

BEFORE THE SELWYN DISTRICT COUNCIL

UNDER	the Resource Management Act 1991
IN THE MATTER OF	Private Plan Change 68 to the Selwyn District Plan (PC68)
Applicants	Urban Holding Ltd, Suburban Estates Ltd, Cairnbrae Developments Ltd

**SUMMARY STATEMENT OF MATHEW (MAT) ROSS COLLINS
ON BEHALF OF SELWYN DISTRICT COUNCIL**

Transport

28 March 2022

1 INTRODUCTION

- 1.1 My full name is Mathew (Mat) Ross Collins. I have been engaged by Selwyn District Council (Council) as its transport expert for PC68 since August 2021, and I prepared the Transportation Hearing Report, attached as Appendix B to Council's s42a report. As that report did not set out my qualifications and experience, I have set these out below.
- 1.2 I hold a Bachelor of Engineering (Hons) from the University of Auckland and have a post-graduate certificate in transportation and land use planning from Simon Fraser University in Vancouver, Canada. I have been employed by Flow Transportation Specialists since February 2019, where I hold the position of Associate at Flow Canterbury.
- 1.3 I have over 6 years of experience as a transportation planner and engineer in public and private sector land development projects, which includes experience with strategic land use and transport planning, plan changes, Integrated Transport Assessments, development consenting, and notices of requirement.
- 1.4 My experience includes acting for Waka Kotahi NZ Transport Agency, Auckland Transport and Auckland Council, Kāinga Ora, Whangārei District Council, Kaipara District Council, and various private developers throughout New Zealand. This work has involved:
 - (a) Plan change applications including multiple Selwyn Private Plan Changes, Drury East, Drury West, Warkworth North, the Whangarei District Plan Changes for Urban and Services, Mangawhai Central, Avondale Jockey Club, and Pukekohe Raceway
 - (b) Resource consent applications including large precincts: Drury South Industrial, Drury Residential, Redhills, Silverdale 3, Drury 1, Waiata Shores, and Crown Lynn Yards
 - (c) Designation, Outline Plan of Works, and resource consent applications for major infrastructure including Healthy Waters St Marys Bay Stormwater Water Quality Programme, Watercare Huia Water Treatment Plant replacement, Watercare Huia 1 Watermain replacement, and several Ministry of Education Schools.

2 CODE OF CONDUCT

- 2.1 I have read and am familiar with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2014, and agree to comply with it. My qualifications as an expert are set out above.
- 2.2 Other than where I state that I am relying on the advice of another person, I confirm that the issues addressed in this Summary Statement are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

3 SUMMARY OF TRANSPORT MATTERS

- 3.1 I have reviewed the following Evidence in Chief (EIC) and Summaries of Evidence from the Applicant:
- (a) Dave Smith (Transport)
 - (b) Patricia Harte (Planning).
- 3.2 I have reviewed the following EIC from Submitters:
- (a) Nick Williamson (on behalf of submitters 0012, 0025, 0030, 0032, 0035, 0037, 0040, and 0041)
 - (b) Marcus Langman (on behalf of Canterbury Regional Council and Christchurch City Council).
- 3.3 I have reviewed the following Summary Statements from other specialists acting for Council:
- (a) Jonathan Clease (Planning).
- 3.4 Unless otherwise discussed below, I consider that matters identified in my Transportation Hearing Report have been resolved through evidence from the Applicant's experts.
- 3.5 In my view the following key transport matters remain in contention, and/or require further discussion:
- (a) Traffic efficiency effects on the Shands Road/Trents Road intersection
 - (b) Staging of development within PC68 to align with Council's planned intersection and carriageway upgrades for Hamptons Road (including the intersection with Springs Road), Shands Road, and Trents Road

- (c) Provision of a continuous footpath on Hamptons Road and on Trents Road, between PC68 and Farthing Drive
- (d) Funding of transport infrastructure
- (e) Cumulative effects on the wider transport network
- (f) Servicing PC68 with public transport.

3.6 I discuss these matters in the following section of my Summary Statement.

4 Traffic safety and efficiency effects on the Shands Road/Trents Road intersection

- 4.1 In paragraphs 12.46 to 12.54 of his EIC, Mr Smith discusses the additional assessment he has undertaken for the Shands Road / Trents Road roundabout. The additional assessment accounted for the Council's intended upgrade of the intersection to a single lane roundabout, whereas the ITA had assumed that the roundabout would be double laned.
- 4.2 Mr Smith modelling identified that, with a single lane roundabout, PC68 would create excessive delays and capacity issues. He then tested an option with a double lane approach on Shands Road (north), as shown in **Figure 1**.
- 4.3 While this addressed delay and capacity constraints on Shands Road (north), in my opinion the modelling indicates excessive queuing and capacity constraints on Shands Road (south):
 - (a) The volume to capacity ratio is indicated to be 0.99 during the AM peak (compared to 0.81 without PC68), whereas the maximum ratio that is typically accepted is 0.85 to 0.90. This indicates that the Shands Road (south) approach is essentially operating at capacity
 - (b) The queueing on the Shands Road (south) approach during the AM peak is indicated to be approximately 330m (compared to 95m without PC68).
- 4.4 While Mr Smith states that the modelling identifies only minor delays of around 30 seconds on the Shands Road (south) approach during the AM peak, I am concerned that the reported delays are highly sensitive to any change in traffic volume, as the Shands Road (south) approach is essentially at capacity.

- 4.5 In other words, a minor increase in traffic on this approach would likely have a much greater effect on queuing and delays. This in turn could lead to a higher crash rate at the intersection, if delays lead to driver frustration and lower gap acceptance.
- 4.6 In the lead up to the hearing I discussed my concerns with Mr Smith. To address my concerns, he tested a second option for the roundabout, with the addition of a double approach lane on Shands Road (south), as shown in **Figure 2**. Mr Smith discusses this option in Section 3 of his Summary Statement.
- 4.7 I am comfortable that the second option, as shown in **Figure 2**, supports full development within PC68 while maintaining acceptable peak hour performance. In my view this upgrade is required as a direct consequence of the transport effects of PC68. I discuss the timing and funding of this upgrade in Sections 5 and 6 below.

Figure 1: Roundabout concept tested in Mr Smith's EIC in Chief

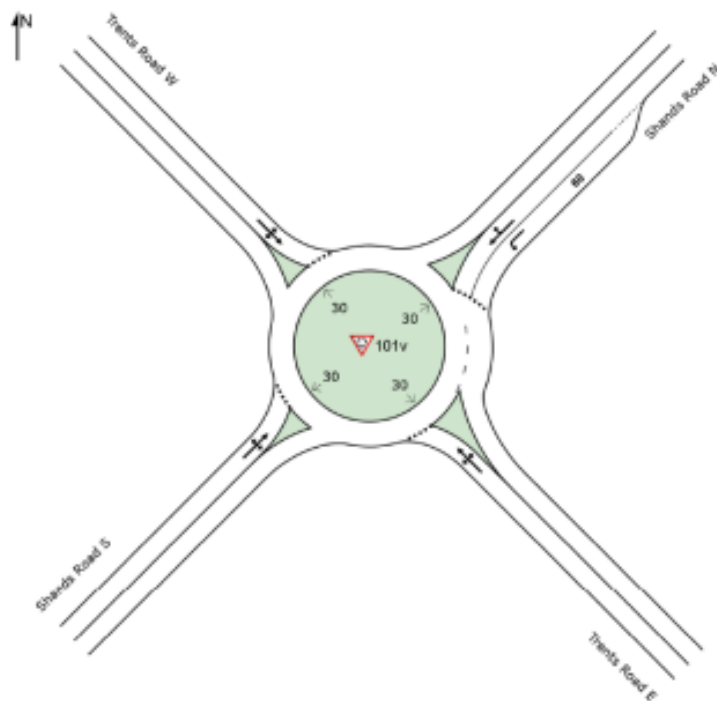
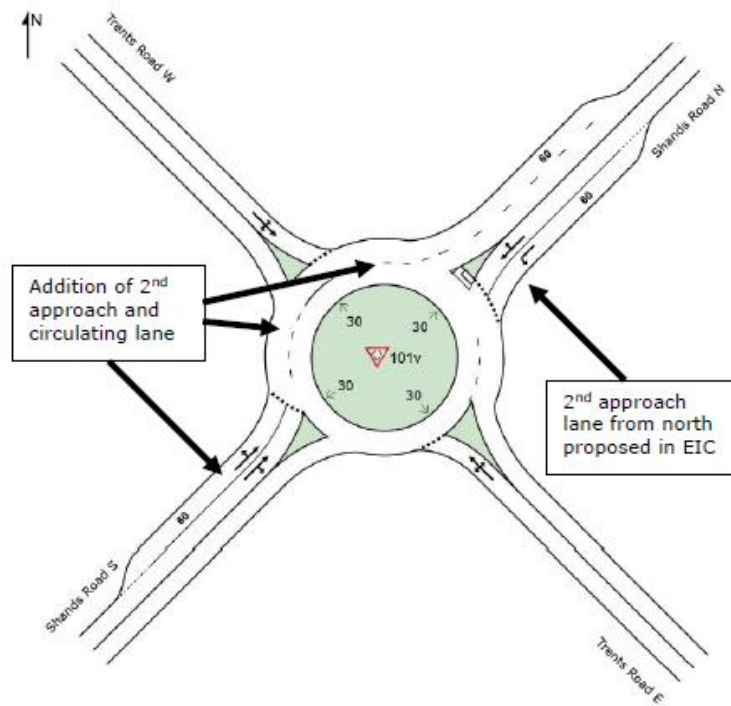


Figure 2: Roundabout concept tested in Mr Smith's Summary Statement



5 Staging of development to align with the delivery infrastructure

5.1 In paragraphs 4.7 and 12.39 – 12.45 of his EIC, Mr Smith discusses staging of development. In summary, he considers that:

- (a) The Shands Road / Trents Road roundabout upgrade is required prior to any development occurring on the Plan Change site (para 12.42(a))
- (b) The Shands Road / Hamptons Road roundabout is required prior to more than 120 lots gaining access to Hamptons Road (para 12.42(b))
- (c) The Springs Road / Hamptons Road roundabout upgrade is not required prior to the full development within PC68 (para 12.42(c)).

5.2 I agree with Mr Smith's assessment and conclusion.

5.3 Ms Harte adopts Mr Smith's recommendations in paragraph 14.3 of her EIC, with some minor simplification, which I have replicated as follows:

- (a) Following completion of the Shands/Trents roundabout (programmed 2022/3) 120 lots can be made available to the public
- (b) Following completion of the Shands/Hamptons (programmed 2023/4), the Hamptons/Springs roundabout (programmed 2024/5) and seal widening of

Trents Road (2022/3) and Hamptons Road (2024/5) the reminder of the lots can be made available to the public.

- 5.4 In paragraphs 34, and 46 - 47 of his EIC, Mr Williamson expresses concern about the uncertainty of these upgrades, and how the proposed staging will be achieved.
- 5.5 I support Ms Harte's recommendations but I share Mr Williamson's concerns about how staging will be achieved. I consider that the staging recommended by Ms Harte should be identified in a District Plan Rule(s). I suggest the following wording

Rule **x**: No residential allotments may be created within ODP Area **z** prior to the completion of the upgrade to the Shands Road / Trents Road intersection, to form a roundabout and two laning of Shands Road on both approaches and the northern departure to the roundabout.

Rule **y**: No more than 120 residential allotments may be created within ODP Area **z** prior to the completion of:

- (a) the upgrade to the Shands Road / Hamptons Road intersection, to form a roundabout; and
- (b) seal widening of Trents Road, between Springs Road and Shands Road; and
- (c) seal widening of Hamptons Road, between Springs Road and Shands Road.

- 5.6 Having discussed this Rule(s) with Mr Cleese, I recommend that any activity that infringes the Rule(s) should be a Non-Complying Activity.
- 5.7 I note that the use of a Rule is consistent with PC73, which proposed amendments to Rule 12.1.3.50(a) and (b) to stage development within PC73, limiting development to 148 dwellings until the upgrade of two nearby intersections was undertaken.

6 Funding of transport infrastructure

- 6.1 In his EIC, Mr Williamson raises concerns about the funding of infrastructure needed to support PC68.
- 6.2 I consider that all required transport infrastructure needed to support PC68 is funded in Councils Long Term Plan (and through Waka Kotahi Road to Zero Programme funding), other than the double lane Shands Road/Trents Road roundabout. Council (and Waka Kotahi) currently has funding allocated to upgrade this intersection to a

single lane roundabout, whereas PC68 necessitates additional capacity upgrades on the Shands Road approaches and departures (as discussed in Section 4).

6.3 Council's programmed dates for this infrastructure are:

- (a) Shands/Trents single lane roundabout and Trents Road seal widening: 2022/23
- (b) Shands/Hamptons double lane roundabout and Hamptons Road seal widening: 2023/24
- (c) Springs/Hamptons single lane roundabout: 2024/25.

6.4 However, despite the high certainty of the funding and delivery of these improvements, there is always a possibility that Waka Kotahi may choose to reallocate funding away from these projects. In my view this possibility is appropriately addressed through the inclusion of a rule as discussed in paragraph 5.5, which ensures PC68 is staged to align with the improvements.

6.5 To deliver the additional capacity upgrade for the Shands Road/Trents Road intersection (as shown in **Figure 2**), the Applicant will require a Developer Agreement with Council. This upgrade will rely on third party land acquisition, which will likely be dependent on the Council's use of the Public Works Act process.

6.6 In my experience, the success of Developer Agreements to address infrastructure upgrades required to support privately initiated Plan Changes depends on the willingness of the Plan Change Applicant and the number of parties that benefit from the infrastructure upgrade. Ideally, there should be few direct beneficiaries, and all beneficiaries should be willing to be a party to the Developer Agreement.

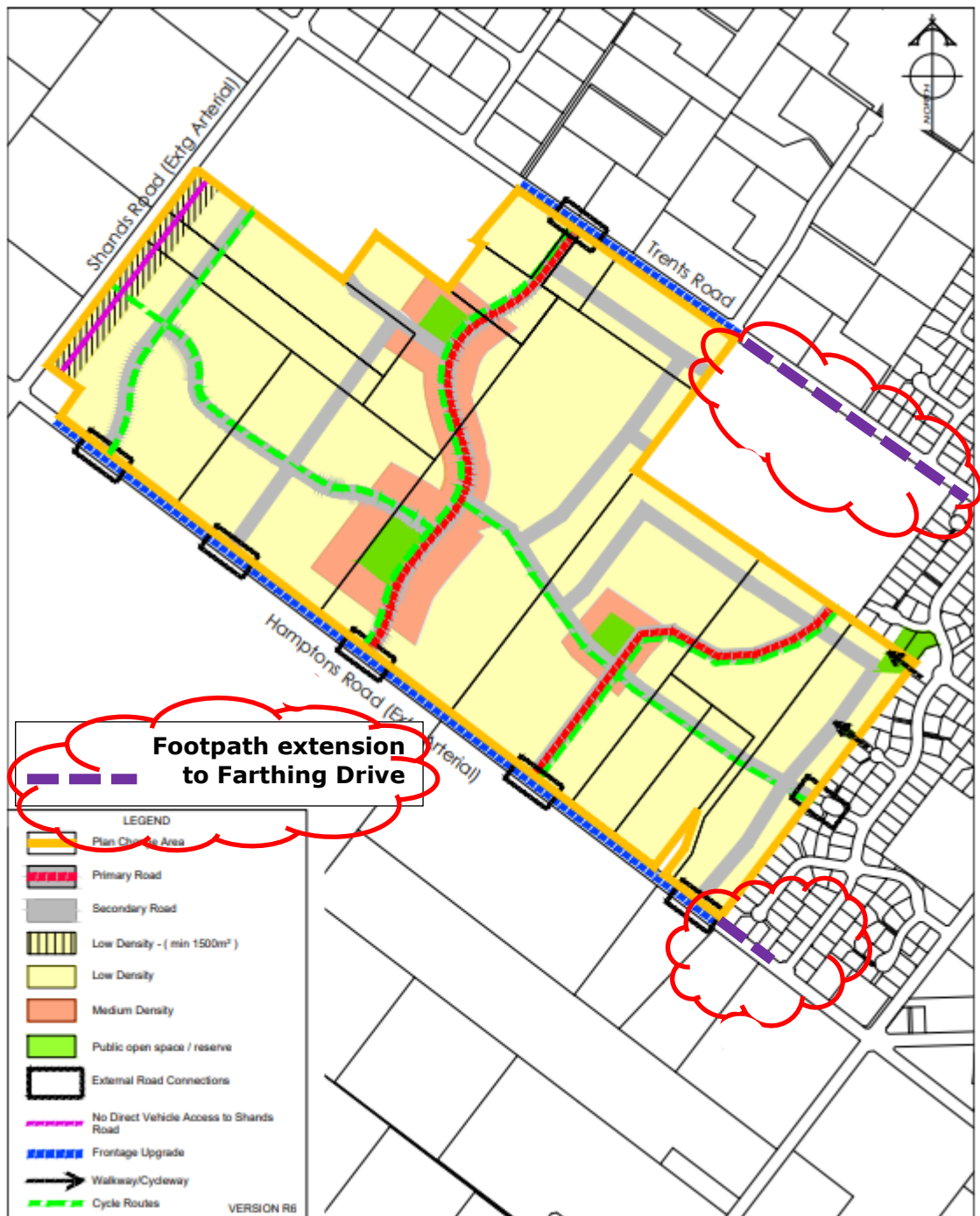
6.7 I understand the Council has successfully engaged in Developer Agreements for residential developments in Rolleston, and that Council has a willingness to work with the Applicants to secure the additional upgrade for the Shands Road/Trents Road intersection.

6.8 As I discuss in paragraph 5.5, I recommend that a staging Rule be included. In my experience this will act as a strong incentive for the Applicant to enter into the Developer Agreement with Council.

7 Provision of a continuous footpath on Hamptons Road and on Trents Road, between PC68 and Farthing Drive

- 7.1 In paragraph 12.56 of his EIC, Mr Smith responds to my recommendation that PC68 provides continuous footpaths on Trents Road and Hamptons Road, between the site frontage and existing footpaths at the intersection of Farthing Drive with both roads.
- 7.2 In his EIC Mr Smith supports my recommendation that a continuous footpath is provided on Trents Road.
- 7.3 While not included in his Summary Statement, from discussions with Mr Smith and from his verbal presentation of evidence at the Hearing, I understand that the Applicant supports my recommendation for the footpath connection on Hamptons Road and has agreed to it being identified in the ODP.
- 7.4 I have shown my recommended amendments to the ODP in **Figure 3**, and recommend that this is also identified in the ODP narrative.

Figure 3: Recommended amendment to the ODP for footpath extensions (changes clouded)



8 Cumulative effects on the wider transport network

- 8.1 In paragraphs 134 to 141 of his EIC, Mr Langman discusses his concerns of the cumulative effect that PC68, and other plan changes within Selwyn District, may have on the wider transport network.
- 8.2 In my experience "out of sequence" development, such as PC68, creates complex challenges for Councils and Road Controlling Authorities. Assessing the effects of

such development on the long term planning and funding commitments associated with bulk transport infrastructure is complex and requires assessment of multiple landuse scenarios.

8.3 Helpfully, and independently to the multiple Plan Changes with the Selwyn District, Council has engaged QTP to assess the transport effects of two future landuse scenarios for Selwyn District. The QTP analysis compares to future growth scenarios:

- (a) Scenario 1 (2038): growth in Selwyn based on forecasts agreed by Greater Christchurch Partnership Committee for households, population, and employment
- (b) Scenario 2 (2038): Scenario 1 plus an additional 10,000 dwellings (Selwyn District only), without any changes to employment, or any changes to households in Christchurch or Waimakariri.

8.4 I discuss the preliminary findings of the QTP assessment in Section 4 of the Transportation Hearing Report (s42a Appendix B, page 6), and my view of “out of sequence” development in Section 6 of the Transportation Hearing Report (s42a Appendix B, page 14), which I summarise below:

- (a) Should PC68 affect the quantum of residential growth within Selwyn, without a corresponding increase in local employment and access to services, additional impact on the Greater Christchurch transport network can be expected as additional residents in Selwyn travel to access services and employment
- (b) However, the wider area effects of an “out of sequence” Plan Change such as PC68 may not be overly apparent in a macro scale regional traffic model. As the vehicle movements generated by a Plan Change distribute across the wider transport network, they become a smaller and smaller proportion of the total trips on the network.

8.5 Mr Smith discusses Mr Langman’s concerns in paragraphs 4.3 to 4.10 of his Summary Statement. I am in general agreement with Mr Smith on this matter.

8.6 I am of the view that, while PC68 will have effects on the wider transport beyond those assessed by Mr Smith in his Integrated Transport Assessment, these effects (including cumulative effects of other Plan Changes) are more appropriately addressed at a District and/or Regional level.

9 Servicing PC68 with public transport

- 9.1 I note that some submitters have raised concerns that PC68 is not served by public transport.
- 9.2 In my view it would be relatively simple (from a routing perspective) to adjust Metro Bus Service 80 (Lincoln to Parklands) to serve PC68, which currently runs on Springs Road in Prebbleton.
- 9.3 As noted by Mr Smith, this would be a decision for CRC, and that residents of PC68 will be charged an Urban Public Transport rate as part of their regional rates, regardless of whether PC68 is directly served by public transport.
- 9.4 While there is no guarantee that PC68 will be directly served by public transport in the future, I consider that there are no fundamental reasons why this could not occur.

10 Summary

10.1 I recommend the following:

- (a) That a District Plan Activity(ies) and Rule(s) and be provided to require development within PC68 to be staged with nearby transport network upgrades, as discussed in paragraph 5.5
- (b) That the ODP Plan and narrative identify that footpaths are to be provided on Trents Road and Hamptons Road, between PC68 and the intersections with Farthing Drive, as discussed in paragraph 7.4.

10.2 Subject to the adoption of these recommendations, I consider that there are no transport impediments to the approval of PC68.



Mat Collins
28 March 2022