BEFORE HEARING COMMISSIONERS FOR SELWYN DISTRICT COUNCIL

UNDER the Resource Management

Act 1991

AND

IN THE MATTER Private Plan Change Request

67 (PC67)

STATEMENT OF EVIDENCE OF HUGH ANTHONY NICHOLSON ON BEHALF OF SELWYN DISTRICT COUNCIL

URBAN DESIGN AND LANDSCAPE

23th AUGUST 2021

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1. INTRODUCTION

- 1.1 My full name is Hugh Anthony Nicholson. I am a Director at UrbanShift which is an independent consultancy that provides urban design and landscape architecture advice to local authorities and private clients.
- 1.2 I hold a Post-Graduate Diploma of Landscape Architecture from Lincoln University and a Post-Graduate Certificate in Urban Design from the University of Sydney. I have more than twenty years' experience in both the public and private sectors. I am a registered member of the New Zealand Institute of Landscape Architects (NZILA).
- 1.3 Prior to my current role, I worked as the Design Lead for the *Ōtākaro Avon River Regeneration Plan* for Regenerate Christchurch for two years, and as a Principal Urban Designer for Christchurch City Council for ten years. Before this I worked as an Urban Designer for the Wellington City Council for seven years.
- 1.4 I am a chair / member of the Nelson City / Tasman District Urban Design Panel and the Akaroa Design Review Panel. I was a member of the advisory panel for the development of the National Guidelines for Crime Prevention through Environmental Design (CPTED) for the Ministry of Justice, and a member of the Technical Advisory Group for the Wellington Waterfront.

1.5 My experience includes:

- (a) Project leader for the establishment of the Christchurch Urban Design Panel which reviews significant resource consent applications and significant Council public space projects (2008);
- (b) Project leader for Public Space Public Life Studies in Wellington (2004) and Christchurch (2009) in association with Gehl Architects which surveyed how people used different public spaces around the city centre, and how the quality of these public spaces could be improved;

- (c) Steering group and design lead for *Share an Idea* and the Draft *Christchurch Central Recovery Plan* including associated draft district plan amendments to the central city zones which were subsequently reviewed and incorporated into the *Christchurch Central Recovery Plan*;
- (d) Expert urban design witness for Christchurch City Council to the Independent Hearings Panel for the Christchurch Replacement District Plan on the Strategic Directions and Central City chapters;
- (e) Design reviewer for more than fifty resource consent applications for major central city rebuilds for the Christchurch City Council including the Justice & Emergency Precinct, the Central Library, the Bus Interchange and the Christchurch Hospital Outpatients and Acute Services Buildings.

2. CODE OF CONDUCT

2.1 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.

3. SCOPE

3.1 I have been asked by the Selwyn District Council to carry out a peer review of the Landscape and Visual impact Assessment report by DCM Urban, to provide additional comments on urban design effects in relation to the urban form of West Melton, and to comment on matters raised in submissions that relate to urban design or landscape architecture that have been referred to me by Ms White.

- 3.2 My assessment is focused on the urban design effects in relation to the urban form of West Melton and does consider the urban form implications for Greater Christchurch which are addressed in Ms. White's evidence.
- 3.3 In my assessment I have reviewed the following documents:
 - (a) Attachment 2: Proposed Outline Development Plan
 - (b) Attachment 3: Section 32 Evaluation prepared by Novo Group
 - (c) Appendix C: Landscape and Visual Effects Assessment by DCM Urban
 - (d) Submissions addressing urban design and landscape architecture matters from the following parties:
 - (i) 0005 Winston and Kristina Posthuma
 - (ii) 0006 Christchurch City Council
 - (iii) 0009 Elene Helen Anderson
 - (e) Draft transport evidence prepared for Selwyn District Council by Mr Dave Smith.
- 3.4 I have visited the site and West Melton on 28th July 2021.

4. PROPOSAL

- 4.1 PC67 covers an area of 32.7 hectares and proposes to create a new residential zone as an extension of the existing Living West Melton Zone. The area is located approximately 1.1 kilometres to the south of the existing West Melton township on the southern side of State Highway 73 and is currently part of the Inner Plains Zone.
- 4.2 The proposed Living WM South zone differs from the existing residential zone, renamed Living WM North, in have increased minimum site sizes (increased from 500m² to 1,100m²).

5. STRATEGIC DIRECTIONS

- In my peer review and in providing evidence I have drawn strategic direction on good urban form from three sources, the National Policy Statement on Urban Development (NPSUD), the Canterbury Regional Policy Statement (CRPS) and the Operative Selwyn District Plan (SDP), all of which provide overarching guidance.
- 5.2 The **NPSUD** seeks to provide "well-functioning urban environments" that enable more people to live near a centre or employment opportunities, and which are well serviced by public transport.²
- In particular the **NPSUD** promotes urban environments that provide good accessibility between housing, jobs, community services, and natural and open spaces, support reductions in greenhouse gas emissions, and are resilient to the likely effects of climate change.³
- The **CRPS** seeks to manage the urban form and settlement pattern of Christchurch through the consolidation and intensification of urban areas. In particular it encourages the "consolidation of the existing settlement of West Melton".⁴
- 5.5 The objectives of the **CRPS** direct that residential development should be of a high quality and incorporate "good urban design".⁵
- 5.6 The **CRPS** also seeks housing developments that give effect to the listed principles of good urban design, and to those in the NZ Urban Design Protocol 2005. These principles refer to the need for well-integrated places that have high-quality connections including walking, cycling and public transport, and that are environmentally sustainable.⁶

¹ National Policy Statement on Urban Development 2020, Objective 1, p.10

² Ibid, Objective 3, p.10

³ Ibid, Policy 1, p.10-11

⁴ Canterbury Regional Policy Statement 2013 (as at October 2020), Objective 6.2.2 Urban form and settlement pattern

⁵ Ibid, Objective 6.2.3 Sustainability

⁶ Ibid, Policy 6.3.2 Development form and urban design

- 5.7 The objectives of **SDP** seek that "growth of existing townships has a compact urban form", and that a "high level of connectivity is provided both within the development and with adjoining land areas".8
- 5.8 The policies in the **SDP** direct that zoning patterns should not "leave land zoned Rural surrounded on three or more boundaries with land zoned Living or Business", and that townships should be encouraged to grow in a compact shape where practical.¹⁰
- 5.9 Policy 4.2.10 in the **SDP** goes on to direct that new residential blocks should be "small in scale, easily navigable and convenient to public transport services and community infrastructure such as schools, shops, sports fields and medical facilities, particularly for pedestrians and cyclists".¹¹
- 5.10 Policy B4.3.98 anticipates new residential or business growth in West Melton on either side of Weedons Ross Road north of SH73 and south of Halkett Road. Only a limited extent of new low density residential development is envisaged south of SH73 in order to maintain a consolidated form for future growth.
- 5.11 Policy B4.3.99 seeks to promote a consolidated pattern of urban growth in West Melton in order to achieve a generally compact shape. The explanation and reasons reiterate that a substantial amount of urban growth is anticipated north of SH73, with development south of SH73 limited in both extent and density.
- 5.12 Drawing on the strategic directions outlined above I have reviewed the urban form proposed in PC67 in terms of consolidation or the extent to which it creates a compact urban form for West Melton, and in terms of connectivity or the extent to which it supports accessibility to a range of services in and around West Melton using a range of travel modes including walking, cycling and public transport.

⁷ Operative Selwyn District Plan (Townships Volume), Objective B3.4.4

⁸ Ibid, Objective B3.4.5

⁹ Ibid, Policy B4.3.3

¹⁰ Ibid, Policy B4.3.6

¹¹ Ibid, Policy B4.2.10

6. CONSOLIDATION / COMPACT URBAN FORM

- 6.1 West Melton is a small township situated approximately 24 kilometres west of Christchurch on State Highway 73 (SH73). The main part of the township is located between West Coast and Halkett Roads with the local primary school and shopping centre on Weedons Ross Road just north of the intersection with the SH73.
- The main part of the township is characterised by single-storey modern dwellings on spacious sections with landscaped curvilinear streets. There is a network of pedestrian paths complementing the street network.
- 6.3 While most of the township is located on the northern side of SH73, the community centre, skatepark and the West Melton Tavern are sited on the southern side. There is also a lower density subdivision (Wilfield subdivision) sited to the south-west on land between SH73 and the proposed plan change area.
- I consider that the centre of West Melton is on Weedons Ross Road just north of SH73 between the West Melton Primary School and the local shopping centre. It is also the location of the nearest bus stop on the Christchurch-Darfield bus service (see Figure 2).
- Figure 1 shows 400, 800 and 1,200 metre radius rings around the centre of West Melton to give an indication of walkable catchments, although actual walking distances will be longer depending on the local network of paths.
- The walkable catchments provide an approximate measure of how compact the urban form is and to what extent the urban form enables walking, cycling and public transport as realistic alternatives to the use of private vehicles. I consider them to be one measure to assess the proposed plan change against Policy 4.2.10 of the SDP (as well as the various directions relating to consolidation and compactness).

- 6.7 The existing housing in West Melton is largely located within the two northern quadrants of the walkable catchments shown in Figure 1. The south-western quadrant is undeveloped rural land apart from the community centre and pub, while the south-eastern quadrant includes the lower density Wilfield subdivision south of SH73.
- Two major pieces of infrastructure create community severance within West Melton. State Highway 73 creates a significant barrier to easy access between communities and facilities on the northern and southern sides. A high voltage transmission line running broadly parallel and approximately 600 metres further south creates additional community severance with a strip of undeveloped land separating housing to the north and south (see Photo 1).
- The proposed plan change area is located largely outside the walkable catchments shown in Figure 1 and is separated from the town centre by the high voltage transmission lines and SH73. It extends south-west to within 400 metres of the Existing Development Area (Johnsons Road).
- In my opinion the proposed plan change area does not consolidate West Melton or contribute to a compact urban form for the township anticipated in Policies B4.3.98 and B4.3.99 of the SDP. There are significant areas of undeveloped land within all four quadrants of the walkable catchments identified in Figure 1.
- As a general principle a more compact urban form can be achieved by concentrating development as close to the town centre as practical. Using this principle I note that there are areas of undeveloped rural land to the north of SH73 within the 1,200 metre radius of the town centre, and areas of undeveloped rural land to the south of SH73 within both the 400 and 800 metre radius of the town centre. In my opinion it is likely that development of these areas would make a greater contribution to the consolidation of West Melton.

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¹² Principle - Consolidation and dispersal, *People, Places and Spaces: A design guide for urban New Zealand*, Ministry for the Environment, 2002, p.30

- 6.12 I note that Mr Compton-Moen also considers the land at 708 Weedons Ross Road (on the corner of SH73 and Weedons Ross Road) to be suitable for more intensive development of small lot or medium density residential. However, he argues that the plan change area is a "natural extension" of the Wilfield development, and considers that it is "a[n] in-sequence development adding development capacity to West Melton". 13
- 6.13 While the plan change area might be considered a 'natural extension' if it is considered solely in the context of the Wilfield subdivision, I do not believe it is a natural extension of West Melton in its current size and form as it extends significantly further away from the town centre than any other part of the township. Given that there are a number of areas of undeveloped rural land closer to the town centre I do not agree with Mr Compton-Moen that the plan change area could be regarded as an 'in-sequence' development.
- The proposed plan change area is outside the walkable catchments identified and is further separated from the town centre by SH73 and the high voltage transmission lines. It potentially blurs the distinction between townships and rural areas by creating a finger of low density urban sprawl to the south-west which would be approximately 400 metres from the rural residential enclave zoned Existing Development Area (Johnsons Road).

7. CONNECTIVITY / WALKABILITY

7.1 SH73 is the main road linking Christchurch with the West Coast and carries significant volumes of high speed traffic. It forms a significant barrier to easy access between the northern and southern parts of the township. Weedons Ross Road is the only road linking the northern and southern parts of the township, and the intersection currently gives priority to the SH73 with stop signs on either side.

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¹³ Appendix C Landscape and Visual Effects Assessment PC67, DCM Urban, p. 9

- 7.2 There are no facilities for pedestrians or cyclists at the intersection of SH73 and Weedons Ross Road. There are two pedestrian crossing points with pedestrian refuges on SH73 at West Melton, one is located in front of the community centre approximately 180 metres west of the intersection with Weedons Ross Road. The second one is sited approximately 295 metres east of the intersection (these are shown by orange diamonds in Figure 1).
- 7.3 Currently the walking distance from the north-west corner of the proposed plan change area to the centre of West Melton, between the school, bus stop and shopping centre, is 1,530 metres. This includes walking to the pedestrian refuge in front of the community centre and excludes walking distances within the plan change area.
- 7.4 I accept Mr. Smith's advice that an upgrade of the intersection of SH73 and Weedons Ross Road is proposed for 2022/23 in Waka Kotahi's NZ upgrade programme. If traffic lights with pedestrian crossings are installed the walking distance from the north-west corner of the plan change area to the school, bus stop and shopping centre will be reduced to 1,175 metres excluding walking distances within the plan change area.
- 7.5 While the upgrade of the SH73 / Weedons Ross Road intersection will create controlled pedestrian crossing points on SH73 at the intersection, in my opinion it does not fully mitigate the community severance created by the State Highway. Accessing the controlled crossing points will require significant detours from parts of West Melton, and while there are two pedestrian refuges at other locations they do not have pedestrian priority. Even with traffic lights the intersection is unlikely to be perceived as a safe crossing point for young children given the speed (60kph) and volume of traffic on SH73.
- 7.6 Analysis of data from the New Zealand Household Travel Survey (NZHTS) in 2013 showed that the median walk-to-bus trip length was 200 metres, and 75% of walk-to-bus trips were less than 500 metres. These distances were low compared with the selected international research, which showed that people walk distances of 400-800 metres to reach bus services.¹⁴

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¹⁴ NZ Transport Agency research report 537, Improving the cost-benefit analysis of integrated PT, walking and cycling, Sinclair Knight Merz, 2013, p.79

- 7.7 There are currently no walking or cycling facilities along Weedons Ross Road between the plan change area and SH73 (see Photo 2). This section of Weedon Ross Road has a speed limit of 70kmph which increases to 100kmph at the north-west corner of the plan change area. It has a relatively narrow carriageway with a water race on the eastern side and grass verges.
- 7.8 I accept Mr Smith's advice that a shared path for pedestrians and cyclists could be constructed along Weedons Ross Road from the plan change area to SH73, and that if the plan change is approved, development should be restricted until the shared path is installed between Kingsdowne Drive and SH73, and the SH73 / Weedons Ross intersection upgrade is completed.
- 7.9 I also accept Mr. Smith's advice that a bus route and bus stop could be accommodated on Weedons Ross Road adjacent to the plan change area. I consider that given the low densities and relatively low number of households proposed in the plan change area that it is unlikely to generate sufficient demand for a new bus route or stop and I do not believe this should be relied upon. I note that Environment Canterbury in Submission 0011 indicates that there are currently no planned upgrades or changes to the Metro route passing through West Melton.
- 7.10 In my opinion the proposed plan change area exceeds the distance that the average person would regularly walk to the school, shops or the bus stop in West Melton. Once the SH73 / Weedons Ross Road intersection upgrade and the shared path between the Kingsdowne Road and SH73 are completed, the walking distances to the town centre will still generally exceed 1.2 kilometres and be significantly longer than the 800 metre threshold identified in international studies.
- 7.11 The proposed Outline Development Plan indicates a primary transport route running from Ross Weedons Road at the south west end of the plan change area diagonally to the north-east to link with Ridgeland Way in two places in the north-eastern corner of the plan change area.

- 7.12 The orientation of the primary route and the location of the connection onto Ross Weedons Road means that residents on the southern two-thirds of the plan change area will be forced to head south to join directly onto Weedons Ross Road or to head east and north to access the existing residential streets in the Wilfield subdivision. Either route does not head directly towards the town centre and will increase the travel distances required to reach the town centre.
- 7.13 A pedestrian and cycling route is shown in the Transport Plan which forms part of the Outline Development Plan along the primary connector and the north-south linear park through the adjacent Wilfield subdivision. This route does not currently connect directly to the town centre.
- 7.14 Currently the route through the Wifield residential area to the town centre is approximately 2.1 kilometres long excluding any distances within the plan change area. The route winds through and across various parks and residential streets in the Wifield subdivision to the uncontrolled eastern pedestrian refuge, and across SH73 to Rossington Drive. Once the SH73 / Weedons Ross intersection upgrade is completed the distance will be reduced to approximately 1.75 kilometres excluding any distances within the plan change area.
- 7.15 Given that vehicle emissions are a significant percentage of greenhouse gas emissions in New Zealand¹⁵, ensuring that urban growth supports walking, cycling and public transport as a viable alternatives to private vehicle use will assist in reducing greenhouse gas emissions to address climate change. In my opinion making walking and public transport viable alternatives includes ensuring that the urban form of towns provides amenities, services and bus stops within a distance that the average person would be prepared to walk on a daily basis.

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¹⁵ https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-1990-2019/

7.16 In my opinion the internal layout of the transport routes in the proposed Outline Development Plan, together with the length of the walking routes does not support the use of walking or public transport as viable alternatives to private vehicle trips, and does not assist in reducing emissions to address climate change as anticipated in Policy 1 of the NPSUD.

8. LANDSCAPE AND VISUAL IMPACT ASSESSMENT

- 8.1 I have reviewed the landscape and visual impact assessment in Appendix C of the application prepared by Mr Compton-Moen dated November 2020.
- 8.2 I agree with Mr Compton-Moen's description of the landscape character and values in paragraph 3.1 of his report.
- 8.3 I have used a seven point scale drawn from the NZILA's *Aotearoa New Zealand Landscape Assessment Guidelines*¹⁶ to assess the scale of effects of the Plan Change on the landscape character and the visual impact:

very low	low	mod-low	moderate	mod-high	high	very high	

- In my opinion the effects of the proposed plan change on the landscape character would be greater than Mr Compton-Moen anticipates in paragraph 3.2. I consider I consider that the change in landscape character from an open rural character to a residential subdivision would have a *moderate-high* impact reflecting the change from an open rural landscape with long views and a small number of built elements, to a suburban landscape with shorter views, enclosed spaces and a greater number of built elements.
- 8.5 I have reviewed Mr Compton-Moen's visual impact analysis and broadly agree with his description of the visual context as well as his selection of viewpoints and description of the views.

¹⁶ *Te Tangi A Te Manu*: Aotearoa New Zealand Landscape Assessment Guidelines, (Final Draft), New Zealand Institute of Landscape Architects, May 2021, pp. 63-65

- 8.6 Bearing in mind that the visual impact of the proposal is a subset of the attributes that contribute to change in landscape character, in my opinion the visual impact would be *moderate*. In forming this opinion I note that under the current zoning it would be possible for a shelterbelt or hedge to be planted on the application site blocking longer distance views.
- 8.7 I support the mitigation measures proposed by Mr Compton-Moen, however, I do not consider that they change the level of visual impact to a significant extent. In my opinion the visual impact of the proposed changes with the mitigation measures would remain *moderate*.

9. SUBMISSIONS

- 9.1 This section addresses points raised in submissions that Ms White has asked me to comment on.
- 9.2 Submission 0009 partly supports the application due to the low density nature of the proposed development and the larger buffer zones and considers that this retains the rural feel of West Melton. Submission 0006 suggests that the density should be increased to 15 households per hectare in order to meet the density targets in the CRPS.
- 9.3 In general I would expect higher densities to be located closer to town centres and to public transport in order to benefit from and support the amenities and services offered within a walkable distance. Locating higher densities further away from town centres and public transport promotes higher levels of private vehicle use and a less consolidated urban form.
- 9.4 In my opinion increasing the density of the proposed plan change would exacerbate the potential issues and lead to a less consolidated urban form, a greater dependence on private vehicles and greater landscape and visual effects.

- 9.5 Submission 0005 opposes the application on the grounds that the development will restrict their ability to use their land for rural purposes. In particular they are concerned about increased noise and loss of privacy, and reverse sensitivity for activities such as running farm machinery, permitted burn-offs, and riding dirtbikes.
- 9.6 If the plan change is approved the Submission 0005 seeks that either their land is zoned for residential use, or that a bund is constructed to create a buffer between their property and the new subdivision.
- 9.7 I have been asked to comment on the appropriateness of the request for a bund. I note that while a bund would reduce potential reverse sensitivities between rural and residential land uses, the road width and proposed edge treatment are generally considered to be acceptable solutions in other parts of Selwyn District.

10. CONCLUSION

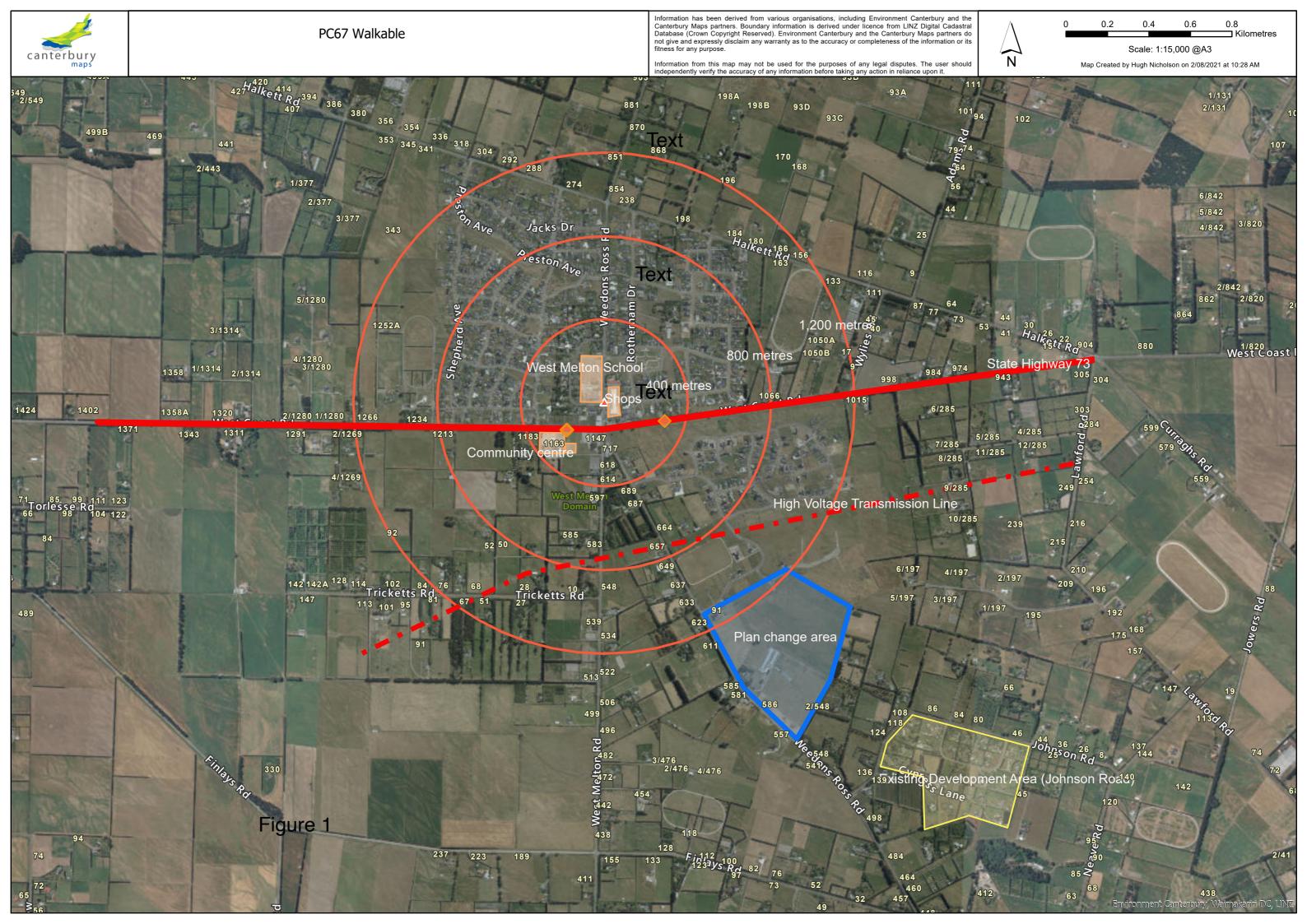
- In my opinion the proposed plan change area does not consolidate West Melton or contribute to a compact urban form for the township anticipated in Policies B4.3.98 and B4.3.99 of the SDP due to its distance from the town centre and the community severance created by SH73 and the high voltage transmission lines. I note that there are significant areas of undeveloped rural land that are closer to the town centre which would be likely to be suitable for higher densities and make a greater contribution to a compact urban form if required.
- In my opinion the location of the proposed plan change area exceeds the distance that the average person would regularly walk to the school, shops or the bus stop in West Melton, and the internal layout of the proposed Outline Development Plan would further increase walking distances to the town centre. I consider that the location of the proposed Plan Change does not support the use of walking or public transport as viable alternatives to private vehicle trips, and does not assist in reducing emissions to address climate change as anticipated in Policy 1 of the NPSUD.

In my opinion the change in landscape character resulting from the proposed Plan Change would have a *moderate-high* impact reflecting the change from an open rural landscape with long views and a small number of built elements, to a suburban landscape with shorter views, enclosed spaces and a greater number of built elements.



Hugh Anthony Nicholson

23rd August 2021



Attachment 1



Figure 2: Map of Metro bus route through West Melton https://www.metroinfo.co.nz/timetables/86-darfield-city/



Photo 1: Panoramic view of the strip of undeveloped land under the high voltage transmission lines taken from Kingsdowne Drive in the Wilfield subdivision.



Photo 2: Photo looking south from close to the southern intersection of Weedons Ross Road and Kingsdowne Drive showing narrow 70kph road, grass verge with no footpath and water race.