

## Appendix 2

Resource Consent Application

*Including: Record of Title and Engineer's Report*

**From:** [Assistant](#)  
**To:** [info](#)  
**Cc:** [Gareth Moran](#)  
**Subject:** External Sender: Resource Consent Application for 109 Taylor Street, Cambridge  
**Date:** Friday, 26 February 2021 11:50:59 am  
**Attachments:** [image001.png](#)  
[AEE - 109 Taylor Street Cambridge Final.pdf](#)  
[Form 9 - Resource Consent Application.pdf](#)

---

**CYBER SECURITY WARNING:** This email is from an external source - be careful of attachments and links. Please follow the Cybersecurity Policy and report suspicious emails to Servicedesk

Hi there,

Please find attached resource consent application on behalf of Warren and Wendy Hodges for a concurrent land use and subdivision consent to construct 5 terraced houses at 109 Taylor Street, Cambridge.

Included in this application is an assessment of environmental effects, the application form, followed by the following information that can be accessed via the link below:

- Appendix 1: Record of Title
- Appendix 2: Site Plan
- Appendix 3: Subdivision Scheme Plan
- Appendix 4: Engineering Assessment and Design Report
- Appendix 5: District Plan Rules Assessment
- Appendix 6: Assessment Criteria

OneDrive Link: [https://barkernz-my.sharepoint.com/:f:/g/personal/assistant\\_barker\\_co\\_nz/Ej\\_2-nSpeuxKrePXP7YvAkUB6UeDEuzRvaxM7y-9syVUWQ?e=6H4hkZ](https://barkernz-my.sharepoint.com/:f:/g/personal/assistant_barker_co_nz/Ej_2-nSpeuxKrePXP7YvAkUB6UeDEuzRvaxM7y-9syVUWQ?e=6H4hkZ)

Should you need any further information please contact Gareth Moran in the first instance either by email, [garethm@barker.co.nz](mailto:garethm@barker.co.nz), or phone 021 745 979

As per the application form, all invoices should be made out to the applicant.

Ngā mihi | Kind regards,

**Anna Wingham**  
Planning Assistant

.....



**Urban & Environmental**  
M 021 028 66023 T 09 375 0900

Kerikeri | Whangarei | Warkworth | **Auckland** | Hamilton | Napier | Christchurch

.....  
[barker.co.nz](http://barker.co.nz)

This email and any attachments are confidential. They may contain privileged information or copyright material. If you are not an intended recipient, please do not read, copy, use or disclose the contents without authorisation and we request you delete it and contact us at once by return email.

# Resource Consent Application Form

Section 88 of the Resource Management Act 1991 (RMA). This form provides us with your contact information and details about your proposal. Please print clearly and complete all sections.

## Note to Applicant:

You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.

**To:** Name of Council that is the consent authority for this application: [Select a Council](#)

## Type of resource consent being applied for:

- ☐ Land use
 ☐ Subdivision
 ☒ Combined land use and subdivision

## Activity Status

- ☐ Controlled
 ☐ Restricted Discretionary
 ☐ Discretionary
 ☒ Non-complying
 ☐ I don't know

## Fast Track Resource Consent

The Resource Management Act 1991 provides for land use activities that have a controlled activity status to be fast tracked through the resource consent process and processed within 10 working days of the application being lodged with Council. Your consent may be fast tracked if you tick 'yes' to the first two questions below.

1. Is this application for a controlled activity (land use consent only)? ☐ Yes ☒ No
2. Have you provided an electronic address for this service? ☐ Yes ☐ No

If you wish to opt out of the fast track process, tick here: ☒

## Applicant Name

Please provide the full name of the persons, company, society or trust applying for this resource consent. If the applicant is a trust, please provide the full name/s of all trustees of that trust.

Name:

Wendy Hodges and Warren Hodges





**Applicant Contact Details**

Postal Address:	c/o - Gareth Moran (agent)		
Post code:		Email:	c/o - Gareth Moran (agent)
Phone:	c/o - Gareth Moran (agent)	Mobile:	

**Agent Contact Details**

If you have an agent or other person acting on your behalf, please complete the details below.

Agent:	Gareth Moran		
Contact:	021 745 979		
Postal Address:	PO Box 9342, Waikato Mail Centre, Hamilton		
Post code:	3240	Email:	garethm@barker.co.nz
Phone:	021745979 (Agent- Gareth Moran)	Mobile:	

**Location of Proposal**

Please complete with as much detail as you can, so the site for your proposal is clearly identifiable. Include details such as unit number, street number, street name and town.

Property address:

109 Taylor Street, Cambridge

Legal description:

Lot 2 DPS 947 comprised under Record of Title SA62D/729

V1 | 01/04/20

**Owner/Occupier of Site**

Landowner's full name, phone number and address:

OR



Same as applicant details

Occupiers full name, phone number and address:

OR



Same as applicant details

**Description of Proposal**

Please provide a brief description of the proposal and the reasons why resource consent is required ie which rules in the district plan are infringed. If the space provided is insufficient, please attach additional pages.

A concurrent land use and freehold subdivision under the auspices of a 'compact housing' development to construct 5 terraced houses and associated titles. Please refer to the application material for further information.

### Other Consents

Please let us know of any other consents that you have applied for or know that you need to apply for related to this application. This includes any resource consents that may be required from a regional council under a regional plan.

☐ Other resource consents

Resource consent no. (if known)

☐ Building consent

Building consent no. (if known)

☐ Regional plan consent

Type of regional consent:

*e.g. water discharge permit,  
water intake permit*

### National Environmental Standards (NES)\*

Please let us know if you require consent under a National Environmental Standard. National Environmental Standards are regulatory documents that contain standards pertaining to certain matters eg management of contaminated land, telecommunications.

Is consent required under a NES?

☒ Yes

☐ No

☐ I don't know

Tick the following applicable NES:

☐ NES for Air Quality

☐ NES for Drinking Water

☐ NES for Telecommunication Services

☐ NES for Electricity Transmission Services

☒ NES for Assessing and Managing Contaminants in Soil to Protect Human Health

☐ NES for Plantation Forestry

☐ Other

\* For further information about National Environmental Standards, their requirements and forms please refer to any other sheets provided with these application forms.

### Assessment of Proposal

Please attach an assessment of your proposal's effects on the environment, an assessment against the relevant matters of Part 2 of the RMA and any relevant provisions of NES, regulations, national policy statement, regional policy statement, regional plan and district plan.

Please refer to the AEE for more information.

### Pre-application Information

We recommend that you have a pre-application discussion about your proposal with a Council planner.

Have you had a pre-application meeting with a Council planner? ☐ Yes ☒ No

Have you had any other conversations with any other Council staff? ☐ Yes ☒ No

Date of meeting:

Please provide the names of Council staff you have spoken with:

N/A

If notes of the meeting or other conversations were provided to you, please attach copies.

Have you attached any minutes/notes from the meeting? ☐ Yes ☒ No

### Notification

The Resource Management Act 1991 allows applications to be notified for public submissions on request of the applicant.

Are you requesting that your application be publicly notified? ☐ Yes ☒ No

If you selected 'yes' to the above question, please attach a short summary outlining the details of your application.

Have you attached a summary? ☐ Yes ☐ No

### Site Visit Requirements

☒ As landowner and with the consent of any occupiers or lessee, I am aware that Council staff or authorised consultants may visit the site which is the subject of this application, for the purposes of assessing this application, and agree to a site visit.

OR

☐ If the applicant is not the owner, I understand that Council staff or authorised consultants may visit the site, which is the subject of this application, for the purposes of assessing this application, and agree to a site visit.

Is there a locked gate or security system restricting access by Council staff?

☒ Yes ☐ No

Are there any dogs on the property?

☐ Yes ☐ No

Are there any hazards that may place a visitor at risk?

☐ Yes ☒ No

Provide details of any entry restrictions that Council staff should be aware of e.g. health and safety, organic farm etc.

Please contact the applicant to arrange a site visit.

### Draft Conditions

When a consent is granted, Council can include conditions to manage any adverse effects.

Do you wish to see draft conditions prior to Council making a decision on the application?

☒ Yes ☐ No

☒ By ticking this box, I understand that the opportunity to review the draft conditions is an act of good faith by the Council intended to assist with identifying errors before consent is granted. I further understand that Council has the right to continue processing the application if too much time is taken in the review of draft conditions. By requesting draft conditions I agree to an extension of time under section 37 of the RMA.

### Signature of the applicant(s)

Please read the information below before signing the application form.

### Payment of fees and charges

You must pay the charges payable to Council for this application under the RMA. Please refer to Council's Fees and Charges on its website.

By submitting this application to Council, you agree to pay the charges set out in Council's Fees and Charges relevant to the application.

### Privacy information

Council requires the information you have provided on this form to process your application under the RMA. Council will hold and store the information on a public register. The details may also be made available to the public on the Council's website. If you would like to request access to, or correction of any details, please contact the Council.

### Information checklist

The information checklist provided with this form sets out the full set of information that Council requires for your application to be considered complete. Your application may be returned as incomplete if you do not provide adequate information. Your completed application should be submitted to Council with any supplementary forms and/or guidance as provided by Council.

### Correspondence and Invoices

Please let us know where to send any correspondence and invoices. Where possible any correspondence will be sent by email.

All correspondence excluding invoices sent to:

☐ Applicant or ☒ Agent

All invoices sent to:

☒ Applicant or ☐ Agent

### Confirmation by the applicant

☐ I/we confirm that I/we have read and understood the information and will comply with our obligations as set out above. A signature is not required if you submit this form electronically.

Applicant name:

Signature:

Date:

Applicant name:

Signature:

Date:

Applicant name:

Signature:

Date:

### Confirmation by the agent authorised to sign on behalf of the applicant

As authorised agent for the applicant, I confirm that I have read and understood the above information and confirm that I have fully informed the applicant of their obligations in connection with this application, including for fees and other charges, and that I have the applicant's authority to sign this application on their behalf. (A signature is not required if you submit this form electronically.)

Agent's full name:

Gareth Moran

Signature:

Date:

26/02/2021

### Information Checklist for Resource Consent Application

All applications must include the following information:

- ☒ A description of the activity
- ☒ A description of the site where the activity will occur
- ☒ The full name and address of each owner or occupier of the site

- ✓ A description of any other activities that are part of the proposal to which this application relates
- ✓ A description of any other resource consent required for the proposal to which the application relates
- ✓ An assessment of the proposed activity's effects on the environment
- ✓ An assessment of the activity against Part 2 of the Resource Management Act 1991. This will need to address section 5 'Purpose', section 6 'Matters of national importance', section 7 'Other matters' and section 8 'Treaty of Waitangi'
- ✓ An assessment of the activity against any relevant objectives, policies or rules in the district plan
- ✓ An assessment of the activity against any relevant requirements, condition or permissions in any rules in a document listed in section 104(1)(b) of the RMA
- ✓ Record of title(s) for the subject site  
This must be less than 3 months old. Please attach the title(s) and any consent notices, covenants, easements attached to the title(s)
- ✓ Site plan or scheme plan  
Please provide at an appropriate scale (for example 1:100) showing the location of the building or activity in relation to all site boundaries. The site plan should include the following where relevant:
  - North point
  - Title or Reference No.
  - Scale
  - Date the plans were drawn
  - Topographical information
  - Natural features, including protected trees, indigenous vegetation, water courses
  - Archaeological and/or cultural/heritage sites
  - Record of Title boundaries/location of fence positions relative to boundaries
  - Accessways and road frontages, including proposed crossing places/right of ways
  - Onsite manoeuvring and existing and proposed car parking spaces
  - Legal and physical roads
  - Existing buildings
  - Existing wells and/or effluent disposal systems
  - Buildings on adjacent sites
  - Layout and location of proposed buildings and activities in relation to legal site boundaries
  - Earthworks design and contours/areas of excavation
  - Landscaping
  - Site coverage calculation
  - Details of any signage (sign design, dimensions and location on buildings)
  - Areas subject to hazards e.g. unstable slopes, areas of flooding, peat soils or fill
  - Areas of potential or confirmed contamination
- ✓ Elevation plans  
Please provide at an appropriate scale (for example 1:50, 1:100 or 1:200) and show all structures to be constructed or altered, showing the relationship and appearance of proposed buildings.
- ✓ Floor plans of proposed building or buildings to be used for the activity  
Please clearly show the use of each area/buildings
- ✓ Engineering design plans for any water, wastewater and stormwater works  
(Only concept engineering plans are required at this stage.)
- ✓ An assessment of the activity against any relevant provisions of a:
  - National Environmental Standard
  - National Policy Statement
  - Regional Policy Statement
  - Regional Plan

- ☒ A description of any part of the activity that is permitted under the district plan
- ☒ If a permitted activity is part of the proposal to which the application relates, a description of the permitted activity that demonstrates it complies with the relevant requirements and conditions for that permitted activity (so that resource consent not required for that activity).
- ☒ An assessment of effects (AEE) of the activity  

An AEE is an essential part of your application. If an AEE is not provided Council is unlikely to accept your application. The AEE should discuss all the actual and potential effects of your proposed activity on the environment. Schedule 4 of the RMA outlines all of the matters that must be addressed in your AEE. The amount of detail provided must reflect the scale and significance of the effects that the activity may have on the environment. For example, if there are major effects arising from the proposal, a detailed analysis and discussion of these effects must be included in the AEE. It may require the provision of information from specific experts (eg a traffic engineer). If the effects of the proposal are minor, then a less detailed AEE can be submitted. *(The Council has information available to assist you to prepare the AEE – please contact us if you have any questions.)*

**All applications for subdivision consent must also include the following information:**

- ☐ The position of all new boundaries
- ☐ A north arrow and the scale (1:2000)
- ☐ All proposed and existing easements (including private easements)
- ☐ Any amalgamations
- ☐ Stages (if proposed)
- ☐ Dimensions and sizes of existing and proposed new lots
- ☐ Legal and physical roads, accessways and rights of way including grades (if applicable)
- ☐ All existing buildings and structures, their distance to existing and proposed boundaries and the position of any eaves in relation to rights of way/accessways
- ☐ The areas of all new allotments, unless the subdivision involves a cross lease, company lease, or unit plan
- ☐ The locations and areas of new reserves to be created, including any esplanade reserves and esplanade strips
- ☐ The locations and areas of any existing esplanade reserves, esplanade strips, and access strips
- ☐ The locations and areas of any part of the bed of a river or lake to be vested in a territorial authority under section 237A
- ☐ The locations and areas of any land within the coastal marine area (which is to become part of the common marine and coastal area under section 237A)
- ☐ The locations and areas of land to be set aside as new roads

**Other useful information**

The following examples of information are not compulsory, but they will be useful in helping Council make an informed decision about your application. Submitting this information *if it is relevant to your proposal* may save time and costs further down the track.

- ☐ Locality plan or aerial photo  

Please provide at an appropriate scale (for example 1:500). Please indicate the location of the site in relation to roads and other landmarks. Show the street number of the subject site and those of adjoining sites.
- ☐ Volume of any earthworks  

This must include area and volume of soil removed/imported and depth of cut/fill



- ☐ Details of Hazardous Activities and Industries (HAIL) List activity  
If you are unsure whether your site is on the HAIL list please contact Council for assistance
- ☐ Any written approvals including details of those sought but not obtained  
Please include any signed written approval forms and signed plans if acquired.
- ☐ Specialist reports to support your application  
This may include traffic impact studies, landscape and planting plans, acoustic design certificates etc.
- ☐ Details and outcome of any consultation undertaken with adjacent land owners and occupiers, and relevant bodies. For example, the Regional Council, Heritage New Zealand Pouhere Taonga, Transpower, KiwiRail, NZTA, Department of Conservation etc.
- ☐ Details of any consultation undertaken with iwi  
If you are unsure whether your proposal may affect matters of interest to iwi, or who the relevant iwi groups might be, please discuss this with Council prior to lodging your application
- ☐ Any other information arising from specific district plan provisions

### Other information to include in an application for subdivision consent if it is relevant to your proposal

#### Proposal details

- ☐ Site coverage calculations
- ☐ Existing and proposed crossing places and sight distances and separation distances between crossing places
- ☐ Building platforms for all allotments including shape factors
- ☐ Onsite manoeuvring and existing and proposed vehicle parking spaces (where required)

#### Network utility operations

- ☐ Existing high voltage electricity lines and gas lines
- ☐ Location of existing and proposed service connections (including connections to reticulated services) and/or systems ie water, wastewater, stormwater and any easements
- ☐ Onsite effluent treatment and disposal areas and fields

#### Natural features

- ☐ Significant trees, bush stands, protected trees (including their extent of their dripline), covenanted areas or other features
- ☐ Water bodies

#### Heritage

- ☐ Archaeological and/or cultural heritage sites

#### Hazards

- ☐ Areas of likely or confirmed contamination

- ☐ Areas subject to land hazards e.g. unstopable slopes, areas of flooding, peat soils, fill
- ☐ Details of proposed stormwater management appropriate to the scale and nature of the subdivision
- ☐ Pipework and onsite stormwater systems
- ☐ Open drains (including ownership)
- ☐ Effect of subdivision and end use on existing overland flow paths
- ☐ Contours showing existing and finished ground level (levels to the relevant datum) at 0.5m intervals within the subdivision, and at 2 metre intervals on adjoining properties (to enable effects on those properties to be assessed). A separate plan may be needed to show these details.
- ☐ Areas of proposed or existing fill or excavation
- ☐ Any proposed retaining walls or embankments (note if retaining wall over 1m is proposed, a typical cross section is required.)
- ☐ In urban areas, details of the percentage of proposed and existing impermeable and permeable areas
- ☐ Natural hazards, e.g. unstable slopes, areas of flooding, ponding, peat soils
- ☐ Elevations (to scale) of buildings which are affected by the location of new boundaries (e.g. where height in relation to boundary rules apply)



# TERRACED HOUSING DEVELOPMENT

109 TAYLOR STREET,  
CAMBRIDGE

ASSESSMENT OF ENVIRONMENTAL EFFECTS  
AND STATUTORY ANALYSIS

PREPARED FOR:  
WENDY & WARREN HODGES

26-Feb-2021

**B&A**  
Urban & Environmental

## CONTENTS

THE APPLICANT AND PROPERTY DETAILS .....	1
1.0 INTRODUCTION .....	2
1.1 Overview .....	2
2.0 SITE CONTEXT .....	3
2.1 Site Description .....	3
3.0 PROPOSAL .....	4
4.0 DISTRICT PLAN RULES ASSESSMENT .....	9
<b>4.1 LAND USE</b> .....	9
<b>4.2 SUBDIVISION</b> .....	10
4.1 NES Contaminated Soils .....	10
5.0 PUBLIC NOTIFICATION ASSESSMENT (SECTIONS 95A, 95C TO 95D) .....	11
5.1 Assessment of Steps 1 to 4 (Section 95A) .....	11
5.2 Section 95D Statutory Matters .....	12
<b>5.3 LAND EXCLUDED FROM THE ASSESSMENT OF WIDER ENVIRONMENTAL EFFECTS</b> .....	13
<b>5.4 PERMITTED BASELINE</b> .....	13
<b>5.5 ASSESSMENT OF EFFECTS ON THE WIDER ENVIRONMENT</b> .....	14
5.6 Public Notification Conclusion .....	17
6.0 LIMITED NOTIFICATION ASSESSMENT (SECTIONS 95B, 95E TO 95G) .....	17
6.1 Assessment of Steps 1 to 4 (Section 95B) .....	17
6.2 Section 95E Statutory Matters .....	18
6.3 Adjacent Properties .....	19
6.4 Assessment of Effects on Adjacent Properties .....	19
6.5 Limited Notification Conclusion .....	22
7.0 CONSIDERATION OF APPLICATIONS (SECTION 104) .....	22
7.1 Statutory Matters .....	22
8.0 EFFECTS ON THE ENVIRONMENT (SECTION 104(1)(A)) .....	23
9.0 DISTRICT PLAN AND STATUTORY DOCUMENTS (SECTION 104(1) (B)) .....	24
9.1 Waipa district plan – objectives and policies .....	24
9.3 Waikato Regional Plan .....	34
9.4 NPS URBAN DEVELOPMENT .....	34
10.0 PART 2 MATTERS .....	36
11.0 OTHER MATTERS (SECTION 104(1)(C)) .....	37
12.0 SECTION 104D – GATEWAY TEST .....	38
13.0 SECTION 106 .....	38
14.0 CONCLUSION .....	40

## **APPENDICES:**

Appendix 1: Record of Title

Appendix 2: Site Plan

Appendix 3: Subdivision Scheme Plan

Appendix 4: Engineering Assessment and Design Report

Appendix 5: District Plan Rules Assessment

Appendix 6: Assessment Criteria



## THE APPLICANT AND PROPERTY DETAILS

<b>To:</b>	Waipa District Council
<b>Site Address:</b>	109 Taylor Street, Cambridge
<b>Applicant's Name:</b>	Wendy & Warren Hodges
<b>Address for Service:</b>	Barker & Associates Ltd PO Box 9342 Waikato Mail Centre Hamilton 3240 Attention: Gareth Moran
<b>Legal Description:</b>	Lot 2 DPS 947 comprised under Record of Title SA62D/729
<b>Site Owner:</b>	Hodges Projects Limited
<b>Operative District Plan:</b>	Waipa District Plan
<b>Operative Zoning:</b>	Residential Zone
<b>Policy Overlays:</b>	Compact Housing Area
<b>Locality Diagram:</b>	Refer to <b>Figure 1</b>
<b>Subject Site Area:</b>	1012m <sup>2</sup>
<b>Brief Description of Proposal:</b>	Concurrent land-use and subdivision consent to construct a terraced housing development and create five separate fee simple titles at 109 Taylor Street, Cambridge.
<b>Summary of Reasons for Consent:</b>	Resource consent required as a <b>Non-Complying Activity</b>

We attach an assessment of environmental effects that corresponds with the scale and significance of the effects that the proposed activity may have on the environment.

### AUTHOR



**Gareth Moran**  
Associate  
Barker & Associates Ltd  
Date: February 2021



**Reviewed By – Fraser McNutt**  
Associate  
Barker & Associates Ltd

## 1.0 INTRODUCTION

---

### 1.1 OVERVIEW

This report has been prepared in support of a resource consent application on behalf of Wendy & Warren Hodges for a concurrent landuse and freehold subdivision consent to create a terraced housing development consisting of five individual dwellings under the auspices of the 'compact housing' provisions of the Waipa District Plan (District Plan), at 109 Taylor Street, Cambridge.

The site is zoned Residential and is within the Compact Housing Area under the provisions of the District Plan.

Although the development fails to comply with the minimum required area for compact housing (2000m<sup>2</sup>), given the site is located directly across the road from the Cambridge Green Belt and is located within a Compact Housing overlay, there is strong policy support in the District Plan for development of this nature. Resource consent has therefore been applied for on this basis.

Given the associated non-compliance with minimum lot area, the development has been assessed as a Non-Complying Activity.

This Assessment of Environmental Effects (AEE) has been prepared in accordance with the requirements of Section 88 and Schedule 4 of the Resource Management Act 1991 (the Act) and is intended to provide the information necessary for a full understanding of the activity for which consent is sought and any actual or potential effects the proposal may have on the environment.

## 2.0 SITE CONTEXT

### 2.1 SITE DESCRIPTION

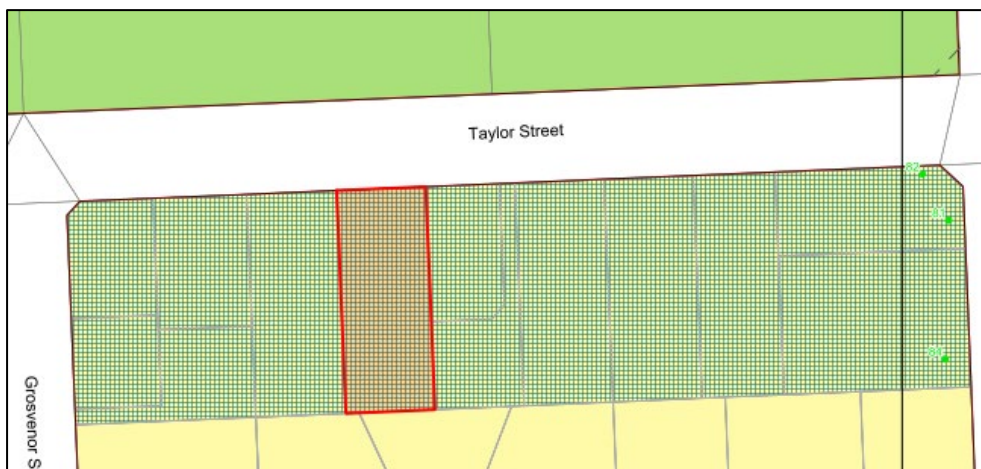
The subject site (site) comprises of one Record of Title, Lot 2 DPS 947 and has a total area of 1012m<sup>2</sup>. An aerial photograph of the site is identified in Figure 1 (below).



**Figure 1:** Aerial photograph of the subject site

The site is located in the Residential Zone and falls within a Compact Housing Area Overlay (Figure 2). There is currently one residential dwelling and accessory building located on site which will be removed/demolished as a result of this proposal.

The site has an existing vehicle access connecting with Taylor Street at the north-western corner of the site. The surrounding environment consists of residential dwellings to the East, South and West and a Reserve Zone to the North directly adjacent to the site on the opposite side of Taylor Street.



**Figure 2:** District Planning maps identifying the Compact Housing Area overlay



## 2.1.1 Record of Title

The site contains the following records of title:

- Lot 2 DPS 947 comprised under Record of Title SA62D/729

There are no interests registered on the title that could restrict the proposal from proceeding. Refer to **Appendix 1** for a copy of the Record of Title.

## 3.0 PROPOSAL

The proposal is for a concurrent landuse and free-hold subdivision under the auspices of a 'compact housing' development (by virtue of the associated District Plan definition) to construct five 'terraced houses' and associated titles.

Throughout the design phase of the project, it was the applicant's intention to create a development that would actively enhance both the current and future amenity values attributed to the area. On this basis Christopher Beer of Christopher Beer Architect Limited, who is a local Architect was engaged to bring the applicants vision into a reality.

In doing so, along with our guidance, Mr Beer was able to create a unique housing development which minimised non-compliance with District Plan provisions, avoided potential effects on neighbouring properties whilst enhancing the amenity values of the area. These points form the nucleus of our application for resource consent and are discussed in depth in later sections of this report.

Although the development fails to comply with the minimum required area for compact housing (2000m<sup>2</sup>), given the site is located directly across the road from the Cambridge Green Belt and is located within a Compact Housing overlay, there is very strong policy support in the District Plan for development of this nature. Resource consent has therefore been applied for on this basis.

The intricacies of the development are outlined in the below table. A copy of the proposed scheme plan is identified in **Figure 3** (below).

Dwelling	Lot Size	Details
1	189m <sup>2</sup>	<p>Lot 1 will accommodate an 84m<sup>2</sup> footprint, two level, three-bedroom dwelling, which is the northern most dwelling and has road frontage to Taylor Street. Vehicular access to the site will be via a new shared accessway (Lot 6). The dwelling has a Gross Floor Area (GFA) of 165m<sup>2</sup>.</p> <p>The construction and subsequent landscaping results in the following site coverage and permeable surface percentages:</p> <ul style="list-style-type: none"><li>• Site coverage = 39.8%</li><li>• Permeable surface = 25.9%</li></ul>

		<p>The 30m<sup>2</sup> outdoor living area will be positioned on the north-western side of the site and will be screened from Taylor Street by virtue of proposed landscaping and an architecturally designed low-level impermeable fence.</p> <p>The dwelling will contain internal garaging suitable for one car park, with a second car park being able to be stacked in front of the garage if necessary. Provision has been made to allow for on-site manoeuvring to ensure vehicles are able to exit the site in a forward direction.</p>
2	132m <sup>2</sup>	<p>Lot 2 will accommodate a 76m<sup>2</sup> footprint, two level, three-bedroom dwelling, which will have access to Taylor Street via a new shared accessway (Lot 6). The dwelling has a GFA of 150m<sup>2</sup>.</p> <p>The construction and subsequent landscaping results in the following site coverage and permeable surface percentages:</p> <ul style="list-style-type: none"> <li>• Site coverage = 48%</li> <li>• Permeable surface = 4.5%</li> </ul> <p>Two separate outdoor living areas will be provided on the eastern and western side of the dwelling. The outdoor living area on the east will be screened from the right of way by garden walls which will create a private internal courtyard.</p> <p>The dwelling will contain internal garaging suitable for one car park, with a second car park being able to be stacked in front of the garage if necessary. Provision has been made to allow for on-site manoeuvring to ensure vehicles are able to exit the site in a forward direction.</p>
3	155m <sup>2</sup>	<p>Lot 3 will accommodate a 76m<sup>2</sup> footprint, two level, three-bedroom dwelling, which will have access to Taylor Street via a new shared accessway (Lot 6). The dwelling has a GFA of 156m<sup>2</sup>.</p> <p>The construction and subsequent landscaping results in the following site coverage and permeable surface percentages:</p> <ul style="list-style-type: none"> <li>• Site coverage = 42.6%</li> <li>• Permeable surface = 13.5%</li> </ul> <p>The 30m<sup>2</sup> outdoor living area will be positioned on the western side of the site accessible through the ground-floor living and dining area.</p> <p>The dwelling will contain internal garaging suitable for one car park, with a second car park being able to be stacked in front of the garage if necessary. Provision has been made to allow for on-site manoeuvring to ensure vehicles are able to exit the site in a forward direction.</p>
4	141m <sup>2</sup>	<p>Lot 4 will accommodate a 67m<sup>2</sup> footprint, two level, two-bedroom dwelling, positioned directly south of Lots 1-3 and will therefore not</p>

		<p>be visible from the streetscape. Vehicular access to the site will be from Taylor Street via a new shared accessway (Lot 6). The dwelling has a GFA of 117m<sup>2</sup>.</p> <p>The construction and subsequent landscaping results in the following site coverage and permeable surface percentages:</p> <ul style="list-style-type: none"> <li>• Site coverage = 46.7%</li> <li>• Permeable surface = 12%</li> </ul> <p>The 34m<sup>2</sup> outdoor living area will be positioned on the north-western side of the site and will be screened from the vehicle access by garden walls which will create a private internal courtyard. The outdoor living area will be accessible through the ground floor living area.</p> <p>The dwelling will contain internal garaging suitable for one car park, with a second car park being able to be stacked in front of the garage if necessary. Provision has been made to allow for on-site manoeuvring to ensure vehicles are able to exit the site in a forward direction.</p>
5	148m <sup>2</sup>	<p>Lot 5 will accommodate a 67m<sup>2</sup> footprint, two level, two-bedroom dwelling, which will have access to Taylor Street via a new shared accessway (Lot 6). The dwelling has a GFA of 125m<sup>2</sup>.</p> <p>The construction and subsequent landscaping results in the following site coverage and permeable surface percentages:</p> <ul style="list-style-type: none"> <li>• Site coverage = 46.1%</li> <li>• Permeable surface = 13.5%</li> </ul> <p>The 40m<sup>2</sup> outdoor living area will be positioned on the north-eastern side of the site. The outdoor living area will be accessible through the ground-floor living area and will be screened from the vehicle access by virtue of garden walls which will create a private internal courtyard.</p> <p>The dwelling will contain internal garaging suitable for one car park, with a second car park being able to be stacked in front of the garage if necessary. Provision has been made to allow for on-site manoeuvring to ensure vehicles are able to exit the site in a forward direction.</p>
6	247m <sup>2</sup>	<p>Proposed Lot 6 is the accessway for Lots 1-5 and is positioned along the eastern section of the site and has an entrance width of 4m. The width of the accessway at its narrowest point is 3.5m (at the western end of the access, north of dwelling 4) and at its widest point has a width of 4.4m.</p> <p>Lot 6 will be divided into one fifth shares between the five dwellings.</p>



**Figure 3: Scheme Plan**

## Transportation

Provision of legal vehicle access will be made via a shared right of way which will be divided into one fifth shares between the five dwellings. The accessway traverses down the eastern edge of the site and curves towards the west, positioned north of Lots 4 and 5. The accessway is of sufficient size to provide for on-site manoeuvring to allow vehicles to exit the site in a forward direction. Each dwelling is provided with one internal garage carpark and the option to stack one car park in front of the garage if necessary.

## Landscaping

The perimeters of the site will be planted in a mixture of species to ensure the development integrates with the surrounding environment as much as possible. Low garden walls have been provided on the road frontage to accentuate the openness of the development. Areas of high garden walls are prevalent throughout the development to create private courtyards, softening the boundary between neighbouring dwellings. The landscaping provided will soften boundaries and provide privacy to future occupiers, enhancing residential amenity onsite and when viewed from the streetscape. Should consent be approved, we would anticipate Council's Planner imposing consent conditions to ensure the ongoing maintenance of the designated landscaping areas.

## Stormwater

In order to minimise impact of the proposed development on the surrounding environment it is imperative that post-development stormwater runoff be no greater than what is currently occurring on site. Two on-site stormwater soakage systems are proposed to be located in the north-eastern corner of the accessway and the southern portion of the accessway (directly north of lots 4 and 5). Further details of the proposed stormwater proposal system can be viewed in the Engineering Assessment and Design Report attached as **Appendix 4**

## Wastewater

According to Waipa Council GIS, an existing 150mm wastewater main runs along the southern boundary on the adjacent lot. A new 150mm pipe connection will be required to service the dwellings. A manhole will need to be utilised as a collection point prior to discharge to the 150mm wastewater main.

## Water

A 100mm water main runs parallel to Taylor Street. A 20mm metered connection services the existing dwelling, this branches off the 100mm water main. A fire hydrant is located approximately 20m north-east of the site. In order to service the development a 63mm DN50 rider main shall be branched off the principal water main and positioned in the right of way. All dwellings will require a service pipe with an individual manifold box. A flushing valve will need to be installed at the end of the rider main.

## Telecommunication and Power

Additional power connection and telecommunication supply will be provided to service each lot.

## 4.0 DISTRICT PLAN RULES ASSESSMENT

The proposal has been assessed against the Residential Zone (Chapter 2) and Subdivision (Chapter 15) provisions of the Waipa District Plan (District Plan). A comprehensive assessment of the proposal against the relevant District Plan rules has been completed and is attached to this report as **Appendix 5**.

### 4.1 LAND USE

The District Plan defines Compact Housing as the following:

*“means a housing DEVELOPMENT in which the design of BUILDINGS, their layout, access and relationship to one another has been planned in a comprehensive manner to achieve compatibility between all BUILDINGS on a SITE or SITES. This can include Papakāinga housing, terraces, duplexes, apartments and town houses, but excludes RETIREMENT VILLAGE ACCOMMODATION AND ASSOCIATED CARE FACILITIES*

As the proposed house designs submitted as part of this development have been comprehensively designed to achieve compatibility between all buildings within the entirety of the development, in our opinion the proposal is best assessed as “Compact Housing” and thus *initially* assumes a **Restricted Discretionary Activity Status** by virtue of Rule 2.4.1.3 (b).

However, as we work through the District Plan provisions the following non-compliances are generated:

- **Rule 2.4.2.43 Compact Housing.** Compact housing shall have a minimum area of 2,000m<sup>2</sup>  
*The total site area is 1012m<sup>2</sup> which fails to comply with the minimum 2,000m<sup>2</sup> requirement. **Discretionary Activity.***
- **Rule 2.4.2.43 Compact Housing (f).** At least 30% of the net site area shall be made up of permeable surfaces.  
*The non-compliances for each lot are as follows*  
*Lot 1 – 25.9%*  
*Lot 2 – 4.5%*  
*Lot 3 – 13.5%*  
*Lot 4 – 12%*  
*Lot 5 – 13.5%*  
**Discretionary Activity.**
- **Rule 2.4.2.43 Compact Housing (c)** Where any dwelling is to be site within 10m of another dwelling on the same site or parent title prior to subdivision, there

shall be no direct line of sight from the main living areas to the dwelling into the main living areas of another dwelling.

*Dwellings 3 and 4 have a direct line of sight between living areas, with a separation distance of 9.7m.*

- **Rule 2.4.2.43 Compact Housing (I).** Dwellings that are parallel to, or adjoin the road boundary of the site shall have a front door facing the road.

*The dwelling on Lot 1 adjoins the road boundary and the front door is not facing the road. **Discretionary Activity.***

Overall, the Landuse component of the application triggers a Discretionary Activity Status.

## 4.2 SUBDIVISION

Although compact housing has been encouraged within close proximity to reserves, the District Plan provisions are silent on the minimum lot size requirements for subdivisions which are subject to a concurrent landuse for Compact Housing in the Residential Zone. As the subdivision fails to comply with the minimum lot size requirements specified in Rule 15.4.2.1 (a) and thus defaults to a **Non-Complying Activity**.

When packaged up, the development (landuse and subdivision) will be assessed as a **Non-Complying Activity**, being the most stringent of the activity status referenced above.

## 4.1 NES CONTAMINATED SOILS

These regulations came into force on 1 January 2012 and apply when a person wants to do an activity described in regulation 5(2) to 5(6) on a piece of land described in regulation 5(7) or 5(8). Following a review of the historical aerial photographs contained within Council's records, a HAIL activity does not appear to have been undertaken on the site. In accordance with Regulation 5(7), the site is not a 'piece of land' and consent is not required under the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

## 5.0 PUBLIC NOTIFICATION ASSESSMENT (SECTIONS 95A, 95C TO 95D)

### 5.1 ASSESSMENT OF STEPS 1 TO 4 (SECTION 95A)

Section 95A specifies the steps the council is to follow to determine whether an application is to be publicly notified. These are addressed in statutory order below.

#### 5.1.1 Step 1: Mandatory public notification is required in certain circumstances

Step 1 requires public notification where this is requested by the applicant, or the application involves the exchange of recreation reserved land under s15A of the Reserves Act 1977.

The above does not apply to the proposal.

#### 5.1.2 Step 2: If not required by step 1, public notification precluded in certain circumstances

Step 2 describes that public notification is precluded where all applicable rules and national environmental standards preclude public notification; or where the application is for a controlled activity; or a restricted discretionary, discretionary or non-complying boundary activity.

In this case, the applicable rules do not preclude public notification, and the proposal is not a controlled activity or a boundary activity. Therefore, public notification is not precluded.

#### 5.1.3 Step 3: If not precluded by step 2, public notification required in certain circumstances

Step 3 describes that where public notification is not precluded by step 2, it is required if the applicable rules or NES require public notification, or if the activity is likely to have adverse effects on the environment that are more than minor.

Public notification is precluded under step 2 above.

#### 5.1.4 Step 4: Public notification in special circumstances

If an application is not required to be publicly notified as a result of any of the previous steps, then the Council is required to determine whether special circumstances exist that warrant it being publicly notified.



Special circumstances are those that are:

- exceptional or unusual, but something less than extraordinary; or
- outside of the common run of applications of this nature; or
- circumstances which make notification desirable, notwithstanding the conclusion that the adverse effects will be no more than minor.

The development involves a residential activity in the Residential Zone at a density that has been anticipated by virtue of the provisions and policy direction of the District Plan. As such there is nothing exceptional, unusual or extraordinary that would denote public notification under the 'special circumstances' umbrella.

## 5.2 SECTION 95D STATUTORY MATTERS

In determining whether an activity will have, or is likely to have, adverse effects on the environment that are more than minor (for the purpose of section 95A(8)(B)), a consent authority must:

- Disregard adverse effects on persons who own or occupy the land within which the activity will occur, or any land adjacent to that land.

The land to be excluded from the assessment is highlighted in the red colouration listed in section 5.3 below.

- Disregard adverse effects permitted by a rule in a plan or NES (the permitted baseline).

The permitted baseline is discussed further in section 5.4 of this report below.

- Disregard trade competition.

This is not considered to be a relevant matter in this case.

- Disregard the adverse effects on those persons who have provided their written approval to the application.

No written approvals have been provided as part of this application.

The sections below set out an assessment in accordance with Section 95D (whether adverse effects are likely to be more than minor, including identification of adjacent properties, and an assessment of adverse effects).

## 5.3 LAND EXCLUDED FROM THE ASSESSMENT OF WIDER ENVIRONMENTAL EFFECTS

In terms of the tests for public notification (but not for the purposes of limited notification or service of notice), the adjacent properties to be excluded from the assessment are shown in **Figure 4** below.



**Figure 4:** Land highlighted in 'red' was excluded from the public notification assessment

## 5.4 PERMITTED BASELINE

Pursuant to section 95D(b) of the Act a consent authority may disregard an adverse effect of an activity on the environment if the plan permits an activity with that effect (the 'permitted baseline' test). There are three categories to the permitted baseline test, these being:

1. What lawfully exists on the site at present;
2. Activities (being non-fanciful activities) which could be conducted on the site as of right, i.e., without having to obtain resource consent; and
3. Activities which could be carried out under a granted, but as yet unexercised, resource consent.

In our view the permitted baseline attributed to the landuse component of the development, is integral to our overall assessment of the proposal.

Of particular note is the District Plan provision relating to site coverage. As a permitted activity, 40% of the overall site is able to be covered in buildings and structures. In this instance the overall built form equates to a site coverage percentage of 44%. Although this doesn't quite comply with the 40% minimum, it is well within the realms of what has been expected within the residential zone. To further put this comment into perspective, the site could be developed with a dwelling, secondary dwelling and

ancillary building (or a combination of either of these scenarios) at basically the same size (minus 4 percent) as the proposed development as a **permitted activity**. This forms a key point in our overall assessment, particularly in relation to amenity related issues which are examined later in our report.

Council's processing planner is also *likely* to look closely at the number of dwellings and potential residents that will reside on the site as part of their amenity effects section of their 42a report. With this in mind, it is very important to note that once again there is nothing preventing a dwelling and secondary dwelling being constructed on site, with equal or more bedrooms than what is proposed as part of this development as a **permitted activity**. This signifies a complying development could theoretically accommodate the same number, or even more residents than what is currently proposed.

It is noted that there are no relevant permitted baseline effects relating to the subdivision component of the application.

## 5.5 ASSESSMENT OF EFFECTS ON THE WIDER ENVIRONMENT

The following sections set out an assessment of wider effects considered relevant to this proposal:

- Character and Amenity
- Traffic
- Earthworks and Construction
- Cultural
- Infrastructure

### Character and Amenity Effects

The Act defines amenity values as *"those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes"*. As such the amenity values of an area can be described as those special attributes, relating particularly to natural and physical characteristics that make an area or neighbourhood unique. Therefore, it is important to consider the effects that development may have on the various characteristics that contribute to the amenity and character of the receiving environment.

As the development has been designed in a comprehensive manner it aligns with the District Plan's definition of 'compact housing'. This alliance with the definition is important as it provides a context to the development and the overall character and amenity values attributed to the Residential Zone.

To accurately assess the potential character and amenity effects attributed to a particular development, we first need to evaluate what the anticipated development

and environmental outcomes are within the area. In order to do this, we need to fall back on the specific provisions of the District Plan for guidance.

The District Plan rules relating to amenity and character spawn from the objectives and policies. In this instance the policy framework of the District Plan directs development of this nature (higher density residential) towards areas within a Compact Housing Overlay or in close proximity to a public reserve. In this instance the subject site ticks both these boxes; the only impeding factor being that the site does not contain a minimum lot size of 2000m<sup>2</sup>.

Regardless, what we can conclude from the above referenced provisions is that the development at the density proposed is not out of character with the environmental outcomes anticipated within the Residential Zone, in close proximity to a public reserve.

It is noted that this type of development is the first of its kind to occur along Taylor Street, which will indicate that it will look *slightly* different to the standard residential development largely comprising of single-story housing existing along that street. However, given the District Plan provisions and further direction from central government to establish higher density housing, the proposal represents a ‘snapshot’ into the future development that will exist in time along Taylor Street, whilst not compromising the existing amenity values.

Further, the proposal represents a residential development in the Residential Zone or in other words a ‘like activity in a like zone’ which are important fundamentals in sustainable planning. As such the amenity values attributed to the Residential Zone will not be compromised with a development of this nature.

We acknowledge that the subject site does not contain the minimum 2000m<sup>2</sup> required as per the provisions of the District Plan. Given there are very few (if any) sites of this size available within areas *suitable* for compact housing development has provided a key road block in development such as this taking a foothold within the Waipa District (particularly Cambridge). From our perspective, should the site (or another similar site) actually contain 2000m<sup>2</sup> then developers would be likely to double the yield of perspective housing developments. With this in mind, the amenity values for a perspective 2000m<sup>2</sup> development would be consistent with what we have proposed, specifically in relation to building density and appearance.

In conclusion, based on the environmental outcomes anticipated in the District Plan along the southern side of Taylor Street (in the Compact Housing Overlay) we conclude that the proposal will have a no-more than minor effect on amenity values.

## Traffic Effects

The development will generate more traffic movements than what currently occurs on site, however they will be generated from a 'residential activity' which is anticipated along Taylor Street. Each dwelling can accommodate one internal garage car park and on-site manoeuvring can occur to ensure all vehicles exit Taylor Street in a forward direction.

It is acknowledged that an Integrated Traffic Assessment (ITA) has not been provided as supplementary evidence supporting this application. This was primarily based on the District Plan provisions for Restricted Discretionary Activities as a useful guidance for when and where an ITA is required. Although the application needs to be assessed as a Non-Complying Activity, the District Plan guidelines for Restricted Discretionary Activities require an ITA when a development triggers greater than 249 vehicle movements per day. In this instance the traffic generated by way of this proposal is significantly less. As such, based on this guidance, we have not commissioned an ITA as part of the consenting process.

It is emphasised that this is a residential development within the Residential Zone, as such, subject to appropriate vehicle crossing and ROW design (which we would anticipate would be conditioned as part of the *approved* consent) we believe that the additional traffic generated by way of this proposal is able to be readily absorbed into the roading network with a no more than minor effect on the safety and functionality of the network.

In conclusion, given that Taylor Street is straight and there are clear lines of sight, we do not anticipate any adverse traffic related effects over and above what theoretically could be generated on the site by virtue of the permitted baseline activities.

## Earthworks and Construction Effects

There undoubtedly will be *some* impact on the surrounding amenity during the construction stage of the proposal, specifically in relation to the increased traffic movements and noise generated by construction vehicles. However, these potential effects are part and parcel of residential development and will only be temporary in nature. Furthermore, given the flat topography of the site only minimal earthworks will be required.

## Cultural Effects

Given the site is modified via existing residential development, in our opinion the proposal will not contribute to any adverse cultural effects. Notwithstanding Council staff *may* send a copy of our resource consent application to Nga Iwi Toopu O Waipa as part of the consenting process. Should any questions or areas of contention arise

as part of this process we will be happy to consult work directly with Nga Iwi Toopu O Waipa to resolve any concerns.

## Infrastructure

An additional water and wastewater connections will be required to service the development. Given the site is located in the Residential Zone, residential development at the density prescribed is not expected to adversely impact on the sustainability of Council's reticulated infrastructure. All stormwater will be engineered at building consent/224c stage to ensure stormwater is retained at predevelopment levels. Overall, the proposal will have a no more than minor effect on the functionality and sustainability of the districts reticulated infrastructure.

## 5.6 PUBLIC NOTIFICATION CONCLUSION

Based on our above assessment, we conclude that any potential adverse effects are no more than minor and public notification is not warranted.

## 6.0 LIMITED NOTIFICATION ASSESSMENT (SECTIONS 95B, 95E TO 95G)

### 6.1 ASSESSMENT OF STEPS 1 TO 4 (SECTION 95B)

If the application is not publicly notified under s95A, the council must follow the steps set out in s95B to determine whether to limited notify the application. These steps are addressed in the statutory order below.

#### 6.1.1 Step 1: Certain affected protected customary rights groups must be notified

Step 1 requires limited notification where there are any affected protected customary rights groups or customary marine title groups, or affected persons under a statutory acknowledgement affecting the land.

The above does not apply to this proposal.

#### 6.1.2 Step 2: If not required by step 1, limited notification precluded in certain circumstances

Step 2 describes that limited notification is precluded where all applicable rules and national environmental standards preclude limited notification; or the application is for a controlled activity (other than the subdivision of land).

In this case, the applicable rules do not preclude limited notification, and the proposal is not a controlled activity. Therefore, limited notification is not precluded.

### 6.1.3 Step 3: If not precluded by step 2, certain other affected persons must be notified

Step 2 requires that where limited notification is not precluded under step 2 above, a determination must be made as to whether any of the following persons are affected persons:

- In the case of a boundary activity, an owner of an allotment with an infringed boundary;
- In the case of a prescribed activity under s360H(1(b)), a prescribed person; and
- In the case of any other activity, a person affected in accordance with s95E.

The application is not for a boundary or prescribed activity as defined in the Act and therefore an assessment in accordance with s95E is required.

### 6.1.4 Step 4: Further notification in special circumstances

In addition to the findings of the previous steps, the Council is also required to determine whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined as eligible for limited notification.

The development denotes a residential activity in the Residential Zone, as such the proposal does not warrant limited notification under the special circumstances umbrella.

## 6.2 SECTION 95E STATUTORY MATTERS

If the application is not publicly notified, a Council must decide if there are any affected persons and give limited notification to those persons. A person is affected if the effects of the activity on that person are minor or more than minor (but not less than minor).



## 6.3 ADJACENT PROPERTIES

We have used the most up to date GIS image to identify which properties have been addressed as part of our 95B and 95E assessments (Figure 5 – below).



**Figure 5:** Properties considered under 95B and 95E – referenced as the red shading.

## 6.4 ASSESSMENT OF EFFECTS ON ADJACENT PROPERTIES

Of the potential effects specifically related to the owners and occupiers of the adjacent property, in our opinion the key point of contention from Council's view point is *likely* to be the non-compliance associated with density, and associated amenity related effects.

Yes, it is acknowledged that the development will alter the existing low density residential development that currently exists in the area, however in our view the development represents a key advance in residential development on the periphery of the green belt, which is in line with the future anticipated growth outcomes derived from the NPS UD and the policy direction of the District Plan.

As such, neighbouring property owners *should* be of the expectation that sites within the vicinity within this area will begin to be developed at a higher density than other parts of Cambridge.

To further narrow in on our assessment we have identified and commented on each individual adjoining property as follows:



## Property 1

As previously mentioned, the development has been designed in order to minimise the potential effects on adjoining property owners. In this instance the upper levels of the dwellings have been positioned to be well outside the permitted setbacks in order to minimise any potential privacy effects on Property 1. However, it is noted a new dwelling *could* be constructed on the subject site in the same position as a permitted activity. Attention during the design phase of the development has also been taken to ensure the dwellings comply with the required height recession planes to ensure that there are no privacy related effects outside of what is denoted as a permitted activity within the District Plan.

In terms of potential noise effects, given the site will be used for residential activity the type of noise generated is anticipated within the zone. It is also important to note that a dwelling and secondary dwelling containing the exact same number of bedrooms as that is proposed could be constructed as a permitted activity.

The predominate outdoor living area for Property 1 appears to be on the northern side of the dwelling fronting Taylor Street and the greenbelt. As a result, it is important that the proposed development does not disrupt this vista to the greenbelt. When assessing this component, it is once again important to note that the development complies with the road boundary setbacks and there is an existing mature hedge planted along the internal boundary between the two sites which will be retained as part of this development. On this basis we can conclude that the proposal will not interfere with the outlook from the Property 1 in a manner that has not been anticipated in the District Plan.

Traffic is another key consideration, however as identified in our Public Notification assessment the additional traffic generated will be derived from a residential activity which is an anticipated tenure of landuse within this area. Subject to appropriate right of way design and the construction of a new vehicle crossing, we don't believe traffic will generate any additional effect over and above what is anticipated in the District Plan.

Amenity effects also relate to the 'intrinsic' values attributed to a site and surrounding area. This can be very difficult to assess as the site and its associated amenity values will mean something different to each property owner. In our opinion the best way to assess is this to take guidance from the high-level objectives and policies of the District Plan. In this instance the District Plan supports higher density residential development within this area, meaning that although the development will look different to what is currently visible along Taylor Street, development of this nature has been anticipated, which in time will alter the existing amenity values attributed to the area.

In summary we can make the following conclusions in relation to the potential effects on Property 1.

- The development complies with the height recession plane angles, thus ensuring that any potential loss of sunlight will be less than minor;
- The development complies with the internal boundary setbacks adjoining Property 1, however in order to further reduce any privacy related effects greater setbacks have been provided to the upper levels of the development;
- The front unit complies with the road boundary setbacks, and the retention of the mature hedge along the north easter boundary of Property 1 will ensure the outlook to the green belt is retained;
- Traffic generated will be within the realms of what has been anticipated within the Residential Zone; and
- The development will not generate any additional noise over and above what is anticipated within the residential zone.

Based on the above analysis, we can conclude that any potential effects on Property 1 are less than minor.

#### Properties 2 and 3

Similar to Property 1, the development has been designed in order to ensure any potential effects on the above referenced properties are minimised. This is particularly apparent in relation to the relevant District Plan bulk and location standards. For example, the development will not contribute to any additional loss of sunlight, privacy or outlook which hasn't already been anticipated by virtue of the permitted baseline activities.

We note that the right of way servicing the development abuts the adjoining boundary, so the owners and occupiers of Properties 2 and 3 will experience some additional traffic movements over and above what currently occurs on site. However once again, these vehicle movements will relate to residential activities and are thus anticipated within this area. It is also important to note that the number of bedrooms (which equate to potential traffic movements) created as part of this development could theoretically be created on site as a permitted activity.

Notwithstanding to soften the appearance of the additional impermeable surfaces associated with the right of way and manoeuvring areas, additional landscaping will be positioned along the abutting boundary.

Given residential development in the form of Terraced Houses has been anticipated in this area, we conclude that any potential effects on the above referenced properties will be less than minor.

#### Property 4

Property 4 is located on the southern side of the development and abuts an existing garage that straddles the southern boundary. Given the outdoor living area for

Property 4 is located on the northern side of the dwelling fronting the proposed development, great time and attention has been taken to ensure the proposed development does contribute to any additional adverse effects on this particular property owner over and above current currently exists on site.

With this in mind the upper level has been set back 5.4m from the boundary in order to ensure that more restrictive height recession plane angle of 28 degrees is able to be complied with. This in turn will give Council's Planner confidence that any daylight related effects are less than minor. In terms of the lower levels of the development, they also comply with the two setback requirements specified in the District Plan.

On this basis Property 4 will not experience any additional effects over and above what could be undertaken on the site as a permitted activity, as a dwelling/ancillary building exactly the same site as units 4 and 5 could be constructed in the same position without requiring resource consent.

Overall, we conclude any potential effects on the owners and occupiers of Property 4 will be less than minor.

#### Property 5

The above property abuts the south western corner of the site and has frontage to Constance Place to the south. Given the mature trees and vegetation planted along the north eastern boundary, the proposed development will not be visibly obtrusive. This point accompanied separation distance draw us to the conclusion that any potential effects on the owners and occupiers of Property 5 will be less than minor.

## **6.5 LIMITED NOTIFICATION CONCLUSION**

Based on our above assessment, we conclude that activities of this nature have been anticipated by virtue of the policy direction of the District Plan, and any associated non-compliances are negligible and will have a less than minor effect on the adjoining properties. As such, we conclude that limited notification is not required.

## **7.0 CONSIDERATION OF APPLICATIONS (SECTION 104)**

### **7.1 STATUTORY MATTERS**

Subject to Part 2 of the Act, when considering an application for resource consent and any submissions received, a Council must, in accordance with section 104(1) of the Act have regard to:

- any actual and potential effects on the environment of allowing the activity;

- any relevant provisions of a National Environmental Standard, other regulations, National Policy Statement, a New Zealand Coastal Policy Statement, a Regional Policy Statement or proposed Regional Policy Statement; a plan or proposed plan; and
- any other matter a council considers relevant and reasonably necessary to determine the application.

As a Non-Complying Activity, section 104B of the Act states that a council:

- (a) may grant or refuse the application; and
- (b) if it grants the application, may impose conditions under section 108.

## 8.0 EFFECTS ON THE ENVIRONMENT (SECTION 104(1)(A))

Under our Section 104 analysis the environmental tests are slightly different, in that we have to ascertain or demonstrate the environmental effects of the proposal are in fact acceptable.

Throughout this report we have concluded that the proposal will have a no more than minor effect on the wider environment and any potential effects on the immediately adjoining property owners and occupiers are less than minor.

In Sections 5.4 and 6.4 we have analysed in detail the key issue around density, where we were able to conclude that the development (although non-complying) has been anticipated within the Residential Zone in the periphery of the greenbelt. Furthermore, the development has been carefully designed to comply with the key bulk and location provisions of the District Plan, which can be used as a useful guidance tool to determine the acceptability (or not) of a residential development.

As such when viewed from a high-level perspective, using the objectives and policies of the District Plan and the NPS UD as guidance, we are able to conclude that the development at the density prescribed is an acceptable outcome in the area.

### Positive Effects

Section 104 also gives the Planner the opportunity to identify any potential positive effects attributed to the development. Given the current housing shortage in the Waikato region (specifically Cambridge) the creation of higher density residential dwellings in the vicinity of the greenbelt represents a positive outcome for the site, and the wider area.

Based on past Council experience plus conversations with real estate agents and other prominent professionals in the property sector we are able to ascertain that the demand for smaller low maintenance dwellings is becoming highly sought after people simply don't have the disposable time available to care for a large sections. This development has attempted to fill this vacant niche in the Cambridge property

market.

While the development will look different to the housing typologies existing along Taylor Street, given the development has been designed by a respected local based architect to a high spec, in our view the development will represent a key advance in residential development within the area and will set a high bench mark for other similar residential developments to follow in the future.

Furthermore, the high level of compliance with the bulk and location provisions of the District Plan, signifies that the design outcomes will contribute positively to the overall amenity of the town.

In order to encourage active, safe and vibrant town centres, higher density development has been encouraged around the perimeters of the Commercial Zone and in close proximity to reserves, where residents can take advantage of the shared open space. As a result, the development will actively enhance the vibrancy of the area.

Although individually this development won't address the housing shortage, when viewed holistically the cumulative positive effects from other similar developments will take important steps towards easing the pressure on the housing market and providing a variety of living choices for the community.

In summary, based on the key conclusions made throughout this report, we are able to conclude that the proposed development represents a positive outcome for the Cambridge community and the Waipa District as a whole.

## **9.0 DISTRICT PLAN AND STATUTORY DOCUMENTS (SECTION 104(1) (B))**

The following planning documents prepared under the RMA are considered relevant to this application.

- Waipa District Plan
- Waikato Regional Policy Statement
- Waikato Regional Plan
- National Policy Statement Urban Development

### **9.1 WAIPA DISTRICT PLAN – OBJECTIVES AND POLICIES**

The below section includes an assessment against the relevant objectives and policies of the District Plan.

## Section 1 – Strategic Policy Framework

OBJECTIVES	POLICIES
<b>1.3.2 Planned and Integrated Development</b> <i>To ensure that development and subdivision happens in a way and at a rate that is consistent with the anticipated settlement pattern, maximises the efficient use of zoned and serviced land, and is co-ordinated with cost-effective infrastructure provision.</i>	<b>1.3.2.1 Implement Proposed Waikato Regional Policy Statement, Future Proof 2009 and Growth Strategy 2009</b> <i>To allow subdivision and development that will give effect to the settlement pattern and directions of the Proposed Waikato Regional Policy Statement and that is consistent with the settlement pattern and directions in the Future Proof Growth Strategy and Implementation Plan 2009 and the Growth Strategy 2009, and avoid unplanned developments which are inconsistent with these directions.</i>

### Comment

The proposal is consistent with the anticipated settlement pattern of the Waikato Regional Policy Statement, Future Proof and the Waipa Growth Strategy. The application demonstrates that the site is able to be developed in a planned and integrated manner in accordance with the above objective and policy.

## Section 2 – Residential Zone

OBJECTIVES	POLICIES
<b>2.3.1 Key elements of residential character</b> <i>To maintain and enhance the existing elements of the Residential Zone that give each town its own character.</i>	<b>2.3.1.1 Cambridge</b> <i>To maintain and enhance Cambridge's character by:</i> <i>(a) Maintaining the grid layout that provides long vistas down roads; and</i> <i>(b) Providing for wide grassed road verges that enable sufficient space for mature trees; and</i> <i>(c) Maximising opportunities to provide public access to the town belt; and</i> <i>(d) Maintaining and enhancing public views to the Waikato River and Karapiro Stream Valley with development actively facing and providing access to the River and the Stream; and</i> <i>(e) Providing for development that is of a low density, one to two storeys, and setback from road frontages to enable sufficient open space for the planting of trees and private gardens; and</i> <i>(f) Maintaining the mix of villa, cottage and bungalow type housing within the identified character clusters.</i>
<b>2.3.2 Neighbourhood amenity and safety</b>	<b>2.3.2.1 Building setback: road boundary</b> <i>All boundaries shall be designed and setback from roads in a manner which:</i>

To maintain amenity values and enhance safety in the Residential Zone	<p>(a) Maintains the predominant building setback within the neighbourhood except in relation to compact housing areas and Neighbourhood and Local Centres; and</p> <p>(b) Allows sufficient space for the establishment of gardens and mature trees on the site except in compact housing areas; and</p> <p>(c) Accentuates the dwelling on the site; and</p> <p>(d) Provides for passive surveillance to roads and avoids windowless walls to the street.</p>
	<p><b>2.3.2.3 Building setback: side boundaries</b></p> <p>To maintain spaciousness when viewed from the road, provide opportunities for planting, provide a degree of privacy, maintain sunlight and daylight, provide ongoing access to the rear of the site and enable building maintenance from within the site by maintaining a consistent setback between buildings on different sites.</p> <p>For compact housing and retirement village developments Policy 2.3.2.3 is to be assessed at the boundary of the site only.</p>
	<p><b>2.3.2.5 Height of buildings</b></p> <p>The height of new buildings shall not be out of character with the Residential Zone. For developments within the compact housing area identified on the Planning Maps this policy applies at the boundary of the site.</p>
	<p><b>2.3.2.6-2.3.2.7 Site coverage and permeable surfaces</b></p> <p>To ensure that all sites have sufficient open space to provide for landscaping, outdoor activities, storage, on-site stormwater disposal, parking, and vehicle manoeuvring by maintaining a maximum site coverage requirement for buildings in the Residential Zone.</p> <p>Maintain a proportion of each site in permeable surfaces such as lawn and gardens, in order to ensure there is sufficient capacity to enable the on-site disposal of stormwater.</p>
	<p><b>2.3.2.9 Maintaining low ambient noise environment</b></p> <p>To ensure that noise emissions and vibration from all activities, including construction, are consistent with the low ambient noise environment anticipated in the Residential Zone.</p>
	<p><b>2.3.2.16 Earthworks</b></p> <p>To ensure that earthworks are carried out in a manner that avoids adverse effects between properties and on water bodies.</p>
	<p><b>2.3.2.19-2.3.2.20 Safety and Design</b></p> <p>To enhance the safety of residential neighbourhoods through site layouts and building designs that incorporate Crime Prevention through Environmental Design (CPTED) principles.</p> <p>To ensure that passive surveillance is provided to roads, reserves and walkways.</p>
	<b>2.3.3.1-2.3.3.2 Building setback from rear and side boundaries</b>



<p><b>2.3.3 On-site amenity values</b></p> <p>To maintain and enhance amenity values within and around dwellings and sites in the Residential Zone through the location, layout and design of dwellings and buildings.</p>	<p>Buildings should be setback from rear boundaries in order to provide for the privacy of adjoining properties and to not overly dominate outdoor living areas on adjoining sites.</p> <p>To enable the construction of buildings up to and on rear and side site boundaries in circumstances where there is no loss of privacy, sunlight or daylight noise effects on adjoining properties or such effects are mitigated, and where sufficient area is maintained on site for outdoor living, and the building does not unduly dominate outdoor living areas on adjoining sites.</p> <p><b>2.3.3.3 Daylight</b></p> <p>To maintain adequate daylight and enable opportunities for passive solar gain by providing for the progressive reduction in the height of buildings the closer they are located to a boundary (except a road boundary).</p> <p><b>2.3.3.5 Maximum building length</b></p> <p>Long building lines are not consistent with residential character and should be avoided. Buildings that are well modulated with architectural detail shall be preferred.</p>
<p><b>2.3.4 Providing housing options</b></p> <p>To enable a wide range of housing options in Cambridge, Te Awamutu, Kihikihi and Karapiro in a way that is consistent with the key elements of the character of each place.</p>	<p><b>2.3.4.1 Sustainable and efficient use of land</b></p> <p>To meet changing housing needs and to reduce demand for further land to be rezoned, by providing for a range of housing options. Developments that are comprehensively designed where spaces can be shared will be preferred.</p> <p><b>2.3.4.5 Compact housing</b></p> <p>To enable compact housing in the following locations:</p> <p>(a) Areas identified for compact housing on the Planning Maps or on an approved structure plan; or</p> <p>(b) Where the intensive use is off-set by adjoining an area zoned for reserve purposes on the Planning Maps that is greater than 1000m<sup>2</sup>, including the Cambridge town belt; or</p> <p>(c) Within a 400m radius of a Commercial Zone.</p> <p>(d) Compact Housing will be supported where it is consistent with compact housing provided on neighbouring land.</p> <p>Provided that:</p> <p>(i) In all cases compact housing shall be comprehensively designed and shall incorporate the sustainable design and layout principles (refer to Section 21 – Assessment Criteria and Information Requirements); and</p> <p>(ii) At the boundaries of the site, compact housing shall be consistent with the predominant height and bulk of development in the neighbourhood; and</p> <p>(iii) Sites which adjoin a cul-de-sac should be avoided.</p>
<p><b>2.3.5 Comprehensive design and development</b></p> <p>To ensure that developments are comprehensively</p>	<p><b>2.3.5.1 Comprehensive design of in-fill housing, compact housing, retirement village accommodation and associated care facilities, rest homes and visitor accommodation</b></p> <p>To ensure that in-fill housing, compact housing, retirement village accommodation and associated care facilities, rest</p>

<p><i>designed, incorporate urban design and CPTED principles, are co-ordinated with infrastructure provision, and integrated with the transportation network.</i></p>	<p><i>homes and visitor accommodation are comprehensively designed by:</i></p> <ul style="list-style-type: none"> <li><i>(a) Ensuring that developments effectively relate to the street, existing buildings, and adjoining developments in the neighbourhood; and</i></li> <li><i>(c) Avoiding long continuous lengths of wall; and</i></li> <li><i>(d) Maximising the potential for passive solar gain; and</i></li> <li><i>(e) Providing for sufficient private space for the reasonable recreation, service and storage needs of residents; and</i></li> <li><i>(h) Incorporating CPTED principles; and</i></li> <li><i>(i) Addressing reverse sensitivity effects; and</i></li> <li><i>(j) Mitigating adverse effects related to traffic generation, access, noise, vibration and light spill; and</i></li> <li><i>(k) Being appropriately serviced and co-ordinated with infrastructure provision and integrated with the transport network.</i></li> </ul>
--	---

## Comment

As alluded to throughout this report, the proposal will promote a new modern feeling and vibrancy to one of the areas in Cambridge which has specifically been designated for high density housing. While the development will look *different* to the older single-story dwelling located along Taylor Street (some of which are former state housing), in our view it will create a high bench mark in terms of design that proceeding developments within the area will be judged upon.

The proposal represents a high level of compliance with bulk and location provisions of the District Plan, and complying outdoor living can be achieved to ensure a high level of on-site amenity is retained once the units become habitable. Furthermore, landscaping will be provided along the front and side of the units to soften the visual appearance and dominance of the development whilst the complying boundary setbacks will ensure a sense of space and openness is retained when viewed from any public vantage points.

The unit facing the street frontages will comply with the key CPTED principles by complying with the required glazing standard which will accentuate 'eyes on the street', which is an important core principle associated with CPTED.

As alluded to throughout this report all dwellings are able to connect to the appropriate reticulated infrastructure and the existing roading network.

Based on the high level of compliance with the key bulk and location standards specified in the District Plan, we are able to conclude that the proposal is not contrary to the above referenced objectives and policies.

Based on aerial photographs of Cambridge the majority of sections within the Residential Zone are in excess of 1000m<sup>2</sup>. At this size, the town is currently unable to supply a wide range of house options as per the directive outlined within Objective 2.3.4. This development will alleviate some of this pressure by providing five terraced houses and associated free hold titles at a size and density not readily seen in Cambridge, promoting a variety of different living alternatives and housing typologies.

In summary it is concluded that the proposal represents a positive outcome for the Cambridge township and is therefore not contrary to the above referenced objectives and policies.

## Section 15 – Infrastructure, Hazards, Development and Subdivision

OBJECTIVES	POLICIES
<b>15.3.1 Integrated development: site design and layout</b> <i>To achieve integrated development within the District, that contributes to creating sustainable communities and enhances key elements of character and amenity.</i>	<b>15.3.1.1 Understanding the constraints and opportunities of a site by undertaking a site and surrounding area analysis</b> <i>Development and subdivision should integrate with and acknowledge the constraints and opportunities of the site and surrounding area.</i>
	<b>15.3.1.2 Sustainable design and layout development principles</b> <i>Development and subdivision within the urban limits and the Large Lot Residential Zones, should occur in accordance with the principles of sustainable design, and enable energy efficiency.</i>
	<b>15.3.1.3 Low impact design</b> <i>The design and layout of development and subdivision, should recognise the landform and processes of the natural environment of the site and surrounding land, and avoid or minimise alterations to the landform and ecosystems.</i>
	<b>15.3.1.4 All zones: ensuring boundary adjustments and boundary relocations do not compromise amenity</b> <i>Boundary adjustments and boundary relocations shall not create or increase any non-compliance with rules for new lots in the zone within which the subdivision is taking place.</i>
<b>15.3.2 Integrated development: natural hazards and site suitability</b> <i>To ensure that sites proposed as part of a development or subdivision will be capable of accommodating activities anticipated within the applicable zone.</i>	<b>15.3.2.1 Land to be suitable for use</b> <i>Land to be developed or subdivided must be physically suitable to accommodate the permitted land use activities for that zone in accordance with the rules of this Plan</i>
	<b>15.3.2.2 Consideration of natural hazards</b> <i>Development and subdivision design should avoid natural hazards, or provide for the mitigation of the hazard within the development or subdivision design.</i>
	<b>15.3.2.3 Consideration of climate change</b>

	Development and subdivision design should avoid areas that may be subject to the known effects of climate change, or provide for the mitigation of the effects of climate change within the development or subdivision design
	<b>15.3.2.4 Consideration of reverse sensitivity</b> Development and subdivision design should not result in reverse sensitivity effects on adjacent sites, adjacent activities, or the wider receiving environment.
<b>15.3.3 Integrating development: efficient servicing</b> Achieving the efficient and cost-effective servicing of land by ensuring that servicing is provided to areas proposed to be developed.	<b>15.3.3.1 Servicing requirements</b> All proposed urban development and subdivision shall be serviced to a level that will provide for the anticipated activities approved in a structure plan, or otherwise anticipated within the zone. Servicing requirements shall include: <ul style="list-style-type: none"> <li>(a) Reserves for community, active and passive recreation; and</li> <li>(b) Pedestrian and cycle connections; and</li> <li>(c) Roads; and</li> <li>(d) Public transport infrastructure, e.g. bus stops; and</li> <li>(e) Telecommunications; and</li> <li>(f) Electricity; and</li> <li>(g) Stormwater collection, treatment and disposal; and</li> <li>(h) Wastewater treatment and reticulation, water provision for domestic and firefighting purposes; and</li> <li>(i) Anticipating and providing for connections to identified adjacent future growth areas.</li> </ul>
	<b>15.3.3.2 Co-ordination between servicing and development and subdivision</b> Development and subdivisions shall: <ul style="list-style-type: none"> <li>(a) Be located in areas where infrastructural capacity has been planned and funded; and</li> <li>(b) In areas subject to an approved structure plan, provide sufficient infrastructural capacity to meet the demand identified in the structure plan; and</li> <li>(c) Achieve the lot yield anticipated in an approved structure plan; and</li> <li>(d) Include infrastructure provision for both the strategic infrastructure network and local infrastructure connections.</li> </ul>
	<b>15.3.3.3-4 Roading infrastructure</b> <ul style="list-style-type: none"> <li>- The design, location, alignment, and dimensions of new roads shall ensure that safe vehicle, pedestrian, and cycling access and manoeuvring can be provided to every site/lot.</li> <li>- The roading pattern shall ensure connectivity to adjacent land identified as Deferred Zones or future growth areas, and the provision of public transport infrastructure, such as bus stops.</li> </ul>

	<p><b>15.3.3.5 Standard of infrastructure</b> Infrastructure services shall be provided to a standard that will allow the service to be extended to Deferred Zones or future growth areas.</p>
<p><b>15.3.4 Urban consolidation</b> To ensure urban consolidation will be achieved within the District, while also contributing to character and amenity outcomes.</p>	<p><b>15.3.4.1 Achieving density, design and character</b> The minimum and maximum lot size and dimension of lots have been established so that they achieve the character and density outcomes of each zone.</p>
	<p><b>15.3.4.2 Achieving sufficient development density to support the provision of infrastructure services</b> Within the urban limits, where there is no structure plan, the maximum lot size for the zone shall be achieved in order provide a development yield to support infrastructure provision. For some developments where there are proven geotechnical constraints the maximum net lot area may be exceeded.</p>
	<p><b>15.3.4.11 Avoiding reverse sensitivity on adjacent zones and infrastructure</b> Development and subdivision shall not compromise the function of adjacent zones, existing nationally or regionally significant infrastructure, or the provision of infrastructure and services.</p>
<p><b>15.3.6 Integrated development: environmental enhancement</b> Maintain and enhance the District's natural environment, including the natural functioning of the environment, natural features and landscapes, and significant natural areas.</p>	<p><b>15.3.6.1 Minimise impacts on the natural environment: low impact design methods</b> To maintain and enhance the natural environment, the existing land forms, vegetation, and water bodies, through the use of low impact design methods at the time of development and subdivision.</p>
	<p><b>15.3.6.5 Achieving permanent protection of the natural environment</b> Incentivised Cycleways may be created by Council resolution once Council is satisfied that granting environmental benefit lot eligibility for that cycleway is consistent with the District Plan, Regional Policy Statement and any Council, regional, or sub-regional, growth strategy.</p>
	<p><b>15.3.6.7 Identification of sensitive locations</b> Subdivision entitlement that creates an additional lot in identified sensitive locations shall be directed to less sensitive locations as specified in this Plan.</p>
<p><b>15.3.7 Maintaining cultural landscapes</b> To maintain the Districts cultural landscapes, identified in this Plan.</p>	<p><b>15.3.7.1 Manage adverse effects on the values of the cultural landscape</b> To maintain the values of the cultural landscapes identified in this Plan, the layout and design of development and subdivision should not result in buildings, earthworks and wastewater systems adversely affecting the cultural values of the landscape.</p>

<p><b>15.3.12 Giving effect to the Waikato River Vision and Strategy</b></p> <p><i>To ensure that the Waikato River Vision and Strategy is given effect to by all development and subdivision.</i></p>	<p><b>15.3.12.1 Maintaining the health and well-being of land and water bodies</b></p> <p><i>To give effect to the directions and outcomes in the Waikato River Vision and Strategy and the Waipā River Accord, by ensuring that all development and subdivision shall include the following elements:</i></p> <ul style="list-style-type: none"> <li><i>(a) Low impact design for stormwater, drainage and earthworks; and</i></li> <li><i>(b) Building setbacks from lakes and water bodies; and</i></li> <li><i>(c) Access to water bodies where appropriate; and</i></li> <li><i>(d) Provision for the Te Awa Cycleway, where relevant; and</i></li> <li><i>(e) Minimal indigenous vegetation removal and requirements for restoration and enhancement of indigenous vegetation and natural character; and</i></li> <li><i>(f) Restricting locations of earthworks, building and wastewater systems within cultural landscapes.</i></li> </ul>
<p><b>15.3.13 Existing consent notices, bonds and other legal instruments</b></p> <p><i>To ensure the integrity of existing consent notices that regulate further subdivision and that are registered on the certificates of titles of land within the District.</i></p>	<p><b>15.3.13.1 Maintaining existing consent notices, bonds and other legal instruments</b></p> <p><i>To avoid fragmentation of the land resource by ensuring that subdivision processes continue to enforce historic restrictions that have been placed on certificates of titles.</i></p>

## Comment

The policy direction of the District Plan attempts to promote higher density residential development within designed Compact Housing Overlays and within areas in close proximity to reserves, however this policy has not been mirrored in density provisions specified in the District Plan. As such the proposal fails to comply with the maximum permitted density in the Residential Zone. Regardless, the comprehensively designed terraced houses that are intrinsically linked back to the lot configuration provide a high level of onsite amenity for future residents. Whilst the development will *somewhat* alter the character and amenity of the local environment from low density residential to a much higher density, in our opinion this change in dynamics represents a positive outcome for the area and provides a ‘snapshot’ into the future density anticipated in this area. Furthermore, as discussed throughout the report, all proposed lots will be serviced to a level that will provide for future residential use which is a key component of the District Plan. Overall, we conclude that the proposal is not contrary to the above Objective and Policies.

## Section 16 - Transportation

OBJECTIVES	POLICIES
<b>16.3.4 Provision of vehicle entrances, parking, loading and manoeuvring areas</b> <i>The provision of adequate and well-located vehicle entrances and parking, loading and manoeuvring areas that contribute to both the efficient functioning of the site and the adjacent transport network.</i>	<b>16.3.4.1 Location of vehicle entrances</b> <i>To maintain the safe and efficient functioning of adjoining roads and railways, vehicle entrances to all activities shall be located and formed to achieve safe sight lines and entry and egress from the site. In some locations, adjoining rail lines, State Highways, and the District's Commercial Zones; vehicle entrances will be limited and will require assessment due to the complexity of the roading environment, or the importance of provision for pedestrians.</i>
	<b>16.3.4.2 Ensuring adequate parking, loading and manoeuvring areas on site</b> <i>To maintain the efficient functioning of adjoining roads, all activities shall provide sufficient area on site to accommodate the parking, loading and manoeuvring area requirements of the activity, except in the Residential Zone where the provision of on-site manoeuvring for dwellings is enabled within the setbacks.</i>
	<b>16.3.4.5 On-site vehicle manoeuvring areas in the Residential Zone</b> <i>The requirement for dwellings to provide an on-site manoeuvring area may be dispensed with in specific and limited circumstances, where any adverse effects on safety can be avoided, remedied or mitigated.</i>

### Comment

The proposal will not have any adverse implications on the overall safety and functionality of Taylor Street or the surrounding transport network. The proposal is able to achieve onsite parking and manoeuvring to ensure vehicles are able to exit the site in a forward direction, as consistent with the District Plan provisions. Pedestrian and cyclist's connectivity and accessibility to the site and the transport network will not be adversely affected by the proposal.

As such we are able to conclude that the proposal is not contrary to the above objective and policies.

### Objectives and Policies Conclusion

Based on the above analysis, we conclude that the proposal is not contrary to the above referenced objectives and policies.



## 9.2 WAIKATO REGIONAL POLICY STATEMENT (RPS)

The relevant provisions of the Operative and Proposed Waikato Regional Policy Statements have been given effect to within the context of the District Plan, to which we have concluded that the proposal is not contrary to the policy framework of the District Plan. On this basis we conclude that the proposal is not contrary to the overarching policy framework of the RPS.

## 9.3 WAIKATO REGIONAL PLAN

No consents were required under the Waikato Regional Plan.

## 9.4 NPS URBAN DEVELOPMENT

The NPS-UD 2020 requires councils to plan well for growth and ensure a well-functioning urban environment for all people, communities and future generations

The NPS-UD 2020 recognises the national significance of:

- Having well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.
- Providing sufficient development capacity to meet the different needs of people and communities.

Relevant Objectives are listed below:

**Objective 1:** *New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.*

**Objective 2:** *Planning decisions improve housing affordability by supporting competitive land and development markets.*

**Objective 3:** *Regional policy statements and district plans enable more people to live in, and more businesses and community services to be located in, areas of an urban environment in which one or more of the following apply: the area is in or near a centre zone or other area with many employment opportunities the area is well-served by existing or planned public transport there is high demand for housing or for business land in the area, relative to other areas within the urban environment.*

**Objective 4:** *New Zealand's urban environments, including their amenity values, develop and change over time in response to the diverse and changing needs of people, communities, and future generations.*



Relevant Policies are listed below:

**Policy 1:** *Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:*

- a) *have or enable a variety of homes that:*
  - i. *meet the needs, in terms of type, price, and location, of different households; and*
  - ii. *enable Māori to express their cultural traditions and norms; and*
- b) *have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and*
- c) *have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and*
- d) *support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and*
- e) *support reductions in greenhouse gas emissions; and*
- f) *are resilient to the likely current and future effects of climate change.*

**Policy 3:** *In relation to tier 1 urban environments, regional policy statements and district plans enable:*

- d) *in all other locations in the tier 1 urban environment, building heights and density of urban form commensurate with the greater of:*
  - (i) *the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or*
  - (ii) *relative demand for housing and business use in that location.*

**Policy 5:** *Regional policy statements and district plans applying to tier 2 and 3 urban environments enable heights and density of urban form commensurate with the greater of:*

- a) *the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or*
- b) *relative demand for housing and business use in that location.*

**Policy 6:** *When making planning decisions that affect urban environments, decision-makers have particular regard to the following matters:*

- a) *the planned urban built form anticipated by those RMA planning documents that have given effect to this National Policy Statement*
- b) *that the planned urban built form in those RMA planning documents may involve significant changes to an area, and those changes:*

- (i) *may detract from amenity values appreciated by some people but improve amenity values appreciated by other people, communities, and future generations, including by providing increased and varied housing densities and types; and*
  - (ii) *are not, of themselves, an adverse effect*
- c) *the benefits of urban development that are consistent with well-functioning urban environments (as described in Policy 1)*
- d) *any relevant contribution that will be made to meeting the requirements of this National Policy Statement to provide or realise development capacity*
- e) *the likely current and future effects of climate change.*

## Comment

This subdivision aligns with the high-level guidance outlined within the NPS UD, specifically in relation to Policy 1 which seeks to encourage well-functioning urban environments which promote a variety of different homes. The proposal provides for five residential units at a density that is not currently predominant in the environment, catering towards professionals, smaller families and retirees. The proposed two-storey terraced houses offer a housing typology that does not exist in the immediate environment, providing future residents with variety and choice without compromising on amenity values. The construction of five smaller sized dwellings in this area will assist in ‘*meet the needs, in terms of type, price, and location of different households*’, which is a key factor linked to Policy 1.

Furthermore, the proposal further supports the urbanisation of residential zoned land which has high accessibility to open space, schools (Cambridge High School) and commercial centres (Cambridge Town Centre).

## **10.0 PART 2 MATTERS**

Section 5 of Part 2 identifies the purpose of the RMA as being the sustainable management of natural and physical resources. This means managing the use, development and protection of natural and physical resources in a way that enables people and communities to provide for their social, cultural and economic well-being and health and safety while sustaining those resources for future generations, protecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

Section 6 of the Act sets out a number of matters of national importance including (but not limited to) the protection of outstanding natural features and landscapes and historic heritage from inappropriate subdivision, use and development.

Section 7 identifies a number of “other matters” to be given particular regard by Council and includes (but is not limited to) Kaitiakitanga, the efficient use of natural and physical resources, the maintenance and enhancement of amenity values, and maintenance and enhancement of the quality of the environment.

Section 8 requires Council to take into account the principles of the Treaty of Waitangi.

Overall, as the effects of the proposal are considered to be acceptable, and the proposal accords with the relevant objectives and policies of the District Plan. Accordingly, it is concluded that the proposal will not offend the general resource management principles set out in Part 2 of the Act.

## 11.0 OTHER MATTERS (SECTION 104(1)(c))

### Precedence

Precedent is an important matter to consider under Section 104(1)(C). While not an environmental effect per se, for Council to approve an application they need to be mindful that an adverse precedent effect is not being made. Whilst the RMA tells us that each application has to be assessed on its individual merits, natural justice means that applications of a similar nature need to be treated in a comparable manner.

In this instance approving a residential development that doesn't comply with the minimum density provisions of the District Plan, specifically the 2000m<sup>2</sup> minimum lot size provision *could potentially* create a precedent for other similar subdivisions. As a result, in order to safeguard Council's position (should consent be approved), Council must be satisfied that the site contains a set of unique characteristics that would differentiate it from other similar sized sites.

The key point of difference associated with this site is that it is located within a designated Compact Housing Overlay immediately abutting the Cambridge Greenbelt. As such the policy direction of the District Plan has recognised that development at this density is an acceptable outcome. To put this comment into perspective, if a development of this nature was applied for within a suburban area, not within a compact housing overlay or within close proximity to the Commercial Zone or public space then yes, approving a development of that nature could potentially create an unwanted precedent effect. However, this is not the case.

In terms of other *possible* future developments located within the vicinity of the subject site failing to comply with the 2000m<sup>2</sup> minimum lot size, we would argue that approving additional compact housing developments (depending on their location and compliance with other District Plan provisions) would represent a positive outcome for the District which is in keeping with the key themes identified in the NPS UD.

Based on our above rational, we conclude the development will not generate any unforeseen precedent related effects.

## Future Proof

The Future Proof Growth Strategy and Implementation Plan 2009 is a collaborative strategy for managing growth in the Waipa District, Waikato District, Hamilton City and that part of the Waikato Region. Implementation of this Strategy is in accordance with Section 74(2)(b) of the Act. It contains directions for a number of growth-related issues including provisions for business and City and Town Centres. The strategy has four focus areas being residential development, rural land, business and industrial land, and retail and commercial development. Given the site subject to this application is located within the Residential Zone, mean it aligns with the key overarching themes of this growth strategy.

## **12.0 SECTION 104D – GATEWAY TEST**

To obtain consent, an applicant will need to demonstrate to Council in its application that either of the ‘two’ gateway tests under Section 104D of the Resource Management Act 1991 are satisfied, being wither that:

- (a) The adverse effects of the application on the environment will be minor; or
- (b) That the application will not be contrary to the objectives and policies of the relevant plan.

Throughout this report I have established that the adverse effects of the proposal are less than minor and that it is not contrary to the objectives and policies of the District Plan.

As such the proposal passes through the gateway test enabling the application to be approved.

## **13.0 SECTION 106**

106 Consent authority may refuse subdivision consent in certain circumstances.

- (1) *A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that—*
  - (a) *there is a significant risk from natural hazards; or*
  - (b) *[Repealed].*

- (c) *sufficient provision has not been made for legal and physical access to each allotment to be created by the subdivision.*
- (1A) *For the purpose of subsection (1)(a), an assessment of the risk from natural hazards requires a combined assessment of—*
  - (a) *the likelihood of natural hazards occurring (whether individually or in combination); and*
  - (b) *the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and*
  - (c) *any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).*
- (2) *Conditions under subsection (1) must be—*
  - (a) *for the purposes of avoiding, remedying, or mitigating the effects referred to in subsection (1); and*
  - (b) *of a type that could be imposed under section 108.*

## Natural Hazards

The management of significant risks from natural hazards is listed in Section 6 of the Resource Management Act (RMA) 1991 as a matter of national importance. Under the RMA, regional councils and territorial authorities have specific functions to manage natural hazards in their jurisdictions in accordance with the risk-based approach articulated by the Ministry for the Environment.

The RMA defines natural hazard as, ‘any atmospheric, earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment’.

The applicant has provided a Site Suitability Report prepared by Titus Consulting Engineers dated 25 February 2021 and referenced 11683 (**Appendix 4**). The report concludes that the site is suitable for the intended development subject to further geotechnical investigations prior to building consent, specifically as follows:

Taking into account the conclusions reached in the Titus report, we are satisfied that the proposal does not present a significant risk from a natural hazard nor through the subdivision of land accelerate worsen or result in material damage on other land, structures or the subject site.

## Legal and Physical Access

Provision of vehicle access to Lots 1-5 is will be provided through a shared accessway (Lot 6) accessing off Taylor Street.

## Conclusion

On the basis of the above, we do not consider there is any grounds to refuse consent under Section 106.

## **14.0 CONCLUSION**

The proposal involves the construction of a five-unit compact housing development and subdivision of one lot into five free-hold titles at 109 Taylor Street. There is an existing residential dwelling onsite which is proposed to be removed as a result of this proposal. This application has been assessed as a **Non-Complying Activity**.

Based on the above report it is concluded that:

- The proposal will not detract from the residential amenity values attributed to the wider area.
- The proposal aligns with the overall densities prescribed in the District Plan.
- Stormwater and wastewater can be disposed in a manner that won't have any overarching effects on the reticulated infrastructure.
- The actual and potential adverse environmental effects are acceptable in residential environment.
- Public and limited notification is not required.
- The proposal is not contrary to the relevant objectives and policies of the District Plan.
- The proposal is consistent with Part 2 of the Act. It is therefore concluded that the proposal satisfies all matters the consent authority is required to assess, and that the application for resource consent can be granted on a non-notified basis.

## AUTHOR



**Gareth Moran**  
Associate  
Barker & Associates Ltd  
Date: February 2021



**Reviewed By – Fraser McNutt**  
Associate  
Barker & Associates Ltd



**RECORD OF TITLE  
UNDER LAND TRANSFER ACT 2017  
FREEHOLD  
Search Copy**



  
R.W. Muir  
Registrar-General  
of Land

**Identifier** **SA62D/729**  
**Land Registration District** **South Auckland**  
**Date Issued** 30 January 1998

**Prior References**

SA1021/226

---

<b>Estate</b>	Fee Simple
<b>Area</b>	1012 square metres more or less
<b>Legal Description</b>	Lot 2 Deposited Plan South Auckland 947

**Registered Owners**

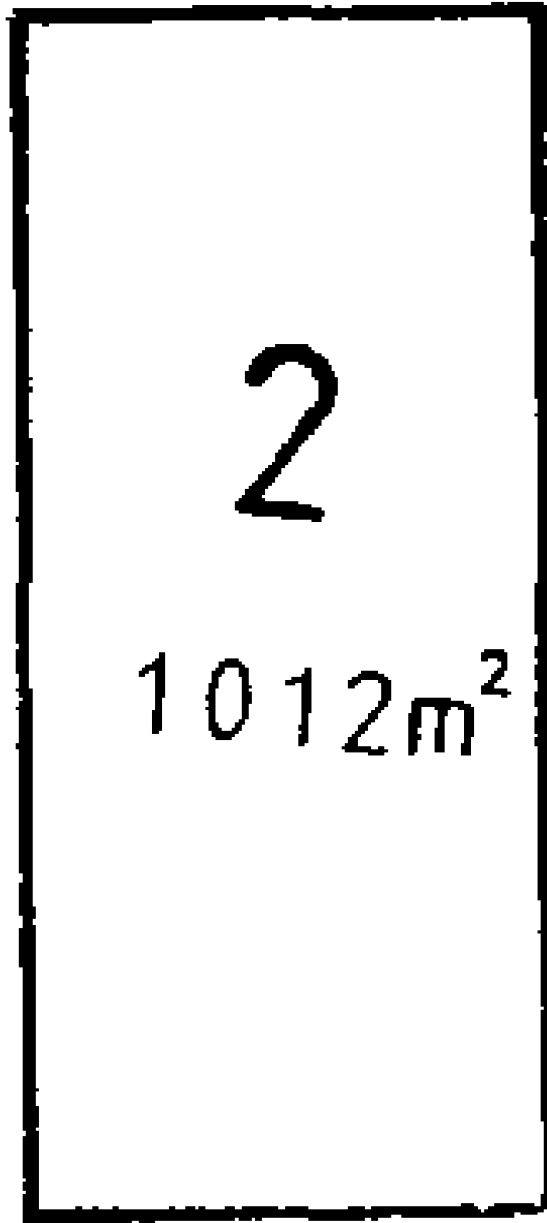
Hodges Projects Limited

---

**Interests**

11835692.2 Mortgage to ASB Bank Limited - 31.8.2020 at 3:17 pm

TAYLOR ST





Taylor Street Terrace Houses

Site Information	
Address:	109 Taylor Street Cambridge
Legal description:	Lot 2 DPS 947
Site area:	1,012m <sup>2</sup>

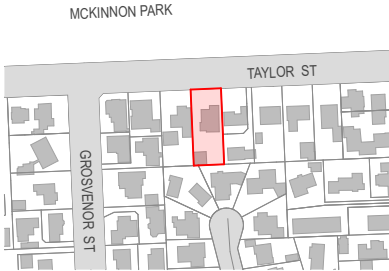


North

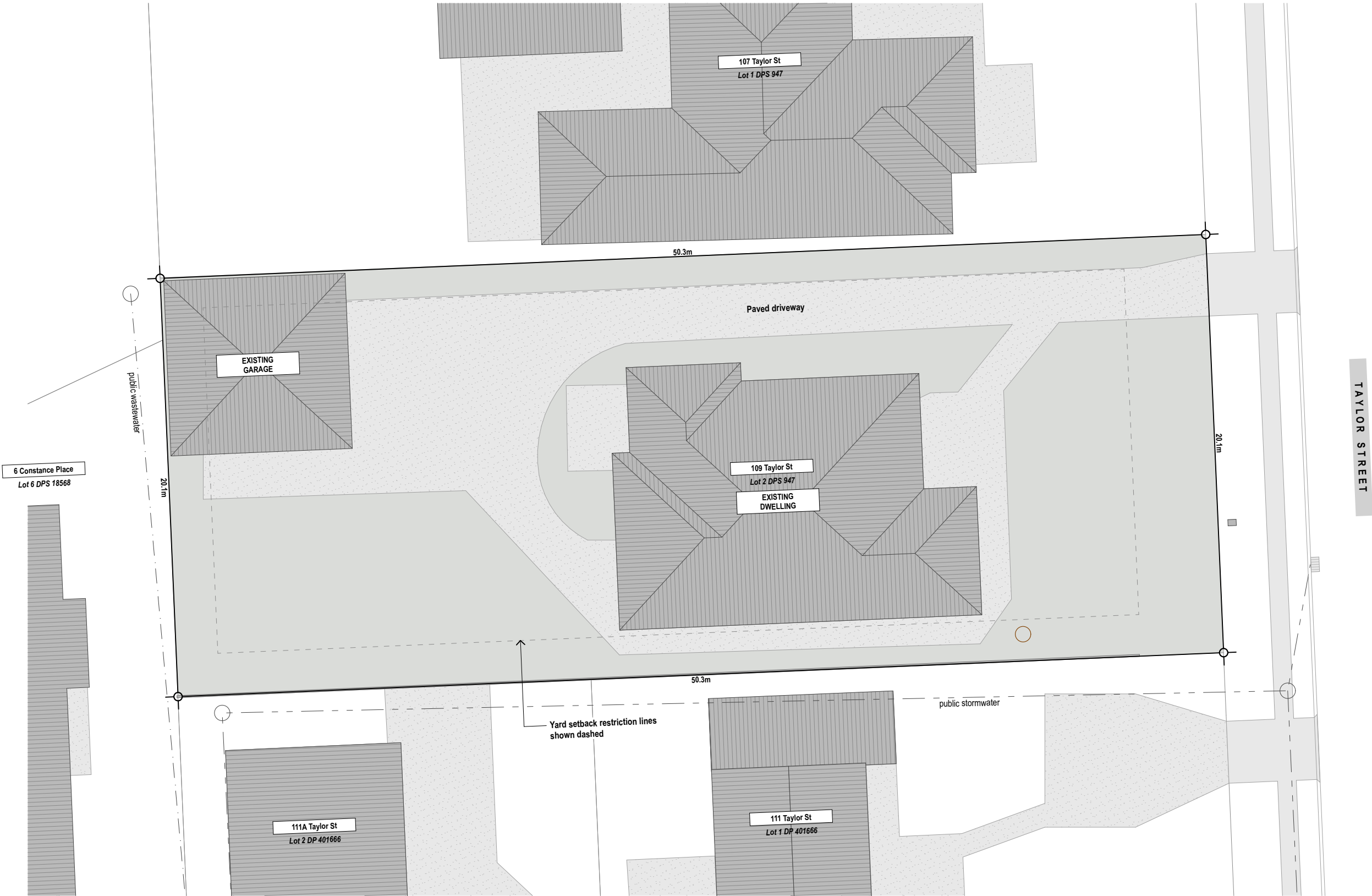
Development Information	
District Plan Zone:	Residential Zone
District Plan Overlay:	Compact Housing
Permeable surface:	40% min.
Site (building) coverage:	40% max.
Front yard setback:	4m
Side yard setbacks:	2m typically (1 at 1.5m)
Maximum building height:	9m
Height control plane:	2.7m + 45° (28° at south boundary)

EXISTING Site Summary – Areas At Roof Level		
Total site area:	1,012	m <sup>2</sup>
Total roof coverage:	266	m <sup>2</sup> 26%
Driveway	187	
Other paving	94	m <sup>2</sup>
Total impermeable area:	547	m <sup>2</sup> 54%
Permeable grass, garden, etc.	465	m <sup>2</sup>
Total permeable area:	465	m <sup>2</sup> 46%

EXISTING Site Summary– Areas at Ground Floor	
Building footprint/coverage	212 m <sup>2</sup>
Driveway	195 m <sup>2</sup>
Other paving	134
Permeable grass, garden, etc.	471 m <sup>2</sup>
Total site area	1,012 m <sup>2</sup>



Site Location



**Christopher Beer Architect Limited**  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

**Warren & Wendy Hodges**  
**Taylor Street Terrace Houses**  
109 Taylor Street, Cambridge

This drawing is for information and consent purposes only. Read in conjunction with other consultants' documentation. The copyright to this drawing and all parts thereof remain the property of Christopher Beer Architect Limited.

S  
e  
r  
i  
e  
s  
c  
h  
o  
b  
e  
r  
c  
t  
a  
r  
c  
h  
i  
t  
e  
c  
t  
s

PLAN: Existing Site

**SK.01(B)**

Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale: 1:1000, 1:200, 1:1.6667

TAYLOR STREET

Site Information	
Address:	109 Taylor Street Cambridge
Legal description:	Lot 2 DPS 947
Site area:	1,012m <sup>2</sup>

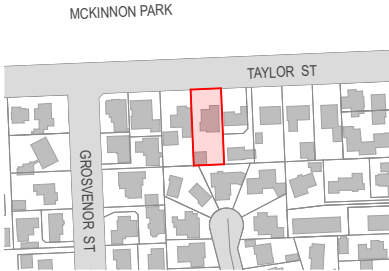


North

Development Information	
District Plan Zone:	Residential Zone
District Plan Overlay:	Compact Housing
Permeable surface:	40% min.
Site (building) coverage:	40% max.
Front yard setback:	4m
Side yard setbacks:	2m typically (1 at 1.5m)
Maximum building height:	9m
Height control plane:	2.7m + 45° (28° at south boundary)

Site Summary – Areas At Roof Level		
Total site area:	1,012 m <sup>2</sup>	
Total roof coverage:	449 m <sup>2</sup>	44%
Driveway	251	
Other paving	164 m <sup>2</sup>	
<b>Total impermeable area:</b>	<b>864 m<sup>2</sup></b>	<b>85%</b>
Permeable grass, garden, etc.	148 m <sup>2</sup>	
<b>Total permeable area:</b>	<b>148 m<sup>2</sup></b>	<b>15%</b>

Site Summary– Actual Areas at Ground Floor	
Building footprint/coverage	370 m <sup>2</sup>
Driveway	314 m <sup>2</sup>
Other paving	178
Permeable grass, garden, etc.	150 m <sup>2</sup>
<b>Total site area</b>	<b>1,012 m<sup>2</sup></b>



Site Location



Christopher Beer Architect Limited  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

Warren & Wendy Hodges  
Taylor Street Terrace Houses  
109 Taylor Street, Cambridge

This drawing is for information and consent purposes only. Read in conjunction with other consultants' documentation. The copyright to this drawing and all parts thereof remain the property of Christopher Beer Architect Limited.

S  
e  
r  
i  
e  
s  
o  
f  
d  
r  
a  
w  
i  
n  
g  
s

PLAN: Site

SK.02(C)

Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale: 1:1000, 1:200, 1:1.6667

TAYLOR STREET

Site Information	
Address:	109 Taylor Street Cambridge
Legal description:	Lot 2 DPS 947
Site area:	1,012m <sup>2</sup>



North

Development Information	
District Plan Zone:	Residential Zone
District Plan Overlay:	Compact Housing
Permeable surface:	40% min.
Site (building) coverage:	40% max.
Front yard setback:	4m
Side yard setbacks:	2m typically (1 at 1.5m)
Maximum building height:	9m
Height control plane:	2.7m + 45° (28° at south boundary)

Site Summary – Areas At Roof Level			
Total site area:	1,012	m <sup>2</sup>	
Total roof coverage:	449	m <sup>2</sup>	44%
Driveway	251		
Other paving	164	m <sup>2</sup>	
Total impermeable area:	864	m <sup>2</sup>	85%
Permeable grass, garden, etc.	148	m <sup>2</sup>	
Total permeable area:	148	m <sup>2</sup>	15%

Site Summary– Actual Areas at Ground Floor				
Building footprint/coverage	370	m <sup>2</sup>		
Driveway	314	m <sup>2</sup>		
Other paving	178			
Permeable grass, garden, etc.	150	m <sup>2</sup>		
Total site area	1,012	m <sup>2</sup>		

Buildings Summary - Floor Areas (m <sup>2</sup> )					
Dwelling / Lot	Site	GF GFA	FF GFA	Unit	GFA
1	189	84	81	165	
2	132	76	74	150	
3	155	76	80	156	
4	141	67	50	117	
5	148	67	58	125	
6	247	–	–	–	
TOTAL	1,012	0	370	343	713

Buildings Summary - Permeability, Coverage, OLA (m <sup>2</sup> )					
Dwelling / Lot	Site	Permeable	Coverage	OLA	
1	189	49	95 39.8%	30	
2	132	6	87 48.0%	30	
3	155	21	87 42.6%	30	
4	141	17	89 46.7%	34	
5	148	20	91 46.1%	40	
6	247	37	– –	–	
TOTAL	1,012	150	449		–
Note: coverage percentage includes 1/5 (49.4m <sup>2</sup> ) of Lot 6 (shared driveway)					



Christopher Beer Architect Limited  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

Warren & Wendy Hodges  
Taylor Street Terrace Houses  
109 Taylor Street, Cambridge

This drawing is for information  
and consent purposes only. Read  
in conjunction with other  
consultants' documentation.  
The copyright to this drawing and  
all parts thereof remain the  
property of Christopher Beer  
Architect Limited.

S  
e  
r  
i  
c  
i  
t  
i  
c  
h  
o  
b  
r  
e  
c  
t  
o  
r  
y

PLAN: Site Compliance & Outdoor Living Areas

SK.03(C)

Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale: 1:200, 1:1.6667



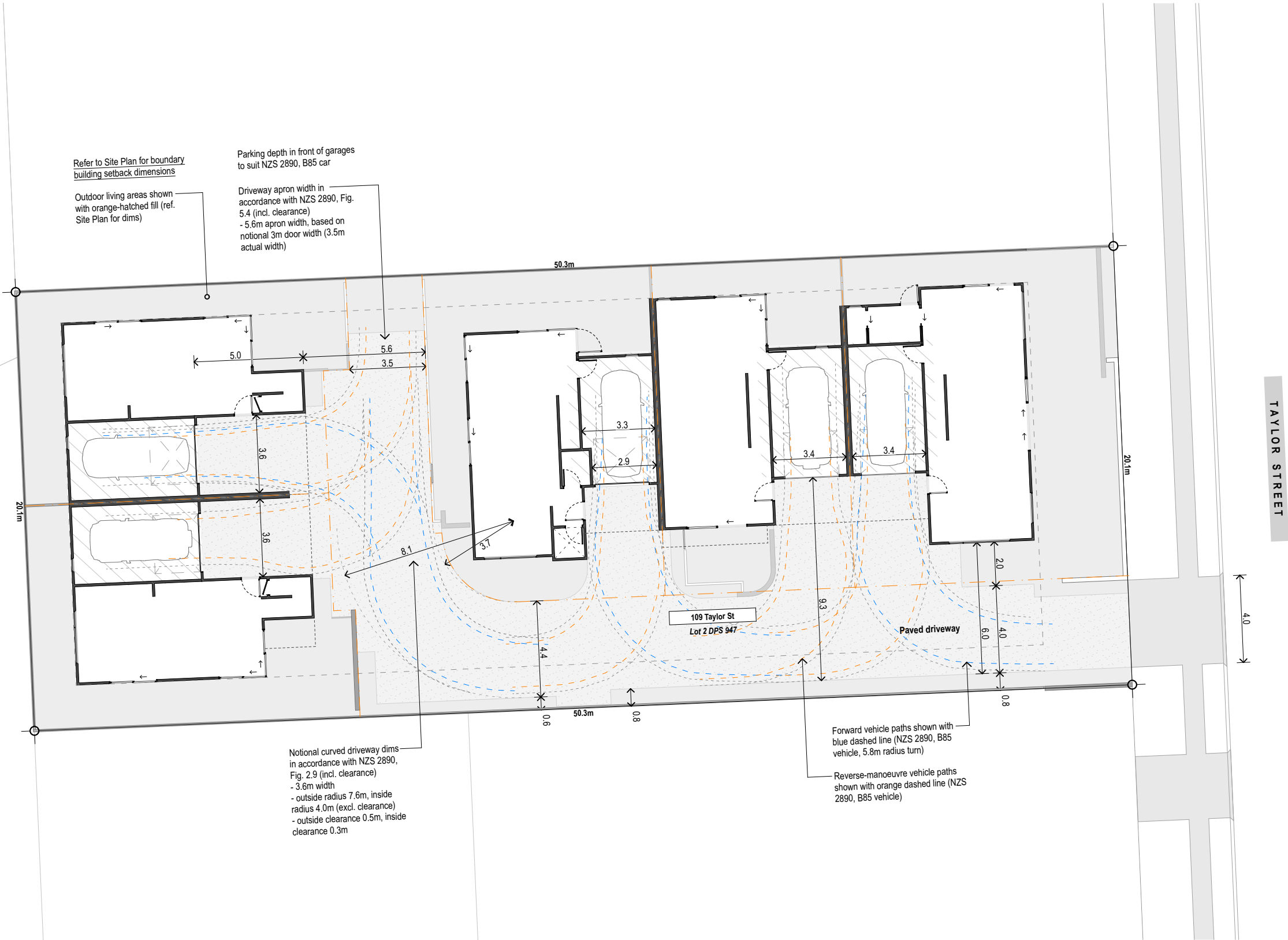
Site Information	
Address:	109 Taylor Street Cambridge
Legal description:	Lot 2 DPS 947
Site area:	1,012m <sup>2</sup>



North

Development Information	
District Plan Zone:	Residential Zone
District Plan Overlay:	Compact Housing
Permeable surface:	40% min.
Site (building) coverage:	40% max.
Front yard setback:	4m
Side yard setbacks:	2m typically (1 at 1.5m)
Maximum building height:	9m
Height control plane:	2.7m + 45° (28° at south boundary)

Note	
1.	Refer to Site Plan for boundary building setback dimensions
2.	Vehicle tracking and vehicle dimensions are in accordance with AS/NZS 2890.1: 2004, for B85 Vehicle. Driveway dimensions & parking dimensions are in accordance with AS/NZS 2890.1: 2004 for Domestic Driveways, except where noted otherwise.



Christopher Beer Architect Limited  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

Warren & Wendy Hodges  
Taylor Street Terrace Houses  
109 Taylor Street, Cambridge

This drawing is for information and consent purposes only. Read in conjunction with other consultants' documentation. The copyright to this drawing and all parts thereof remain the property of Christopher Beer Architect Limited.

S  
E  
R  
I  
T  
I  
P  
R  
O  
B  
E  
R  
A  
R  
C  
H  
I  
T  
E  
C  
T  
S

PLAN: Site Vehicle Manoeuvring

SK.04(C)

Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale: 1:200

Address:	109 Taylor Street Cambridge
Legal description:	Lot 2 DPS 947
Site area:	1,012m <sup>2</sup>



### Development Information

District Plan Zone:	Residential Zone
District Plan Overlay:	Compact Housing
Permeable surface:	40% min.
Site (building) coverage:	40% max.
Front yard setback:	4m
Side yard setbacks:	2m typically (1 at 1.5m)
Maximum building height:	9m
Height control plane:	2.7m + 45° (28° at south boundary)

1. Site boundary information and coordinates are approximate & subject to survey
2. Proposed lot boundaries & subdivision information is shown for coordination purposes; property is to be surveyed & boundaries, easements, etc. proposed & confirmed by Licensed Surveyor




Document Set ID: ~~10563218~~  
Version: 1, Version Date: 26/02/2021

**Warren & Wendy Hodges**  
**Taylor Street Terrace Houses**  
 109 Taylor Street, Cambridge

• I have a  
few more  
things to  
show you  
today.

Drawing issued: 12/02/21  
Drawing scale: 1:200

Site Information	
Address:	109 Taylor Street Cambridge
Legal description:	Lot 2 DPS 947
Site area:	1,012m <sup>2</sup>



North

**Buildings Summary - Floor Areas (m<sup>2</sup>)**

Dwelling / Lot	Site		GF GFA	FF GFA	Unit GFA
1	189		84	81	165
2	132		76	74	150
3	155		76	80	156
4	141		67	50	117
5	148		67	58	125
6	247		—	—	—
<b>TOTAL</b>	<b>1,012</b>	<b>0</b>	<b>370</b>	<b>343</b>	<b>713</b>

**Buildings Summary - Permeability, Coverage, OLA (m<sup>2</sup>)**

Dwelling / Lot	Site	Permeable	Coverage	OLA
1	189	49	95 39.8%	30
2	132	6	87 48.0%	30
3	155	21	87 42.6%	30
4	141	17	89 46.7%	34
5	148	20	91 46.1%	40
6	247	37	— —	—
<b>TOTAL</b>	<b>1,012</b>	<b>150</b>	<b>449</b>	<b>—</b>

Note: coverage percentage includes 1/5 (49.4m<sup>2</sup>) of Lot 6 (shared driveway)



**Christopher Beer Architect Limited**  
 32 Victoria Street (rear), Cambridge  
 +64 (0)7 827 9944  
 studio@christopherbeerarchitect.com

Document Set ID: **10569210**  
 Version: 1, Version Date: 26/02/2021

Concept Design Drawing Set - For RESOURCE CONSENT

**Warren & Wendy Hodges**  
**Taylor Street Terrace Houses**  
 109 Taylor Street, Cambridge

This drawing is for information and consent purposes only. Read in conjunction with other consultants' documentation. The copyright to this drawing and all parts thereof remain the property of Christopher Beer Architect Limited.

s e r i .  
 i h e e t .  
 r p e e c t  
 o b e c t  
 t r a f

PLAN: Ground Floor 1:200

**SK.06(C)**

Sheet number (revision):

Drawing issued: 12/02/21  
 Drawing scale: 1:200, 1:1.6667

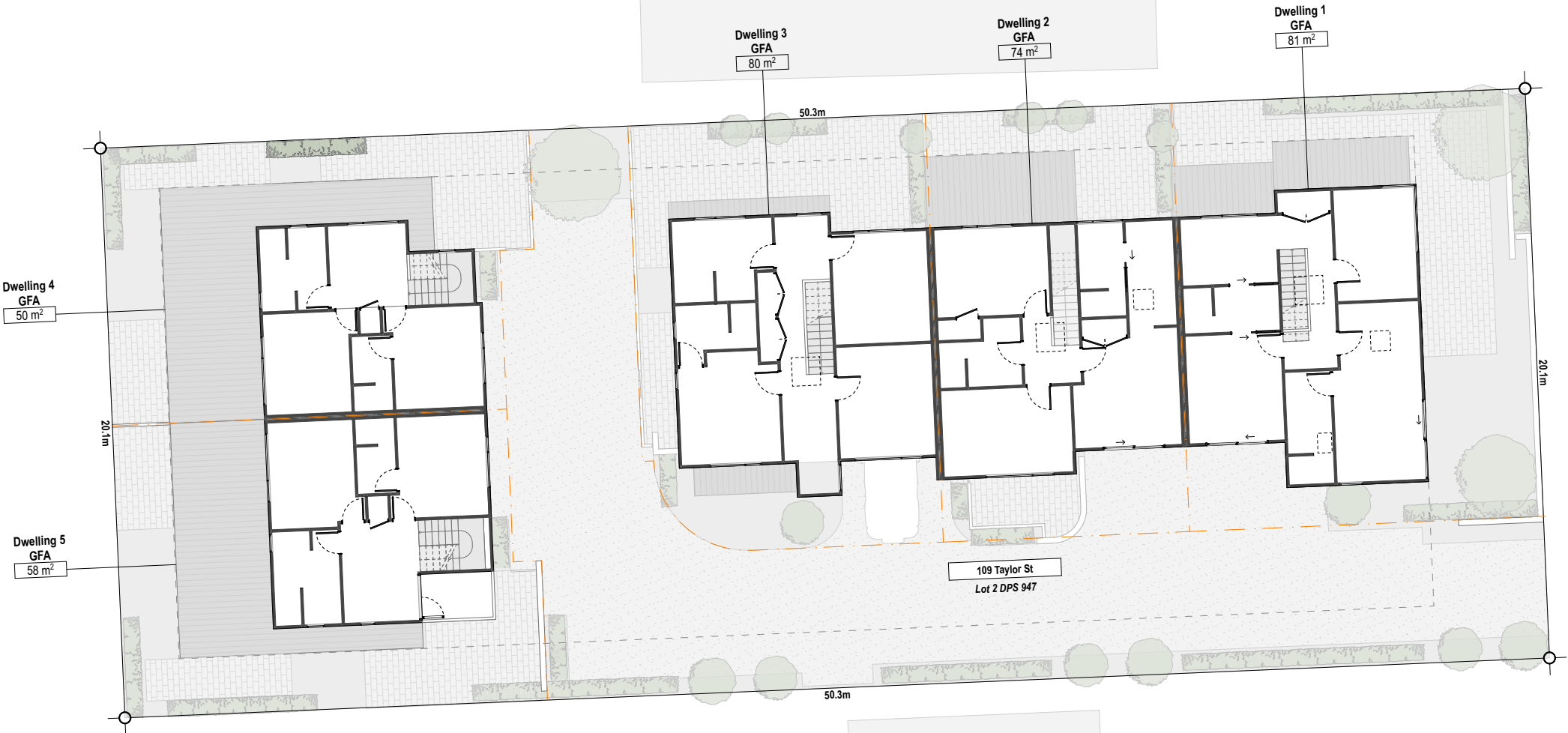
Site Information	
Address:	109 Taylor Street Cambridge
Legal description:	Lot 2 DPS 947
Site area:	1,012m <sup>2</sup>



North

Buildings Summary - Floor Areas (m <sup>2</sup> )					
Dwelling / Lot	Site		GF GFA	FF GFA	Unit GFA
1	189		84	81	165
2	132		76	74	150
3	155		76	80	156
4	141		67	50	117
5	148		67	58	125
6	247		–	–	–
TOTAL	1,012	0	370	343	713

Buildings Summary - Permeability, Coverage, OLA (m <sup>2</sup> )					
Dwelling / Lot	Site	Permeable	Coverage	OLA	
1	189	49	95	39.8%	30
2	132	6	87	48.0%	30
3	155	21	87	42.6%	30
4	141	17	89	46.7%	34
5	148	20	91	46.1%	40
6	247	37	–	–	–
TOTAL	1,012	150	449		–
Note: coverage percentage includes 1/5 (49.4m <sup>2</sup> ) of Lot 6 (shared driveway)					



Christopher Beer Architect Limited  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

Warren & Wendy Hodges  
Taylor Street Terrace Houses  
109 Taylor Street, Cambridge

This drawing is for information and consent purposes only. Read in conjunction with other consultants' documentation. The copyright to this drawing and all parts thereof remain the property of Christopher Beer Architect Limited.

Christopher Beer Architect

PLAN: First Floor 1:200

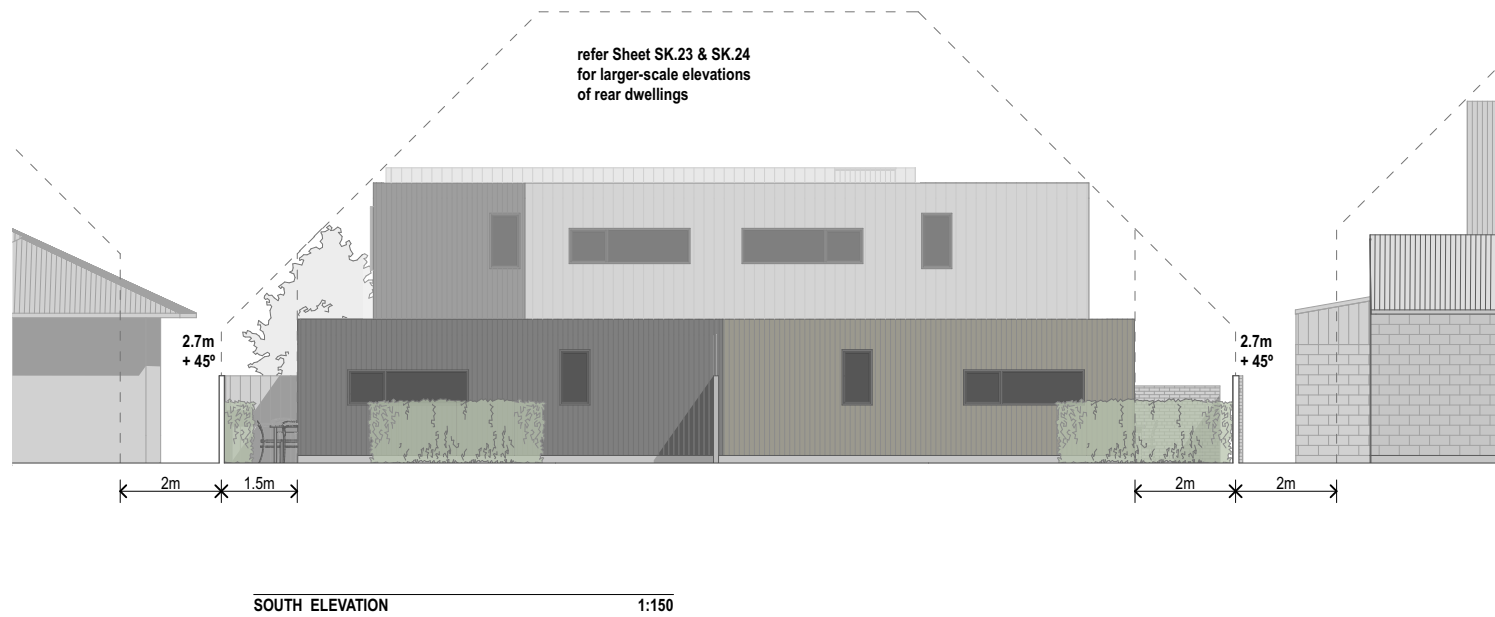
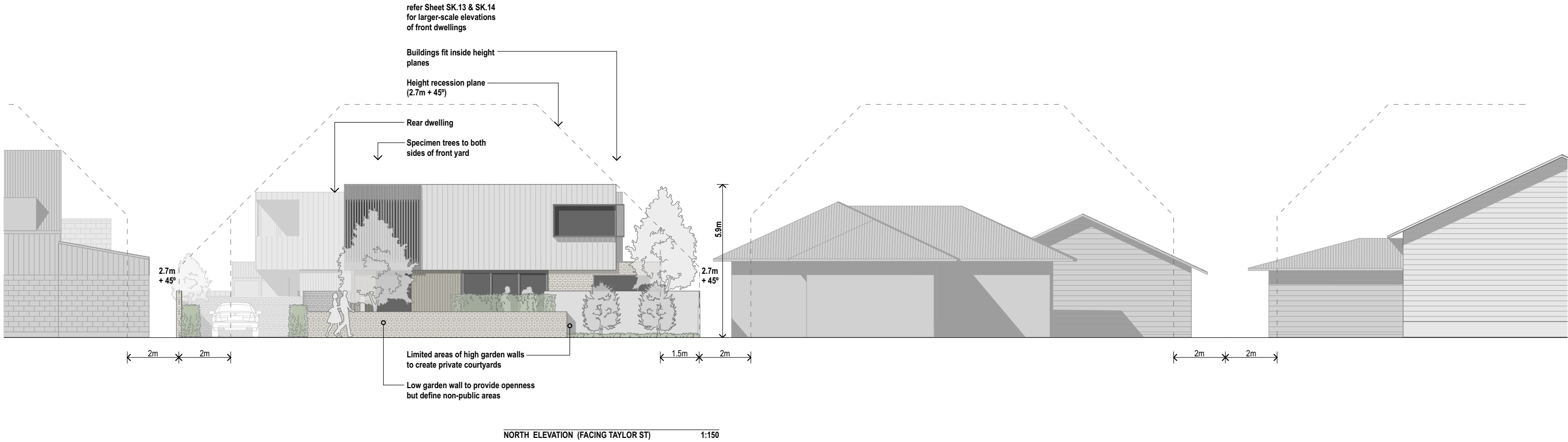
SK.07(A)

Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale: 1:200, 1:1.6667

TAYLOR STREET





**Christopher Beer Architect Limited**  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

**Warren & Wendy Hodges**  
**Taylor Street Terrace Houses**  
109 Taylor Street, Cambridge

This drawing is for information  
and consent purposes only. Read  
in conjunction with other  
consultants' documentation.  
The copyright to this drawing and  
all parts thereof remain the  
property of Christopher Beer  
Architect Limited.

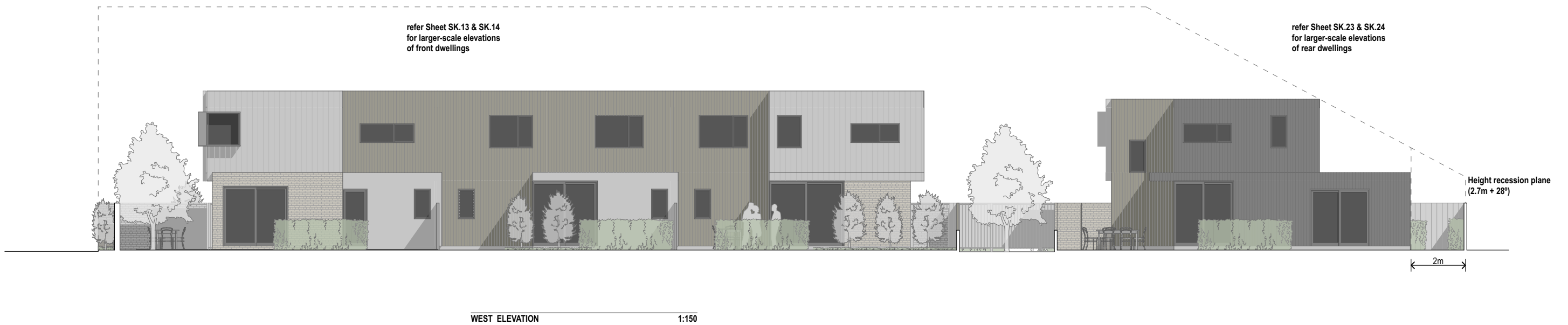
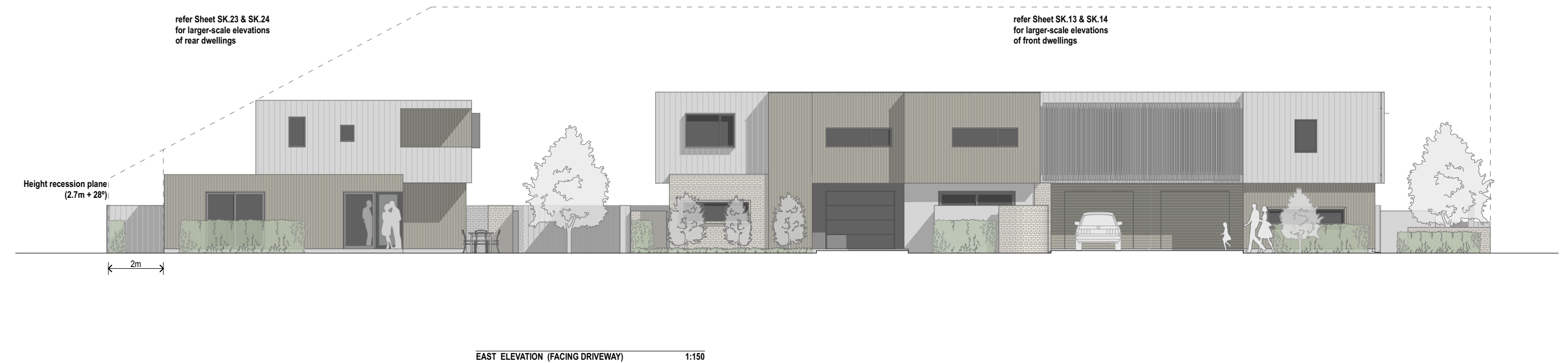
S  
e  
r  
i  
e  
s  
c  
h  
o  
p  
e  
e  
r  
c  
t  
a  
r  
c  
h  
i  
t

ELEVATIONS: North & South 1:150

**SK.08(A)**

Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale: 1:150



**Christopher Beer Architect Limited**  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

**Warren & Wendy Hodges**  
**Taylor Street Terrace Houses**  
109 Taylor Street, Cambridge

This drawing is for information  
and consent purposes only. Read  
in conjunction with other  
consultants' documentation.  
The copyright to this drawing and  
all parts thereof remain the  
property of Christopher Beer  
Architect Limited.

s e r i  
r p e c t  
c h o b e r c t  
t r a c t

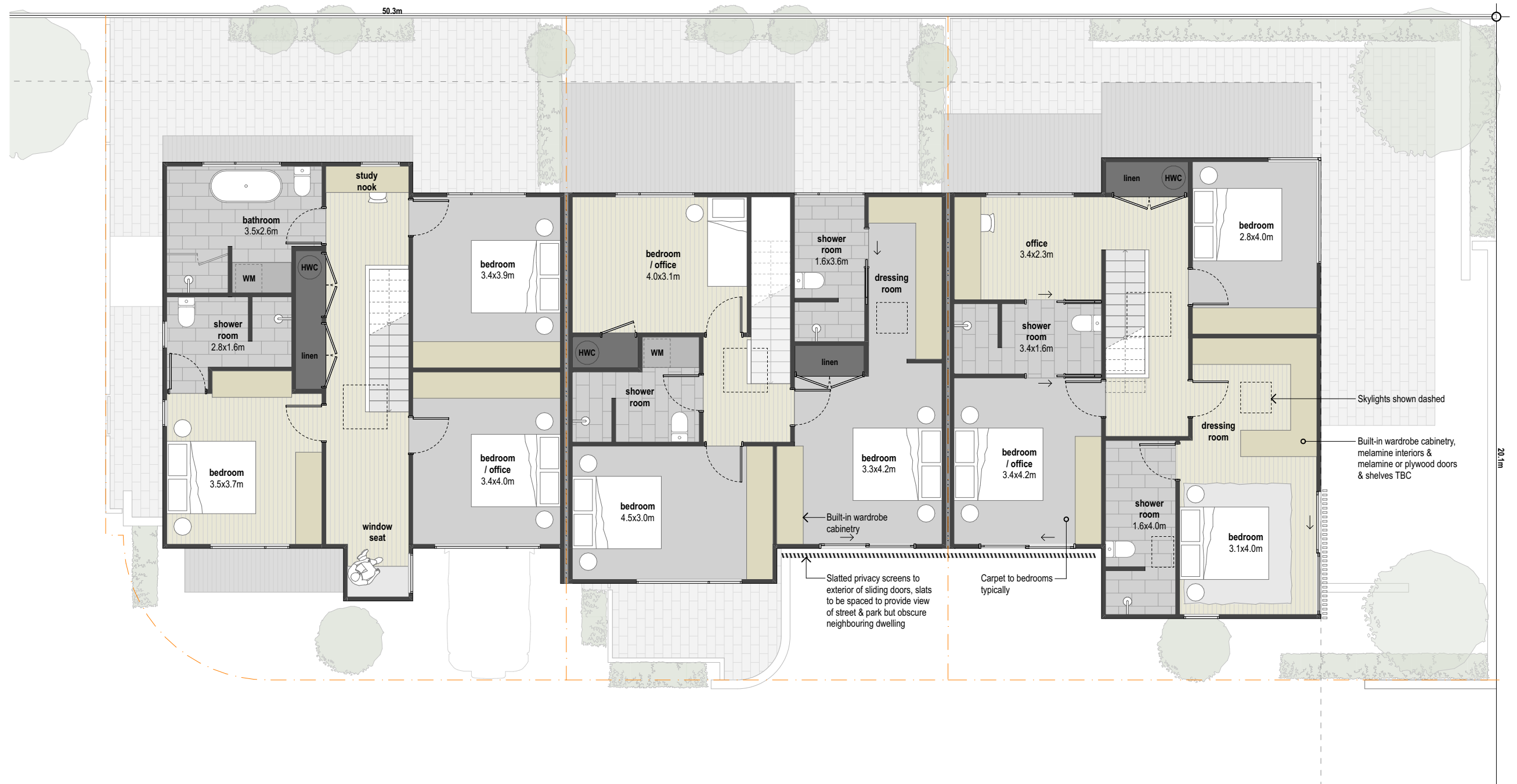
ELEVATIONS: East & West 1:150

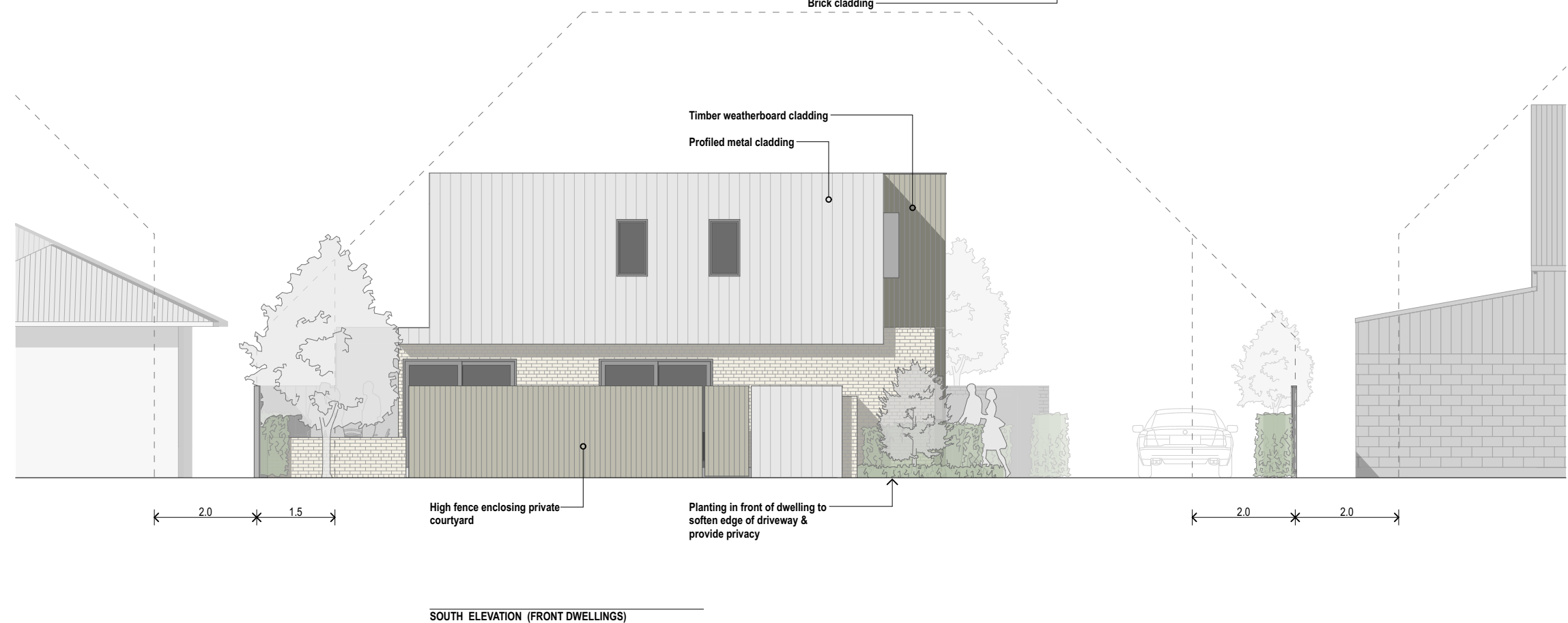
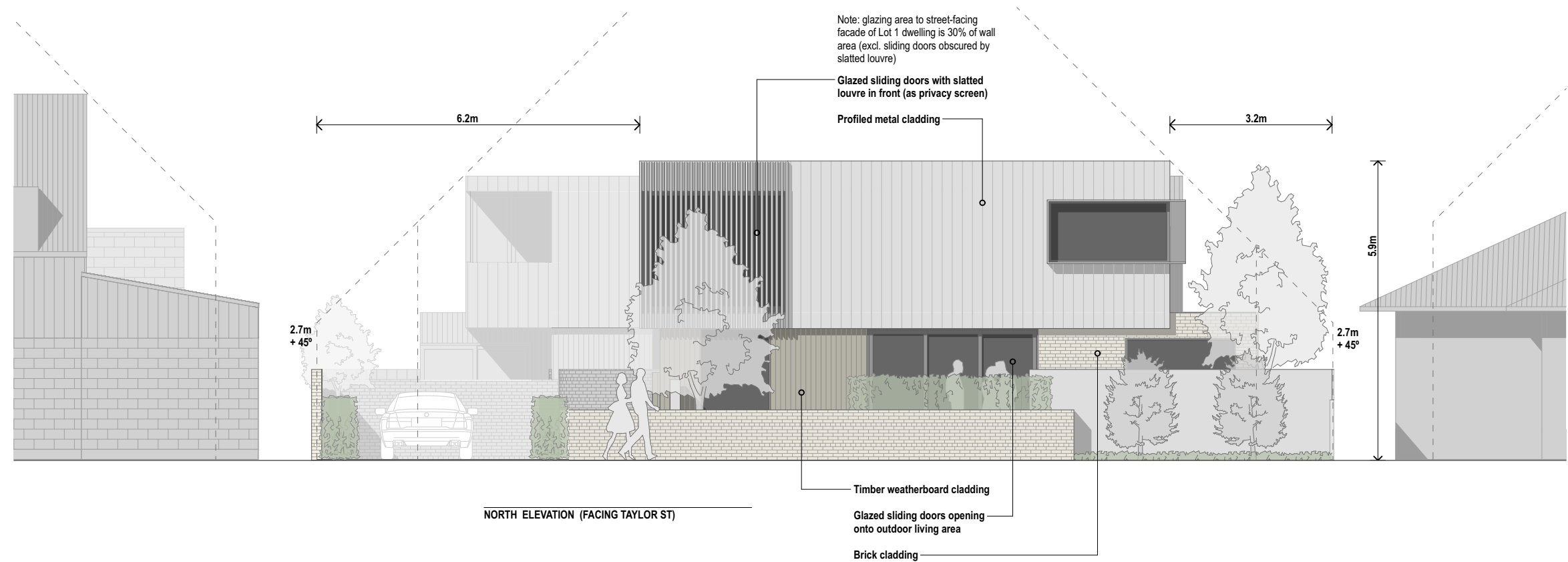
**SK.09(A)**

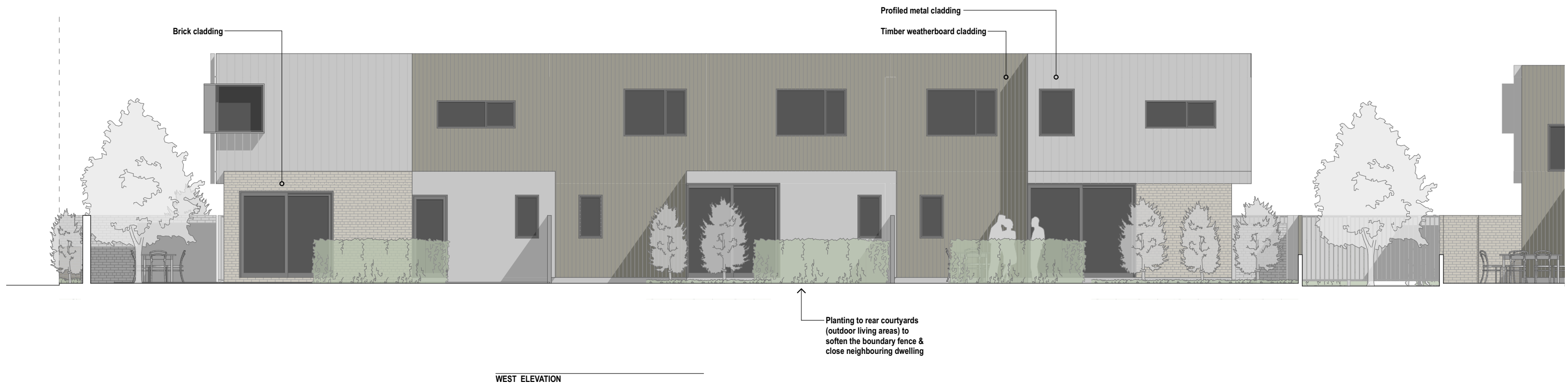
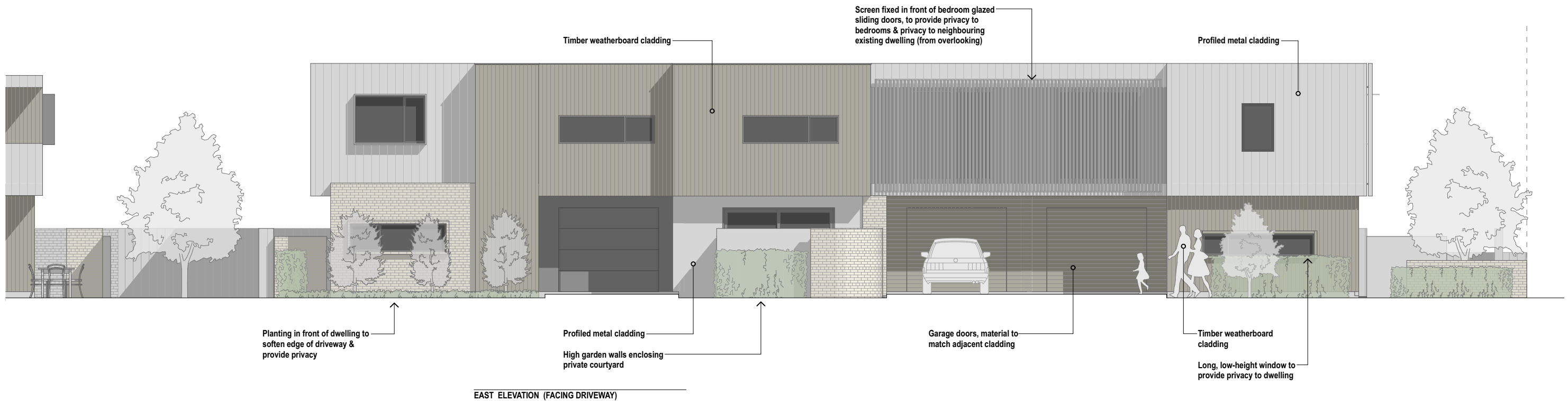
Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale: 1:150









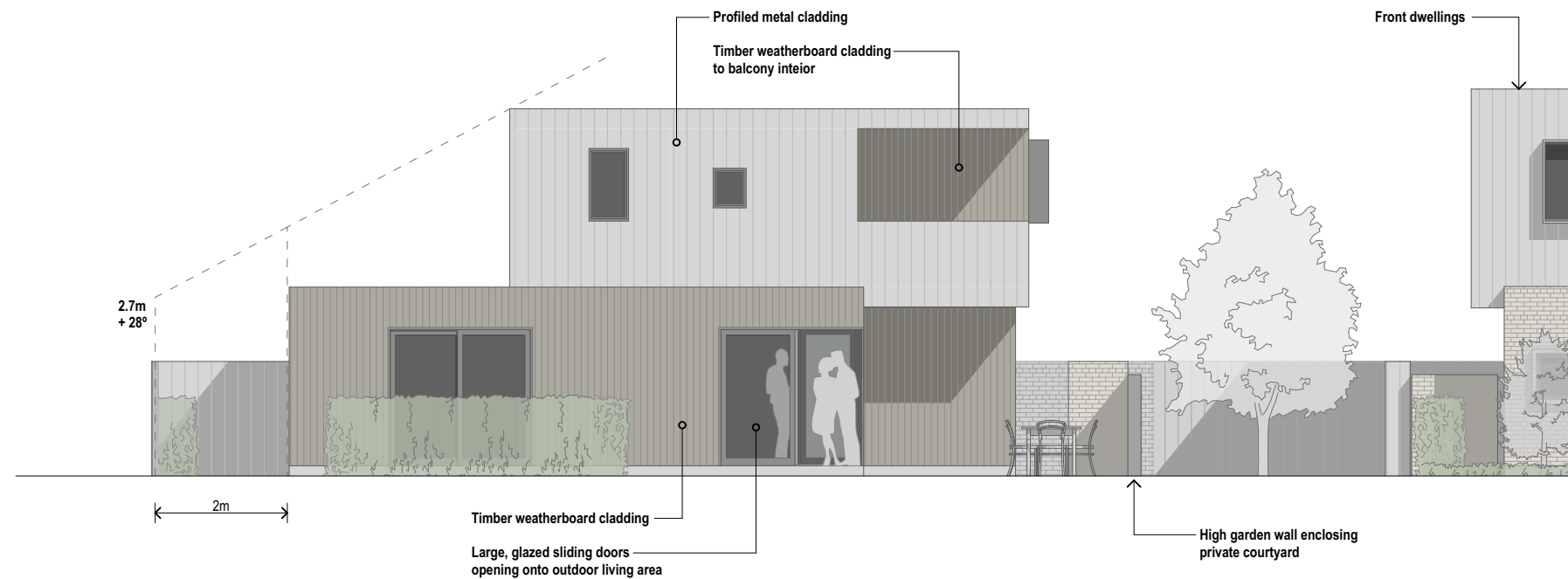












EAST ELEVATION (REAR DWELLINGS)



WEST ELEVATION (REAR DWELLINGS)





**Christopher Beer Architect Limited**  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

**Warren & Wendy Hodges**  
**Taylor Street Terrace Houses**  
109 Taylor Street, Cambridge

This drawing is for information  
and consent purposes only. Read  
in conjunction with other  
consultants' documentation.  
The copyright to this drawing and  
all parts thereof remain the  
property of Christopher Beer  
Architect Limited.

S  
e  
r  
i  
s  
c  
h  
o  
p  
h  
e  
e  
r  
a  
r  
c  
h  
i  
t  
e  
c  
t  
s

PERSPECTIVE: Street-Facing (North) Elevation

**SK.31(C)**

Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale:





**Christopher Beer Architect Limited**  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

**Warren & Wendy Hodges**  
**Taylor Street Terrace Houses**  
109 Taylor Street, Cambridge

This drawing is for information  
and consent purposes only. Read  
in conjunction with other  
consultants' documentation.  
The copyright to this drawing and  
all parts thereof remain the  
property of Christopher Beer  
Architect Limited.

S  
e  
r  
i  
s  
c  
h  
o  
p  
h  
e  
e  
r  
a  
r  
c  
h  
i  
t  
e  
c  
t  
s

PERSPECTIVE: Driveway Perspicitve from North

**SK.32(C)**

Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale:





**Christopher Beer Architect Limited**  
32 Victoria Street (rear), Cambridge  
+64 (0)7 827 9944  
studio@christopherbeerarchitect.com

Concept Design Drawing Set - For RESOURCE CONSENT

**Warren & Wendy Hodges**  
**Taylor Street Terrace Houses**  
109 Taylor Street, Cambridge

This drawing is for information  
and consent purposes only. Read  
in conjunction with other  
consultants' documentation.  
The copyright to this drawing and  
all parts thereof remain the  
property of Christopher Beer  
Architect Limited.

S  
e  
r  
i  
s  
c  
h  
o  
p  
h  
e  
e  
r  
a  
r  
c  
h  
i  
t

PERSPECTIVE: Driveway Perspicive from East

**SK.33(C)**

Sheet number (revision):

Drawing issued: 12/02/21  
Drawing scale:





AMALGAMATION CONDITIONS

THAT LOT 6 HEREON (LEGAL ACCESS) BE HELD AS TO 5 UNDIVIDED ONE-FIFTH SHARES BY THE OWNERS OF LOTS 1 - 5 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL CERTIFICATES OF TITLE BE ISSUED IN ACCORDANCE THEREWITH  
SEE LINZ REF:..... SECTION 220(1)(b)(iv)

THAT LOT 7 HEREON (LEGAL ACCESS) BE HELD AS TO 3 UNDIVIDED ONE-THIRD SHARES BY THE OWNERS OF LOTS 3 - 5 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL CERTIFICATES OF TITLE BE ISSUED IN ACCORDANCE THEREWITH  
SEE LINZ REF:..... SECTION 220(1)(b)(iv)

TAYLOR STREET

Lot 1 DPS 947

Lot 1 DP 401666

Lot 5 DPS 18568

Lot 6 DPS 18568

SITE COVERAGE			
LOT	AREA	BLG AREA	%
1	189	83.9	44.4
2	132	76.4	57.9
3	155	75.7	48.8
4	142	67.6	47.6
5	148	67.6	45.7

SITE IMPERMEABILITY			
LOT	AREA	IMPERM. AREA	%
1	189	138.7	73.4
2	132	125.2	94.8
3	155	133.9	86.4
4	142	127.9	90.0
5	148	128.3	86.7
ALL	1012	866.0	85.6

- NOTE:
- 1) FINAL DIMENSIONS AND LAYOUT SUBJECT TO SURVEY AND APPROVAL FROM WAIPA DISTRICT COUNCIL
- 2) LEGAL DESCRIPTION: - LOT 2 DPS 947
- 3) RT: - SA62D/729
- 4) TOTAL AREA: - 1012m<sup>2</sup>
- 5) ZONE: - RESIDENTIAL

MEMORANDUM OF EASEMENTS

PURPOSE	SERV. TENE. (BURDENED LAND)	SHOWN	DOM. TENE (BENEFITED LAND)
RIGHT OF WAY RIGHT TO CONVEY WATER, ELECTRICITY, TELECOMMUNICATIONS RIGHT TO DRAIN SEWAGE AND WATER	ACCESS LOT 6	ACCESS LOT 6	LOTS 1 - 5
	ACCESS LOT 7	ACCESS LOT 7	LOTS 3 - 5
PARTY WALL EASEMENT	LOT 1	A	LOT 2
	LOT 2	B	LOT 1
	LOT 2	C	LOT 3
	LOT 3	D	LOT 4
	LOT 4	E	LOT 5
	LOT 5	F	LOT 4



PROPOSED SCHEME PLAN  
LOTS 1 - 6 BEING A SUBDIVISION OF LOT 2 DPS 947  
109 TAYLOR STREET, CAMBRIDGE

Client Reference:

20202

Sheet:

1

Version:

1

PREPARED FOR: HODGES PROJECTS LIMITED

SCALE: 1:200 @ A3

DATE: December 20

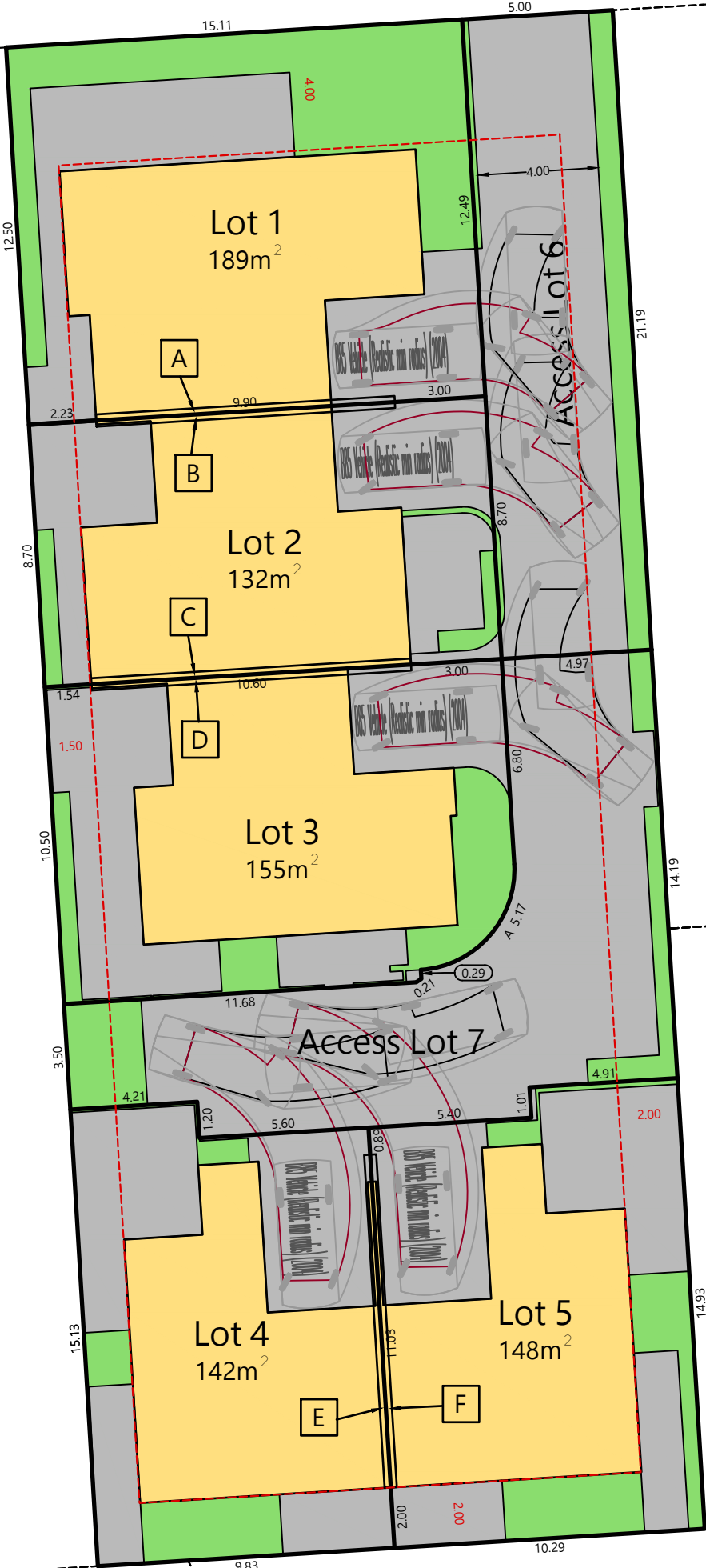


AMALGAMATION CONDITIONS

THAT LOT 6 HEREON (LEGAL ACCESS) BE HELD AS TO 5 UNDIVIDED ONE-FIFTH SHARES BY THE OWNERS OF LOTS 1 - 5 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL CERTIFICATES OF TITLE BE ISSUED IN ACCORDANCE THEREWITH  
SEE LINZ REF:..... SECTION 220(1)(b)(iv)

THAT LOT 7 HEREON (LEGAL ACCESS) BE HELD AS TO 3 UNDIVIDED ONE-THIRD SHARES BY THE OWNERS OF LOTS 3 - 5 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL CERTIFICATES OF TITLE BE ISSUED IN ACCORDANCE THEREWITH  
SEE LINZ REF:..... SECTION 220(1)(b)(iv)

TAYLOR STREET



Lot 1 DP 401666

Lot 1 DPS 947

Lot 5 DPS 18568

Lot 6 DPS 18568

SITE COVERAGE

LOT	AREA	BLG AREA	%
1	189	83.9	44.4
2	132	76.4	57.9
3	155	75.7	48.8
4	142	67.6	47.6
5	148	67.6	45.7

SITE IMPERMEABILITY

LOT	AREA	IMPERM. AREA	%
1	189	138.7	73.4
2	132	125.2	94.8
3	155	133.9	86.4
4	142	127.9	90.0
5	148	128.3	86.7
ALL	1012	866.0	85.6

NOTE:

1) FINAL DIMENSIONS AND LAYOUT SUBJECT TO SURVEY AND APPROVAL FROM WAIPA DISTRICT COUNCIL

2) LEGAL DESCRIPTION: - LOT 2 DPS 947

3) RT: - SA62D/729

4) TOTAL AREA: - 1012m²

5) ZONE: - RESIDENTIAL

MEMORANDUM OF EASEMENTS

PURPOSE	SERV. TENE (BURDENED LAND)	SHOWN	DOM. TENE (BENEFITED LAND)
RIGHT OF WAY RIGHT TO CONVEY WATER, ELECTRICITY, TELECOMMUNICATIONS RIGHT TO DRAIN SEWAGE AND WATER	ACCESS LOT 6	ACCESS LOT 6	LOTS 1 - 5
	ACCESS LOT 7	ACCESS LOT 7	LOTS 3 - 5
PARTY WALL EASEMENT	LOT 1	A	LOT 2
	LOT 2	B	LOT 1
	LOT 2	C	LOT 3
	LOT 3	D	LOT 4
	LOT 4	E	LOT 5
	LOT 5	F	LOT 4



07 843 1587 027 411 8496  
237 DIXON ROAD, HAMILTON  
troy@radsurveying.co.nz

PROPOSED SCHEME PLAN  
LOTS 1 - 6 BEING A SUBDIVISION OF LOT 2 DPS 947  
109 TAYLOR STREET, CAMBRIDGE

Client Reference:

20202

Sheet:

1

Version:

1

PREPARED FOR: HODGES PROJECTS LIMITED

SCALE: 1:200 @ A3

DATE: December 20

Document Set ID: 10563218  
Version: 1, Version Date: 26/02/2021  
Copyright: The copyright in the information shown on this plan remains the right of Rad Surveying Ltd. It may not be reproduced (wholly or in part), without consent from Rad Surveying Ltd.

File: 2020-12-16 - 109 TAYLOR STREET - SCHEME.DWG





# **ENGINEERING ASSESSMENT AND DESIGN REPORT**

**109 Taylor Street,  
Cambridge**

**Warren & Wendy Hodges**

**25 FEBRUARY 2021**

PROJECT NO. 11683

**TITUS**  
CONSULTING ENGINEERS



Approved for issue by:

X

Anthony Richardson  
Principal Project Engineer

CPEng 1026340

## DOCUMENT HISTORY AND STATUS

Rev.	Issued To	Date	Prepared	Reviewed	Approved
A	Warren & Wendy Hodges	10/12/2020	HK	JV	TR
B	Warren & Wendy Hodges	25/02/2021	TG	MH	TR

## RECORD OF REVISION CHANGES

*Rev B: Section 2 Natural Hazard Assessment added*

## Titus Consulting Engineers

Level 3, Door 1, 169 London St, Hamilton, 3204

Ph: 07 242 0017

Email: [office@tituscivil.co.nz](mailto:office@tituscivil.co.nz)

## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>5</b>
1.1	Overview .....	5
1.2	Site Details .....	5
1.3	Planning Requirements.....	6
1.4	Existing Water Features.....	6
1.5	Existing Services .....	6
1.6	Historic Land Use .....	7
1.7	New Zealand Geotechnical Database.....	7
1.8	Soil Investigation.....	7
<b>2</b>	<b>NATURAL HAZARD ASSESSMENT .....</b>	<b>8</b>
2.1	Potential Natural Hazards.....	8
2.2	Seismic Hazard .....	8
2.3	Liquefaction Susceptibility .....	9
2.3.1	<i>Underlying Geology.....</i>	<i>9</i>
2.3.2	<i>Semi-quantitative Screening Criteria .....</i>	<i>9</i>
2.4	Slope stability.....	11
2.5	Volcanic Eruption .....	11
2.6	Flooding.....	11
2.7	Tsunami.....	11
<b>3</b>	<b>THREE WATERS IMPACT ASSESSMENT .....</b>	<b>12</b>
3.1	Water Supply Assessment .....	12
3.1.1	<i>Existing water supply .....</i>	<i>12</i>
3.1.2	<i>Proposed Water Supply.....</i>	<i>12</i>
3.2	Wastewater Assessment.....	12
3.2.1	<i>Existing Wastewater supply.....</i>	<i>12</i>
3.2.2	<i>Proposed Wastewater System .....</i>	<i>12</i>
3.3	Stormwater Assessment .....	12
3.3.1	<i>Existing Stormwater Services .....</i>	<i>12</i>
3.3.2	<i>Stormwater Management Guidelines.....</i>	<i>13</i>
3.3.3	<i>Proposed Stormwater System.....</i>	<i>13</i>
<b>4</b>	<b>STORMWATER ASSESSMENT AND DESIGN.....</b>	<b>14</b>
4.1	Design Parameters.....	14

---

4.2	Design Results .....	14
4.2.1	<i>Soakage Trench</i> .....	14
4.2.2	<i>Secondary flow path</i> .....	15
4.3	Operation and maintenance .....	15
4.4	Construction Monitoring .....	15
<b>5</b>	<b>LIMITATIONS.....</b>	<b>16</b>
	<b>APPENDICES .....</b>	<b>17</b>
	<b>APPENDIX A - PROPOSED SITE LAYOUT PLAN .....</b>	<b>18</b>
	<b>APPENDIX B - SOIL INVESTIGATION BORE LOGS .....</b>	<b>19</b>
	<b>APPENDIX C – UNDERLYING GEOLOGY .....</b>	<b>21</b>
	<b>APPENDIX D - CALCULATION SHEET .....</b>	<b>22</b>
	<b>APPENDIX E – WATER SUPPLY LAYOUT (RITS D6.10).....</b>	<b>23</b>
	<b>APPENDIX F – WASTEWATER SUPPLY LAYOUT (RITS D5.22).....</b>	<b>24</b>
	<b>APPENDIX G – WDC UTILITIES MAP .....</b>	<b>25</b>
	<b>APPENDIX H - TYPICAL DETAILS.....</b>	<b>26</b>

---

## 1 INTRODUCTION

### 1.1 Overview

Titus Consulting Engineers has been engaged by Warren & Wendy Hodges to perform an engineering assessment and design report for a proposed five-lot subdivision and future residential development at 109 Taylor Street.

The report includes the following;

- Section 2: Natural Hazard Assessment.
- Section 3: Three Waters Impact Assessment.
- Section 4: Stormwater Assessment and Design.

The assessments and design meet the requirements of the local authority, Waipa District Council, and the following technical documents;

- The building code
- NZS3604:2011
- District Plan
- Waikato Local Authority Shared Services (RITS)
- Waikato Regional Council Plan
- AS/NZS 1547/2012

### 1.2 Site Details

The site is located within Cambridge township. The site is currently an occupied residential lot with an existing dwelling and garage located on the lot. The site is bordered by other occupied residential lots with Taylor Street to the north. The area near the proposed foundation is flat.



Figure 1: Site Photo

### 1.3 Planning Requirements

The following requirements based on the Regional Council Plan, Consent Notices and Subdivisional Reports are noted, and have been duly considered in the proposed recommendations.

- No consent notices or planning issues have been noted.

This report is subject to revision based on any unsighted planning requirements.

### 1.4 Existing Water Features

There are no significant water courses or gullies on the site.

### 1.5 Existing Services

GIS shows a 100mm water main that runs parallel with Taylor Street and a 20mm metered connection servicing the existing dwelling. A 150mm wastewater main runs along the southern boundary on the adjacent lot, however GIS shows no wastewater service pipe or

connection for the existing dwelling. GIS shows 2 stormwater pipes in the immediate area, however there is no connection that services the existing dwelling.

### **1.6 Historic Land Use**

Through the use of retrolenz imagery it has been noted that this site has been a residential lot, this land use has been recorded since 1939.

### **1.7 New Zealand Geotechnical Database.**

There are no relevant entries to this site on the New Zealand Geotechnical Database.

### **1.8 Soil Investigation**

The site assessment conducted on 22<sup>nd</sup> of February 2021 included the following:

- General site walkover
- Hand Auger Tests: 2 (BH1 – 2<sup>nd</sup> December 2020, BH2 – 22<sup>nd</sup> February 2021)
- Scala Penetrometer Tests: 1
- Shear Vane Tests: 6
- Soakage Test: 1 (tested 2<sup>nd</sup> December 2020)

Test locations are shown in Appendix A.

Topsoil was found to be 200mm in depth. Underlying soils consist predominantly of sand. Overall, the boreholes showed a layer of silt with minor sand and minor clay to a depth of 800mm. The subsequent layers consist of sandy silt, fine sand with minor to some silt, silty fine sand, silt, and fine sand. Borehole logs are attached in Appendix B.

The ground water level was not found within 4.0m of the surface (tested 22<sup>nd</sup> February).

No soft clays were found on the site (kPa < 25).

No peat soils were found on the site.

## 2 NATURAL HAZARD ASSESSMENT

### 2.1 Potential Natural Hazards

The tables below summarise the preliminary assessment of the site for Natural Hazards in accordance with Section 106 of the Resource Management Act 1991 (RMA), including those in relation to seismic activity, liquefaction and the potential risks incurred by these events. The degree of damage incurred for each event is considered where no appropriate remedial actions are undertaken. The site risk potential for each natural hazard is interpreted by this preliminary assessment and is not necessarily conclusive.

**Table 1: Natural Hazard Risk Matrix Key**

DEGREE OF DAMAGE				
Negligible	Low	Medium	High	Critical

**Table 2: Proposed Site Natural Hazard Risk Assessment**

LIKELIHOOD	POTENTIAL CONSEQUENCES			
	None	Minor	Moderate	Severe
Almost Certain				
Likely				
Possible				
Unlikely		<ul style="list-style-type: none"> <li>• Liquefaction</li> <li>• Vertical settlements</li> <li>• Underground services uplift</li> </ul>	<ul style="list-style-type: none"> <li>• Flooding</li> </ul>	
Very Unlikely	<ul style="list-style-type: none"> <li>• Slope instability</li> <li>• Tsunami</li> </ul>	<ul style="list-style-type: none"> <li>• Lateral spreading</li> </ul>	<ul style="list-style-type: none"> <li>• Volcanic eruption/ash fall</li> </ul>	

The risk potential for Natural Hazards at the site is discussed in the following sections of this report.

### 2.2 Seismic Hazard

According to the GNS Science New Zealand Active Faults Database, the nearest known active fault is Kerepehi Fault to the north-east.

The Table below summarises the seismic parameters adopted for the site:

**Table 3: Seismic parameters (NZTA Bridge Manual, Third Edition)**

Importance Level 2			
Design Life:		50 Years	
Ground Acceleration (SLS)		Ground Acceleration (ULS)	
Cambridge		Cambridge	
Class D		Class D	
1/25		1/500	
$f$	1.00	$f$	1.00
$R_u$	0.25	$R_u$	1
$C_{0,1000}$	0.32	$C_{0,1000}$	0.32
$M_{eff}$	-	$M_{eff}$	5.9
PGA, $a_{max}$ (g)	<b>0.06</b>	PGA, $a_{max}$ (g)	<b>0.25</b>

## 2.3 Liquefaction Susceptibility

### 2.3.1 Underlying Geology

According to GNS (GNS Science, 2018), the underlying geology of the site is classified as (Late Pleistocene) river deposits (Hinuera Formation), as shown in Appendix C. The Late Pleistocene sediments are approximately up to 27,000 years old and are described as cross-bedded sands, gravels, silts with minor peat lenses (GNS Science, 2018).

The Subsoil Class (NZS 1170.5:2004) for this site is Class D (Jeong & Wotherspoon, 2019). (

### 2.3.2 Semi-quantitative Screening Criteria

The earthquake intensity and depth to groundwater in conjunction with the deposition type and age of the deposits of the site may be used to identify land where liquefaction damage at the surface is unlikely.

This geological screening criteria is shown in Table 1 below, reproduced from “Planning and engineering guidance for potentially liquefaction-prone land” by Ministry of Business, Innovation & Employment (MBIE 2017). Where either condition is met, the land may be assigned a vulnerability category of “Liquefaction Damage is Unlikely”.



**Table 4: Semi-quantitative screening criteria for identifying land where liquefaction-induced ground surface damage is unlikely**

TYPE OF SOIL DEPOSIT	A LIQUEFACTION VULNERABILITY CATEGORY OF LIQUEFACTION DAMAGE IS UNLIKELY CAN BE ASSIGNED IF EITHER OF THESE CONDITIONS IS MET:	
	DESIGN PEAK GROUND ACCELERATION (PGA) FOR 500-YEAR INTENSITY OF EARTHQUAKE SHAKING <sup>1</sup>	DEPTH TO GROUNDWATER <sup>2</sup>
<b>Late Holocene age</b> Current river channels and their historical floodplains, marshes and estuaries, reclamation fills	Less than 0.1 g <sup>3</sup>	More than 8 m
<b>Holocene age</b> Less than 11,000 years old	Less than 0.2 g	More than 6 m
<b>Latest Pleistocene age</b> Between 11,000 and 15,000 years old	Less than 0.3 g	More than 4 m

Notes:

- 1 The listed PGA values correspond to a magnitude 7.5 earthquake. For screening purposes using this table, earthquake scenarios with different magnitudes may be scaled using the magnitude scaling factor (MSF) proposed by Idriss and Boulanger (2008):  
 $MSF = [6.9 \exp(-M/4) - 0.058]$ , up to a maximum value of 1.8.
- 2 For screening purposes using this table, a high groundwater scenario should be assumed (eg a typical seasonal high groundwater level).
- 3 For many types of late Holocene age deposits (and especially reclamation fills), if liquefaction is triggered then **Moderate to Severe** ground damage often results. Therefore careful consideration should be given to the uncertainties in the seismic hazard estimate before screening out these soils on the basis of the expected intensity of earthquake shaking. It is important to understand the potential consequences if earthquake shaking is stronger than expected.

Table 3 in Section 2.2 shows the design Peak Ground Accelerations for the SLS & ULS events for an Importance Level 2 structure as defined by NZS:1170.0:2002.

The PGA of 0.25g shown in Table 3 corresponds to an Effective Magnitude of 5.9. Therefore, the magnitude scaling factor (MSF) proposed by Idriss and Boulanger (2008) shall be applied to calculate PGA<sub>7.5</sub>. The design PGA<sub>7.5</sub> value is shown in Table 5.

$$MSF = \left[ 6.9 \exp\left(-\frac{M}{4}\right) - 0.058 \right] \leq 1.8 \quad (1)$$

$$PGA_{7.5} = \frac{PGA}{MSF} \quad (2)$$

**Table 5: Magnitude-corrected Peak Ground Acceleration**

PGA <sub>5.9</sub>	MSF	PGA <sub>7.5</sub>
0.25g	1.52	0.16g

Therefore, the site may be categorised as “Liquefaction Damage is Unlikely” due to either the PGA<sub>7.5</sub> or the high seasonal groundwater depth meeting the criteria shown in Table 4.

---

## 2.4 Slope stability

The slope on site complies with clause 3.1.2 (b) of NZS 3604:2011 with respect to building foundations located near the top of a bank, these include “*The horizontal distance (H) from the top to the bottom shall not exceed 3 m.*” and “*The slope beyond the bank shall not exceed 5° for a distance of 10 m.*”. As such no further slope stability analysis is required.

Any cut to fill earthworks required to establish a suitable building platform shall be specifically designed.

## 2.5 Volcanic Eruption

According to GNS Science Volcano Geology and Hazards in New Zealand the nearest active volcanos are Auckland Volcanic Field, Ruapehu, and Mayor Island, located within 150km of the site. Auckland Volcanic Field and Mayor Island are at Alert Level 0. Mt Ruapehu is at Alert Level 1. It is considered that there is no volcanic unrest at Auckland Volcanic Field and Mayor Island and minor volcanic unrest at Mt Ruapehu.

## 2.6 Flooding

Council planning maps show no ponding or flooding in the area.

## 2.7 Tsunami

Land damage due to tsunami or coastal processes is not expected at this location.

### **3 THREE WATERS IMPACT ASSESSMENT**

#### **3.1 Water Supply Assessment**

##### **3.1.1 Existing water supply**

A 100mm water main runs parallel to Taylor Street. A 20mm metered connection services the existing dwelling, this branches off the 100mm water main. A fire hydrant is located approximately 20m north-east of the site.

##### **3.1.2 Proposed Water Supply**

Council shall confirm that adequate capacity is available from the existing 100mm water main to service the proposed dwellings. A 63mm DN50 rider main shall be branched off the principal water main. The rider main shall be located along the ROW. All Dwellings shall have a service pipe with an individual manifold box. A flushing valve shall be installed at the end of rider main. The proposed units shall have connections as per RITS D6.10, refer to Appendix E for pipe connections.

#### **3.2 Wastewater Assessment**

##### **3.2.1 Existing Wastewater supply**

According to Waipa Council GIS an existing 150mm wastewater main runs along the southern boundary on the adjacent lot. There is no wastewater service pipe to the existing dwelling according to GIS, however there would be an existing pipe servicing the existing dwelling.

##### **3.2.2 Proposed Wastewater System**

It is recommended that the 150mm wastewater main running adjacent to the property is confirmed by Council to have sufficient capacity. A new 150mm pipe connection will be required to service the dwellings.

A manhole should be utilised as a collection point prior to discharge to the 150mm wastewater main. Refer to Appendix F for pipe connections.

#### **3.3 Stormwater Assessment**

##### **3.3.1 Existing Stormwater Services**

An existing 400mm stormwater pipe runs parallel to Taylor Street, this pipe collects stormwater runoff from the road via catchpits. Another 375mm stormwater pipe runs close to the western boundary on the adjacent lot. This pipe connects to other stormwater networks located on Constance Place.

No stormwater mitigation devices were noted to be servicing the existing dwelling. All existing stormwater runoff from the existing impermeable surfaces is assumed to be released into underground soak holes since no kerb collectors were visible.

---

### 3.3.2 Stormwater Management Guidelines

Stormwater management has been considered with respect to the Regional Infrastructure Technical Specifications (RITS) and the Waikato Region Council (WRC) Plan rules. Further design shall also meet the requirements stated by the RITS and WRC Plan rules.

The proposed site does not fall within any completed or ongoing ICMP. There is no downstream stormwater management device in place.

The receiving environment includes a Lake as defined in Table 4.5 of the RITS. The management objectives for the site includes the following;

*Water Quality:* Stormwater quality shall be provided for a third of the 2-year ARI (24hr) (with climate change).

*Water Quantity:* Flow attenuation required as per Table 4-3, designed for the 2 and 10-year ARI design storms.

*Flood Control:* Not required.

*Extended Detention:* Not required.

*Overland Flow:* To provide an approved stormwater outfall for all secondary flows. The secondary overland flow path shall be designed to cater for the 100yr ARI.

### 3.3.3 Proposed Stormwater System

As per Section 3.

## 4 STORMWATER ASSESSMENT AND DESIGN

### 4.1 Design Parameters

- Lot Size: 1,012m<sup>2</sup>
- Proposed roof area: 370m<sup>2</sup>
- Land is sloping: Towards the road
- Design storms:
  - Primary: 10yr ARI
  - Secondary: 100yr ARI
- Rainfall data: HIRDS 24-hour storm
- Climate change: 2.1 degrees warming
- Soakage rate: 750mm/hr was adopted since the borehole could not be filled to the surface with 40 minutes of constant filling
- Water table was not found within 2.0m of the surface

Figure 2, below summarises the catchment characteristics that have been adopted.

SOAKAGE DESIGN CALCULATIONS AND OUTPUTS			
Rainfall Location		Event	ARI
Cambridge		Primary	10
		Secondary	100
Catchment	Area (m2)		C
	Existing	Proposed	
Grass	866		0.30
Roof		370	0.95
Concrete		496	0.90
Gravel			0.70
Other			-
TOTAL	866	866	
Composite C	0.3	0.92	
Adopted C	0.30	0.92	

Existing	Input / Select
Proposed	Answer
Existing Catchment Characteristics, Time of Concentration (Tc)	
Average grassed surface	0.045
Length of flow path (m)	20.00
Slope (%)	2.00
Tc (min)	11.38
Existing Q(max) (l/s) (interpolated wrt Tc)	5.81
Adopted Soakage rate (mm/hr)	750

Figure 2: Stormwater Design Parameters

### 4.2 Design Results

#### 4.2.1 Soakage Trench

It is proposed that a soakage trench is constructed to enable disposal of water from all the impermeable areas to ground during the design storm. Catchpits should be installed in the sealed areas and be piped to the soakage trench.

All roof water should be routed to the soakage trench. The overflow from the soakage trench will bubble up in the driveway which should be sloping towards the public road to enable flow to the nearby catchpit.

The driveway areas shall be sloped towards the catchpits, with a low point at the centre of the driveway. The driveway shall also slope longitudinally towards the road. All downpipes shall be directed to a catchpit or sump before released to the soakage trench.

The soakage trench can either be constructed with 40-60mm clean rock or proprietary stormwater crates as follows:

- A rock filled trench shall be **1.0m** deep and a minimum of **29.0m<sup>2</sup>** in plan area.
- A proprietary crate system shall be **0.86m** deep (2 layers) and a minimum of **19.3m<sup>2</sup>** in plan area.

The location of the **rock filled trench** underneath paved trafficable areas (for domestic residential driveways only) is acceptable given that an adequate pavement as described below is constructed in areas where vehicle loads are expected over the soakage trench, extending a minimum of 1.5m wider than the trench extents:

- Base Material: (Fill over top of soakage trench) - 200mm GAP 40 compacted to 102% RDD
- Surface - 125mm Concrete 25Mpa with SE62 Steel reinforcing Mesh - on 50mm chairs
- Sawcuts at a maximum 6m spacing, as per NZS 3604 Cl. 7.5.8.6.4 are to be provided

Subsurface water drains shall be sized in accordance with Acceptable Solutions and Verification Methods for New Zealand Building Code Clause E1 Surface Water (E1/AS1) Section 3.

#### **4.2.2 Secondary flow path**

The stormwater runoff from impermeable surfaces has been designed to be routed via the soakage trench, the overflow from these devices shall discharge via a bubble up at driveway and flow to the public road.

#### **4.3 Operation and maintenance**

It is recommended that first flush devices are installed upstream of the soakage trench and that these devices are regularly checked and cleaned along with the catchpits and overflow pipes.

#### **4.4 Construction Monitoring**

Titus Consulting Engineers have been engaged to perform inspections of the storm water system during construction.

---

## 5 LIMITATIONS

This report does not assess risk of contamination of soils. This report does not provide; a foundation design, an assessment of flood risk or a FFL recommendation.

Testing portrays a limited percentage of ground conditions at 109 Taylor Street, and may not be representative of all soils present on site.

Assessment of the water table depth and moisture content is subject to seasonal variation.

During excavation and construction, the site should be examined by a suitably qualified engineer in order to assess whether the exposed subsoils are compatible with the inferred soil conditions on which the recommendations have been based and potentially further investigation and design rationalisation may be required.

This report has been prepared solely for Warren & Wendy Hodges, its professional advisors and local authorities in relation to 109 Taylor Street. No liability is accepted for its use for any other purpose or by any other entity. Reliance by other parties or future owners of the property on the information or opinions contained in the report shall be verified with Titus Consulting Engineers.

Should you be in any doubt as to the recommendations of this report it is essential that you discuss these issues with Titus Consulting Engineers prior to proceeding with any work based on this report.

## APPENDICES



## APPENDIX A - Proposed Site Layout Plan



## APPENDIX B - Soil Investigation Bore Logs



Address: 109 Taylor Street Cambridge  
Date: 02/12/2020  
Testers: HK

Log:

BH1

Project №: 11683

Water Table:	Depth (mm):	Graphic Log:	Material Description:	Blows /100mm:			Shear Strength (kPa):		
				5	10	15	Undrained:	Remoulded:	Sensitivity:
Not Found	0		Topsoil						
	100								
	200								
	300								
	400		SILT with minor sand and clay, brownish yellow, low plasticity, moist						
	500								
	600								
	700								
	800		Medium SAND, brownish grey, poorly graded, moist						
	900								
	1000								
	1100								
	1200		Fine SAND with some silt, brownish grey, well graded, moist						
	1300								
	1400								
	1500								
	1600								
	1700								
	1800		SILT, grey, low plasticity, moist						
	1900								
	2000								
	2100		End of Borehole @2000mm						

TITUS CIVIL

office@tituscivil.co.nz

+64(0)7 242 0017

**TITUS**  
CONSULTING ENGINEERS

Address: 109 Taylor Street Cambridge  
Date: 02/12/2020  
Testers: ToyG

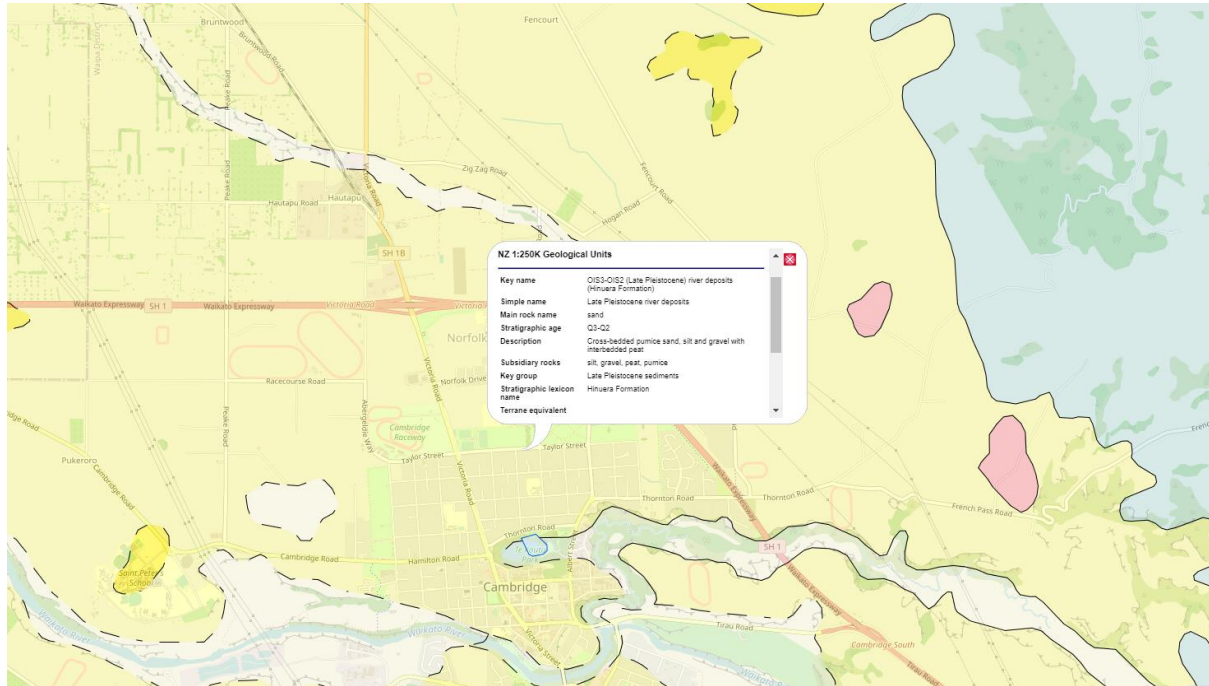
Log:

BH2

Project №: 11683

Water Table:	Depth (mm):	Graphic Log:	Material Description:	Blows /100mm:			Shear Strength (kPa):						
				5	10	15	Undrained:	Remoulded:	Sensitivity:				
Not Found			Topsoil				0	213	43	5			
	200						0						
							0						
	400		SILT with minor sand, brownish yellow, low plasticity, dry to moist, very stiff				7						
							8						
	600						7						
							9						
	800						6						
							5						
	1000		Sandy SILT, brownish yellow, low plasticity, moist, stiff				3	134	52	2.6			
							2						
	1200		Fine SAND with minor silt, brownish grey and yellow, well graded, moist, loose				2						
							2						
	1400		Silty fine SAND, light brownish greyish yellow, well graded, moist to wet, loose to medium dense				3				76	40	1.9
							2						
	1600						3						
							3						
	1800						3	143	40	3.6			
							3						
	2000						4						
							2				122	46	2.7
	2200		SILT, light brownish grey, low plasticity, moist, interbedded layers of silty fine sand, stiff to very stiff				4						
							5						
	2400						5						
							8	168	73	2.3			
	2600						6						
						6							
2800		Fine SAND, brownish grey, poorly graded, moist to wet, medium dense				7							
						7							
3000						9							
						8							
3200						10							
	3400												
	3600												
	3800												
	4000												
			End of Borehole @4000mm										

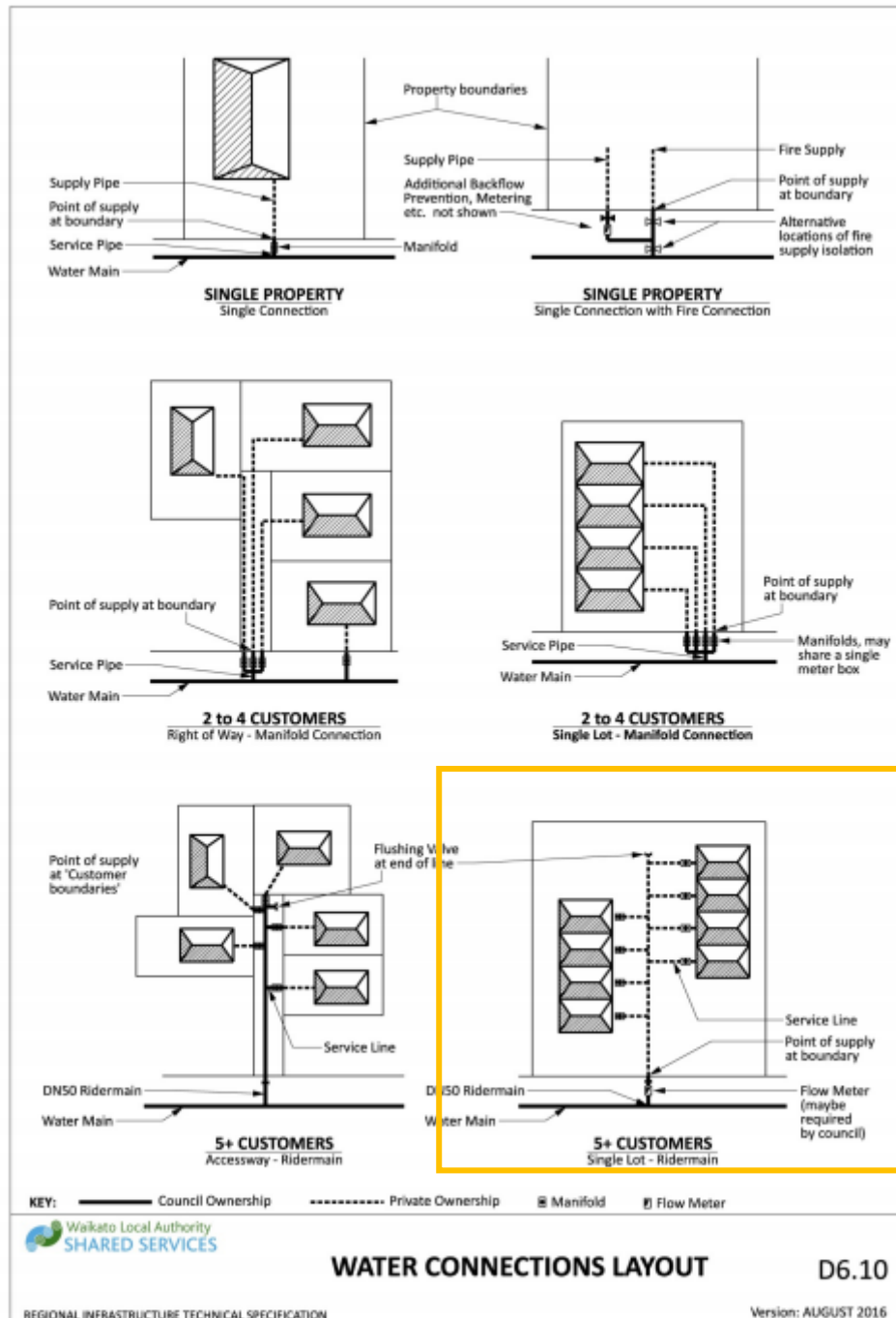
## APPENDIX C – Underlying Geology



## APPENDIX D - Calculation Sheet

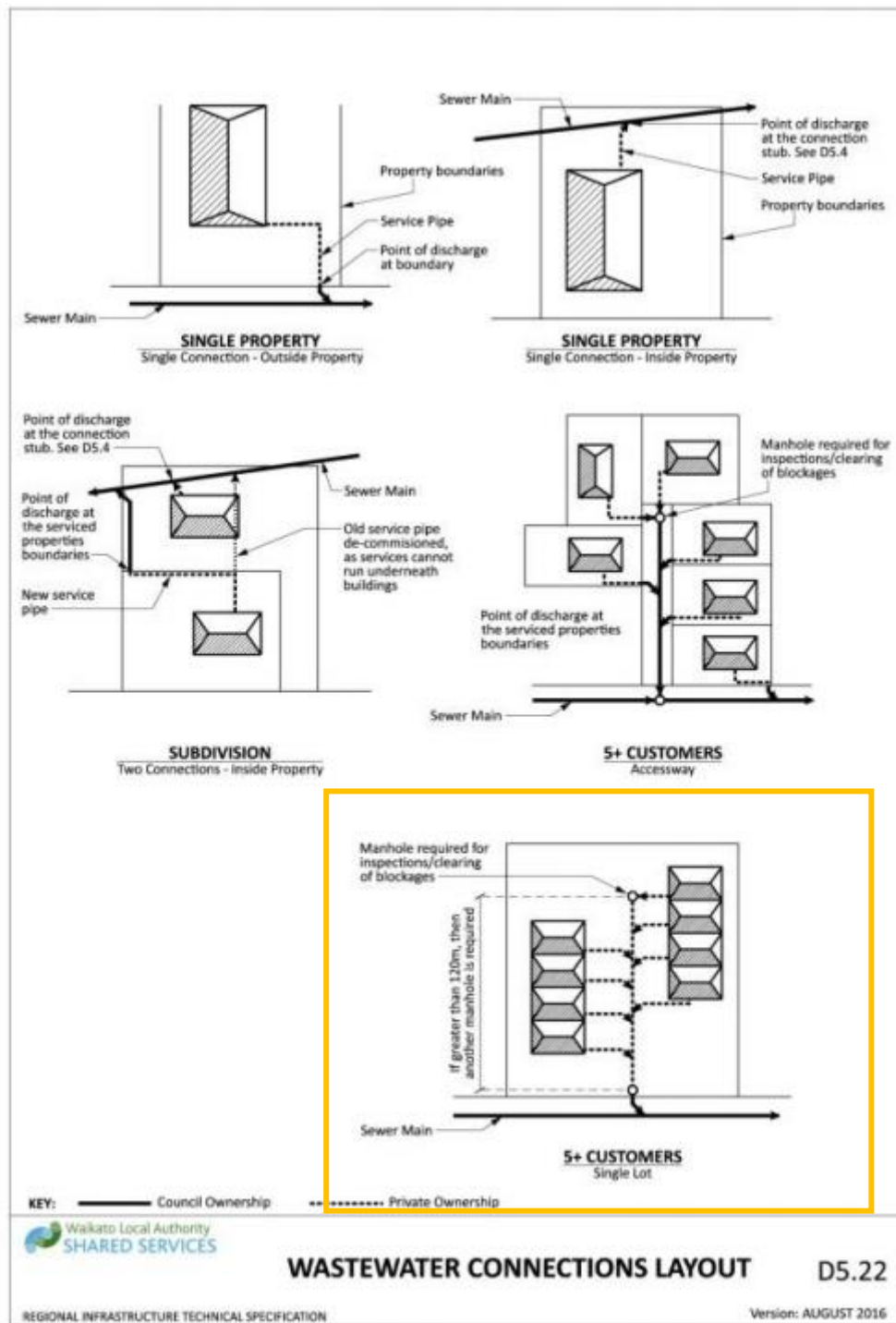
SOAKAGE DESIGN CALCULATIONS AND OUTPUTS											
						Existing		Input / Select			
Rainfall Location		Event	ARI			Proposed		Answer			
Cambridge		Primary	10								
		Secondary	100								
Catchment	Area (m2)		C								
	Existing	Proposed									
Grass	866		0.30			Average grassed surface		0.045			
Roof		370	0.95			Length of flow path (m)		20.00			
Concrete		496	0.90			Slope (%)		2.00			
Gravel			0.70			Tc (min)		11.38			
Other			-								
TOTAL	866	866				Existing Q(max) (l/s) (interpolated wrt Tc)		5.81			
Composite C	0.3	0.92				Adopted Soakage rate (mm/hr)		750			
Adopted C	0.30	0.92									
ARI	10										
Duration(min)	10	20	30	60	120	360	720	1440	2880	4320	
Delta t (min)	10	10	30	60	240	360	720	1440	1440		
Delta Q (l/s)	-1.8	-0.8	-1.0	-0.8	-0.8	-0.3	-0.2	-0.1	-0.1		
Intensity	84.0	58.5	47.2	32.8	21.4	10.8	7.1	4.6	2.7	2.0	
Intensity CC	98.4	68.1	54.8	37.9	24.6	12.4	8.0	5.2	3.1	2.2	
Existing Q (l/s)	6.1	4.2	3.4	2.4	1.5	0.8	0.5	0.3	0.2	0.1	
Proposed Q (l/s)	21.8	15.1	12.1	8.4	5.5	2.7	1.8	1.2	0.7	0.5	
ARI	10										
Duration	10m	20m	30m	60m	2h	6h	12h	24h	48h	72h	
Depth EX	14.0	19.5	23.6	32.8	42.7	65.0	84.7	110.4	130.0	143.1	
Depth CC	16.4	22.7	27.4	37.9	49.2	74.3	96.3	125.0	146.7	160.8	
Existing Vol m3	3.6	5.1	6.1	8.5	11.1	16.9	22.0	28.7	33.8	37.2	
Proposed Vol m3	13.1	18.1	21.9	30.2	39.3	59.3	76.8	99.7	117.1	128.3	
Soakage - Clean Rock											
Depth	1	Voids	0.38								
Duration	10m	20m	30m	60m	2h	6h	12h	24h	48h	72h	
Vsoak /m2	0.13	0.25	0.38	0.75	1.50	4.50	9.00	18.00	36.00	54.00	
Vstore /m2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
Vtotal /m2	0.5	0.6	0.8	1.1	1.9	4.9	9.4	18.4	36.4	54.4	
Trench size m2	25.9	28.7	29.0	26.8	20.9	12.1	8.2	5.4	3.2	2.4	
Soakage - SW Crates											
Depth	0.86	Voids	0.95	No. layers	2						
Duration	10m	20m	30m	60m	2h	6h	12h	24h	48h	72h	
Vsoak /m2	0.13	0.25	0.38	0.75	1.50	4.50	9.00	18.00	36.00	54.00	
Vstore /m2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	
Vtotal /m2	0.9	1.1	1.2	1.6	2.3	5.3	9.8	18.8	36.8	54.8	
Trench size m2	13.9	17.0	18.3	19.3	16.9	11.1	7.8	5.3	3.2	2.3	

## APPENDIX E – Water supply layout (RITS D6.10)



**Drawing 6-10: Water connections layout**

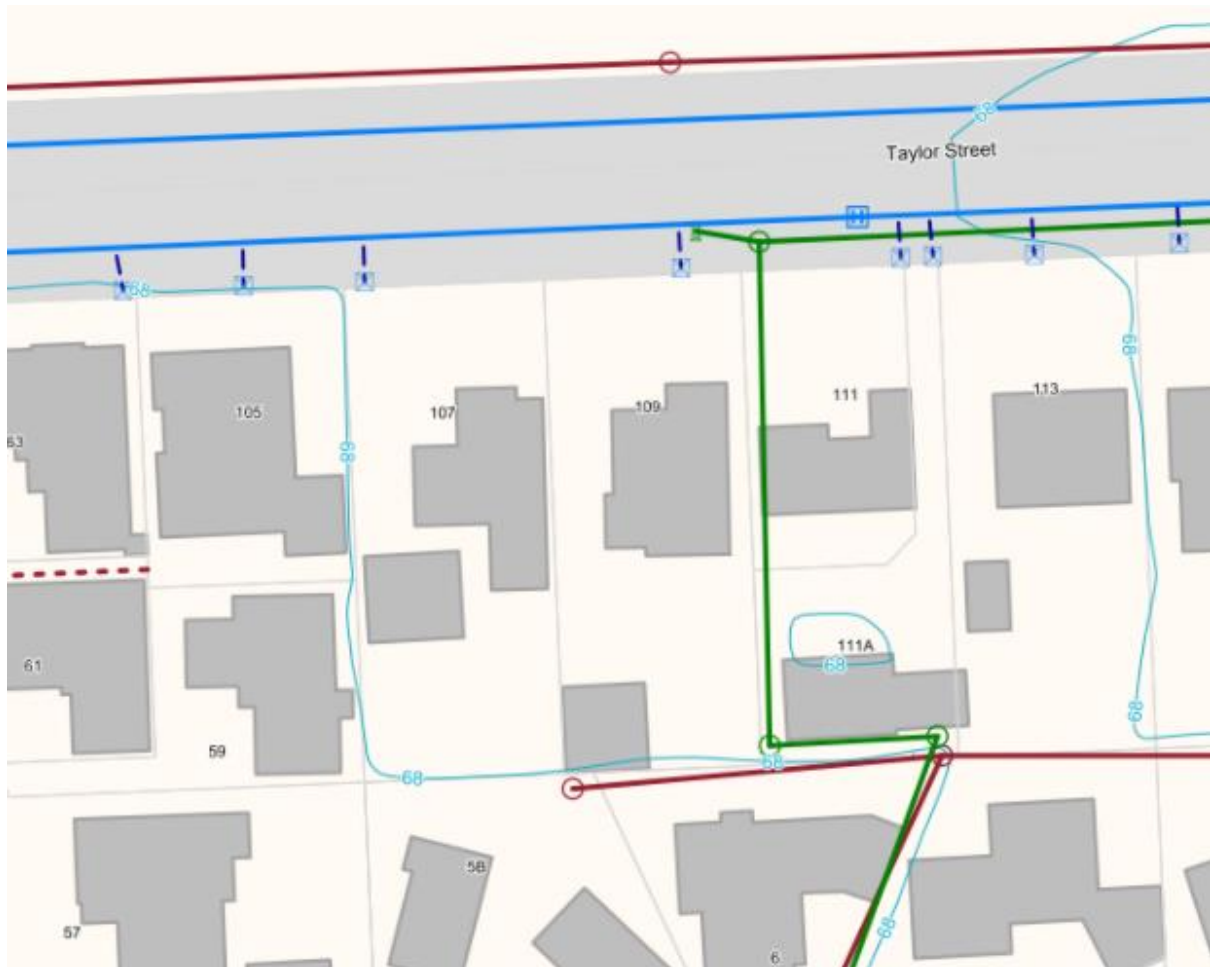
## APPENDIX F – Wastewater Supply Layout (RITS D5.22)



**Drawing 5-22: Wastewater connections layout**



## APPENDIX G – WDC Utilities Map



## **APPENDIX H - Typical Details**

*Attached separately*



# Waipa District Plan Rules Assessment

Rule	Complies	Comments
<b>Section 15: Infrastructure, Hazards, Development and Subdivision</b>		
<b>Activity Status</b>		
<b>15.4.1.1 (e)</b> Subdivision that meets all the performance rules in Part A OR; Part A and Part C for 7 or more lots. (Part A: Development and subdivision Part C: Development and subdivision of 7 or more lots in any zone.): RD for all zones, except NC for Deferred Zones and NA for Airport Business Zone	No	The subdivision fails to comply the performance standards outlined in this provision, thus defaults to a <b>Non-Complying Activity</b> .
<b>Design and Layout</b>		
<b>15.4.2.1 Net lot area rules</b> All new lots shall comply with the following minimum net lot areas: (a) Residential Zone – 500m <sup>2</sup> (b) Residential Zone Compact Housing – Refer to Rule 2.4.2.43	No	The District Plan is silent on the minimum lot size requirements for Compact Housing, as such the proposal needs to comply with the minimum requirements for the Residential Zone. The proposal fails to comply with the 500m <sup>2</sup> minimum, thus needs to be assessed as a <b>Non-Complying Activity</b> .
<b>15.4.2.3 Lot frontage, lot shape factor and vehicle crossings</b> All lots shall comply with the following: <ul style="list-style-type: none"> <li>Residential, except front lots of entrance corridors               <ul style="list-style-type: none"> <li>Lot frontage (excluding rear lots): 20m</li> <li>Lot shape factor: 13m diameter circle</li> <li>Vehicle Crossing minimum to maximum: 3m to 5.5m</li> </ul> </li> </ul>	Yes	Lot 1 has a frontage of 15.1m. The proposal is for a residential development designed comprehensively therefore the shape factor circle is not relevant.
<b>15.4.2.4 Minimum width of vehicle access to rear lots</b>  Access to rear lots shall comply with the following minimum widths.  Residential: 4-6 lots: 6m	No	Lots 2-5 are rear lots and are accessed through the shared accessway which has a width of 4m.  <b>Discretionary Activity</b>
<b>15.4.2.5 Lot design</b> Each new lot created shall be able to incorporate the lot shape factor in a position which does not encroach on any building setback or easement requirement.	n/a	The lot shape factor circle is not relevant, as identified above.
<b>15.4.2.6 Lot design</b> Subdivision within the urban limits, and any Large Lot Residential Zone shall not create more than two rear lots, unless provided for by Rule 15.4.2.64.	No	Four rear lots are proposed.  <b>Discretionary Activity</b>
<b>15.4.2.7 Lot design</b> New residential and large lot residential lots, other than corner lots, shall have frontage to only one road or street.	Yes	The development will have frontage to Taylor Street.

<p><b>15.4.2.8 Lot design</b></p> <p>In any zone where lots are to be prevented from obtaining direct access to an adjacent road an access denial or segregation strip shall be vested in Council. The performance standards for development and subdivision in the underlying zone do not apply to lots created for the purpose of access denial or segregation.</p>	n/a	n/a
<p><b>15.4.2.9 Lot design</b></p> <p>Any new Lot created must be able to accommodate all buildings outside of the Root Protection Zone of a protected tree whether the protected tree is on the new lot or on an adjacent site.</p>	n/a	n/a
<p><b>15.4.2.11 Design and layout of development and subdivision adjoining water bodies and reserves</b></p> <p>Within the urban limits and the Large Lot Residential Zone, the design and layout of subdivisions shall ensure that water bodies and reserves are fronted by either roads or the front or side boundary of a lot.</p> <div data-bbox="192 580 974 852"> </div> <div data-bbox="192 874 974 901"> <p><i>Development should front natural features such as water bodies and reserves.</i></p> </div>	n/a	There are no water bodies/reserves adjoining the subdivision
<p><b>15.4.2.12 Lots within areas of high value amenity landscapes, viewshafts, river and lake environs, significant natural features and landscapes and visually sensitive hill country</b></p> <p>Where new lots are to be created within high amenity landscapes, viewshafts, river and lake environs, significant natural features, and visually sensitive hill country, as identified on the Planning Maps, then the following shall apply:</p> <ul style="list-style-type: none"> <li>(a) Power and telephone services shall be provided underground; and</li> <li>(b) The subdivision plan shall define the building platform and associated access alignment on each lot. The building platform shall be located so that at the time of building construction no part of any complying building will extend above the ridgeline nearest to the building platform, when viewed from a public place; and</li> <li>(c) The building platform, roads, and accessways shall minimize intrusion into the landscape, or viewshaft; and</li> <li>(d) Access to the building site must follow the contour of the land.</li> </ul>	n/a	n/a
<p><b>Site Suitability &amp; Hazards</b></p>		

<b>15.4.2.13 Site Suitability &amp; Hazards: Site Suitability: General</b> Subdivision and development shall have a defined building platform in a complying location that is capable of being serviced to the requirements of the zone.	Yes	The development is able to connect to Councils reticulated infrastructure.
<b>15.4.2.14 Site Suitability &amp; Hazards: Site Suitability: within or adjoining a Flood Hazard Area</b> Subdivision and Development within or adjoining a Flood Hazard Area identified on the Planning Maps, or as shown on the Houchens Road Large Lot Residential Structure Plan at Appendix S13, shall have building platforms in a complying location that can achieve a minimum free-board level 500mm above the 1% AEP (100 year flood level).	n/a	The site is not located within a Flood Hazard Overlay
<b>15.4.2.15 Site Suitability &amp; Hazards: Site Suitability: within or adjoining a Flood Hazard Area</b> No subdivision and development shall occur within a High Risk Flood Zone.	n/a	As above
<b>15.4.2.16 Infrastructure and Services: Rule – Infrastructure servicing in all zones</b> All lots in a subdivision and any sites in a development shall be connected to the following infrastructure services: <ul style="list-style-type: none"> <li>(a) Formed public road or new road; and</li> <li>(b) Electricity; and</li> <li>(c) Telecommunications; and</li> <li>(d) Fibre optic cable.</li> </ul>	Yes	All lots are able to connect to the appropriate infrastructure.
<b>15.4.2.17 Design, location and maintenance of services in infill development</b> Where more than one serviced building (excluding accessory buildings) is erected on a site, all services shall be provided to each building as if the site was being subdivided to create separate titles for each serviced building.	Yes	All lots will be serviced as per the requirements of the Residential Zone.
<b>15.4.2.18 Additional infrastructure servicing for the Residential, Commercial and Industrial Zones within the urban limits</b> All lots in a subdivision and any sites in a development in the Residential, Commercial and Industrial Zones within the urban limits shall be connected to the following Council infrastructure services: <ul style="list-style-type: none"> <li>(a) Wastewater reticulation and treatment; and</li> <li>(b) Water supply for domestic, or industrial, or commercial activity; and</li> <li>(c) Water supply for firefighting purposes.</li> </ul>	Yes	As above
<b>15.4.2.19 Additional infrastructure servicing for the Residential, Commercial and Industrial Zones within the urban limits</b> Any proposed connection to the mains water supply shall be located in the berm adjacent to the building it is supplying and not require crossing under road carriageways.	Yes	As above
<b>15.4.2.20 Additional infrastructure servicing for the Residential, Commercial and Industrial Zones within the urban limits</b>	Yes	A site suitability report has been attached with the resource consent application that identifies how stormwater can be disposed of.

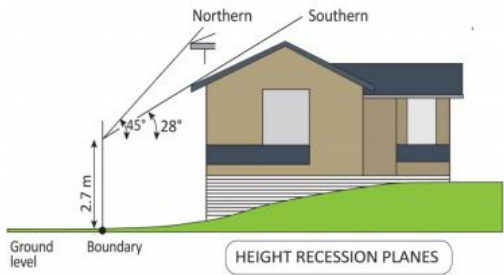
<p>Within the urban limits, all lots in a subdivision and any sites in a development in the Residential, Commercial and Industrial Zones shall:</p> <ul style="list-style-type: none"> <li>(a) Dispose of stormwater generated from within roads, reserves, and any lot to be vested in Council, into Council's reticulation system at pre development levels; and</li> <li>(b) Dispose of all stormwater generated from lots not to be vested in Council within the boundaries of the lot itself.</li> <li>(c) Except that (a) and (b) above shall not apply to the C1 and C2/C3 growth cells where regional and/or district resource consents for the overall structure plan stormwater system provide for alternative means of stormwater management and disposal. For the avoidance of doubt, on-site soakage within the C3 cell is not anticipated due to the risk of exacerbating slope stability issues. Alternative methods of stormwater management will need to be demonstrated for the C3 cell.</li> </ul> <div data-bbox="192 606 1001 895"> </div> <div data-bbox="219 922 1001 970"> <p><i>Swales can provide a sustainable option to traditional kerb and channel drainage, and can contribute to both the ecological diversity and aesthetic values of the neighbourhood.</i></p> </div>		
<p><b>15.4.2.21 When infrastructure services are not provided by Council</b> Where wastewater treatment and disposal services are not provided by Council:</p> <ul style="list-style-type: none"> <li>(a) Every Lot shall be of sufficient size to contain within the lot boundaries the treatment and disposal of wastewater resulting from any future permitted development; and</li> <li>(b) The wastewater treatment and disposal services shall be set back 23m from any water body.</li> </ul>	n/a	Reticulated infrastructures is available in the area.
<p><b>15.4.2.22 When infrastructure services are not provided by Council</b> Where water is not supplied by Council each lot shall provide:</p> <ul style="list-style-type: none"> <li>(a) An independent potable water supply sufficient for activities permitted on the site.; and</li> <li>(b) Access to an adequate water supply for firefighting purposes.</li> </ul>	n/a	As above
<p><b>15.4.2.23 Wastewater disposal</b> The design (including design life) and construction of wastewater treatment and disposal facilities shall</p>	n/a	As above

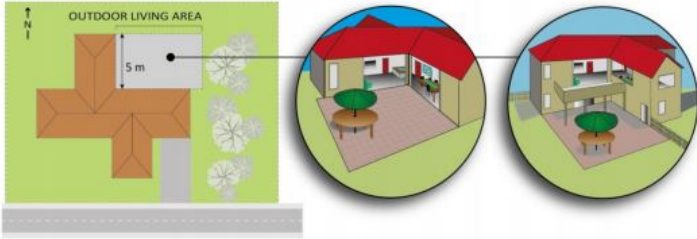
ensure adequate provision is made to meet public health standards, eliminate the ingress of stormwater and groundwater, and avoid the occurrence of system surcharging or overflow.		
<b>Part B: Development and subdivision for specific activities</b>		
<b>15.4.2.59 Esplanade strips</b> Where land adjoins a river or lake which is not listed in Rules 15.4.2.56 and 15.4.2.57, Council may require as a condition of consent, that an esplanade strip under Section 232 of the Resource Management Act 1991 be created.	n/a	The site does not adjoin a waterway.
<b>15.4.2.60 Stopped roads to be esplanade reserves or access strips</b> The provisions of Section 345(3) of the Local Government Act 1974 will apply where any road which is stopped pursuant to the provisions of the Local Government Act 1974 or the Public Works Act 1981 is located within a Large Lot Residential Zone or within any other zone or <ul style="list-style-type: none"> <li>(a) Adjoining a stream, river or lake identified in Rules 15.4.2.56 to 15.4.2.58; or</li> <li>(b) Shown on the Planning Maps as requiring an esplanade reserve, esplanade strip or access strip; or</li> <li>(c) Stopped road that adjoins any existing marginal strip or esplanade reserve or esplanade strip or land used for public purposes.</li> </ul> And Rule 15.4.2.55 will apply. For the avoidance of doubt Section 345(3) of the Local Government Act 1974 shall not apply to any road which is stopped pursuant to the provision of the Local Government Act 1974 or the Public Works Act 1981 when: <ul style="list-style-type: none"> <li>(i) The road adjoins a stream, river or lake not identified in the rules or shown on the Planning Maps as requiring an esplanade reserve, esplanade strip or access strip to be set aside; and</li> <li>(ii) Is within the Rural Zone.</li> </ul>	n/a	As above
<b>15.4.2.61 Development within a Deferred Zone</b> No development or subdivisions shall occur unless a structure plan for the comprehensive and integrated development of the zone has been approved by Council and incorporated into the District Plan by way of a plan change or approved by way of a resource consent.	n/a	The development is situated in the Residential Zone
<b>15.4.2.62 Comprehensive Development Subdivision within the C1 and C2/C3 Structure Plan areas</b> Any Comprehensive Residential Subdivision within the C1 and C2/C3 Structure Plan areas (as described within the relevant Structure Plan) shall comply with the following standards (in addition to the relevant performance standards): <ul style="list-style-type: none"> <li>(a) Be applied to an area of land within the overall structure plan area within common ownership and/or control of the applicants.</li> </ul>	n/a	The development is not situated within the C1 or C2/C3 Structure Plan areas

<p>(b) Through an appropriate concept plan for the entire Comprehensive Residential Subdivision development area identified, demonstrate how development will achieve a minimum density of 12.5 dwelling per hectare net as set out in the Structure Plan over the course of a staged development in accordance with Rule 15.4.2.1(ad).</p> <p>(c) Provide a minimum 2.5% net residential land area or 2,000m<sup>2</sup> (whichever is larger) of the overall comprehensive residential development area as 'compact housing'.</p> <p>For avoidance of doubt, all other relevant performance standards within Part A, C and D of this section shall continue to apply.</p>		
<b>Section 2: Residential Zone</b>		
<p><b>2.4.1.3(b) Activity Status</b></p> <p>Compact housing seven or more dwellings per site located within the compact housing overlay</p>	<b>No</b>	The proposal is to construct a five-unit compact housing development
<b>Performance Standards</b>		
<p><b>2.4.2.1 Minimum building setback from road boundaries</b></p> <p>The minimum building setback from road boundaries shall be 4m, provided that where a garage is attached to a dwelling, and forms part of the front façade of that dwelling, or is detached from a dwelling, the minimum setback for the garage shall be 5m, provided that this rule does not apply to the locations specified in Rule 2.4.2.2.</p>	Yes	The proposed houses will be located a minimum of 4m from the road boundary. Lots 4 and 5 have garages which form the front façade of the dwelling and will be setback more than 5m from the road boundary.
<p><b>2.4.2.2 Minimum building setback from road boundaries</b></p> <p>The minimum building setback from road boundaries in the following locations are:</p> <ul style="list-style-type: none"> <li>(a) Along State Highways 7.5m</li> <li>(b) Along Hall Street, Cambridge 7.5m</li> <li>(c) Along roads within Character Areas 1 and 4 in the Cambridge Park Residential Area 3m</li> <li>(d) Along all roads marked as character streets on the Planning Maps 6m</li> <li>(e) Along roads located within the St Kilda Residential Area 5m</li> <li>(f) Compact housing and visitor accommodation within the C1 and C2/C3 Structure Plan areas 3m</li> </ul>	Yes	As above
<p><b>2.4.2.3 Design of building façade</b></p> <p>Not more than 50% of the overall front façade of a building can consist of garaging, as measured from the inside internal walls of the garage. Where the garage is accessory to a dwelling but detached from the dwelling, not more than 50% of the combined front façades (of the dwelling and detached garage) can consist of garaging.</p>	Yes	Glazing will be in full compliance with the District Plan
<p><b>2.4.2.4 Minimum building setback from internal site boundaries</b></p> <p>The minimum building setback from internal site boundaries shall be 2m, except in the following locations where the setback from all internal site boundaries shall be:</p> <ul style="list-style-type: none"> <li>(a) Along Mc Nair Road on rear boundaries that adjoin lots to the north east of Lots 24-29, DPS</li> </ul>	Yes	The dwelling on Lot 1 and 2 will be located 1.5m from the internal western boundary. All other internal site boundaries will be at least 2m.



<p>4416 and Lot 1 DPS 15918: 5m</p> <p>(b) In the Residential Zone at Karāpiro, the minimum rear boundary for dwellings adjoining the Karāpiro and Arapuni Hydro Power Zone: 5m</p> <p>(c) In the St Kilda Structure Plan Area</p> <p>(i) From a side boundary 3m</p> <p>(ii) From a rear boundary 5m</p> <p>Provided that:</p> <p>(i) Other than in the locations listed above in 2.4.2.4(a) to (c), one internal setback per site may be reduced from 2m to 1.5m, provided that where an existing building on the site has an internal setback of 1.5m or less, the setback from the remaining internal site boundaries shall be at least 2m.</p> <p>(ii) The eaves of any building may encroach into the required setback by not more than 600mm.</p> <p>(iii) In all locations, no building or eave shall encroach into any access, driveway, or other vehicle entrance.</p>		
<p><b>2.4.2.7 Maximum building length</b></p> <p>The maximum length of the wall and roofline of any building parallel or up to an angle of 30 degrees to any internal site boundary that adjoins the Residential Zone or the Reserves Zone shall be 23m, provided that:</p> <p>(a) Building lines in excess of 23m shall have the wall and roofline stepped to a minimum of 2.4m and a minimum length of 3m; and</p> <p>(b) For every additional 23m in length the wall and roofline of a building shall be stepped to a minimum of 2.4m and a minimum length of 3m.</p>	Yes	The dwellings comply with the maximum building length requirements.
<p><b>2.4.2.9 Maximum height</b></p> <p>Buildings shall not exceed 9m in height and shall be no more than two storeys, provided that in the following locations the maximum height shall be:</p> <p>(a) Cambridge Park Residential Character Area 1 13m</p> <p>(b) Cambridge Park Residential Character Areas 2 and 3 10m</p> <p>(c) Cambridge Park Residential Character Area 4 5m</p> <p>(i) Provided that a chimney or similar architectural element or the peak of a roof structure, may project beyond this plane but by no more than 2m vertical</p> <p>(d) St Kilda Structure Plan Area 10m</p> <p>(e) Compact Housing Area 10m</p> <p>(f) Compact Housing Areas located within C1 and C2/C3 Structure Plan areas and a maximum of 3 storeys 13m</p>	Yes	All dwellings comply with the maximum height requirements.
<p><b>2.4.2.10 Daylight control</b></p>	Yes	All dwellings are able to comply with the height recession plane

<p>Buildings shall not penetrate a recession plane at right angles to the boundary inclined inwards at the angles shown in the diagram from 2.7m above ground level at internal site boundaries that adjoin the Residential Zone a reserve of less than 1ha in size, or a public walkway. The angles in the diagram below shall be applied using the methodology in Appendix O6.</p> <p>Provided that where an internal boundary of a site abuts a driveway or right of way the recession plane may be measured from points 2.7m above the furthest boundary of the drive way or right of way.</p> 		requirements.
<p><b>2.4.2.11 Maximum site coverage</b></p> <p>Site coverage shall not exceed 40% of the net area of the site where no garage or carport has been provided the maximum site coverage shall be reduced by 20m<sup>2</sup>, provided that this rule does not apply to the St Kilda Structure Plan Area (refer to Rules 2.4.2.13 and 2.4.2.14) and compact housing (refer to Rule 2.4.2.43).</p>	n/a	Although site coverage are excluded for Compact Housing Developments
<p><b>2.4.2.12 Permeable surfaces</b></p> <p>Each site shall be grassed, planted in trees and/or shrubs or otherwise landscaped in a manner that retains a minimum of 40% of the gross site area in permeable surfaces, provided that in the Cambridge North Structure Plan Area where 55% of the gross site area shall be retained in permeable surfaces. For the avoidance of doubt Rule 2.4.2.43 shall apply to any compact housing.</p>	n/a	n/a
<p><b>2.4.2.18 Outdoor living area</b></p> <p>Each dwelling shall have an outdoor living area which:</p> <ul style="list-style-type: none"> <li>(a) Is for exclusive use of the dwelling and is contained within the site on which the dwelling is located; and</li> <li>(b) Is free of buildings, driveways, manoeuvring areas, parking spaces, and outdoor storage areas, but may include covered or uncovered decks, roof overhangs, and pergolas and that are designed to provide cover for users of the outdoor living area; and</li> <li>(c) Is directly accessible from a living area of the dwelling; except where the outdoor living area complies with (g) below; and</li> <li>(d) Is located in the north, east or west of the site.</li> </ul>	n/a	n/a

<p>(e) Where a Principal Dwelling has a living area at Ground Level, it shall have a minimum continuous area of 60m<sup>2</sup> at ground level with a minimum dimension of 5m over the entire area.</p> <p>(f) Where a Principal Dwelling has the Living Area solely above ground level, part of the 60m<sup>2</sup> outdoor living area requirement must comprise a balcony that is directly accessible from the living area with a minimum area of 8m<sup>2</sup> and a minimum dimension of 2m. For the avoidance of doubt the remaining outdoor living area shall have a minimum dimension of 5m.</p> <p>(g) In the case of Secondary Dwellings, the outdoor living area shall be:</p> <ul style="list-style-type: none"> <li>(i) Additional to the outdoor living area for the Principal Dwelling; and</li> <li>(ii) A minimum of 35m<sup>2</sup> in a continuous area with a minimum dimension of 4m over the entire area.</li> </ul> <p>Provided that this rule does not apply to compact housing developments, refer to Rule 2.4.2.43, or Rule 2.4.1.3(e) Retirement village accommodation and associated care facilities and rest homes within or outside the compact housing overlay identified on the Planning Maps.</p> 		
<p><b>2.4.2.19 Neighbourhood amenity and safety</b></p> <p>The minimum area of glazing on the front façade(s) of a building that adjoins a public place shall be 15%. Provided that:</p> <ul style="list-style-type: none"> <li>(a) Where a site adjoins a public place, the front façade(s) of a building shall be all the sides of a building that faces the public place; and</li> <li>(b) Where the front façade(s) of a building is not parallel to a public place, the minimum area of glazing shall only apply to the longest wall facing the public place; and</li> <li>(c) Where the front façade(s) of a building is not parallel to a public place and the façades facing the public place are of equal length, then the façade at the least acute angle to the public place shall be deemed to be the front façade and the 15% glazing requirement shall only apply to that façade; and</li> <li>(d) The percentage area of glazing shall be measured as the framed wall opening size to accommodate the entire window.</li> </ul>	Yes	Lot 1 is the only dwelling which has road frontage and is able to comply with the minimum 15% glazing requirements.

(e) This rule shall not apply to relocated buildings.		
<b>2.4.2.25 Noise</b> Activities shall be conducted and buildings located, designed and used to ensure that they do not exceed the following noise limits at the boundary of the site: (a) Monday to Saturday - 7.00am to 10.00pm 50dBA (Leq) (b) Sundays & Public Holidays - 8.00am to 6.00pm 40dBA (Leq) (c) Sundays and Public Holidays - 8.00am to 8.00pm in Character Area 4 in the Cambridge Park Residential Zone 40dBA (Leq) (d) At all other times 40dBA (Leq) (e) Night time 10.00pm to 7.00am single noise event 70dBA (Lmax) Provided that this rule shall not apply to the use or testing of station and vehicle sirens or alarms used by emergency services. All noise levels shall be measured and assessed in accordance with the requirements of NZS 6801:2008 – Acoustics – Environmental Sound and assessed in accordance with NZS 6802:2008 – Acoustics – Environmental Noise.	Yes	The development is residential in nature and will comply with the maximum noise level requirements.
<b>2.4.2.26 Vibration</b> Vibration emanating from a site shall meet the limits recommended in and be measured and assessed in accordance with New Zealand Standard NZS 4403:1996 Code of Practice for Storage, Handling, and Use of Explosives.	Yes	Any vibrating emanating from the site will be limited to what occurs during the construction phase of the proposal. All vibration will be compliant with this rule.
<b>2.4.2.27 Construction noise</b> Construction noise emanating from a site shall meet the limits recommended in and be measured and assessed in accordance with New Zealand Standard NZS 6803:1999 Acoustics – Construction Noise.	Yes	Any construction noise will be within the limits outlined in New Zealand Standard NZS 6803:1999 Acoustics – Construction Noise.
<b>2.4.2.34 Earthworks</b> Earthworks shall not exceed a total volume of 25m <sup>3</sup> or a total area of 250m <sup>2</sup> in a single activity or in cumulative activities in any calendar year, provided that this rule shall not apply to earthworks incidental to an approved resource consent or building consent.	Yes	Only minimal earthworks are required and will comply with the maximum requirements
<b>2.4.2.43 Compact housing</b> Compact housing within the compact housing area overlay shall have a minimum area of 2,000m <sup>2</sup> and shall meet the following requirements: (a) The maximum length of unbroken building line parallel to all site boundaries including internal site boundaries shall be 20m. Building lines in excess of this standard shall be broken or stepped to a minimum depth of 2.4m and a minimum length of 3m at least once every 20m in length. This rule shall apply to each level of a multi-level building inclusive of the roof; and (b) Where there is more than one building on a site, it shall be separated from other buildings on the site by at least 3.5m; and (c) Where any dwelling is to be sited within 10m of another dwelling on the same site or parent title prior to subdivision by way of unit title, cross lease or strata title, there shall be no direct line of	<b>No</b>  yes  n/a  No	The total site area is 1,012m <sup>2</sup>  The exterior façade of the development has been ‘broken’.  After subdivision occurs, there will be only one building per sit  The development has been designed to ensure privacy through the layout of each dwelling as well as implementing appropriate

sight form the main living areas of the dwelling into the main living areas of another dwelling. If a direct line of sight between main living areas cannot be avoided, visual screening shall be constructed or planted to prevent a direct line of sight; and

- (d) Dwellings shall have a dual aspect with windows being placed so that outlook is obtained to the front and rear of the dwelling, with window sills no more than 1m from floor level; and
- (e) The following minimum gross floor areas and outdoor living areas shall apply:

Dwelling	Minimum floor area of dwelling	Minimum outdoor living area for ground level dwellings	Minimum outdoor living area dimensions for ground level dwellings	Minimum outdoor living area for above ground level dwellings	Minimum outdoor living area dimensions for above ground level dwellings
Studio units and 1 bedroom unit	50m <sup>2</sup>	20m <sup>2</sup>	4m	10m <sup>2</sup>	2m
2 bedroom unit	70m <sup>2</sup>	30m <sup>2</sup>	4m	12m <sup>2</sup>	2m
3 bedroom unit	95m <sup>2</sup>	30m <sup>2</sup>	4m	14m <sup>2</sup>	2m

- (f) Landscaping and permeable surfaces: At least 30% of the net site area of any site or unit site area shall be grassed, planted in trees and/or shrubs or otherwise landscaped in a manner that retains the permeable nature of the surface.

- (g) A communal outdoor service area or storage court shall be provided that does not exceed 10m<sup>2</sup> of site area and it shall be screened so that it is not visible from the front boundary of the site.
- (h) Outdoor living areas shall:
- Be located and/or screened so that at least 50% of the outdoor living area has complete visual privacy from the living rooms and outdoor living areas of other dwellings on the same site and shall be screened from adjoining sites; and
  - Be oriented to the north, east or west of the dwelling but not the south of east or west measured from the southernmost part of the dwelling; and
- (i) Any communal outdoor living area provided shall be in addition to, not in substitution of, the required outdoor living area for each dwelling; and
- (j) An area for letterboxes at the front of the property; and
- (k) A place for refuse and recycling material that is accessible to a two-axled truck shall be provided; and
- (l) Dwellings that are parallel to, or adjoin the road boundary of the site shall have a front door that faces the road.

screening between neighbouring dwellings. All outdoor living areas are positioned on the ground level in order to avoid a direct line of site into the neighbouring properties. However, Dwellings 3 and 4 have a direct line of sight between living areas, with a separation distance of 9.7m. However, they also have 1.8m-high garden fences and a tree between them to reduce overlooking between the dwellings.

Yes

All dwellings are 3-bedroom dwellings and are able to comply with the minimum gross floor areas and outdoor living area dimensions. Refer to attached site plan as **Appendix 2**.

No

Permeable surfaces for each non-complying lot are as follows:

- Lot 1 = 25.9%
- Lot 2 = 4.5%
- Lot 3 = 13.5%
- Lot 4 = 12%
- Lot 5 = 13.5%

n/a

Each lot is provided with their own outdoor service area/storage court. No communal service areas are proposed.

Yes

All dwellings will be provided with an outdoor living area that is oriented to the north, east or west and at least 50% of the area has complete privacy from nearby dwellings

n/a

No communal outdoor living areas are provided

Yes

This will be provided for at the front of the development on the roadside.

Yes

Lot 1 is the only site which has road frontage and the front door is not facing the road boundary.

No

**Discretionary Activity**

# B&A

Transportation		
<b>16.4.1.1(e)</b> Activities generating 100 or more vehicle movements per day onto a State Highway or Major Arterial Road	n/a	
<b>16.4.2.4 Vehicular access to sites in all zones</b>	Yes	The new vehicle crossings will be constructed in accordance with the standards specified by Waipa District Council
<b>16.4.2.5 Vehicle separation distance</b>	Yes	The shared accessway is compliant with all minimum distances from an intersection or other vehicle entrance.
<b>16.4.2.8 Vehicle access to compact housing development</b> Compact housing development must only have one access point to a strategic road	Yes	Only one vehicle access is proposed to service the five lots
<b>16.4.2.13-19 Parking loading and manoeuvring areas</b>	Yes	Each dwelling is able to accommodate two car parking spaces with ample space to allow for on site manoeuvring to comply with requirements
<b>16.4.2.24 Provision of bicycle parking facilities</b>	n/a	
<b>16.4.2.25 Provision of an integrated transportation assessment</b>	n/a	There is no formal District Plan requirement of an ITA



## Assessment Criteria

Assessment Criteria	Explanation	Criteria Met?
<b>21.1.1.3 Visual</b> (a) The extent to which the development effects the surrounding environment; particularly any identified character precinct areas, prominence of buildings and design elements in the proposal, and public places and roads (b) The scale, height, bulk, cross sectional area, colour, glazing reflectivity and texture of any buildings (c) The location, scale and nature of earthworks/excavations/spoil and vegetation removal/soil or spoil heaps (d) The extent of any light spill, light intensity and shadowing effects (e) The extent to which existing vegetation is retained to screen or soften visual effects (f) The extent and nature of landscape planting and rehabilitation proposed and whether this will remedy or mitigate the effects of the activity, including provision for on-going maintenance of planting	The proposal is consistent with the surrounding environment and will not diminish the character and amenity of the area. Landscaping has been implemented to soften the visual dominance of the buildings along with road frontage and the eastern side of the accessway.	Yes
<b>21.1.1.4 Amenity values</b> (a) The likely effects of the activity and associated land uses on any other activity in the vicinity by emission of noise, fumes, dust, smoke, glare or any other form of pollution (b) The degree to which there is a loss or privacy, daylight or sunlight in adjacent sites (c) The extent to which harmony of form, colour, texture and materials is present within individual developments (d) The extent to which solar potential, innovative aspect and design is optimized in the development (e) The scale and bulk of building(s) in relation to the site and adjoining neighbours (f) The built characteristics of the locality (g) The extent to which the road boundary setback is appropriate in the location (h) The extent of modification to the existing landform and the impact this will have on the character and amenity of the surrounding area (i) The ability to avoid, remedy or mitigate potential visual and amenity effects on sites in the vicinity	The design of the buildings is compatible with the surrounding environment and the proposal will modernise the character of the area. Despite the site being significantly smaller than what is provided for in the plan, each dwelling is of a sufficient size to provide future occupants with a high level of internal and external amenity.	Yes
<b>21.1.1.6 Traffic</b> (a) The impacts on the safe, efficient and effective provision of the transportation system including, but not limited to: <ul style="list-style-type: none"> <li>i. Impacts on the road network and the effective operation of the road hierarchy; and</li> <li>ii. Infrastructure provision, including works needed to maintain the safety, efficiency and effectiveness of the transportation system such as any upgrades necessary to pedestrian and cycle facilities, intersections, pavements and structures on the system affected by the proposed activity; and</li> <li>iii. Timing and staging of development; and</li> <li>iv. Connectivity between adjacent areas of development</li> </ul> (b) Whether sufficient provision has been made for alternative modes of transportation where this is available and practicable, including but not limited to: <ul style="list-style-type: none"> <li>i. Public transport; and</li> <li>ii. Cycle and pedestrian movement; and</li> <li>iii. The establishment of cycleways, walkways and public transport stops; and</li> <li>iv. The establishment of cycle stands; and</li> </ul>	The proposal is expected to generate under 100 vpd and any effects on the transport network are consistent with what has been anticipated within the Compact Housing Area overlay. As such, the proposal does not trigger the need for an ITA.  The shared accessway is consistent with the relevant rules (other than minimum width) and is an adequate distance from intersections and other vehicle crossings as to not create any adverse effects on the functioning of the transport network.	Yes

<ul style="list-style-type: none"> <li>v. Connectivity to alternative transport modes such as rail and air transport</li> </ul> <p>(c) The extent to which the location of the activity on the site has given regard to:</p> <ul style="list-style-type: none"> <li>i. The need for acceleration and deceleration lands; and</li> <li>ii. The type, frequency and timing of traffic; and</li> <li>iii. The safety of road users, cyclists and pedestrians; and</li> <li>iv. The ability for access to roads other than arterial roads or State Highways; and</li> <li>v. The need for forming or upgrading roads and pavements potentially affected by the activity; and</li> <li>vi. The need for additional maintenance, inspection or traffic monitoring; and</li> <li>vii. The need for traffic control, including signs, signals and traffic islands; and</li> <li>viii. The ability for parking and manoeuvring to be carried out on site</li> </ul> <p>(d) The extent to which the location of the site accessway has given regard to:</p> <ul style="list-style-type: none"> <li>i. Safety for vehicles, and pedestrians with particular regard to the effect on the safety and functioning of the road and/or level crossing</li> <li>ii. The practicality and adequacy of the proposed access having regard to the location, nature and operation of the proposed activity and/or development</li> </ul> <p>(e) The extent to which the location of the land use activity on the site has given regard to:</p> <ul style="list-style-type: none"> <li>i. Visibility and sight distances particularly the extent to which vehicles entering or exiting the level crossing are able to see trains</li> <li>ii. The extent to which failure to provide adequate level crossing sightlines will give rise to level crossing safety risks</li> </ul>		
<p><b>21.1.1.7 Noise and vibration</b></p> <p>(a) The extent to which the activity affects the existing ambient noise environment of the locality</p> <p>(b) The time and frequency that the activity occurs, duration of noise, and any special characteristics of the noise or vibration and subsequent effects on health and safety, and on the amenity values of the surrounding environment</p> <p>(c) The effects on the environment from the maximum noise levels of the proposed activity, particularly at night</p> <p>(d) The extent to which the noise adversely affects the amenity of the surrounding environment including cumulative effects</p>	<p>The proposal is for a residential activity in the residential zone. As such, any noise generated from the proposal (other than temporary construction noise) will be consistent with what is expected in the zone.</p>	<p>Yes</p>
<p><b>21.1.1.9 Servicing</b></p> <p>(a) Council shall consider the adequacy of the site and potential adverse effects from activities on sites not adequately served by reticulated sewerage, potable water supply, authorised stormwater disposal systems or sealed roads and safe and effective vehicle access</p> <p>(b) Whether the site is suitable for any proposed wastewater treatment and disposal methods and whether the site can physically accommodate the volume of wastes generated</p> <p>(c) The degree to which the activity will cause demand for the uneconomic or premature upgrading or extension of public services (including roading) that are not in the interests of the District or locality</p> <p>(d) In un-reticulated areas, the extent to which the activity is self-contained with regard to stormwater drainage, effluent disposal and water supply within the boundaries of the site on which the activity is located</p>	<p>The site will be able to be serviced as per the requirements of the District Plan</p>	
<p><b>21.1.1.11 Crime prevention</b></p> <p>(a) The extent to which the building, site and development for the proposed activity takes into account the personal safety of people and the following CPTED principles:</p>	<p>The orientation and layout of the proposal promotes passive surveillance of the streetscape. The landscaping/fencing along the road frontage is sufficient</p>	<p>Yes</p>



<ul style="list-style-type: none"> <li>i. Access: Safe Movement and Connections – Places with well-defined routes, spaces and entrances that provide for convenient and safe movement without compromising security; and</li> <li>ii. Surveillance and Sightlines: See and Be Seen – Places where all publicly accessible spaces are overlooked and clear sightlines and good lighting provide maximum visibility; and</li> <li>iii. Layout: Clear and Logical Orientation – Places designed to discourage crime, enhance perception of safety and help orientation and way-finding; and</li> <li>iv. Activity Mix: Eyes on the Street – Places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times by promoting a compatible mix of uses and increased use of public spaces; and</li> <li>v. Sense of Ownership: Showing a space is cared for – Places that promote a sense of ownership, respect, territorial responsibility and community; and</li> <li>vi. Quality Environments: Well Designed, Managed and Maintained Environments – Places that provide a quality environment and are designed with management and maintenance in mind to discourage crime and promote community safety in the present and the future</li> </ul>	<p>to provide privacy for Lot 1 while being open enough to allow for informal surveillance of the streetscape and the adjoining reserve to occur.</p>	
<p><b>21.1.1.13 Social and Heritage</b>  (a) The likely impact of activities on social, recreational and heritage values, places of assembly, public reserves and any identified buildings, sites or areas  (b) The likely effects on the social values and vibrancy of the primary commercial centres and village commercial centres from out of centre retail developments</p>	<p>The development will not have an impact on the functioning of the adjacent reserve zone (The Town Belt adjoining the opposite side of Taylor Street)</p>	<p>Yes</p>
<p><b>21.1.2.4 Compact housing with seven or more dwellings per site located within the Compact Housing Overlay identified on the Planning Maps</b>  (a) Building design including:  <ul style="list-style-type: none"> <li>i. The extent to which solar potential and good solar aspect is optimized within the development; and</li> <li>ii. Colours; and</li> <li>iii. The materials to be used and how they are to be repeated within the development; and</li> <li>iv. Details of roof pitches; and</li> <li>v. Details of doorways and the provision of shelter for visitors; and</li> <li>vi. Windows, revetment, balconies and recesses; and</li> <li>vii. Garaging to create visual continuity and cohesion and reflect a residential character; and</li> <li>viii. Whether designs avoid monolithic walls in favour of designs that incorporate smaller scale building elements to promote feelings of interest and diversity</li> </ul> (b) Visually permeable fences and glazing of facades that provide for surveillance from the dwelling to the street and other public places such as walkways and reserves  (c) Integration with neighbouring residential development that is responsive to local character in terms of its façade treatment, including building proportions, detailing, materials and landscape treatment  (d) Outdoor living spaces for independent living units that are private and have good access to sunlight in midwinter and/or have access to a range of communal landscaped outdoor areas that are orientated such that they have good solar aspect.</p>	<p>The design and building materials used have been carefully chosen to complement the existing environment and remain consistent throughout the entire development. The outdoor living areas provided with each unit are private and are oriented to ensure maximum sunlight/daylight is achieved. Planting/landscaping has been included throughout the entire development to provide privacy in the form of a permeable fence to integrate with the surrounding environment.</p> <p>The development has been oriented to avoid any garage facing the transport corridor and majority of the lot frontage is covered in planting/landscaping to contribute to neighbourhood amenity. A variety of landscaping borders the eastern edge of the site, softening the visual dominance for adjoining properties and for future occupants.</p>	<p>Yes</p>

<p>(e) The location of outdoor storage areas and rubbish and recycling compounds such that the appearance from the street is not adversely affected and on-site amenity, such as the provision of outdoor living spaces is not compromised</p> <p>(f) The design of the road boundary setback:</p> <ol style="list-style-type: none"> <li>Street definition – the extent to which units as opposed to garages orient and face the street creating a strong interface between the public and private domains. Designs need to avoid street frontages that are dominated by garages and outdoor storage areas; and</li> <li>Landscaping – the type and nature of the landscaping both within the front yard setback and throughout the development so that it contributes both to the neighbourhood and to on-site amenity; and</li> <li>Accessway design – the width and proportion of the frontage as well as the landscaping and the materials to be used.</li> </ol> <p>(g) The provision of connections to public walkways/cycleways and the road networks</p> <p>(h) Open space character including on-site landscaping, retention of mature trees, provision of shared driveways</p> <p>(i) Adequate vehicle parking and the provision of safe vehicle entrances for pedestrians and vehicles, car parking and manoeuvring and vehicle access to rubbish and recycling compounds, access for emergency vehicles</p> <p>(j) The provision of lighting for amenity and crime prevention without being a nuisance to residents</p> <p>(k) The extent of effects on the surrounding road network including the function of intersections</p> <p>(l) Aural privacy including the noise levels anticipated from on-site and adjacent land uses and the provision of acoustic treatment</p> <p>(m) The adequacy of on-site stormwater disposal methods</p> <p>(n) The benefits provided to residents from communal facilities being provided on site.</p>		
<p><b>21.1.2.6 Design of building façade</b></p> <p>(a) The visual effect of the development on the streetscape</p> <p>(b) The extent to which the development takes into account the personal safety of people and principles of Crime Prevention Through Environmental Design (CPTED)</p>	<p>The design and building materials used will promote passive surveillance of the streetscape and the adjacent reserve zone. The vegetation/landscaping used will soften the visual dominance of the building to mitigate any adverse visual effects that may occur.</p>	<p>Yes</p>
<p><b>21.1.2.7 Minimum building setback from internal site boundaries</b></p> <p>(a) The extent to which the development provides for the visual and aural privacy of occupants and neighbours</p> <p>(b) The degree to which there is a loss of privacy, daylight, sunlight or outlook in adjacent sites</p> <p>(c) Whether the building affects existing trees on the site</p> <p>(d) The extent to which existing vegetation is retained and landscaping adds to the amenity of the development</p> <p>(e) Whether the development will affect the perception of spaciousness on and between sites when viewed from the street</p> <p>(f) Whether the proposed activity will have reverse sensitivity effects on adjacent activities or zones</p> <p>(g) The extent to which the building precludes the ability to access the rear of the site or dwelling</p>	<p>The internal site boundaries are sufficient to provide an adequate amount of privacy to future occupants and neighbouring dwellings without reducing the amount of daylight/sunlight on pre-existing adjacent dwellings. This is an intensified development and is the first of the area, but it does not deviate from what is expected within the Compact Housing Area overlay. Due to the layout of the development, the smaller lot sizes will not be discernible when viewed from the streetscape.</p>	<p>Yes</p>
<p><b>21.1.2.8 Maximum building length</b></p> <p>(a) The degree to which there is a loss of privacy, daylight, sunlight or outlook on adjoining sites</p> <p>(b) The extent to which the design of the building is modulated and avoids long lengths of walls adjoining residential</p>	<p>The dwelling have been broken up through a well-managed design to ensure they do not detract from the amenity values of the area.</p>	

zoned or reserve zoned sites. Buildings that are inconsistent with residential building forms should be avoided (c) The effects of the non-compliance on the character and amenity of the streetscape		
<b>21.1.2.11 Outdoor living area</b> (a) The internal layout of the dwelling and its relationship to the outdoor living area (b) The size, dimension, and orientation of the outdoor living area	All dwellings will be provided with an outdoor living area easily accessible from a living/dining area which is of a sufficient size and has adequate privacy from neighbouring sites	Yes
<b>21.1.2.12 Neighbourhood amenity and safety</b> (a) Whether the development promotes passive surveillance of the street (b) The degree to which the development promotes public safety (c) Whether the design and height of the fence or type and height of landscaping planting will undermine the principle of passive surveillance of the street	Lot 1 has road frontage to the street and will be orientated to ensure passive surveillance can occur. The mixture of both low and high level garden walls bordering the site further ensures informal surveillance of the streetscape and adjoining reserves zone can occur.	Yes
<b>21.1.2.13 Construction noise</b> (a) The time and frequency that the activity occurs, the duration of noise continuance, any adverse effects on buildings either on-site or on surrounding properties and any special characteristics of the noise and subsequent effects on health and safety and on the amenity values of surrounding properties.	Any construction noise will be temporary in nature and mitigation measures will be implemented to ensure any adverse effects on neighbouring properties is less than minor.	Yes
<b>21.1.2.19 Permeable surfaces</b> (a) The degree to which on-site stormwater disposal can be achieved in a range of stormwater events (b) The extent to which any increase in the level of impermeable surfaces will effect or has the potential to result in stormwater run-off to adjoining properties (c) Alternative methods of retaining stormwater on site	The non-compliances associated with permeable surfaces will not have an adverse effect on public infrastructure. The site is able to be adequately serviced to ensure stormwater can be adequality managed, thus avoiding any potential runoff to adjoining properties	Yes
<b>21.1.15.14 Sustainable design and layout principles will apply to all development and subdivision within the urban limits, and all areas that are subject to a structure plan</b>	Suitable access onto Taylor Street that has been designed.	Yes
<b>21.1.15.15 Site and surrounding area analysis/constraints assessment</b> (a) The extent to which the development and subdivision is designed to integrate with development and subdivision on surrounding sites, and work with the natural features of the land and local climatic conditions. (b) In the Rural Zone, the extent to which the development and subdivision is designed to integrate with the on-going productive use of the land. (c) In the landscape overlays, the extent to which the building platform provides for a building that complies with the building location requirements of Section 25 - Landscapes and Viewshafts and Assessment Criteria 21.1.25.	The development has been designed to be compatible with the surrounding residential zone.	Yes
<b>25.1.15.16 Site suitability-general/flooding/Geotech</b>	The development will not contribute to any additional hazards.	Yes
<b>21.1.15.17 Infrastructure servicing: general</b>	Suitable infrastructure will be provided to service the development.	Yes
<b>21.1.15.18 Infrastructure servicing: water supply and reticulation</b>	As above	Yes
<b>21.1.15.19 Infrastructure servicing: wastewater reticulation and wastewater disposal system</b>	As above	Yes
<b>21.1.15.20 Infrastructure servicing: stormwater and land drainage</b>	As above	Yes

<p><b>21.1.15.23 Easements</b>  (a) Where roading, access, car parking area or infrastructure services have been required to serve any subdivision or development, the extent to which easements have been provided for the identification, protection, maintenance and operation of any public or private service, secondary overland flow path or ponding area. Conditions may include the granting of these easements at the applicant's expense</p>	<p>Refer to scheme plan</p>	<p>Yes</p>
<p><b>21.1.15.25 Lot frontage, shape factor and vehicle crossing</b>  (a) The extent to which the lots and or proposed development achieves the required shape factor, to accommodate buildings anticipated within the activity status rules and the rules for the relevant zone.  (b) The extent to which the lots or development are able to be serviced with a vehicle crossing of the correct size, and in a location that allows safe vehicle entry and egress.</p>	<p>The proposed lots are of a sufficient size to provide each unit with private outdoor living and service areas, parking spaces and manoeuvring areas. The orientation of the lots has been designed to achieve maximum surveillance and interaction with public spaces.</p>	<p>Yes</p>
<p><b>21.1.15.27 Design and layout: general</b>  (a) The extent to which each new boundary is practically and appropriately located taking into account the following factors:</p> <ul style="list-style-type: none"> <li>i. The location of existing or proposed buildings, roads, fence lines, drains, shelter belts/hedges, Protected Trees, the topography of the landform, areas of vegetation, wetlands, streams, rivers, internal roading, footpaths and cycleways, heritage, the retention of cultural and/or archaeological sites within one title, cultural landscapes, and other physical features, as identified in the site and surrounding area analysis; and</li> <li>ii. The operational characteristics of the existing planned activities on the site including the potential for reverse sensitivity effects on adjacent activities; land use activity within the subdivision, capacity to accommodate permitted activities without adversely affecting any Protected Trees, and the ability to mitigate those effects through the design, shape or development of the subdivision or subsequent development.</li> </ul> <p>(b) In the Residential Zone, where any subdivision involves the division of an infill housing or compact housing residential development into separate lots for each household unit then the size, shape and arrangement of the unit site areas, shall be in accordance with any approved land use consent and site approved development plan and shall be such as to adequately accommodate:</p> <ul style="list-style-type: none"> <li>i. Outdoor living areas; and</li> <li>ii. Access, manoeuvring and parking of vehicles; and</li> <li>iii. Provision for ensuring the convenience and privacy of the occupants; and</li> <li>iv. Provision of infrastructure services.</li> </ul> <p>(c) In the Residential Zone, where any subdivision involves dividing an apartment building into separate allotments for each dwelling the configuration of the development shall be such that the individual dwellings can be held in separate ownerships and the size, shape and arrangement of such allotments and provision for access thereto shall be such as to:</p> <ul style="list-style-type: none"> <li>i. Adequately provide for the convenience, privacy and leisure needs of the occupants; and</li> <li>ii. Make appropriate provision for vehicles including the allocation of car parks for each unit; and</li> <li>iii. Provide and allocate ownership or responsibility for the part of the lot not built upon; and</li> <li>iv. Provide and allocate ownership and responsibility for the provision of infrastructure services.</li> </ul>	<p>The development has been designed to accentuate onsite amenity values as depicted within our Section 95 and 104 assessments in the Assessment of Environmental Effects.</p>	<p>Yes</p>

<p>(d) The effects of any proposed impermeable surfaces on the health and viability of any protected tree, including soil aeration and hydrological balance.</p> <p>(e) The mitigation methods proposed to ensure the values of any protected tree are not compromised, including its health and structural integrity, and its contribution to community amenity.</p> <p>(f) The effect of the subdivision on the values for which any protected tree was protected.</p> <p>(g) The potential for the location of the protected tree to cause significant damage or harm to buildings, services or property, whether public or privately owned, or people, now or in the future.</p> <p>(h) The extent to which the protected tree has the potential now or in the future to cause significant hardship to nearby residents, including any significant loss of sunlight or extraordinary leaf and debris drop.</p>		
<p><b>21.1.16.9 Vehicular access to sites in all zones</b></p> <p>(a) Whether works are necessary, are proposed, or have been undertaken to improve the safety and operation of the proposed vehicular access including but not limited to:</p> <ol style="list-style-type: none"> <li>Works to improve sight distances and other safety enhancements; and</li> <li>Closure of an existing entrance; and</li> <li>Relocation of an existing entrance to a complying or less non-complying location; and</li> <li>The upgrade of existing roads and accesses necessary to serve the building or activity; and</li> <li>Erection of roadside signs; and</li> <li>Where the accessway is to be shared by other lots, units, flats or activities, whether the safety of all users of the accessway has been adequately provided for.</li> </ol>	<p>The vehicle access to all lots is relatively flat and is able to achieve the desired unimpeded sight lines in all directions. The safety and efficiency of the adjacent transport network will not be compromised as a result of this proposal.</p>	<p>Yes</p>
<p><b>21.1.6.11 Vehicle manoeuvring</b></p> <p>(a) The extent to which the vehicle or truck manoeuvring is designed to ensure the vehicle can exit the site in a forward direction.</p> <p>(b) Whether the vehicle or truck manoeuvring can be achieved on the site, within a designated manoeuvring area, and does not impede access to car parks, loading areas or accessways for other users of the site</p> <p>(c) The extent to which the manoeuvring area:</p> <ol style="list-style-type: none"> <li>Encroaches on any road boundary, internal site boundary setback or outdoor living area; and</li> <li>Can avoid remedy or mitigate the effects of dust nuisance; and</li> <li>Provides for the safe and efficient disposal of surface stormwater; and</li> <li>Accommodates the anticipated use of the area by all traffic likely to access the site; and</li> <li>Is located in proximity to an entrance to a school or any preschool facility; and</li> <li>Where associated with a dwelling in the Residential Zone, takes account of the Guidelines for Property Design to Improve Driveway Safety in Appendix T9.</li> </ol>	<p>One-site manoeuvring is provided to ensure all vehicles are able to exit the site in a forward direction. Manoeuvring is provided within the shared accessway (Lot 6) which is of a sufficient size to allow courier vehicles, vans, delivery trucks and emergency services to access the site.</p>	<p>Yes</p>



AMALGAMATION CONDITIONS	
THAT LOT 6 HEREON (LEGAL ACCESS) BE HELD AS TO 5 UNDIVIDED ONE-FIFTH SHARES BY THE OWNERS OF LOTS 1 - 5 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL CERTIFICATES OF TITLE BE ISSUED IN ACCORDANCE THEREWITH SEE LINZ REF:.....	SECTION 220(1)(b)(iv)
THAT LOT 7 HEREON (LEGAL ACCESS) BE HELD AS TO 3 UNDIVIDED ONE-THIRD SHARES BY THE OWNERS OF LOTS 3 - 5 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL CERTIFICATES OF TITLE BE ISSUED IN ACCORDANCE THEREWITH SEE LINZ REF:.....	SECTION 220(1)(b)(iv)



07 843 1587    027 411 8496  
237 DIXON ROAD, HAMILTON  
troy@radsurveying.co.nz

**PROPOSED SCHEME PLAN**  
**LOTS 1 - 6 BEING A SUBDIVISION OF LOT 2 DPS 947**  
**109 TAYLOR STREET, CAMBRIDGE**

Client Reference:  
**20202**

Sheet: **1**    Version: **1**





AMALGAMATION CONDITIONS	
THAT LOT 6 HEREON (LEGAL ACCESS) BE HELD AS TO 5 UNDIVIDED ONE-FIFTH SHARES BY THE OWNERS OF LOTS 1 - 5 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL CERTIFICATES OF TITLE BE ISSUED IN ACCORDANCE THEREWITH SEE LINZ REF:.....	SECTION 220(1)(b)(iv)
THAT LOT 7 HEREON (LEGAL ACCESS) BE HELD AS TO 3 UNDIVIDED ONE-THIRD SHARES BY THE OWNERS OF LOTS 3 - 5 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL CERTIFICATES OF TITLE BE ISSUED IN ACCORDANCE THEREWITH SEE LINZ REF:.....	SECTION 220(1)(b)(iv)



SITE COVERAGE			
LOT	AREA	BLG AREA	%
1	189	83.9	44.4
2	132	76.4	57.9
3	155	75.7	48.8
4	142	67.6	47.6
5	148	67.6	45.7

SITE IMPERMEABILITY			
LOT	AREA	IMPERM. AREA	%
1	189	138.7	73.4
2	132	125.2	94.8
3	155	133.9	86.4
4	142	127.9	90.0
5	148	128.3	86.7
ALL	1012	866.0	85.6

**NOTE:**  
1) FINAL DIMENSIONS AND LAYOUT SUBJECT TO SURVEY AND APPROVAL FROM WAIPA DISTRICT COUNCIL  
2) LEGAL DESCRIPTION: - LOT 2 DPS 947  
3) RT: - SA62D/729  
4) TOTAL AREA: - 1012m²  
5) ZONE: - RESIDENTIAL

MEMORANDUM OF EASEMENTS			
PURPOSE	SERV. TENE (BURDENED LAND)	SHOWN	DOM. TENE (BENEFITED LAND)
RIGHT OF WAY RIGHT TO CONVEY WATER, ELECTRICITY, TELECOMMUNICATIONS RIGHT TO DRAIN SEWAGE AND WATER	ACCESS LOT 6	ACCESS LOT 6	LOTS 1 - 5
	ACCESS LOT 7	ACCESS LOT 7	LOTS 3 - 5
PARTY WALL EASEMENT	LOT 1	A	LOT 2
	LOT 2	B	LOT 1
	LOT 2	C	LOT 3
	LOT 3	D	LOT 4
	LOT 4	E	LOT 5
	LOT 5	F	LOT 4

07 843 1587    027 411 8496  
237 DIXON ROAD, HAMILTON  
troy@radsurveying.co.nz

PROPOSED SCHEME PLAN  
LOTS 1 - 6 BEING A SUBDIVISION OF LOT 2 DPS 947  
109 TAYLOR STREET, CAMBRIDGE

Client Reference:	
20202	
Sheet:	Version:
1	1