

**BEFORE AN INDEPENDENT HEARINGS COMMISSIONER AT
SELWYN**

IN THE MATTER OF

Clause 21 of the First Schedule of
the Resource Management Act 1991
(Plan Change 67)

AND

IN THE MATTER OF

GW WILFIELD LIMITED
(Applicant)

**STATEMENT OF EVIDENCE OF ANDREW ALAN METHERELL ON
BEHALF OF GW WILFIELD LIMITED**

TRANSPORT

Dated: 30 August 2021

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LAWYERS
CHRISTCHURCH
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1 INTRODUCTION

- 1.1 My full name is Andrew Alan Metherell. I am a Chartered Professional Engineer, a Chartered Member of Engineering New Zealand, and am included on the International Professional Engineers Register. I hold a Bachelor of Engineering (Civil) with Honours degree from the University of Canterbury. I am also an Associate Member of the New Zealand Planning Institute.
- 1.2 I have more than twenty years' experience, practising as a traffic engineering and transportation planning specialist based in Christchurch. I am currently employed as the Christchurch Traffic Engineering Team Leader at Stantec New Zealand (*Stantec*), a global multi-disciplinary engineering consultancy. In this role I am responsible for providing transport engineering advice, assessment and design for a wide range of activities.
- 1.3 I have had extensive experience providing transportation engineering advice and assessment for land development projects in the greater Christchurch area. Relevant to this project I am regularly involved with the planning, assessment and design of the transport networks for residential growth areas.
- 1.4 Within West Melton, and over a period of more than 10 years, I have undertaken transportation assessments for the plan changes that established Preston Downs, and for the commercial centre on Weedons Ross Road. I have also prepared transportation assessments for large scale residential subdivision consent applications at Gainsborough, Preston Downs, and Wilfield, and resource consent applications for commercial centres on Weedons Ross Road and SH73.
- 1.5 I recently gave expert transport engineering evidence for Private Plan Change Request 59 which sought to rezone Living 2 and Living 2A zoned land in Wilfield to Living West Melton South Zone.
- 1.6 I am familiar with the application by GW Wilfield Ltd (*the Applicant*) for a plan change to rezone approximately 33.4ha of Inner Plains zoned land to the south of West Melton to Living West Melton South (*the Application*).

- 1.7 I was part of the Stantec team that prepared the Integrated Transport Assessment (ITA), dated 9 October 2020 and submitted with the Application. The ITA assessed an Outline Development Plan (ODP) that was subsequently refined when Plan Change 67 (PC67) was notified.

Code of Conduct

- 1.8 Whilst this is a Council hearing, I acknowledge that I have read and agree to comply with the Environment Court's Code of Conduct for Expert Witnesses, contained in the Environment Court Practice Note 2014. My qualifications as an expert are set out above. Other than where I state that I am relying on the advice of another person, I confirm that the issues addressed in this statement of evidence 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.

Scope of Evidence

- 1.9 Whilst I do not intend to reproduce the comprehensive ITA, my evidence will provide a summary of the key parts of the ITA and address any matters that have changed since that time. It will then go on to provide specific responses to issues related to traffic matters raised by submitters, and then provide responses to matters raised in the section 42A report (the *Officer's Report*).
- 1.10 I note that the ITA submitted with the Plan Change request referenced an ODP that was subsequently adjusted and replaced by the Applicant in response to the Selwyn District Council request for information. No additional transportation assessment of the notified ODP was included, so my evidence also addresses those changes.
- 1.11 In preparing this evidence, I have read and considered the following documents:
- (a) the Application;
 - (b) submissions lodged in relation to the Application;
 - (c) Selwyn District Long Term Plan 2021-2031;
 - (d) Canterbury Regional Public Transport Plan 2018;

- (e) relevant provisions of the Operative Selwyn District Plan;
- (f) relevant provisions of the Canterbury Regional Policy Statement;
- (g) the National Policy Statement Urban Development 2020; and
- (h) the Officer's Report.

2 **EXECUTIVE SUMMARY**

- 2.1 I have assessed the transportation matters associated with the PC67 proposal. I consider residential development of the site can be integrated with the West Melton transport network and urban area in a manner that supports consolidation and transport mode choice.
- 2.2 I consider the site is well located adjacent to the existing Wilfield residential subdivision which includes a safe walking and cycling network. Weedons Ross Road will provide the primary road for vehicle access through a new safely located intersection into the site. That intersection can be expected to be located within a future extension of the urban speed environment. The rural section of Weedons Ross Road is soon to be widened to better reflect its arterial status. This will improve its safe traffic carrying function.
- 2.3 A new rule is proposed (Rule 12.1.57A) that will restrict development until further enhancements to the external walking and cycling network are provided. Those enhancements include a direct off-road pedestrian / cycle path along Weedons Ross Road from the site to SH73, and traffic signalisation of SH73 / Weedons Ross Road which is currently funded by Waka Kotahi and is in the detailed design stage. Aspects of the pedestrian and cycle enhancements will most likely require funding from the developer, and will provide a wider community benefit.
- 2.4 The Plan Change ODP transport provisions are proposed to be further refined. I consider this will provide additional certainty that the subdivision process will result in an internal transport network for pedestrians and cyclists that connects efficiently to the external network, supporting walking, cycling and other micro-mobility modes as feasible and attractive local means of transport. The distances involved are comparable to existing extents of zoned land in West Melton.

- 2.5 The ODP provisions have also been refined to include additional recognition of possible future public transport services, either internal or external to the site. When public transport services are improved for West Melton, this will support encouragement of public transport as a feasible mode of travel to and from the Plan Change site. Whilst public transport generally has a low utilisation throughout greater Christchurch, I consider this increases the opportunity for public transport and further improves the consistency with various planning policies.
- 2.6 The site location will also enable the opportunity for residents to utilise bicycles, particularly e-bikes for travel to local employment destinations and activity centres at Rolleston. The safety of that trip will be improved when the West Melton to Rolleston cycleway is completed.
- 2.7 The level of vehicle traffic generated by the site is not large and my analysis has shown that it can efficiently and safely access the arterial and state highway transport network with negligible change in performance of key intersections.
- 2.8 In the absence of the zoning, I consider it likely that many of the trips would still be made on the surrounding or wider Selwyn District transport network with comparable or longer travel distances. This is because I understand the supply of dwellings of the type and location proposed would only be available in other towns that are also separated from Christchurch, including Darfield well to the west. I also expect that over time, emissions generated by private vehicle travel at West Melton will reduce in response to the changing vehicle fleet (i.e. increasing use of electric vehicles), increased accessibility to safe routes and services for active and public transport, increased self-sufficiency, and increased prevalence of individuals working from home.
- 2.9 For the reasons I have set out, I consider that the proposed Plan Change, with the amendments to transport provisions as proposed by Ms Seaton, can be supported from a transportation perspective.

3 EXISTING TRANSPORT ENVIRONMENT

Site Location

- 3.1 **Figure 1** shows that the site for the PC67 rezoning (the *Site*), is immediately south of the Wilfield residential subdivision on the eastern side of Weedons Ross Road. Weedons Ross Road is a Selwyn District arterial road connecting SH73 to Rolleston and the Christchurch Southern Motorway (CSM).
- 3.2 The ITA outlines nearby land uses and activities in West Melton, including the domain and community centre on the southern side of SH73 and the village shopping centre and school on the northern side of SH73.
- 3.3 **Figure 2** shows that all vehicle access to the existing Wilfield subdivision is from Weedons Ross Road, via two T-intersections on Kingsdowne Drive. Ridgeland Way provides access to the south-eastern part of Wilfield.

Existing Transport Infrastructure

- 3.4 The ITA describes Weedons Ross Road past the site as well as its existing priority-control crossroad intersection with SH73, the existing Wilfield subdivision roads, existing off-road cycle and pedestrian provision and the bus network.
- 3.5 Weedons Ross Road has a rural formation past the site and an open road speed limit. It is formed with an approximately 6.0m wide carriageway and wide grass berms. There is a curve in the road alignment along the site frontage and approximately 150m north of the curve, the speed limit drops to 60km/h for the approach into West Melton. North of SH73, Weedons Ross Road has a 50km/h speed limit.
- 3.6 The two Kingsdowne Drive intersections on Weedons Ross Road have been formed as simple T-intersections with localised widening on the subdivision side of the road only. Between the two Kingsdowne Drive intersections, the rural formation of the road is retained and there is no footpath. There is a footpath from the northern Kingsdowne Drive intersection to West Melton.

- 3.7 Within the Wilfield subdivision, Kingsdown Drive is the primary loop road and Silver Peaks Drive is a secondary loop road providing access to the northern and eastern parts of the subdivision. Both roads have a 9m wide carriageway and one footpath.
- 3.8 Ridgeland Way is currently a short cul-de-sac in the southern part of the subdivision with an 8m wide carriageway and one footpath. It ends in a temporary turning head but is planned to extend into the PC67 site.

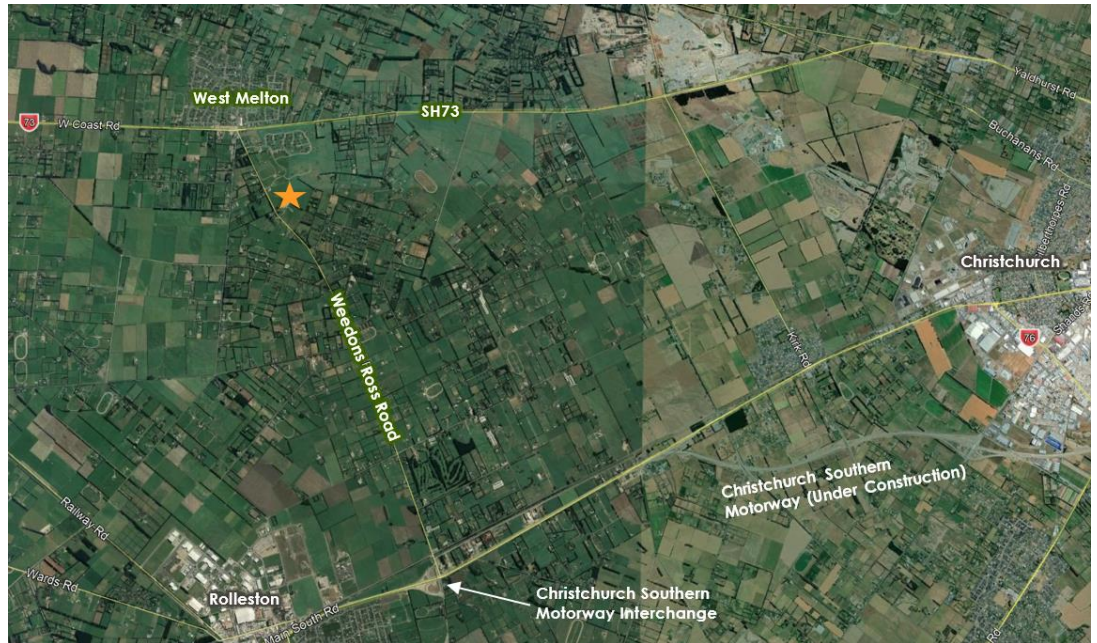


Figure 1: Site Location in Wider Context



Figure 2: Site Location in West Melton

Current Travel Patterns

- 3.9 The ITA outlines daily traffic volumes on the key surrounding roads, hourly traffic volumes on Weedons Ross Road, weekday peak hour turning volumes at West Melton intersections on Weedons Ross Road and existing weekday peak hour delays at the SH73 / Weedons Ross Road intersection.
- 3.10 Current information from NZTA indicates that SH73 carries approximately 13,300 vehicles per day (vpd) east of West Melton and 7,200vpd to the west, while Weedons Ross Road carries moderate traffic volumes for an arterial road of approximately 2,000vpd. During peak periods, the intersection of these two roads is operating with average delays in the order of 30 and 50 seconds for drivers on the southern Weedons Ross Road approach in the AM and PM peak periods respectively.

Road Safety

- 3.11 The ITA includes a thorough review of reported crashes in the vicinity of the site for the full five-year period of 2015-2019.
- 3.12 Most of the crashes identified (eight out of 11) occurred in West Melton, with five of those occurring at the sign controlled SH73 / Weedons Ross Road intersection and the others occurring at commercial driveways. The remaining three crashes were isolated loss-of-control crashes which are typical crash types in rural areas.
- 3.13 No crashes had been reported within the Wilfield subdivision, at the Kingsdowne Drive intersections on Weedons Ross Road or at property accesses on the rural section of Weedons Ross Road.
- 3.14 I carried out an updated crash search on 19 August 2021. Two crashes have been reported in the search area since the ITA was prepared. One was a non-injury crash at the Weedons Ross Road / Newtons Road intersection when a driver crossing on the side road failed to see a vehicle on the main road. The second was a non-injury crash on Weedons Ross Road, approximately 450m north of Newtons Road, which occurred when a driver performed a U-turn without noticing a vehicle approaching from behind.

- 3.15 The crash history indicates that Weedons Ross Road is operating in a manner that does not cause a prevalence of serious or fatal crashes. The complex SH73 / Weedons Ross Road intersection has had several crossing crashes which indicates there is a higher risk of possible serious consequence, particularly if speed is also a factor.

4 **FUTURE TRANSPORT NETWORK**

- 4.1 It was announced in early 2020 that the Government's NZ Upgrade Programme (*NZUP*) funding package will include funding for an upgrade of the SH73 / Weedons Ross Road intersection. Waka Kotahi NZ Transport Agency (*Waka Kotahi*) is planning to install traffic signals including signalised pedestrian crossings. The preliminary layout consulted on, which I understand has been carried forward to detailed design, involves:
- (a) West Melton Road being realigned to meet Weedons Ross Road opposite Kingsdowne Drive (north) where a roundabout with pedestrian linkages would be constructed. West Melton Road would no longer connect to Weedons Ross Road just south of SH73. This will improve access between the domain and Wilfield.
 - (b) On each approach to the new signalised intersection, there will be a shared through and left turn lane, and separate right turn lanes.
 - (c) Pedestrian crossings on each approach.
- 4.2 Selwyn District Council (*SDC*) is also currently consulting on a reduction in speed limit on Weedons Ross Rd (Newtons Road to West Melton) from 100km/h to 80km/h. This includes the section of Weedons Ross Road past the site.
- 4.3 The ITA described the CSM Stage 2, which was under construction at the time of writing. This has now been completed with a full motorway interchange provided at Weedons Ross Road. The interchange provides access between the motorway and both Rolleston and West Melton. The recent opening has not allowed for investigation of actual changes in travel patterns on the local Selwyn District road network, although as set out in the ITA it is expected that it will provide for improved travel route options to and from West Melton.

- 4.4 The ITA also outlined that a reduced speed limit of 60km/h was to be adopted on SH73 through West Melton. As of October 2020, this has been adopted. This further contributes to reducing the community severance that has previously occurred with SH73.
- 4.5 Weedons Ross Road seal widening was highlighted in the ITA as being planned by SDC. The latest information from SDC is that it will involve widening the carriageway from 6.0m to 8.5m with 0.5m unsealed shoulders from Kingsdowne Drive (south) to Maddisons Road. The three intersections along the route will receive safety upgrades by way of lighting and kerb and channel works. This work is awaiting funding approval but is expected to go out to tender soon.
- 4.6 The ITA stated that a cycle route along West Melton Road linking West Melton and Rolleston was planned for 2026/27. The latest information from SDC is this is now planned for 2034/35. As outlined in the evidence of Mr Wheelans, GW Wilfield Ltd is in discussions with SDC regarding the potential to financially contribute to the cycleway to bring it forward in the programme.
- 4.7 While Environment Canterbury has not indicated in the Canterbury Regional Public Transport Plan an intention to provide additional direct bus services for West Melton, the planned upgrades to West Melton intersections and widening of Weedons Ross Road will facilitate any services being accommodated on that part of the road network in the future. In particular, the signals and pedestrian crossings will assist bus movement and pedestrian connections if a Rolleston – West Melton service was implemented.
- 4.8 Finally, since the ITA was completed, Plan Change 59 sought to rezone the Wilfield Living 2 and Living 2A zones to a new Living West Melton South Zone, allowing an extra 72 lots to be developed, and that has now been approved. Housing construction on the additional lots cannot begin until the SH73 / Weedons Ross Road intersection upgrade is complete.

5 PROPOSED PLAN CHANGE

- 5.1 PC67 will allow for an additional approximately 130 residential lots to be developed to the south of Wilfield.

- 5.2 The transport layer of an Outline Development Plan (ODP) was presented in the ITA which showed roading connections, pedestrian / cycle connections and a neighbourhood park. This is included in my evidence as **Figure 3**.
- 5.3 The ODP showed the primary vehicle access as proposed from Weedons Ross Road towards the southern end of the site. The location of the new intersection was chosen to allow good visibility along Weedons Ross Road and to minimise impacts on existing farm vehicle accesses nearby. The design of the intersection will be considered further at the subdivision and detailed design stages. Whilst the intersection is located in the current 100km/h, and proposed 80km/h speed limit area, speed limits are adjusted in response to subdivision development such that an urban speed limit of no more than 60km/h could be anticipated.
- 5.4 The transport ODP included minor road connections to Ridgeland Way via a short link road, and also an extension of Ridgeland Way through the previously L2A zoned area. These minor connections provide integration with the Wilfield subdivision, noting that a new roading connection directly to Kingsdowne Drive is currently not possible due to existing Wilfield lot ownership by third parties.
- 5.5 The ODP assessed in the ITA indicated a pedestrian / cycle path along the new road between Weedons Ross Road and the off-road path network through the reserves. It also included a pedestrian / cycle path running from the site to the north along Weedons Ross Road.
- 5.6 A revised ODP was subsequently prepared by the Applicant, and was included in the notified Plan Change request. As shown in **Figure 4** below, the notified ODP included a pedestrian / cycle path running along the Site frontage on Weedons Ross Road but not on the section north of the site (outside the PC67 Area) as the Applicant does not have control of that section of the road.

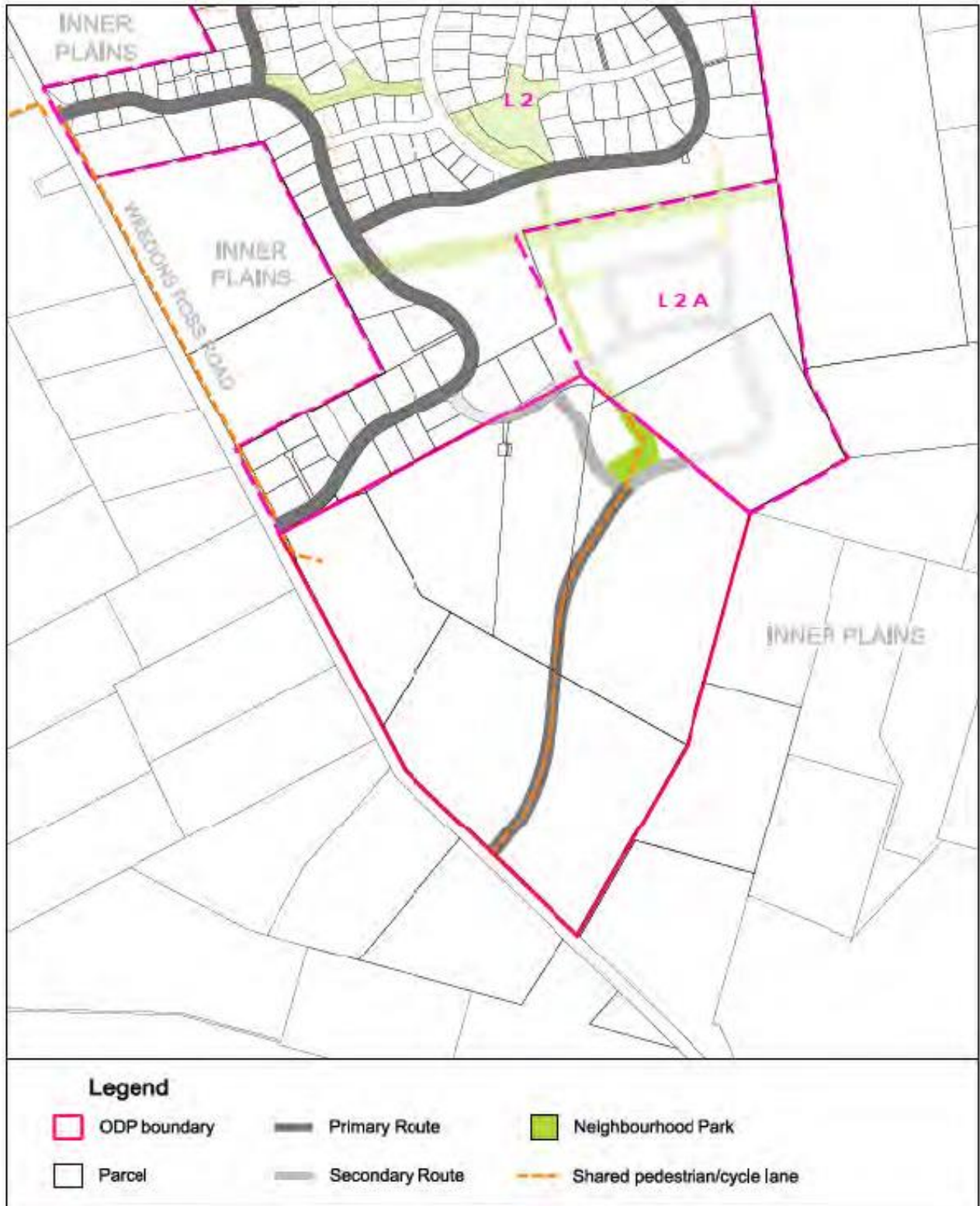


Figure 3: ODP Transport Layer in ITA

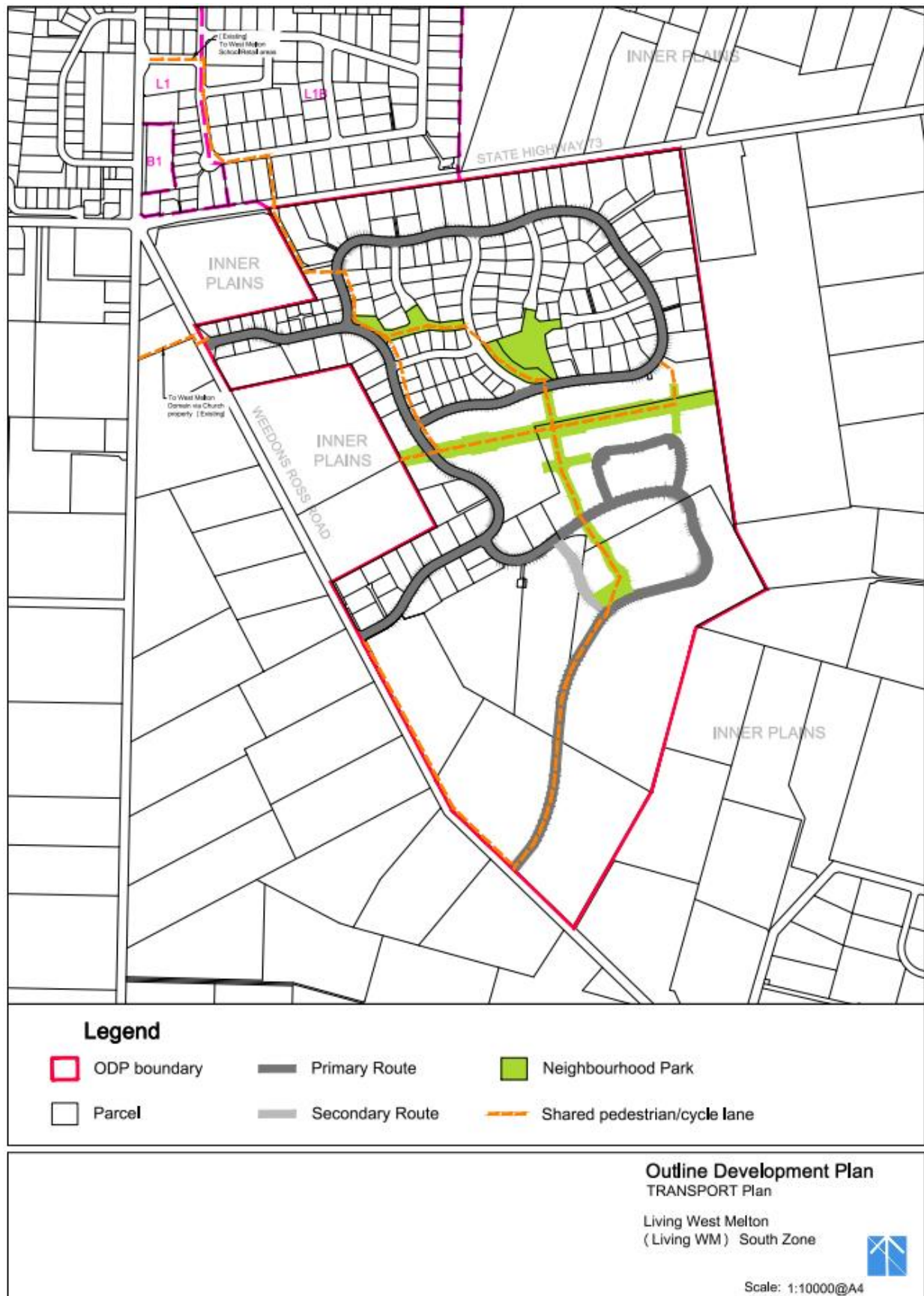


Figure 4: Revised Transport ODP as Notified

- 5.7 As set out in the evidence of Ms Seaton, the Applicant now proposes a new rule (12.1.57A (b)) which would act to defer subdivision completion until a cycle / pedestrian path connection is constructed along Weedons Ross Road from the intersection of SH73 / Weedons Ross Road and the southern intersection of Kingsdown Drive / Weedons Ross Road. This would require the developer to construct the path if it has not otherwise been undertaken by the road controlling authorities or others in time. As set out in the evidence of Mr Hamish Wheelans, the Applicant has indicated that this is achievable. The remaining part, between Kingsdown Drive and the new road into PC67 is required by the ODP.
- 5.8 I note that between the lodged ODP and the notified ODP there were also changes to the labelling of the roading connections between the Site and Wilfield. The notified ODP includes Ridgeland Way as a primary route, and there is also a secondary road connection between Ridgeland Way and the new primary road. These amendments better reflect the ODP provisions of the now approved PC59, and the formation of existing roads.
- 5.9 The ODP as notified made no specific provision for bus services through the Site, noting that the connecting local roads (as constructed) such as Ridgeland Way were not specifically designed to accommodate a standard city bus service.
- 5.10 Bus services respond to demand and if a future service was to run along Kingsdown Drive and Weedons Ross Road, much of the Site would be within walking distance of the route. Such a service would enable convenient connectivity to the likes of Rolleston town centre, but also affords the opportunity to connect to express routes to the Christchurch CBD.
- 5.11 Given this, it would be sensible to avoid a subdivision design that precludes a future bus route via Ridgeland Way and the new PC67 road network. To ensure that the Site can adapt to possible future changes in public transport provision, I have recommended that the ODP movement network description is modified to reference integration with public transport.
- 5.12 Ms Seaton has added provisions that describe the need to design the internal transport network (roads and pedestrian / cycle connections) in

a way that allows for efficient integration with possible changes in bus service provision in the future, either internal or external to the PC67 site. I note that bus provision on some Metro routes involve buses that are of a smaller size than the standard city bus, and the likes of Timaru have operated smaller on-demand buses.

- 5.13 In the interim, if a bus service is not provided in the southern part of West Melton, the use of park n ride at Rolleston also offers the opportunity to connect conveniently to Christchurch CBD as the distance from the site to the Christchurch CBD via the CSM2 is similar to the use of SH73. With express bus routes likely on CSM2 in the future, such park and ride at Rolleston would be a feasible option for commuting to Christchurch.

6 TRAFFIC GENERATION AND DISTRIBUTION

- 6.1 I have assessed that the additional 131 residential lots could generate approximately 80 vehicle movements per hour (*vph*) during peak times and 790 vehicle movements per day (*vpd*), based on previously adopted and accepted external traffic generation rates of 6vp/h per household for West Melton. Those rates, which are lower than a typical suburban trip generation rate of 8vp/h per household were also originally based on information collated from household interview surveys in satellite towns of greater Christchurch. I return to this matter in my response to Mr Dave Smith.
- 6.2 Based on existing traffic patterns and previously adopted analysis, I have assessed that at peak times, 65% of the additional traffic generated could travel to/from the east along SH73, 25% could travel to/from the south along Weedons Ross Road and a combined 10% could travel to/from the West Melton township and the west along SH73. I consider this a conservative distribution for the assessment of the performance of the SH73 intersection that follows, given the location of the Site to the south of Wilfield and closer to the CSM interchange.

7 TRAFFIC EFFECTS

- 7.1 As outlined in the ITA, I consider that the number of residents living in the Site who would use Ridgeland Way to travel to West Melton / SH73 would be small. Also, the extension of Ridgeland Way into the Site will offer a more direct route for people living in the south-east of Wilfield to

travel towards Rolleston. Based on the above, I consider that the proposed rezoning would result in a negligible change in traffic volume on Ridgeland Way south of Kingsdowne Drive.

- 7.2 The ITA assessed the impact of additional traffic that could be generated by residential development of the Site on the performance of the signalised SH73 / Weedons Ross Road intersection. It concluded that for most movements, the level of service would remain unchanged and the increases in delays resulting from the extra traffic from the Site would be negligible. In practice, the approximately 60vph (two-way) from the Site that could use the SH73 intersection during peak hours equate to an extra one vehicle movement per minute or 1-2 per signal phase. This level of traffic increase would not have a noticeable impact on the performance of the intersection which I expect to be built with plenty of capacity to allow for future traffic growth.
- 7.3 On the wider road network, I consider that the forecast approximately one extra vehicle movement per minute (either eastbound or westbound) on SH73 east of West Melton during peak times would not be noticeable on the State Highway. Similarly, the additional traffic that could be generated to the south along Weedons Ross Road will be able to be accommodated on this arterial road which is planned to be upgraded and which carries relatively modest traffic volumes for an arterial road with a motorway interchange.
- 7.4 At a strategic level, I note that the growth that would occur in West Melton as a result of PC67 may otherwise occur in other Selwyn District townships, and require longer travel distances. As an example, many of the work trips made from Darfield, where I understand there is greater land availability of a comparable type of housing, still commute to areas east of West Melton and around Rolleston. That involves greater travel distances than those that are required to be made from West Melton. The “greening¹” of the vehicle fleet also contributes to reducing the level of emissions for private vehicle trips.

¹ July 2021 EV registrations as a proportion of all new light vehicle registrations jumped to approximately 6.5%, up from 0.6% five years ago.
<https://www.transport.govt.nz/statistics-and-insights/fleet-statistics/sheet/monthly-ev-statistics>

8 PLANNING CONTEXT

- 8.1 The ITA includes assessment of the Application against relevant transport-related operative District Plan and Regional Policy Statement objectives and policies.
- 8.2 I consider that the proposed ODP will ensure that a residential development of the Site will be consistent with the Transport Network objectives and policies in the District Plan (Section B2.1). The Site will be connected to the Wilfield subdivision, both on-road and off-road, for walking and cycling to the West Melton township. An off-road path is also proposed along Weedons Ross Road to connect towards West Melton and the proposed cycleway to Rolleston.
- 8.3 At between approximately 0.9km to 2.2km to the town centre, domain, community centre and school, I do not consider there is a reliance on private car's for travel to local services and facilities. Cycling and other forms of micro-mobility, e.g. electric scooters, would be particularly feasible alternative modes of transport with a choice of routes available.
- 8.4 I have also considered how the distances compare to the existing urban extents of West Melton. **Table 1** below shows that the Plan Change area would represent a comparable urban extent as the northwest, northeast, and southeast extents of the existing urban zoned township area. It is also practically the same as the recently approved PC59 extents.

Origin	Destination		
	School / Shops	Domain	Community Centre
Preston Downs NW	1.6km	1.9km	1.7km
Gainsborough NE	1.3km	1.7km	1.7km
Wilfield Zoned SE	2.0km	1.6km	2.1km
PC67	1.2km -2.1km	0.9km – 1.7km	1.3km – 2.2km

Table 1: Walking Distances to Key Urban Facilities (refer to Appendix 1 for locations)

- 8.5 In my opinion, and when also considering the availability to integrate the development with the existing Wilfield site, the Site contributes to consolidation of the urban area, given the key community facilities are located centrally in West Melton.
- 8.6 To further support the urban consolidation, I would expect that the subdivision process will result in a transport network that minimises walk

and cycle distances to the northwest corner of the Plan Change area. This is a standard assessment matter for subdivision.

- 8.7 The new primary intersection on Weedons Ross Road as well as internal roading will be able to be designed at the subdivision and detailed design stages to ensure that they operate safely for all users.
- 8.8 Traffic generated by the Site will readily be able to be accommodated on the surrounding roading network given the planned signalisation of the SH73 intersection.
- 8.9 I consider that Growth of Township Policy B4.3.98 related to limiting development south of SH73 to be of less relevance given the way West Melton and the SH73 corridor has developed. I understand the policy is focused on safety and efficiency of the highway. The SH73 intersection signalisation will be in place before the Site can be developed. This will allow safe and efficient access to and across the highway for pedestrians and cyclists as well as vehicle travel. As set out in the Waka Kotahi intersection upgrade project description:

*"These changes will help reconnect the community to key facilities, like the community and recreation centre, the Domain, local shops, West Melton School and early childcare facilities. They will also help reduce delays and make travel times at the intersection more reliable – which is really important with the opening of the Christchurch Southern Motorway, and Selwyn District continuing to grow."*²

- 8.10 I do not consider the Site to be inconsistent with the policy B4.3.99 related to consolidated development given it is immediately adjacent to Wilfield subdivision and internal connections, particularly for pedestrians and cyclists, will be available. As I set out earlier, the distances to the West Melton central facilities are comparable to the extents of the existing West Melton urban areas.
- 8.11 As outlined in the ITA, the Regional Policy Statement objectives and policies are similar to those in the District Plan. Specifically related to public transport, West Melton is currently only served by the 86 Darfield

² <https://www.nzta.govt.nz/projects/sh73-west-melton-improvements/>

/ City commuter bus service. The Site may generate additional demand for public transport and by being located adjacent to the existing township, the additional demand could assist the viability of increasing the frequency and / or coverage of services.

- 8.12 Within section 10.3 of the ITA, an assessment of the National Policy Statement – Urban Development (*NPS-UD*) is provided. I consider that there is adequate existing and planned infrastructure to support the wider transport needs of the Plan Change development.
- 8.13 As required by Policy 1(c) of the NPS-UD, the development achieves good accessibility to existing transport corridors, including being close to the existing arterial and State Highway road networks. The ODP further requires connections to the existing transport network in locations that support safe and efficient integration of the site with those networks.
- 8.14 The site is well located near a planned cycle route to connect to Rolleston, and key employment and activity centres. Travel times in the order of 20-25 minutes would be achievable with electric bike and by regular commuters (say 25km/h average). A more leisurely ride speed (15km/h average) would involve a trip taking approximately 30-40 minutes, which may be considered for some trips. This is also consistent with SDC Policy B2.1.14.
- 8.15 Additional pedestrian and cycle infrastructure is proposed along Weedons Ross Road to support connectivity to existing non-residential facilities in West Melton. A rule is also proposed to require wider expansion of the pedestrian / cycle network in West Melton to be complete. More refined provision for connectivity within the site to ensure efficient travel by non-vehicular modes is a standard matter to address at the time of subdivision.
- 8.16 West Melton is already serviced by school bus services that connect to Rolleston. Whilst **existing** public transport services are currently limited, opportunities exist to access future service improvements, which respond to demand, either locally, or at nearby park and ride locations. Weedons Ross Road, as an arterial road, could be contemplated for efficient travel by public transport to the Christchurch CBD if it connects with express bus services that travel via the CSM.

With the scale of development contributing to additional public transport demand from West Melton, and combined with additional demand from growth at Darfield and other growth areas to the west, I consider the site can respond to changes in transport mode over time. Further references to the site responding to future public transport provision are now proposed to be included in the modified ODP provisions, as set out by Ms Seaton.

9 RESPONSE TO ISSUES RAISED BY SUBMITTERS

- 9.1 I have reviewed the submissions and further submissions on PC67 and respond to these as follows.
- 9.2 Environment Canterbury and Christchurch City Council have opposed the Application for a number of reasons including that the Site is outside of planned growth areas, will not be served by public transport and will lead to car dependence.
- 9.3 With respect to public transport, it is noted that Environment Canterbury's model for provision of bus services typically involves responding to residential development and therefore bus passenger demand. Residential development of the Site will add to possible bus passenger demand, which combined with increasing demand from other townships to the northwest could make a service through Wilfield and along Weedons Ross Road more feasible. Provision for this has been incorporated in the amended ODP text presented by Ms Seaton.
- 9.4 I reiterate that the site is immediately adjacent to residential development of Wilfield and local connections will be available for people to walk, cycle and use other forms of micro-mobility to travel to the West Melton township. Rolleston and particularly the Izone will be within cycling distance of West Melton when the cycleway along West Melton Road is constructed.
- 9.5 On a more local level, submitters Beaven, Manera and Stevenson have raised concerns about the ability of the existing roading network to accommodate the additional traffic volumes. As I have outlined already, increases in traffic volumes resulting from an additional approximately 130 residential lots will be relatively small. Weedons Ross Road is an arterial road which connects directly to the CSM so is expected to serve

a traffic carrying function. It is also planned to be widened by SDC so that it better reflects its function. The traffic signals at SH73 will ensure accessibility to and from the highway.

9.6 Submitter Anderson considers that the Weedons Ross Road widening as well as the SH73 intersection signalisation should be completed before the Site can be developed. I agree that the intersection signalisation should be completed before development and this is covered by an existing rule for the West Melton Living South Zone. I do not agree that there is a requirement for the Weedons Ross Road widening to be carried out before the Site can begin to be developed. Development of the Site will only generate small volumes of additional traffic and Weedons Ross Road is an important arterial road in the Selwyn District which SDC has signalled that they intend to widen within the short-term.

9.7 Submitter Posthuma has raised concerns with the proposed location of the new intersection on Weedons Ross Road and effects on the safe operation of their driveway. The intersection has been proposed in this location so that it is midway between the existing driveways for 557 and 581 (the Posthuma property) Weedons Ross Road. This will allow for flexibility in designing the intersection and any localised road upgrades necessary at the subdivision and detailed design stages. I do not share the submitter's concerns related to impacts of the intersection on the operation of their driveway given they will be separated by approximately 100m. Weedons Ross Road will continue to carry modest traffic volumes for an arterial road and the Posthuma's low-volume rural residential driveway will continue to be able to operate safely.

10 **RESPONSE TO SECTION 42A REPORT**

10.1 I have reviewed the Officer's Report prepared by Ms Liz White as well as evidence that has informed that report, including the transportation evidence of Mr Dave Smith and the urban design and landscape evidence of Mr Hugh Nicholson. I comment on these below.

Transportation Evidence

10.2 Mr Smith has provided a review of the ITA and some additional assessment in his evidence. We are in agreement on the following matters:

- (a) The proposed intersection location on Weedons Ross Road is appropriate, the intersection should be supported by a reduced speed limit and appropriate sightlines will be achieved;
- (b) There are no underlying road safety matters relating to the local road environment; and
- (c) The SH73 / Weedons Ross Road intersection upgrade should be completed before housing construction can begin on the site.

10.3 Mr Smith considers that the traffic generation rate adopted in the ITA is low and he has presented an alternate traffic distribution which makes more use of Weedons Ross Road to the south and the CSM. The result is that his assessment of the future performance of the SH73 traffic signals is very similar to that presented in the ITA.

10.4 As I described earlier, I note that I have used the traffic generation rate adopted in the ITA for a number of residential assessments in West Melton. This had considered the residential traffic generation characteristics of towns that are separated from the major urban area (in this case Christchurch). It also reflects that some "at the gate" trips typical of the higher trip generation rate surveys would be local within West Melton, including the part south of SH73, so are not external.

10.5 Also, the traffic distribution adopted in the ITA provides a conservative assessment of potential impacts on the SH73 intersection which has always been the critical one for development on the southern side of the highway. I note that Mr Smith has placed some reliance on Census journey to work data for trip patterns. Whilst that is generally reasonable for a centre like West Melton, it is most likely to be reflective of peak period patterns where journey to / from work dominates the pattern. Throughout other times of the day, I just highlight that there are a range of other trip purposes, many of which would be made more locally, and would not need to travel longer distances.

10.6 I agree that the higher rates adopted by Mr Smith are often applied for transport assessment purposes and reflect a business as usual approach to trip generation, and are reasonable for testing network performance. Those higher rates would also represent minimal change in travel mode over time.

- 10.7 However, I also note that even before taking into account the effects of the Covid-19 pandemic, Stats NZ travel to work data for the usually resident population indicates that 12% of the West Melton regular workforce would work from home. This is slightly higher than Christchurch City and Rolleston at 9% of people working from home. While I have not been able to access formalised travel surveys of greater Christchurch residents over the past 18 months, the anecdotal evidence is that work from home is contributing to reduced travel to work commuting, at least for some occupations. In this regard I consider that the 2018 Census results would conservatively underestimate future work from home proportions.
- 10.8 Mr Smith carried out a further assessment with a longer-term growth applied to the through movements on SH73 and concluded that the signals will have capacity to operate at a satisfactory level during peak times.
- 10.9 Ultimately, the additional analysis carried out by Mr Smith is helpful in demonstrating the transport network can accommodate the potential traffic generation under different trip rate and trip distribution assumptions.
- 10.10 Mr Smith is not concerned with the increased use of Weedons Ross Road south of the site if the traffic distribution is closer to what he has presented and I agree given the low additional traffic volumes. Weedons Ross Road is an arterial road and Council is proposing to upgrade it further.
- 10.11 Mr Smith supports the connectivity proposed for walking and cycling into and through the Wilfield subdivision. However, he highlights the gap in the walking and cycling network along Weedons Ross Road between the Site and the northern Kingsdowne Drive intersection. He considers that a pedestrian / cycle path should be provided from the Site frontage along Weedons Ross Road to the new Kingsdowne Drive / Weedons Road intersection, and onwards to SH73 before the Site can be developed.
- 10.12 I agree that a safe walking and cycling route should be provided along Weedons Ross Road from the site to SH73 / Weedons Ross Road, as a more direct alternative to the existing off-road routes through

Wilfield. A suitable rule has been proposed by Ms Seaton to address this. In addition, further refinements have been made to the internal pedestrian / cycle network provisions.

Urban Design and Landscape Evidence

10.13 Mr Nicholson has raised concerns that development of the Site would not contribute to a consolidated and compact urban form for West Melton. He points out that the Site is largely outside 1200m from the 'town centre', which he has defined as a point on Weedons Ross Road outside the shopping centre and the primary school.

10.14 I addressed this matter earlier in my evidence, and highlighted that the distances involved are comparable to those involved with the existing urban area.

10.15 I acknowledge walking is unlikely to be a preferred mode for some trips within the township primarily due to distance. However, in this location I consider many others would walk the distances involved to the facilities within 10-25 minutes (at an average walk speed, and for the near and far points of the zone respectively). The reasonably direct and easily legible pedestrian network would contribute to the occurrence of walking trips.

10.16 I consider the travel distances are also convenient for cycling as well as other micro-mobility modes which are becoming increasingly popular e.g. electric scooter. The neighbourhood connectivity through Wilfield will be important for walking and particularly leisure walking. Also, there are a number of community facilities on the southern side of SH73 including the sports fields at the domain which involve shorter walking distances as I have described earlier.

10.17 Mr Nicholson considers that SH73 provides community severance and he has remaining concerns with the use of the traffic signalised intersection for pedestrians. I point out that the combination of recent speed limit reductions to 60km/h, an urban speed, and the signalised crossing will provide a vast improvement for active mode users on what is provided currently. The primary rationale, as stated by Waka Kotahi in their project description, is to support an integrated community. I expect the design of the intersection to ensure that active mode users

are well catered to in terms of space for waiting and to ensure that the intersection is well highlighted to drivers in advance. This will help to ensure appropriate vehicle speeds through the intersection. The existing refuge islands either side of the intersection will continue to provide connectivity for the surrounding neighbourhoods and pedestrians in this sort of environment would not expect to have priority.

10.18 On a local level, Mr Nicholson has raised concerns with the orientation of the main road into the Site and the off-road connectivity through Wilfield for pedestrians and cyclists. Revisions to the ODP have been proposed by the Applicant to emphasise additional pedestrian and cyclist connectivity requirements to Weedons Ross Road.

10.19 At this stage of transport network planning the existing speed environment and road alignment restricts possible locations for a safe intersection on Weedons Ross Road, given the presence of the curve in the road and rural vehicle speeds. The location does provide for good intersection separation and supports movement to and from the Rolleston area.

10.20 The off-road cycle and pedestrian connections through Wilfield are for neighbourhood connectivity and to provide more attractive alternative routes for people using active travel modes. I consider that the off-road connections through a series of reserves in Wilfield to be a good outcome for all residents in this part of West Melton.

Section 42A Report

10.21 I have reviewed the Officer's Report of Ms Liz White. At paragraph 37 she accepts the traffic effects assessment of the ITA. Her transport-related concerns are related to the location of the Site relative to the West Melton township but also the remote location of West Melton relative to larger employment areas and resulting car dependence.

10.22 At paragraph 42 Ms White does not consider it reasonable to assume that there will be a future public transport network. Firstly, I interpret she is referring to the comments about a service along Weedons Ross Road, noting there is already an existing service in West Melton, albeit with limited frequency. There is also a school service that connects West Melton to Rolleston. As West Melton has had rapid

growth, but is not yet fully developed, some lag in the frequency of service could be expected.

10.23 Secondly, in my experience public transport provision does adapt to changes in location and quantum of land use. Generally, as the actual or potential demand increases, that is acknowledged through refined public transport plans.

10.24 My understanding is that the most recent public transport planning work (Greater Christchurch Public Transport Futures – “*PT Futures*”) only recognises the anticipated growth as set by the likes of the Canterbury Regional Policy Statement and ‘Our Space’. I understand on that basis it is unlikely to have addressed additional localised refinements that may be warranted if further land is zoned to address urban development capacity issues. In my opinion, if additional area was zoned at West Melton, the overall strategy would only need refinement in terms of implementation of the supporting services, a relatively modest change.

10.25 By way of further context, the PT Futures work states that currently only 2.25% of all trips made in Greater Christchurch are by public transport. As such, low utilisation of public transport is not solely an issue for this site or West Melton. A range of responses are proposed in PT Futures including more frequent services, and branching out services to bring more households close to a bus route. Applying that to the West Melton context, I consider it reasonable to expect there will be further consideration by the Regional Council for how the existing zoned households of West Melton will be efficiently serviced by public transport, let alone a future West Melton with an increased number of residents.

10.26 As an existing example, the smaller township of Burnham has a more frequent service than West Melton as an extension of the core services between Christchurch and Rolleston. A similar extension of a core service such as that planned between Christchurch CBD and Yaldhurst, or extension of the existing orbital route (currently linking Lincoln to Rolleston) would be logical public transport network developments that could be considered to further increase public transport accessibility for West Melton.

10.27 Ms White also comments elsewhere on the potential reliance of private vehicle travel from this site. As I have discussed within my evidence, local travel options will be available particularly by bicycle and micro-mobility modes, and walking is available for some trips. The site is located in reasonable proximity to the major Selwyn District industrial areas north of Rolleston, and the Rolleston town centre which is also within cycling distance and there are plans for a future cycle network to safely provide for that movement. The distances involved are comparable to the southwest Christchurch growth area distances into central Christchurch.

11 **CONCLUSIONS**

11.1 I have assessed the transportation matters associated with PC67. I have concluded that with the modified transport ODP and rule provisions relating to active and public transport modes, residential development in the Plan Change area can:

- (a) be integrated with the West Melton transport network, supporting urban consolidation and transport mode choice;
- (b) improve existing community active transport infrastructure;
- (c) support utilisation of the planned District cycleway network connecting West Melton to the Rolleston employment and activity centre;
- (d) respond to desirable future public transport enhancements such that public transport can be accessed;
- (e) be safely and efficiently accessed by the arterial and state highway transport network, with negligible change in performance of intersections or the roads; and
- (f) have minimal impact on overall travel distances and as such greenhouse gas emissions in the greater Christchurch urban area based on my expectation that;
 - (i) many of the trips would otherwise be made to and from comparable dwellings on the surrounding or wider Selwyn

District transport network with comparable or longer travel distances;

- (ii) there is a changing vehicle fleet with lower emissions; and
- (iii) there are changing working patterns, with recent events confirming some occupations can remove vehicle trips by working from home.

11.2 On that basis, I consider PC67 can be supported from a transportation perspective.

Andrew Metherell

August 2021

Appendix 1:

Map for Table 1 Walking Distances of Urban Area to Key Facilities

