Johnston Whitney

RESOURCE MANAGEMENT . PLANNING CONSULTANTS

Our Ref: 52/3/86

<u>CENTRAL OTAGO DISTRICT COUNCIL</u> <u>REQUESTED PLAN CHANGE 13 :</u> <u>RIVER TERRACE DEVELOPMENTS LIMITED, CROMWELL : PC 00013</u> <u>REPORT OF PLANNING CONSULTANTS PURSUANT TO SECTION 42A OF THE</u> <u>RESOURCE MANAGEMENT ACT 1991</u>

1.0 INTRODUCTION

On 1 March 2018 River Terrace Developments Limited requested a change to the Central Otago District Plan (Operative District Plan) pursuant to section 73(2) and clause 21(1) of Part 2 of Schedule 1 to the Resource Management Act 1991 (the Act/RMA).

The request is to change the zoning of land to apply a new River Terrace Resource Area to land that is currently in the Rural Resource Area, part of which is subject to the Rural Residential notation as shown on Planning Map 44 of the Operative District Plan. The requested plan change relates to land located to the west of Sandflat Road and to the south of State Highway 6 near Cromwell. This land is described as Section 28 Block I Cromwell Survey District and Part Section 24 Block I Cromwell Survey District, being some 49.8387 hectares of land in total.

The Council accepted the request pursuant to clause 25(2)(b) of Part 2 of Schedule 1 to the Act on 11 April 2018.

2.0 PUBLIC NOTIFICATION, SUBMISSIONS & FURTHER SUBMISSIONS

The requested plan change was publicly notified as Plan Change 13 on 19 May 2018 and the closing date for submissions was 20 June 2018. Altogether some 417 submissions were received in response to the requested plan change.

Some 15 of the 417 submissions were lodged with the Council between 21 June 2018 and 27 June 2018, ie. within the week following the closing date for submissions. Section 37 of the Act provides for a local authority, in any particular case, to extend a time period or to waive a failure to comply with a requirement for the time of serving documents. Having taken into account the matters listed in section 37A(1) of the Act we **recommend** that the late submissions by Valerie Dawn Adams (3), Peter John Corkery (60), Stephen William Day (84), Phillippa Jane de Lacey (88), Stephen Paul Gray (134), Mark William Hourigan (152), Rod Keillor for Little Quail Ltd (171), William Latta (181), John Stanley Milburn (235), Kylie Jane Morton (247), Ivan Ralph Smith (339) and Christian Josef Wieser (394) be accepted. The late submissions received from Craig Davies (81), Tania Davies (82) and Adam Gent (130) are incomplete and we discuss these submissions further below.

Several of the submissions are incomplete as no address for service is provided and the submissions are not signed. In our view these are not valid submissions and we **recommend** that the submissions by Craig Davies (81), Tania Davies (82), Adam Gent (130) and Allan Douglas Kirk (174) be declared invalid.

A summary of the submissions (including the late submissions and the invalid submissions discussed above) was notified for further submissions on 13 October 2018, with further submissions closing on 29 October 2018. Some 80 persons and organisations lodged further submissions.

The further submissions by Ian Anderson (502) and Julene Ludlow (534) are generic and relate to all submissions in opposition to Plan Change 13.

The further submission by Paul Desmond Coghill (510) was also generic and was lodged in response to the two submissions that were in favour of the development.

On 29 October 2018 a document in response to Plan Change 13 was forwarded in the name of Brett Sherriff and 1229 others (560) by Crux to the Council. This document purports to be a petition in opposition to Plan Change 13 and is not a valid further submission.

Several further submissions were lodged which do not identify the original submission or submissions to which they relate. It appears that these further submissions simply oppose Plan Change 13. While most of these further submitters did not make original submissions, some did; and the content of the further submissions made by those who have made original submissions may be traversed when the individuals concerned present their original submissions.

Having regard to the above we **recommend** that the further submissions received from Donna Abrams (501), Lyall & Jan Hopcroft (523), Phillip James Horn (524), Patricia O'Neill (543), Graeme Francis O'Rourke (544), Elaine Rae (551), Laura Randall (552), Vicki Ann West (574), John Fereday Wilkinson & Margaret Janet Wilkinson (575) and Jonathan Young (580) be declared invalid as they do not identify any submission to which they relate; and therefore fail to comply with Clause 8(2) of Schedule 1 to the Act.

We have prepared a summary of all submissions and all the valid further submissions received in response to requested Plan Change 13 that has been posted on the Council's website at <u>https://www.codc.govt.nz/publications/plans/district-plan/plan-changes/Pages/default.aspx</u>. The further submissions are summarised in the right hand column of that document, adjacent to the summary of the corresponding original submission. We note that the further submissions by Ian Anderson (502) and Julene Ludlow (534) (which support all submissions in opposition to Plan Change 13) are summarised in the context of the original submission by Donna Abrams (1) only, to avoid repetition.

The summary document only summarises the contents of each submission and valid further submission, and we acknowledge that further details are contained in the full text of the submissions and further submissions that will be available to the Commissioners and the parties at the hearing.

3.0 STATUS OF THIS REPORT

The attention of the requester, submitters and further submitters is drawn to the fact that the purpose of this report is to bring to the attention of the Commissioners all relevant factual information or issues which should be considered in deliberating on requested Plan Change 13 (which we refer to as Plan Change 13 in this report). It must be emphasised that any conclusions reached or recommendations made in this report are not binding on the Commissioners, and it should not be assumed that the Commissioners will reach the same conclusion or decision having considered all the evidence.

4.0 SCOPE OF PROPOSAL

Plan Change 13 amends the Planning Maps Legend and Planning Map 44 of the Operative District Plan to apply a new River Terrace Resource Area (RTRA) to land that is currently in the Rural Resource Area, part of which is subject to the Rural Residential notation.

Plan Change 13 inserts Section 20 : River Terrace Resource Area into the Operative Central Otago District Plan and amends the Contents accordingly. Section 20 includes a suite of provisions including objectives, policies and rules relating to subdivision and development in the RTRA. Provision is made for land in the RTRA to be developed for urban activities including medium and higher density residential activity, retirement living, a neighbourhood centre (and a possible school), with an associated open space network, walkways, roading and infrastructure.

Development is guided by a Structure Plan which delineates the general layout of activities in the Residential A, Residential B and Open Space Sub-Areas; and in the Retirement Living, Neighbourhood Centre and Education Overlays. Roads and greenways are shown on a Movement Plan; and provision is made for each Development Parcel shown on a Development Parcel Plan to be subdivided and developed comprehensively with the intention of promoting high quality residential neighbourhoods.

Subdivisions within the Residential A Sub-Area allotments are to have a minimum lot size of $160m^2$ and a maximum lot size of $500m^2$; and within the Residential B Sub-Area allotments are to have a minimum lot size of $400m^2$ and a maximum lot size of $1000m^2$. No minimum or maximum lot size applies to the Retirement Living, Neighbourhood Centre and Education Overlays.

The maximum number of residential units (including retirement living units) in the RTRA is to be 900 residential units.

Rules relating to the RTRA provide for the following:

- Residential activities and buildings within the Residential Sub-Areas A and B are permitted activities provided various standards are complied with including height determined by a 45 degree recession plane measured from a point 4.5 metres vertically above ground level along rear and side boundaries with a maximum height of 9 metres; maximum building coverage of 45%; a 1 metre minimum setback from all boundaries (except where units share a common wall and then no setback is required); outlook space from external windows of a living room or bedroom; outdoor living space; a maximum height of boundary fences and walls; a restriction on the minimum and maximum length of driveways; a 5 metre setback from the Resource Area boundary; and carparking. A breach of the standards is a restricted discretionary activity.
- Residential activities including Living Accommodation and centralised activities including food preparation and related activities, Care Centre activities, and medical activities limited to the premises of doctors and health care professionals are permitted activities within the Retirement Living Overlay.
- Retail activities, cafes, restaurants, Care Centre facilities, community activities, medical activities limited to the premises of doctors and other health care professionals, residential activities, recreational activities and travellers accommodation are permitted activities within the Neighbourhood Centre Overlay.
- Community facilities limited to school and pre-school care activities are permitted activities within the Education Overlay.

- Subdivision for the purposes of network and public utilities, reserves and boundary adjustments are a controlled activity.
- Buildings for residential activities within the Retirement Living Overlay are a restricted discretionary activity provided various standards are complied with including height determined by a 45 degree recession plane measured from a point 4.5 metres vertically above ground level along rear and side boundaries with a maximum height of 9 metres; a maximum building coverage of 45%; a 5 metre setback from the Resource Area boundary; and carparking.
- Buildings for centralised activities within the Retirement Living Overlay are a restricted discretionary activity provided standards are complied with including a maximum height of 12 metres; and carparking.
- Buildings within the Neighbourhood Centre Overlay are a restricted discretionary activity provided various standards are complied with including a maximum height of 12 metres; maximum building coverage of 75%; no setback from road boundaries and a minimum setback of 1.5 metres from other boundaries; a maximum gross floor area of 200m² for any retail or service premise except that a medical centre/general practitioner shall have a maximum gross floor area of 400m²; a total combined gross floor area of 1000m² for all retail premises; and carparking.
- Buildings within the Education Overlay are a restricted discretionary activity provided various standards are complied with including height determined by a 45 degree recession plane measured from a point 4.5 metres vertically above ground level along rear and side boundaries with a maximum height of 15 metres; maximum building coverage of 50%; a minimum setback from road boundaries of 1.5 metres; and carparking.
- Matters over which discretion is restricted for buildings within the Retirement Living Overlay, the Neighbourhood Centre Overlay and the Education Overlay are stated which include (amongst others) the external appearance and design of buildings; and assessment matters are stated for the external appearance and design of buildings.
- Subdivision (except for subdivision for the purposes of network and public utilities, reserves and boundary adjustments which is a controlled activity) is a restricted discretionary activity provided various standards are complied with including general accordance with the Structure Plan and Movement Plan with respect to sub-area boundaries, roads, overlay boundaries and greenway locations; roads to comply with the minimum overall width and minimum carriageway widths of the Indicative Road Cross Section Plans; provision of an access lane in Development Parcels within Residential Sub-Area A; minimum and maximum lot sizes except for the Overlay areas (as detailed above); design requirements for the Open Space Sub-Areas and Greenways; planting (to a minimum width of 2 metres and a minimum height of 2 metres) at the western boundary of the Resource Area in Residential Sub-Areas A and B; a minimum width of 15 metres for Greenways; connections to reticulated services for potable water, wastewater, telecommunications and power; and a condition of subdivision consent that requires an accidental archaeological discovery protocol. Matters over which discretion is restricted to for subdivision are stated.
- Travellers accommodation is to be a restricted discretionary activity in Residential Sub-Areas A and B.
- General Standards are proposed including Rule 7.3.6(i) Traffic Generation and Characteristics of Activities from the Residential Resource Area (with specific exceptions); a requirement that

no more than 40 residential lots are to be created until a left-turn deceleration lane is constructed at the State Highway 6/Sandflat Road intersection and that no more than 300 residential lots are to be created before a left-turn acceleration lane is constructed at the State Highway 6/Sandflat Road intersection; Rule 7.3.6(vii) Signs from the Residential Resource Area to apply in the Residential Sub-Areas A and B; Rule 8.3.6(iv) Signs from the Business Resource Area to apply in the Neighbourhood Centre Overlay; Rule 7.3.6(viii) Keeping of Animals from the Residential Resource Area; a maximum of 900 residential units (including retirement living units) in the RTRA; an acoustic insulation standard for residential buildings or buildings containing activities sensitive to road noise within 80 metres of the boundary with State Highway 6; a restrictive nocomplaint covenant in favour of the Cromwell Motorsport Park Trust Limited (in respect of Highlands Motorsport Park (Highlands) on Lot 400 DP 466637) and the Central Otago District Council (in respect of the Central Speedway (Speedway) on Lot 1 DP 403966) to address reverse sensitivity relating to motorsports activities; and a restrictive nocomplaint covenant (in respect of the Jones Orchard on Lot 2 DP 300152 and Section 28-36 Sarita Subdivision) to address reverse sensitivity effects on existing orcharding activities.

- Discretionary activities are to include any proposal to breach the General Standards; any subdivision that does not meet the standards for a restricted discretionary activity subdivision; and any proposal that does not meet the standards for buildings in the Overlay Areas.
- Non-complying activities are to include any activities with Noxious Effects listed in Rule 7.3.5(i) for the Residential Resource Area; any direct vehicle access from a private property onto Sandflat Road; any proposal that infringes Rule 20.7.3(iv)(e) or (f) which limit maximum gross floor areas for retail activity in the Neighbourhood Centre Overlay; any subdivision in Residential Sub-Area A that creates an individual residential lot that is not part of a comprehensive subdivision of all of a Development Parcel; activities not listed as permitted, controlled, restricted discretionary, discretionary or as a prohibited activity; and buildings and stormwater discharges to ground within the Horn's Shaft setback area marked on the Structure Plan.
- Prohibited activities include any road or direct vehicle access from the RTRA onto State Highway 6.

It is emphasised that the above is a summary only of the provisions that are to apply to the subdivision and development of land in the RTRA and that Document 2 of the plan change request document should be referred to for full details of all provisions to be inserted by Plan Change 13 as publicly notified. It is also noted that the requestor has promoted amendments to the provisions of Plan Change 13, as publicly notified, these are summarised in part 5.2 of this report, below.

5.0 DOCUMENTS IN SUPPORT OF REQUESTED PLAN CHANGE

5.1 Request Document

The private plan change request document entitled "River Terrace Developments Limited Request for a Change to the Operative Central Otago District Plan" prepared by Brown & Company Planning Group that is dated 1 March 2018 provides background information relevant to the proposed plan change. The request document provides an overview with respect to the request, a description of the property and existing environment, the reason for the request and the amendments proposed in the publicly notified plan change, and addresses the statutory framework under the Act (Document 1); the proposed amendments to the Central Otago District Plan in detail (Document 2); an Assessment of Effects on the Environment (AEE) (Document 3); and an Evaluation under section 32 of the Act (Document 4). Attached to the request document are supporting technical assessments and reports as follows:

- Economic Assessment prepared by Market Economics Limited (M.E. Consulting) dated 19 December 2017 (Document 5).
- Design Report prepared by Jasmax dated 7 December 2017 (Document 6).
- Transportation Assessment prepared by Carriageway Consulting dated 14 December 2017 (Document 7).
- Infrastructure Report prepared by Paterson Pitts Limited Partnership dated 4 December 2017 (Document 8).
- Geotechnical Assessment prepared by GeoSolve Limited dated September 2017 (Document 9).
- Preliminary Site Investigation [for potential soil contamination] prepared by e3 Scientific dated 21 November 2017 (Document 10).
- Archaeological Assessment prepared by Origin Consultants Ltd dated February 2018 (Document 11).

5.2 Requestors Submission

River Terrace Developments Limited (298) has made a submission in response to Plan Change 13 that promotes a new Rule 20.7.7(x) relating to the acoustic insulation of buildings containing noise sensitive activities; and promotes amendments to Rules 20.7.7(viii) and (ix) of the notified plan change that relate to restrictive no-complaint covenants. These proposed amendments are discussed in detail in part 7.10 of this report; and we simply note here that the requestor has sought amendments to Plan Change 13, as publicly notified.

The following documents are attached to the submission by the requestor:

- Assessment of Noise Effects prepared by the Styles Group dated 20 June 2018.
- Three draft covenants being a Motorsport Covenant, an Orchard Covenant and a Speedway Covenant.

5.3 Urban Design Assessment

In response to a Minute from the Commissioners (Minute 1) the requestor has provided a supplementary urban design assessment in the form of a Memo prepared by Alistair Ray of Jasmax, such document being dated 30 November 2018. Schedule A to the Jasmax Memo is a document prepared by Ms Natalie Hampson of M.E Consulting dated 13 November 2018 entitled "RE : Cromwell Masterplan – Feedback from Market Economics".

6.0 MATTERS RAISED IN SUBMISSIONS

To avoid preparing an unnecessarily lengthy report, and to avoid repetition, we have chosen to discuss the matters raised in submissions when, in particular, addressing the effects on the environment of the proposal; and we have therefore refrained from discussing the matters raised in submissions on a submission by submission basis.

As noted above 413 valid original submissions have been lodged; and valid further submissions were received from 70 persons and organisations. Many of the submissions and further submissions

In many instances the same or a similar point is raised by several submitters; and we have chosen not to identify every submitter who has made a particular point in our report, to avoid an unnecessarily lengthy report. We confirm that we have had regard to the contents of all valid submissions and further submissions when preparing this report; and that the summary document and the full text of submissions and further submissions will be available to the Commissioners and the parties at the hearing.

The submission by Anthony Streeter (353) supports Plan Change 13; and the submission by River Terrace Developments Limited (298) supports the plan change subject to modification. Submissions from 5 other parties either support in part/oppose in part Plan Change 13, or neither support nor oppose Plan Change 13. These "neutral" submissions have been received from Julene Ludlow (191), the Ministry of Education (239), the NZ Transport Agency (254), the Otago Regional Council (261) and Transpower New Zealand Limited (373).

The remaining 98.3% of submissions, or 406 of the 413 valid original submissions, oppose Plan Change 13.

7.0 EFFECTS ON ENVIRONMENT

The requestor has prepared an AEE (Document 3) which discusses some of the effects on the environment of Plan Change 13 under a series of headings. We have chosen to address effects of the proposal by adopting the headings and the order used in Document 3 in parts 7.1-7.12 of this report, below. It is emphasised that addressing effects in the same order as presented in Document 3 is done purely for the convenience of the Commissioners and the parties; and this should not be taken as any assessment of our ranking of the relative significance of these effects.

We note that a number of other effects and issues have been raised by submitters in response to Plan Change 13. We address these other effects and issues in parts 7.13 - 7.24 of this report. Again the order in which these effects and issues are addressed is not to be taken as any ranking of their relative significance.

7.1 Effects in relation to urban land supply and growth

Plan Change 13 provides for land in the Rural Resource Area (some subject to the Rural Residential notation) to be included in a RTRA that will provide for a range of activities, including subdivision and development for residential purposes. Proposed Rule 20.7.7(vi) stipulates that the maximum number of residential units (including retirement living units) in the RTRA shall be 900.

7.1.1 Residential Demand and Supply

The M.E. Consulting report (Document 5) in Part 2 identifies the key economic issue as whether the plan change responds to projected demand for additional residential capacity in Cromwell, including lot sizes/development typologies that reflect the anticipated demand of current and future households. The report notes that this is relevant as it determines the likely effectiveness and efficiency of the plan change to achieve its objectives.

At page 21 the M.E. Consulting report states:

"... the analysis indicates demand for approximately 108 additional dwellings per annum in Cromwell and surrounds over the medium term (2016 - 2028) to meet resident household and visitor demand and approximately 86 additional dwellings per annum over the long term

(2016-2043). This growth outlook means that suitable land in Cromwell needs to be identified, zoned and serviced – at appropriate times and at appropriate scales – to ensure that projected dwelling demand can be met without undue constraint."

Commencing at page 22 in Clause 2.5 the M.E. Consulting report addresses residential supply in Cromwell, including residential growth capacity. M.E. Consulting has identified six main areas of residential growth as follows; and these are identified in the M.E. Consulting report on Figure 2.15 at page 25. These identified areas are as follows:

- A. Gair Avenue (240 sections).
- B. Wooing Tree (210 dwellings).
- C. Golden View Lifestyle Village (94 dwellings).
- D. Chalets (estimated yield 35-60 dwellings).
- E. Waenga Drive (estimated yield 240-345 dwellings).
- F. Top 10 Holiday Park (173 dwellings).

It is noted that both B. (Wooing Tree) and F. (Top 10 Holiday Park) are referred to in the M.E. Consulting report as "awaiting a decision".

We can confirm that Plan Change 12 that provides for the denser subdivision and development of the Wooing Tree vineyard adjacent to State Highways 6 and 8B became operative on 20 February 2019. Rule 7.3.3(i)(c) of the Operative District Plan, as amended by Plan Change 12, caps the number of residential allotments at Wooing Tree at 210.

We also confirm that on 23 January 2018 Commissioners granted subdivision and land use consent RC 170378 to CHP Developments Ltd to subdivide the Top 10 Holiday Park site into 173 residential lots and to authorise residential activity on each of those lots. It is noted that the Top 10 Holiday Park site is located in the Rural Resource Area and that the consented residential allotments vary between $250m^2$ and $2055m^2$ in area.

The M.E. Consulting report on page 22 states:

"The Cromwell urban area (Residential Resource Areas) is nearly all subdivided into residential lots with few vacant sections remaining in established areas based on M.E.'s observations as at October 2017...."

On page 24, having identified the capacity of areas A. – F. above, the report states:

"In total, M.E estimates that the Cromwell urban area could have capacity (optimistically <u>subject to approvals</u>) for between 992 and 1,122 additional residential dwellings within enabled and proposed growth areas (and not allowing for capacity not quantified)¹⁵....

At pages 26 and 27 M.E. Consulting states:

"... Even if all known development site yields are approved and come on-stream, this capacity might get Cromwell through to 2028 with little to spare. Continued growth in demand between 2028 and 2033 indicates that additional capacity will be required by then (and it is important to take account of the time needed between zoning and development). In the long term (by 2043), a significant shortfall of urban capacity is anticipated – in the order of 950-1,100 dwellings¹⁹....

¹⁵ i.e. additional capacity associated with infill, vacant residential and other small scale subdivisions (estimated at around S0 additional dwellings – this is indicative only and not informed by any analysis)."

¹⁹ Modelled shortfall is 1,210-1,340 by 2043. M.E has factored this down for the reasons described."

The M.E. Consulting report indicates that there is sufficient zoned and consented capacity to provide, say, for the next nine years; and that additional capacity will be required beyond 2028.

Again we note in this context that M.E. Consulting has defined the Cromwell urban area as being the Residential Resource Areas; and that while M.E. Consulting does not quantify potential infill or vacant capacity that may exist within Cromwell at present, it has estimated such capacity as being around 80 additional dwellings.

7.1.2 Rural Resource Area within Cromwell's Urban Limits

The M.E. Consulting report has not addressed the potential capacity of land in the Rural Resource Area in the general vicinity of the Top 10 Holiday Park ie. to the south of State Highway 8B and adjacent to land in the Residential Resource Area; albeit that the potential to use the golf course within this area for large scale development is acknowledged on page 11 of the document prepared by Ms Hampson of M.E. Consulting dated 13 November 2018 that is attached as Appendix A to the Jasmax Memo dated 30 November 2018.

The Commissioner's decision on RC 170378 that consented the 173 residential allotments on the Top 10 Holiday Park as a non-complying activity in the Rural Resource Area gave consideration to the character of that site in the context of the rural environment as described in the District Plan. At paragraph 53 in the decision on RC 170378 the Commissioners presented these reasons for distinguishing the Top 10 site from the rural environment found elsewhere in the Rural Resource Area:

- •• The application site is not 'distinct' from the urban areas of the district. Rather, as identified in the section 42A report and Mr Milne's evidence [for the applicant in RC 170378], the site is considered to be within the urban limits of Cromwell.
- The site has residential development to the east and west, and the developed nature of the site is such that it does not display the unique characteristics that dominate the Central Otago landscape;
- Any effects on landscape character will not be visible to any parties beyond the immediate neighbours, and as such the visual amenity of the rural area will not be significantly adversely affected; and
- The proposal will have characteristics that are similar to the existing residential development to the east and west."

In our view similar distinctions can be drawn with respect to other land located in the Rural Resource Area within the urban limits of Cromwell in the vicinity of the Top 10 Holiday Park site, including Freeway Orchard (8.8 hectares), and land to the west of The Dunes subdivision which forms part of the Cromwell Golf Course (23.9 hectares). It is noted in this context that Peter Raymond Brass (26/8) considers that the existing golf course would be better used for residential use; and that Freeway would be far more desirable as a residential development, [than Plan Change 13] being closer to town. While the 32.7 hectares of land referred to above is located within the Rural Resource Area it is within the urban limits of Cromwell; and given the Commissioner's decision on the Top 10 Holiday Park, a precedent has been established for subdivision of land in the Rural Resource Area within the urban limits of Cromwell for residential purposes. The potential exists for land within the Rural Resource Area within the urban limits of Cromwell for residential purposes. The potential exists for land within the Rural Resource Area within the urban limits of Cromwell for residential purposes. The potential exists for land within the Rural Resource Area within the urban limits of Cromwell for residential purposes.

For completeness we note that land to the south of the Top 10 site, that also forms part of the Cromwell Golf Course, is designated D85 for "Recreation Purposes" being the Cromwell Golf Course Recreation Reserve; and that this land has an underlying Residential Resource Area and an area of 22.3 hectares.

The potential exists for this and other land to be rezoned to provide for future residential subdivision and development at Cromwell. Currently the Council is committing considerable resources to the development of the Cromwell Masterplan which will provide the basis for future plan changes. The Cromwell Masterplan process is discussed further in part 7.15 of this report.

7.1.3 Conclusion : Residential Land Supply

Our conclusion is that while the plan change is intended to respond to demand for residential land at Cromwell to help address an estimated shortfall in long term capacity; such a response can be achieved, in large part, by utilising other land currently in the Rural Resource Area that is located within the urban limits of Cromwell; and within other areas (or through greater infill) as may be identified in the outcome of the Cromwell Masterplan process.

7.2 Effects in relation to urban design

Jasmax has prepared a report entitled River Terrace Design Report being Document 6 that addresses the urban design implications of Plan Change 13.

7.2.1 Comprehensive Development

It is proposed that the RTRA is to be comprehensively developed for urban activities including medium and higher density residential, retirement living, a small neighbourhood centre, and a possible school, with an associated open space network, walkways, roading and infrastructure. The Jasmax Design Report describes the rationale behind the development proposal, using images and words to illustrate how the proposed development responds to the opportunities and constraints of the site and the surrounding area. The Design Report presents the analysis and thinking behind the design of the proposed development.

The focus of the Design Report is on the development of the land in the RTRA; rather than addressing integration with the existing urban area of Cromwell. The Local Context map at page 19 of the Design Report is helpful as it indicates 5, 10 and 15 minute walks from the RTRA. Travelling towards Cromwell a 15 minute walk extends to south of McNulty Road on State Highway 6 or to the edge of the existing industrial development within the Industrial Resource Area at Cemetery Road. The map on page 19 locates the services and amenities that are within driving distance of the River Terrace site, including schools, shops, recreation and employment. In our view it would be helpful if a similar map could be produced which shows those services and amenities deemed to be within cycling distance of the RTRA.

7.2.2 Design Hierarchy

The Masterplan concept for the RTRA is broken down into a design hierarchy in the Design Report. This design hierarchy discusses the proposal at "Home" "Cluster" and "Community" levels.

On page 28 of the Design Report chief design elements are identified that risk poor built environment outcomes when not resolved carefully. One of these is to provide sufficient parking spaces to eliminate parking in non-designated areas; and we note that the illustrations indicate only a single garage and a parking space on each property. The Design Report confirms that these factors and more have been and are being routinely considered in the ongoing design development of homes and clusters at River Terrace.

The Design Report confirms that the River Terrace scheme is designed to accommodate a range of housing types – "Conventional", "River Terrace Homes" and "Modern Homes" – with further variation within these types.

"Conventional" subdivision lots will have an area of approximately $550m^2$ and are earmarked to accommodate new dwellings built to buyers' design and specification (subject to design control standards) and deliverable by individual house builders.

The "River Terrace Homes" and "Modern Homes" are to be pre-designed homes developed by the requestor that are to suit the specially designed River Terrace housing clusters. The "River Terrace Homes" will be on allotments of approximately 300m² in area; will be 1-2 storeys in height; will have 2-3 bedrooms; and will have an area of approximately 140m² excluding the garage. The Design Report advises that the "River Terrace Homes" have been designed and built by the developer for a subdivision and development in Wanaka, and reflect the Otago context in their form and materiality.

"Modern Homes" are to be on lots having an area of approximately 200m². "Modern Homes" are to be 1-2 storeys; contain 2-3 bedrooms; and have a floor area of approximately 90m². The Design Report confirms that the "Modern Homes" are more compact in site and floor area than the "River Terrace Homes" and are intended to bring a more "affordable" housing product for the local market.

It is anticipated that providing for a range of housing, including the higher density River Terrace Homes and Modern Homes typologies, has resulted in the bulk and location rules eg. Rule 20.7.1(ii)(a) - (d) and the minimum and maximum lot sizes provided for in terms of Rule 20.7.3(viii)(d). It is noted that these provisions will provide for a denser form of subdivision and development than is currently provided for in the Residential Resource Area as provided for in the Operative District Plan.

The small lot sizes proposed has drawn a response from submitters. Thomas Alan Coull (63/7) notes that the plan change puts forward lot sizes of $160m^2$ with narrow roads over most of the property; and the submitter observes that typically developments of this type are near a transport node or retail/service hub [and no such relationship exists with respect to the RTRA]. James Dicey (90/16) considers the minimum lot size of $160m^2$ is highly inappropriate; and that this would result in an "urban ghetto" feel to the subdivision. The submitter considers that a minimum lot area should be increased to $500m^2$; and the submitter advises that a minimum lot area of $300m^3$ applies at Shotover Country [in the Queenstown Lakes District].

7.2.3 Cluster Subdivision

The Design Report confirms that a cluster subdivision typology has been developed for River Terrace as a way to unlock efficient, quality compact development.

The Design Report advises that a River Terrace "cluster" is to be a carefully planned mix of "Conventional", "River Terrace Homes" and "Modern Homes". The cluster model introduces a home-zone environment – "an internal, quiet, slow-speed, pedestrian and play friendly space which also accesses "off-street" homes". This home-zone environment is described as Jointly Owned Access Lots (JOALs) in the Transportation Assessment (Document 7).

The Design Report advises that the cluster model provides a safer and more attractive streetscape and neighbourhood. It notes that internalising access to a proportion of homes alleviates space pressure on vehicles accessing the street; and that this means fewer vehicle crossings, fewer cars reversing across footpaths and more berm space for trees and vegetation.

We raise issues with respect to the adequacy of parking and the implications for road congestion in part 7.3.16 of this report in our consideration of the Transportation Assessment (Document 7). In these circumstances we do not propose to address those matters here in the context of the Design Report.

The Design Report notes that the clusters are arrayed across the development in what is described as an efficient grid arrangement. The Design Report notes that several cluster design permutations will ensure that each cluster responds positively to its orientation and context, be it adjacent roads, open spaces or other clusters. Cluster variation also prevents repetition helping with visual appeal and neighbourhood legibility and way-finding.

The Design Report confirms that clusters predominate in the middle of the project site, with a periphery of conventional lots creating a lower density transition to the neighbouring boundaries [ie. boundaries shared with adjacent properties that are not in the RTRA].

7.2.4 Landscape Strategy & Masterplan Concept

The Design Report advises that the River Terrace landscape strategy aims to reflect the local landscape character, while introducing thematic variety across different zones being the "Productive Terrace", the "Alpine Ecology Zone" and the "River Terrace". These zones relate to the upper terrace adjacent to State Highway 6, the terrace riser that bisects the site and the lower terrace on the site, respectively.

Various open space typologies are proposed as described as page 34 of the Design Report. We note in particular that the Greenways run north-south between community clusters and will provide cycling and walking connectivity and informal recreation opportunities. The "Linear Park" generally coincides with the route of the primary access (Road A) and is intended to offer a "meandering walkway/cycleway" to provide a safe connection between the key open space amenities and site entrances. The walkway/cycleway does not connect to any walkway/cycleway infrastructure beyond the site boundaries.

The Masterplan concept also provides for "Lanes" (referred to on page 30 as "home-zone environment" and in the Transportation Assessment (Document 7) as JOALs). The lanes are intended to provide safe, "pedestrian privileged routes from door to open space network" and to host informal play, notwithstanding that they are also to be used to provide vehicle access to adjacent dwellings.

7.2.5 Provision for School

A Suburban Park is proposed on the lower terrace that coincides with the Education Overlay as shown on the Structure Plan; and the Design Report confirms that this park is large enough that in future it could accommodate a school. The Design Report at pages 39/40 notes that the two existing Cromwell Primary Schools are operating at roll capacity and that, benchmarking against a sample study of primary schools (page 40), the authors estimate that the Suburban Park at 2.2 hectares is sufficient to support the establishment of a new local primary school, with enough area to locate school buildings and retain a playing field for school and community use.

On page 38 the Design Report notes that a school at River Terrace would reduce pressure on the existing schools, as well as significantly reduced local traffic movements at drop-off and pick-up

times. It is important to note in this context that the Ministry of Education (239/3 & 239/5) has advised that the level of development anticipated in Plan Change 13 is insufficient to justify a state school in the locality; and that the Ministry does not have any plans to establish a school on the site. Given that the closest primary school (Goldfields Primary School) and Cromwell's secondary school (Cromwell College) are located 3.1 kilometres and 3.3 kilometres, respectively, from the RTRA it appears inevitable that traffic movements will be required to transport RTRA children to schools at Cromwell, in the absence of a school in the RTRA.

7.2.6 Retirement Living

The Design Report discusses the retirement living component of Plan Change 13 commencing at page 41. The Design Report confirms that the retirement living component would be comprised of a mix of independent living "villas", with some supporting staged advanced care facilities. Integration with the wider RTRA community is proposed as social interaction is an important component in mental health and wellbeing. The Design Report notes that the River Terrace "retirement living area" [Retirement Living Overlay on the Structure Plan] is co-located with the Neighbourhood Centre Overlay to optimise the opportunity for integration through close proximity.

7.2.7 Neighbourhood Centre

The Design Report confirms that the neighbourhood centre will comprise of a small range of shops or services that support the immediate local community; and will be sized to strike a balance between providing a basic retail offer (eg. general store) that saves the need to drive further afield for day-today items or services, without commercially undermining Cromwell's existing town centre. The siting of the Neighbourhood Centre Overlay offers mutual benefit to the adjacent retirement living area. The location of the neighbourhood centre at the crest of the embankment will result in it being prominent (visible from the lower terrace); enjoying prospect (views over the lower terrace and towards the ranges to the south); and being central – as it is described as being equidistant to as many homes as possible.

7.2.8 Street Hierarchy

Commencing on page 44 the Design Report discusses the proposed street hierarchy within the RTRA. The street hierarchy is reflected in the Movement Plan (Rule 20.7.9) and in the Indicative Road Type Cross Sections (Rule 20.7.11). We discuss traffic effects associated with the street hierarchy in the context of the Transportation Assessment (see part 7.3.13 below).

7.2.9 Visualisation & Conclusions

Commencing at page 46 of the Design Report presents a suite of indicative "artist impression" visualisations of the design intent for the RTRA. These are helpful in gaining an appreciation of the form of the development that is proposed.

The AEE (Document 3) in clause 3 comments that the RTRA's intended settlement structure is well designed and will result in a high quality, cohesive urban neighbourhood. The AEE finds that the RTRA will have positive urban design effects on the environment.

Again it is noted that the Design Report gives no particular consideration to the issue of integration of the RTRA with the existing Cromwell town. We also note that no consideration has been given to the effects of noisy activities associated with Highlands and the Speedway, in particular, on those who wish to use the open space network provided for in the RTRA (discussed in part 7.10.2 of this report below).

7.2.10 Supplementary Urban Design Memo

On 7 November 2018 the Commission issued Minute 1 that noted that the urban design assessment [Design Report] does not extend to the wider issues of the relationship of the proposed new urban

area with the existing township and does not address the effects of the proposal on the overall urban form of Cromwell. The Commission considered this to be a gap in the information provided; and that strategic design matters are of sufficient relevance to the matters the Commission must consider that a more comprehensive assessment is required from an urban designer. In response Mr Alistair Ray of Jasmax has provided a Memo dated 30 November 2018.

7.2.10.1 Options for Future Growth of Cromwell

Mr Ray's Memo assesses three options for future growth at Cromwell as detailed in the "Let's Talk Options" discussion document which has been produced as part of the Cromwell Masterplan process (the Cromwell Masterplan also being referred to in the Commission's Minute 1).

We have refrained from discussing Mr Ray's comments on the options presented in the "Let's Talk Options" discussion document in detail; given that the Masterplan process is still underway. It is also acknowledged that the Masterplan is not a statutory document and we therefore consider that no particular weight should be placed upon the Masterplan discussion document in the context of Plan Change 13.

Mr Ray considers that the best possible scenario for addressing Cromwell's future growth issues is the encouragement of more intensive development within the existing town to maximise efficiency and support the town centre but recognising that due to growth pressures an element of growth on the edge of the town will also be required. Mr Ray considers that due to the physical constraints of Lake Dunstan to the north and the Kawarau River [sic – Kawarau Arm of Lake Dunstan] to the east and the hills to the west, any growth of the town will inevitably be to the south. In paragraph 2.14 Mr Ray observes:

"... The motorsports area (including Highland Park and the speedway), the triangular shaped conservation area (for the protected Chafer beetle) and the airstrip/racecourse are [sic] effectively already form part of the town fabric together with the low-density (life-style lots) residential areas along Bannockburn Road to the south of the town as all of these areas are already developed (or are never going to be developed in the case of the conservation area). ..."

Mr Ray does not consider that intensive horticulture and viticulture are part of the urban form of the town as they are not existing (urban) uses and could theoretically still be developed at some point in the future. Mr Ray has presented an "existing effective 'urban boundary'" of Cromwell delineated by a red dotted line in his plan in paragraph 2.15.

We question whether the areas identified by Mr Ray do in fact form part of the urban form of Cromwell given that Highlands, the Speedway, and the Chafer beetle reserve, along with the airstrip/racecourse and other land generally to the south and west of the Industrial Resource Area, are all located in the Rural Resource Area and are located in a rural environment. It is also noted in this context that the term "Urban area" is defined on page 18.12 of the Operative District Plan as meaning the Residential, Business, Industrial and Rural Settlement Resource Areas (and not the Rural Resource Area).

7.2.10.2 Connectivity

In part 4 of his Memo Mr Ray addresses the issue of connectivity. At paragraph 4.5 Mr Ray states:

"As with any urban expansion area, connectivity is an important urban design principle that must be addressed to ensure that new areas are well connected and feel like part of the existing fabric. In the case of this southern expansion area [being the RTRA and land to the south and east], making these connections is relatively straightforward. The opportunity exists to improve several of the existing connections back to the existing urban fabric (as illustrated in the plan below). The land in this area is generally flat making walking and cycling an attractive option."

Again we note that the Design Report (Document 6) as presented with the request is devoid of analysis with respect to the issue of connectivity. It is also noted that while paragraph 4.5 (as reproduced above) refers to "making walking and cycling an attractive option" it does not provide any commentary with respect to the practicality of utilising these modes of transport given the distance between the RTRA and the existing residential areas and commercial and community facilities at Cromwell, and the suitability of providing for walking and cycling along State Highway 6 or through the Industrial Resource Area (via Cemetery Road).

In paragraphs 4.6 and 4.7 Mr Ray comments on potential walking and cycling routes as follows:

- "4.6 SH6 and Cemetery Road offer existing connections back to the town to the north. Whilst currently offering good vehicle connections both of these 2 routes could be upgraded to provide better walking and cycling connections. SH6 offers the best opportunity to create a local public transport connection which could be part of a more regular public transport route between Queenstown and Cromwell.
- 4.7 To the south of Highland Park, Bannockburn Road/Barry Avenue already provides a straightforward and easy connection into the southern side of Cromwell town. Again, walking and cycling facilities could easily be improved along this route."

Apart from our general reservations with respect to the practicality and suitability of these connections (discussed above), the issue also arises of whether the requestor or some public agency would be required to provide the walking and cycling connections referred to.

At present there is no public transport available at Cromwell; and no such public transport provision is envisaged in the foreseeable future. It is also noted that Mr Ray has referred to Bannockburn Road/Barry Avenue as providing a connection to the southern side of Cromwell. This suggests that parts of the local roading network, (apart from Sandflat Road north/State Highway 6/Cemetery Road) are likely to be utilised if Plan Change 13 proceeds.

Other potential connections referred to in paragraphs 4.8 and 4.9 of Mr Ray's Memo include the existing Cromwell to Bannockburn lakeside track that connects Pearson Road with the Old Cromwell Town; and that extends further west to connect to State Highway 6, and to the south to Bannockburn Bridge (that connects to Bannockburn). In paragraph 4.9 Mr Ray refers to an existing informal track through the plantation block to the south of Highlands and across the Chafer beetle reserve. Mr Ray comments that this could be formalised and provide another good walking and cycling connection back to the town.

Mr Ray considers that the topography and existing routes create ideal opportunities to improve connections to Cromwell town and surrounding places which, in his opinion, will allow the southern area [that includes the RTRA] to be well connected as it develops.

7.2.11 Conclusion : Urban Design

Plan Change 13 will result in a substantial residential area being developed remote from the existing residential areas of Cromwell, and remote from commercial and community facilities, such as schools. As a consequence the RTRA will not be integrated with the existing town of Cromwell. This contrasts with, say, accommodating further development within the Rural Resource Area within the urban limits of Cromwell to the south of State Highway 8B, as discussed in part 7.1.2 above.

7.3 Effects in relation to traffic

Carriageway Consulting has prepared a Transportation Assessment dated 14 December 2017 being Document 7. To assist us in our consideration of the Transportation Assessment we have invited the Council's engineering consultants Stantec New Zealand Limited to comment on the Transportation Assessment. Mr Andrew Metherell, the Christchurch Traffic Engineering Team Lead at Stantec, has provided comments to us in a Memo dated 14 February 2019 which is attached to this report at Appendix A.

7.3.1 Roading Network

The site is located to the south of State Highway 6 (classified in Schedule 19.7 of the District Plan as a Rural State Highway) and to the west of Sandflat Road (classified as a Rural Local Road).

The current transportation network is described in Part 3 of the Transportation Assessment. While reference is made to Sandflat Road, State Highway 6, Cemetery Road, McNulty Road and State Highway 8B, other roads in the vicinity of the site that are relevant to the consideration of Plan Change 13, being Pearson Road (generally to the south) and Bannockburn Road (generally to the east) are not described in Part 3 of the Transportation Assessment. Pearson Road is a sealed Rural Collector Road and Bannockburn Road (referred to in Schedule 19.7 as the "Cromwell-Bannockburn Road") is a sealed Arterial Road. Pearson Road provides a potential connection to Queenstown via State Highway 6 to the west of the RTRA via Sandflat Road and Pearson Road; and Pearson Road provide a potential connection to Cromwell to the east via Barry Avenue.

The primary focus of Part 3 of the Transportation Assessment appears to be on Sandflat Road and State Highway 6 that are anticipated to provide the primary access to the RTRA.

The carriageway of Sandflat Road, at the very northern end, has a sealed width of 12.5 metres to facilitate access to the Highlands. Further to the south Sandflat Road has a 6.5 metre wide sealed carriageway to approximately 600 metres south of State Highway 6. Further to the south Sandflat Road has a metalled carriageway for some 1.2 kilometres to the Pearson Road intersection. Sandflat Road has a speed limit of 100 kph. The Transportation Assessment advises that two crest curves exist on Sandflat Road, these being approximately 360 metres and 550 metres to the south of the State Highway 6 intersection, respectively.

The Transportation Assessment notes that at its northern end Sandflat Road meets State Highway 6 at a priority intersection which has auxiliary right-turn lanes for traffic turning right into Sandflat Road and right into Papillon (furniture and homemade gifts workshops) located on the northern side of State Highway 6, generally opposite Highlands. We understand the "Papillon" property referred to is the Lennox property; and that this is now a residential property at Rapid 344 that does not operate as a retail outlet. We also note that the entrance to the McKay property is located immediately to the west of the entrance to the Lennox property, and is offset from the intersection with Sandflat Road opposite.

State Highway 6 has a speed limit of 100 kph and has traffic lanes 3.5 metres wide adjacent to the site and the Sandflat Road intersection. The Transportation Assessment notes that while there are no formal left turn lanes provided at the intersection there is a 3.8 metre wide sealed shoulder towards the east of the Sandflat Road intersection which enables drivers to move out of the west bound through traffic lane of the highway to slow down before turning left. This widened shoulder runs the full length of the highway between Sandflat Road and Cemetery Road.

State Highway 6 to the west of Sandflat Road has a straight horizontal alignment. To the east of Sandflat Road the highway curves towards the north. The Transportation Assessment notes that this curve has a large radius and that traffic does not need to slow to negotiate it. Cemetery Road meets State Highway 6 on the outside of the curve around 270 metres to the east of Sandflat Road. The State Highway 6/Cemetery Road intersection is a give-way controlled intersection, and does not have any auxiliary lanes for turning traffic albeit that there is a widened shoulder of 3 metres on each side of the highway which can be used by vehicles to move out of the through traffic lanes before turning.

Beyond the curve State Highway 6 has a flat and straight alignment to the north. Approximately 1 kilometre north of Cemetery Road intersection is the McNulty Road priority intersection. This intersection has auxiliary lanes for each turning movement to and from the highway with flush (painted) islands to assist drivers turning left into and left from McNulty Road. State Highway 8B joins State Highway 6 approximately 2 kilometres north of McNulty Road. The Transportation Assessment notes that the State Highway 6/State Highway 8B intersection is constructed as a high capacity priority intersection.

7.3.2 Traffic Counts

Part 4 of the Transportation Assessment contains statistics from traffic counts undertaken by the NZ Transport Agency. In 2015, being the last year which is available when the Transportation Assessment was prepared, the highway had an Annual Average Daily Traffic of 3,890 vehicles (two way).

Mr Metherell of Stantec has commented that the traffic information from the NZTA is considered unreliable. He comments that for such a large scale development more robust traffic counts would be warranted, as they would impact the potential transport assessment and requirements for road network upgrades. Mr Metherell advises that other sources of traffic information, such as Mobileroad.org which links to updated versions of the Council's asset management database, suggest that the "counts" are only estimates, and that updated estimates are of a higher volume than referenced in CAS system.

In paragraph 4.1.11 the Transportation Assessment models the performance of both the Sandflat Road/State Highway 6 intersection and the State Highway 8B/State Highway 6 intersection. The Transportation Assessment notes that the intersections currently provide an excellent level of service with low queues and delays.

7.3.3 Non-Car Modes of Travel

In clause 4.2 the Transportation Assessment notes that given that the area is predominantly rural at present, it can reasonably be expected that pedestrian and cyclist numbers will be relatively low and predominantly associated with recreational travel. In view of this the Transportation Assessment considers that the current levels of infrastructure provided for both pedestrians and cyclists are appropriate. Again it is noted that Bannockburn Road and Pearson Road do not appear to be addressed in this context. Mr Metherell has noted that Bannockburn Road includes some informal off-road facility for walking and cycling; and that no data is provided on actual numbers of cyclists and walkers on the surrounding network.

The Transportation Assessment in clause 4.2.2 confirms that there are no regular bus services that pass the site. Although several longer-distance services pass nearby on the highway, there are no bus stops provided within walking distance.

7.3.4 Road Safety

Clause 4.3 of the Transportation Assessment addresses road safety drawing on statistics from the NZTA CAS system for Sandflat Road (full length) and for portions of State Highway 6, McNulty Road and Cemetery Road. Again we note that no reference is made to Pearson Road or Bannockburn Road; and any crash statistics relating to the Pearson Road/State Highway 6 intersection area would be relevant.

The Transportation Assessment advises that, based on the prevailing crash record, it is not considered that there are any inherent deficiencies in the roading network in the vicinity of the site. This observation relates to past and current traffic numbers only.

7.3.5 River Terrace Resource Area

The Transportation Assessment in Part 5 discusses the potential development within the plan change area. While this refers to the plan change facilitating around 690 residential dwellings and 140 retirement units, we note that Rule 20.7.7(vii) provides for a maximum number of 900 residential units in the RTRA.

The Transportation Assessment acknowledges that the Masterplan prepared by Jasmax shows a total of six roading connections onto Sandflat Road. This is consistent with the Movement Plan provided for in terms of Rule 20.7.9. No access is to be provided direct onto State Highway 6 and it is noted that any such access is a prohibited activity in terms of Rule 20.7.6. Direct vehicle access from a private property onto Sandflat Road is a non-complying activity in terms of Rule 20.7.5(ii).

7.3.6 Traffic Generation

In clause 6.1.4 the Traffic Assessment advises that an allowance has been made for each dwelling to generate one vehicle movement in the peak hours. The Transportation Assessment advises that in the morning peak hour, 90% of these are likely to be exiting the development, with 65% of the generated vehicle movements entering the development site in the evening peak hour. Mr Metherell advises that in Stantec's experience the typically adopted percentage exiting in the morning peak is 75%; and that the Assessment of Effects on the morning peak should consider this percentage, at least as a sensitivity test.

In clause 6.1.5 the Transportation Assessment anticipates that the retirement villas will generate two vehicle movements per day; and of these 20% of vehicle movements (0.4 movements per villa) will occur in the peak hours. Mr Metherell advises that industry data suggests that a higher level of daily movements are made for a retirement village, being approximately 2.6 vpd/unit.

7.3.7 Trip Distribution

In clause 6.2.1 the Transportation Assessment makes allowances for trip distribution. The Transportation Assessment has made an allowance for 25% of peak hour movements to be wholly within the town of Cromwell (such as for employment, travel to school and travel to community facilities) and for the remaining 75% of movements to be external [beyond Cromwell]. The Transportation Assessment considers that the bulk of external vehicle movements will be associated with destinations towards the west, in the direction of Queenstown; with a smaller proportion towards the north (towards Wanaka) and the east (towards Alexandra). Accordingly 80% of external travel has been assumed to be towards Queenstown, 10% towards Wanaka and 10% towards Alexandra. Mr Metherell notes that this equates to an overall trip distribution for peak hour movements as follows:

- 25% to/from Cromwell
- 60% to/from Queenstown
- 7.5% to/from Alexandra
- 7.5% to/from Wanaka

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Mr Metherell has commented that the trip distribution allowances appear to assume the site will act as a commuter suburb for Queenstown. He advises, based on the NZTA Household Travel Survey summary for 2015-2018, that commuting work trips make up a relatively small proportion of trips during the day (up to approximately 22% of all vehicle driver trips). Mr Metherell advises that when considering the other types of trips made, it is clear that the RTRA will generate a lot of movements that are likely to have a local focus, such as shopping, personal appointments, social visits and entertainment; and that many of these trips can occur in the peak hours. Mr Metherell observes that this suggests that the Transport Assessment may be too heavily skewed to consideration of commuter travel. In addition, across the course of the day, the other trips (assuming each household generally has only one vehicle travelling to/from Queenstown) of up to 6 vpd/household would most likely be local trips, indicating a different traffic distribution across the day than in the peak period.

We consider that the 25% trip distribution allowance within Cromwell (ie. to and from facilities in the town of Cromwell) is too conservative. We note in this context that substantial land is located in the Industrial Resource Area at Cromwell, allowing for further expansion of employment opportunities locally. We also note that primary and secondary schools are located within the town of Cromwell which will serve the community resident in the RTRA and again note that the Ministry of Education (239/3) advises that the level of development anticipated in the RTRA is insufficient to justify a state school (primary school) within the RTRA.

The Transportation Assessment in Clause 6.2.3 predicts that travel to/from the direction of Queenstown will be via Sandflat Road and State Highway 6 (west). It appears that no consideration has been given to traffic to/from Queenstown travelling via Sandflat Road and Pearson Road to connect to State Highway 6 at the Pearson Road/State Highway 6 intersection. This alternative route may be attractive particularly if congestion occurs at the Sandflat Road/State Highway 6 intersection.

In clause 6.2.4 several routes are identified for persons travelling into Cromwell; and distances are specified for the different routes between the site and the Cromwell town centre. The Transportation Assessment identifies the route via State Highway 6 and State Highway 8B as being the shortest (5.0 km) and fastest for travel between the site and the Cromwell town centre.

Some of the peak hour movements may be associated with travel to school. We have calculated that the distance between the site and the Goldfields Primary School (D76 – Map 13) at Gilling Place is some 3.1 kms (via Sandflat Road, State Highway 6, Cemetery Road, Hughes Crescent, Gair Avenue, Jollys Road and Gilling Place); and that the distance between the site and Cromwell College (D80 – Maps 13/15) is approximately 3.3 kms (via Sandflat Road, State Highway 6, Cemetery Road, Hughes Crescent, Gair Avenue and Barry Avenue). Both routes involve using Cemetery Road and the Transportation Assessment observes that this option involves negotiating several sharp curves and yielding to traffic on McNulty Road. At clause 6.2.5 the Transportation Assessment observes (in the context of travel between the site and the town centre) that a route via McNulty Road is around 10% faster than travelling via Cemetery Road; and accordingly State Highway 6 and McNulty Road may provide a faster alternative for accessing school facilities at Cromwell.

Clause 6.2.7 of the Transportation Assessment predicts peak hour traffic flows at the State Highway 6/Sandflat Road intersection based on the trip distribution allowances contained in the Transportation Assessment. We simply note that the turning traffic volumes shown in Figures 10 and 11 in clause 6.2.7 will be different if greater than 25% of peak hour movements are allowed for between the site and Cromwell.

Mr Metherell has advised that if, for example, the volume travelling to and from Cromwell is closer to, say, 70% that this represents over 4,000 vpd to/from Cromwell, of which at least some will travel via the local road network. Mr Metherell observes that even a small portion of the 4,000 vpd could result in the need for modifications to the road design and provision for other transport modes. Mr Metherell advises that by not upgrading the connection via Sandflat Road and Pearson Road through to Bannockburn Road, there is very little resilience in the transport network.

7.3.8 Effects on Transportation Networks

The effects on the transportation networks are assessed in Part 7 of the Transportation Assessment. The performance of the State Highway 6/Sandflat Road and State Highway 6/State Highway 8B intersections have been remodelled using the computer software package Sidra Intersection. The Transportation Assessment advises that for this, and in accordance with best practice, 10 years of ambient traffic growth has been applied to the existing traffic flows on the highways.

Table 3 discloses that a Level of Service D will result on the State Highway 6/Sandflat Road intersection (for right turning vehicles from Sandflat Road). The Transportation Assessment notes that the transition between Level of Service C and D occurs at a delay of 25 seconds, and that the Sidra Intersection model forecasts that the delay is only slighter greater than this. The Transportation Assessment advises that the difference (just 0.1 seconds) is within the margin of error for the forecasts and would be resolved if only one less vehicle turned right at the intersection in the evening peak hour.

The intersection capacity modelling appears to be based on the trip distribution allowances detailed in clauses 6.2.1 and 6.2.2 of the Transportation Assessment. It is therefore anticipated that delays at the Sandflat Road intersection would increase, perhaps significantly, if a greater proportion of movements were to occur between the site and Cromwell.

In these circumstances we have reservations with respect to the conclusion, in clause 7.1.5 of the Transportation Assessment, that both intersections [including the Sandflat Road/State Highway 6 intersection] have sufficient capacity to accommodate the traffic generated by development of the plan change area.

Hilary Anne Lennox (183/2) is concerned that inadequate measures have been proposed to avoid/manage/mitigate likely adverse effects arising from increased traffic movements; and the submitter promotes that Plan Change 13 be declined unless an alternative access onto State Highway 6 can be obtained and specific alterations to the new State Highway 6 intersection can be provided, such as a roundabout and speed restrictions. The McKay Family Trust (228/14) is concerned that the Transportation Assessment takes no account of the submitter's access onto the highway and the effects of the proposal on that access. The submitter is of the opinion that sooner or later someone will be paying for a roundabout at the State Highway 6/Sandflat Road intersection.

If congestion occurs at the Sandflat Road/State Highway 6 intersection then motorists are likely to choose other routes in the local road network (including Pearson Road) to travel in the directions of Cromwell or Queenstown. Mark Schofield and Rebecca Schofield (311/7) are concerned that surrounding roads, especially Pearson Road, will become very busy. The submitters consider that it would become too dangerous for them to undertake their usual activities including the walking of children and dogs, children on bikes and horse riding along Pearson Road.

While the Transportation Assessment has modelled the State Highway 6/Sandflat Road and State Highway 6/State Highway 8B intersections, no modelling has been conducted with respect to the State Highway 6/Cemetery Road intersection. Rex Edgar (96/4) has noted that if a percentage of

traffic flowing towards Cromwell needs to turn right into Cemetery Road, that there will be a queue backed up to Sandflat Road making it very hard to turn right at all.

It is noted that the primary access into the RTRA is Road A which is to have an intersection with Sandflat Road approximately 90 metres to the south of the State Highway 6/Sandflat Road intersection. This new intersection is located at about the end of the landscape strip adjacent to Sandflat Road that exists on the site; and is approximately 75 metres to the north of the existing site entrance off Sandflat Road (that is located immediately to the north of the Edgar property at Rapid 18). We estimate that the entrance to Highlands, on the opposite side of Sandflat Road, is approximately 60 metres to the south of the State Highway 6/Sandflat Road intersection ie. between the Road A intersection and the State Highway 6/Sandflat Road intersection.

Rex Edgar (96/6) has raised issues with respect to the performance of the Sandflat Road/State Highway 6 intersection when there is an event on at Highlands. The Transportation Assessment does not appear to model the performance of the intersection at those times when events are held at Highlands.

7.3.9 Non-Car Modes of Travel with RTRA

In clause 7.2 the Transportation Assessment discusses non-car modes of travel. The Transportation Assessment advises that development of the site [in terms of the RTRA] is likely to result in increased levels of walking and cycling in the immediate area; but observes that the distance from the site to the town centre and other potential destinations is such that the bulk of these non-car movements will be made internal to the site rather than on the external networks. Consequently the Transportation Assessment does not consider that any additional infrastructure is required for pedestrians or cyclists on the frontage roads. Furthermore in clause 7.2.2 the Transportation Assessment advises that the size of the development is not sufficient to give rise to the need for a public transport service.

The Ministry of Education has advised that the level of development provided for in PC 13 is insufficient to justify a state primary school within the Education Overlay and that the Ministry does not have any plans to establish a school on the site (239/5). Furthermore Norman David Wing (405/3), the bus controller for school transport in Cromwell, has advised that secondary students who live closer than 4.8 kilometres to their school will not be eligible for school transport. In these circumstances it appears likely that non-car modes of travel may be used by some pupils to access the local secondary school. In the absence of any additional infrastructure it appears that pedestrians and cyclists will have to share the road carriageways with motor vehicles. State Highway 6 and Sandflat Road have 100 kph speed limits and we question whether it is appropriate to create a situation whereby pedestrians and cyclists are required to share these roads with through traffic and traffic negotiating the Sandflat Road/State Highway 6, State Highway 6/Cemetery Road and/or State Highway 6/McNulty Road intersections.

Mr Metherell has noted that census data from 2013 indicates that over 13% of commuting trips are by bicycle and walking and that accordingly there are opportunities for people to use modes of travel other than a motor vehicle to travel to work. As noted above we also consider that the potential exists for cyclists and pedestrians to travel between the site and local schools albeit that those schools are located in excess of 3 kilometres (by road) from the RTRA. The absence of provision in the Transportation Assessment for pedestrians and cyclists to travel beyond the RTRA appears contrary to the higher level policy direction which typically promotes development that supports the use of non-car modes of travel.

7.3.10 Road Safety with RTRA

The Transportation Assessment at clause 7.3.1 states that in view of the excellent road safety record on the road network adjacent to the site, it is not considered that the additional traffic is likely to give rise to any road safety concerns.

Mr Metherell considers that changes in traffic distribution [ie. with a greater proportion of traffic travelling between the RTRA and Cromwell] would warrant reconsideration of the assessment of road safety. He considers that the road safety assessment for such a large development fronting rural high speed roads should consider the ability of surrounding roads to accommodate the level of extra traffic, not just the design parameters of intersections. Again we note in this context the potential for pedestrians and cyclists to be using the Sandflat Road/State Highway 6 intersection and other intersections, in addition to motor vehicles.

Mr Metherell notes that whilst any development in Cromwell has the potential to add to longer distance highway movements, that the RTRA site access provisions place a high reliance on the use of State Highway 6 over a short distance for local movements, which are not part of the desired function of the highway (the primary role of which is to carry through traffic – see clause 2.2.2 of the Transportation Assessment) if a supporting local road network can reduce the use of the highway. Mr Metherell advises that the large increase in travel eg. potentially 4000 to 5000 vpd on the highway, will more than double volumes. Mr Metherell advises that consideration of whether improvements to the road layout are necessary should be considered.

We have a fundamental reservation about whether it is appropriate to rely on State Highway 6 to provide for local traffic movements between the RTRA and the commercial and community facilities present at Cromwell. In essence the proposal will result in local traffic utilising the high speed environment of State Highway 6 to access Cromwell via Cemetery Road, McNulty Road and/or State Highway 8B.

Several submitters have expressed concern at the addition of traffic from the RTRA travelling towards Queenstown on State Highway 6 through the Kawarau Gorge and Theresa Edgar (97/3) has noted that State Highway 6 in peak hours leading to and from Queenstown is already congested; and that more cars will only add to the problem. Werner Murray (252/11) opines that it would be conceivable that the commute to Queenstown could be extended by 20 minutes (each way), which would add 40 minutes to an already long day; and that this would have further safety implications.

We simply note that this issue is not unique to the site and that such congestion would result on State Highway 6 irrespective of where additional residential development of the scale proposed is provided for in Cromwell and environs, if residents are commuting to Queenstown from Cromwell.

7.3.11 Deceleration/Acceleration Lanes

The Transportation Assessment in clauses 7.3.2 - 7.3.4 discusses the provision for turning lanes. It notes that the Austroads Guide to Road Design Part 4A (Unsignalised and Signalised Intersections) sets out when auxiliary turning lanes are required.

The Transportation Assessment notes that taking into account the expected traffic flows, a left-turn deceleration lane is justified at the State Highway 6/Sandflat Road intersection when the site has around 40 residences developed and generating traffic. The Transportation Assessment observes that the lane is partially formed at present, and that therefore only minor works will be required to formalise this ie. marking the lane and potentially undertaking some very minor widening to form a sealed shoulder. Rule 20.7.7(ii)(a) requires the left-turn deceleration lane when no more than 40 residential lots are created.

The Transportation Assessment notes that a left-turn acceleration lane is generally required in terms of the Austroads Guide when left-turning traffic flows reach 300 vehicles in the peak hour. The Transportation Assessment notes, based on its trip distribution allowances, that at full site development 405 vehicles are expected to turn left. On this basis the Transportation Assessment considers that a left-turn acceleration lane should be provided when 75% of the plan change has been developed. Rule 20.7.7(ii)(b) requires the provision of a left-turn acceleration lane when no more than 300 residential lots have been created within the RTRA.

The Transportation Assessment notes that the provision of the acceleration lane will require the relocation of the power poles on the southern side of the highway. The Transportation Assessment advises that from information provided there is a distance of 5.9m between the existing edge of the traffic lane and the site boundary; which means that even if the power poles were moved adjacent to the site boundary that there would be a separation of only 2.4m between the edge of the acceleration lane and the poles. The Transport Assessment anticipates that this is unlikely to be acceptable to NZTA since if a driver lost control within the acceleration lane, the driver would be unable to recover his/her vehicle before striking a pole. The Transportation Assessment therefore recommends that specific crash protection is provided for the poles and that they be set back behind a crash barrier.

Mr Metherell notes that the improvements proposed (in clauses 7.3.2 -7.3.4 of the Transportation Assessment) have not considered the potential improvements required to side road approaches, delineation at intersections, and other associated infrastructure such as lighting and kerbing, expected on higher volume intersections. Based on the assessed traffic distribution, Mr Metherell advises that Sandflat Road could carry a volume close to the equivalent of State Highway 8B, which has a much higher standard intersection layout to support existing through traffic volumes. Mr Metherell considers that the Transportation Assessment has set expectations of a minor intersection upgrade, which may not be the appropriate provision in practice.

7.3.12 Potential Site Layout

Part 8 of the Transportation Assessment discusses Potential Site Layout. It is noted that Rules 20.7.9 and 20.7.10 include a Movement Plan and a Development Parcel Plan, respectively. The Movement Plan provides for a roading hierarchy within the RTRA. It is noted that Rule 20.7.3(viii)(a) requires all subdivision to adhere to the Movement Plan at Rule 20.7.9.

Mr Metherell has noted that the Transportation Assessment does not provide assessment of the Structure Plan layout [which we understand is a reference to the Movement Plan and Development Parcel Plan] or proposed road hierarchy, from a transportation perspective. As these plans will largely constrain future subdivision patterns, Mr Metherell recommends that the justification for the layout and hierarchy is explained by the requestor. Mr Metherell has identified some matters for consideration as follows:

- "• Expected traffic volumes on each road, to confirm the road cross-sections are appropriate;
- The potential for lots directly accessing Sandflat Road, and what changes may be required to Sandflat Road;
- Changes in formation on Sandflat Road to assist with integration with the development including speed;
- The grid layout results in a lot of minor road intersections on Sandflat Road and the Primary Road, and further consideration should be given to the block orientation to maximise safety;

- Interaction of proposed connections to Sandflat Road with existing accesses, and confirmation that appropriate intersection design will be achievable.
- The disconnect between the east-west and north-south primary roads.
- The definition of roads, and how they relate to other District Plan rules eg is a Primary Road a Collector Road? "

It is noted in the context of the second bullet point, above, that Rule 20.7.5(ii) stipulates that any direct vehicle access from a private property onto Sandflat Road is to be a non-complying activity; the reason for such status being that it discourages any proposal for direct vehicle access from any private property within the RTRA onto Sandflat Road to ensure traffic safety standards are maintained.

7.3.13 Road Widths

The Central Otago District Council's Code of Practice for Urban Subdivision comprises NZS 4404:2004 and the Council's July 2008 Addendum thereto. The Council's road design standards, as detailed in Table 3.1 of the July 2008 Addendum, is summarised in a condensed form in Table 5 at clause 8.1.1 of the Transportation Assessment.

The roads proposed within the RTRA are to comply with NZS 4404:2010; and road dimensions will therefore differ from the Council's current standards. The road dimensions proposed in the subdivision are summarised in Table 6 at clause 8.1.2 of the Transportation Assessment.

It is noted in particular that Road B (Secondary) will have combined parking and traffic lanes that total 8.2 metres when compared to the required 8.5 metres for Local Roads under the Council's current standards; and that Road C (Neighbourhood) will have a carriageway width of 5.7 metres when compared to the current standard for a "Cul de Sac" being 6.0 metres.

The Transportation Assessment notes that Road A (Primary) forms an east-west and north-south route within the site. Road A is to act as a focus for all movements and will be the main route for the bulk of traffic entering and exiting from Sandflat Road. Road A therefore has a wider carriageway than other roads (the width replicating that of Sandflat Road) and makes provision for cycling and wider footpaths for pedestrian movements. Anthony John Cox (69/5) considers that the traffic lanes for the Road A are too wide, making crossing on foot more dangerous; and encouraging higher speeds.

While provision for cycling and pedestrian movements is made within Road A connecting to Sandflat Road; the Transportation Assessment (at clause 7.2.1) does not consider that any additional infrastructure is required for pedestrians or cyclists on the frontage roads, which includes Sandflat Road and State Highway 6. The absence of such provision beyond the RTRA will mean that there is no provision for pedestrians and cyclists who wish to travel beyond the RTRA.

At clause 8.1.6 the Transportation Assessment notes that the secondary (Road B) roads permeate further into the site but that the volumes of all road users will be lower and hence the widths are less than those of the primary road (Road A). The Transportation Assessment states that the dimensions are the same as for a "Local Road" under the Council's subdivision code. This is incorrect given that the carriageway width of Road B is less than that required for a Local Road, as noted above.

Neighbourhood (Road C) roads are to carry the least traffic volumes and have therefore been designed to have narrow carriageways to reduce speeds and provide greater road safety and amenity

for non-car users. The Transportation Assessment at clause 8.1.7 notes that any on-street parking will take place within the traffic lanes in order to slow through traffic even further.

It is noted, in the first instance, that Road C roads are generally not cul-de-sacs and in some instances will perform a through traffic function. We are aware of other situations at Cromwell where roads in new subdivisions designed in accordance with the Council's current standards have been subject to criticism given the prevalence of on-street parking and the associated difficulties faced by drivers travelling on these roads. Given that parking is to be provided within the traffic lanes for Road C; we anticipate that significant congestion is likely to occur within the RTRA.

We anticipate that congestion difficulties will be experienced not only by residents and service vehicles travelling through the RTRA but also by emergency services, including Fire and Emergency New Zealand appliances. Such difficulties will also be experienced by the Council's contractors providing refuse collection services.

Mr Metherell acknowledges that NZS 4404:2010 includes cross-sections for roads similar to those proposed; and that they are now well utilised elsewhere in New Zealand. He notes however that NZS 4404:2010 also includes a range of other provisions that require the road to be considered in context of the place, traffic volumes, design speed, and place in the road hierarchy. Mr Metherell advises that design statements are required to support the provisions, as are staged road safety audits.

Mr Metherell considers that Rule 20.7.11, that proposes three cross sections for roading, is simplistic (adopting a one size fits all approach) which in Stantec's experience can cause concern following implementation, particularly around adequacy of on-street parking, design speeds, vehicle access, and pedestrian and cycling provision. Mr Metherell considers that a more robust assessment framework should be provided, or reference to or inclusion of the many other provisions relating to road cross-section and design that are referenced in NZS 4404:2010. It is noted in this context that Rule 20.7.3(viii)(b) stipulates as follows:

"(b) <u>Roading</u>

All roads shall comply with the minimum overall width and minimum carriageway widths of the Indicative Road Cross Section Plans in Rule 20.7.10 [sic -20.7.11] below; and shall be in accordance with the other features of those cross-sections."

Mr Metherell considers that a lot more supporting information is required in the rules (or ensuring a higher level of discretion for Council officers assessing the roading provisions). While Mr Metherell has not commented in depth he has offered the following general comments with respect to Road A – Road C for context:

- •• Road A Primary Road is a term not defined elsewhere in the District Plan. It will most likely act as a Collector Road and should be defined as such so other applicable rules can be applied. A Collector Road requires consideration of cycle facilities, and none are provided. There may be some place context such as through a neighbourhood centre, retirement village, residential area, and education area where a different cross-section will be desired, and different provisions for footpaths may be desirable.
- Road B It is assumed Secondary Road is equivalent of a local road. It has an overall width of approximately 8.2m, but the diagram could be interpreted such that parking is always only on one side of the road. This may result in under provision of street parking. Differing footpath provisions may be desirable in different place context within the site.

• Road C – This is typically only applied to short residential lanes, and development with rear lanes. Additional indented parking should be provided in the cross-section as a matter for consideration, which would then necessitate a wider road reserve in some cases."

The Transportation Assessment in clause 8.3.1 notes that the proposed Masterplan includes a number of Jointly Owned Access Lots (JOALs). These are communal areas which are to provide access to several different lots and their associated carparking spaces. The use of JOALs, as proposed, will mean that many of the residential lots will not have frontage to roads; and parking for those dwellings served by JOALs is anticipated on the allotments or within the communal areas within the JOALs. The Transportation Assessment notes that certain JOALs have sections of roadway that are 3.5 metres wide, meaning that they provide only one traffic lane. Consequently it is anticipated that these traffic lanes will operate in a one way direction only, with appropriate signage to be provided to indicate this to drivers.

Again we have reservations with respect to potential congestion within the JOALs as dwellings may have multiple vehicles associated with them. Such congestion will not just apply to residents vehicles, but also to emergency services and refuse collection services (that we anticipate will collect wheelie bins from the road frontages of the JOALs).

7.3.14 Sandflat Road Upgrading

Commencing at clause 8.4.1 the Transportation Assessment discusses Sandflat Road upgrading and observes that the development of the site will inevitably increase traffic flows on Sandflat Road.

The Transportation Assessment notes that part of Sandflat Road is presently unsealed (being some 1.2 kilometres – clause 3.1.3) and, as the site will have frontage onto this road, it is recommended that the seal be extended as far as the southernmost site access onto Sandflat Road. This would appear to involve the sealing of a further 450 metres of Sandflat Road; meaning 750 metres of Sandflat Road between the southernmost site access and Pearson Road would remain unsealed.

Given that the RTRA is likely to generate traffic on the surrounding roading network beyond Sandflat Road (including Pearson Road and Bannockburn Road) we find it surprising that sealing of Sandflat Road for its entire length is not proposed.

In clause 8.4.2 the Transportation Assessment notes that the northernmost part of Sandflat Road to the east-west primary road (Road A) intersection [a length of approximately 90 metres] will need to be widened to 8.4 metres; and that such widening can be achieved within the legal road reserve of Sandflat Road.

In clause 8.4.3 the Transportation Assessment again notes that the alignment of Sandflat Road includes two crest curves. The Transportation Assessment notes that there are no restrictions on overtaking at these locations "... which indicates that sight distances remain appropriate"; and we note that a similar statement is made at clause 3.1.2. We question whether the appropriateness of sight distances can be determined by the current absence of overtaking restrictions.

The Transportation Assessment notes that it is possible that a minor lowering of the carriageway levels may be justified in order to improve sight lines; suggesting that sight distances may in fact be an issue on Sandflat Road. When travelling south on the sealed portion of Sandflat Road we have observed that the road drops over the escarpment. Motorists approaching this drop cannot see vehicles approaching the foot of the escarpment or travelling up the incline. Overtaking in such

circumstances would be dangerous and we therefore consider that sight distances are inadequate for motorists using this section of Sandflat Road.

In clause 8.4.4 the Transportation Assessment notes that the more heavily trafficked new priority intersections may require formal provision for right turn movement; and observes that any widening of the carriageway to accommodate these can be carried out within the legal road reserve of Sandflat Road.

For completeness we note that Council roading staff have advised us that the unsealed portion of Sandflat Road is currently being re-metalled (in March 2019).

7.3.15 Sight Distance Rule

In Part 9 the Transportation Assessment discusses current transportation related rules; such rules being located in Part 12.7 of the Operative District Plan.

The Transportation Assessment notes that under Rule 12.7.1(ii) a sight distance of 40 metres is required; but observes that it is likely that there will be a number of lots which do not achieve the appropriate sight distance. This is either because the lot is adjacent to an intersection and the intersection geometry means that the sightline passes across land outside the lots and the road reserve, or because the access is on the inside of a curve and the curve restricts the sight distance.

The Transportation Assessment notes that the sight distance of 40 metres is based upon a vehicle speed of 50 kph. The Transportation Assessment notes however that as a vehicle approaches an intersection it must slow down in order to be able to give way to other vehicles and/or to negotiate the intersection geometry. Since there is a direct relationship between vehicle speeds and sight distances, the Transportation Assessment advises that where speeds are physically reduced, sight distances can also be reduced while still allowing a driver to see and react to a potential hazard ahead.

In clause 9.2.1.3 the Transportation Assessment notes that limiting the potential for obstructions to be placed within sightlines can be addressed via a rule within the plan change provisions to ensure that a minimum setback distance is always provided; or a condition subject to a consent notice could be applied to the effect that no obstruction of more than 1 metre in height is permitted within the sightline. It is understood that Rule 20.7.1(ii)(g) (that controls the height of boundary fences and walls) is intended to avoid sightline obstruction.

7.3.16 Parking & Loading Rules

The Transportation Assessment anticipates that Rule 12.7.2 Parking will be complied with; and advises that it is expected that each lot will be able to provide at least one carparking space, as required under the Operative District Plan.

Several submitters have questioned the adequacy of the parking provisions within the RTRA. Richard Andrew Ford (122/3) notes that there are likely to be two working parents in todays society. If, say, one worked in Queenstown and the other worked in Cromwell, two cars would be required. Werner Murray (252/10) has completed a parking survey of the recently completed Summerfields subdivision adjacent to McNulty Road in Cromwell; and he has observed that most dwellings have two cars and a work ute/caravan/trailer/bike present. He also notes that people who can't afford a mortgage are renting rooms out in houses, with people in those rooms having at least one car each. We also note the potential to convert attached garages to provide additional living spaces, rather than accommodating vehicles. Furthermore given the ready access available to Lake Dunstan we consider that it is quite possible that some residents will have boats or jet skis.

Rule 20.7.1(ii)(j) requires that a minimum of one carpark space per dwelling be provided on site (with an additional carpark in association with a home occupation). While the Jasmax illustrations (page 28 of Document 6) show parking on driveways; Rule 20.7.1(h) stipulates that driveways are to be a minimum of 5m in length or a maximum of 1.5m in length, thus envisaging that parkable driveways will not be provided on all sites within the RTRA. Given the intent to provide affordable housing on smaller lots, the anticipated appeal of the RTRA to families, the distance from commercial and community (including education) facilities at Cromwell and the absence of public transport, we anticipate that many households will have more than one vehicle and that significant on-street parking is likely to occur within the RTRA. Given the narrow carriageway widths proposed for the Road C roads and JOALs in particular, we anticipate that difficulties will arise with respect the ability of traffic to move freely through the RTRA.

In all the circumstances we support the submitters' concerns that inadequate parking is being provided for in this development.

In the context of Rule 12.7.3 Loading and Manoeuvring the Transportation Assessment notes that the proposed plan change will enable residential activity and that therefore the loading and unloading of goods is not expected to occur frequently. It is appropriate to acknowledge that such loading and unloading of goods can be anticipated within the Neighbourhood Centre Overlay.

Mr Metherell advises that while he has not undertaken a detailed review of the provisions that contribute to the transport outcome, he notes that some matters of concern include the absence of justification for transport related provisions including the carparking and driveway length provisions (see Rule 20.7.1(ii)(h) and (j), Rule 20.7.3(ii)(e), Rule 20.7.3(iii)(b), Rule 20.7.3(iv)(g) and Rule 20.7.3(v)(e)).

7.3.17 Distance Between State Highway 6 and Road A Intersection

In clause 9.6.1 the Transportation Assessment notes that the NZTA Planning Policy Manual stipulates a minimum distance for an access on a district road from an intersection onto a state highway. The Transportation Assessment notes that this distance is 60 metres and that the plans provided show that a distance of 90 metres is to be provided between State Highway 6 and the first access road being the Primary Road (Road A).

The Transportation Assessment notes at clause 9.6.2 that the NZTA does not set out any minimum separation distances for a legal road, as distinct from a private access, but rather assesses each application on a case by case basis. The Transportation Assessment notes that if this access road was not to be acceptable to NZTA for full turning movements, site access can be gained further towards the south with the northern most road potentially operating as a left-out.

It appears that consultation has not occurred with NZTA (at the time that the Transportation Assessment was prepared); and that it appears possible that the Movement Plan may require amendment to satisfy NZTA with respect to the distance between Road A and the Sandflat Road/State Highway 6 intersection. We note in this context that the submission lodged by the NZ Transport Agency (254) makes no specific reference to the distance between State Highway 6 and the Road A intersection.

Again we note that the intersection of Road A with Sandflat Road is in close proximity to the entrance to Highlands on the opposite side of Sandflat Road; and that the Transportation Assessment makes no reference to any issues which may arise due to the close proximity of the Road A intersection to the Highlands access.

7.3.18 Conclusion : Transportation

Mr Metherell considers that there are a range of transport matters requiring more detailed consideration. He observes that this is a large development disconnected from the existing urban area; and Mr Metherell considers that an integrated Transport Assessment approach is warranted to better understand how the site will sit within the context of the wider transport environment.

Plan Change 13 will have adverse traffic effects resulting from the use of State Highway 6 for local traffic movements to commercial and community (including school) facilities and to employment opportunities in Cromwell; the use of roads in the local road network (including Sandflat Road south, Pearson Road and Bannockburn Road) that have not been assessed; and the lack of provision for non-car modes of travel external to the RTRA. Adverse traffic effects can also be anticipated within the RTRA due to congestion resulting from parking in the traffic lanes for Road C and the carriageways in JOALs; due to the limited provision for on-site parking when compared to the likely demand for parking by residents of the RTRA.

Having regard to the various matters addressed above, we consider that Plan Change 13 is likely to have significant adverse effects in relation to traffic.

7.4 Effects in relation to infrastructural services

The effects on infrastructure are addressed in the Infrastructure Report prepared by Paterson Pitts Group dated 4 December 2017 (Document 8).

7.4.1 Water Supply

The Paterson Pitts Group Infrastructure Report addresses water supply for potable, fire-fighting and irrigation purposes. Attached to the Infrastructure Report at Appendix D is a report by Mott MacDonald NZ Limited dated 24 November 2017. The Mott MacDonald water report confirms that that company has previously been commissioned by the Central Otago District Council to assess the system performance in terms of Levels of Service (LOS) and fire-fighting capacity for the proposed River Terrace Development; and that the impact of this development on the remaining network has also been investigated.

Computer modelling of the Cromwell water reticulation by Mott MacDonald shows that the River Terrace Development will have a detrimental effect on the existing network, there being insufficient pipe capacity along the Cemetery Road, Kawarau Gorge Road (SH 6) and Chardonnay Road sections of existing pipeline. Four options to improve LOS, security of supply and supplying ultimate demand have been assessed for the future design horizon (2048); and Option 4 is preferred which in summary involves the construction of a 300mm pipe duplication along Bannockburn Road from McNulty Road to 75 Bannockburn Road; and a 300mm connection between Bannockburn Road and Cemetery Road to the end of the 200mm watermain along Cemetery Road. The Mott MacDonald report notes that a potential wastewater upgrade (discussed in part 7.4.2 below) includes the installation of a pipe between Cemetery Road and Bannockburn Road, following the Option 4 layout. Cost saving would therefore result from installing both pipes at the same time. Paterson Pitts Group advises that the new trunk ring main will be constructed down Sandflat Road and Pearson Road, connecting to the Cromwell-Bannockburn watermain in Bannockburn Road.

Paterson Pitts Group confirms that it is feasible that any public open space irrigation requirements can be met by on-site groundwater sources (ie. bore supplies). The Infrastructure Report notes that it is the Council's preferred option that public open space irrigation be supplied from an independent bore, rather than the town reticulation.

Peak irrigation requirements for lawn and garden irrigation within the private allotments will be from the town reticulation via a metered supply. Paterson Pitts Group notes that experience elsewhere in Central Otago (Cromwell/Clyde/Alexandra) is that private irrigation supply can only practicably be met out of the town reticulation.

The Mott MacDonald and Paterson Pitts Group reports are silent with respect to the capacity of the water headworks (pumping/treatment/storage) to accommodate the additional demand resulting from Plan Change 13. The Council's engineers have advised that the Cromwell Water Treatment Plant has funding allocated for capacity assessments and treatment plant upgrades in the Council's Long Term Plan. Detailed design for treatment plant upgrades will incorporate required flows for predicted growth for approximately 35 years. It is noted that Plan Change 13, if approved, would take up a substantial portion of the capacity. The Council's Water Services Manager, Mr Adams, has emphasised to us that upgrading is to be undertaken irrespective of whether Plan Change 13 proceeds. It is anticipated that such works will be funded from a variety of sources including development contributions (to provide for growth) and rates (to fund improvement in the level of service and renewals).

Mr Adams has noted that the water treatment plant upgrade will benefit new development irrespective of where that development occurs at Cromwell. In these circumstances, and given that funding for growth is to be obtained from development contributions (notwithstanding the reference to other funding sources including direct funding by Council in clause 8 of the Infrastructure Report); it does not appear that Plan Change 13 would impose a significant rate cost, being a concern raised by Thomas Alan Coull (63/11).

7.4.2 Wastewater

Attached at Appendix C to the Paterson Pitts Group Infrastructure Report is a report prepared by Mott MacDonald NZ Limited dated 22 November 2017 that assesses the impact of the proposed River Terrace Development on the Cromwell wastewater system. This report confirms that Mott MacDonald was commissioned by the CODC to undertake a hydraulic modelling analysis. This analysis shows that the River Terrace Development is likely to have a detrimental effect on the existing network as the downstream pipework reticulation, being the existing sewer along Cemetery Road, does not have enough capacity to convey wastewater flows from the development.

Mott MacDonald at page 3 acknowledge that a new connection point has been proposed by Paterson Pitts Group which involves constructing a pipe (approximately 2.8km long) that conveys wastewater flows to a manhole at the intersection of Bannockburn Road and Richards Beach Road. This would be a new direct connection to the existing 750mm diameter pipe upstream of the Cromwell wastewater treatment station (that is located at Richards Beach Road). Mott MacDonald observes that the topography of the area suggests that no pump is required and that a gravity main would be sufficient to transport the wastewater load from the River Terrace Development. Reference is made to a 300mm pipe being used for the new connection.

As noted in part 7.4.1 of this report the route of the new direct wastewater connection would coincide with the route of the new water main; and again it is noted that cost savings would result from installing both pipes at the same time.

The route of the new wastewater pipe (and of the new water main) traverse land other than legal road. It therefore appears that construction of the wastewater main and water main would depend upon negotiations with the affected landowner to secure any easements necessary for these works.

Paterson Pitts Group advises that at least two wastewater pump stations are likely to be required to service the River Terrace Development; and that further detailed modelling will be required to determine the final configuration of any pump station/gravity reticulation.

Again we note that the Mott MacDonald and Paterson Pitts Group reports are silent with respect to any effects on wastewater headworks. The Council's engineers advise that the Cromwell Wastewater Treatment Plant has been designed for predicted growth to the year 2051.

We have also discussed this matter with Mr Adams. He advises that the design for the headworks has been undertaken; and that this is to serve development at Cromwell irrespective of its location. Again it is noted that improvements to serve growth is funded from development contributions, rather than being a rates cost. This is relevant to concerns expressed by some submitters with respect to the implications of Plan Change 13 for ratepayers in terms of infrastructure costs.

7.4.3 Stormwater

The Paterson Pitts Group report states that there is no reticulated stormwater system in the Cromwell area. We understand that this statement is not correct as stormwater mains were installed as part of the town expansion of Cromwell as part of the Clutha Valley Development. Trunk mains were installed in the new industrial and residential areas; and stormwater reticulation was also installed in the original residential area of Cromwell. Recent practice in the Cromwell area has been to dispose of stormwater to ground.

The Paterson Pitts Partners Infrastructure Report notes that the site is underlain by a considerable depth of glacial outwash gravels, with depths to groundwater varying from 25-34 metres below ground level. Soakage tests have shown that these gravels are highly permeable; and that no issues are anticipated with respect to the discharge of stormwater from roading, hardstand and roof run-off to ground via suitably designed soakpits. The Paterson Pitts Group Infrastructure Report provides diagrams on page 5 of the Cauldwell type soakpit and of the "inverted syphon" type mudtank (that provides a silt and debris trap).

Paterson Pitts Group advises that where road swales are used, these provide a measure of pretreatment of stormwater before discharge into the mud tanks.

7.4.4 Network Utility Services

Correspondence from Chorus dated 11 October 2017 is attached to the Paterson Pitts Group Infrastructure Report at Appendix E. This confirms that a suitable telecommunications (fibre) landline service can be provided to the River Terrace Development. Paterson Pitts Group also notes that individual homeowners will also have the alternative option of the cellular network (4.5G) and several long-distance wi-fi providers for their telecommunications and computer media service.

There are three possible options for electricity supply as described in the report from S. Tilleyshort Electrical Consulting that is presented at Appendix F to the Paterson Pitts Group Infrastructure Report.

These options are:

- A direct supply from Aurora Energy Limited's network; with Aurora owning the subdivision infrastructure.
- An "embedded" supply from an alternative provider connected to a dedicated feeder off Aurora's Zone sub-station or a feed off Aurora's distribution network, with the alternative provider owning the subdivision infrastructure.
- An independent supply from an alternative provider from a Grid Exit Point (GXP) off the Transpower Cromwell substation, with the alternative provider owning the subdivision infrastructure.

Correspondence from Aurora dated 10 November 2017 is also included at Appendix F to the Paterson Pitts Infrastructure Report; and this confirms that a direct supply can be made available from the Aurora network to the subdivision.

S.Tilleyshort Electricity Consulting confirms that preliminary discussions have been held with alternative providers as to the possibility of an embedded network or a direct feed from Transpower's GXP. The report advises that it appears that a direct feed from Transpower's GXP is unlikely to be economically viable.

7.4.5 Road Construction

The Paterson Pitts Group Infrastructure Report advises that no difficulty is expected in designing and constructing suitable road pavements within the site, in compliance with "Austroads" and the subdivisional pavement design standards of the Central Otago District Council.

The Infrastructure Report notes that the Council's current subdivision engineering design standard is NZS 4404:2004 and the Council's July 2008 Amendments thereto. The Infrastructure Report notes on page 9 that the roading layouts and typical cross sections proposed for roads do not comply with this standard. It is proposed instead that road designs be in accordance with the updated version of the standard, being NZS 4404:2010.

We have discussed the potential congestion issues associated with the road carriageways proposed in the RTRA in part 7.3.13 of this report (above). We do not propose to re-traverse here, in the context of the Infrastructure Report, the roading and parking issues which we have identified earlier in this report.

7.4.6 Conclusion : Infrastructure Effects

Provision can be made for water supply, wastewater disposal, stormwater disposal and the provision of network utility services to serve the River Terrace Development. Engineering solutions are available and we again note that it is the Council's practice to fund growth related improvements to headworks from development contributions.

7.5 Effects in relation to geotechnical conditions and natural hazards

GeoSolve Limited has prepared a Geotechnical Report being Document 9.

7.5.1 General Comment

The Geotechnical Report details the outcome of geotechnical investigations and describes the geological setting, subsoil and groundwater conditions, natural hazards, earthworks, cut and fill batters and foundation options; and makes general geotechnical recommendations with respect to the Plan Change 13 site.

We do not propose to discuss the contents of Document 9 in detail but understand that the majority of the site is acceptably safe from geotechnical hazards; and that the area is suitable for the RTRA subdivision and development, from a geotechnical perspective, noting that site-specific assessments and localised mitigation measures may be necessary. These would be undertaken at the time when any specific subdivision and development proposals are under consideration.

7.5.2 Historic Mine Shafts

The Geotechnical Report gives particular consideration to any hazard that may be associated with historic mine shafts in the immediate vicinity of the Plan Change 13 land. In clause 6.1.1 the Geotechnical Report discusses Horn's Shaft that is located adjacent to the eastern boundary of the Plan Change 13 land inside the property boundary of 54 Sandflat Road [being the Alpine Water bottling plant site] and near the base of the prominent terrace riser that bisects the site. Horn's Shaft was sunk to a total depth of 34.1 metres and did not include lateral drives. The Geotechnical Report concludes in clause 6.2 that Horn's Shaft poses a low risk to the proposed subdivision; but recommends that setback mitigation be provided for. The Structure Plan for the RTRA identifies a Horn's Shaft setback (20m); and Rule 20.7.5(vi) confirms that within the Horn's Shaft setback area no buildings shall be constructed; and that there shall be no stormwater discharge to ground. The contents of this rule are consistent with the recommendation of the Geotechnical Report.

Much of the Horn's Shaft setback area identified on the Structure Plan relates to the property at 54 Sandflat Road which is to remain in the Rural Resource Area. Given that the Structure Plan and Rule 20.7.5(vii) apply only to the RTRA, it is only land within the RTRA that is subject to the Horn's Shaft setback provision.

Clause 6.1.3 of the GeoSolve report advises that the current landowner of 131 Pearson Road has never seen any evidence of the Bell & Hooper mine shaft on the ground surface. Gary Carl Hyndman & Deborah Lee Hyndman (155/23) consider this statement to be a blatant mistake. They, as the current landowners of 131 Pearson Road, would like to know exactly who the developers or their representatives spoke to in order to be able to make the above statement. The submitters advise that they have not been spoken to.

The GeoSolve report in Clause 6.2 confirms that other mineshafts in the vicinity of the Plan Change 13 site (apart from Horn's Shaft) present no risk to the proposed subdivision of that land, and will not require mitigation.

7.5.3 Conclusion : Geotechnical Effects

Our conclusion is that any effects in terms of geotechnical hazards are to be mitigated; and that the land appears suitable for subdivision and development in terms of geotechnical considerations.

7.6 Effects in relation to soil contamination

A Preliminary Site Investigation (PSI) has been prepared by e3 Scientific (Document 10).

7.6.1 Agrichemicals

The PSI addresses the history of the site which has generally been used for pastoral activity. The PSI has concluded on page 22 that the application of agrichemicals onto the site (if this did occur) would not result in contaminant levels that would present a risk to residential activity.

The PSI notes the presence of Jones Orchard adjacent to the site. The PSI comments that the Jones Orchard is separated from the site by a large pine shelterbelt which is likely to be very effective preventing any spray drift entering the site. The PSI authors therefore consider that it is unlikely that herbicides sprayed onto the orchard would have impacted the soil quality of the subject site.

7.6.2 Other Contaminants

The PSI has found that contaminants present or possibly present are confined to contaminants at the firewood yards (adjacent to Sandflat Road) and to land that was previously occupied by buildings on the southern portion of the site.

Contaminants associated with the firewood yards (and burning areas) noted on page 23 of the PSI include a range of heavy metals and organic contaminants such as petroleum hydrocarbons. Contaminants on land previously occupied by buildings include lead and arsenic that exceed the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES) Risk Based Soil Contaminant Standards.

X-ray fluorescence instrument (XRF) results are summarised in Part 3.1 at page 18 of the PSI. These confirm that lead and arsenic concentrations at the site of a former miners residence exceed the NES soil contaminant standard; and that lead concentrations exceed the NES soil contaminant standard at one location in the vicinity of a concrete feature to the south of the miners residence.

Based on the findings of the PSI e3 Scientific advises that further targeted investigation will be required to confirm the activity status of residential development under the NES. It is anticipated that a Detailed Site Investigation (DSI) will be provided at the subdivision consent stage, to confirm that potentially contaminated areas are fit for residential activity.

7.6.3 Conclusion : Soil Contamination

We consider, based on the contents of the PSI, that potential adverse effects in terms of soil contamination can be addressed via the DSI process in terms of the NES.

7.7 Effects on cultural values and archaeology

Origin Consultants have prepared an Archaeological Assessment (Document 11). This confirms that the NZ Archaeological Association site records indicate that there are currently no recorded archaeological sites on the land subject to Plan Change 13.

7.7.1 Māori Cultural Values

Based on the findings of the Archaeological Assessment there appear to be no known Māori cultural values at the site subject to Plan Change 13.

Rule 20.7.3(viii)(i) requires the implementation of an accidental archaeological discovery protocol in the context of subdivision. Given that there are no known Māori cultural values of relevance to the site there appears to be no particular reason why an accidental archaeological discovery protocol should be the subject of a rule in the District Plan relating to the RTRA when no such rule applies to other Resource Areas provided for in the Operative District Plan. It is however appropriate to note in this context that it is not unusual for an accidental discovery protocol to be required as a condition of resource consent, particularly where it is anticipated that cultural values may be present.

7.7.2 Identified Archaeological Features

The Archaeological Assessment identifies two clear archaeological features, being two water races, that bisect the site. Both races are shown on 1880s survey maps; and the Archaeological Assessment advises that it is likely that these races were constructed in the 1870s to provide irrigation to land on the Cromwell Flat. Both races have subsequently been truncated by 20th Century development on either side of the site, with the remaining portions falling into disuse and being partly filled in by natural accumulation processes. On page 27 the Archaeological Assessment describes the condition of the water races as fair; and notes that they are a relatively common feature within the Central Otago landscape.

The Archaeological Assessment concludes that the remains of the water races have a moderate archaeological significance (as they were part of expensive endeavours to provide water to parts of the Cromwell Flat to allow land to be farmed); but that little additional information can be determined from their archaeological excavation.

The Archaeological Assessment recommends that consideration should be given to preserving the water races during the development of the site; and notes that races in other parts of the region have been retained as landscape features, and are a naturally suitable place to put plants as they catch additional moisture.

The requestor proposes to retain one of the races, being the northern race, by including it within the Open Space Sub-Area C as shown on the Structure Plan, except where it is crossed by proposed roads. It is understood that the other water race, to the south, will be destroyed as part of the land development process, subject to an archaeological authority being obtained from Heritage New Zealand Pouhere Taonga (HNZPT).

Figure 5 on page 12 of the Archaeological Assessment identifies various features which were observed during a visit to the site by Mr Teele, the author of the Archaeological Assessment; and Figures 7-16 include photographs of the various features which were observed. The Archaeological Assessment recommends that due to the uncertain nature of the possible house site and linear stone feature, that test pitting should be undertaken by an archaeologist in an attempt to determine if these features have archaeological values. In the event that they are found to be archaeological features that will be damaged or destroyed by the proposed works, an archaeological authority will be required from HNZPT.

The Archaeological Assessment notes that concrete features at the site are likely to be 20th Century in origin, and as such they do not require an archaeological authority to authorise their removal.

7.7.3 Conclusion : Archaeological Values

Plan Change 13 will have an adverse effect to the extent that the southern water race is to be lost. It appears that any effects associated with this loss will be minor given that water races are a relatively common feature within Central Otago and as the northern water race is to be retained. It is anticipated that general recommendations contained in the Archaeological Assessment will be followed during any future subdivisional works to mitigate any other effects on archaeological values; and it is again noted that a rule is proposed to require an accidental archaeological discovery protocol if pre-European (Māori) material is discovered.

Our conclusion is that any effects on cultural values and archaeology will be no more than minor.

7.8 Effects on ecological values

Effects on ecological values are briefly addressed in the AEE (Document 3).

7.8.1 Existing Vegetation

The Geotechnical Report (Document 9 at page 3) describes ground cover as comprising grass and scattered briar bushes. That report notes that a shelterbelt of well-established pine trees is present on the western boundary of the upper terrace surface; and that a shelterbelt of eucalypt trees is present on the southern boundary of the property. The report notes that a row of pine trees runs along a terrace riser on the western corner of the property. Works have been undertaken on the site subsequent to the preparation of the Geotechnical Report that have resulted in the establishment of a landscape strip adjacent to State Highway 6 and Sandflat Road and plantings adjacent to the Edgar property at Rapid 18 Sandflat Road.

Exotic vegetation has been established on the site for many years and there are no stands of indigenous vegetation.

The AEE confirms that the Plan Change 13 proposal includes landscaping, including planting of indigenous species, within the proposed open space areas and greenways, and on the western periphery of the RTRA. While this planting is for the purpose of enhancing the amenity values of the proposed new urban environment, the AEE notes that it will have additional benefit to ecological values by providing new habitat for fauna, particularly bird life.

The AEE also notes that given the Rural Resource Area status of the land (part being subject to the Rural Residential notation) activities are permitted, including farming, [limited] forestry, orcharding and horticulture which could occur without reference to any ecological values (ie. as a permitted activity in the Rural Resource Area). The AEE concludes that effects on ecological values from urbanising the land will not be adverse; and that the effects are likely to be the same or similar to the effects already anticipated by the Operative District Plan.

7.8.2 Conclusion : Ecological Effects

We consider that any effects, in terms of ecological values, will be limited; and that the potential exists for some enhancement of ecological values, particularly through the creation and planting of open space areas with indigenous species.

7.9 Effects on landscape and visual amenity values

The effects on landscape values are addressed on page 8 of the AEE (Document 3). In the absence of a detailed landscape assessment report it is anticipated that the effects on landscape values have been assessed by Brown & Company Planning Group (being the authors of Document 3) rather than by an expert in landscape architecture.

7.9.1 Existing Landscape Character

The description of the existing landscape character opens with the following paragraph:

"The RTRA is close to the existing urban area – the employment/business area of Cemetery Road is around 1km to the east of the site, and the intervening area contains the Highlands Motorsport Park and the Speedway. These uses, including the buildings, the tracks, carparking areas, signage, and the related activities they attract, have modified the landscape significantly."

We question whether the uses referred to in the above paragraph have modified the landscape significantly in the immediate vicinity of the site having regard to the landscape setting of the site as a whole and as viewed from State Highway 6.

In particular we note that land on both sides of State Highway 6 to the west and north of the site contains established orchards with associated shelterbelt plantings. Land to the east of the site to the north of State Highway 6 and Cemetery Road also comprises established orchard properties that have rural character and amenity values. Land immediately to the east of Sandflat Road includes Highlands that features lawns, amenity plantings and vineyards adjacent to State Highway 6 and Sandflat Road in the vicinity of the Highlands entrance, and we note that only parts of the built development at Highlands (being the spider car sculpture, signage, parts of the main museum/café building complex and the "gasoline alley" garages are visible from State Highway 6). The Highlands track and other built development associated with Highlands are located on a lower terrace and are not visible from State Highway 6; and land generally to the south of the Speedway (including part of the Highlands site) is in plantation. In our view it is important to note that the subject site is not viewed as part of the same landscape as the Industrial Resource Area at Cemetery Road.

A substantial dwelling exists on the Edgar property to the west of Sandflat Road that is a rural residential property adjacent to the site. Further to the south below the escarpment is the Alpine Water bottling plant which is not visible from State Highway 6.

Sandflat Road generally to the south of the site includes open rural land (to the west) and land in plantation (to the east). Land on either side of Pearson Road has a rural residential character, consistent with the Rural Residential notation. Dwellings are found on small rural properties; and some land adjacent to Pearson Road maintains an open pastoral character. Land to the north of Pearson Road, between Sandflat Road and Bannockburn Road, includes dwellings and accommodation facilities within a plantation setting. Again we note that land visible from Sandflat Road and Pearson Road, including the site and its environs, has a rural character, with dwellings on smaller holdings facilitated by the Rural Residential notation (which provides for subdivision with an average lot area of 2 hectares).

In our view it is appropriate to acknowledge that Plan Change 13 proposes the RTRA (an urban zone) in a rural landscape.

The description of the existing landscape character presented in the AEE concludes with the statement that:

"Given the extent of landscape modification in this area, there is little remaining landscape "naturalness", and landscape has considerable capacity to absorb change without adverse effects."

Again we note in this context that the site and environs has a rural landscape character with landscape "naturalness" derived from the presence of shelterbelts, orchards, open pasture and plantations in this locality.

When considering the existing landscape character it is appropriate to acknowledge that the site is prominent in the landscape, as viewed from State Highway 6. The Transportation Assessment (Document 7) in clause 4.1.1 advises that in 2015 (the land year for which counts are available) the Annual Average Daily Traffic was 3890 vehicles (two-way). Such traffic is likely to include considerable numbers of visitors travelling to and from Queenstown. The rural landscape character of the site and its environs, including horticultural properties, provide a landscape contrast that is experienced by those travelling on State Highway 6 between the rugged natural grandeur of the Kawarau Gorge (to the west) and the urbanised landscape of Cromwell to the east of State Highway

6 which becomes apparent some distance to the east and north of the site in the vicinity of McNulty Road, opposite the Cromwell Aerodrome and Racecourse (D199 and D81 on Planning Map 44).

It is also noted that the treed corridor along State Highway 6 to the north and west of the site becomes a particular focus of tourist interest when the poplar trees on the north side of State Highway 6 display their autumn foliage. Visitors are often observed photographing vistas along State Highway 6 during autumn.

7.9.2 Landscape Change

The AEE in Clause 10.2 on page 9 confirms that the RTRA, when implemented, will change the character of the site: the site will lose its open ruralness and will become, over time, urban.

The AEE considers that urban development of the site, in accordance with the RTRA provisions, will not be alien to or out of character in the wider area, given the values and characteristics of the immediate and wider landscape previously described in the AEE. The AEE states that urban development is not an unexpected element in the landscape in this area, and that the area is not remote but is highly modified, typical of a peri-urban setting.

Again we observe that the site and environs have a rural landscape character at present and we do not consider that this landscape can aptly be described as having a "peri-urban setting". Given the rural landscape character and the established neighbouring land uses at State Highway 6, Sandflat Road and Pearson Road, we consider that Plan Change 13 will result in an island of urban development in what is a rural landscape; and that such urban development would in fact be an unexpected element in this landscape setting.

A 30 metre landscape setback area is proposed adjacent to State Highway 6, being part of Sub-Area C as shown on the Structure Plan. Land to the south is in Sub-Areas Residential B and Residential A where a maximum height of 9 metres applies (in terms of Rule 20.7.1(ii)(a)). This land is also subject to the Retirement Living Overlay where buildings with centralised activities are permitted to a height of 12 metres (as are buildings in the Neighbourhood Centre Overlay on the southern portion of the Retirement Living Overlay). Urban development on the northern portion of the site will be visible from State Highway 6 across the 30 metre landscape setback area.

The urban development facilitated by Plan Change 13 will also be visible from Sandflat Road, in part from Pearson Road (where not obscured by intervening undulating topography and tree plantings), and from neighbouring properties, including those subject to the Rural Residential notation.

The RTRA rules require a 5 metre setback of buildings from the RTRA boundary (Rule 20.7.1(ii)(i) and Rule 20.7.3(ii)(d)); and a 2 metre wide planted buffer strip at the time of subdivision along the western boundary (Rule 20.7.3(viii)(f)). The AEE indicates that these measures will provide visual screening or softening of the views of the urban development within the RTRA when viewed from outside the RTRA area; and will serve to mitigate the visual effects of the development (in addition to mitigating any potential reverse sensitivity effects – discussed in parts 7.10.3 and 7.10.4 of this report below).

The Design Report prepared by Jasmax (Document 6) contains visualisations and an indicative masterplan for the RTRA. These images are of assistance when assessing the visual effects of the proposal on the landscape.

In our view the proposal will have a significant adverse effect on landscape and visual amenity values in this locality as viewed from State Highway 6 and Sandflat Road and from neighbouring

The AEE acknowledges that the RTRA will significantly change the landscape at a localised level, but we do not agree, having regard to the RTRA provisions that are intended to provide landscape mitigation that ".... any perceived adverse effects of this change in landscape values are not adverse".

Landscape effects from further afield have been raised by Mt Difficulty Wines Limited (249/13). The submitter considers that the visual amenity of the surrounding area will be significantly impacted. The submitter advises that it hosts 60,000 domestic and international visitors annually; and that the visual amenity from the submitter's Cellar Door [at Felton Road] will be impacted both during the day and night, the visual amenity from the submitter's Cellar Door being one of its drawcards.

Richard Andrew Ford (122/19) notes that the effect of light pollution on the surrounding environment has not been addressed in the AEE. The submitter notes that with the site visible from many parts of Bannockburn and the surrounding roads which are within the rural surrounds of Cromwell, the lightspill caused by the development will have a detrimental effect on the night sky and the surrounding rural character during the hours of darkness.

The proposal will have an adverse effect on landscape values as viewed from a distance on elevated land with a view to the north including from roads and properties in the Residential Resource Area (4) at Bannockburn and as viewed from elevated land in the environs of Bannockburn, including the Mt Difficulty Cellar Door; and such development will be particularly prominent at night due to the presence of street and domestic lighting associated with what essentially would be an island of urban development within an otherwise dark rural setting.

7.9.3 Conclusion : Landscape and Visual Amenity

The proposal will have a significant adverse effect on landscape and visual amenity values in this locality. The proposal will result in an island of urban development being established in a landscape which has established rural character and amenity values, as viewed by passers-by on State Highway 6 and neighbouring roads, adjacent rural residential properties and from elevated vantage points further afield at Bannockburn and environs. Measures proposed for landscape mitigation in the RTRA will not serve to effectively mitigate the significant adverse effects on landscape and visual amenity values that will result from Plan Change 13.

7.10 Effects on nearby land uses

The effects on nearby land uses including reverse sensitivity effects are addressed on page 10 of the AEE (Document 3). It is also noted that the requestor has commissioned the Styles Group to prepare an Assessment of Noise Effects dated 20 June 2018 that is attached as Appendix 1 to the submission by River Terrace Developments Limited (298). That submission in 298/1 - 298/7 promotes the inclusion of a new Rule 20.7.7(x) – Acoustic Insulation of Buildings Containing Noise Sensitive Activities; along with amendments to Rule 20.7.7(viii) and Rule 20.7.7(ix) that relate to Reverse sensitivity – Motorsport Activities and Reserve sensitivity – Orcharding activities, respectively.

We have given consideration to the effects on nearby land uses having regard to the Noise Assessment report and the new rules/amendments to rules proposed by the requestor in its submission.

The AEE on page 10 identifies the facilities and land uses surrounding the site as follows:

- State Highway 6;
- Highlands Motorsport Park, on the east side of Sandflat Road;
- The Cromwell Speedway, on the east side of Sandflat Road;
- Rural-residential properties, to the north (on the opposite side of the highway), east (on the western side of Sandflat Road immediately adjacent to the site) and southwest (adjoining the boundary with the lower terrace);
- Farmland, including the vacant paddock south of the site and Jones Orchard west of the northern terrace.

The AEE discusses the effects on these land uses on pages 11-13 and the effects on several of these land uses are also discussed in the Noise Assessment report prepared by the Styles Group. We focus here on effects in terms of noise and reverse sensitivity to avoid duplication of matters discussed in parts 7.3 and 7.9 of this report above.

7.10.1 Effects on State Highway 6

State Highway 6 adjoins the northern boundary of the site. The Structure Plan shows a strip of land adjacent to State Highway 6 being included in the Open Space Sub-Area C; Sub-Area C being 30 metres wide.

Styles Group advises that noise sensitive activities establishing within proximity to the northern boundary of the site will have the potential to be affected by noise from vehicles travelling on State Highway 6, notwithstanding the 30 metre wide open space buffer. Rule 20.7.7(vii) is intended to avoid the potential for adverse effects of road noise from the state highway on noise sensitive activities within the RTRA. Rule 20.7.7(vii) and its associated Reason state as follows:

"Acoustic insulation of dwellings near State Highway 6

Any new residential buildings, or buildings containing activities sensitive to road noise, located within 80m of the boundary with State Highway 6 shall be designed, constructed and maintained to ensure that the internal noise level does not exceed 40dB $L_{Aeq(24hr)}$ in bedrooms and all other habitable spaces.

The titles affected shall be encumbered with a consent notice requiring ongoing compliance with this standard in perpetuity.

Reason:

The rule avoids the potential for adverse effects of road noise from the State Highway on sensitive [sic] activities within the Resource Area".

Rule 20.7.7(vii) is similar in content to Rule 7.3.6(xii) of the Operative District Plan which applies in the context of the Residential Resource Area (13) to land at Pisa Moorings north of Cromwell (see Map 29). We note that a difference between the rules is that Rule 7.3.6(xii) requires that noise from traffic on State Highway 6 is not to exceed 35dB $L_{Aeq(24hr)}$ in bedrooms; whereas Rule 20.7.7(vii) does not distinguish between bedrooms and other habitable spaces (where a 40dB $L_{Aeq(24hr)}$ applies to both). The NZ Transport Agency (254/1) supports Rule 20.7.7(vii) in part and promotes that some acknowledgement of the impact of the likely growth in traffic volumes be made by adding the following words to Rule 20.7.7(vii):

"This shall take account of any increases in noise from projected traffic growth during a period of not less than 10 years from the commencement of construction of the development."

In our experience traffic growth over a period of 10 years is often referred to in consent notice conditions applied to address potential reverse sensitivity effects of noise sensitive activities on state highways within the District.

The Styles Group supports Rule 20.7.7(vii) as notified to address the potential effects of traffic noise on future development within the RTRA. Styles Group considers that the inclusion of Rule 20.7.7(vii) in Plan Change 13 is appropriate and will ensure that the effects of (and on) State Highway 6 will be avoided or mitigated adequately.

7.10.2 Effects on the Highlands Motorsport Park and the Cromwell Speedway7.10.2.1Economic & Community Significance

Many submitters have emphasised the significance of Highlands and the Speedway to the local community. Highlands Motorsport Park Limited (144/2) advises that in 2017 turnover exceeded \$6 million; and that Highlands employs 30 local staff. Ross & Karen Lindsay (188/4) note that Highlands is a \$32 million private investment that contributes to local accommodation, retail and other businesses; and Trevor Robert Haig Tinworth (370/10) notes that Highlands runs successful international and national motorsport events as well as providing a destination for locals and tourists alike. It is noted in this context that the applicant in RC 150225 (discussed below) advised that 150,000 people had visited Highlands in the 20 months prior to that application being lodged in August 2015; and that approximately 10,000 people attended the Highlands 101 event in November 2014.

It is appropriate to acknowledge that investments have been made by other parties at Highlands, particularly in the Highlands Innovation & Technology Park off Cemetery Road. Persons have invested in business premises and apartments within the Park that has been developed to accommodate motorsport related activities. For example The Three G Family Trust (368/1) advises that to date that submitter has invested more than \$2.3 million in its developments at Highlands and that the submitter is proposing to build on a vacant section within the next two years. Several submitters have advised that they have invested in properties within the Highlands Innovation & Technology Park since the establishment of Highlands.

Central Speedway Club Cromwell Incorporated (45/1) confirms that the Cromwell Speedway Club, that occupies the land owned by the Central Otago District Council described as Lot 1 DP 403966, has invested approximately \$1.5 million into the Speedway venue over the past 15 years. Richard Andrew Ford (122/16) considers that the Speedway makes up a large part of the community fabric; and that it draws people from all around New Zealand for various events.

Many submitters are concerned that the introduction of noise sensitive activities within the RTRA will be incompatible with the motorsport activities at Highlands and the Speedway; and that reverse sensitivity effects will result which could compromise the continued operation and potential expansion of these facilities. Submitters have referred to issues that have arisen elsewhere in New Zealand where they report conflict has arisen between motorsport facilities and noise sensitive activities, examples cited including Western Springs in Auckland, Ruapuna in Christchurch and Bay Park in Tauranga.

7.10.2.2 Planning History of Highlands

Highlands Motorsport Park is located generally to the east of Sandflat Road with the track and facilities being located on land described as Lot 400 DP 466637. Highlands initially operated under a land use consent granted by the Environment Court in 2009¹ and the 2009 Highlands land use consent is listed as RC 070149 in the Council's resource consent filing system.

The conditions of RC 070149 were subject to various changes as applied for by the consent holder following the development of Highlands.

On 30 November 2015 Commissioner Nugent granted land use consent RC 150225 to the Cromwell Motorsport Park Trust Limited, being the owner of Highlands. That consent replaced the existing consent RC 070149 in part; and the application RC 150225 was made to resolve what the Highlands owner considered to be uncertainties and ambiguities in the conditions of the original consent RC 070149; and also to obtain retrospective consent for structures and signage, and for consent for additional activities and signage. Subsequent to the granting of RC 150225, RC 070149 was formally surrendered as it related to Lot 400 DP 466637 and Lot 600 DP 466637 (Lot 600 being a parcel of land to the east of the Highlands track, adjacent to the Chafer beetle reserve).

The key conditions of RC 150225 that relate to noise and their effect are succinctly summarised in Clause 3.4 of the Styles Group Assessment of Noise Effects. Given that various conditions of RC 150225 are referred to below we have chosen to attach the conditions of RC 150225 (and the plans listed in Condition 1 of RC 150225) at Appendix B to this report for convenient reference.

RC 150225 provides for Tier 1 days on any day of the year excluding Christmas Day and before 1pm on Anzac Day. On Tier 1 days noise levels from Highlands are permitted to reach 55dB L_{Aeq} at the notional boundary of any dwelling between the hours of 0800 and 1800 and 40dB L_{Aeq} between the hours of 1800 and 0800, with the exception that the noise level of 55dB L_{Aeq} shall apply until 2100 hours on five Tier 1 days per year (see Conditions 35 and 37 RC 150225).

RC 150225 also allows for up to 16 Tier 2 days at Highlands which are essentially race days when a large number of people and cars are likely to attend events. These Tier 2 days have no noise limit applying to them other than the requirement that all race vehicles meet a limit of 95dB L_{Amax} when measured at 30 metres from the sound source – usually infield of the track at a point where the vehicles are accelerating hard. Styles Group advises that in practice, this permits the generation of noise levels up to around 80dB $L_{Aeq(15 \text{ min})}$ and 70dB L_{Aeq} across the day to be received on neighbouring sites. It is noted that while Tier 2 days have no noise limit during the hours of 0800 – 1800; a noise limit of 40dB L_{Aeq} applies to Tier 2 days between the hours of 1800 – 0800.

It is noted that RC 150225 consented a wide range of activities at Highlands as listed on page 47 at Appendix B to this report. This includes helicopter landing and take-off ancillary to activities at Highlands with a limit of 30 helicopter movements (15 flights) on any Tier 2 Day; and a limit of 6 helicopter movements per day (3 flights) or 10 per week (5 flights) on Tier 1 Days (see Conditions 26 & 27 RC 150225.) It is noted that the helicopter flight path from Queenstown (as illustrated on the plan "Proposed Helicopter Flight Paths Highlands Motorsport Park, Cromwell" S14361, Drawing 02, Revision D dated 10.11.15) passes over the RTRA.

7.10.2.3 Planning History of the Speedway

¹ *I & E Armstrong & Ors v Central Otago DC & Cromwell Motorsport Trust Limited*, C132/2009 Final Decision. The reasoning for the decision is set out in the Interim Decision C131/2008. Second Interim Decision C54/2009 deals with disagreements between the parties concerning Condition 16 of the decision.

The Cromwell Speedway is located immediately to the east of Sandflat Road, generally between the Highlands track and go kart track, and Sandflat Road.

On 29 September 1980 the former Vincent County Council granted planning consent to Ronald James Spriggs under the Town and Country Planning Act 1977 for the construction of a speedway and stock car track and ancillary buildings at the Speedway site, which is now described as Lot 1 DP 403966.

The 1980 planning consent, that is attached to this report at Appendix C for convenient reference, contains a general condition relating to noise as follows:

"(9) The construction and maintenance of safety walls, fences and barriers; the emission of noise, and general conduct of activities on the property shall at all times conform to standards set by the New Zealand Speedway Association and the Stock Car Association: "

The 1980 planning consent contains no specific controls relating to noise emissions; and does not restrict the number of days on which the Speedway can operate; or restrict the hours of operation. The Styles Group understands that the Speedway holds approximately 20 meetings per year between around October and April; and that those meetings generally run on a Friday or Saturday evening from around 5:30pm to 10:00pm, with variations likely across the season to account for weather, attendance and other variables.

7.10.2.4 Noise Emissions at RTRA from Highlands & the Speedway

The effects associated with Highlands and the Speedway are addressed together in clause 11.2 of the AEE and, to a significant extent, in the Styles Group Assessment of Noise Effects.

Styles Group has produced noise models to show the typical noise emissions over the River Terrace site from both Highlands and Speedway activities; with relevant noise level contours being plotted at Appendix C to the Assessment of Noise Effects report.

For Tier 1 days at Highlands Styles Group advises in clause 4.3.1 that noise levels across the River Terrace site will be compliant with the 55dB L_{Aeq} noise limit. Styles Group advises that the noise sources on the Highlands site may vary in terms of their location and intensity and that the noise level contour may shift slightly at times. Styles Group expects that such variations will be limited to plus/minus 2.3 dB, which Styles Group advises would be a barely noticeable difference to a compliant situation.

Styles Group has noted in clause 4.5.1 that while noise levels across the site will be no greater than the limit of 55dB L_{Aeq} at the notional boundary of any dwelling, the noise from Tier 1 days will be noticeable for the occupants of the site, and will at times be the dominant noise source in the environment. Styles Group notes that a level of 55dB is generally accepted be to the upper level of noise for a residential environment, where a small proportion of the population (often around 10%) will be highly annoyed. We note in this context that Highlands Motorsport Park Limited (144/10) has advised that it's acoustic advice has concluded that a significant number of residents will be highly/significantly annoyed by levels of noise experienced within the site day to day.

Styles Group in clause 4.5.1 notes that a noise limit of 55dB is very common in District Plans around New Zealand for activities affecting residential receivers during the day; and we note that Rule 9.3.5(iii)(a) of the Operative District Plan stipulates that all activities conducted in the Industrial Resource Area not exceed a noise limit of 55dBA L_{10} at any point within the Residential Resource Area during the hours of 7:00am – 10:00pm.

On the basis that no mitigation was required for the existing dwellings subject to noise from

Highlands at the time of consenting, Styles Group in clause 4.5.1 considers that no further mitigation is required for the development at River Terrace (in the context of Tier 1 days) beyond that already required in the Highlands consent. It is noted in this context that when Highlands was originally consented on land in the Rural Resource Area only a small number of rural residential properties existed in the vicinity of Highlands; whereas a substantial residential community is now proposed in the RTRA through Plan Change 13, in close proximity to Highlands.

For Highlands Tier 2 days, and based on noise measurements undertaken by Styles Group in January 2014, the noise level contours in Appendix C to the Styles Group report show noise levels across the Plan Change 13 site ranging from $67dB L_{Aeq}$ to $77dB L_{Aeq}$. Styles Group advises in clause 4.3.2 that these noise levels can only be considered typical of a Tier 2 day; and that the actual noise emissions on any given Tier 2 day may vary and could be higher or lower. Styles Group does not expect the noise levels to be more than 3-5 dB higher than those presented in their report (a noticeable increase) on the very loudest day, and Styles Group observes that levels could easily be 10dB lower depending on the class of racing cars on any given day.

For the Speedway, Styles Group advises in clause 4.4 that data has been used from their database of noise measurements from over 2000 speedway races at Western Springs Speedway and Bay Park Speedway (and others). Styles Group has adopted the typical noise level over a night of racing involving the classes of cars advertised by the Speedway and have applied the source levels to the noise model and the local topography. Based on this they advise that noise levels during Speedway racing will vary between approximately 65dB L_{Aeq} and 80dB L_{Aeq} across the Plan Change 13 site. Again Styles Group advises that these levels are indicative only and may vary by several decibels on any given night. Overall Styles Group does not expect an increase in noise levels by more than 1-3 dB, but there could be a reduction of 10 dB or more if only the quieter classes of vehicle are raced on any given night.

Styles Group advises in clause 4.5.2 that the noise levels experienced across the site on Tier 2 days and during a Speedway meeting are considered to be relatively high, with levels ranging from approximately 65dB L_{Aeq} to 80dB L_{Aeq} . The Styles Group observes that such noise levels would dominate the noise environment across the site and would compromise the outdoor acoustic amenity to the point where some residents would likely seek respite indoors for much or all of the day or leave home to undertake other activities away from the site.

Styles Group considers that it is important to note that events generating this level of noise are both infrequent and, in the case of Speedway, are of a relatively short duration; and that the events are also well publicised and that the receivers of noise have the opportunity to plan ahead and avoid the noise if they desire. Styles Group in clause 5 has noted that the effects of the Speedway and Highlands Tier 2 days will only be experienced for a maximum of approximately 36 occasions per year. We note again in this context that the 1980 Speedway planning consent contains no limitation on the number of days that the Speedway can operate; and accordingly the Speedway (20+) and Highlands Tier 2 (16) could, in combination, operate for more than 36 days per year.

Styles Group in clause 5 considers that it would be imprudent to allow for development of noise sensitive activities on the site without imposing rules and controls to provide an appropriate level of acoustic comfort from noise sources in the surrounding environment, and to mitigate the potential reverse sensitivity effects. Styles Group advises that noise effects on the site can be managed by:

• A rule requiring all noise sensitive activities on the site to be adequately acoustically insulated from noise sources within the surrounding environment (Rule 20.7.7(x)); and

• A rule requiring a restrictive no-complaint covenant in favour of land containing the Highlands track (Lot 400 DP 466637) and the Speedway (Lot 1 DP 403966) (Rule 20.7.7(viii)).

7.10.2.5 Rule 20.7.7(x) Acoustic Insulation

The new Rule 20.7.7(x) as proposed in the submission by River Terrace Developments Limited (298/1) provides for a noise level reduction to be achieved in Acoustic Insulation Zones that are shown on the Acoustic Insulation Plan (to be inserted as a Rule 20.7.11).

Styles Group advises in clause 6.1.1 that Zone A is effectively the combined land area that will be within the 70dB L_{Aeq} noise level contour for Speedway and Highlands Tier 2 days, and also the area affected by frost fan noise from the adjacent Jones Orchard to a lesser degree (discussed further in 7.10.4.3 below). Zone B is defined by the 69dB L_{Aeq} noise level contour for frost fan noise; and Zone C is the area of the site that is most remote from external noise sources.

Styles Group recommends in clauses 6.1.1 - 6.1.3 that for dwellings located within Zone A a Outdoor-Indoor Transmission Class (OITC) noise level reduction for bedrooms and other noise sensitivity spaces of 30dB should be achieved. For dwellings west of the 70dB L_{Aeq} contour (in Zone B) a performance standard of OITC 33dB for bedrooms (for frost fan noise) and OITC 25dB for all other habitable spaces (for motorsport noise) is recommended; and for dwellings in Zone C an OITC 30dB for bedrooms (for frost fan noise) and an OITC 25dB for all other habitable spaces (for motorsport noise) is recommended.

Styles Group in clause 5.3 advises that these controls will provide an approximate reduction of 30dB and 25dB from inside to outside respectively (as provided for in terms of Rule 20.7.7(x)); and that these will generally be perceived as providing a significant reduction in noise level.

Styles Group also advises in clause 5.3 that for the houses closest to Highlands or the Speedway, the internal noise levels [that will result from Rule 20.7.7(x)] will be no greater than approximately 50dB L_{Aeq} , and for the sites further away the noise levels will be as low as approximately 30dB L_{Aeq} during the day and evening. Styles Group advises that the insulation controls will provide a significant reduction of noise levels indoors.

We note that in clause 6.3 Styles Group advises that in order to achieve the Outdoor-Indoor Transmission Class (OITC) noise level reductions recommended (and provided for in Rule 20.7.7(x)), it will be necessary to ensure that windows and doors are able to be kept closed. Whilst this is not likely to be a particular issue in the winter, Styles Group notes that it will be impracticable to keep windows closed in the summer time without considerable thermal discomfort at times. To overcome this Styles Group recommends that mechanical cooling (air conditioning) is provided for, along with a source of fresh air to meet the requirements of clause G4 of the Building Code. The recommended rule presented in clause 7 of the Styles Group Assessment of Noise Effects provides for such mechanical cooling as follows:

"e) Where the design requires windows and doors to be closed to meet the OITC requirements, all Noise Sensitive Spaces shall be ventilated or supplied with fresh air to meet the requirements of the Building Act, and shall be mechanically cooled (air conditioned) to ensure that the occupants do not need to open windows or doors for thermal comfort."

Rule 20.7.7(x) as presented in the submission by River Terrace Developments Limited (298/1) omits the rule requiring mechanical cooling [ie. e) above], as recommended by Styles Group. It is

anticipated that this is an oversight and that the requestor will confirm whether or not this is the case at the hearing.

As noted in 7.10.2.4 above the Styles Group has advised that the noise from Tier 1 days will be noticeable for the occupants of the RTRA, and at times will be the dominant noise source in the environment. Furthermore Styles Group has advised that at a level of 55dB a small proportion of the population (often around 10%) will be highly annoyed. Noise from Tier 1 days are expected to be an almost constant factor at the RTRA as RC 150225 contains minimal restrictions on the number of Tier 1 days ie. they can occur on any day when Tier 2 days are not operating at Highlands except for Christmas Day and Anzac Day before 1pm.

The Styles Group has also advised that noise levels associated with Tier 2 days and during a Speedway meeting would dominate the noise environment across the RTRA and would compromise the outdoor acoustic amenity to the point where some residents would likely seek respite indoors for much or all of the day or leave home to undertake other activities away from the RTRA.

The effect of Rule 20.7.7(x) is to provide respite indoors only. Some residents of the RTRA will not be able to enjoy the outdoor living space on their properties (that Rule 20.7.1(ii)(f) confirms is intended for amenity and outdoor recreation) or the open space/greenways within the RTRA on Tier 2 days and during Speedway meetings without their outdoor acoustic amenity being compromised. All Tier 2 events at Highlands are required to occur between and including the months of October and April (Condition 52 RC 150225); and Styles Group advises that Speedway meetings also occur during this period. Such events and meetings are therefore likely to occur at those times of the year when it is most likely that residents of the RTRA would otherwise be enjoying the outdoors within the RTRA.

Central Speedway Club Cromwell Incorporated (45/7) has noted that there are no methods that can be employed to mitigate the effects of noise on the outdoor amenity of residents; and Public Health South (285/7) observes that the proposal does not enable the maintenance and enhancement of amenity values. Public Health South observes that the ability of future residents of this area to enjoy their wider property will be significantly impacted by the Plan Change 13 site proximity to Highlands and the Speedway.

Our conclusion is that the noise effects of motorsport activities, as described in the Styles Group Assessment of Noise Effects, will significantly adversely affect residential amenity within the RTRA. The proposed Rule 20.7.7(x) does not avoid, remedy or mitigate the adverse effects of the motorsport activity upon amenity values that includes the use of outdoor living space for amenity and outdoor recreation purposes, along with the enjoyment of communal open space within the RTRA.

70.10.2.6 Rule 20.7.7(viii) No Complaint Covenant

Rule 20.7.7(viii) provides for a restrictive no-complaint covenant to be registered against the titles in the RTRA to prevent any owner or occupier of the servient land from complaining about or taking steps to prevent motorsports and related activities at Highlands and speedway and stock car track and related activities at the Speedway, as authorised by terms and conditions of the relevant resource consents/planning consent operative prior to 19 May 2018.

The AEE in clause 11.2 observes that registration of the land covenant will ensure that purchasers are alerted to the potential noise of the Highlands and Speedway activities, and can make their purchase decisions with that knowledge. The requestor notes that people sensitive to noise can elect not to buy an RTRA lot. The no-complaint covenant is intended to ensure that any potential adverse effects arising from reverse sensitivity are avoided.

Requiring a restrictive no-complaint covenant via a rule in the District Plan is novel, certainly in the context of the Central Otago District. In this instance the covenant is to apply to the RTRA where a maximum of 900 residential units are to be provided for (in terms of Rule 20.7.7(vi)).

In our view incompatible land uses should be located such that conflict is avoided to the maximum extent that is practicable. As noted above noise from Tier 1 days will at times be the dominant noise source in the environment within the RTRA; and noise levels associated with Tier 2 days at Highlands and with Speedway meetings will dominate the noise environment across the RTRA to the point where some residents would likely seek respite indoors. The resulting adverse effects on amenity values would apply across the RTRA irrespective of the no-complaint covenant.

Public Health South (285/7) has observed that while the inclusion of a restrictive no-complaints covenant may avoid the potential for complaints, it does not suitably mitigate the actual and potential effects that result from the significant noise levels that may be generated by Highlands. As such Public Health South considers that Plan Change 13 cannot be considered to maintain or enhance amenity values.

In our view the restrictive no-complaint covenant provided for in Rule 20.7.7(viii) is inappropriate as it will prevent owners or occupiers of the RTRA from complaining about or taking steps to prevent activities that have an adverse effect upon their environment, albeit that such activities are being lawfully carried out on neighbouring properties referred to in the rule. Owners and occupiers may have legitimate concerns which they would be prevented from pursuing through the various avenues otherwise available to them, including any action which could be taken in terms of the Resource Management Act 1991.

We also question whether, in reality, the restrictive no-complaint covenant would prevent owners and occupiers either directly, or through a third party, from raising concerns about the effects of Highlands or the Speedway. For example Roger James Aburn (2/6) questions whether the no-complaints covenant can extend to tenants, visitors and staff or others present within the RTRA who are not residents. Mr Aburn (along with several other submitters) has quoted from the legal firm Bell Gully as follows:

"A no complaints covenant can only go so far. It cannot prevent a member of the public from taking enforcement action against the effects producing land owner making a complaint or submitting [on] an effects producing resource consent application."

Ross & Karen Lindsay (188/5) have an overriding concern for the future of Highlands and the Speedway as they are concerned that covenants lack teeth and can be easily manipulated by, for example, having friends lodge noise complaints.

The restrictive no-complaint covenant, as provided for in Rule 20.7.7(viii), relates to the activities as authorised by the resource consents/planning consent for Highlands and the Speedway, including any variations operative prior to 19 May 2018. As a consequence the restrictive no-complaint covenant would not apply to any activities authorised by a future resource consent or a change of condition at either Highlands or the Speedway after 19 May 2018. Complaints could therefore be made with respect to future activities at Highlands or the Speedway, and Plan Change 13 may therefore impose reverse sensitivity constraints for Highlands and the Speedway in relation to activities authorised into the future.

The restrictive no-complaint covenant would also not prevent residents of the RTRA submitting on an application for resource consent or on an application to change a condition of consent at Highlands or the Speedway, if such application were to be notified (or limited notified to them).

Rule 20.7.7(viii) refers to RC 150281. That land use consent was granted on 9 November 2015 and consented the arrival and departure of helicopters at Highlands only on 14 and 15 November 2015. Given that RC 150281 related to an activity conducted for two days only during 2015; we see no purpose in including a reference to RC 150281 in the proposed Rule 20.7.7(viii)(b)(ii). For completeness we note again that RC 150255, as consented by Commissioner Nugent on 30 November 2015, authorises helicopter landings and take-offs ancillary to activities at Highlands.

Scott O'Donnell (256/6) has noted that covenants are enforceable primarily by the parties to the covenant. The submitter notes that this means that the onus will be on Highlands [or the Central Otago District Council with respect to the Speedway] to take action against the complainant. The submitter notes that each time a complaint is made, Highlands will have to expend time and money enforcing the covenant; and the submitter considers that this is an inefficient and unjustifiable use of resources.

The effect of Rule 20.7.7(viii)(c) is that the respective rules do not apply if the owner of the benefiting land does not allow registration of the restrictive covenant. If, say, the owner of Highlands or the Speedway considers that it does not wish to commit resources to the administrative cost of such a covenant; then the respective rules would not apply, and no restrictive no-complaint covenant with respect to, say, Highlands or the Speedway would be placed on the titles for properties in the RTRA.

Rule 20.7.7(viii)(b)(v), as promoted in the requestor's submission, provides that the restrictive covenant is to be in a format and wording approved by the Council. As noted above we consider that a restrictive no-complaint covenant is inappropriate; and we question whether the Council, given its statutory responsibilities in terms of the Resource Management Act 1991, should be facilitating the imposition of restrictive no-complaint covenants by approving the format and wording of such covenants.

In summary we have significant reservations with respect to the appropriateness and effectiveness of the restrictive no-complaint covenant provided for in terms of Rule 20.7.7(viii) which will apply to up to 900 residential units (including retirement living units) within the RTRA.

7.10.3 Effects on Rural Residential Properties

7.10.3.1 Rural Residential Properties in Vicinity

The AEE (Document 3) at clause 11.3 notes that there are several rural residential properties close to or adjoining the RTRA site. These include rural residential properties on the northern side of State Highway 6 opposite the Sandflat Road intersection; the Edgar rural residential property immediately to the east of the RTRA and west of Sandflat Road (between the RTRA and the Cromwell Speedway site); and several rural residential properties adjoining the western boundary of the RTRA site generally to the south of the escarpment that bisects the site.

Land immediately to the south of the subject site is subject to the Rural Residential notation and could be subdivided into rural residential properties having an average area of 2 hectares as a controlled activity (to which the Council could not refuse consent) provided a maximum of 5 allotments are shown on each plan of subdivision (see Rules 4.7.2(ii)(a)(i) & (iv)) of the Operative District Plan.

7.10.3.2 Proposed Mitigation

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Rules 20.7.1(ii)(i) and 20.7.3(ii)(d) require a minimum setback of buildings from the RTRA boundary of 5 metres; and Rule 20.7.3(viii)(f) requires the planting, maintenance and retention of a 2 metre wide buffer strip parallel with the western RTRA boundary (in the context of subdivision). These rules, in combination, will ensure that buildings within the RTRA are a minimum of 5 metres off the boundary with the immediately adjacent rural residential properties; with a 2 metre wide buffer strip planted at the western boundary.

The neighbouring rural residential properties are either located in the Rural Resource Area (to the north and east of the RTRA) or are located in that part of the Rural Resource Area that is subject to the Rural Residential notation. In either case a range of activities are permitted in the Rural Resource Area which may create adverse effects, including noise effects, which may have an adverse effect on the amenities of the neighbouring residential properties in the RTRA. These include spraying; the use of equipment such as chainsaws; tractor movements; and pest control, including bird shooting. Burning of vegetation can also be anticipated on rural residential blocks.

We question whether a 5 metre building setback and a 2 metre planted strip at the western boundary provides a sufficient buffer between residential activity and the rural activities that can be anticipated on the existing and future adjacent rural residential properties. While the requestor proposes that properties in the RTRA be subject to Rule 20.7.7(x) Acoustic Insulation of Buildings Containing Noise Sensitive Activities; it is again noted that this rule applies to buildings only. Those utilising outdoor living spaces and open space areas within the RTRA may be exposed to noise from activities on the neighbouring rural residential properties.

For completeness we note that the restrictive no-complaint covenants proposed in Rules 20.7.7(viii) and (ix) relate specifically to Highlands, the Speedway and the adjoining Jones Orchard only. These covenants would not prevent owners or occupiers of the RTRA complaining about activities lawfully carried out on neighbouring rural residential properties.

7.10.3.3 Effects on Rural Amenity Values

Those who reside in the Rural Resource Area, and on land in the Rural Resource Area that is subject to the Rural Residential notation, presumably do so as they enjoy the rural amenity values found in this locality. The presence of residential development in close proximity to and adjacent to rural residential properties (albeit with buildings 5 metres off the boundary and with a 2 metre planted buffer strip at the western boundary of the RTRA) is likely to detract from the rural amenity values enjoyed by the owners and occupants of these rural residential properties.

Gary Carl Hyndman and Deborah Lee Hyndman (155/7) have advised that they have a large number of implements/machinery associated with an orchard that they run on their property; and that they have concerns relating to the security of their property (as well as health and safety issues) as families with children will be living next door in the RTRA and will have easy access onto the submitters' property in their absence. The submitters also raise issues with respect to the noise and dust that will be associated with the development phase (155/5); and the potential for urban dogs to worry livestock (155/11).

The Hyndmans operate a small homestay on their property and are concerned that the proposal will result in a loss of privacy and enjoyment, as well as income from their homestay operation (155/5).

Bart & Constanze Vangronsvelt (375/4) advise that they own the property at 141 Pearson Road that directly borders the subject site; and those submitters request an impenetrable fence be erected between the new houses and their property. As noted above planting is proposed adjacent to the western external boundary of the RTRA; and we note that Rule 20.7.1(g) permits fences and walls to a maximum height of 1.8 metres where rear boundaries adjoin another private property. There is

no rule that requires the provision of a fence or wall at the boundary with neighbouring properties, consistent with the intent of the Vangronsvelt submission.

7.10.4 Effects on Existing Rural Activities in the Area [including Orcharding activities]7.10.4.1Rural Properties in Vicinity

The AEE (Document 3) at clause 11.4 notes existing rural activities in the area as comprising a production forest on Sandflat Road, vacant paddocks between the southern boundary of the site and Pearson Road and Jones Orchard, which is located to the west and north of the RTRA.

The AEE considers that the RTRA will have no particular effect on, or be affected by, the production forest and related forestry operations at the plantations of Sandflat Road. We note that harvesting activity can be anticipated in close proximity to the RTRA; and that truck movements associated with such harvesting activities may occur at Sandflat Road that is also to carry traffic associated with the RTRA.

It is again noted that the land to the south of the RTRA is subject to the Rural Residential notation which provides for that land to be subdivided into allotments having an average area of 2 hectares. The potential exists for the RTRA to have effects on, and be affected by, future rural residential activities on land subject to the Rural Residential notation.

7.10.4.2 Significance of Established Orchards

The Assessment of Noise Effects prepared by the Styles Group (Appendix 1 to the submission by River Terrace Developments Limited (298)) notes in clause 3.2 the presence of two substantial orchards adjacent to and in the vicinity of the site. This includes the Jones Orchard immediately to the west and north of the site (Lot 2 DP 300152 and Sections 28-36 Sarita subdivision) and the Sarita Orchard that is located across State Highway 6, to the north-west of the site. There are other substantial orchards also located to the north of State Highway 6.

The submission by DJ Jones Family Trust and Suncrest Orchard Limited (164/1) confirms that planting of the Jones Orchard commenced in 1981; and that the orchard consists predominantly of plantings of cherries, but also includes plantings of nectarines, peaches, apples, pears and plums. That submission confirms at 164/3 that the Jones Orchard produced 9.75% of the total NZ cherry export crop in 2017/18, and 9.8% of the NZ domestic cherry market crop. The Jones Orchard is currently managed by Suncrest Orchard Limited that is a significant employer of staff in Cromwell with gross wages for 2017/18 being \$3.5 million (164/4).

The 45 South Group of Companies (123/1) owns and operates orchards that have frontages to State Highway 6, Ripponvale Road and Ord Road [to the north and west of State Highway 6] that have been planted since 1994. The submitter advises that in 2017/18 the submitter produced 470 tonnes of fruit with a value of over \$5.5 million; and that the submitter is New Zealand's largest cherry exporter. It has 40 full time staff and employs 400 seasonal workers (123/2).

Other substantial orchardists on the Ripponvale Flats to the north of State Highway 6 include the McKay Family Trust (228/1) that owns a 20 hectare block to the north of the junction of State Highway 6 and Sandflat Road that has 8 hectares planted in cherries; and Sarita Orchard Limited (310/1) that owns a 30 hectare block being a fully planted cherry orchard north of State Highway 6, to the north-west of the site.

In summary land immediately adjacent to the site and to the north of State Highway 6 comprises large orchard properties that are important to the local, regional and national economy. Freshmax NZ Limited (126/4) observes that this location represents a special mix of local soil conditions,

suitable micro climate and local district rules that the submitter advises are present on only a very small amount of land within the District and which cannot be replaced by alternative land.

7.10.4.3 Noise Effects from Frost Fans

The Jones Orchard and other nearby orchards are located in the Rural Resource Area where orcharding is a permitted activity. Styles Group notes in clause 3.2 that the rules of the Rural Resource Area facilitate the emission of temporary, short duration noises associated with audible bird deterrent devices and wind machines for frost control, such rules being Rule 4.7.6E(b) and Rule 4.7.6E(c) of the Operative District Plan, respectively.

Styles Group notes in clause 3.2 that on 18 April 2017 the Council issued a certificate of compliance for the construction and operation of frost fans at the Jones Orchard. This permits 8 frost fans at the centre of 100 metre diameter circles on Jones Orchard as depicted in the plan at Figure 1 of the Styles Group report.

Styles Group has used computer noise modelling software to predict the propagation of noise across the RTRA site from the frost fans operating as a permitted activity on the neighbouring orchard. Styles Group has noted in clause 3.2 that the frost fans will only be used during the early hours of the morning and generally only in the cooler months. Styles Group considers it extremely unlikely that the frost fan noise would be generated at the same time as noise from the Speedway or Highlands Tier 2 days.

DJ Jones Family Trust and Suncrest Orchard Limited (164/11) advise that the 8 existing wind machines on Jones Orchard can be in operation from mid to late August through until January (ie. from the end of winter to mid summer which coincides in part with the October-April season for the Speedway – see part 7.10.2.3 of this report; and the season for Tier 2 events at Highlands – condition 52 of RC 150225). The submitter advises that the wind machines start automatically when the critical temperature is reached, that there are no normal operating hours for the machines and that they can operate at any time day or night. The McKay Family Trust (228/4) also observes that cherry growers use wind machines at night (sometimes right through the night for up to 10 hours, and on consecutive nights) and that while the best machines are used and the noise complies with the District Plan, the use of wind machines does not result in a nice experience.

Rule 4.7.6E(c) of the Operative District Plan stipulates that noise emission from a wind machine measured at a distance of 300 metres shall not exceed 65dB L_{10} . From information supplied by Orchard Rite (the manufacturer of the frost fans for Jones Orchard) Styles Group has calculated in clause 4.2 that the difference between the L_{10} level and the L_{Aeq} level for the normal operation of a fan is approximately 3dB. Accordingly Styles Group has based the frost fan noise emissions on precise compliance with a level of 62dB L_{Aeq} at 300 metres from each of the fans. Styles Group notes that the use of the L_{Aeq} standard is consistent with the approach taken to noise modelling for Highlands and the Speedway.

A plan at Appendix C to the Styles Group report shows that the noise from the frost fans extends across the RTRA site, with the highest levels being approximately 71dB L_{Aeq} in the lower northwest corner of the site; and Styles Group advises that such noise reduces to approximately 58dB L_{Aeq} at the south-eastern corner of the site.

Rule 4.7.6E(d) requires any noise sensitive activity which locates within the Rural Resource Area to adequately acoustically isolate habitable spaces from noise to achieve an indoor design sound level of 45dBA L_{max} . This rule will not apply to the RTRA as the land will no longer be within the Rural Resource Area if Plan Change 13 is approved.

In clause 5.1.2 Styles Group has recommended acoustic insulation controls within the RTRA that require the same level of insulation as Rule 4.7.6E(d) for all dwellings. Clause 6.1.2 of the Styles Group report confirms that Zone B (as shown on the Acoustic Insulation Plan provided for in terms of Rules 20.7.7(x) and 20.7.11) is bounded by the western boundary of the site and the 69dB L_{Aeq} noise level contour for frost fan noise which occurs through the site, centred at about the frost fans in the Jones Orchard to the west.

The insulation requirements for Zone B are Outdoor-Indoor Transmission Class (OITC) 33dB (for frost fan noise) and OITC 25dB for all other habitable spaces (for motorsport noise). Styles Group advises in clause 6.1.2 that the insulation requirement will ensure that the effects of motorsport noise will be mitigated for all internal spaces during the day, and that frost fan noise in the night will be compliant with the existing 45dBA L_{max} control in bedrooms.

Again we note that Rule 20.7.7(x), as presented in the submission by River Terrace Developments Limited (298/1), omits the requirement for mechanical cooling, as recommended by the Styles Group.

As noted in part 7.10.2.5 of this report Rule 20.7.7(x) relates to buildings; and outdoor living space would remain subject to noise effects. Given that frost fans are likely to be operating during the early hours of the morning we do not consider that this is as significant a factor with respect to amenity values as it is in the context of noise associated with motorsport activities (which occur during the day or in the evening).

As noted above the standard for acoustic insulation provided for in Rule 20.7.7(x) in Zone B is consistent with the standard that applies in Rule 4.7.6E(d) in the Rural Resource Area. While the latter standard applies to a noise sensitive activity such as a residential activity choosing to locate within a Rural Resource Area, we question whether this remains an appropriate standard for the RTRA, which is a medium/high density residential zone.

7.10.4.4 Noise Effects from Helicopters

DJ Jones Family Trust and Suncrest Orchard Limited (164/11) note that helicopters are used at different times during the season to assist with frost fighting and to remove excess water from fruit after a rain event to prevent fruit splitting. Noise effects will therefore also be associated with the use of helicopters on the Jones Orchard and other nearby orchards and such noise effects do not appear to have been assessed in the Assessment of Noise Effects prepared by the Styles Group. McKay Family Trust (228/6) has noted that helicopters are used at low altitudes for frost fighting right through the night.

We again note that helicopter movements over the RTRA are also anticipated to occur ancillary to activities at Highlands in terms of conditions 26 and 27 of RC 150225.

7.10.4.5 Noise Effects from Bird Scaring

Rule 4.7.6E(b) of the Operative District Plan applies to any audible bird deterrent devices sited and operated within the Rural Resource Area. This rule requires any audible bird deterrent devices situated and operated from the Rural Resource Area to achieve a limit of 65dB ASEL (percussive devices) and 55dBA L_{10} (non percussive devices) at the notional boundary of any dwelling, resthome or hospital. Given that the land is to be located within the RTRA (and not the Residential Resource Area or the Rural Settlements Resource Area) it appears that a 70dB ASEL noise limit, which would otherwise apply to the Residential/Rural Settlements Resource Areas in terms of Rule 4.7.6E(b), will not apply for percussive devices at the Jones Orchard.

Styles Group observes in clause 5.1.1 that the insulation controls proposed for motorsport and frost fan activities will provide a very good level of acoustic insulation for bird scaring devices for the dwellings close to the neighbouring orchards. Styles Group considers in clause 5.1.1 that the sensitivity of residential activity to bird scaring devices is best managed by way of no-complaint covenant, primarily to set expectations about their operation for incoming residents. We discuss the appropriateness and effectiveness of such covenants further below in part 7.10.4.7 of this report.

7.10.4.6 Spray Drift

The AEE in clause 11.4 addresses effects associated with spray drift of agrichemicals from the nearby orchard operations.

The AEE notes that an existing pine shelterbelt separates the Jones Orchard from the RTRA site. The AEE also notes that the NZ Standard 8409:2004 – Management of Agrichemicals – Part G6 – provides guidelines for buffer zones and shelterbelts to assist in the management of activities sensitive to agrichemicals. Buffer zone guidelines provide for various agrichemical application methods with associated separation distances which vary as follows:

Application method (of agrichemical)	With shelter	Without shelter
Boom sprayer	2m	10m
Air blast sprayer	10m	30m
Aerial application	100m	300m

While the RTRA is to provide for a 5 metre setback from buildings from the boundary and a 2 metre buffer planting strip from the western boundary (Rules 20.7.1(ii)(i) / 20.7.3(ii)(d) and Rule 20.7.3(viii)(f)); this may be inadequate to mitigate the effects of agrichemical application utilising an air blast sprayer or aerial application having regard to the separation distances presented above, and depending on the proximity of spraying operations to the boundary with the RTRA. It is appropriate to acknowledge that the 5 metre setback relates to buildings, and outdoor living space can be anticipated between buildings and the boundary of the RTRA that is shared with the adjacent orchard.

Potentially large portions of the RTRA may be subject to spray drift from the aerial application of agrichemicals; the extent of the area affected being determined by whether or not the adjacent property owner decides to retain the existing shelterbelt along the western and southern boundary of Jones Orchard. As an aside Freshmax NZ Limited (126/11) notes that shelterbelts may cause significant shading to adjoining land, in this instance being the RTRA.

The 45 South Group of Companies (123/8) has noted that the use of agrichemicals in proximity to residential activities gives rise to reverse sensitivity issues in relation, in particular, to odour and toxicity.

Irene Margaret Wallace (384/4) has noted that warning signs are displayed when spraying is in progress and has questioned whether residents will need to leave during this time. The submitter also notes that some residents may not know that they are allergic to the sprays until they experience them.

Freshmax NZ Limited (126/10) notes that horticultural spraying is subject to strict operating guidelines which have specific setbacks from residential land and neighbour notification requirements. The submitter notes that spraying regulations have the potential to get stricter which could increase the setback distances required from residential activities. The submitter has noted

that Plan Change 13 may limit the growers ability to spray trees and therefore affect their ability to produce quality fruit for the export or local markets.

Lindsay Mathers (223/4) has noted that in the event of an unwanted pest (eg. Queensland Fruit Fly) getting into the area, the presence of 900 more houses (in the RTRA) would impede eradication efforts. The submitter has noted that the area would almost certainly be within the MPI Exclusion Zone with all the inconvenience that entails. The McKay Family Trust (228/8) has also noted the potential for, say, a Fruit Fly incursion and observes that large perimeter areas would need to be sprayed in the event of such an incursion.

7.10.4.7 Rule 20.7.7(ix) – Restrictive No-Complaint Covenant/Orcharding

Rule 20.7.7(ix) provides for a restrictive no-complaint covenant with respect to orcharding activities. We have expressed our significant reservations with respect to the appropriateness and effectiveness of such covenants in the context of Highlands and the Speedway in part 7.10.2.6 of this report; and these reservations stand in the context of Rule 20.7.7(ix) that relates to orcharding activities. We note, in particular, that such covenants do not avoid effects on residential amenity.

The restrictive no-complaint covenant provided for in Rule 20.7.7(ix) is to be in favour of Lot 2 DP 300152 and Sections 28 - 36 Sarita Subdivision only, being the Jones Orchard. Owners and occupiers within the RTRA would not be subject to a restrictive no-complaint covenant with respect to operations at other orchards established on land in the Rural Resource Area in the vicinity of the subject site, such as the McKay Family Trust, Sarita and 45 South orchards to the north of State Highway 6.

It is also noted that Rule 20.7.7(ix)(b)(ii) makes specific reference to noise and does not refer to other activities which could be undertaken at Jones Orchard. Such activities include spraying and any associated spray drift as discussed in part 7.10.4.6 of this report; and other activities not addressed include the burning of prunings and trees that are removed from orchards, such burning being desirable for biosecurity reasons as noted by the 45 South Group of Companies (123/9).

Rule 20.7.7(ix)(b)(ii) relates to noise being generated in the normal course of orcharding activities, including from frost fighting and bird scaring. This would include the use of frost fans and the use of audible bird deterrent devices as discussed above; and would appear to include the use of helicopters for frost fighting (although not addressed in the Styles Group report) and for the drying of fruit after a rain event (as this noise is generated in the normal course of orcharding operations). Other noise effects that can be anticipated at orchards include those associated with tractor movements (associated with mowing etc); the use of chainsaws and other equipment; bird shooting during the fruit season; noise associated with pickers during harvesting (up to 150 persons being present at the Jones Orchard alone (164/11)); and the use of diesel engines for irrigation.

7.10.4.8 Other Effects on Orchardists

DJ Jones Family Trust and Suncrest Orchard Limited (164/17) observe that there is no consideration given to the security of the adjoining tree crops and orchard property from increasing the number of people in the environs (in the RTRA). Theft of very valuable crops from established fruit trees is a real concern to the submitters, along with vandalism and people encroaching within the orchard boundaries which compromises the health and safety management of the orchard business. The submitters note that with the increase in numbers of people in the vicinity of the orchard, these risks increase.

7.10.5 Conclusion : Effects on Neighbouring Land Uses

Our overall conclusion is that Plan Change 13 will have significant adverse effects on neighbouring land use activities as the owners and occupiers of residential properties in the RTRA are likely to be

The acoustic insulation rule promoted by the requestor will not serve to maintain residential amenity as Rule 20.7.7(x) will not apply outdoors; and we have significant reservations about the appropriateness and effectiveness of the restrictive no-complaint covenant proposed in Rules 20.7.7(viii) and (ix). The activities undertaken on neighbouring properties are likely to have an adverse effect on the residential amenity values enjoyed by those who are to reside in the RTRA, particularly in terms of the use of outdoor living space and other communal outdoor space within the RTRA for amenity and outdoor recreation purposes. In our view these adverse effects will not be adequately avoided, remedied or mitigated by Plan Change 13.

7.11 Effects on existing retail centres

7.11.1 Neighbourhood Centre Overlay

Part 3 of the M.E. Consulting report (Document 5) assesses the appropriateness of the proposed "Neighbourhood Centre Sub-Area"; and identifies the key economic issue as being whether the Neighbourhood Centre Sub-Area is appropriately scaled to achieve a convenience role without adversely impacting on the role of the Cromwell town centre to serve the day-to-day/weekly shopping needs of local residents.

Provision is made in the RTRA for a Neighbourhood Centre Overlay; within which the total combined gross floor area of all retail premises is to be $1000m^2$ (in terms of Rule 20.7.3(iv)(f)).

7.11.2 Role of Cromwell town centre

In clause 3.1 on page 30 the M.E. Consulting report observes that the shape of the current residential zones (urban area) at Cromwell and the relative ease of access from most directions has allowed the Cromwell town centre to play dual roles; being a convenience role and a weekly shopping role.

Figure 3.1 in the M.E. Consulting report depicts the relationship between the existing urban residential area and the town centre at Cromwell. This Figure includes land in the Rural Resource Area within the urban limits of Cromwell (as discussed in part 7.1.2 of this report) as being within the approximate urban residential extent; and also clearly depicts the significant separation that exists between the land subject to Plan Change 13 and the existing urban residential area of Cromwell.

In clause 3.1 on page 31 the M.E. Consulting report advises that the distance to the town centre (by road) is approximately 5.1 - 6.7 kilometres depending on the route. The report also discloses that the nearest café – takeaway or basic item grocery store not in the town centre is either approximately 2.7 - 2.9 kilometres away in Bannockburn or approximately 3.8 - 4.0 kilometres away in McNulty Road. In clause 3.4 on page 34 the M.E. Consulting report states that only part of the projected floor space demand arising from the plan change area households should be supported locally, in the Plan Change 13 area. In essence convenience retail and service demand is to be supported within the RTRA, allowing the balance of demand to flow to other centres, including the Cromwell town centre. This helps mitigate any effects arising from a new convenience centre on the town centres weekly shopping role.

As a consequence we note that residents of the RTRA are expected to travel to the Cromwell town centre to do their weekly shopping; State Highways 6 and 8B providing the shortest route to the Cromwell town centre (5.1 kilometres).

7.11.3 Additional Demand for Neighbourhood Centre

The M.E Consulting report in clause 3.4 at page 35 also notes that persons, other than residents of the RTRA, are anticipated to be customers of the Neighbourhood Centre within the RTRA. This additional demand is anticipated to come from the following sources:

- "• Existing (mostly rural) households in the vicinity of the River Terrace plan change area for whom the centre provides greater accessibility (i.e. is closer) than the nearest alternative for convenience retail and service shopping.
- Future households that may occupy greenfield land in the vicinity of the River Terrace plan change area for whom the centre provides greater accessibility (i.e. is closer) than the nearest alternative for convenience retail and service shopping (if those developments do not support convenience centres of their own).
- Future employees in River Terrace businesses³⁵ for whom the centre provides greater accessibility (i.e. is closer) than the nearest alternative for convenience retail and service shopping.
- Existing and future employees in the Highland Park business area for whom the centre provides greater accessibility (i.e. is closer) than the nearest alternative for convenience retail and service shopping.

³⁵ Which could include a school and preschool."

M.E. Consulting has noted that no passer-by demand from State Highway 6 is included as the centre is not expected to be visible [from the state highway]. M.E. Consulting anticipates that demand will be limited primarily to locals who know where the centre is located.

Based on ME Consulting's report it is anticipated that there will be traffic movements into the RTRA in addition to the traffic movements associated with residents. These traffic movements do not appear to have been taken into account in the Transportation Assessment (Document 7). The potential may also exist for patrons at Highlands and the Speedway to patronise convenience retail and service shopping at the Neighbourhood Centre in the RTRA.

7.11.4 Gross Floor Area Limits

In clause 3.4.3 on page 37 M.E. Consulting confirms that based on their analysis, a 1000m² GFA limit on total retail and service floor space would be appropriate to enable the development of a viable, functional Neighbourhood Centre for an indicative 840 households and some neighbouring demand. M.E. Consulting advises that a 1000m² GFA cap would ensure that the scale of the centre is limited to a smaller number of retail and service premises; and that this means that the centre will be limited to a convenience role that encourages the significant majority of demand (spend) to be directed to other centres, including the Cromwell town centre.

M.E. Consulting also considers that a maximum retail and services tenancy of $200m^2$ GFA would be appropriate to ensure viable retail and service premises while also ensuring that larger shops are directed to other business zones in Cromwell and that a mix of businesses eventuate. An exception is to be made for up to $400m^2$ GFA for medical services to enable a functional GP practice.

7.11.5 Conclusion : Effects on Existing Retail Centres

In our view it is appropriate that provision be made for convenience retail and service premises within the RTRA, if Plan Change 13 is approved. Such provision is particularly important given the significant distance which exists between the land subject to Plan Change 13 and the town centre (and other convenience shopping) at Cromwell; and to reduce local traffic movements on State Highway 6 that would otherwise be associated with convenience shopping trips.

7.12 Positive effects

The AEE (Document 3) in Part 13 lists the following positive effects of Plan Change 13 on the environment:

- "(a) The spatial expansion of urban Cromwell to meet current and future residential land needs for a wide range of residents,
- (b) The range of housing product provided for by the rules will assist in maintaining housing affordability and bringing greater residential catchment to Cromwell.
- (b)[sic]An integrated, masterplanned urban development providing for residential (including retirement) living, a small neighbourhood centre, a network of open space areas, the opportunity for a school, and suitable road and infrastructure networks.
- (c) A variety of open spaces, safe walking and cycling connections, and a high-quality building environment for living in and visiting.
- (d) A safe and efficient street network that integrates with the existing network and possible future development in surrounding areas;
- (e) A well-designed built environment that provides a high quality of amenity for residents and visitors.
- (f) A conveniently located neighbourhood centre with amenities to serve the development while complementing and not undermining the existing business centres in Cromwell, and the potential for a school to serve the immediate and wider neighbourhood."

In terms of (a) and the first (b) above there is adequate residential land in Cromwell to meet current needs; and land is or is available or potentially available within the existing urban limits of Cromwell to meet future needs that is better integrated with the existing Cromwell community than the RTRA.

In terms of (a) and the second (b) above, it is noted that the RTRA will be located a significant distance from the existing residential areas of Cromwell, and from commercial and community facilities at Cromwell. The RTRA is not integrated with the existing town of Cromwell.

In terms of (c) and (d) walking and cycling is provided for internally; but there is no provision for walking and cycling connections external to the RTRA. We question whether the RTRA integrates satisfactorily with the existing road network including State Highway 6 in this locality; and note that an effect of the RTRA will be to generate local traffic onto State Highway 6. It is also questioned whether a safe and efficient road network will result within the RTRA given the proposed use of traffic lanes for parking in neighbourhood roads (Road C), the width of JOAL carriageways and the limited parking to be required on properties in the RTRA.

In terms of (c) and (e) we question whether a high quality of amenity will be provided for residents and visitors, including within open spaces, given the noise effects generated by established neighbouring land uses, particularly Highlands and the Speedway.

In terms of (f) the Ministry of Education (239/3) has advised that the level of development in the RTRA is insufficient to justify a primary school within the RTRA. As a consequence children from the RTRA will be required to travel a substantial distance to primary school facilities at Cromwell;

and according to Norman David Wing (403/3) many secondary school pupils will not have access to school bus services.

In our view the purported positive effects of Plan Change 13, as listed by the requestor, need to be carefully scrutinised in light of the matters that we have summarised above.

7.13 Effect on land/soil resource

7.13.1 Issue raised by Submitters

Several submitters have expressed concern that the proposal will result in the loss of productive soils.

Sarita Orchard Limited (310/6) considers that the soils of the Ripponvale Flats need to be protected; and the submitter observes that this proposal will not do that. Alastair & Sue Stark (348/11) observe that Plan Change 13 will forever remove what has the potential to be very valuable and productive orchard and vineyard land. The submitters note that although as currently constituted the site may not have been productive, a land use change to orchards or vineyards would significantly add to the productivity of the land and that this has not been properly considered. The submitters note that once the land is subdivided the land will effectively be locked away from enhanced and regionally appropriate use as productive vineyard/orchard land.

Irene Margaret Wallace (384/3) has noted that there will not only be the loss of food production but also the impact of lost employment opportunities for future generations.

7.13.2 Zoning and Land/Soil resource

The northern part of the subject site (above the escarpment), is located within the Rural Resource Area; and the balance of the site (generally below the escarpment) is within the Rural Resource Area and is subject to the Rural Residential notation. The Rural Resource Area above the escarpment extends to the west and north and includes the Jones Orchard and the orchards to the north of State Highway 6, and also extends to the east of State Highway 6, north of Cemetery Road where an orchard is present. Land on the eastern side of Sandflat Road is also located within the Rural Resource Area.

The New Zealand Land Resource Inventory Worksheets (published by the former National Water and Soil Conservation Organisation) identify land inventory units which are homogeneous at the scale of mapping (1 inch to 1 mile) for the main physical factors governing land use. Sheet S133 of the Worksheets confirms that the part of the site above the escarpment in the Rural Resource Area (such land being described in the Landscape Strategy in the Design Report (Document 6) as "the Productive Terrace") is in land inventory unit IVs 9. This unit also includes land to the west (ie. the Jones Orchard), land to the north (ie. the orchards across State Highway 6, and land to the east of State Highway 6 and north of Cemetery Road). An effect of Plan Change 13 is that part of the site, which is in the same land inventory unit as adjacent orchards, will be subdivided and developed for urban purposes consistent with the provisions of the RTRA.

The balance of the site below the escarpment that is subject to the Rural Residential notation consists of land capability unit VIs 7. This land inventory unit also applies to nearby land to the south and west on either side of Pearson Road; and to most of the land to the east across Sandflat Road.

The site is identified on Sheet 10 of the Soil Map Of The South Island New Zealand (published by the then Department of Scientific and Industrial Research in 1964) as containing Molyneux soils-2d. In June 1993 PD McIntosh of Landcare Research prepared a report entitled "High Class Soils in Otago" for the Otago Regional Council (Landcare Research Contract Report LC9293/85). The

McIntosh report in Table 4 lists Molyneux soils -2d as one of the high class soils of Otago. Molyneux soils are found on the existing orchards to the west and north of the site.

7.13.3 Conclusion : Effect on land/soil resource

In our view the proposal will have an adverse effect in terms of the loss of the productive potential of the land/soil resource, particularly with respect to that part of the subject site on the upper terrace that is in land inventory unit IVs 9. The presence of orchards on adjacent land with the same land inventory unit and that also have high class Molyneux soils demonstrate that such land/soil resources are potentially productive; and an effect of the proposal will be to preclude the ongoing potential economic benefits that could otherwise result from the use of these land/soil resources for productive purposes.

7.14 Precedent for nearby land

Peter Raymond Brass (26/2) has expressed concern that the proposal will establish a precedent for nearby horticultural land to be used for residential development.

As noted in part 7.13.2 of this report part of the site is in land inventory unit IVs 9; this being the same land inventory unit as adjacent orchards. It has also been noted that the site contains Molyneux soils which have been listed as a high class soil of Otago. If the current site becomes subject to the RTRA the potential would exist for owners of land of the same or similar land quality in the locality to also promote that their land be rezoned for urban purposes in future.

The Movement Plan provided for in Rule 20.7.9 shows a Road A and Road B extending to the southern boundary of the site. This indicates that land to the south may also be developed at some time in the future. It is also noted that Mr Ray's Memo dated 30 November 2018 in clause 2.19 identifies land to the south and east of the subject site, including land to the south of Pearson Road, as potential southern extension sites for the urban boundary of Cromwell. It is clearly anticipated in the request documentation that urbanisation beyond the RTRA will occur in future in this locality, beyond the boundaries of the land subject to Plan Change 13.

Approval of Plan Change 13 is likely to have the effect of establishing a precedent for adjacent land to also be promoted for rezoning for urban purposes in future. A factor that would be considered when assessing such rezoning proposals would be the potential for up to 900 residential units to be present in the RTRA, if Plan Change 13 is approved.

7.15 Effect on Cromwell Masterplan process

Many submitters are concerned at the effect of Plan Change 13 on the Cromwell Masterplan process and on the forthcoming District Plan Review. The Central Otago District Council (506/1) has lodged a further submission expressing support for those submissions that have called for Plan Change 13 to be declined on the basis that it will pre-empt the outcomes of the Masterplan, and plan changes to the Operative District Plan that may eventuate from it.

Submitters have promoted that Plan Change 13 be delayed until the Cromwell Masterplan and/or the District Plan Reviews are completed. Roger James Aburn (2/7) observes that given that a shortfall of urban capacity is anticipated in the long term (2043) that there is time to reflect and not rush into a decision on Plan Change 13.

Early in 2018 work commenced on the Cromwell Masterplan process. This has been a major exercise in community consultation with a substantial initial budget of some \$758,000, that is being met from the financial reserves of the Cromwell Community Board. The Central Otago District Council (506/1) advises that the Masterplan is an integrated planning approach to the future development of Cromwell, and is to provide a strategic vision to guide growth. It is understood that

a final Masterplan is intended to be presented to the Cromwell Community Board for adoption in April 2019; and that this is likely to result in Council initiated plan changes to the Operative District Plan.

Plan Change 13 potentially compromises the outcome of the Cromwell Masterplan process as, if approved, Plan Change 13 will result in a substantial area being zoned for residential development beyond the limits of the Cromwell urban area.

The Commission in Minute 1 dated 7 November 2018 noted that a number of submitters had expressed concerns at the impact the Plan Change 13 development may have on the Cromwell Masterplan process. In his Memo dated 30 November 2018 in response, Mr Ray of Jasmax expresses his opinion that an outcome of the Cromwell Masterplan process is that it will identify southern expansion (which includes the subject site) as being appropriate, and probably necessary, to accommodate future urban growth at Cromwell.

In our view it is not appropriate to attempt to predict the outcome of the Masterplan process which is still underway at this time. It is also noted that there is a real risk of compromising the outcome of the Cromwell Masterplan process if Plan Change 13 is approved and the Masterplan does not provide for the southern expansion (including the site) as predicted by Mr Ray.

Our conclusion is that Plan Change 13 will have an adverse effect in terms of potentially compromising the Cromwell Masterplan process which is currently well advanced and which has involved considerable community consultation and resourcing.

7.16 Relative scale of development/integration

Werner Murray (252/3) notes that while the subdivision of 800-900 dwellings is by no means a very large subdivision by global standards, in the context of the Cromwell Basin Plan Change 13 will grow a small community by almost double its current population. The submitter considers that cultural impacts on the community living within the Cromwell Basin will be significant.

Mt Difficulty Wines Ltd (249/6) observes that Cromwell is already under pressure during peak periods for carparking and the ability to access the town centre. Without any form of public transport and with the underlying assumption that Plan Change 13 residents are all going to commute to Cromwell, the submitter considers that these access and parking pressures are going to grow exponentially, materially impacting on community values.

The M.E. Consulting report (Document 5) at Figure 2.1 on page 20 indicates that there were 2182 occupied dwellings in Cromwell in 2018. Plan Change 13 provides for up to 900 residential units in the RTRA; and this equates to 41% of the total number of occupied dwellings in Cromwell in 2018. This provides a useful indicator of the relative scale of the RTRA when compared to the existing Cromwell community.

It is noted that development of the scale proposed, wherever it is located, would have an effect in terms of demand for commercial and community facilities at Cromwell. In our view, however, development at the scale proposed should be integrated in with the existing community rather than being located in a position that is separated from and not integrated with that community.

In our view the planning history of Cromwell is informative in this respect. In the late 1970s/early 1980s Cromwell was expanded from an estimated population of 1,870 in 1979 to accommodate an estimated peak population of 4,965 in 1989. Such expansion was to accommodate an estimated project population of 3,000 associated with the Clutha Valley Development (which ultimately resulted in the construction of the Clyde Dam and Lake Dunstan). As part of the planned Cromwell

town expansion commercial and community facilities were located in a central position to serve the expanded township, comprising both the historically subdivided portion of Cromwell and the new project housing areas (generally between Barry Avenue and Waenga Drive). Plan Change 13 stands in stark contrast to the integrated planning which provided for the expansion of Cromwell to accommodate the Clutha Valley Development workforce and which has served to guide Cromwell's development in recent decades.

It appears that what is proposed here is essentially a satellite residential area that will be substantial in scale and which will not be integrated with the existing town of Cromwell.

7.17 Effect in terms of potential industrial expansion

Some submitters have noted the potential for the subject site to ultimately be utilised for industrial purposes. For example James Dicey (90/14) considers that zoning the land for either rural or industrial purposes is a more appropriate use of the land, than high density residential.

The land subject to Plan Change 13 is strategically located with respect to State Highway 6. This land may well be a logical area for industrial expansion once industrial land in the vicinity of McNulty Road and Cemetery Road, and vacant land generally to the south of the existing Industrial Resource Area, is fully utilised.

Given the constraints imposed by the established activities in the vicinity, including activities conducted at Highlands, the Speedway and neighbouring orchards, industrial use may be more appropriate on some or all of the subject site than residential use, if the land or part of the land were to be utilised for urban purposes in future.

Plan Change 13, which provides for the land to be used for residential and associated purposes in the RTRA, is likely to preclude the use of the land for industrial purposes (noting that industrial activity would be a non-complying activity in terms of Rule 20.7.5(i) & (v)); and will also act as a constraint to the future use of adjacent land for industrial purposes in this locality.

James Dicey (90/10) has noted that Plan Change 13 will have the effect of hemming in the Cromwell industrial area so that it will be surrounded by residential areas, restricting additional expansion of this type of land and increasing reverse sensitivity issues for industrial uses.

The proposal will have an adverse effect in terms of restricting the potential that the subject site and adjacent land has for industrial subdivision and development to serve the needs of Cromwell and the wider Central Otago/Queenstown Lakes sub-region in future.

7.18 Effects on Cromwell Aerodrome

Some submitters have noted that the RTRA is located in the vicinity of the Cromwell Aerodrome. The Cromwell Aerodrome is designated D199 for Aerodrome Purposes as shown on Map 44 of the Operative District Plan. The site is located approximately 900 metres from the Cromwell Aerodrome.

Trevor Robert Haig Tinworth (370/4) notes that the proposed development lies on the centreline of the approach to Cromwell Aerodrome; and that as take-off and landing are deemed critical phases of flight a significant number of incidents and accidents occur during these phases. The submitter (370/5) also notes that fleets of helicopters use the Aerodrome for frost-fighting and during the cherry season as a base for operations. The submitter notes that as a result there would be an increase in aircraft movements over the proposed development during these times. The submitter is concerned that this would result in complaints from residents and conceivably limit future aircraft operations putting a local-million dollar export industry as risk.

We note that the helicopter movements identified by Mr Tinworth would be in addition to helicopter movements associated with Highlands and may be in addition to the use of helicopters at the Jones Orchard (as discussed in parts 7.10.2.2 and 7.10.4.4 of this report).

The Operative District Plan in Schedule 19.8 and Schedule 19.8A contains height restrictions in the vicinity of the Alexandra Airport and the Roxburgh Aerodrome. Airport Protection Zones are applied in both instances which are depicted on the relevant planning maps (Map 42 (for Alexandra) and Maps 33, 34, 45 and 62 (for Roxburgh)). The height of buildings or structures within the Airport Protection Zone are subject to control in terms of Rule 4.7.6A(i) which applies in the Rural Resource Area. The Airport Protection Zone extends from the ends of the runway strips for a distance of 940 metres; and extends to a point where the take-off surface is 15 metres above the level of the runway strip. No height restrictions or Airport Protection Zone provisions are included in the Operative District Plan with respect to the Cromwell Aerodrome.

It is likely that fixed-wing aircraft will be flying over the subject site when landing or departing from the Cromwell Aerodrome off the grass strip which has a north-east/south-west axis. The proximity of the Cromwell Aerodrome, and the location of the site with respect to aircraft landing and takingoff at Cromwell, raises potential issues with respect to aircraft noise and reverse sensitivity. Again we note that the site is located approximately 900 metres (at the closest) from the Cromwell Aerodrome.

We question the appropriateness of providing for medium and high density housing, as provided for in the RTRA, in a location which is under the approach and take-off paths for aircraft using the Cromwell Aerodrome.

7.19 Effects on high voltage transmission lines

Transpower New Zealand Limited (373/3) notes that Transpower's existing Cromwell-Frankton A (CML-FKN A) 110kV transmission line is located approximately 65 metres to the south-east of the Plan Change 13 site; being located on 222 Pearson Road (Part Section 48 Sarita Subdivision).

At a general level Transpower seeks amendments to various provisions of Plan Change 13 to confirm that Sections 11-15 of the District Plan will also apply to land in the RTRA; and that those provisions prevail. We note that Sections 11-15 relate to activities undertaken in all existing Resource Areas. This relationship is made clear in the rules which apply to the various Resource Areas and we consider that corresponding provisions should be included in the text of the RTRA rules if Plan Change 13 is approved.

Transpower (373/7) refers to the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34 : 2001). We question whether this code has any particular relevance given the separation which exists between the RTRA and the CML-FKN A transmission line. Transpower (373/8) also refers to the risk of dust being generated during earthworks; and we note that this is a matter which could be addressed in the context of the management of subdivision works in the event that Plan Change 13 is approved.

7.20 Effects in terms of solar advantage/outlook space

Anthony John Cox (69/1) considers that the combination of the maximum building height and building recession plane rules will cause severe shading in winter; and the submitter considers that design for solar gain should be aided and encouraged by the rules. The submitter notes that a modern house in Cromwell benefits greatly from winter sun.

Rule 7.3.6(iii)(f)(1)(ii) of the Operative District Plan controls the height of buildings on sites in the Residential Resource Area beyond the line of the minimum side and rear yard by a 25° recession plane; and an absolute height of 7.5 metres applies. This control has worked well in practice in terms of maintaining solar advantage for neighbouring properties.

Rules 20.7.1(ii)(a) and (b) of the RTRA provide for a maximum height of 9 metres and a 45° recession plane measured from a point 4.5 metres vertically above ground level along rear and side boundaries for residential activities and buildings within the Residential Sub-Areas A and B. Equivalent provisions apply with respect to the Retirement Living Overlay except that the maximum height for buildings for centralised activities is to be 12 metres (Rule 20.7.3(iii)(a)(i)); a maximum height of 12 metres with no recession plane applies to the Neighbourhood Centre Overlay (Rule 20.7.3(iv)(a)); and a maximum height of 15 metres with a 45° recession plane applies within the Education Overlay.

The Design Report (Document 6) does not discuss the implications of the bulk and location rules proposed within the RTRA, and particularly the implications of the height and recession planes in terms of shading in winter. We consider that access to the winter sun will be compromised for properties within the RTRA as a consequence of the height and recession plane controls that are proposed in Plan Change 13.

Anthony John Cox (69/2) has questioned the value of providing for an outlook space from the principal bedroom (Rule 20.7.1(ii)(e)(ii)). The rationale for this provision is also not presented in the Design Report; but we note that a building may otherwise be 1m from boundaries in terms of Rule 20.7.1(ii)(d).

7.21 Provision for travellers accommodation

Anthony John Cox (69/3) considers that travellers accommodation in the Residential Sub-Areas A and B should be non-complying, as the effects are often significant and residents should be able to have input into the decision making process. Rule 20.7.3(ix) currently makes provision for travellers accommodation in Residential Sub-Areas A and B as a discretionary (restricted) activity.

We note that travellers accommodation is a full discretionary activity in the Residential Resource Area in terms of Rule 7.3.4(iii) of the Operative District Plan. Within the Residential Resource Areas (1) to (13) travellers accommodation is a non-complying activity in terms of Rule 7.3.5(iii). Within those areas the Operative District Plan notes that the effects of travellers accommodation are not compatible with the environment present.

Given the medium and high density nature of the housing proposed and access constraints (which we have discussed in part 7.3.13 of this report), we consider that travellers accommodation should be provided for as a discretionary or non-complying activity, rather than a discretionary (restricted) activity. Whether the residents have input into the decision making process depends on the outcome of assessment in terms of the notification provisions of the RMA.

In our view land in the Residential Sub-Area B adjacent to the landscape strip (Open Space Sub-Area C) and State Highway 6 may be a focus for applications for travellers accommodation, given the profile and proximity of that part of the RTRA to passers-by on State Highway 6.

7.22 Air quality

The Otago Regional Council (261/3) has noted that Cromwell is within gazetted Airshed 1 which is considered "polluted" by the Ministry for the Environment. The submitter advises that, on average, Cromwell residents experience over 30 days during winter when pollution levels breach the national

standard. The submitter advises that a major source of particulates is emissions from solid-fuel home heating appliances.

The Otago Regional Council (261/3) notes that the proposed development is near Cromwell's Air Zone 1 in the Regional Plan : Air for Otago; and that the use of solid fuel heating systems could exacerbate ambient air quality, both within the new development and the existing urban area. Accordingly the submitter at 261/4 considers that the use of low or no emission heating systems should be required within the Plan Change 13 area.

Given the scale of the development envisaged within the RTRA, it would appear appropriate to require the use of low or no emission heating systems as promoted by the Otago Regional Council, if Plan Change 13 is approved.

7.23 Amendments Proposed to Specific Provisions

Central Speedway Club Cromwell Incorporated (45), Highlands Motorsport Park Limited (144) and Public Health South (285) have, as an alternative relief, suggested detailed amendments to the RTRA provisions in the event that Plan Change 13 is not declined. The NZ Transport Agency (254) and Transpower New Zealand Limited (373) have also suggested amendments to the RTRA provisions.

The focus of this report has been on assessing Plan Change 13 as notified having regard to the amendments promoted in the submission of the requestor being River Terrace Developments Limited (298). Where appropriate we have addressed specific amendments proposed by submitters in the body of this report; but we do not propose to comment at this time on all of the detailed amendments as promoted by the submitters listed above. We anticipate that these detailed amendments will be addressed and quite possibly further refined by the submitters concerned and by the requestor at the hearing.

In the event that the Commissioners were to decide to approve Plan Change 13 with modifications we confirm our availability to liaise with the parties in formulating final provisions for the RTRA. In such circumstances, and to facilitate such formulation, it is noted that the Commissioners could choose to release an Interim Decision in the first instance.

7.24 Effects of works conducted on site

Thomas Alan Coull (63/14) has noted that works in anticipation of the development along the road frontage [with State Highway 6 and Sandflat Road] have already been started by the developer. The submitter considers that this shows a certain level of disregard for the Act and for the community or worse still, it could be considered to have the effect of suborning the whole planning process. The submitter considers these to be unlawful subdivision works and questions whether an abatement notice would usually be required in such circumstances.

Works including fencing and planting are lawful provided they comply with the rules which apply in the Rural Resource Area. Boundary and amenity planting and fences are commonly established and/or constructed on rural properties within the District.

Gary Carl Hyndman & Deborah Lee Hyndman (155/21) have noted that in addition to the landscaping along the boundary with State Highway 6 that the developer has planted hedging around the property owned and occupied by Rex Edgar [at 18 Sandflat Road] despite concerns that he (Mr Edgar) has raised with the developer. Again we note that planting along boundaries is permitted in the Rural Resource Area.

Richard Andrew Ford (122/13) observes that the existing masonry work alongside the state highway does not appear to be set back far enough from the carriageway for the safety of road users in the

event of a crash. The submitter notes that vegetation within the roadside buffer needs to be frangible, so he considers that the masonry should also meet similar requirements rather than bringing vehicles to an abrupt stop.

The masonry work referred to are sections of schist stone wall located adjacent to the intersection of Sandflat Road with State Highway 6 and along the State Highway 6 frontage of the site, comprising some 4 sections of wall in total. The Transportation Assessment (Document 7) in clause 7.3.4 refers to the hazard posed by existing power poles adjacent to State Highway 6; and recommends that specific crash protection be provided for the poles and that they are set back behind a crash barrier when relocated. If the poles are a hazard then the solid schist walls would also appear to be a hazard that needs to be remedied.

Other structures and activities are present on the property, some of which may have occurred subsequent to closing date for original submissions in June 2018.

River Terrace Developments Limited obtained land use consent RC 180355 in September 2018 for the construction of two attached large signs on the site adjacent to State Highway 6. We note that while those prominent signs are authorised by resource consent no such consent appears to have been applied for or granted with respect to the corten steel signs that are attached to two sections of the schist walls at the boundary of the site.

We noted during our site visit in March 2019 that a red wooden cottage style building has been placed on the upper terrace within the site, such cottage being visible from State Highway 6. It is unclear whether a resource consent is required to authorise this building; or whether it is a permitted activity in the Rural Resource Area.

R & R Hiab Services Limited occupies land on the lower terrace, close to the southern boundary of the site. This appears to be some sort of depot/storage facility with trucks, containers and portacom type buildings being present; and signage that reads "R & R Hiab Hire – Container Sales – Rentals & Transport" was observed during our site visit.

As previously noted that part of the Plan Change 13 site that comprises the lower terrace is subject to the Rural Residential notation within the Rural Resource Area. Rule 4.7.6B(b)(ii) of the Operative District Plan stipulates that no person shall be engaged in any activity of a commercial or industrial nature within areas identified as Rural Residential on the planning maps. A breach of Rule 4.7.6B(b)(ii) is a discretionary activity in terms of Rule 4.7.4(i). We are not aware of any land use consent being granted to authorise the R & R Hiab activity on the site; and we therefore conclude that such activity is unlawful and its effects should not be considered as being part of the environment for the purposes of assessing Plan Change 13.

It appears that there are currently lawful and unlawful structures and activities on the site. Their existence in no way compromises the Commissioners' ability to decline, approve or approve with modifications Plan Change 13.

7.25 Conclusion : Effects on Environment

Plan Change 13 is intended to provide for residential growth at Cromwell; noting that there is sufficient supply within existing developments through to 2028. As previously noted the estimated shortfall in supply in the long term can be achieved, in large part, by utilising other land currently in the Rural Resource Area that is located within the urban limits of Cromwell.

Plan Change 13 will result in a substantial residential area being developed remote from the existing residential areas of Cromwell, and remote from commercial and community facilities that will be

needed to serve the RTRA community, such as schools. As a consequence the RTRA, which is substantial in scale in terms of the existing town of Cromwell, will not be integrated with the town of Cromwell.

Plan Change 13 is likely to have significant adverse effects in relation to traffic. Such effects relate, in particular, to the use of State Highway 6 for local traffic between the RTRA and the existing town of Cromwell; to the increase in traffic movements on other roads in the local roading network, including Sandflat Road, Pearson Road and Bannockburn Road; to the absence of provision for non-vehicle modes of transport beyond the RTRA; and to the congestion which is likely to occur within the RTRA given the proposal to use traffic lanes for parking on local roads and JOALs and the limited on-site parking that is to be provided.

Plan Change 13 will have a significant adverse effect on landscape and visual amenity values in this locality. The proposal will result in an island of urban development being established in a locality which has established rural character and amenity values.

Highlands, the Speedway and Jones Orchard (and other orchards in the vicinity) are important established land use activities in the immediate vicinity of the RTRA. Plan Change 13 will have significant adverse effects on neighbouring land use activities as the owners and occupiers of residential properties in the RTRA are likely to be adversely affected by the activities undertaken on neighbouring properties; and significant reverse sensitivity effects are likely to result accordingly notwithstanding the rules proposed by the requestor to mitigate such effects. Similarly the activities undertaken on neighbouring properties are likely to have an adverse effect on the residential amenity values enjoyed by those who reside in the RTRA. These adverse effects will not be adequately avoided, remedied or mitigated by the Plan Change 13 provisions.

Plan Change 13 will have an adverse effect in terms of the loss of the productive potential of the land/soil resource found on the site. This resource has the potential to support economic activity including employment into the future. Approval of Plan Change 13 would also establish a precedent for adjacent land to be subject to rezoning proposals for urban purposes into the future.

Plan Change 13 will have an adverse effect on future land use options, as the RTRA will preclude the use of the land for industrial purposes; and will also act as a constraint to the use of adjacent land for industrial purposes in future.

Plan Change 13 will potentially compromise the outcome of the Cromwell Masterplan process which is currently well advanced and which the community has devoted considerable resources to.

We acknowledge that the proposal will have other effects as identified by the requestor. These include, in particular, effects in relation to infrastructure; effects in relation to geotechnical conditions and natural hazards; effects in relation to soil contamination; effects on cultural values and archaeology; effects on ecological values; and effects on existing retail centres that can be adequately mitigated or are of no particular consequence in this instance.

We also acknowledge that submitters have raised other effects on the environment including effects on the Cromwell Aerodrome; effects on high voltage transmission lines; effects in terms of solar advantage/outlook space; provision for travellers accommodation; air quality; and effects of works conducted on the site that are either of relatively limited or no significance in the overall consideration of Plan Change 13 or are matters which could be addressed via modifications to the provisions of Plan Change 13, as notified.

Our overall conclusion is that Plan Change 13 will have significant adverse effects on the environment; and that these adverse effects are not outweighed by any positive effects associated with the plan change in terms of providing additional housing in the Cromwell Basin.

8.0 CONSIDERATION OF ALTERNATIVES

Section 74(1)(d) and (e) of the Act confirms that a change is to be in accordance with the Council's obligation (if any) to prepare and have particular regard to an evaluation report prepared in accordance with section 32. Section 32 establishes requirements for preparing and publishing evaluation reports on a proposed plan change as follows:

"32. Requirements for preparing and publishing evaluation reports

- (1) An evaluation report under this Act must-
 - (a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
 - (b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by-
 - (i) identifying other reasonably practicable options for achieving the objectives; and
 - (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
 - (iii) summarising the reasons for deciding on the provisions; and
 - (c) contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.
- (2) An assessment under subsection (1)(b)(ii) must-
 - (a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for-
 - (i) economic growth that are anticipated to be provided or reduced; and
 - (ii) employment that are anticipated to be provided or reduced; and
 - (b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
 - (c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

A section 32 evaluation has been prepared by Brown & Company Planning Group for the requestor, and this is presented in Document 4 of the request document.

8.1 Plan Change 13 Objectives

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The objectives of the proposal are stated in 20.3 Objectives in Document 2. These include, amongst others, the following:

- 20.3.1 <u>Objective Efficient, co-ordinated, integrated greenfields development</u> Efficient greenfields development that is co-ordinated by way of a Structure Plan to achieve an integrated, connected, high quality residential neighbourhood.
- 20.3.3 <u>Objective Well-designed built environment</u> A well-designed built environment that provides for and positively responds to roads and open spaces, provides high quality amenity for residents, and contributes to public safety.

20.3.6 <u>Objective – Road network</u>

A safe and efficient road network within the Resource Area that provides for all transport modes, including walking and cycling, while also integrating with the existing transport network and possible future development in surrounding areas.

20.3.10 Objective – Compatibility with surrounding activities

Development which is undertaken in a manner that is compatible with the surrounding land uses including State Highway 6, motorsport activities, orcharding.

Following our consideration of the effects of the proposal in part 7.0 of this report, we do not consider that the RTRA objectives are the most appropriate way to achieve the purpose of the Act or that the provisions of Plan Change 13 achieve the above objectives.

In terms of Objective 20.3.1 we do not consider that an integrated or connected residential neighbourhood will result given that the RTRA is not integrated with or connected to the existing town of Cromwell. We also consider that a high quality residential neighbourhood that provides high quality amenity to residents (in terms of Objectives 20.3.1 and 20.3.3) will not result having regard to the effects of established land uses in the vicinity (Highlands, the Speedway and orchards).

In terms of Objective 20.3.6 integration with the existing transport network is not achieved. We note in particular that State Highway 6 is to be used to provide local access between the RTRA and the commercial and community facilities of Cromwell; and that no provision is being made for cycling and walking between the RTRA and the existing town of Cromwell.

The proposal will not achieve Objective 20.3.10 as development within the RTRA will not be compatible with the surrounding land uses, particularly motorsport activities and orcharding.

Having regard to the above we consider that the objectives of Plan Change 13 are not the most appropriate way to achieve the purpose of the Act; and that the provisions of the proposal are not the most appropriate way to achieve the objectives.

8.2 Operative District Plan Objectives

The objectives of the Operative District Plan provide the basis for the existing pattern of development within the District including in the Rural Resource Area and in Urban Areas (defined as meaning the Residential, Business, Industrial and Rural Settlement Resource Areas on page 18:12 of the Operative District Plan).

8.2.1 Objectives for Rural Resource Area

The land subject to Plan Change 13 is currently within the Rural Resource Area in terms of the Operative District Plan. Objectives of particular relevance include the following:

- 4.3.1 <u>Objective Needs of the District's People and Communities</u> To recognise that communities need to provide for their social, economic and cultural wellbeing, and for their health and safety at the same time as ensuring environmental quality is maintained and enhanced.
- 4.3.3 <u>Objective Landscape and Amenity Values</u> To maintain and where practicable enhance rural amenity values created by the open space, landscape, natural character and built environment values of the District's rural environment, and to maintain the open natural character of the hills and ranges.
- 4.3.7 Objective Soil Resource

To maintain the life-supporting capacity of the District's soil resource to ensure that the needs of present and future generations are met.

Following our consideration of the effects of the proposal in part 7.0 of this report; we consider that the objectives of the Operative District Plan that apply to the Rural Resource Area are more appropriate for the promotion of the sustainable management of the land resource subject to Plan Change 13 than the objectives proposed for the RTRA in Plan Change 13 (as discussed in part 8.1 of this report).

8.2.2 Objectives for Section 6 : Urban Areas

In our view Objectives 6.3.1-6.3.4 (and the associated Policies 6.4.1 and 6.4.2) are relevant to Plan Change 13 given that the RTRA is, in essence, proposed to be an urban zone. These provisions state as follows:

6.3.1	 <u>Objective - Needs of People and Communities</u> To promote the sustainable management of the urban areas in order to: (a) Enable the people and communities of the district to provide for their social, economic and cultural wellbeing and their health and safety; and (b) Meet the present and reasonably foreseeable needs of these people and communities
6.3.2	<u>Objective - Amenity Values</u> To manage urban growth and development so as to promote the maintenance and enhancement of the environmental quality and amenity values of the particular environments found within the District's urban areas.
6.3.3	<u>Objective - Adverse Effects on Natural and Physical Resources</u> To avoid, remedy or mitigate the adverse effects of urban areas on the natural and physical resources of the District.
6.3.4	<u>Objective - Urban Infrastructure</u> To promote the sustainable management of the District's urban infrastructure to meet the present and reasonably foreseeable needs of the District's communities.
6.4.1	 <u>Policy - Maintenance of Quality of Life within Urban Areas</u> To maintain and, where practicable, enhance the quality of life for people and communities within the District's urban areas through: (a) Identifying and providing for a level of amenity which is acceptable to the community; and (b) Avoiding, remedying or mitigating the adverse effects on the community's social, economic and cultural wellbeing and health and safety which may result from the use, development and protection of natural and physical resources, and (c) Recognising that change is inevitable in the use of land to enable the community to provide for its wellbeing.

<u>Policy - Expansion of Urban Areas</u> To enable the expansion of urban areas or urban infrastructure in a manner that avoids, remedies or mitigates adverse effects on:

- (a) Adjoining rural areas.
- (b) Outstanding landscape values.
- (c) The natural character of water bodies and their margins.
- (d) Heritage values.

6.4.2

(e) Sites of cultural importance to Kai Tahu ki Otago.

- (f) The integrity of existing network utilities and infrastructure, including their safe and efficient operation.
- (g) The life supporting capacity of land resources.
- (h) The intrinsic values of areas of significant indigenous vegetation and habitats of significant indigenous fauna.

In terms of Objective 6.3.1 we do not consider that Plan Change 13 will promote the sustainable management of the urban area of Cromwell given the lack of integration of the RTRA with the existing town of Cromwell. We also note, in terms of Objective 6.3.3, that Plan Change 13 will result in adverse effects on the natural and physical resources of the District including reverse sensitivity effects on the established land use activities in the immediate vicinity; and in terms of the loss of the productive potential of high class soils.

We also consider in terms of Policy 6.4.1(a) that Plan Change 13 will not provide a level of amenity acceptable to the community having regard to the effects of the established land uses in the immediate vicinity of the RTRA; and that Plan Change 13 will not enable the expansion of urban areas in a manner that avoids, remedies or mitigates adverse effects on the adjoining rural areas or the life supporting capacity of land resources (in terms of Policy 6.4.2(a) and (g)).

8.3 Consideration of Alternatives

There are several options potentially available to the Commissioners including the five options identified in Table 1 on page 6 of the section 32 evaluation (Document 4).

These include Options 1-3 as identified by the requestor in Table 2 being to rezone the land to the existing Residential Resource Area; to rezone the land using the existing Residential Resource Area with modifications for site specific outcomes; or to rezone to a new bespoke resource area (being the RTRA). Another option identified by the requestor is to await the outcome of the District Plan Review; and there is also an option of maintaining the status quo ie. retaining the Rural Resource Area (part subject to Rural Residential notation) at the subject site.

A further option is to adopt modified provisions for the RTRA (resulting from the hearing process).

We do not propose to re-traverse the first three options which are discussed in detail on pages 7-9 of Document 4. All of these options involve the urban development of the land subject to Plan Change 13.

Given that the District Plan Review process essentially defers determination of any change of zoning of the land subject to Plan Change 13 to a later date; this option is inherent in the option of maintaining the status quo at this time.

Amending the RTRA provisions following the Commissioners consideration of Plan Change 13 is now the option proposed by the requestor as it seeks amendments to those provisions through its submission; and the modification option now appears to supercede the requestors Option 3 as described in Document 4 (being rezoning to the RTRA as contained in the notified request document (Document 2)).

Having regard to the effects on the environment of the proposal, as discussed in part 7.0 of this report and the Plan Change 13 objectives and relevant objectives of the Operative District Plan (discussed in parts 8.1 and 8.2 of this report), we have concluded that the status quo is the appropriate option in this instance.

The RTRA is not integrated with the existing town of Cromwell; and the RTRA will result in a substantial residential community being created that is separated from the existing residential areas

of Cromwell by the Industrial Resource Area and Highlands. This lack of integration is a fundamental flaw with respect to Plan Change 13.

There is inherent incompatibility between the RTRA, which is to provide a medium to high density housing area and other facilities including a retirement village, and the neighbouring established land uses including Highlands, the Speedway and Jones Orchard in particular. As a consequence Plan Change 13 fails to provide an adequate standard of residential amenity for future residents.

We have fundamental concerns with respect to the wisdom of providing for residential development within the RTRA that is largely dependent on using State Highway 6 as the primary road link for local trips to commercial and community services at Cromwell.

Given the current demand for housing at Cromwell and developments that are coming on stream, there appears no necessity to establish a distinctly separate residential area, as proposed in Plan Change 13, at this time. Provision for the future growth of Cromwell is able to be guided by the outcomes of the Cromwell Masterplan process, plan changes resulting from the Masterplan, and/or through the District Plan Review.

We consider that Options 1-3 as identified by the requestor in Document 4, and the option of modification of Plan Change 13 as notified, are all inappropriate for the reasons which we have outlined above.

In all the circumstances we favour the status quo option.

8.4 Conclusion : Alternatives

Our conclusion, following our consideration of the alternatives is that the status quo is the most appropriate alternative. This option, if adopted by the Commissioners, should be explicitly addressed in the Commissioners' decision as the status quo is discussed by the requestor in Document 4 on the basis that this option would require resource consents to achieve subdivision and development of the site as intended by the requestor. In supporting the status quo option in this report we are not envisaging future subdivision and development of this land for urban purposes (consistent with the subdivision and development envisaged in the RTRA) in the environment that is provided for in the Rural Resource Area.

9.0 OTHER STATUTORY CONSIDERATIONS:

9.1 Statutory Provisions

The purpose of district plans is stated in section 72 of the Act:

"72. *Purpose of district plans* – *The purpose of the preparation, implementation, and administration of district plans is to assist territorial authorities to carry out their functions in order to achieve the purpose of this Act.*

It is also noted that section 74(1)(a) directs that a territorial authority must prepare and change its district plan in accordance with its functions under section 31. The functions of territorial authorities under the Act are stated in section 31 as follows:

"31. Functions of territorial authorities under this Act - (1) Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:

(a) The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district:

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. . .

- (aa) the establishment, implementation, and review of objectives, policies, and methods to ensure that there is sufficient development capacity in respect of housing and business land to meet the expected demands of the district:
- (b) the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of -
 - (i) the avoidance or mitigation of natural hazards; and
 - (*iia*) the prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land:
 - (iii) the maintenance of indigenous biological diversity:
- (d) The control of the emission of noise and the mitigation of the effects of noise:
- (f) Any other functions specified in this Act.
- (2) The methods used to carry out any functions under subsection (1) may include the control of subdivision."

Having regard to the above, we consider that making provision for the RTRA, as proposed through the provisions of Plan Change 13, will not serve to achieve integrated management of the effects of the use, development or protection of land and associated natural and physical resources of the District being a function of a territorial authority in terms of section 31(1)(a) of the Act.

In terms of section 31(1)(aa) sufficient development capacity in respect of housing, at least in the short to medium term, is currently available in Cromwell; with potential for providing more land for housing within the existing urban limits of the town in the long term. The Cromwell Masterplan process is likely to result in the identification of additional development capacity, to be advanced through the plan change process and/or the District Plan Review.

It is again noted that contaminated land (section 31(1)(b)(iia)) has been addressed in the PSI prepared by e3 Scientific (discussed in part 7.6 of this report); and such effects can be addressed via the DSI process in terms of the NES.

In terms of section 31(1)(d) Plan Change 13 does not adequately mitigate the effects of noise from established land use activities in the vicinity; and this is likely to result in reverse sensitivity effects from the use of land in the RTRA.

Plan Change 13 will not serve to assist the territorial authority to carry out its functions in order to achieve the purpose of the Act (discussed in part 9.4.2 of this report, below).

<u>9.2 Proposed Regional Policy Statement & Other Statutory Documents referred to in</u> Section 74(2) & (2A)

Section 74 of the Act sets out the matters to be considered by a territorial authority when preparing or changing a district plan. Section 74(2) and (2A state as follows:

- "(2) In addition to the requirements of section 75(3) and (4), when preparing or changing a district plan, a territorial authority shall have regard to-

(2A) A territorial authority, when preparing or changing a district plan, must take into account any relevant planning document recognised by an iwi authority and lodged with the territorial authority, to the extent that its content has a bearing on resource management issues of the district.

9.2.1 Proposed Regional Policy Statement

The Proposed Regional Policy Statement for Otago was publicly notified on 23 May 2015. Decisions on submissions on the Proposed Regional Policy Statement were issued on 1 October 2016; and the Partially Operative Regional Policy Statement for Otago became operative on 14 January 2019.

While most provisions of the Proposed Regional Policy Statement as notified in 2015 are now operative; we note in particular that Chapter 3 in Part B entitled "Otago has high quality natural resources and ecosystems" remains part of the Proposed Regional Policy Statement.

Objective 3.1 and its associated Policy 3.1.7 and Objective 3.2 and its associated Policies 3.2.17 and 3.2.18 as presented in the decisions version of the Proposed Regional Policy Statement are relevant. These state as follows:

"Objective 3.1 The values of Otago's natural resources are recognised, maintained and enhanced

Policy 3.1.7 Soil values

Manage soils to achieve all of the following:

- a) Maintain or enhance their life supporting capacity;
- b) Maintain or enhance soil biological diversity;
- c) Maintain or enhance biological activity in soils;
- d) Maintain or enhance soil function in the storage and cycling of water, nutrients, and other elements through the biosphere;
- e) Maintain or enhance soil function as a buffer or filter for contaminants resulting from human activities, including aquifers at risk of leachate contamination;
- f) Maintain or enhance soil resources for primary production;
- g) Maintain the soil mantle where it acts as a repository of historic heritage objects unless an archaeological authority has been obtained;
- *h)* Avoid the creation of contaminated land;
- *i)* Control the adverse effects of pest species, prevent their introduction and reduce their spread.

Objective 3.2 Otago's significant and highly-valued natural resources are identified, and protected or enhanced

Policy 3.2.17 Identifying significant soil

Identify areas of soil that are significant according to one or more of the following criteria:

- a) Land classified as land use capability I, II and IIIe in accordance with the New Zealand Land Resource Inventory;
- b) Degree of significance for primary production;
- c) Significance for providing contaminant buffering or filtering services;
- d) Significance for providing water storage or flow retention services;
- e) Degree of rarity.

Policy 3.2.18 Managing significant soil

Protect areas of significant soil, by all of the following:

- a) Avoiding significant adverse effects on those values which make the soil significant;
- b) Avoiding, remedying or mitigating other adverse effects;
- c) Recognising that urban expansion on significant soils may be appropriate due to location and proximity to existing urban development and infrastructure;
- d) Controlling the adverse effects of pest species, preventing their introduction and reducing their spread."

Method 4 which relates to Policy 3.1.7 refers, in the context of City and District Plans, to Method 4.1.4 and Method 4.1.5; and Method 4 that relates to Policy 3.2.18 also refers to Method 4.1.5. The corresponding provisions to Methods 4.1.4 and 4.1.5 of the Proposed Regional Policy Statement, as presented in the Partially Operative Regional Policy Statement, are Methods 4.1.5 and 4.1.6, respectively, which state as follows:

- "4.1.5 Policies 3.1.7, 3.1.8 and 5.4.1: by including provisions to manage the discharge of dust, and silt and sediment associated with earthworks and land use;
- 4.1.6 Policies 3.1.7, 3.2.18, 4.5.1, and 5.3.1: by managing urban growth and development and the subdivision of land to protect significant soils."

It is also noted that Method 5 Research, Monitoring and Reporting which relates to Policy 3.2.17 refers to Method 5.1.3c and Method 5.2.1d. Method 5.1.3c (as stated in both the Proposed Regional Policy Statement and the Partially Operative Regional Policy Statement) states as follows:

"5.1 Identification of important resources 5.1.3 Regional council will:

c. Identify significant soils;

Method 5.2.1d (as stated in the Proposed Regional Policy Statement only) states as follows:

"5.2 Research 5.2.1 The regional council will:

> ... d. Investigate and provide guidance on: i. The inventory and mapping of soil resources; ii. The location and extent of significant soil; iii. Identification of threats to the life-supporting capacity of soil resources;

I understand that to date the Otago Regional Council (ORC) has not identified significant soils as provided for in Method 5.1.3c. It is again noted, however, that the Molyneux soils found at the site have previously been listed as one of the high class soils of Otago by PD McIntosh of Landcare Research in a report prepared for the ORC in 1993 (see part 7.13.2 of this report). Given this listing as a high class soil and given the use of adjacent land containing the same soil type for orcharding, we consider it likely that Molyneux soils will ultimately be identified as significant soils.

In our view Plan Change 13 is not consistent with Policies 3.1.7 and 3.2.18 of the Proposed Regional Policy Statement and the associated Method 4.1.6 (as now presented in the Partially Operative Regional Policy Statement); as Plan Change 13 will not serve to manage urban growth and development and the subdivision of land to protect significant soils.

For completeness we acknowledge that high class soils are the subject of a specific policy in the Operative Regional Policy Statement being Policy 5.5.2 that is discussed in part 9.3.4 of this report (below).

9.2.2 Otago Southland Regional Land Transport Plans

The combined Otago Southland Regional Land Transport Plans have been prepared under the Land Transport Management Act 2003. This is a document is to be had regard to pursuant to section 74(2)(b)(i) of the Act.

Section 3.4 of the Otago Southland Regional Land Transport Plans contain land transport policies. Policies 7 and 8 are of relevance and these state as follows:

- 7. When needed to ensure resilience, prompt a change in travel behaviour towards increased walking, cycling and public transport use in urban areas, by:
 - managing traffic to maintain certain levels of congestion
 - adapting the supply and pricing of car parking over time
 - promoting multi-model journeys.
- 8. Support and promote growth in cycle and pedestrian trips and in public transport patronage."

No provision is to be made for infrastructure to provide for walking and cycling trips between the RTRA and commercial and community facilities located at Cromwell. The absence of such provision is not consistent with Policies 7 and 8 of the Otago Southland Regional Land Transport Plans.

9.2.3 Kāi Tahu ki Otago Natural Resource Management Plan 2005

The Kāi Tahu ki Otago Natural Resource Management Plan 2005 is a relevant planning document recognised by an iwi authority. This document appears to have no particular relevance to the current proposal and we acknowledge that Kāi Tahu has not submitted in response to Plan Change 13.

9.3 Policy Statements and Plans listed in Section 75(3) & (4)

Section 75(3) and (4) provide statutory direction with respect to the contents of district plans as follows:

- "(3) A district plan must give effect to -
- (a) any national policy statement; and
- (ba) a national planning standard; and
- (c) any regional policy statement.
- (4) A district plan must not be inconsistent with -
- (b) a regional plan for any matter specified in section 30(1).
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...

9.3.1 National Policy Statement on Urban Development Capacity 2016

The Preamble to the National Policy Statement on Urban Development Capacity 2016 (NPSUDC) confirms that all objectives and policies PA1 – PA4 as stated in the NPSUDC apply to all local authorities, including the Central Otago District Council. For the avoidance of doubt it is noted that the Central Otago District does not contain any high-growth urban area or medium-growth urban

area as defined in the NPSUDC as it has no urban areas with a resident population (or combined resident population and visitor population) of over 30,000 people.

The objectives stated in the NPSUDC are reproduced in full in clause 10.2 on page 47 of Document 4 as attached to the request document and we have therefore refrained from reproducing them in full in this report. The Preamble to the objectives as stated in the NPSUDC states as follows:

"The following objectives apply to all decision-makers when making planning decisions that affect an urban environment."

We also note that the Preamble to Policies PA1 to PA 4 state as follows:

"Policies PC1 to PA4 apply to any urban environment that is expected to experience growth."

The term "urban environment" is defined in the NPSUDC as follows:

"Urban environment means an area of land containing, or intended to contain, a concentrated settlement of 10,000 people or more and any associated business land, irrespective of local authority or statistical boundaries."

In 2013 Cromwell (including outlying urban areas and rural areas in the Cromwell Ward) had a resident population of 4,143. It appears that the existing urban area of Cromwell, as provided for in the Operative District Plan, does not contain and is not intended to contain a concentrated population of 10,000 people.

While the existing urban area of Cromwell will not contain 10,000 people growth projections prepared by Rationale Limited in the context of the Cromwell Masterplan process forecast a Resident Population for the Cromwell Ward of 10,200 by 2033 and 12,150 by 2048. It is emphasised that these projections are for the Cromwell Ward that contains both Cromwell and other urban areas located in the Upper Clutha Valley. The town of Cromwell may not contain a population of 10,000 by 2048 and therefore Cromwell may not be an urban environment for the purposes of the NPSUDC.

Accordingly while the objectives and policies PA1 - PA4 of the NPSUDC apply to all local authorities; if Cromwell is not an urban environment (as defined in the NPSUDC) the objectives and policies of the NPSUDC would be of no relevance in the context of Plan Change 13.

Notwithstanding that the NPSUDC may not be relevant to Plan Change 13, we again note that ensuring that there is sufficient development capacity in respect of housing and business land is a function of territorial local authorities in terms of section 31(1)(aa) of the Act, as discussed in part 9.1 of this report.

Given that the NPSUDC is discussed in Document 4, and to address a situation whereby evidence is presented to the Commission that establishes that Cromwell is an urban environment for the purposes of the NPSUDC, we have chosen to give consideration to the proposal in terms of the objectives and policies of the NPSUDC.

Objectives OA1, OC1 and OD1 of the NPSUDC state as follows:

"OA1: Effective and efficient urban environments that enable people and communities and future generations to provide for their social, economic, cultural and environmental wellbeing.

- *OC1: Planning decisions, practices and methods that enable urban development which provides for the social, economic, cultural and environmental wellbeing of people and communities and future generations in the short, medium and long-term.*
- *OD1:* Urban environments where land use, development, development infrastructure and other infrastructure are integrated with each other."

In our view Plan Change 13 will not provide for the environmental wellbeing of people, communities and future generations in terms of objectives OA1 and OC1 having regard to the effects of established neighbouring land uses including, in particular, Highlands, the Speedway and Jones Orchard. We also consider that the proposal fails to meet objective OD1 given that the RTRA will not be integrated with the existing town of Cromwell.

As previously noted the objectives of the NPSUDC are presented in full in Document 4 of the request documents.

Policies PA1 and PA2 of the NPSUDC are concerned with ensuring that there is sufficient housing and business land development capacity in the short, medium and long term; and that infrastructure required to support urban development is likely to be available.

Policies PA3 and PA4 of the NPSUDC state as follows:

- "PA3: When making planning decisions that affect the way and the rate at which development capacity is provided, decision-makers shall provide for the social, economic, cultural and environmental wellbeing of people and communities and future generations, while having particular regard to:
 - a) Providing for choices that will meet the needs of people and communities and future generations for a range of dwelling types and locations, working environments and places to locate businesses;
 - b) Promoting the efficient use of urban land and development infrastructure and other infrastructure; and
 - c) Limiting as much as possible adverse impacts on the competitive operation of land and development markets.
- *PA4:* When considering the effects of urban development, decision-makers shall take into account:
 - a) The benefits that urban development will provide with respect to the ability for people and communities and future generations to provide for their social, economic, cultural and environmental wellbeing; and
 - b) The benefits and costs of urban development at a national, inter-regional, regional and district scale, as well as the local effects. "

Again we consider that the proposal is not consistent with providing for the environmental wellbeing of people, communities and future generations in terms of Policy PA3 having regard to the established land use activities that exist in the immediate environs of the land subject to Plan Change 13.

9.3.2 Other National Policy Statements

The National Policy Statement on Electricity Transmission 2008, the National Policy Statement for Renewable Electricity Generation 2011 and the National Policy Statement for Freshwater Management 2014 are of no particular relevance to Plan Change 13.

9.3.3 National Environmental Standards

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health has been addressed in the e3 Scientific PSI (Document 10) and is discussed in part 7.6 of this report.

There are no other National Environmental Standards in force that are of any particular relevance to Plan Change 13.

9.3.4 Operative Regional Policy Statement 1998

The Regional Policy Statement for Otago became operative on 1 October 1998. Given that there is now a new Partially Operative Regional Policy Statement we have only chosen to address those provisions of the 1998 Operative Regional Policy Statement which do not appear to have been superceded by the Partially Operative Regional Policy Statement.

Objectives 5.4.1 and 5.4.2 relate to the land resource and state as follows:

- "5.4.1 To promote the sustainable management of Otago's land resources in order:
 - (a) To maintain and enhance the primary productive capacity and lifesupporting capacity of land resources; and
 - (b) To meet the present and reasonably foreseeable needs of Otago's people and communities.
- 5.4.2 To avoid, remedy or mitigate degradation of Otago's natural and physical resources resulting from activities utilising the land resource."

Policies 5.5.2 and 5.5.3 state as follows:

- "5.5.2 To promote the retention of the primary productive capacity of Otago's existing high class soils to meet the reasonably foreseeable needs of future generations and the avoidance of uses that have the effect of removing those soils or their lifesupporting capacity and to remedy or mitigate the adverse effects on the high class soils resource where avoidance is not practicable.
- 5.5.3 To maintain and enhance Otago's land resource through avoiding, remedying or mitigating the adverse effects of activities which have the potential to, among other adverse effects:
 - (a) Reduce the soil's life-supporting capacity
 - (b) Reduce healthy vegetative cover
 - (c) Cause soil loss
 - (d) Contaminate soils
 - (e) Reduce soil productivity
 - (f) Compact soils
 - (g) Reduce soil moisture holding capacity."

The term "high class soils", being the term used in Policy 5.5.2, is defined in Appendix B : Glossary to the Operative Regional Policy Statement as follows:

"High Class Soils

Soils that are capable of being used intensively to produce a wide variety of plants including horticultural crops. The definition requires good soil and other resource features that in

combination are capable of producing a wide range of crops. It does not include areas that may be suited to one or two specialist crops, largely due to the climate rather than soil quality."

In this instance the northern part of the subject site (above the escarpment) is in the same land inventory unit as adjacent land that has been developed for orchards; and soils on the site are Molyneux soils, which have been identified as one of the high class soils of Otago by PD McIntosh of Landcare Research in a 1993 report for the Otago Regional Council. Policy 5.5.2 of the Operative Regional Policy Statement is therefore of particular relevance in this instance.

Policy 5.5.3 requires the maintenance and enhancement of Otago's land resource through avoiding, remedying or mitigating the adverse effects of activities, including reducing soil productivity. The RTRA provides for urban development on the high class soils within the subject site and is therefore contrary to Policy 5.5.2 and Policy 5.5.3 of the Operative Regional Policy Statement.

We consider that Plan Change 13 does not give effect to the provisions of the Operative Regional Policy Statement as presented above.

9.3.5 Partially Operative Regional Policy Statement 2019

The Partially Operative Otago Regional Policy Statement 2019 became operative on 14 January 2019. Objectives and policies presented in Part B Chapter 4 and Chapter 5 of the Partially Operative Regional Policy Statement are relevant.

Objective 4.3 and Policy 4.3.3 relate to infrastructure and state as follows:

"Objective 4.3 Infrastructure is managed and developed in a sustainable way

Policy 4.3.3 Functional needs of infrastructure that has national or regional significance

Provide for the functional needs of infrastructure that has regional or national significance, including safety. "

The subject site is adjacent to State Highway 6 that is infrastructure that has regional or national significance. An effect of the proposal is that local traffic travelling between the RTRA and commercial and community facilities and residential areas at Cromwell will utilise State Highway 6. This is contrary to the primary role of the state highway that is to carry through traffic.

Objective 4.5 and its associated policies relate to urban growth and development. Objective 4.5 states as follows:

"Objective 4.5 Urban growth and development is well designed, occurs in a strategic and coordinated way, and integrates effectively with adjoining urban and rural environments"

Plan Change 13 provides for the RTRA to apply to the subject site; and we do not consider that the RTRA integrates effectively with the adjoining urban and rural environments as required by Objective 4.5 of the Partially Operative Regional Policy Statement.

Policy 4.5.1 of the Partially Operative Regional Policy Statement relates to providing for urban growth and development and states as follows:

"Policy 4.5.1 Providing for urban growth and development

Provide for urban growth and development in a strategic and co-ordinated way, including by:

- a) Ensuring future urban growth areas are in accordance with any future development strategy for that district.
- b) Monitoring supply and demand of residential, commercial and industrial zoned land;
- c) Ensuring that there is sufficient housing and business land development capacity available in Otago;
- d) Setting minimum targets for sufficient, feasible capacity for housing in high growth urban areas in Schedule 6
- e) Coordinating the development and the extension of urban areas with infrastructure development programmes, to provide infrastructure in an efficient and effective way.
- *f) Having particular regard to:*
 - *i.* Providing for rural production activities by minimising adverse effects on significant soils and activities which sustain food production;
 - *ii.* Minimising competing demands for natural resources;
 - *iii. Maintaining high and outstanding natural character in the coastal environment; outstanding natural features, landscapes, and seascapes; and areas of significant indigenous vegetation and significant habitats of indigenous fauna;*
 - iv. Maintaining important cultural or historic heritage values;
 - v. Avoiding land with significant risk from natural hazards;
- g) Ensuring efficient use of land;
- *h)* Restricting urban growth and development to areas that avoid reverse sensitivity effects unless those effects can be adequately managed;
- *i)* Requiring the use of low or no emission heating systems where ambient air quality is:
 i. Below standards for human health; or
 - *ii. Vulnerable to degradation given the local climatic and geographical context;*
- *j)* Consolidating existing coastal settlements and coastal urban areas where this will contribute to avoiding or mitigating sprawling or sporadic patterns of settlement and urban growth."

Plan Change 13 does not provide for urban growth and development in a strategic and coordinated way. As previously noted the Cromwell Masterplan process is underway and this, in essence, will provide a future development strategy with respect to the Cromwell area within the District. The outcome of the Cromwell Masterplan process is uncertain at this time. The proposal may therefore be inconsistent with Policy 4.5.1a) depending on the outcome of the Cromwell Masterplan process.

In terms of Policy 4.5.1d) we note that Schedule 6 of the Partially Operative Regional Policy Statement states as follows:

"Schedule 6 : Housing capacity

This schedule will be amended in accordance with the NPS Urban Development Capacity requirements. Refer to Policy 4.5.1(c) Providing for urban growth and development."

We note again in this context that Cromwell may not be an urban environment as identified in the NPSUDC (as discussed in part 9.3.1 of this report).

In terms of Policy 4.5.1f)i. the proposal will not serve to minimise adverse effects on significant soils and activities which sustain food production. As noted above land at the upper terrace is of the same land capability unit as that which supports neighbouring orchards; and Molyneux soils at the site are high class soils.

The proposal is contrary to Policy 4.5.1h). In this instance reverse sensitivity effects (with respect to Highlands, the Speedway and Jones Orchard, in particular) will not be avoided; and cannot be

adequately managed. It is again noted in this context that the RTRA will accommodate up to 900 residential units in close proximity to neighbouring incompatible existing land uses.

Policy 4.5.2 of the Partially Operative Regional Policy Statement relates to integrating infrastructure with land use. This states as follows:

"Policy 4.5.2 Integrating infrastructure with land use

Achieve the strategic integration of infrastructure with land use, by undertaking all of the following:

- a) Recognising and providing for the functional needs of infrastructure;
- b) Locating and designing infrastructure to take into account all of the following:
 - *i.* Actual and reasonably foreseeable land use change;
 - *ii.* The current population and projected demographic changes;
 - *iii. Actual and reasonably foreseeable change in supply of, and demand for, infrastructure services;*
 - iv. Natural and physical resource constraints;
 - v. Effects on the values of natural and physical resources;
 - vi. Co-dependence with other infrastructure;
 - vii. The effects of climate change on the long-term viability of that infrastructure; viii.Natural hazard risk.
- c) Coordinating the design and development of infrastructure with land use change in growth and redevelopment planning."

As previously noted we do not consider that Plan Change 13 recognises and provides for the functional needs of infrastructure being State Highway 6; and we do not consider that the strategic integration of infrastructure with land use is achieved in this instance. Providing for the use of State Highway 6 for local traffic is contrary to its primary purpose of serving through traffic. In terms of Policy 4.5.2c) we consider that an effect of Plan Change 13 will be to increase traffic volumes on neighbouring roads including Sandflat Road south, Pearson Road and Bannockburn Road. The adequacy of these roads for this purpose has not been assessed in the request document.

Policy 4.5.3 of the Partially Operative Regional Policy Statement relates to urban design and states as follows:

"Policy 4.5.3 Urban design

Design new urban development with regard to:

- a) A resilient, safe and healthy community;
- b) A built form that relates well to its surrounding environment;
- c) Reducing risk from natural hazards;
- d) Good access and connectivity within and between communities;
- e) A sense of cohesion and recognition of community values;
- f) Recognition and celebration of physical and cultural identity, and the historic heritage values of a place;
- g) Areas where people can live, work and play;
- h) A diverse range of housing, commercial, industrial and service activities;
- i) A diverse range of social and cultural opportunities."

In terms of Policy 4.5.3a), b) and g) the subject site has significant constraints having regard to the established land use activities in the immediate vicinity including Highlands, the Speedway and Jones Orchard, in particular. Noise associated with these activities, and particularly motorsport activities, will significantly compromise residential amenity by compromising outdoor living within the RTRA. Policy 4.5.3d) requires that urban development be designed to provide good access and

connectivity within and between communities. We do not consider that good access and connectivity is to be provided between the RTRA and the commercial and community facilities and residential areas that exist at Cromwell.

The subject site is currently located within the Rural Resource Area and rural activities are established in the immediate vicinity of the site. We therefore consider that Objective 5.3 and its associated Policy 5.3.1 as presented in the Partially Operative Regional Policy Statement are relevant. These state as follows:

"Objective 5.3 Sufficient land is managed and protected for economic production

Policy 5.3.1 Rural activities

Manage activities in rural areas, to support the region's economy and communities, by:

- a) Enabling primary production and other rural activities that support that production;
- b) Providing for mineral exploration, extraction and processing;
- c) Minimising the loss of significant soils;
- *d)* Restricting the establishment of incompatible activities in rural areas that are likely to lead to reverse sensitivity effects;
- e) Minimising the subdivision of productive rural land into smaller lots that may result in a loss of its productive capacity or productive efficiency;
- f) Providing for other activities that have a functional need to locate in rural areas."

In this instance the proposal will result in the use of high class soils, which are able to be developed for horticultural use, for urban purposes; and the proposal will result in the establishment of incompatible activities in this existing rural area. The proposal is therefore contrary to Objective 5.3 and Policies 5.3.1a), c), d) and e) of the Partially Operative Regional Policy Statement.

Highlands, the Speedway and nearby orchards have a functional need to locate in rural areas; the motorsport activities requiring substantial areas of land and/or the need to be separated from residential areas. Plan Change 13, with its associated reverse sensitivity effects, is not consistent with providing for these other activities which have a need to locate in rural areas in terms of Policy 5.3.1f) of the Partially Operative Regional Policy Statement.

It is emphasised that we have not addressed all of the objectives and policies presented in the Partially Operative Regional Policy Statement 2019. In our view the objectives and policies presented above are those which are most relevant to the Commissioners consideration of Plan Change 13; and we consider that Plan Change 13 does not give effect to those provisions of the Partially Operative Regional Policy Statement presented above.

9.3.6 Regional Plan

Relevant regional plans are the Regional Plan : Air for Otago that became operative on 1 January 2003; and the Regional Plan : Water for Otago which became operative on 1 January 2004.

9.3.6.1 Regional Plan : Air

Policy 9.1.4 of the Regional Plan : Air is as follows:

"9.1.4 To promote clean heating in new residential areas where discharges are likely to have an adverse impact on air quality in Air Zones 1 or 2, or degrade high quality ambient air."

Air Zone 1 at Cromwell extends to the intersection of Cemetery Road with State Highway 6. While the subject site is not in Air Zone 1 the Otago Regional Council (261/4) has advised that the use of

solid fuel heating systems could exacerbate ambient air quality, both within the new development and the existing urban area. We also note that Policy 4.5.1i) of the Partially Operative Regional Policy Statement requires the use of low or no emission heating systems where ambient air quality is below standards for human health; or is vulnerable to degradation given the local climatic and geographical context. The use of low or no emission heating systems within the RTRA (as promoted by the Otago Regional Council (261/4) and discussed in part 7.22 of this report) is consistent with Policy 9.1.4 of the Regional Plan : Air.

9.3.6.2 Regional Plan : Water

In clause 9.3 of Document 4 the requestor notes that the development relies on consents that will be applied for under the Regional Plan : Water in relation to water supply and wastewater disposal both by the requestor and as part of the Council's consents.

The Otago Regional Council (261/7) notes that the Mott MacDonald Water Impact Assessment (Appendix D to Document 8) anticipates a daily consumption of 500 litres/person/day. The ORC is unclear if this is exclusive of an irrigation component for domestic irrigation needs. We assume that this figure does include provision for domestic irrigation, given that communal open space only is to be irrigated utilising a bore. Document 8 in clause 5.1 confirms that domestic irrigation can only practicably be met out of the town reticulation. The ORC considers 200 litres/person/day to be efficient based on standard residential figures in accordance with AS/NZS 1547:2000; and we note in this context that the current standard is AS/NZS 1547:2012.

The Otago Regional Council (261/8) has advised that it is unclear from the information provided in the request document whether the population growth associated with Plan Change 13 is able to be accommodated by the consents held by the Council for the Cromwell wastewater treatment plant. Given that sufficient headworks capacity for water and wastewater is to be provided irrespective of where development is to be located at Cromwell (as discussed in part 7.4 of this report) we consider that the Regional Plan : Water has limited direct relevance to Plan Change 13.

9.4 Part 2 9.4.1 Primacy of Part 2

Section 74(1)(b) of the Act confirms that a change to a district plan is to be in accordance with the provisions of Part 2; and we again note that achieving the purpose of the Act (section 5 in Part 2) is the purpose of the preparation, implementation and administration of district plans in terms of section 72.

Part 2 includes sections 5, 6, 7 and 8 that are presented with our corresponding comments and a conclusion with respect to Part 2, below.

9.4.2 Purpose of Act:

"5. *Purpose* – (1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while-

- (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and

(c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment."

Plan Change 13 will not serve to promote the sustainable management of natural and physical resources. We note in particular that the plan change will not sustain the potential for natural and physical resources to meet the reasonably foreseeable needs of future generations or to safeguard the life supporting capacity of soil; and we acknowledge again in this context that the land on the upper terrace is in the same land capability unit as neighbouring land that has been developed for orcharding and that the site contains high class soils. Plan Change 13 will also not serve to avoid, remedy or mitigate adverse effects of the activities on the environment, including reverse sensitivity effects, as these relate to the effects of established neighbouring land uses including Highlands, the Speedway and Jones Orchard in particular; adverse effects on State Highway 6 and the local roading network; and adverse effects that result from the lack of integration with the existing town of Cromwell.

9.4.3 Matters of National Importance

****6.** *Matters of national importance* – In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- (a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
- (b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:
- (c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:
- (d) The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
- (e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.
- (f) the protection of historic heritage from inappropriate subdivision, use, and development.
- (g) the protection of recognised customary activities.
- (h) the management of significant risks from natural hazards."

In our view matters of national importance listed in section 6 are of limited relevance in this instance. We note in the context of section 6(e) that an accidental discovery protocol is to be provided for. In terms of section 6(f) we acknowledge that one of the existing historic irrigation races, being the northern race, is to be protected to the extent that it is within the Open Space Sub-Area C as shown on the Structure Plan. In terms of section 6(h) there appear to be no significant risks associated with natural hazards that need to be managed; and we again note that a 20 metre setback is proposed in the vicinity of Horn's Shaft, this being a hazard that is not natural. No other matters listed in section 6 appear to be relevant to Plan Change 13.

9.4.4 Other Matters

"7. **Other matters** – In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to-

- (a) Kaitiakitanga:
- (aa) The ethic of stewardship:
- (b) The efficient use and development of natural and physical resources:
- (ba) The efficiency of the end use of energy:
- (c) The maintenance and enhancement of amenity values:
- (d) Intrinsic values of ecosystems:
- (e) Repealed.
- (f) Maintenance and enhancement of the quality of the environment:
- (g) Any finite characteristics of natural and physical resources:
- (*h*) The protection of the habitat of trout and salmon.
- (i) the effects of climate change:
- (j) the benefits to be derived from the use and development of renewable energy."

In our view the proposal, which is to provide for the use of land with productive potential for urban purposes is not consistent with section 7(b) being the efficient use and development of natural and physical resources. We also consider that rezoning of the land, as proposed, in a locality where there are established land uses that will compromise residential amenity values is not consistent with section 7(c) and (f) that relate to the maintenance and enhancement of amenity values; and the maintenance and enhancement of the quality of the environment. We also consider that avoiding reverse sensitivity effects upon Highlands, the Speedway and Jones Orchard (and neighbouring orchards) is consistent with having particular regard to any finite characteristics of those natural and physical resources (in terms of section 7(g)).

9.4.5 The Treaty

"8. *Treaty of Waitangi* – In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi)."

In our view the Treaty has no particular relevance to Plan Change 13.

9.4.6 Conclusion : Part 2

Our conclusion is that Plan Change 13 is not consistent with the purpose of the Act (section 5); and that the proposal is not consistent with the principles of the Act stated in sections 7(b), (c), (f) and (g).

We consider that section 6 and section 7 (apart from section 7(b), (c), (f) and (g)) and section 8 are of limited or of no particular relevance in this instance.

9.5 Conclusion : Other Statutory Provisions (Including Planning Documents)

We consider that requested Plan Change 13 is not consistent with the function of the Council to achieve integrated management of the effects of the use, development or protection of land and associated natural and physical resources of the District in terms of section 31. In terms of sections 74 and 75 the proposal is contrary to the Proposed Regional Policy Statement and to the Otago Southland Regional Land Transport Plans; and Plan Change 13 does not give effect to the NPSUDC (if it is relevant), to the Regional Policy Statement (1998) or to the Partially Operative Regional Policy Statement (2019). We also consider that Plan Change 13 is not in accordance with the purpose and relevant principles of the Act as stated in Part 2; and it is again noted that achieving the purpose of the Act (as stated in section 5 in Part 2) is the purpose of District Plans in terms of section 72.

<u>10.0 RECOMMENDATIONS</u>

Clause 29(4) in Part 2 of Schedule 1 to the Act provides as follows:

- "(4) After considering a plan or change, undertaking a further evaluation of the plan or change in accordance with section 32AA, and having particular regard to the evaluation, the local authority-
 - (a) may decline, approve, or approve with modifications the plan or change; and (b) must give reasons for its decision "
 - (b) must give reasons for its decision."

Following consideration of the requested Plan Change 13 and the submissions and further submissions received, we recommend as follows:

- 1. That the submission by **Donna Abrams (1/1)** and the other **405 submissions that oppose Plan Change 13** (including further submissions lodged in support thereof) be <u>accepted.</u>
- 2. That the submission by Julene Ludlow (191/1-191/6) and further submissions thereto be <u>accepted in part</u> to the extent that the submission opposes Plan Change 13.
- 3. That the submission by the **Ministry of Education** (239/1 239/5) and further submissions thereto be <u>accepted</u> on the basis that the submission has been taken into consideration.
- 4. That the submission by the NZ Transport Agency (254/1 254/7) and further submissions thereto be <u>accepted in part</u> to the extent that the submission opposes Plan Change 13.
- 5. That the submission by the Otago Regional Council (261/1 261/8) and further submissions thereto be <u>accepted in part</u> to the extent that the submission opposes Plan Change 13.
- 6. That the submission by the **River Terrace Developments Limited (298/1 298/8)** be <u>rejected</u> and that the opposing further submissions thereto be <u>accepted</u>.
- 7. That the submission by Anthony Streeter (353/1 353/5) be <u>rejected</u> and that the opposing further submissions thereto be <u>accepted</u>.
- That the submission by Transpower New Zealand Limited (373/1 373/9) and further submissions thereto be <u>accepted in part</u> to the extent that the submission has been taken into consideration albeit Plan Change 13 (and any modifications thereto) is not recommended for approval.

Consistent with the above recommendations we recommend that requested Plan Change 13 be declined.

JOHNSTON WHITNEY

Colum

W D WHITNEY Planning Consultant

21 March 2019

Appendix A

Stantec				Memo¶
a Ian				a
То:	Neville Jelley	From:	Andrew Metherell	
	Stantec Alexandra		Stantec Christchurch	
File:	80510526 cc0001	Date:	February 14, 2019	

Reference: CODC Plan Change 13: Review of Transport Assessment

Dear Neville

As requested we have considered the request by Central Otago District Council (CODC) to review the Transportation Assessment provided with the Prosed Plan Change 13 Application. The Plan Change is to rezone land west of Cromwell for a residential development. The Transportation Assessment was prepared by Carriageway Consulting, and is dated 14 December 2017.

The CODC brief was to consider the following matters:

- The traffic distribution adopted in the Transportation Assessment;
- The proposed road cross-section dimensions to be applied;
- Any other relevant matters to raise in respect of the Transportation Assessment report.

In order to address this request, we have reviewed the Transportation Assessment and provided general comments on matters that could have a material influence on the outcomes of the assessment, and as requested responded to the specific queries made.

EXISTING TRANSPORT ENVIRONMENT

Scope of Assessment

The discussion of the existing transport environment is particularly focused on the northern end of Sandflat Road and SH6 intersections. For such a larger scale development, where increases in movement could be expected along other surrounding roads, consideration of some of the other road links in the network should have been considered for context, including Pearson Road (a collector road), Bannockburn Road (an arterial road) and intersections. This should cover function, formation, traffic volumes, and road safety. It appears the author has predetermined that all traffic (and non-car road users) will travel to and from the site via SH6.

Traffic Information

The traffic information from NZTA CAS system is considered unreliable. For such a large-scale development more robust traffic counts would be warranted, as they would impact the potential transport assessment and requirements for road network upgrades. Other sources of traffic information, such as Mobileroad.org which links to updated versions of the Council asset management database, suggest that the "counts" are only estimates, and updated estimates are of a higher volume than referenced in CAS.

Non-Car Modes of Travel

For a large development, identification of available links to the site for non-car modes of travel would be appropriate. For example, Bannockburn Road includes some informal off-road facility for walking and cycling. No data is provided on actual numbers of users on the surrounding road network.

FUTURE TRANSPORT ENVIRONMENT

The author has not referenced the strategies or guides referenced (at section 3.2). Consideration should be given to the CODC Infrastructure Strategy, and NZTA plans for the highway network. It is understood a



masterplan is being developed for Cromwell, and some consideration of how the development fits within the initial considerations would be useful for context.

There is no discussion of other future large scale residential and commercial development in the surrounding area, which could substantially influence traffic volumes on the road network, and the need for integration of transport facilities.

PROPOSED DEVELOPMENT

The discussion of the masterplan indicates approximately 690 residential units and 140 retirement units. Whilst the structure plan includes a Neighborhood Centre and Education Overlay, there is no discussion of those activities in the assessment, which should be addressed.

This is a large scale development and warrants an Integrated Transport Assessment. The Transport Assessment does not cover matters expected of an Integrated Transport Assessment of a new development of this type including:

- Consistency with the policy framework for transport, set by higher order planning documents. That
 may include policy around integrating development with non-car modes of transport to ensure it is
 accessible, safe, protects SH6 as strategic infrastructure, consistency with surrounding rural amenity
 expectations (from a transport perspective) and addresses overall efficiency of travel and use of
 non-car modes.
- Consideration of the implications for other parts of the road network, and how that may influence improvements that might need to be planned due to cumulative effects from this and other development.
- How the surrounding area may be developed in response to the Plan Change, and whether the connections shown are adequate to support future integrated development.

It is considered reference should be made to the content included in the NZTA Integrated Transport Assessment Guidelines, to ensure a robust and full assessment.

TRAFFIC GENERATION

The assessment of traffic generation references 8vpd, and 1vph per household for residential dwellings. This would be typical of a suburban type of development. In the peak hours the assessment of those exiting the site in the morning peak is 90%. In our experience the typically adopted percentage exiting in the morning peak is 75%. Assessment of effects in the morning peak should consider this percentage, at least as a sensitivity test.

For a retirement village, industry data suggests a higher level of daily movements are made, being approximately 2.6vpd/unit.

TRAVEL DISTRIBUTION

The assessment provides expectations of travel distribution, without supporting information. The assessed distribution appears to be:

- 25% to/from Cromwell,
- 60% to/from Queenstown,
- 7.5% to/from Alexandra,
- 7.5% to/from Wanaka.



The distribution appears to assume the site will act as a commuter suburb for Queenstown. In order to provide some initial consideration of the validity of this distribution, we have considered information available from the latest available Census information, and the NZTA Household Travel Summary.

Reason for Vehicle Trip

The NZTA Household Travel Survey summary for 2015-2018 indicates the main purpose for trips (across all of New Zealand).

Purpose of travel	Share of trip legs
01. Went home	29%
02. Went to work	11%
03. Shopping/personal appointments/services/volunteer	28%
04. Social visit/entertainment	13%
05. Made a trip for work	10%
06. Completed study/education	1%
07. Accompany someone/dropped someone off/picked someone up	6%
08. Sport and exercise	2%
09. Other (incl unknown)	0%
Total	100%

Table 1: NZTA Household Travel Survey Trip Purpose

Commuting work trips make up a relatively small proportion of trips during the day (up to approximately 22% of all vehicle driver trips). When considering the other types of trips made, it is clear that a new suburb in Cromwell will generate a lot of movements that are likely to have a local focus, such as shopping, personal appointments, social visits and entertainment. Many of these can occur in the peak hours.

This suggests the Transport Assessment may be too heavily skewed to consideration of commuter travel. In addition, across the course of the day, the other trips (assuming each household generally has only one vehicle travelling to/from Queenstown) of up to 6vpd/household would most likely be local trips, indicating a different traffic distribution across the day than the peak period.

Journey To Work

Even though journey to work trips only make up part of the trip making to and from a new development, journey to work data relevant to Cromwell is available from Statistics NZ Census data. The most recent census data available is from 2013, and shows the following journey to work pattern, for those that drove a private vehicle:

The data suggests approximately 9% to and from the west (ie Queenstown), with a majority to the east. Only 3% are to Wanaka.

This suggests the Transport Assessment has assessed a very significant change in commuting patterns from Cromwell, and does not recognize the high level of local trips made by a household each day. In our opinion, their assumption is unsubstantiated and a much higher proportion to and from Cromwell (and the northeast generally) could be expected. That would require reworking of the assessment undertaken.



Table 2: Statistics NZ 2013 Census Travel to Work by Vehicle from Cromwell

Work Destination of those Employed in Cromwell	Percentage (of those that Drove to Work from Cromwell)	Direction from Site / Road Network Used	Potential Routes
Cromwell Township	64%	East	Via SH6, Some lesser use via Sandflat Road & Bannockburn Road (eg 10-20%)
Dunstan Area Unit	18%	East – South - North	Via SH6, Some lesser use via Sandflat Road & Bannockburn Road (eg 10%)
Alexandra / Clyde	6%	East	Via SH6
Wakatipu / Queenstown	9%	West	Via SH6, Some lesser use via Sandflat Road and Pearson Road
Wanaka	3%	North	Via SH6

Route Choice

As many of the movements made to and from the development will not be related to commuting, and there are likely to be a higher number than assessed to and from Cromwell, it is considered a more comprehensive assessment of the sensitivity to the use of local roads is necessary. That should include matters such as safety, and potential change in function of different roads.

For example, if the volume travelling to and from Cromwell is closer to say 70%, that represents over 4,000vpd to/from Cromwell, of which at least some will travel via the local road network. As indicated by the existing traffic volumes which are low on adjacent rural roads, even a small portion of the 4,000vpd could result in the need for modifications to the road design and provision for other transport modes. By not upgrading the connection via Sandflat Road and Pearson Road through to Bannockburn Road, there is very little resilience in the transport network.

Mode of Travel

The Census data from 2013 also shows the mode of travel to work for those from Cromwell.

Table 3; Census Travel To Work 2013 - Mode of Transport

Mode of Travel	Proportion that Worked
Worked at home	6%
Drove a private car, truck, or van	52%
Drove a company car, truck, or van	21%
Passenger in a car, truck, van, or company bus	7%
Motorbike or powercycle	0%
Bicycle	6%
Walked or jogged	7%
Other	1%

This indicates over 13% of commuting trips are by bicycle and walking and there are opportunities for people to use modes of travel other than a motor vehicle to travel to work. Further trips are likely to be made by a household such as for school, recreation, and social visits. The assessment assumes there will be practically no trips by these modes, which indicates the site is not accessible for other modes of travel. As discussed, there is



a gap in consideration of the assessment against higher level policy direction which typically promote development that supports use of non-car modes. It is recommended that further information is sought on walking and cycling in the area, and potentially from comparable developments.

ROAD SAFETY

As advised, the changes in traffic distribution would warrant reconsideration of the assessment of road safety. In our opinion, the road safety assessment for such a large development fronting rural high speed roads should consider the ability of surrounding roads to accommodate the level of extra traffic, not just the design parameters of intersections.

Whilst any development in Cromwell has the potential to add to longer distance highway movements, the site access provisions place a higher reliance on the use of SH6 over a short distance for local movements, which are not part of the desired function of the highway if a supporting local road network can reduce the use of the road. The large increase in travel, eg potentially 4000 to 5000vpd on the highway, will more than double volumes. Consideration of whether improvements to the road layout are necessary should be considered.

The improvements proposed have not considered the potential improvements required to side road approaches, delineation at intersections, and other associated infrastructure such as lighting and kerbing, expected of higher volume intersections. Based on the assessed traffic distribution, Sandflat Road could carry a volume close to the equivalent of SH8B, which has a much higher standard intersection layout to support existing through traffic volumes. It is considered the Transport Assessment has set expectations of a minor intersection upgrade, which may not be the appropriate provision in practice.

SITE LAYOUT

Road Layout

The assessment does not provide assessment of the structure plan layout, or proposed road hierarchy from a transportation perspective. As the structure plan layout will largely constrain future subdivision patterns, it is recommended that the justification for the layout and hierarchy is explained by the Applicant. Some matters for consideration include:

- Expected traffic volumes on each road, to confirm the road cross-sections are appropriate;
- The potential for lots directly accessing Sandflat Road, and what changes may be required to Sandflat Road;
- Changes in formation on Sandflat Road to assist with integration with the development including speed;
- The grid layout results in a lot of minor road intersections on Sandflat Road and the Primary Road, and further consideration should be given to the block orientation to maximise safety;
- Interaction of proposed connections to Sandflat Road with existing accesses, and confirmation that appropriate intersection design will be achievable.
- The disconnect between the east-west and north-south primary roads.
- The definition of roads, and how they relate to other District Plan rules eg is a Primary Road a Collector Road?

Road Widths

The proposed Plan Change proposes new road widths that differ from CODC practice. It is acknowledged that the NZS4404:2010 includes cross-sections similar to those proposed and they are now well utilised elsewhere in New Zealand. However, NZS4404:2010 also includes a range of other provisions that require the

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road to be considered in context of the place function, traffic volumes, design speed, and place in the road hierarchy. Design statements are required to support the provisions, as are staged road safety audits.

The rule proposed of three cross-sections is simplistic (a one size fits all approach) which in our experience can cause concern following implementation, particularly around adequacy of on-street parking, design speeds, vehicle access, and pedestrian and cycling provision. It is our opinion a more robust assessment framework should be provided, or reference to or inclusion of the many other provisions relating to road cross-section and design that are referenced in NZS4404:2010.

As we consider a lot more supporting information is required in the rules (or ensuring a high level of discretion for Council officers assessing the roading provisions), we have not commented in depth but make the following general comments for context.

- Road A Primary Road is a term not defined elsewhere in the District Plan. It will most likely act as a
 Collector Road and should be defined as such so other applicable rules can be applied. A
 Collector Road requires consideration of cycle facilities, and none are provided. There may be
 some place context such as through a neighborhood centre, retirement village, residential area,
 and education area where a different cross-section will be desired, and different provisions for
 footpaths may be desirable.
- Road B It is assumed Secondary Road is equivalent of a local road. It has an overall width of approximately 8.2m, but the diagram could be interpreted such that parking is always only on one side of the road. This may result in under provision of street parking. Differing footpath provisions may be desirable in different place context within the site.
- Road C This is typically only applied to short residential lanes, and development with rear lanes. Additional indented parking should be provided in the cross-section as a matter for consideration, which would then necessitate a wider road reserve in some cases.

PLANNING MATTERS

The Transport Assessment is silent on the provisions of the Plan Change, and whether they are reflective of the assessment undertaken. It is considered further consideration is made of each of the provisions that contribute to the transport outcome.

We have not undertaken a detailed review, but note that some matters of concern include the absence of justification for transport related provisions including car parking provisions, and driveway length.

SUMMARY

It is considered there a range of transport matters requiring more detailed consideration. This is a large development disconnected from the existing urban area, and an Integrated Transport Assessment approach is warranted to better understand how the site will sit within the context of the wider transport environment.

Stantec New Zealand

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Appendix One: Details of Consent and Conditions

A: Activities for which Consent is Granted

- Construction and operation of HMSP including associated buildings and infrastructure, parking and loading areas and landscaping;
- Motor racing events including rally cross, Jet boat displays, and on track and off track entertainment.
- Commercial Recreational Activities involving the use of motor vehicles and including Hot Laps, Fast Laps, dirt buggies, Jurassic Park Safari;
- d. Go Kart Track;
- Commercial Recreational Activities not involving the use of motor vehicles and including Motorsport Museum, Frisbee Golf, Playground, sculptures, mini-golf
- f. Use of the Park for sports including cycling or triathlon;
- g. Retail Activity ancillary to the Museum and ancillary to on-track events;
- h. Cafe;
- Commercial Vehicle Activity including vehicle proving, tyre testing, vehicle launch events, filming and driver training;
- j. Corporate Commercial Activity and Functions and including promotional events, conferences, weddings, awards dinners or members events;
- k. Residential activity within the Pit Lane building;
- 1. Ancillary provision of catering services including sale and supply of alcohol;
- m. Ancillary administration and offices;
- n. Ancillary service and maintenance activities for vehicles and the facility;
- o. Ancillary storage of safety vehicles, grounds machinery and equipment.
- p. Helicopter landing and take-off ancillary to activities at the Park;
- q. Storage of Hazardous substances required for the operation of the HMSP;
- r. Signage as detailed below:
 - A sculpture platform on The Nose site at the south-eastern corner of Sandflat Road and State highway 6;
 - Billboard facing State Highway 6/Cemetery Road (Billboard 1);
 - (iii) Billboard facing Sandflat Road (Billboard 2);
 - (iv) Finger board entry sign at the entry to the site on the opposite side of Sandflat Road;
 - (v) All signs existing on the site on 7 August 2015;
 - (vi) Flags flying from the flagpoles existing on the site on 7 August 2015;
 - (vii) Signage within Zone 2 provided that no sign or sculpture shall be installed, facing outwards on the boundary fences of the site.
- s. Parking associated with events at HMSP on the land identified in Red and called "Parking Overflow" and "Parking Area CODC Land" on the plan "Aerial Overview Highlands Motorsport Park, Cromwell" S14631, Drawing 01, Revision C dated 16 October 2015";
- Storage within the maintenance compound and fuel depot identified on the plan "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015 of:
 - (i) Maintenance vehicles, implements and landscaping supplies;
 - (ii) Fuel tanks in fuel depot;
 - (iii) Miscellaneous equipment including but not limited to dirt buggies, bricks, timber, empty drums and other equipment utilised during the operation of HMSP.

B: Conditions

Definitions Used in Conditions:

For the purposes of these conditions:

- "Chief Executive" means the Chief Executive of the Central Otago District Council.
- "HMSP" means Highlands Motorsport Park.
- "Multi Day Tier 2 Event" means a Tier 2 Event of 2 or more consecutive days.
- "On-Track Activities" means activities taking place on the Track, and any ancillary activities.
- "Off-Track Activities" means any activity taking place on any part of the site that is not defined as the Track.
- "Rally-cross Activities" means motor racing in which cars are drive over a course including the unsealed rally-cross track and the sealed race track.
- "Speedway" means the land and buildings comprised in Certificate of Title 413533 legally described as Lot 1 Deposited Plan 403966.
- "Track" means the sealed race track, rally cross track and the lake all identified in orange on the plan "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015.
- "Tier 2 Activity" means an On-Track activity that is to take place under the Tier 2 Noise Limited in Condition 35 below and which has been notified with less than one month's notice.
- "Tier 2 Days" means both Tier 2 Activity and Tier 2 Events.
- "Tier 2 Event" means an event held at HMSP that is to take place under the Tier 2 Noise Limits in Condition 35 below and which has been notified with one month or more notice.
- "Year" means period between 1 July and 30 June of any consecutive year.
- "Zone 1" means that area defined as Zone 1 Upper Terrace Area on the plan "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015.
- "Zone 2" means that area defined as Zone 2 Tracks and Trackside and Zone 3 Track on plan "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015.

Preliminary Conditions

- The activities shall be undertaken in general accordance with the information provided with the resource consent application received on 7 August 2015 and the plans submitted with that application and subsequent to the hearing including:
 - "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015.
 - b. "Aerial Overview Highlands Motorsport Park, Cromwell" S14631, Drawing 01, Revision C dated 16 October 2015.
 - c. "Proposed Helicopter Flight Paths Highlands Motorsport Park, Cromwell", S14361, Drawing 02, Revision D dated 10.11.15.
 - d. "Proposed Signage Highlands Motorsport Park" S14361 Drawing 01_00 Revision D dated 7 August 2015.

except where modified by the following conditions.

 This consent may not be implemented until the Consent Holder provides a Notice of Surrender of RM070149 (and any relevant variation of that consent) as it relates Lot 600 DP 466637 and Lot 400 DP 466637 to the Chief Executive.

Zone 1 - Upper Terrace Area

Activities

The following activities can be undertaken within Zone 1:

- Highlands National Motorsport Museum Café to be located within the museum building;
- Retail activity ancillary to operation of the HMSP within the museum building;
- c. Registration and reception area for tourist activities which occur either or both of Zone 1 and Zone 2;
- Functions including but not limited to corporate events, car club events, conferences, weddings, dinners and award evenings;
- e. Offices and ancillary space;
- Gasoline Alley and workshops, including storage, maintenance, repair and servicing of vehicles; and
- g. Any activity ancillary to the above, such as parking.

Bulk and Location

- 4. Yards No yards are required.
- 5. The maximum height of buildings shall be 8 metres.

Building Materials

- Wall cladding materials shall be restricted to coloursteel, concrete (including blocks), bricks, plaster, or timber.
- Roofing materials shall be restricted to coloursteel, tiles, butynol (or equivalent), and limited use of translucent sheeting where appropriate.

- Notwithstanding Condition 6, on the eastern and western elevations of the museum building Danpalon may be used as shown on Elevation Plan A04 dated 19/04/2012.
- Finished building colours shall comply with Rule 4.7.6D(a) of the Central Otago Operative District Plan which requires new buildings to be finished in colours in the range of browns, greens, grey blue, greys, terracotta, tussock and dark reds.
- Any colour chosen for any Building in Zone 1 shall have a reflectivity value of 13% or less for roofs and 30% or less for walls.

Functions

 Functions in Zone 1 may only occur until 10:30 pm seven nights per week, with all persons departing the site by 11:00pm.

Shade Sails

 No more than 5 shade sails (comprising of black, grey and/or orange) with a combined area of 90m² may be erected within Zone 1.

Playground

- The playground to be established on the playground platform identified on "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015 shall comply with the following:
 - a. A total area of no more than 225m².
 - b. Not exceed 4 m in height.
 - c. Have no electronic components.
 - d. Play equipment will not consist of highly reflective components.
 - e. Play equipment will not have any lights and will not be lit.

Zone 2 - Tracks and Trackside

Activities

- 14. The following activities can be undertaken within Zone 2:
 - On-track activity including but not limited to club days, members days, vehicle and vehicle equipment testing, rally-cross, jet boating, motorsport events and driver training;
 - b. Outdoor entertainment;
 - Functions including but not limited to corporate events, car club events, conferences, weddings, dinners and award evenings;
 - d. Filming including both on track and off track activities;
 - Commercial recreation activities including but not limited to high performance sports car rides, "U-drive" activities, go-karts, dirt buggies, Jurassic Park Safari, members laps and passive activities such as the sculpture garden;
 - Commercial activities (non-recreational), including but not limited to vehicle launches and promotions, tourism promotion, filming, corporate activities and functions;

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- g. Residential accommodation provided it is located in the Pit Lane area indicated on the "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015; and
- h. Any activity ancillary to the above, such as parking.

For avoidance of doubt bookings, pick-ups and administration associated with activities in Zone 2 may be carried out within Zone 1 in the reception area within the museum building and the adjacent carpark.

Rally-Cross Track

- 15. Prior to the commencement of activity on the rally-cross track the consent holder shall establish and plant an earth bund that shall have a minimum height of 4 metres or an acoustic fence designed by an appropriately qualified acoustic engineer which achieves comparable sound attenuation to the bund, such bund/fence is to be located between the rally-cross track and the eastern boundary of the site.
- 16. Prior to the commencement of activity on the rally cross track the consent holder shall prepare a Dust Management Plan and shall submit that Plan to the Chief Executive for certification. The Dust Management Plan shall address the following:
 - Steps taken to minimize the production of dust from activities on the rally-cross track;
 - b. Steps to be taken during Rally-cross Activities to minimize dust generation including but not limited to provision and use of water tankers and other dust suppression techniques.
- The Dust Management Plan will be implemented during all activity undertaken on the rally cross track.
- On a Tier 2 Day there will be no overlap in time between Rally-cross Activity and any other Tier 2 Track Activity.

Bulk and Location

- No yards are required except that no buildings are to be established within 25 metres of the eastern boundary of the site where that boundary adjoins the Cromwell Chafer Beetle Reserve.
- The maximum height of any building shall be 8 metres except for the control tower complex for which the maximum height is 12 metres.
- Wall cladding materials for buildings are restricted to coloursteel, concrete (including blocks), bricks, plaster, or timber.
- Roofing materials for buildings are restricted to coloursteel, tiles, butynol (or equivalent), and limited use of translucent sheeting where appropriate.

Colour and Finishes

23. Where a building is visible from any public road adjacent to HMSP finished building colours shall comply with Rule 4.7.6D(a) of the Central Otago Operative District Plan which requires new buildings to be finished in colours in the range of browns, greens, grey blue, greys, terracotta, tussock and dark reds; except for:

- Accent colours on the control tower complex; and
- b. The start/finish line gantry
- c. Accent colours on the go-kart facility building.
- Where a building is not visible from any public road adjacent to HMSP condition 20 does not apply.

Functions

- Functions in Zone 2 where access is achieved via Sandflat Road may only occur until 10:30 pm seven nights per week, with all persons departing the site by 11:00pm.
- Note: Where access to the function is achieved solely via Cemetery Road Condition 25 does not apply.

Helicopter Landing/Take-Off

- During any Tier 2 Day notified in accordance with Conditions 59, 60 and/or 61 there shall be no more than 30 helicopter movements (15 flights).
 - For Tier 1 Days the number of helicopter movements shall not exceed 6 per day (3 flights) or 10 per week (5 flights). A week shall be Monday to Sunday.
 - 28. Any helicopter landing at the site will land within that portion of the Helicopter Landing Zone identified on the plan entitled "Proposed Helicopter Flight Paths Highlands Motorsport Park, Cromwell", S14361, Drawing 02, Revision D dated 10.11.15 which is east of the Track.
 - 29. The consent holder shall maintain a log of helicopters landing at HMSP between 1 July and 30 June each year. The log shall be submitted to the Chief Executive no later than 14 July each year; and the Chief Executive may request the log more frequently. If the Chief Executive requests the log it shall be provided no more than one week following the request.
 - For the avoidance of doubt Conditions 26-29 do not apply to any emergency rescue helicopter that may be required to attend HMSP in the event of an emergency.

Temporary Activities - Whole of HMSP - Zone 1 and Zone 2

- 31. Temporary activities, as defined in the Central Otago Operative District Plan, which do not comply with the noise limits for off-track activities in Condition 45, which may include charity events such as Christmas in the Park or Relay for Life, are subject to the following controls:
 - (a) such events are not to exceed three per Year;
 - (b) there shall be at least 5 days between the event and any Tier 2 Day; and
 - (c) the event shall not be a dedicated music concert which involves the playing or performance of amplified music.
- 32. A temporary activity which can comply with the noise limits applying to a Tier 2 Day as defined in Condition 35 may be counted as a Tier 2 Day so long as the limit of 16 Tier 2 Days per Year is not exceeded.

 All other temporary activities, as defined in the Central Otago Operative District Plan, are to comply with the noise limits for off-track activities contained in Condition 45.

General Conditions

Noise Conditions

- 34. Noise levels shall be measured in accordance with NZS 6801:2008 Acoustics— Measurement of environmental sound, and assessed in accordance with NZS 6802: 2008 Acoustics— Environmental noise, except that no adjustment for special audible character or duration shall be applied.
- 35. Each day's use of the Track will be classified as a Tier 1 Day or a Tier 2 Day. A Tier 1 Day is subject to the Tier 1 Day noise limits shown in the table below and subsequent conditions as specified. A Tier 2 Day is subject to the Tier 2 Day noise limits shown in the table below and subsequent conditions as specified;

	um Number of /s per year	Noise I	limit, L _{Aeq}
		0800-1800	1800-0800
Tier 1 Day	No limit	55 dB	40 dB
Tier 2 Day	16	N/A*	40 dB

* Refer to Condition 42 for applicable limits.

- Notwithstanding Condition 35 above, on any Tier 1 day that falls on a Sunday 40 dB LAeq must be complied with until 0900 (9:00am) on that day.
- 37. Notwithstanding Condition 35 above, on five Tier 1 Days per Year the noise limit of 55 dB LAeq shall apply until 2100 hours (9:00pm) provided that the purpose of any Track Activity in this time is to facilitate noise monitoring and the calibration of proxy measurement locations or a noise model in accordance with the noise management plan.
- 38. Where activities are to occur in accordance with Condition 37 above the consent holder shall notify their intention at least a week in advance in the following ways:
 - a. By email to the Chief Executive;
 - By email to those neighbours who have provided their email to the consent holder for that purpose;
 - c. On the event calendar on the HMSP website.
- 39. On any Tier 1 Day if the daytime (0800-1800 hrs) noise limits in Condition 34 are exceeded for more than one 15 minute period the conditions of this consent will be breached unless:
 - (a) the exceedance was not for more than four 15 minute periods; and
 - (b) the total used and scheduled Tier 2 Days for the Year is less than 16.

- 40. Where the Tier 1 Day noise limits are breached under Condition 39 and clauses (a) and (b) of that Condition are both satisfied that day shall be counted as a Tier 2 Day and added to the tally of Tier 2 Days, and the Chief Executive shall be notified of this within 5 working days.
- 41. Where the Tier 1 Day noise limits are breached under Condition 39 and one or other of clauses (a) and (b) of that Condition is <u>not</u> satisfied the consent holder shall advise the Chief Executive in writing of the breach with an explanation of how it occurred within 5 working days.
- 42. Every vehicle using the Track shall comply with a noise limit of 95 dB L_{Amax} measured 30m from the sound source and measured in accordance with the New Zealand Motorsport Standard, except that on no more than 4 (of 16) Tier 2 Days the consent holder may allow 'special interest vehicles' to undertake exhibition laps for no more than four 15 minute periods.

For the purpose of this condition a 'special interest vehicle' is a unique or rare vehicle of special or particular interest to the car collecting community. For example, a Formula One race car.

- 43. Any Rally-cross activity on the Track as identified on the plan "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015 shall be treated as a Tier 2 Event for the purposes of Condition 35 above. Activities, other than Rally-cross activities, that comply with the Tier 1 noise limits will not be considered a Tier 2 Event solely for the reason that they take place on the rally-cross track.
- 44. The consent holder shall maintain a log of Tier 2 Days held at HMSP between 1 July and 30 June each year. The log shall be submitted to the Chief Executive no later than 14 July each year; and the Chief Executive may request that the log be provided more frequently. If the Chief Executive requests the log it shall be provided no more than 1 week following the request.
- 45. All Off-Track activities shall comply with the limits specified in the table below. These noise limits shall be achieved at any point within the notional boundary of any dwelling identified on the plan "Aerial Overview Highlands Motorsport Park, Cromwell" S14631, Drawing 01, Revision C dated 7 August 2015.

	Maximum Number of Days per year		Noise I	imit, L _{Aeq}
			0800-1800	1800-0800
Any track activity	Off-	No limit	55 dB	40 dB

 Notwithstanding condition 45 above any Off-Track activity taking place on a Sunday must comply with 40 dB L_{Aeq} until 0900 (9:00 am) on that day.

- 47. The consent holder shall prepare and implement a Noise Management Plan. The Noise Management Plan shall be prepared by a suitably qualified acoustic engineer and shall include the following:
 - a. Establishment of a permanent onsite noise monitoring station at the location identified as "Sound Logger" on the plan "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015 to assist in the management of noise generating activities at HMSP.
 - b. Ongoing calibration requirements for the Sound Logger.
 - c. Process for establishing a correlation between the Sound Logger and the Notional Boundary of identified dwellings on plan "Aerial Overview Highlands Motorsport Park, Cromwell" S14631, Drawing 01, Revision C dated 16 October 2015.
 - d. Review of on-site noise monitoring data to assess the ongoing appropriateness of the location of the Sound Logger and indicative compliance with sound levels identified in Condition 34 at any point within the notional boundary of any dwelling identified on plan "Acrial Overview Highlands Motorsport Park, Cromwell" S14631, Drawing 01, Revision C dated 16 October 2015.
 - Details of the procedure for measuring noise from individual vehicles, and the process to be used for addressing any non-compliance with Motorsport New Zealand noise limits;
 - f. Monitoring protocol to be followed when a new Track Activity is to be undertaken for the first time to determine compliance with Condition 35.
 - g. Review and assessment of Off-Track activities to ensure compliance with Condition 45.
 - h. Calibration of the Public Address system to ensure compliance with Condition 63 below.
 - Methods to be used to ensure that use of the track by activities that may possess special audible characteristics are not of a duration or a frequency to trigger the application of the special audible character and duration adjustments to the monitored noise levels.
 - j. Establishment of an online tool displaying real time data from the onsite noise monitoring station. The online tool shall be accessible by the Chief Executive and ultimately the public once the correlation between the Sound Logger and notional boundaries is resolved.
 - Procedure to be followed in scheduling Tier 2 events to avoid to the extent practicable Tier 2 Days coinciding with an event at the neighbouring speedway.
 - j. Procedures for receiving, addressing and recording complaints.
 - k. Provide a programme of off-site noise monitoring on Tier 2 Days at nearby dwellings to show that the noise received at those dwellings in not unreasonable and that the noise effects on those properties is not increasing over time due to the operation of the HMSP on Tier 2 Days.
 - Provide a programme of off-site noise monitoring to demonstrate compliance with the Tier 1 Day noise limits as received in Bannockburn.
- 48. The consent holder shall review the Noise Management Plan annually and provide such review to the Chief Executive for certification as complying with the requirements of Condition 47 above no later than 14 July each year.

- 49. If a burial is scheduled at the Cromwell Cemetery during any Tier 2 Activity, then the activity shall be suspended for the period of the ceremony and half an hour either side of the ceremony as notified to the consent holder by the funeral director or person responsible for the funeral arrangements, provided that at least 2 days' notice has been given to the consent holder in accordance with the Event Management Plan required under condition 64 below.
- Tier 2 Days may take place on no more than 2 Public Holidays in Central Otago per year.
- No On-Track or Off-Track Activity (whether Tier 1 or Tier 2) within Zone 2 shall take place on Christmas Day or before 1pm on Anzac Day.
- 52. All Tier 2 Events as defined for these conditions shall take place during a seven (7) month season between and including the months of October and April. For avoidance of doubt this does not preclude Tier 2 Activities as defined occurring between May and September inclusive.
- Note: Condition 61 limits the maximum number of Tier 2 Activity days to two per year.
- 53. The following condition shall apply to Tier 2 Days that coincide with a Speedway event at the Speedway track during Easter Weekend (Friday to Monday inclusive).
 - a. There shall be no more than two Tier 2 Days over Easter Weekend if a Tier 2 Day coincides with a Speedway event on Good Friday, Easter Saturday or Easter Monday.
 - b. If a Tier 2 day and a Speedway event coincide on Easter Sunday, then:
 i. The Tier 2 Day shall not commence until 10am; and
 ii. One of Good Friday or Easter Monday must be a Tier 1 Day.
 - c. It shall not be a breach of this condition where the consent holder:
 - has scheduled its Tier 2 Days in good faith to avoid coinciding with a Speedway event; and
 - when a misunderstanding or change of schedule by the adjoining Speedway causes events to be held on the same calendar day.

This exclusion shall not be relied on to permit Tier 2 Days and Speedway events to coincide on more than two (2) days over Easter Weekend.

<u>Advice Note</u>: This condition does not apply where only Tier 1 activities are occurring.

- (a) Other than in accordance with Condition 53 no Tier 2 Activity shall take place on any calendar day on which a motor racing event is held at the neighbouring Speedway track;
 - (b) It shall not be a breach of this consent where in good faith the Consent Holder has scheduled its events not to coincide with the neighbouring Speedway track when a misunderstanding or change of schedule by the adjoining Speedway causes events to be held on the same calendar day;
 - (c) Clause (a) does not apply on days which become Tier 2 Days due to the operation of Condition 40.
- 55. Multi Day Tier 2 Events shall not exceed four days in duration and there may be no more than three Multi Day Tier 2 Events of three or four days' duration in any Year.

- Multi-day Tier 2 Events provided for under condition 55 above may not occur in consecutive weeks. A week shall be Monday to Sunday.
- There must be at least 5 days between a Multi-day Tier 2 Event or Activity and another Tier 2 Day.
- 58. When a Multi-day Tier 2 Event or Activity includes one or more weekend days, at least one day of the following weekend shall be limited to Tier 1 activities and Offtrack activities only.
- 59. The consent holder shall notify any Multi Day Tier 2 Event or Activity, including whether any special interest vehicles are to be run during the relevant event, in the following ways:
 - on the Event Calendar available on the HMSP website no less than 1 month prior to the first Tier 2 Event of the Year, and
 - b. in the Central Otago News (or other free local paper with a similar circulation area) no less than 1 month prior to the first Tier 2 Event of the Year.
- All other Tier 2 Days shall be notified no less than one month prior to the event where possible.
- If a Tier 2 Day is scheduled less than one month in advance the event shall as soon as practicable be:
 - (a) included on the Event Calendar on the HMSP website and be subject to a notice in a local paper (consistent with Conditions 59 a. & b.); and
 - (b) advised by email to nearby residents if they have made their email addresses available to the consent holder for this purpose.

A Tier 2 Day notified under this Condition may not occur more than twice in any Year.

- 62. Where a Tier 1 Day becomes a Tier 2 Day due to the operation of Condition 40 the notification requirements under Condition 61 shall not apply.
- 63. The sound level from the amplified public address system shall be kept at less than 55 dB LAeq at any point within the notional boundary of any dwelling identified on the plan "Aerial Overview Highlands Motorsport Park, Cromwell" S14631, Drawing 01, Revision C dated 16 October 2015.
- 64. The consent holder will prepare an Event Management Plan which shall address the following:
 - Matters relating to the notification of affected neighbouring property owners prior to the running of Tier 2 events, such as email notification of those neighbours who request it;
 - b. Fire risk management procedures;
 - c. Communication and management protocols in relation to the potential for conflict with services at the Cromwell Cemetery including the liaison process required to give effect to condition 49 above.

- The process for receiving, addressing and recording complaints associated with events at the HMSP;
- Other management measures to reduce off-site adverse effects of hosting events; and
- f. Helicopter landing areas.
- 65. The Event Management Plan shall be reviewed annually and shall be provided to the Chief Executive for certification as complying with the requirements of Condition 64 no later than 14 July in any year.

Advice Note: The noise limits in this consent shall not apply to helicopters in flight.

Complaints Log

66. The consent holder shall maintain a log of all complaints made by members of the public with respect to noise associated with activity conducted at the site, and shall make such log available to the Chief Executive on request.

Services 5 8 1

- Water supply shall be metered and shall have an appropriate, serviceable, backflow prevention device fitted.
- Trade waste disposal shall be in accordance with the Council's Bylaw a copy of which can be obtained by contacting the Assets and Contracts Department of the Council.
- All stormwater shall be disposed of within the confines of the site or to other outlets approved by the Chief Executive.

Traffic and Parking

- Accesses into the site from Council roads shall be constructed in accordance with Figure 12.3 and Table 12.1 of the Central Otago Operative District Plan.
- 71. The consent holder shall prepare an Event Traffic Management Plan in consultation with the Roading Manager of the Central Otago District Council and the New Zealand Transport Agency one month prior to any Major Race Event being held within the HMSP. For the purposes of this condition, a Major Race Event is defined as any Tier 2 event exceeding 2 days in duration. The Event Traffic Management Plan shall address the following matters:
 - a. Traffic control measures for event traffic;
 - b. Alternative transport options for patrons of the event; and
 - c. Event parking.

- A Traffic Management Plan shall be prepared in consultation with the above agencies for all other events and day-to-day operations prior to the commencement of this consent.
- 73. All parking shall be onsite except during Tier 2 Events when overflow parking is required. When overflow parking is required it is limited to the overflow parking areas identified on the plan "Aerial Overview Highlands Motorsport Park, Cromwell" S14631, Drawing 01, Revision C dated 16 October 2015.
- No less than 64 carparks shall be available in the parking area adjacent to the museum building.
- Rules 12.7.2 Parking, 12.7.3 Loading and Manoeuvring and Table 12.3 Vehicle Parking Requirements of the Central Otago Operative District Plan shall be complied with.

Landscaping

- 76. Landscaping and planting established in accordance with the Landscape Plan Titled "Landscaping Plan May 2012" submitted pursuant to RC070149 shall be maintained in perpetuity. Any plants that die or are removed by natural processes shall be replaced within the next growing season.
- Any future landscaping shall provide for a no build buffer area 25 metres in width adjacent to the Cromwell Chafer Beetle Reserve.
- All external boundary fencing shall be finished in natural tones (not galvanised metal) and shall have a maximum height of 2 metres.

<u>Signs</u>

- 79. The sculpture platform permitted on The Nose site:
 - has maximum dimensions of 7.5m x 7.5m (56.25m²);
 - (b) any sculpture placed on the platform shall comply with the following:
 - i. be associated with motorsport or motor vehicle themes;
 - ii. be static with no moving parts or lights;
 - iii. not be lit by external lights during hours of darkness;
 - iv. not have any electronic components;
 - v. not consist of highly reflective components;
 - vi. be limited to one sculpture at any one time;
 - vii. have a maximum height of 4 m.
- 80. Billboard 1 facing State Highway 6/Cemetery Road shall comply with the following:
 - (a) it shall not exceed 36m² (3 m high x 12 m wide);
 - (b) it shall be set back no less than 25 m from State Highway 6;
 - (c) colours of this sign will be predominantly Highlands orange, yellow and black;
 - (d) lettering on the billboard shall be no less than 150mm high;
 - (e) it may include an Arrow and 'Entry' or 'Entrance' to direct travellers.
- Billboard 2 facing Sandflat Road shall comply with the following:
 - (a) it shall not exceed 6m² (2 m high x 3 m wide);
 - (b) colours of this sign will be predominantly Highlands orange, yellow and black;

- (c) lettering on the billboard shall be no less than 150mm high;
- (d) it shall be located within the site immediately south of the vehicle access to The Nose on Sandflat Road.
- 82. The finger board entry sign may be located in the Sandflat Road road reserve provided such finger board sign is approved by the Roading Manager of the Central Otago District Council.
- Any other sign in Zone 1 as identified on the "Proposed Zoning Map Highlands Motorsport Park, Cromwell" S14361, Drawing 03, Revision C dated 27 May 2015 must not exceed 3m² in area.
- Any sign installed under Conditions 80, 81 or 82 must comply with NZTA Traffic Control Devices Part 3 'Advertising Signs' Guidelines.
- 85. The existing sign installed at the entry of HMSP on Sandflat Road shall be removed prior to the installation of Billboard 2 and the finger board entry sign provided for under Conditions 81 and 82 above.
- Any sign may be illuminated, but shall not have any flashing lights. Any illumination shall comply with Rule 12.7.6 of the Central Otago Operative District Plan.

Lighting

 Any illumination within the site shall comply with Rule 12.7.6 of the Central Otago Operative District Plan.

<u>Storage and Hazardous</u> <u>Substances</u>

- The Hazardous Substances and New Organisms Act 1996 and any relevant Regulations and Gazetted controls shall be complied with at all times.
- Any discharge of a hazardous substance shall be immediately reported to the Otago Regional Council. Hazardous substances include but are not limited to diesel, petrol, flammable liquids and solids.

Earthworks

- Any topsoil present shall be removed and stockpiled separate from overburden such that topsoil is not lost to wind blow or run off.
- The consent holder shall be responsible for minimising the generation of dust by regularly spraying water over any disturbed areas.
- The consent holder shall at all times adopt the best practicable method to mitigate any adverse dust effects.

Cultural Heritage Values

 If kõiwi (human skeletal remains), waahi taoko (resource or object of importance including greenstone/pounamu), waahi tapu (place or feature of special significance) 61

or other artefact materials are discovered work shall stop, allowing for a site inspection by the appropriate Runaka and their advisors and the Heritage New Zealand Regional Archaeologist. In the case of koiwi, the New Zealand Police must also be advised. These people will determine if the discovery is likely to be extensive and whether a thorough site investigation will be required. Materials discovered should be handled and removed by takata whenua who possess knowledge of tikanga (protocol) appropriate to their removal or preservation and an appointed qualified archaeologist.

1. The consent holder shall be responsible for obtaining any necessary Notes: archaeological authority which is required in terms of the Heritage New Zealand Pouhere Taonga Act 2014. 2. All Maori archaeological sites are protected under the Heritage New Zealand Pouhere Taonga Act 2014.

Transpower Lines

- 94. The consent holder must ensure that the discharge of dust and/or particulate matter from the activities authorised by the consent do not create any dust hazard or nuisance to any National Grid transmission line or support structure.
- All land use activities on site shall comply with the New Zealand Electrical Code of 95. Practice for Electrical Safe Distances (NZECP34:2001) or any subsequent revision of the code.

Power and Telephone Services

96. All power and telephone lines within the site shall be located underground.

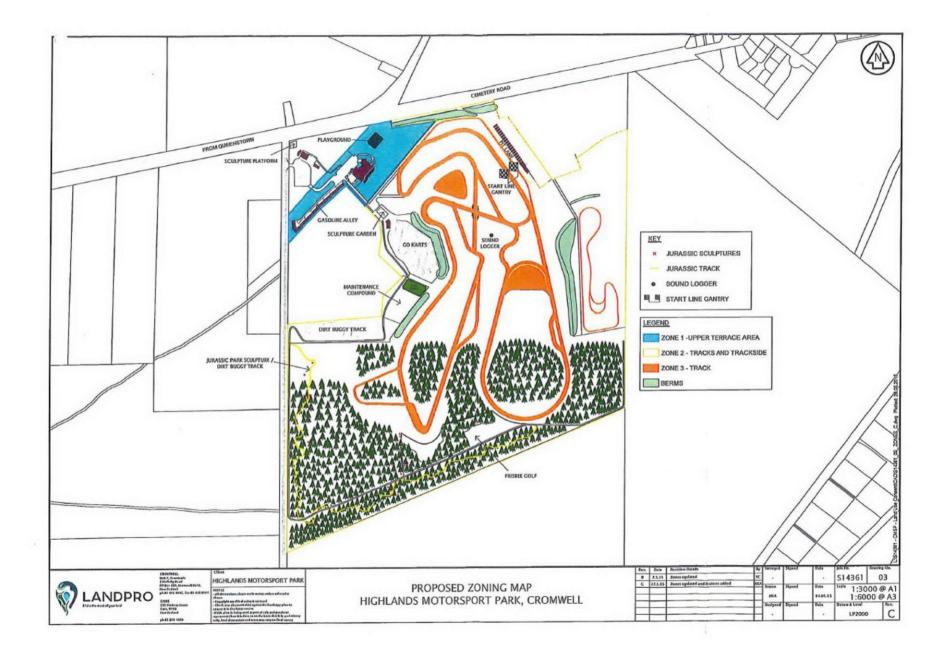
Chafer Beetle Reserve

A rabbit proof fence shall be erected and maintained along the eastern boundary of the 97. area to be utilised for the proposed facility.

Review and monitoring

- 98. The consent holder shall provide the following information to the Chief Executive no later than 14 July each year:
 - A copy of the Noise Management Plan including any amendments made 8 following the annual review of that plan required in accordance with Condition 48:
 - b. A copy of the Event Management Plan including any amendments made following the annual review of that plan required in accordance with Condition 65:
 - A copy of the log of Tier 2 days held in the preceding year as required under с. Condition 44; and
 - d. A copy of the log of helicopter movements to the site in the preceding year as required under Condition 29.
- 99 In accordance with section 128 of the Resource Management Act 1991, the conditions of this consent may be reviewed on and in the period within six (6) months upon

- a. There is or is likely to be an adverse environmental effect as a result of the exercise of this consent which was unforeseen when the consent was granted.
- b. Monitoring of the exercise of the consent has revealed there is, or is likely to be a significant adverse effect on the environment.
- c. There has been a change in circumstances such that the conditions of consent are no longer appropriate in terms of the purpose of the Act.
- 100. Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent shall be at the consent holder's expense.
- 101. The consent holder shall pay to the Council all required administration charges fixed by the Council pursuant to section 36 of the Act in relation to:
 - a. Administration, monitoring and inspection relating to this consent; and
 - b. Charges authorised by regulations.







APPENDIX C COMPLIANCE LOCATIONS

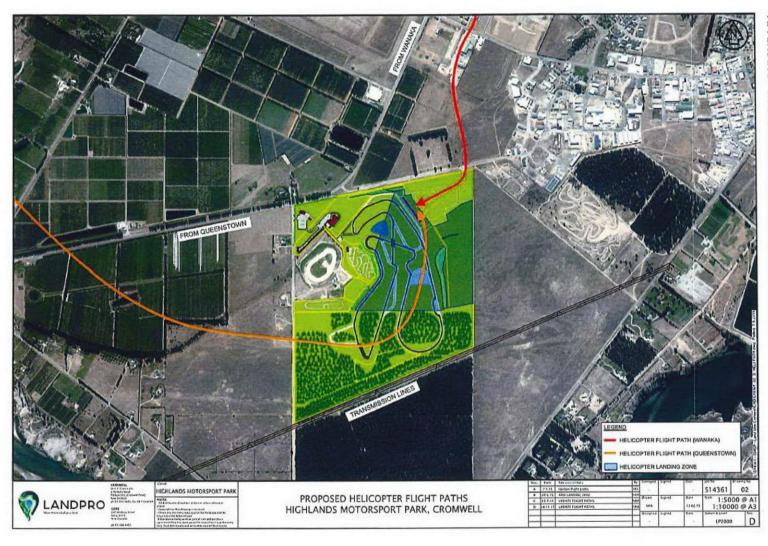


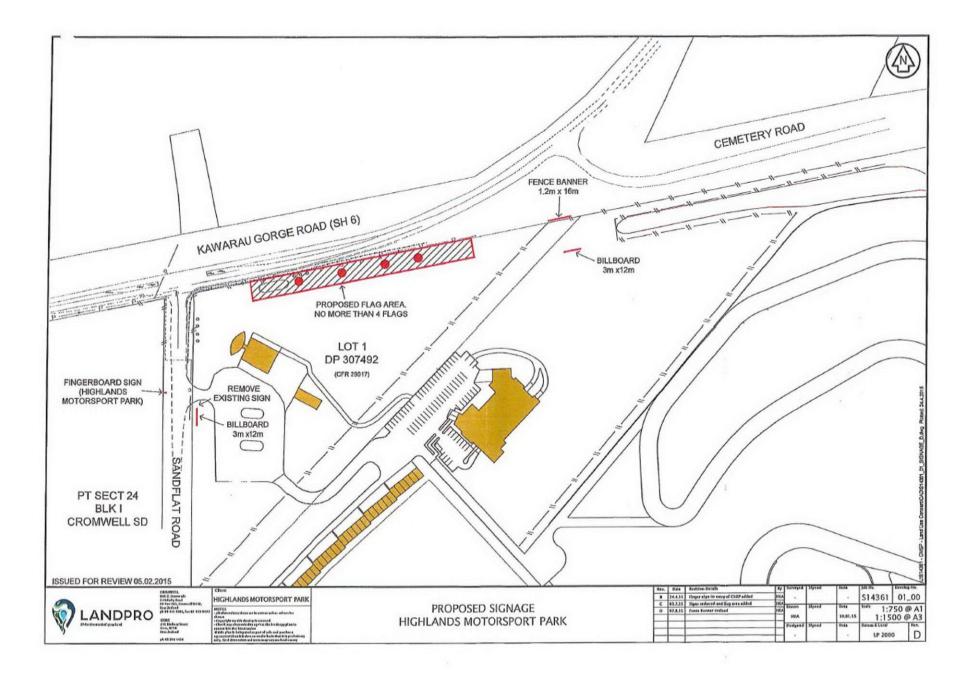


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APPENDIX D HELICOPTER FLIGHT PATH AND LANDING AREA





Appendix C

Springs 210

THAT THE APPLICATL OF ROMALD JAMES SPRIGGS FOR FLANNI CONSENT TO CONSTRUCT A SPEEDMAY AND STOCK CAR TRACK AND ANCILLARY BUILDINGS ON APPROXIMATELY 12 HECTARES OF THE LAND DESCRIBED AS S.D. 3813 PART 17 CROMMELL TOWN ENDOWMENT (PART SECTION 17 BLOCK I CROMMELL SURVEY DISTRICT) LOCATED AT THE INTERSECTION OF SANDFLAT ROAD AND STATE HIGHWAY 8, BE DEALT WITH AS AN APPLICATION FOR CONDITIONAL USE PURSUANT TO SECTION 72 OF THE TOWN AND COUNTRY PLANNING ACT 1977 AND THAT THE APPLICATION BE GRANTED; THE REASONS FOR SUCH DECISION BEING THAT -

- (a) THE PROPOSED USES CAN BE DEEMED TO FALL WITHIN THE CATEGORIES OF CONDITIONAL USES SET OUT IN CLAUSE 2.2.2 (x) AND (xiv) OF THE CODE OF ORDINANCES OF THE . DISTRICT SCHEME;
- (b) THE APPLICATION IS NOT IN CONFLICT WITH MATTERS OF NATIONAL IMPORTANCE AS SET OUT IN SECTION 3 OF THE ACT;
- (c). THE SITE IS SUITABLE FOR THE PROPOSED USES DETERMINED BY REFERENCE TO THE PROVISIONS OF THE OPERATIVE DISTRICT SCHEME, AND
- (d) ANY POSSIBLE ADVERSE EFFECTS OF THE PROPOSED USES CAN BE ADEQUATELY CONTROLLED BY THE MEANS OF APPROPRIATE CONDITIONS :
- AND FURTHER THAT SUCH CONSENT BE GRANTED SUBJECT TO THE FOLLOWING CONDITIONS :-
- THE APPLICANT MAY CONSTRUCT A SPEEDMAY AND STOCK CAR TRACK AND ANCILLARY BUILDINGS ACCORDING TO THE PLANS AND DESCRIPTIONS CONSIDERED AT THE HEARING OF THE APPLICATION:
- (2) ALL ACCESSORY BUILDINGS SHALL BE DESIGNED, SITED, CONSTRUCTED AND FINISHED TO THE COUNCIL'S APPROVAL AND SATISFACTION:
- (3) BEFORE CONSTRUCTION COMMENCES THE APPLICANT SHALL SUPPLY THE VINCENT COUNTY COUNCIL WITH AN ACCURATE PLAN SHOWING THE BOUNDARIES AND DIMENSIONS OF THE LAND TO BE LEASED FROM THE CRONWELL BOROUGH COUNCIL:
- (4) THERE SHALL BE NOT NORE THAN TWO POINTS OF VEHICULAR ENTRY TO AND EGRESS PROM THE SITE, TO BE LOCATED ON SANDFLAT BOAD TO THE SATISFACTION OF THE COUNCIL AND TO PROVIDE THE GREATEST POSSIBLE DISTANCE BETWEEN THE MORE NORTHERLY ENTRY AND EGRESS POINT AND THE JUNCTION WITH STATE HIGHMAY 6 AS IS CONSISTENT WITH THE PLAN OF OPERATION AS DESCRIBED AT THE HEARING OF THE APPLICATION:
- (5) AN ADEQUATE FENCE SHALL BE MAINTAINED ALONG THE RDAD FRONTAGES OF THE SITE EXCEPT FOR THE ACCESS POINTS DESCRIBED IN CONDITION (4) HEREOF:
- (6) TO PREVENT TRAFFIC CONGESTION ON PUBLIC ROADS, ADMISSION FEES TO ALL EVENTS CONDUCTED ON THE PROPERTY SHALL BE COLLECTED ONLY AFTER SPECTATORS' VEHICLES HAVE BEEN PARKED ON THE PROPERTY:
- (7) THERE SHALL BE NOT NORE THAN ONE SIGNBOARD ON THE PROPERTY, LOGATED AS NEAR AS PRACTICABLE TO THE JUNCTION OF SANDFLAT ROAD AND STATE HIGHWAY 6, PROVIDED -
 - (a) THAT THE SIGNBOARD INDICATE ONLY THE NAME OF THE PROPERTY AND THE NATURE AND DATE OF THE NEXT NEETING ON THE PROPERTY;
 - (b) THAT NO PART OF SUCH SIGNBOARD SHALL BE MORE THAN 5m ABOVE GROUND LEVEL;
 - (c) THAT THE DIMENSIONS OF THE SIGN SHALL NOT EXCEED 4m² IN AREA, AND
 - (d) THAT THE SIGN SHALL NOT BE ILLUMINATED OR REPLECTORISED:
- (8) THE SITE SHALL BE KEPT IN A TIDY CONDITION AT ALL TIMES TO THE ENTIRE SATISFACTION OF THE COUNCIL:
- (9) THE CONSTRUCTION AND MAINTEMANCE OF SAFETY WALLS, FENCES AND BARRIERS: THE ENISSION OF MOISE, AND GENERAL CONDUCT OF ACTIVITIES ON THE PROPERTY SHALL AT ALL TIMES CONFORM TO STANDARDS SET BY THE NEW ZEALAND SPEEDWAY ASSOCIATION AND THE STOCK CAR ASSOCIATION:
- (10) MATER SUPPLY, DISPOSAL OF STORMMATER DRAINAGE AND SEMAGE, AND THE COLLECTION AND DISPOSAL OF LITTER SHALL BE CARRIED OUT TO THE SATISFACTION OF THE COUNCIL'S HEALTH INSPECTOR:
- -(11) "SHOULD ELECTRICITY OR TELEPHONE SERVICES BE REQUIRED ON THE PROPERTY, ALL RETICULATION SHALL BE CARRIED OUT WITHIN THE PROPERTY BY UNDERGROUND WIRING FROM THE NEAREST SUITABLE POINT OF SUPPLY."

Certified to be a correct copy of the decision of the Vincent County Council in the above matter:

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ANR.	
L.Chandler,	
CLERK.	1.0

andler, CLERK. 29 September, 1980.

PLANNING APPLICATION - R.J. SPRIGGS:

The County Clerk reported on an approach made by the Otago Central Electric Power Board, relative to difficulties envisaged in providing a full underground power. supply to the speedway complex to be established on the Cromwell Flats by R.J. Spriggs. This development was subject to a notified planning application, consent for which was issued by the Council on 25th September, 1980, and included the usual condition pertaining to the installation of underground wiring of electricity and telephone services.

Councillor Felton reported that he had inspected the property in the company of an officer of the Power Board to assess the situation. In view of the difficulties and excessive cost of providing full underground reticulation, it was , suggested that the Council might consider waiving the subject condition and allow the necessary reticulation to be provided by means of a temporary overhead power line.

RESOLVED, "THAT IT BE AGREED THAT CONDITION (11) OF THE PLANNING APPROVAL GRANIEL TO R.J. SPRIGGS BE WAIVED AND THAT THE INSTALLATION OF A TEMPORARY OVERHEAD POVEF LINE ON THE SUBJECT PROPERTY BE PERMITTED, SUCH ARRANGEMENT TO BE REVIEWED BY THE COUNCIL ON THE EXPIRATION OF A FIVE-YEAR PERIOD."