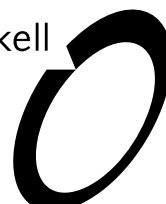


7 April 2020

Sam Kealey  
Waimakariri District Council

By email: samantha.kealey@wmk.govt.nz

Boffa Miskell



Dear Sam

**REQUEST FOR FURTHER INFORMATION #2 - PRIVATE PLAN CHANGE 29 -  
SUMMERSET VILLAGES (RANGIORA) LIMITED, 141 SOUTH BELT, RANGIORA**

Thank you for your letter dated 18 March 2020 seeking further additional information and clarification in relation to the private plan change request by Summerset Villages (Rangiora) Ltd.

We set out below in tabular form, a set of responses to each of the points you raised in your letter:

ISSUE RAISED IN RFI	RESPONSE / QUERIES
1. Please clarify if the Section 32 assessment determines that a Retirement Village is not dwellinghouses and is to be considered a 'facility'? It should be noted in the current District Plan a definition for facility does not exist.	<p>The plan change proposes that there be a new definition introduced into the District Plan of "<b>retirement village</b>" (see pages 3, 6, 8, 20 and 33, and Appendix 3 of the application documents).</p> <p>This definition reads "<i>means a managed comprehensive residential complex or facilities used to provide residential accommodation for people who are retired and any spouses or partners of such people. It may also include any of the following for residents within the complex: recreation, leisure, supported residential care, welfare and medical facilities (inclusive of hospital care) and other non-residential activities</i>".</p> <p>This definition is mandatory and is to be applied to all retirement villages across the country through the operative National Planning Standards and thus the definition must be applied in this District Plan to this activity. Please also refer to the assessment regarding this matter on page 20 of the application documents.</p> <p>It is not necessary that the definition of 'dwelling house' be used in any way to apply to retirement villages, as that is no longer relevant to retirement villages with the introduction of the mandatory national definition. A retirement village is made up of a range of connected</p>

	<p>activities to be considered as a whole and not split into component parts. While retirement villages include residential accommodation, this is not all in the form of traditional dwelling houses and thus that definition in the District Plan should not apply when considering the retirement village as an activity. Some of the independent units in a retirement village could be considered the equivalent of a dwelling house but many are not as they are not self-contained, and regardless of this they are all part of a wider complex.</p> <p>To be clear, it is <u>not</u> proposed that any definition of 'facility' be applied.</p>
<p>2. Page 20 and 22 of the Civil Engineering Assessment has provided peak flows and estimate demands on the water and wastewater capacity which has stated numbers in relation to villas, assisted living suites, memory care apartments, hospital beds, maintenance shed and bowling green and maximum occupancy of 700 persons. How is it determined feasible to provide for a retirement village over and above the numbers listed in regards to water demand and wastewater capacity with a controlled activity status?</p>	<p>The controlled activity rule is only intended to relate to design and appearance matters and is not intended to cover the adequacy of servicing or the method in which servicing connections are made.</p> <p>The reference to "<i>connection of the development to all necessary services</i>" is not necessary within this rule as this does not relate to a design matter and can be removed (refer to amended Plan Change text attached).</p> <p>The potential development of the land for a retirement village is able to be serviced for water and wastewater. The Civil Engineering assessment has covered two possible scenarios for the development of the site – full residential development or full retirement village. The assessed hypothetical 700 person occupancy is the maximum hypothetical population of the site under the proposed zoning on a site of this size and so represents the maximum hypothetical servicing capacity that could be required and therefore there would not be a greater demand than this.</p> <p>However, to provide further reassurance on these matters please refer to the attachments which contain:</p> <ul style="list-style-type: none"> <li>- An updated wastewater reticulation assessment to include the existing wastewater network capacity, and</li> <li>- A copy of correspondence received from WDC in July 2019 regarding the water supply network capacity. In the attached email from Chris Bacon/Harriette Davies (31/07/2019), WDC analysed their network capacity in the area and found that a demand of 22.2 l/s only reduce the network pressure at peak times to approximately</li> </ul>

	<p>480kPa. This demand is below the Summerset water supply peak demands of 19.5 l/s as calculated in the assessment dated 15/10/2019. WDC also indicated that there were no issues with fire fighting flow of 25 l/s.</p> <p>A plan change is only required to show that matters such as servicing <u>can</u> be achieved, with the details of <u>how</u> this can be achieved to be dealt with at the time of future development design and consenting.</p> <p>There is no necessity for the plan change to require servicing of a retirement village as there are other provisions within the district plan that achieve connection to services e.g. subdivision rules 32.1.1.50 and 32.1.1.54. In addition, the building consent process will require servicing to be achieved and design and connections agreed with the Council.</p> <p>Additionally, it is noted that no other residential activity is subject to a rule requiring confirmation of capacity of servicing. The closest rule to this for dwelling houses (rule 31.1.1.6) simply links to the subdivision rules and requires that services be available at the boundary.</p>
<p>3. Please confirm discussions of capacity with power companies in order to ensure that there is network capacity. Page 25 of the Civil Engineering Assessment states the <i>“anticipated number of allotments that would be created on the site is approximately 140”</i>. Please confirm that the network has capacity over and above <i>“approximately 140 lots”</i> as the plan change proposal does not specify how many lots are to be created.</p>	<p>The confirmation from MainPower provided as part of the Civil Engineering report is sufficient to show that they have capacity to service a hypothetical development of around 140 residential allotments on this land. This would be the capacity if the site were developed for normal residential dwellings. This confirmation is sufficient to show that the servicing can be provided for whatever scenario may occur on the land once rezoned.</p> <p>Any more specific demand and supply analysis would require a site design to be undertaken which has not been done at this time. Summerset will be seeking a further update from MainPower in relation to current capacity for various design options and will provide this to Council in due course. It is however considered that there is sufficient certainty on this matter that the plan change should not be held up.</p>
<p>4. The response to the initial further information request stated that any future application for a retirement village will meet parking requirements of the District Plan. Please provide clarification of what activity in table 30.8 of the District Plan will apply. The reason for this clarification to be provided is for any</p>	<p>It is not relevant or necessary to determine in advance what parking provisions may apply to the future development of the land. The plan change allows for residential or retirement village use, and no determination of the exact nature of any future development has been made at this time.</p>

submitters to make informed submissions.	<p>Even if a retirement village is developed on the land in the future, there could be different parking provisions that apply through the upcoming district plan review and those are unknown at this time.</p> <p>As stated in the documentation, any future development of the site, for a retirement village or otherwise, will comply with the relevant parking provisions or will need to seek a resource consent if it cannot comply.</p>
5. Please provide the evidence of consultation as described in section 8.3 of the application. In particular the evidence that Mahaanui recommended the proceeding of the plan change and had no specific concerns.	<p>The original hui arranged with Tūāhuriri rūnanga and Mahaanui Kurataiao Ltd was cancelled on the morning of the hui via a phone message. As part of that message from Jason Eden at Mahaanui Kurataiao Ltd he stated that there was no intent to hold up the plan change process and it should continue despite the hui not being held.</p> <p>Further correspondence post lodging is attached to this letter and shows additional efforts to liaise with rūnanga and the reassurance that they do not want to engage at this time and that it is not likely that a submission would be made by rūnanga.</p>
6. The rule 31.1.1.37 is for comprehensive residential developments and the proposed addition of c. raises the question is it proposed a retirement village be treated as a comprehensive residential development? A comprehensive residential development would then treat each unit as a dwellinghouse and further assessment required under objectives and policies. Please clarify and amend the application accordingly.	<p>It was not intentional to cause any confusion over the addition to this rule and it is certainly not intended that the retirement village be treated as a comprehensive residential development.</p> <p>The proposed addition to rule 31.1.1.37 was simply intended to clarify that there is no necessity for individual residential unit within a retirement village to have an individual outdoor living or service space, and to confirm that a communal rubbish/recycling space is required to be provided on the site to meet the needs of the site as a whole.</p> <p>To remove this confusion the revised plan change text attached removes this clause from rule 31.1.1.37 and introduces this as a separate subsequent rule (refer to amended Plan Change text attached).</p>
7. Please provide clarification as to why the retirement village units will not be considered as dwellinghouses.	See answer to query 1 above.

We hope that this information satisfactorily explains the areas of the application which were unclear to you and the Council team.

Can you please advise the process and timing for dealing with the plan change going forward, especially in the light of the uncertainty over processes during the response to COVID-19.

Yours sincerely

**BOFFA MISKELL LTD**

A handwritten signature in black ink, appearing to read 'S. Styles', with a stylized flourish at the end.

Stephanie Styles

Planner / Senior Principal

Attachments: Amended Plan Change Text (replacement Appendix 3)  
Copy of correspondence with Mahaanui Kurataiao Ltd on behalf of Tūāhuriri  
rūnanga  
Correspondence regarding water supply  
Updated wastewater reticulation assessment

# Revised as at 3 March 2020 and 25 March 2020

## Appendix 1: Proposed Changes to the Waimakariri District Plan

### Chapter 1. Definitions

#### Retirement Village (from NPS)

means a managed comprehensive residential complex or facilities used to provide residential accommodation for people who are retired and any spouses or partners of such people. It may also include any of the following for residents within the complex: recreation, leisure, supported residential care, welfare and medical facilities (inclusive of hospital care) and other non-residential activities.

### Chapter 17. Residential Zones

#### Objectives and Policy

**Table 17.1: Residential Zone Characteristics – Residential 1 and 2**

Residential 1	Residential 2
<ul style="list-style-type: none"> <li>— Predominant activity is living;</li> <li>— facilities include schools, limited commercial activities, reserves, churches, and service related businesses;</li> <li>— highest density of dwellings for the District's Residential Zones;</li> </ul>	<ul style="list-style-type: none"> <li>— Predominant activity is living;</li> <li>— predominantly detached dwellings;</li> <li>— facilities include schools, local shops, churches, places of assembly, reserves and retirement villages;</li> <li>— lower density of dwellings than for Residential 1;</li> </ul>
<ul style="list-style-type: none"> <li>— flats and townhouse developments are more common than Residential 2;</li> <li>— minimum lot size 300 square metres, and maximum site coverage 50%;</li> <li>— streetscapes enhanced by mature trees and other plants;</li> <li>— hard surfaces visually dominant;</li> <li>— full urban services; and</li> <li>— footpaths on both sides of the street</li> </ul>	<ul style="list-style-type: none"> <li>— lot sizes minimum 600 square metres and maximum site coverage 35%;</li> <li>— open, spacious streetscape, with hard surfaces visually dominant;</li> <li>— low traffic speeds;</li> <li>— fewer traffic movements on many streets than in Residential 1;</li> <li>— limited advertising;</li> <li>— full urban services; and</li> <li>— trees and plants enhance streetscapes</li> </ul>

### Chapter 30. Utilities and Traffic Management – Rules

#### Traffic Management

##### 30.6 Permitted Activities

##### 30.6.2 Exemptions

30.6.2.7 The intersections of roads within the South West Rangiora Outline Development Plan area shown on District Plan Map 173, and within the South Belt Outline Development Plan area shown on District Plan Map 184 are exempt from complying with Rule 30.6.1.32.

## **Chapter 31. Health, Safety and Wellbeing – Rules**

### **Buildings and Structures**

#### **31.1 Permitted Activities**

##### **Structure Coverage**

31.1.1.10 The structure coverage of the net area of any site shall not exceed:

- a. 50% in Residential 1 Zones;
- b. 35% in Residential 2, 3, 5 and 6 Zones;
- ...
- m. 35% for any retirement village in the Residential 2 zone (subject to the South Belt Outline Development Plan as shown on District Plan Map 184) as an average across the site, however within Height Area B up to 50% of that area may be covered by structures.

##### **Structure Height**

31.1.1.24 Any structure in a Residential 1, 2, 3, 6 or 7 Zone (Areas B and C) shall not exceed a height of 8m except within the View Protection Area identified in Maori Reserve 873 shown on District Plan Map 176B, where any structure shall not exceed a height of 5 metres, and

except within the areas identified as Height Area A and Height Area B on the South Belt Outline Development Plan as shown on District Plan Map 184, where only for a retirement village structure:

- a Within Height Area A no structure shall exceed a height of 14 metres, and
- b Within Height Area B no structure shall exceed a height of 10.5 metres.

##### **Outdoor Living Space and Service Areas**

31.1.1.36 Each dwellinghouse in the: ...

31.1.1.37 Comprehensive residential developments shall be provided with:

- a. a continuous private ground level outdoor living space per dwellinghouse that:
  - i. contains a 4 x 4m square;
  - ii. has a minimum dimension of 3m;
  - iii. is not occupied by any building, driveway, manoeuvring or parking area; and
  - iv. has direct sunlight available throughout the year.
- b. a minimum of 5m<sup>2</sup> of outdoor service area per dwellinghouse to provide for rubbish and recycling storage for each dwellinghouse that:
  - i. has a minimum dimension of 1.5m; and
  - ii. is screened or located behind buildings when viewed from any road or public open space.

Non-compliance with Rule 31.1.1.37 will not require an application to be notified or served on affected persons, unless required through non-compliance with other plan conditions.

31.1.1.38 Within a Retirement Village in the Residential 2 zone subject to South Belt Outline Development Plan as shown on District Plan Map 184, there shall be communal rubbish/recycling space/s

provided for use of residents within the site and no specified private outdoor living spaces or service spaces are required.

31.1.1.53 Within the Residential 2 Zone subject to South Belt Outline Development Plan as shown on District Plan Map 184 all fencing between the residential property and reserve land or road reserve shall have a maximum height of 1.8m and a minimum visual permeability/openness of 45%.

## **31.2 Controlled Activities**

31.2.2 A retirement village, in the Residential 2 zone subject to South Belt Outline Development Plan as shown on District Plan Map 184, that meets all applicable conditions for permitted activities under Rule 31.1 shall be a controlled activity.

In considering any application for resource consent under Rule 31.2.2, the Council shall in granting consent and in deciding whether to impose conditions, exercise control over the following matters:

Whether the development, while bringing change to existing environments, is appropriate to its context, taking into account:

- whether the proposal would cause significant loss of sunlight, daylight or privacy on adjoining residential properties.
- the ability of the proposal to provide engagement with, and contribution to, adjacent streets and public open spaces, with regard to:
  - fencing and boundary treatments;
  - connectivity, including the configuration of pedestrian accesses.
- the mitigation measures proposed, including landscape planting, to mitigate any adverse effects of loss of trees from the site or openness of the site, and to assist the integration of the proposed development within the site and neighbourhood.
- the location and design of vehicle and pedestrian access and on-site manoeuvring to cater for the safety of elderly, disabled or mobility-impaired persons.
- integration of internal accessways, parking areas and garages in a way that is safe for pedestrians and cyclists, and that does not visually dominate when viewed from the street or other public spaces.
- the degree to which the village design demonstrates that the design has had particular regard to personal safety of the occupants, both in the sense of injury prevention and crime prevention.
- creation of visual quality and variety through the separation of buildings, building orientation, and in the use of architectural design, detailing, glazing, materials, colour and landscaping.
- where practicable, incorporation of environmental efficiency measures in the design, including passive solar design principles that provide for adequate levels of internal natural light and ventilation.
- the proposed stormwater management within the site and connection of the development to all necessary services.
- the appropriate provision of esplanade reserve land.

## **31.3 Discretionary Activities (Restricted)**

31.3.8 A retirement village, in the Residential 2 zone subject to South Belt Outline Development Plan as shown on District Plan Map 184, that does not meet any one or more of the applicable conditions for permitted activities under Rule 31.1.

In considering any application for a resource consent under Rule 31.3.8 the Council shall, in deciding whether to grant or refuse consent, and in deciding whether to impose conditions, restrict the exercise of discretion to the following matters:

Whether the development, while bringing change to existing environments, is appropriate to its context, taking into account:

- whether the proposal would cause significant loss of sunlight, daylight or privacy on adjoining residential properties.



- the ability of the proposal to provide engagement with, and contribution to, adjacent streets and public open spaces, with regard to:
  - fencing and boundary treatments;
  - connectivity, including the configuration of pedestrian accesses.
- the mitigation measures proposed, including landscape planting, to mitigate any adverse effects of loss of trees from the site or openness of the site, and to assist the integration of the proposed development within the site and neighbourhood.
- the location and design of vehicle and pedestrian access and on-site manoeuvring to cater for the safety of elderly, disabled or mobility-impaired persons.
- integration of internal accessways, parking areas and garages in a way that is safe for pedestrians and cyclists, and that does not visually dominate when viewed from the street or other public spaces.
- the degree to which the village design demonstrates that the design has had particular regard to personal safety of the occupants, both in the sense of injury prevention and crime prevention.
- creation of visual quality and variety through the separation of buildings, building orientation, and in the use of architectural design, detailing, glazing, materials, colour and landscaping.
- where practicable, incorporation of environmental efficiency measures in the design, including passive solar design principles that provide for adequate levels of internal natural light and ventilation.
- the proposed stormwater management within the site and connection of the development to all necessary services.
- the appropriate provision of esplanade reserve land.

## **Chapter 32. Subdivision – Rules**

### **32.1.1 Standards and Terms**

#### **Allotment Areas and Dimensions**

32.1.1.1 All allotments shall comply with Table 32.1.

**Table 32.1: Minimum Allotment Areas and Dimensions**

Zone	Minimum Allotment Area	Minimum Dimensions of Allotment (m)	
		Internal Square	Frontage
Residential 2 (excluding Comprehensive Residential Development and a retirement village in the Residential 2 zone subject to South Belt Outline Development Plan as shown on District Plan Map 184)	600m <sup>2</sup>	18 x 18	15
	NOTE: See Rules 32.1.1.4, 32.1.1.8, 32.1.1.9 and 32.1.1.10		

32.1.1.28 Subdivision within the following areas shall generally comply with the Outline Development Plan for that area.

...

ak) The Residential 2 Zone on South Belt, subject to South Belt Outline Development Plan as shown on District Plan Map 184.

#### **Finished Section Levels**

32.1.1.91 Within the South Belt Outline Development Plan area as shown on District Plan Map 184 any application for subdivision consent shall identify the minimum finished floor level required to achieve 400mm above a 0.5% Annual Exceedance Probability flood event for each new residential allotment.

#### **32.4 Non-complying Activities**

32.4.1 Except where exempted under Rule 32.1.2, any subdivision that does not comply with Rules 32.1.1.1 to 32.1.1.28, 32.1.1.54 to 32.1.1.57 or 32.1.1.65 to 32.1.1.76, or 32.1.1.78 and 32.1.1.80 to 32.1.1.82 or 32.1.1.91 or 32.1.1.93 is a non-complying activity.

#### **Chapter 33. Esplanades: Locations and Circumstances – Rules**

33.1.4 Except where provided by Rule 33.1.6 and Rule 33.1.7, the minimum width of an esplanade reserve or esplanade strip required under Rules 33.1.1 and 33.1.2 shall be 20m.

33.1.7 Esplanade reserves shall be provided for land adjoining the Southbrook Stream as shown on the South Belt Outline Development Plan. The esplanade reserves shall conform with the dimensions shown on South Belt Outline Development Plan as shown on District Plan Map 184.

*Any other consequential amendments and numbering changes.*

#### **Planning Maps**

- Change Planning Maps 116 and 117 to show the area as Residential 2 zone
- Insert a new Map 184 to contain the South Belt Outline Development Plan

## Stephanie Styles

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**From:** Jason Eden <Jason.Eden@ngaitahu.iwi.nz>  
**Sent:** Thursday, 5 March 2020 1:29 pm  
**To:** Stephanie Styles  
**Cc:** Brad Thomson  
**Subject:** RE: Summerset Rangiora plan change

Kia ora Stephanie,

Apologies, as I've only had periphery involvement with this project. The rūnanga report had briefed the kaitiaki on this being a private plan change.

I'm familiar with the private plan change process, and at the end of the day, given the size of the takiwā, the kaitiaki receive a significant volume of proposals before them and they have decided that this proposal does not warrant a presentation (presentations are not common, generally briefing reports are used, even for things of a scale such as District Plan Review chapters/Plan Changes to Regional Plans).

I do apologise that the engagement process in regard to this proposal has not been straight forward. However, I don't envision that a submission would be made on behalf of the rūnanga, given the need to prioritise resources for activities which are more impactful on the environment/Tūāhuriri strategic objectives.

The kaitiaki will look forward to seeing future developments once zoning changes are sorted.

Ngā mihi,

Jason

---

**From:** Stephanie Styles <Stephanie.Styles@boffamiskell.co.nz>  
**Sent:** Thursday, 5 March 2020 9:52 a.m.  
**To:** Jason Eden <Jason.Eden@ngaitahu.iwi.nz>  
**Cc:** Brad Thomson <Brad.Thomson@ngaitahu.iwi.nz>  
**Subject:** RE: Summerset Rangiora plan change

Kia ora Jason

This is not an application for a retirement village at this point in time, it is a plan change application to rezone the land from Residential 4 to Residential 2. The rezoning of the land would enable typical residential and/or a retirement village in the future – but there is no development designed at this stage.

Given the advice from yourself/Brad last year, when the previous hui was cancelled, we have already made the plan change application to Council which will be publicly notified in due course. We would be happy to share that with you prior to public notification if that would assist you with understanding what is proposed.

Are you sure that a briefing report is appropriate for this type of project? The current process now may be limited to the submissions on the plan change as this is the current process that is underway. That is why Summerset wanted to engage directly with rūnanga to explain the plan change and future plans before it gets too far down the track.

I know Summerset is still committed to engaging with the rūnanga over a village development in the future once the zone is changed.

Would it be better for me to meet with you to explain these processes?

Ngā mihi  
Stephanie

---

**From:** Jason Eden <[Jason.Eden@ngaitahu.iwi.nz](mailto:Jason.Eden@ngaitahu.iwi.nz)>  
**Sent:** Thursday, 5 March 2020 9:18 am  
**To:** Stephanie Styles <[Stephanie.Styles@boffamiskell.co.nz](mailto:Stephanie.Styles@boffamiskell.co.nz)>  
**Cc:** Brad Thomson <[Brad.Thomson@ngaitahu.iwi.nz](mailto:Brad.Thomson@ngaitahu.iwi.nz)>  
**Subject:** RE: Summerset Rangiora plan change

Kia ora Stephanie,

Yes, after discussions with the kaitiaki, they have decided against a presentation. They have seen a number of lifestyle village applications in recent times, and have decided that the usual process of a briefing report will be the best form of engagement.

I'm somewhat unfamiliar with this project, but is there a draft resource consent application (or similar document) which we could base a briefing report on? If so (and if you are happy for us to do so), we can provide an updated scope and then undertake consultation via a briefing report to rūnanga, and provide you with a report outlining the rūnanga recommendations.

Ngā mihi,

Jason

---

**From:** Stephanie Styles <[Stephanie.Styles@boffamiskell.co.nz](mailto:Stephanie.Styles@boffamiskell.co.nz)>  
**Sent:** Thursday, 5 March 2020 8:10 a.m.  
**To:** Jason Eden <[Jason.Eden@ngaitahu.iwi.nz](mailto:Jason.Eden@ngaitahu.iwi.nz)>  
**Subject:** RE: Summerset Rangiora plan change

Morena Jason

Just wondering how the Kaitiaki meeting went on Tuesday and if you have an update for us on how to engage with Tūāhuriri over this project.

Ngā mihi  
Stephanie

---

**From:** Stephanie Styles  
**Sent:** Tuesday, 25 February 2020 10:38 am  
**To:** 'Jason Eden' <[Jason.Eden@ngaitahu.iwi.nz](mailto:Jason.Eden@ngaitahu.iwi.nz)>  
**Subject:** RE: Summerset Rangiora plan change

Thanks for following up on this Jason.

We would greatly appreciate it if you can please talk to them about this and how we can liaise with them appropriately.

We look forward to hearing from you after the meeting.

Ngā mihi  
Stephanie

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**From:** Jason Eden <[Jason.Eden@ngaitahu.iwi.nz](mailto:Jason.Eden@ngaitahu.iwi.nz)>  
**Sent:** Tuesday, 25 February 2020 9:24 am  
**To:** Stephanie Styles <[Stephanie.Styles@boffamiskell.co.nz](mailto:Stephanie.Styles@boffamiskell.co.nz)>  
**Subject:** RE: Summerset Rangiora plan change

Kia ora Stephanie,

Apologies for the delayed reply.

Our next meeting with the Kaitiaki is on the 3<sup>rd</sup> of March. However, there have been some changes within the Tūāhuriri Kaitiaki Portfolio and I will have to canvas them regarding the presentation.

Can I let you know their thoughts following this meeting?

Ngā mihi,

Jason

---

**From:** Stephanie Styles <[Stephanie.Styles@boffamiskell.co.nz](mailto:Stephanie.Styles@boffamiskell.co.nz)>

**Sent:** Tuesday, 25 February 2020 7:20 a.m.

**To:** Jason Eden <[Jason.Eden@ngaitahu.iwi.nz](mailto:Jason.Eden@ngaitahu.iwi.nz)>; Brad Thomson <[Brad.Thomson@ngaitahu.iwi.nz](mailto:Brad.Thomson@ngaitahu.iwi.nz)>

**Subject:** RE: Summerset Rangiora plan change

**Importance:** High

Morena

Just wondering if you received this email and if there is any chance of setting up a hui with rūnanga please?

I assume it will not be possible to hold this on Thursday now but can you please advise of other possible timings for this to be arranged?

Ngā mihi  
Stephanie

---

**From:** Stephanie Styles

**Sent:** Monday, 17 February 2020 5:17 pm

**To:** 'Jason Eden' <[Jason.Eden@ngaitahu.iwi.nz](mailto:Jason.Eden@ngaitahu.iwi.nz)>; Brad Thomson <[Brad.Thomson@ngaitahu.iwi.nz](mailto:Brad.Thomson@ngaitahu.iwi.nz)>

**Subject:** Summerset Rangiora plan change

Kia ora Jason and Brad

Hopefully you will recall that I was in contact with you last year around the proposal that Summerset has for rezoning some land in southern Rangiora for residential purposes and a retirement village. We had arranged a hui with Tūāhuriri to discuss the project which unfortunately was not able to proceed.

In the last few months the project has proceeded but my client is still keen to talk to the rūnanga about what is proposed.

My client will be in Christchurch on Thursday 27<sup>th</sup> February and is wondering if it would be possible to meet with you and kaitiaki on that afternoon?

Please let me know if this can be arranged.

Ngā mihi  
Stephanie



**Stephanie Styles** | Planner | Senior Principal

E: [stephanie.styles@boffamiskell.co.nz](mailto:stephanie.styles@boffamiskell.co.nz) | D: +64 3 364 4215 | T: +64 3 366 8891 | M: +64 27 416 3419

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**[www.boffamiskell.co.nz](http://www.boffamiskell.co.nz)**

*My work days are Mon-Thurs*

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## Stephanie Styles

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**From:** Chris Bacon <chris.bacon@wmk.govt.nz>  
**Sent:** Wednesday, 31 July 2019 3:05 pm  
**To:** Harriette Davies  
**Cc:** Gary Stevenson  
**Subject:** RE: 104 Townsend Road & 141 South Belt, Rangiora

That's great Harriette

So Gary, we modelled a worst case scenario (ie all the demand off one connection point on the existing 150 main and we didn't encounter any issues with the model meeting our normal LOS requirements.

Therefore we don't need to be concerned about capacity, it'll more be a question of redundancy and whether we need two feeds to the retirement village and/or the residential area to maintain that redundancy.

Also we don't need to connect into the 300mm dia pipe. We can connect one or more connections to the 150mm dia pipe without any problems.

Cheers

**Chris Bacon | Network Planning Team Leader**  
**Project Delivery Unit**  
**Phone: 0800 965 468 (0800 WMK GOV)**  
**Mobile: 021 480 925**



---

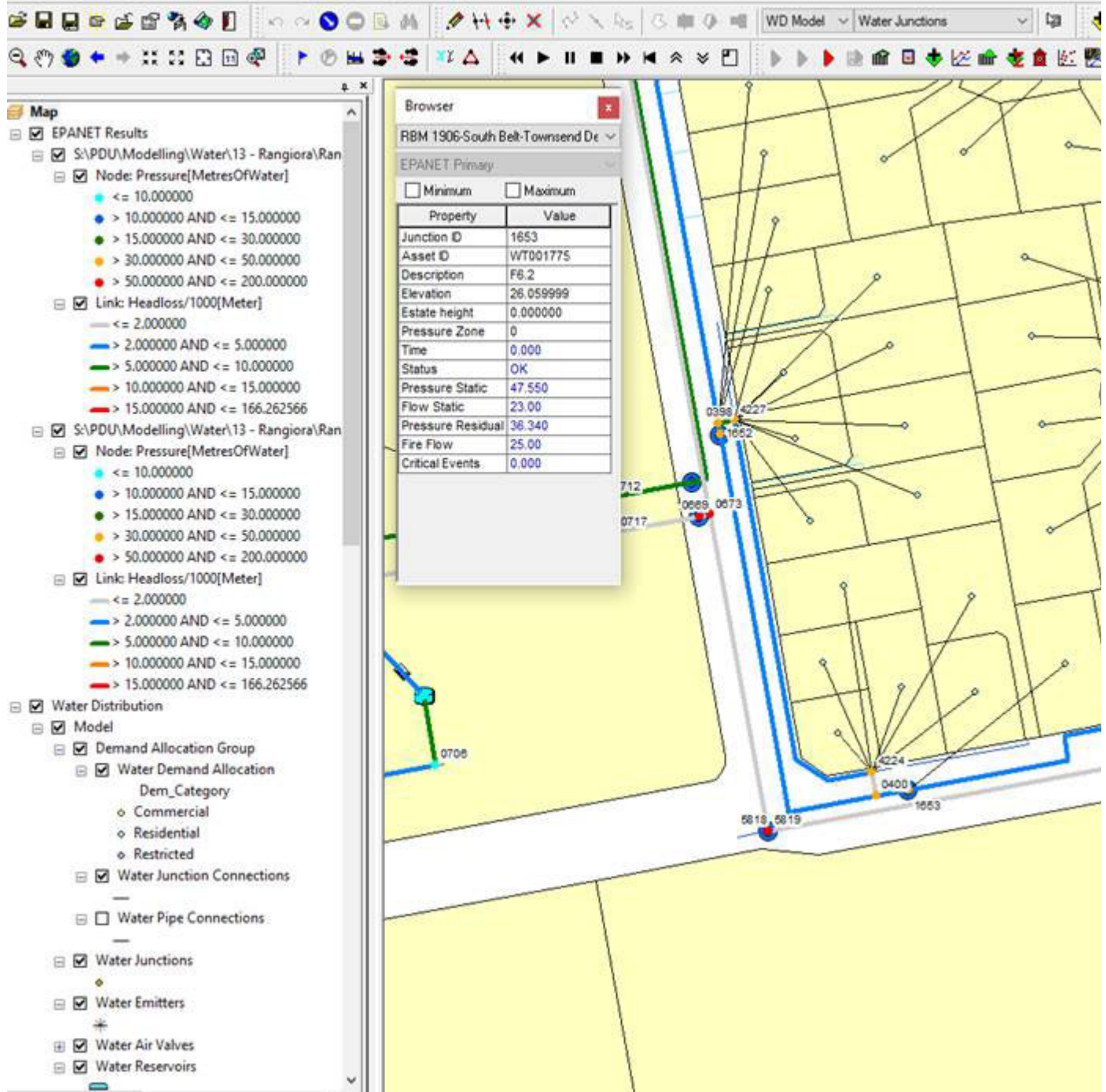
**From:** Harriette Davies  
**Sent:** Wednesday, 31 July 2019 11:31 AM  
**To:** Chris Bacon  
**Cc:** Gary Stevenson  
**Subject:** RE: 104 Townsend Road & 141 South Belt, Rangiora

Hi Chris,

As discussed the model doesn't indicate any issues with an additional 22.2 L/s PHF on one connection off the 150 PVC main. We are still maintaining approx. 48m of pressure at peak time.

There are also no issues with the firefighting flow (Assuming 25L/s and 50% PHF). There is approx. 36m of residual pressure at that location. Refer to results below.

File Edit EPANET Simulation Model Results View Tools Window Help



Let me know if you need anything else.

Cheers,  
Harriette

**Harriette Davies | Project Engineer**  
**Project Delivery Unit**  
**Phone: 0800 965 468 (0800 WMK GOV)**  
**Mobile: 027 552 7565**



---

**From:** Chris Bacon <[chris.bacon@wmk.govt.nz](mailto:chris.bacon@wmk.govt.nz)>  
**Sent:** Wednesday, 31 July 2019 7:44 AM  
**To:** Harriette Davies <[harriette.davies@wmk.govt.nz](mailto:harriette.davies@wmk.govt.nz)>  
**Cc:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Subject:** FW: 104 Townsend Road & 141 South Belt, Rangiora

Hey Harriette

Can you have a look at this one for me?

Initially can I get you to have a look at one scenario. 22.2 L/s additional PHF on the 150 PVC main at the corner of South Belt and Pentecost Road. Plus also assess it for fire fighting by assuming 25 L/s from the same location and 50% PHF across the rest of the network.

If that scenario works then we don't need to worry about doing any other permutations, if not then we need to delve further into it.

Let me know if you have any questions.

Cheers

**Chris Bacon | Network Planning Team Leader**  
**Project Delivery Unit**  
**Phone: 0800 965 468 (0800 WMK GOV)**  
**Mobile: 021 480 925**

---

**From:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Sent:** Wednesday, 31 July 2019 6:56 AM  
**To:** Chris Bacon <[chris.bacon@wmk.govt.nz](mailto:chris.bacon@wmk.govt.nz)>  
**Cc:** Colin Roxburgh <[colin.roxburgh@wmk.govt.nz](mailto:colin.roxburgh@wmk.govt.nz)>  
**Subject:** FW: 104 Townsend Road & 141 South Belt, Rangiora

Hi Chris,

Can you run this through the model assuming both connections off the 150 PVC on the north side of South Belt at locations shown. Can you look at sensitivity with a disproportionate split of flows to one connection or the other if you have any concerns.

Cheers

Gary Stevenson | Development Manager  
Project Delivery Unit  
Phone: 0800 965 468 (0800 WMK GOV)  
Mobile: 021 480 833



**From:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Sent:** Wednesday, 24 July 2019 5:14 PM  
**To:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Cc:** Colin Roxburgh <[colin.roxburgh@wmk.govt.nz](mailto:colin.roxburgh@wmk.govt.nz)>; Chris Bacon <[chris.bacon@wmk.govt.nz](mailto:chris.bacon@wmk.govt.nz)>  
**Subject:** RE: 104 Townsend Road & 141 South Belt, Rangiora

Hi Gary,

See attached for possible connection locations:

- 1 – Across from Pentecost Road
- 2 – Adjacent proposed retirement village main entrance

The apportion of flow split will depend on future layouts, I guess as an initial assessment we could assume that Connection 1 services the Balance Land only and Connection 2 services the Proposed Retirement Village only (i.e. not a looped connection). This is not entirely accurate as 2 connections to the village would likely be provided. The table below shows the demands at connection 1 and 2 if the land was developed as residential or fully as retirement village.

	Connection 1	Connection 2
All residential (not looped)	5.3 L/s *	13.3 L/s *
Retirement Village and Residential Balance Land (not looped)	6.1 L/s *	15.1 L/s *

\* the above is potable demands only, an additional 25L/s for fire fighting flows would need to be included.

We have not got to the point of modelling yet, therefore cant confirm demand splits. At present we are trying to gauge when/if this upgrade would be required.

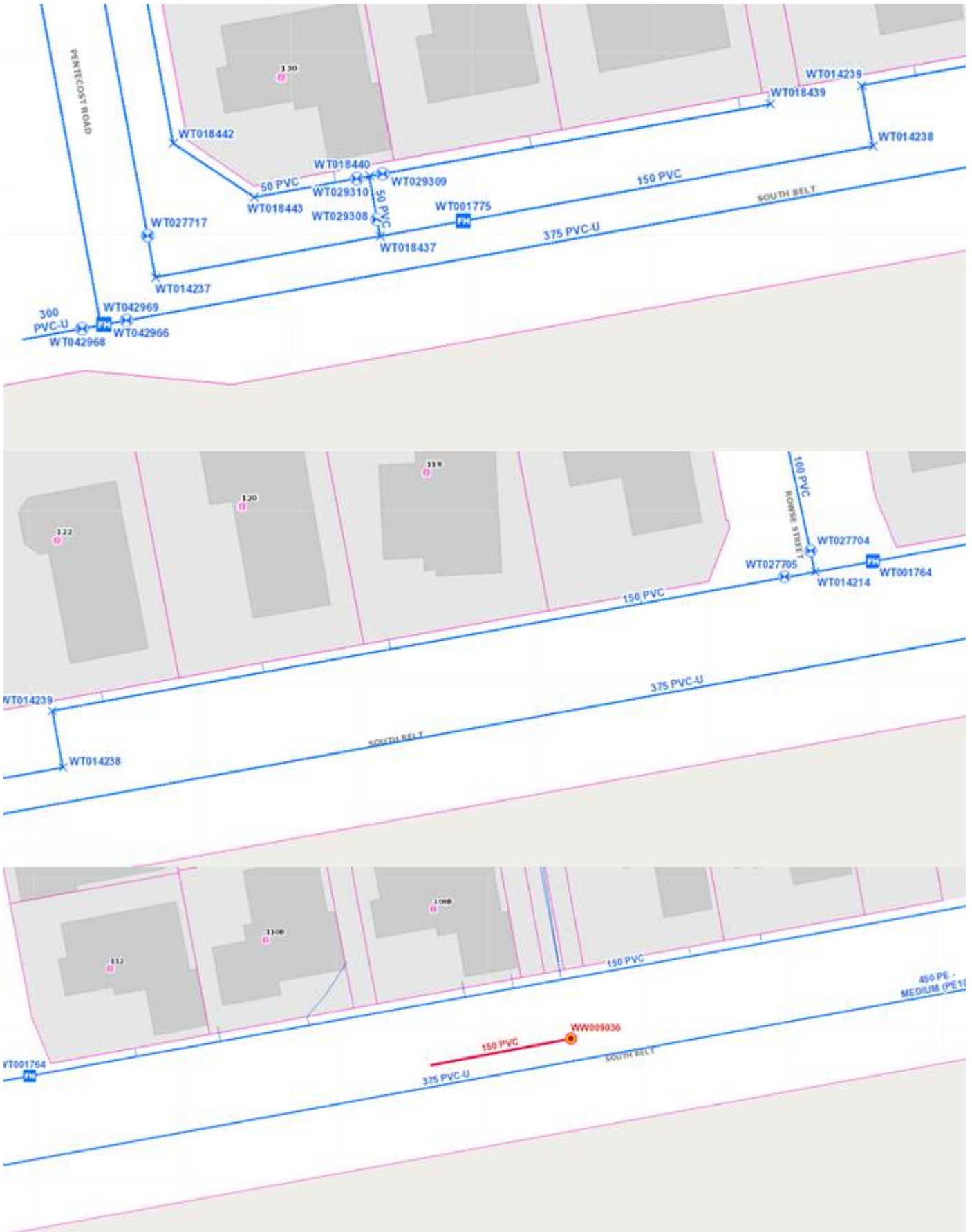
Thanks,  
Leanne

Leanne Sutherland  
Riley Consultants Ltd

**From:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Sent:** Tuesday, 23 July 2019 10:04 a.m.  
**To:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Cc:** Colin Roxburgh <[colin.roxburgh@wmk.govt.nz](mailto:colin.roxburgh@wmk.govt.nz)>; Chris Bacon <[chris.bacon@wmk.govt.nz](mailto:chris.bacon@wmk.govt.nz)>  
**Subject:** RE: 104 Townsend Road & 141 South Belt, Rangiora

Hi Leanne,

At a high level we think that a connection to the 150mm PVC mains could be possible. See snippets below. Are you able to show where you anticipate connection/s to be installed and apportioned flows if more than one connection? When we have this we can model the connections to ensure adequate pressure at peak hourly demand.



Cheers

Gary Stevenson | Development Manager  
Project Delivery Unit  
Phone: 0800 965 468 (0800 WMK GOV)  
Mobile: 021 480 833



---

**From:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Sent:** Monday, July 22, 2019 5:38 PM  
**To:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Cc:** Colin Roxburgh <[colin.roxburgh@wmk.govt.nz](mailto:colin.roxburgh@wmk.govt.nz)>  
**Subject:** RE: 104 Townsend Road & 141 South Belt, Rangiora

Hi Gary,

The water demands referred to below is based on development of the entire plan change area (i.e. both the Summerset proposed village area as well as the balance land to the west).

i.e. approx. 11.2ha @ 600m<sup>2</sup> lots = 187 lots x 0.1 L/s/dwelling = 18.7L/s potable plus 25 L/s fire fighting

Essentially I am trying to determine what level of development (or supply demand) would trigger the need for connection of these existing mains? I agree that 2 connections and a ring main is best, although could this be achieved off the current mains configuration?

Thanks,  
Leanne

Leanne Sutherland  
Riley Consultants Ltd

---

**From:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Sent:** Monday, 22 July 2019 5:07 p.m.  
**To:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Cc:** Colin Roxburgh <[colin.roxburgh@wmk.govt.nz](mailto:colin.roxburgh@wmk.govt.nz)>  
**Subject:** RE: 104 Townsend Road & 141 South Belt, Rangiora

Hi Leanne,

I've chased up Greenspace for a response re esplanade area. Note that this was fleshed out as part of the plan change so you may glean info by referring to this.

The water demand you are projecting is large and I question if this peak demand is right (as this is 187 equivalent residential dwellings). Do you have a breakdown of the demand? I anticipate that you will need more than one connection to create a ring main and provide security of supply. Has there been consideration to the residential block proposed to the west of the development?

As below there is a gap in reticulation that for the flows proposed may need to be bridged with a 300mm I.D. (355mm OD) PE100 PN12.5 pipe.



Cheers

**Gary Stevenson | Development Manager**  
**Project Delivery Unit**  
**Phone: 0800 965 468 (0800 WMK GOV)**  
**Mobile: 021 480 833**



---

**From:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Sent:** Friday, July 19, 2019 8:55 AM  
**To:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Subject:** RE: 104 Townsend Road & 141 South Belt, Rangiora

Hi Gary,

Just wondering if you have heard back from the Reserves Team in terms of the requirements for the Esplanade Reserve, below were the original queries we had:

- Esplanade Reserve: Is there a requirement to have an access strip along the Esplanade Reserve. If so, what are the requirements for this in terms of minimum width, any freeboard requirements etc?
- Works will likely be required within and along the banks of the South Brook, are there any requirements we should be aware of in terms of filling/maximum batter slopes etc.
- Should we be aware of any planting requirements that may be imposed within the Esplanade Reserve?
- Are there any development setbacks/landscape buffer requirements within/from the Esplanade Reserve.

Also, are you able to confirm what freeboard we should be working to, I recall at the meeting 400mm was discussed, although this was going to be confirmed.

We have also been further looking in to the water supply for the site, are you also able to confirm whether the watermain would need to be extended between Pentecost and Townsend Road based on the following demands:

- 18.7 L/s potable plus 25 L/s fire fighting (site development at 600m<sup>2</sup> Lots)
- 21.2 L/s potable plus 25 L/s fire fighting (site fully developed as retirement village – this is more a sensitivity check)

Thanks,  
Leanne

Leanne Sutherland  
Riley Consultants Ltd

---

**From:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Sent:** Monday, 8 July 2019 6:44 a.m.  
**To:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Subject:** FW: 104 Townsend Road & 141 South Belt, Rangiora

Hi Leanne,

You should have been notified of a sharefile account for download of relevant information you have requested. Chris Bacon has uploaded the below. I have also uploaded a drawing set which outlines the details and invert (where the water main passes under it) for the Green Street catchment culvert that discharges to the drain to the east of site.

I have forwarded your other questions as highlighted below to Jon Read, Reserves Team.

Cheers

**Gary Stevenson | Development Manager**  
**Project Delivery Unit**  
**Phone: 0800 965 468 (0800 WMK GOV)**  
**Mobile: 021 480 833**



[waimakariri.govt.nz](http://waimakariri.govt.nz)

---

**From:** Chris Bacon <[chris.bacon@wmk.govt.nz](mailto:chris.bacon@wmk.govt.nz)>  
**Sent:** Friday, 5 July 2019 9:40 AM  
**To:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>; Libica Hurley <[libica.hurley@wmk.govt.nz](mailto:libica.hurley@wmk.govt.nz)>  
**Cc:** Kalley Simpson <[kalley.simpson@wmk.govt.nz](mailto:kalley.simpson@wmk.govt.nz)>  
**Subject:** RE: 104 Townsend Road & 141 South Belt, Rangiora

Hi Gary

I've added:

- The 2015 Survey of the Southbrook and Lehman's Road undertaken by Calibre. This should give them everything they need to know about the culverts and bridges along the Southbrook
- DGN (microstation) drawings showing the south belt culvert design. 762 series drawings
- The Townsend Road extension as-builts which show the pipeline under John's Road from the Oxford Estates SMA



- The rainfall hydrographs we use for the Rangiora Modelling work. The tabs in the spreadsheet are marked YYDD where YY is the ARI return period and DD is the duration of storm (in hours). Please note that these are total rainfall figures (ie no losses) and are based on HIRDS3 + 16%.
- The 200 year precipitation file. This is the MIKE21 net runoff file used in the WDC 200 year MIKE 21 model.
- A copy of the WDC modelling guidelines, section 4.4 outlines the infiltration parameters used in the modelling in relation to the Landcare Soils drainage categories
- A copy of the Landcare Soils map in .shp format. For the drainage classes use the field DrainClass.

I think that's about all from my end...

Cheers

**Chris Bacon | Network Planning Team Leader**  
**Project Delivery Unit**  
**Phone: 0800 965 468 (0800 WMK GOV)**  
**Mobile: 021 480 925**




---

**From:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Sent:** Wednesday, 3 July 2019 8:49 AM  
**To:** Libica Hurley <[libica.hurley@wmk.govt.nz](mailto:libica.hurley@wmk.govt.nz)>  
**Cc:** Chris Bacon <[chris.bacon@wmk.govt.nz](mailto:chris.bacon@wmk.govt.nz)>; Kalley Simpson <[kalley.simpson@wmk.govt.nz](mailto:kalley.simpson@wmk.govt.nz)>  
**Subject:** Fwd: 104 Townsend Road & 141 South Belt, Rangiora

Hi Libby

Can you Please set up a share file for Leanne to access (hopefully her details are readable below). Likely that Chris, Kalley and I will flick through information to add.

Cheers  
 Gary

Sent from my Samsung Galaxy smartphone.

----- Original message -----

**From:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Date:** 1/07/19 8:20 AM (GMT+12:00)  
**To:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Subject:** 104 Townsend Road & 141 South Belt, Rangiora

Hi Gary,

Thanks for the meeting on Friday, below is the email of the queries that we went through. Thought it was easier to resend it rather than you trying to locate it from deep in your emails. If you could forward these items to the relevant parties would be much appreciated.

Thanks,  
 Leanne

**From:** Leanne Sutherland  
**Sent:** Monday, 24 June 2019 10:37 a.m.  
**To:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Subject:** 104 Townsend Road & 141 South Belt, Rangiora

Hi Gary,

Prior to our meeting on Friday, below is a summary of the modelling methodology and required inputs we need confirmed prior to undertaking this modelling. I will leave this to you to circulate elements to appropriate people.

#### Methodology

We are looking to undertake modelling with a similar approach to what was completed for Townsend Fields Development. The modelling will be completed within HEC2d, as a 2d model and will incorporate in 4 key culverts (1D). We will look to model the following events:

- Pre-development, Existing Conditions (including proposed improvements by Townsend Fields)
- Post-development, 50-year ARI
- Post-development, 200-year ARI
- Post-development, Ashley River Breakout including 200 year ARI.

From this modelling, Finished Floor Levels will be set as well as demonstrating the effects of the development on the surrounding environment.

#### Required Inputs

Model Parameters:

- Ground Surface: Lidar data surveyed in 2014 will be used as the based ground terrain with detailed site survey used across the site and of South Brook adjacent to the site. We would look to include the development of Townsend Field in the predeveloped ground surface if the development earthworks surface is available. Please confirm if available/provide the developed ground surface for Townsend Fields.
- Rainfall: Can the 200-year and 50-year rainfall hydrographs used in the WDC modelling be provided. This rainfall will be applied to the model via rain on grid.
- Ashley River breakout flow: The breakout flow will be applied at the upstream location (similar to Townsend Fields modelling), this flow hydrograph has been requested from Ecan.
- Structures: Four key culverts will be modelled (see attached and below for locations). Is as-built/GIS data available for these 4 culverts, including size and inverts.
  1. Box culvert under Lehmans Road (within South Brook);
  2. Box culvert under Townsend Road (within South Brook);
  3. Pipe from detention pond under Johns Road;
  4. Box culvert beneath South Belt discharging to drain along eastern site boundary.
    - Infiltration parameters: are infiltration parameters available across this area?
    - In order to set Finished Floor Levels, please confirm the freeboard requirement that shall be used.

Stormwater Basin Design:

- First flush – designed to capture the first 25mm rainfall on impervious areas. This volume will be discharged through a wetland.
- Attenuation provided to pre-development levels for all events up to the 50-year 18-hour duration, where attenuation storage is provided over the first flush up to 0.3m depth and 0.5m over wetlands.
- These basins will likely intercept groundwater, are there any additional requirements to be aware of.

External to site:



- Esplanade Reserve: Is there a requirement to have an access strip along the Esplanade Reserve. If so, what are the requirements for this in terms of minimum width, freeboard etc?
- Works will likely be required within and along the banks of the South Brook, are there any requirements we should be aware of in terms of filling/maximum batter slopes etc.
- Should we be aware of any planting requirements that may be imposed within the Esplanade Reserve?
- Can we assume that no filling will occur on the land south of South Brook/if filling does occur that future water levels in South Brook would be maintained?
- Assume that all drainage of South Belt (road reserve) can be discharged to the drain along the eastern boundary of the site.
- Are there any development setbacks/landscape buffer requirements within the Esplanade Reserve.

If there are any other requirements we should be aware of, or if any of the above is outside of what you are expecting of this modelling, please let us know. Also, if any of the above items can be confirmed prior to our meeting, would be much appreciated, otherwise these can be discussed on Friday.

Thanks,  
Leanne

Leanne Sutherland  
Riley Consultants Ltd

---

**From:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Sent:** Thursday, 13 June 2019 4:16 p.m.  
**To:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Cc:** Kalley Simpson <[kalley.simpson@wmk.govt.nz](mailto:kalley.simpson@wmk.govt.nz)>; Kelly LaValley <[kelly.lavalley@wmk.govt.nz](mailto:kelly.lavalley@wmk.govt.nz)>; Chris Bacon <[chris.bacon@wmk.govt.nz](mailto:chris.bacon@wmk.govt.nz)>; Owen Davies <[owen.davies@wmk.govt.nz](mailto:owen.davies@wmk.govt.nz)>  
**Subject:** RE: 104 Townsend Road & 141 South Belt, Rangiora

Hi Leanne,

The following people cc'd are those best to sit in on a flood modelling meeting. These same people you can talk to about the capabilities of Rileys.

I have sent an invite for the earliest date I can get everyone in a room being 3:30pm on Friday 28 June. It would be good if you can supply an agenda of what you would like to discuss specifically with any plans you can share. It could be that we can answer your enquiry much earlier by email.

Let me know if any issue with the proposed date and time.

Cheers

**Gary Stevenson | Development Manager**  
**Project Delivery Unit**  
**Phone: 0800 965 468 (0800 WMK GOV)**  
**Mobile: 021 480 833**




---

**From:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Sent:** Thursday, June 13, 2019 3:57 PM

**To:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Subject:** 104 Townsend Road & 141 South Belt, Rangiora

Hi Gary,

We are looking to progress the flood modelling for this site and are keen to have a kick-off meeting to confirm modelling parameters/outputs etc. Are you able to let us know who would be best to meet with at WDC so we can schedule a meeting? Alternatively if you could provide a meeting time that suits the relevant people and we can see if this works for us.

On another front, with the recent return of Jeff Dunn (previously with WDC) back to Riley Consultants, we are keen to have a catch up following this flood modelling meeting with yourself and a couple of your colleagues to provide a brief overview of what we do at Riley Consultants and to understand a bit more about how we might assist WDC on existing or future projects.

Looking forward to hearing back from you on a suitable meeting time.

Thanks,  
Leanne.

Leanne Sutherland  
Riley Consultants Ltd

---

**From:** Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Sent:** Thursday, 11 April 2019 10:40 a.m.  
**To:** Leanne Sutherland <[lsutherland@riley.co.nz](mailto:lsutherland@riley.co.nz)>  
**Cc:** Fraser Scales <[fraser.scales@wmk.govt.nz](mailto:fraser.scales@wmk.govt.nz)>  
**Subject:** Fwd: [#333509] RC165121, Townsend Fields, 223 Application

Hi Leanne

Please see stormwater asbuilts. Let me know if this is not what you are after.

Cheers  
Gary

Sent from my Samsung Galaxy smartphone.

----- Original message -----

**From:** Graeme Mawson <[glm@eliotsinclair.co.nz](mailto:glm@eliotsinclair.co.nz)>  
**Date:** 3/04/19 6:35 PM (GMT+12:00)  
**To:** Ruth Dunn <[ruth.dunn@wmk.govt.nz](mailto:ruth.dunn@wmk.govt.nz)>  
**Cc:** Matthew Bacon <[matthew.bacon@wmk.govt.nz](mailto:matthew.bacon@wmk.govt.nz)>, Gary Stevenson <[gary.stevenson@wmk.govt.nz](mailto:gary.stevenson@wmk.govt.nz)>  
**Subject:** RE: [#333509] RC165121, Townsend Fields, 223 Application

Hi Ruth,

Please find attached the asbuilt plans that relate to the Stormwater easements being created at Townsend Road.

Kind Regards

*Graeme Mawson* BSurv  
Licensed Cadastral Surveyor



20 Troup Drive, PO Box 9339, Tower Junction, Christchurch 8149, NZ  
Phone: 03 379 4014 | Fax: 03 365 2449

---

**From:** Ruth Dunn [<mailto:ruth.dunn@wmk.govt.nz>]  
**Sent:** Tuesday, 2 April 2019 1:39 p.m.  
**To:** Graeme Mawson  
**Cc:** Matthew Bacon; Gary Stevenson  
**Subject:** RE: [#333509] RC165121, Townsend Fields, 223 Application

Hi Graeme,

Thanks for submitting the revised Title Plan, and providing that additional information.

I note that the Memorandum of Easements in Gross states includes Easement Lot 5, is this a typo?

Memorandum of Easements in Gross (Pursuant to s243 Resource Management Act 1991)			
Purpose	Shown	Servient Tenement (Burdened Land)	Grantee
Right to Convey Electricity	R & S P	Lot 1 Lot 14	Mainpower Ltd
Right to Drain Water	D, F & G H Lot 5	Lot 2 Lot 3 Lot 5	Waimakariri District Council

Additionally, with regards the As-Builts. By not providing As-Builts prior to the granting of the 223 it cannot be demonstrated that the proposed easements are correctly located. If when As-Builts are subsequently submitted to Council as part of the 224c process it is identified that the easements are incorrectly located the Title Plan will need to be modified and a new 223 required. Therefore, would it be better to postpone the processing of the 223 until the As-Builts are available?

Kind regards,

**Ruth Dunn | Land Development Engineer**  
**Project Delivery Unit**  
[ruth.dunn@wmk.govt.nz](mailto:ruth.dunn@wmk.govt.nz)  
Customer Service: 0800 965 468 (0800WMKGOV)

# Draft Annual Plan 2019-2020

We want to know your views on five key issues affecting ratepayers over the coming year.

---

**From:** Graeme Mawson <[glm@eliotsinclair.co.nz](mailto:glm@eliotsinclair.co.nz)>  
**Sent:** Monday, 1 April 2019 3:23 PM  
**To:** Ruth Dunn <[ruth.dunn@wmk.govt.nz](mailto:ruth.dunn@wmk.govt.nz)>  
**Subject:** RE: [#333509] RC165121, Townsend Fields, 223 Application

Hi Ruth,

Thank you for your email regarding the s223 application for Townsend Fields. I have gone through your email below and have made several amendments to the plan and commented in red below.

I have regenerated the plan in landonline and with a new easement schedule attached.

Kind Regards

Graeme Mawson BSurv  
Licensed Cadastral Surveyor

[Graeme.Mawson@eliotsinclair.co.nz](mailto:Graeme.Mawson@eliotsinclair.co.nz)



20 Troup Drive, PO Box 9339, Tower Junction, Christchurch 8149, NZ  
Phone: 03 379 4014 | Fax: 03 365 2449

---

**From:** Ruth Dunn [<mailto:ruth.dunn@wmk.govt.nz>]  
**Sent:** Thursday, 28 March 2019 4:18 p.m.  
**To:** Graeme Mawson  
**Cc:** Gary Stevenson; Matthew Bacon  
**Subject:** RC165121, Townsend Fields, 223 Application

Hi Graeme,

I'm currently reviewing the 223 application for Townsend Fields, and have identified the following points that require further clarification.

Can you please review the comments below and provide feedback:

1. The **Dataset Description** includes Lot 11, however, a Lot 11 is not being created by the subdivision.

Survey Details			
Dataset Description	Lots 1-10 & 11-15 being Subdivision of Lot 2 DP 80253, Lot 4 DP 495345, Lot 1 DP 27779 and 1 DP 492222		
Status	Initiated		
Land District	Canterbury	Survey Class	Class A
Submitted Date		Survey Approval Date	
		Deposit Date	

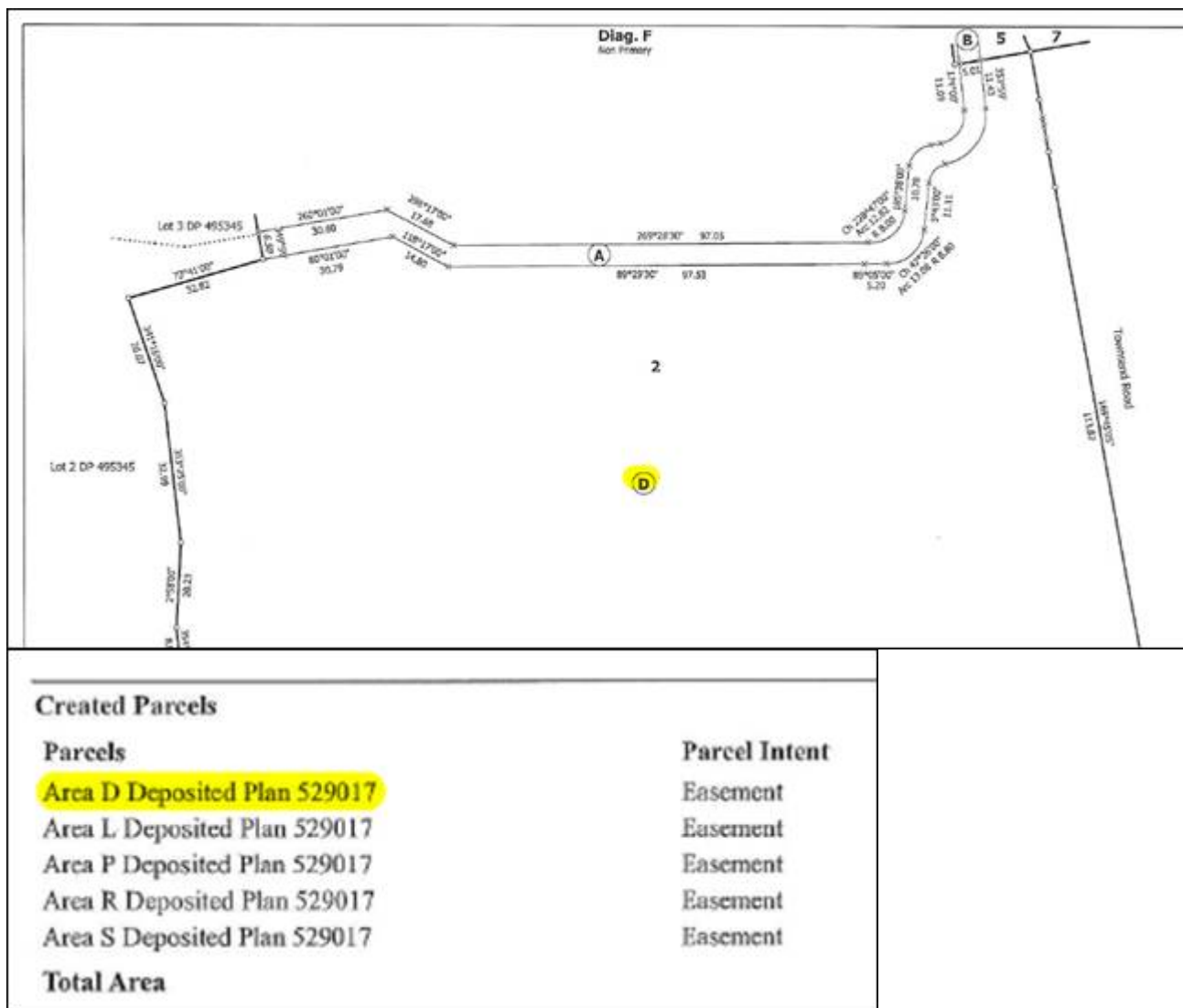
This has been amended and the reference to Lot 11 has been removed.

- Easement N is not included under the title **Created Parcels** nor is it included in any of the diagrams, however, easement N is stated in the **Schedule of Easements in Gross**.

Schedule of Easements in Gross			
Purpose	Shown	Servient Tenement (Burdened Land)	Grantee
Right to Convey Electricity	R & S	Lot 4	Mainpower Ltd
	P	Lot 14	
Right to Drain Water	N	Lot 2	Waimakiriri District Council

Easement letter corrected to Easement D.

- Easement D is shown under the title **Created Parcels** and on Diagram F, however, it is not included in the **Memorandum of Easements, the Schedule of Easements in Gross** nor the **Schedule of Existing Easements in Gross**.



Same as above

4. Easements R & S are stated as being servient to Lot 4, however, Diagram GD shows them to be located on Lot 1.

Schedule of Easements in Gross			
Purpose	Shown	Servient Tenement (Burdened Land)	Grantee
Right to Convey Electricity	R & S P	Lot 4 Lot 14	Mainpower Ltd
Right to Drain Water	N	Lot 2	Waimakiriri District Council



Servient Tenement has been updated to Lot 1

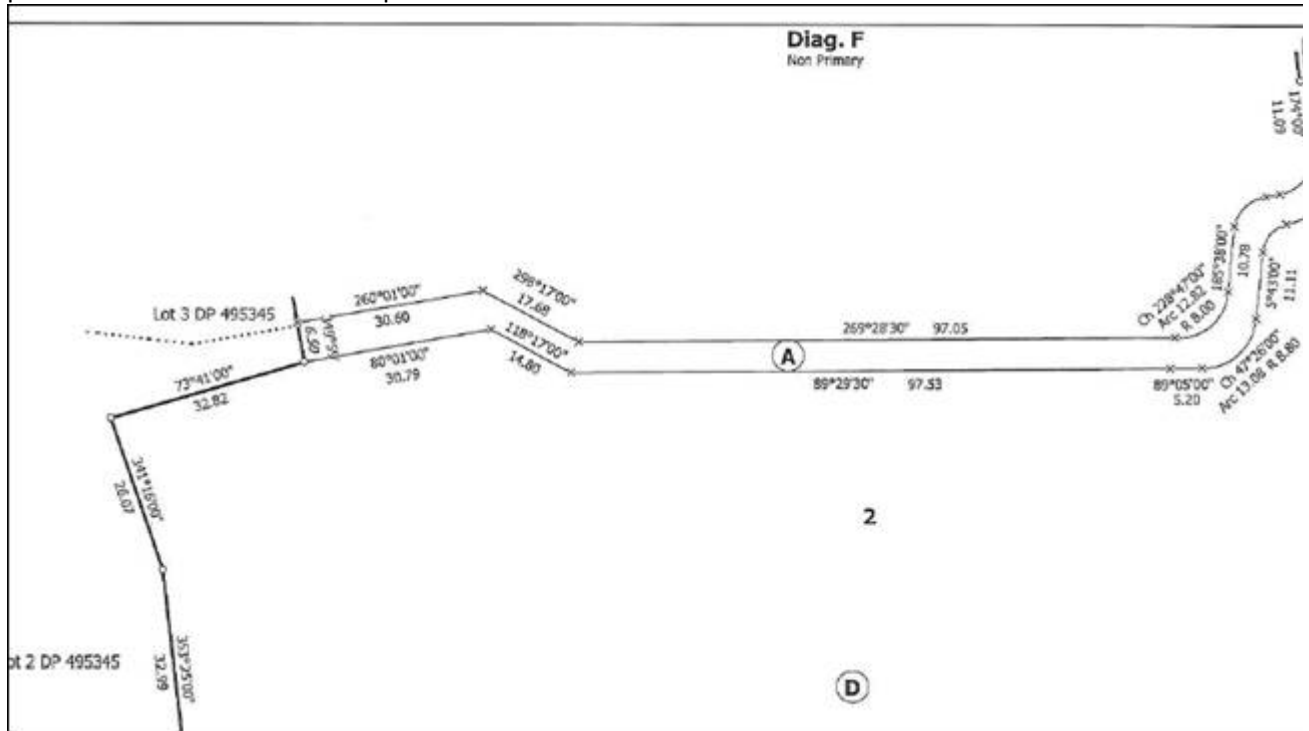
5. Easement B is stated as being servient to Lot 2, should this be Lot 2 DP 80253?

Schedule of Existing Easements to be Surrendered			
Purpose	Shown	Servient Tenement (Burdened Land)	Document Number
Right of Way	B, C, D, F & G	Lot 2	10337067.11
Right to convey electricity, telecommunications and computer media	A, B, C, D, E, F & G	Lot 2	10337067.9



Existing Easements servient tenement has been updated to Lot 2 DP 495345

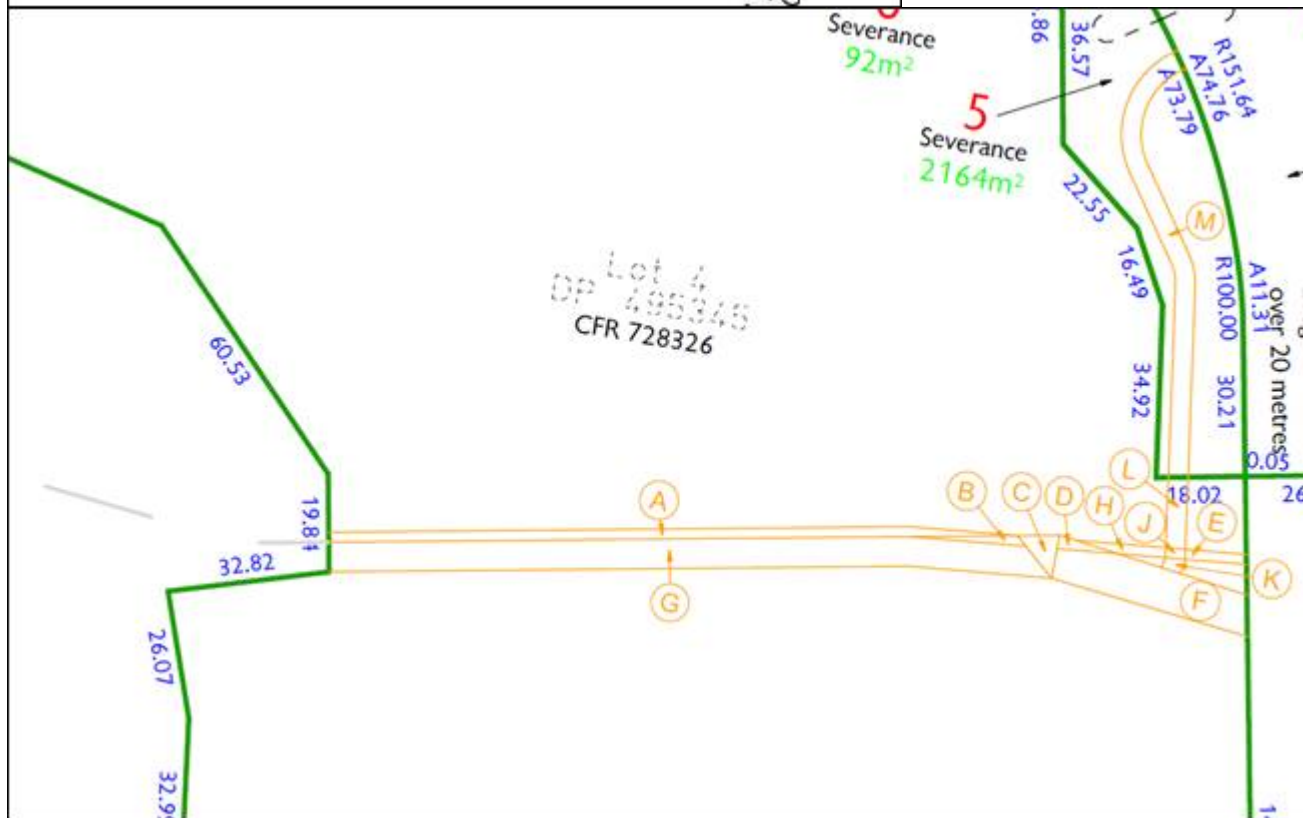
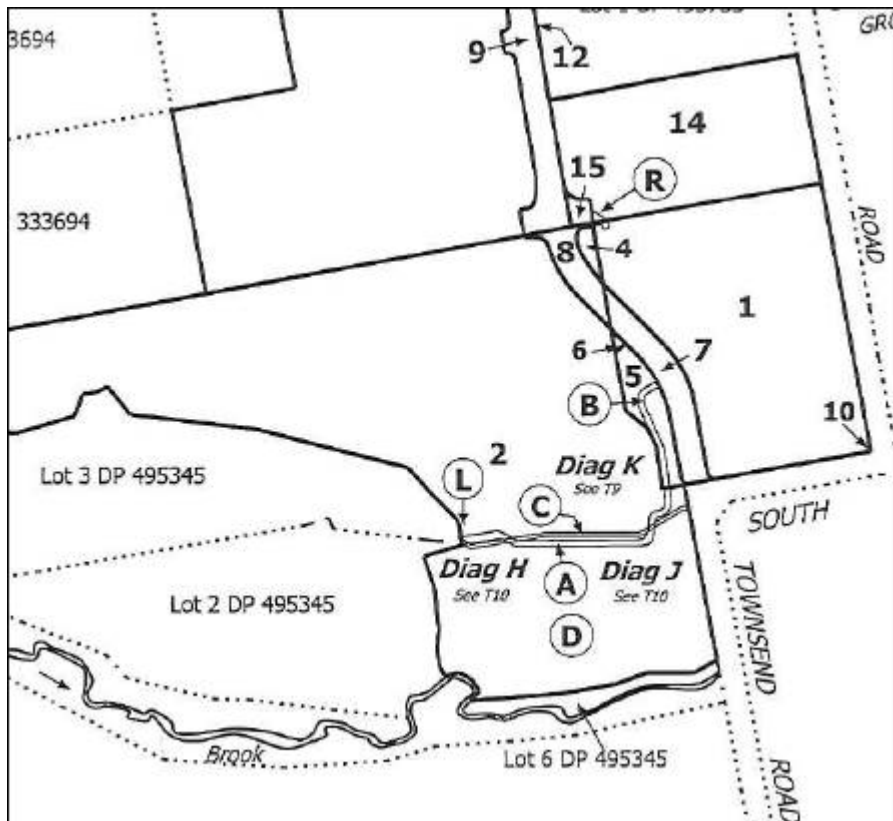
6. Not all easements are shown on all diagrams, for example Easement C is not included on Diagram F, can you please advise if this is standard practice?



Easements C and L has been captured as a tertiary easement to simply the easement layout, and avoid having to split the easement into 8 parts. I have amended the diagrams to show both the secondary and tertiary easements so the relationship between the easements can be seen.

7. Considerably more easements are shown on the approved application plan than the proposed Title Plan. Can you please advise the reason for modifying the easement configuration.





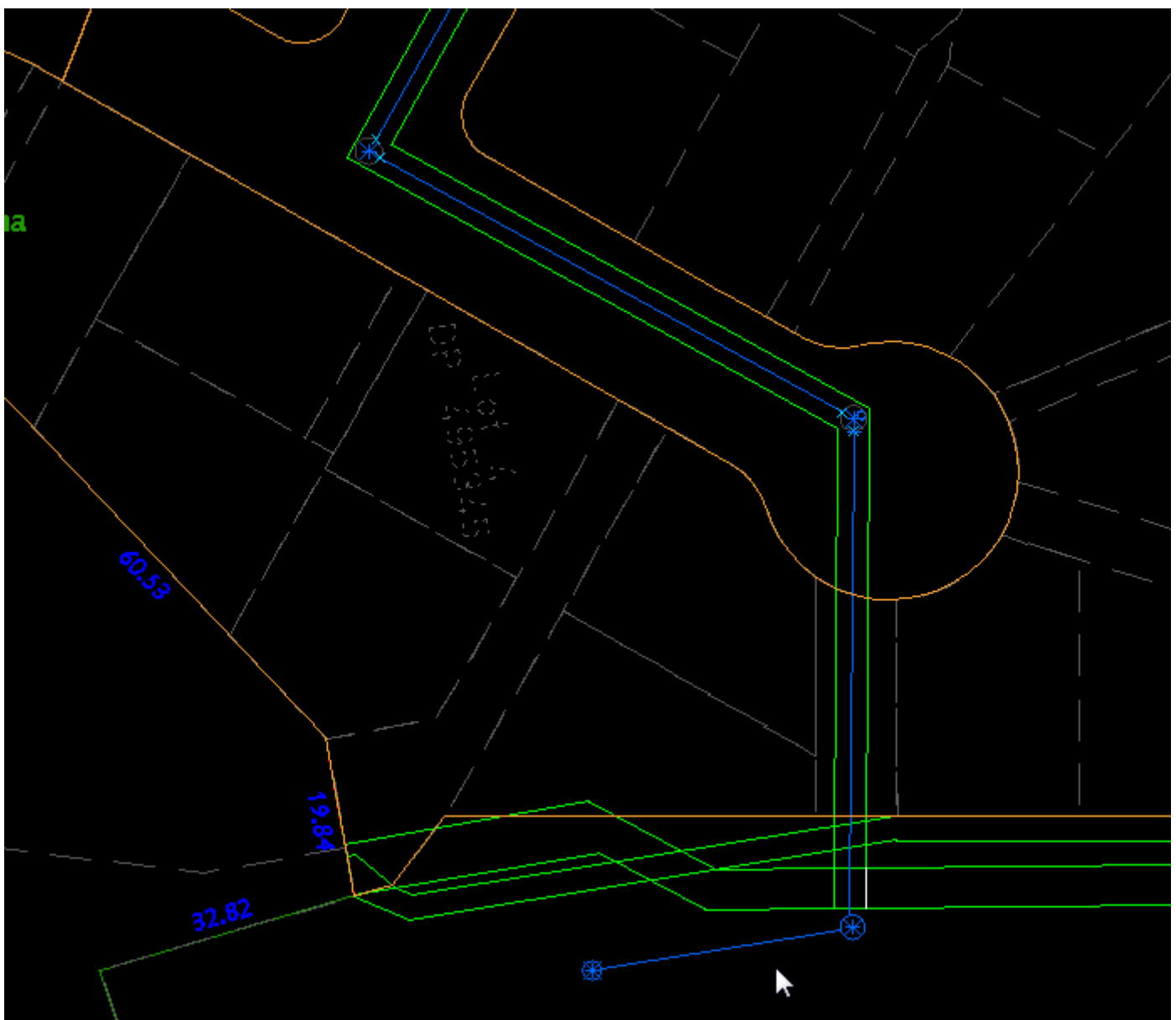
The easements shown on the application plan are the existing easements that were in existence prior to the construction of the Townsend Road extension. During construction it was decided to bury the overhead powerline as it was a site hazard, particularly as the ground below the existing power lines was being filled therefore decreasing the vertical clearance to the ground. The new position of the electricity cable and telecommunications has been measured and Easement C has been created to cover this. Easement C provides Lots 3 & 4 DP 495345 with the same rights as Easements A to G that were created on DP 495345.

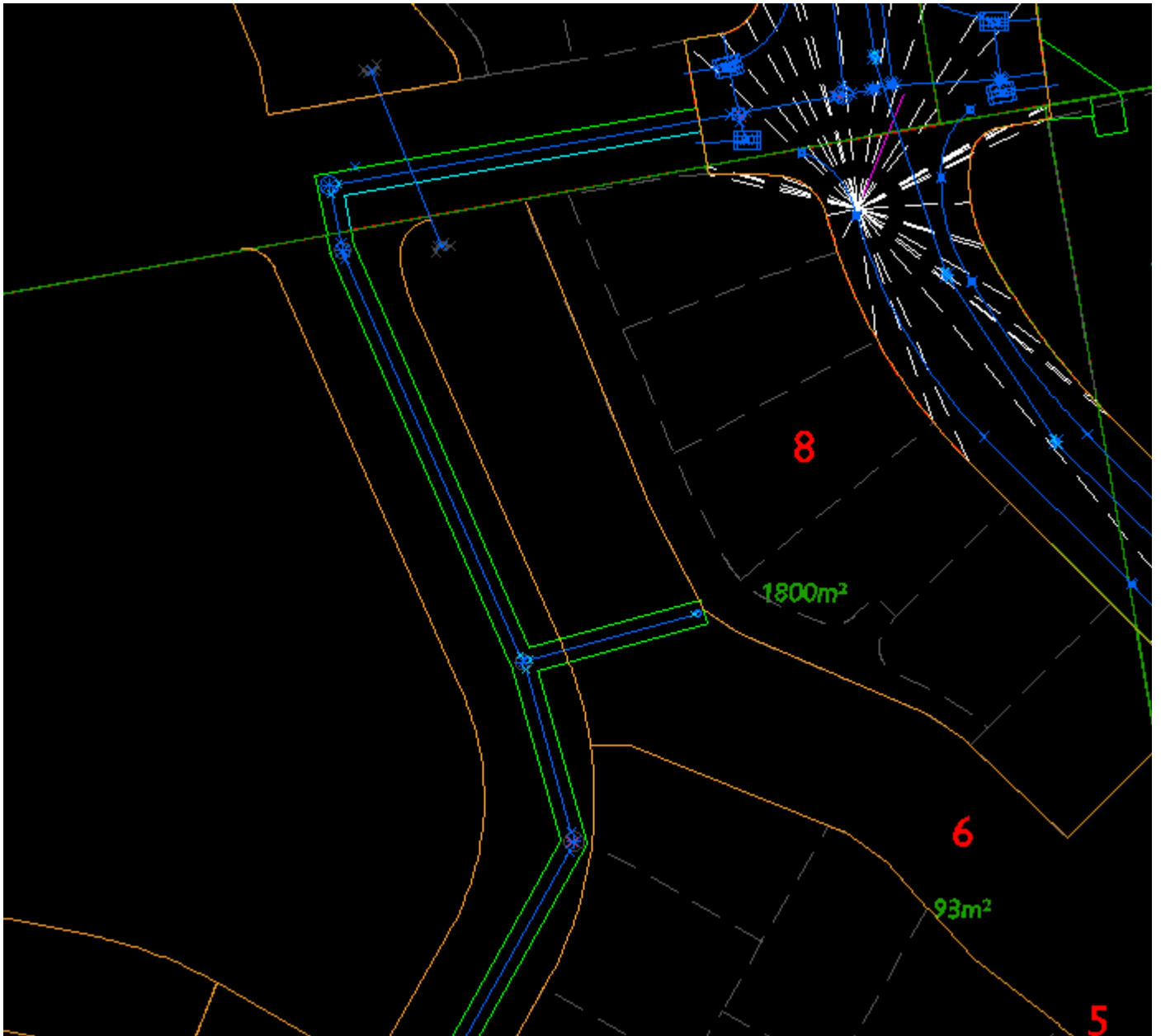
As part of the construction works for the future stages the existing ROW had to be moved off the future lots that were being formed, new easements A, B, E and F provide Lots 3 & 4 DP 495345 with a right of way and replace easements B, C, D, F & G on DP 495345.

The new easements that have been created maintain the previous rights held by Lots 3 & 4 DP 495345, but the position has been altered to cover the physical location of the right of way formation and the services. These easements are limited in duration and will be cancelled upon the completion of the next stage when the final right of way is constructed and the electricity, telecommunications and computer media services are connected into the new network.

8. The approved application plan states *“Extra easements for right to drain water in gross in favour of Waimakariri District Council will be created on the Land Transfer Plan once as built positions of engineering works are available.”* These additional easements do not appear to have been added and as built have not been provided to confirm the location of easements if required.

These easements have now been captured and are shown as easements D, F, G & H. I have included a few screen dumps showing the asbuilt location of the stormwater infrastructure around the newly created easements. The asbuilt plans are currently going through the QA checks and a final copy will be sent to Council as part of the upcoming s224 application.





I await your response on the above matters.

Kind regards,

**Ruth Dunn | Land Development Engineer**

**Project Delivery Unit**

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## **Draft Annual Plan 2019-2020**

**We want to know your views on five key issues affecting ratepayers over the coming year.**



	4 Fred Thomas Drive, Takapuna, Auckland 0622 PO Box 100253, North Shore, Auckland 0745 Tel: 09 489 7872 Email: riley@riley.co.nz	Project No:	170743	Page	1	of	2
	22 Moorhouse Avenue, Addington, Christchurch 8011 PO Box 4355, Christchurch 8140 Tel: 03 379 4402 Email: rileychch@riley.co.nz	Project:	104 Townsend Road and 141 South Belt, Rangiora				
		Calc:	RAB	Date:	15/10/2019 Rev.1 25/03/2020		
		Check:	LS	Date:	15/10/2019 Rev.1 27/03/2020		
Description:	Wastewater Reticulation Capacity and Demands						

**Purpose:** Determine wastewater reticulation capacity to meet demands for the site based on either full Residential 2 development (minimum 600m<sup>2</sup> lots) or full development of a retirement village based on Waimakariri District Council engineering standards.

**Method:** WDC Engineering Code of Practice (ECoP) Part 6

### **Reticulation**

Based upon the WDC ECoP part 6.5.2 “*Design systems to carry maximum flows without surcharging.*”, therefore; the wastewater reticulation has a PWWF capacity equal to the full flow of the pipeline.

### **Existing 300mm diameter uPVC main**

The wastewater main servicing the site is a 300mm diameter uPVC main with a minimum gradient of approximately 0.27%, based on the Colebrook-white equation this pipe has a peak capacity of **53 l/s**.

### **Demand**

#### **Development as full retirement village**

The wastewater demands for development such as a retirement village have been calculated based on WDC ECoP part 6, using the following parameters:

- Per capita demand of 250 l/p/d for residents and a staff demand of 50 l/p/d
- Peak wet weather flow factor = 2.5 (WDC ECoP 6.5.4)
- Peak wet weather flow factor=2.6 (WDC ECoP Chart 6.1 for 50<No. Dwellings<550)
- Occupancy rates for villas and townhomes of 1.3 persons per unit, while all other facilities are calculated at a 1 person per unit.
- The estimated number of units is based on other similar retirement villages.


The above parameters were used to calculate total flow and average flow rates for the village and are summarised below:

	Number Units	Occupancy	Per Capita Flows (l/p/d)	Total demand (m <sup>3</sup> /day)
Villa/Townhouse	343	446	250	111.5
Assisted Living Suites	78	102	250	25.5
Memory Care Apartments	28	28	250	7.0
Resthome & Hospital Beds	60	60	250	15.0
Staff	0	64	50	3.2
	<b>509</b>	<b>700</b>		<b>162.2</b>

Average Daily Flow (ADF) = 1.9 litres/sec

Peak Dry Wastewater flow (PDWF) = 4.7 litres/sec

Peak Wet Weather Wastewater flow (PWWF) = 12.2 litres/sec

	4 Fred Thomas Drive, Takapuna, Auckland 0622 PO Box 100253, North Shore, Auckland 0745 Tel: 09 489 7872 Email: riley@riley.co.nz	Project No:	170743	Page	2	of	2
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		Check:	LS	Date:	15/10/2019 Rev.1 27/03/2020		
Description:	Wastewater Reticulation Capacity and Demands						

The peak wet weather flow from site based on full development of a retirement village would require **23%** of the capacity of the wastewater main. This is assuming an approximately occupancy of 700 as calculated above. This would leave reserve capacity of approximately **41l/s** for upstream demands

### **Standard Residential 2 (minimum 600m<sup>2</sup>)**

Potential Development = up to 150 (Res 2 600m<sup>2</sup>)

Residential population density = 2.7 people per dwelling (WDC ECoP 6.5.6)

Maximum Occupancy = 405 people

Per capita wastewater flow = 250 litres/sec/person/day

Average Daily Flow (ADF) = 1.2 litres/sec

Total wastewater demand = 101 m<sup>3</sup>/day

Peak Dry Weather Wastewater Flow (PDWF) = 2.9 litres/sec

Peak Wet Weather Wastewater Flow (PWWF) = 8.8 litres/sec

The peak wet weather flow from site based on full development as standard residential 2 development would require **16.6%** of the capacity of the existing Ø300mm wastewater main. This is assuming up to 150 lots as calculated above.

**Summary** The above assessment compares the development demands for either full development of a retirement village or Residential 2 development. Therefore, the maximum expected PWWF from site would be either:

- 12.2 L/sec for full development of a Retirement Village; or
- 8.8 L/sec for full development as Residential 2