Te Kaunihera o Te Hiku o te Ika
For North District Council

Office Use Only
Application Number:

Application for change or cancellation of resource consent condition (S.127)

(Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA)) Prior to, and during, completion of this application form, please refer to Resource Consent Guidance Notes and Schedule of Fees and Charges — both available on the Council's web page.

1. Pre-Lodgement Meeting

Have you met with a council Resource Consent representative to discuss this application prior to lodgement?
(✔) **Yes** ( ) **No**

If yes, who have you spoken with? Whitney Peat & Nikki Callinan

2. Type of Consent being applied for

(●) **Change of conditions (s.127)**

3. Consultation:

Have you consulted with Iwi/Hapū? ( ) **Yes** (●) **No**

If yes, which groups have you consulted with?

Who else have you consulted with?

For any questions or information regarding iwi/hapū consultation, please contact Te Hono at Far North District Council tehonosupport@fndc.govt.nz

4. Applicant Details:

Name/s: Nicola McCreesh

Email: [redacted]

Phone number:

Postal address:
(or alternative method of service under section 352 of the act)

Office Use Only
Application Number:

5. Address for Correspondence

Name and address for service and correspondence (if using an Agent write their details here)

Name/s: Steph Wilson

Email: [redacted]

Phone number:

Postal address:
(or alternative method of service under section 352 of the act)

All correspondence will be sent by email in the first instance. Please advise us if you would prefer an alternative means of communication.

6. Details of Property Owner/s and Occupier/s

Name and Address of the Owner/Occupiers of the land to which this application relates (where there are multiple owners or occupiers please list on a separate sheet if required)

Name/s: Housing New Zealand Limited

Property Address/ Location: PO Box 74598, Greenlane, Auckland

Postcode 1546

7. Application Site Details

Location and/or property street address of the proposed activity:

Name/s:

Site Address/ Location: 59 & 61 Allen Bell Drive, Kaitaia

Postcode

Legal Description: Lot 16 & 17 Deposited Plan 74955 **Val Number:**

Certificate of title:

Please remember to attach a copy of your Certificate of Title to the application, along with relevant consent notices and/or easements and encumbrances (search copy must be less than 6 months old)

Site visit requirements:

Is there a locked gate or security system restricting access by Council staff? ◯ **Yes** ✔ **No**

Is there a dog on the property? ◯ **Yes** ✔ **No**

7. Application Site Details (continued)

Please provide details of any other entry restrictions that Council staff should be aware of, e.g. health and safety, caretaker's details.
This is important to avoid a wasted trip and having to re-arrange a second visit.

Please contact agent to arrange site visit if needing site access - site understood to be vacant.

8. Detailed description of the proposal:

This application relates to the following resource consent: 2220905-RMACOM

Specific conditions to which this application relates:

Refer to proposed conditions - Appendix 3

Describe the proposed changes:

Refer to AEE

9. Would you like to request Public Notification?

◯ **Yes** ✔ **No**

10. Other Consent required/being applied for under different legislation
(more than one circle can be ticked):

◯ **Building Consent** Enter BC ref # here (if known)
◯ **Regional Council Consent (ref # if known)** Ref # here (if known)
◯ **National Environmental Standard consent** Consent here (if known)
◯ **Other (please specify)** Specify 'other' here

11. Assessment of Environmental Effects:

Every application for resource consent must be accompanied by an Assessment of Environmental Effects (AEE). This is a requirement of Schedule 4 of the Resource Management Act 1991 and an application can be rejected if an adequate AEE is not provided. The information in an AEE must be specified in sufficient detail to satisfy the purpose for which it is required. Your AEE may include additional information such as Written Approvals from adjoining property owners, or affected parties (including consultation from iwi/hapū).

Your AEE is attached to this application ✔ **Yes**

12. Draft Conditions:

Do you wish to see the draft conditions prior to the release of the resource consent decision? (●) Yes ( ) No

If yes, do you agree to extend the processing timeframe pursuant to Section 37 of the Resource Management Act by 5 working days? (✔) Yes ( ) No

13. Billing Details:

This identifies the person or entity that will be responsible for paying any invoices or receiving any refunds associated with processing this resource consent. Please also refer to Council's Fees and Charges Schedule.

Name/s: (please write in full) Nicola McCreesh

Email: [redacted]

Phone number: [redacted]

Postal address: (or alternative method of service under section 352 of the act) [redacted]

Fees Information:

An instalment fee for processing this application is payable at the time of lodgement and must accompany your application in order for it to be lodged. Please note that if the instalment fee is insufficient to cover the actual and reasonable costs of work undertaken to process the application you will be required to pay any additional costs. Invoiced amounts are payable by the 20th of the month following invoice date. You may also be required to make additional payments if your application requires notification.

Declaration concerning Payment of Fees:

I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application. Subject to my/our rights under Sections 357B and 358 of the RMA, to object to any costs, I/we undertake to pay all and future processing costs incurred by the Council. Without limiting the Far North District Council's legal rights if any steps (including the use of debt collection agencies) are necessary to recover unpaid processing costs I/we agree to pay all costs of recovering those processing costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.

Name: (please write in full) Nicola McCreesh

Signature: (signature of bill payer) [redacted] MANDATORY

Date 01-Sep-2025

14. Important Information:

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.
You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

PrivacyInformation:
Once this application is lodged with the Council it becomes public information. Please advise Council if there is sensitive
information in the proposal. The information you have provided on this form is required so that your application for consent pursuant to the Resource Management Act 1991 can be processed under that Act. The information will be stored on a public register and held by the Far North District Council. The details of your application may also be made available to the public on the Council's website, www.fndc.govt.nz. These details are collected to inform the general public and community groups about all consents which have been issued through the Far North District Council.

Declaration
The information I have supplied withthis application is true and complete to the best of my knowledge.

Name: (please write in full) Steph WIlson

Signature:

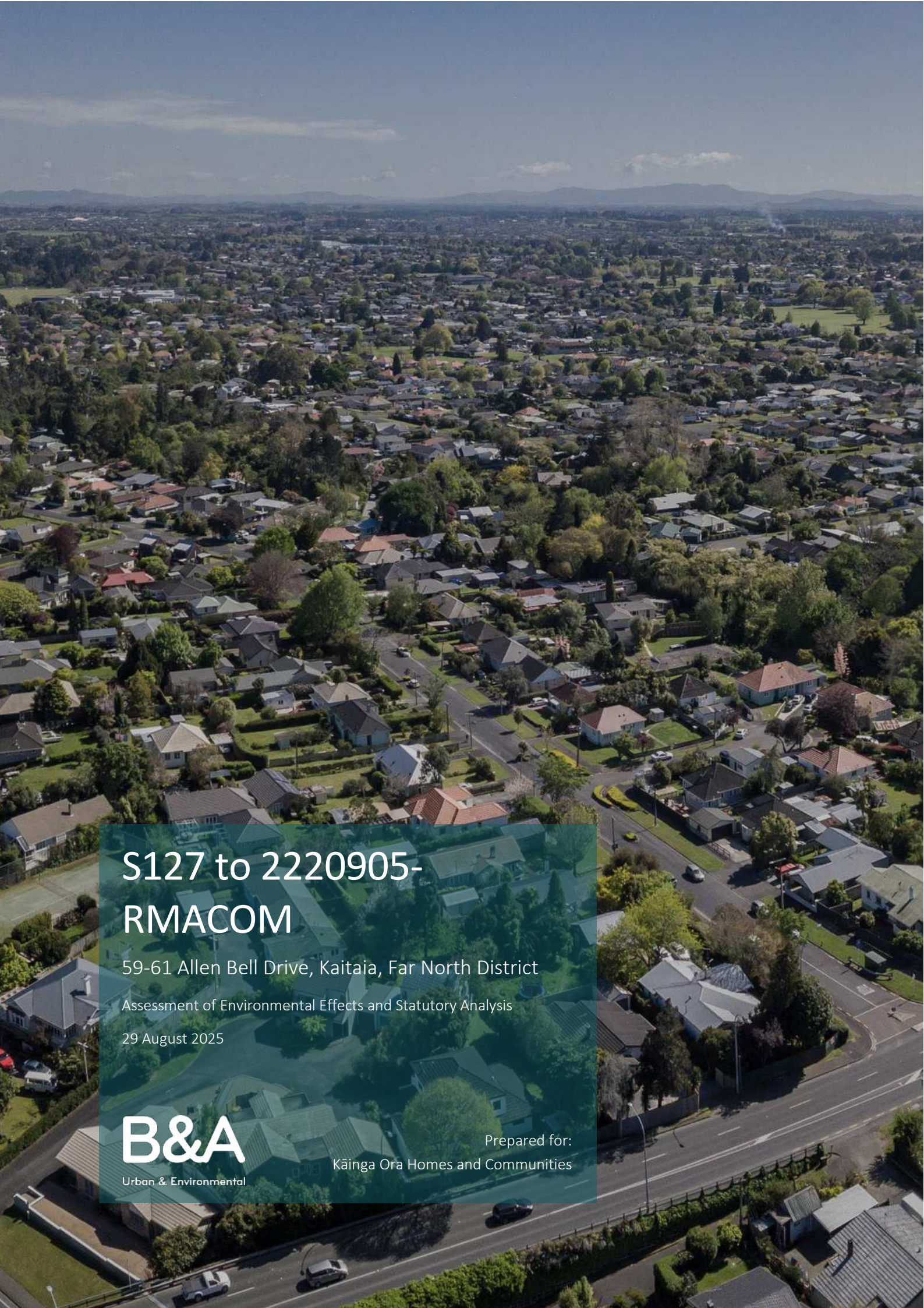
Date 01-Sep-2025

A signature is not required if the application is made by electronic means

Checklist (please tick if information is provided)

- ☐ Payment (cheques payable to Far North District Council)
- ☐ Details of your consultation with Iwi and hapū
- ☑ A current Certificate of Title (Search Copy not more than 6 months old)
- ☑ Copies of any listed encumbrances, easements and/or consent notices relevant to the application
- ☑ Applicant / Agent / Property Owner / Bill Payer details provided
- ☑ Location of property and description of proposal
- ☑ Assessment of Environmental Effects
- ☐ Written Approvals / correspondence from consulted parties
- ☑ Reports from technical experts (if required)
- ☑ Copies of other relevant consents associated with this application
- ☑ Location and Site plans (land use) AND/OR
- ☑ Location and Scheme Plan (subdivision)
- ☑ Elevations / Floor plans
- ☑ Topographical / contour plans

Please refer to chapter 4 (Standard Provisions) of the Operative District Plan for details of the information that must be provided with an application. This contains more helpful hints as to what information needs to be shown on plans.



S127 to 2220905-RMACOM

59-61 Allen Bell Drive, Kaitaia, Far North District

Assessment of Environmental Effects and Statutory Analysis

29 August 2025

B&A
Urban & Environmental

Prepared for:
Kāinga Ora Homes and Communities

B&A Urban & Environmental

B&A Reference:

025487 – MBU1

Status:

Final Revision 01

Date:

29 August 2025

Prepared by:

Gus Finlayson

Intermediate Planner, Barker & Associates Limited

Reviewed by:

Gerard Thompson

Director, Barker & Associates Limited

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1.0 Applicant and Property Details

To:	Far North District Council
Site Address:	59-61 Allen Bell Drive, Kaitaia, Far North District
Applicant Name:	Kāinga Ora Homes and Communities
Address for Service:	Barker & Associates Ltd PO Box 1986, Shortland Street, Auckland 1140 Attention: Steph Wilson
Legal Description:	Lot 16 and Lot 17 Deposited Plan 74955 (refer to Records of Title as **Appendix 1**)
Site Area:	1,556m^2
Site Owner:	Housing New Zealand Limited
District Plan:	Far North Operative District Plan 2009 ('FNDP') and Proposed Far North District Plan ('PDP')
FNDP Zoning:	Residential Zone
PDP Zoning:	General Residential Zone
FNDP and PDP Overlays & Controls:	N/A
PDP Non-District Plan Layers:	Treaty Settlement Area of Interest – Ngāi Takoto and Te Rawara
Additional Limitations:	Northland Regional Council 100-year flood extent
Locality Diagram:	Refer to **Figure 1**
Brief Description of Proposal:	S127 to an approved development for six residential dwellings and associated subdivision.
Summary of Reasons for Consent:	S127 to vary conditions of consent

2.0 Introduction

This report has been prepared to address a section 127 application submitted by Kāinga Ora Homes and Communities (hereafter referred to as 'Kāinga Ora') for a development at 59-61 Allen Bell Drive, Kaitaia. This report is intended to address the relevant matters under the Resource Management Act 1991 ('RMA').

2.1 Background

2.1.1 Pre-Application Meeting

On 19 August 2025, a pre-application meeting was held with Far North District Council ('FNDC'). Nikki Callinan, Losaline Finekifolau, Gourav Rana and Sujeet Tikaram were in attendance on behalf of FNDC and reviewed the initial site plan, landscape masterplan and servicing layout. The meeting minutes are included as **Appendix 2**.

Further to the pre-application meeting, the proposal was discussed again with Nikki Callinan on 21 August 2025. The applicant noted that the FFLs of the units will be increasing, which create a new non-compliance with the maximum height standard. FNDC noted that they are willing to include the maximum height breach within the scope of this s127 application.

These matters have been addressed in full within this application.

2.1.2 Approved Resource Consent 2220905-RMACOM

On 28 September 2023, the applicant obtained resource consent approval to remove the existing dwellings and develop and subdivide around six new dwellings, comprising 2 x four-bedroom standalone units and 4 x two-bedroom duplex units. The approved subdivision provided the following gross site areas/net site areas:

- Lot 1: 320m^2/314m^2
- Lot 2: 144m^2/144m^2
- Lot 3: 188m^2/81m^2
- Lot 4: 183m^2/107m^2
- Lot 5: 156m^2/156m^2
- Lot 6: 366m^2/366m^2

The approved subdivision also provided a Jointly-Owned Access Lot ('JOAL') which served Lots 1-3. A number of changes are proposed to the approved design, including:

- The standalone dwelling typologies have changed, providing a smaller building footprint. The standalone dwellings have also reduced from a 4-bedroom to a 2 and 3-bedroom typology;
- Grading has changed and there is a difference in the finished ground surface. The total volume of earthworks has increased from 53m^3 cut and fill to a proposed cut of 752m^3 (including 114m^3 of remediation volume) and fill of 315m^3;
- In order to provide mitigation from flood hazards, finished floor levels for all dwellings have increased from 14m to 14.7m. This will result in a small encroachment into the maximum 8m height standard for the duplex dwellings (Units 3-4 and 5-6); and

- There is a new front yard non-compliance caused by Unit 1 and 2's eaves, and Unit 1's entrance porch, which is above 1m in height and considered to be a building.

The proposed changes are considered to be within scope of the original resource consent application, such that the changes can be sought as a change to consent conditions under Section 127 of the RMA.

2.1.3 Proposed District Plan

The District Plan review process began in 2016. In 2022 the Proposed District Plan (PDP) was formally notified and submissions were invited. The hearings phase commenced in May 2024 and is ongoing, with the most recent hearing (hearing 14) held on 21 July 2025. Hearings are scheduled to conclude on 6 November 2025.

In 2026 the Council will issue its decisions on the PDP, based on the recommendations of the hearings panel. Several rules in the PDP already have immediate legal effect, and these have been addressed as part of this resource consent application.

3.0 Site Context

3.1 Site Description

As shown in **Figure 1** below, the application site comprises two existing contiguous lots, 59 and 61 Allen Bell Drive, which together form the subject site. The site is regular in shape with a total area of 1,556m^2 and is generally flat. The dwellings which previously occupied the site have since been demolished, as shown in **Figure 2** below.

Figure 1: Locality Plan. Source: eMaps.

Figure 2: Subject site as viewed from Allen Bell Drive (September 2024). Source: Google Maps.

At present, the site is vacant and provided as grass lawn, with one mature tree retained within the south-eastern part of site. As seen in Figure 2 above, a transformer straddles the road boundary, and will remain situ, with the easement in gross to be carried over to the new title. The site boundaries with neighbouring properties are defined by high timber fence. The front yard is unfenced and provided as lawn.

Two vehicle crossings are currently provided to the site. The property at 61 Allen Drive gains access from an existing crossing to Parkdale Crescent. The property at 59 Allen Drive gains access from an existing crossing to Allen Bell Drive.

Allen Bell Drive is a local road which has a legal width of approximately 24.5m with one side of the street lined with footpath and both provided with grass berms. Parkdale Crescent is a local road which has a legal width of approximately 15.5m, with both sides of the street lined with footpaths and grass berms. There are no street trees within the road reserve adjoining the site.

The site is subject to the 100-year River Flood Hazard under the Northland Regional Policy Statement ('RPS') Maps, as can be seen in Figure 3 below.

Figure 3. 100-year flooding as it applies to the subject site (outlined in red). Source: NRC Hazard Viewer.

3.2 Surrounding Locality

The surrounding environment is predominantly residential in nature with a rural outlook to the east. Built development typically features one-storey standalone residential units with some variety in architectural style. The exception to this is 27-29 Parkdale Crescent which, subject to the implementation of RC22201542, will display a similar level of residential development to that which is proposed.

In terms of surrounding amenities, Mathews Park is within proximity to the site as is Parkdale Park. Kaitaia Intermediate School, fresh produce suppliers and Kaitaia's big box retail centre (which includes Pak 'N' Save and the Warehouse) are located within an approximate 1.5km walking radius of the site. Kaitaia Town Centre is approximately 1km to the west.

4.0 Proposal

The consented design involved six dwellings, including 2 x four-bedroom, two-storey dwellings and 4 x two-bedroom, two-storey dwellings (a total of 16 bedrooms). The proposed design involves six dwellings, being 1 x three-bedroom and 5 x two-bedroom dwellings (a total of 13 bedrooms).

The approved site layout is shown in **Figure 4**, and proposed site layout is shown in **Figure 5** below. The following key changes are proposed to the dwelling typologies and site layout:

- The standalone dwellings now have a rectangular shape, and a reduced GFA;
- The dwellings within the south-west portion of site are now located further away from the southern boundary due to an FFL height increase, to avoid further infringing the HIRB recession plane;

- The layout of the dwellings has changed due to the large public stormwater pipe traversing the site. The four duplex dwellings are now located in the south of the site, with the standalone dwellings in the north. The approved Unit 1 has effectively switched places with approved Units 4 and 5.

Figure 4: Consented Site Layout. Source: Appendix 2.

Figure 5: Proposed Site Layout. Source: Appendix 4.

4.1.1 Earthworks

As per the consented development, the existing dwellings, hard surfaces, and vegetation on the site will be removed to accommodate the redevelopment. The updated plans by McKenzie & Co, are included as **Appendix 5**. Earthworks of approximately 752m³ cut and 315m³ fill across the site area of 1,558m² are required compared with 53m³ cut consented. Given most of the earthworks comprise 500mm topsoil scrape and replacement, there are minimal changes to ground level throughout the site.

4.1.2 Contamination

Tonkin + Taylor ('T+T') have conducted a Preliminary Site Investigation ('PSI') and Detailed Site Investigation ('DSI') (refer **Appendix 4**) and concluded that there is no evidence of current or historic HAIL activities being undertaken on site. As such, the site is not considered to be 'land covered', and resource consent under the NES-CS is not required. It is noted that localised samples of asbestos are to be removed during site works using a Site Management Plan ('SMP').

4.1.3 Infrastructure and Servicing

The servicing strategy for the proposed development remains generally the same and is set out in the report and accompanying drawings by McKenzie & Co, included as **Appendix 3**. The most significant change is the retention of the public stormwater pipe which traverses the site. This pipe was proposed to be removed under the approved consent. However, due to the cost of removing and replacing this pipe, it is proposed to be retained and integrated into the stormwater servicing strategy for the site.

Plans have been updated to reflect the changes to the approved design. In summary, it is concluded that all dwellings can be appropriately serviced in terms of stormwater, wastewater, water supply, power and telecommunications with no further upgrades required.

4.1.4 Access and Parking

The layout of the vehicle access and parking area has been adjusted. Where two vehicle crossings to Parkdale Crescent (including one combined crossing) and one vehicle crossing to Allen Bell Drive was provided under the approved design, it is now proposed to provide one vehicle crossing each to Allen Bell Drive and Parkdale Crescent. Eight parking spaces were approved, and seven are now proposed (one space to each two-bedroom dwelling, and two spaces for the three-bedroom dwelling). Two Commonly Owned Access Lots ('COAL's) are proposed where just one COAL was consented. An assessment of the arrangement has been prepared by Traffic Planning Consultants (TPC) and is included as **Appendix 10**.

4.1.5 Landscaping

The approved design involved planting, surface treatments and fencing, as illustrated on the approved plans. The updated plans by Greenwood Associates are included as **Appendix 7** and it is noted that the planting strategy is generally unchanged, with a continued focus on providing specimen planting towards the site frontage and at internal boundary interfaces.

4.1.6 Subdivision

The approved development involved freehold subdivision around the approved development to contain each dwelling on its own lot and to provide one COAL. The proposed subdivision

arrangements remain generally the same with, an adjustment to the dwelling lots, outlines, and an additional COAL. Refer to the Scheme Plan included as **Appendix 7** for further information.

4.2 Proposed Changes to Conditions

A total of fourteen conditions (four land use consent conditions and ten subdivision conditions) were imposed on the approved consent. It is proposed to amend ten conditions to reflect the above changes to the development.

The proposed changes are marked up in **Appendix 3** with additions **underlined in bold** and deletions ~~struck-through~~.

5.0 Reasons for the Application

5.1 Activity Status

The proposal involves changes to conditions of 2220905-RMACOM to replace the stamped Architectural Plans and Landscape Plans.

The proposed changes are considered to be within the scope of the original resource consent as the proposal remains fundamentally the same in terms of the activity and scale and does not have materially different adverse effects from that originally consented.

As an application to change conditions under section 127 of the Act, the proposal is treated as if it were a **discretionary activity**.

6.0 Public Notification Assessment (Sections 95A, 95C and 95D)

6.1 Assessment of Steps 1 to 4 (Sections 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.

6.1.1 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 is made jointly with an application to exchange of recreation reserved land under section 15AA of the Reserves Act 1977.

The above does not apply to the proposal.

6.1.2 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 boundary activity. Therefore, public notification is not precluded.

6.1.3 Step 3: If not required 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 national environmental standards require public notification, or if the activity is likely to have adverse effects on the environment that are more than minor.

As noted under step 2 above, public notification is not precluded, and an assessment in accordance with section 95A is required, which is set out in the sections below. As described below, it is considered that any adverse effects will be less than minor.

6.1.4 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 proposal involves design changes to the consented development. The original proposal was not considered as giving rise to special circumstances and it is considered that the changes proposed are in keeping with the original proposal.

It is considered that there is nothing noteworthy about the proposal. It is therefore considered that the application cannot be described as being out of the ordinary or giving rise to special circumstances.

6.2 Section 95D Statutory Matters

In determining whether to publicly notify an application, section 95D specifies a council must decide whether an activity will have, or is likely to have, adverse effects on the environment that are more than minor.

In determining whether adverse effects are more than minor:

- Adverse effects on persons who own or occupy the land within which the activity will occur, or any land adjacent to that land, must be disregarded.

  The land to be excluded from the assessment is listed in section 6.3 below.

- Adverse effects permitted by a rule in a plan or national environmental standard (the 'permitted baseline') may be disregarded.

In this case there is no permitted baseline that can be usefully applied in this case. However, the approved resource consents referred to further above are part of the receiving environment against which any adverse effects from this proposal should be assessed.

- Trade competition must be disregarded.

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

- The adverse effects on those persons who have provided their written approval must be disregarded.

No persons have provided their written approval for this proposal.

The sections below set out an assessment in accordance with section 95D, including identification of adjacent properties, and an assessment of adverse effects.

6.3 Land Excluded from the Assessment

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 6** below, and include:

- 60, 60A, 60B, 62, 64 Allen Bell Drive and Lot 1 DP 173052 (east);
- 29A and 29B Parkdale Crescent and 63 Allen Bell Drive (north);
- 18 Parkdale Crescent and 57 Allen Bell Drive (south); and
- 26 Parkdale Crescent (west).

Figure 6: Adjacent properties in relation to subject site. Source: Emaps.

6.4 Assessment of Effects on the Wider Environment

The following sections set out an assessment of wider effects of the proposal, and it is considered that effects in relation to the following matters are relevant:

- Built Character and Amenity;
- On-Site Amenity;
- Land Disturbance;
- Infrastructure and Servicing; and
- Transportation.

These matters are set out and discussed below.

6.4.1 Built Character and Amenity

The change in site layout is due to an inability to relocate the public stormwater pipe which intersects the site. To allow for the retention of the pipe, the four consented duplex dwellings are now located within the southern portion of site, with the two standalone dwellings now located towards the northern part of site (Parkdale Crescent frontage).

It is noted that on balance, the proposed net site areas are generally imperceptible to the approved scheme, given that the proposed bedrooms and GFA is decreasing, and the layout change constitutes the switching of the approved Unit 1 (standalone dwelling) with Units 4 and 5 (duplex dwellings). The visual effect of this on the road reserve will be that the two standalone units will be at the site 'frontage' when viewed from Parkdale Crescent. Given their location and orientation, the four duplex dwellings will appear largely as one single built form when viewed from Allen Bell Drive.

With regard to the potential adverse effects arising as a result of the proposal, it is considered that the effects generated by the maximum height infringement are visually similar to what was approved under the existing consent. The floor level and subsequent building height has increased by approximately 0.7m, however aside from this, the intensity of built development has not significantly changed from what was originally applied for.

It is noted that the eaves of Units 1 and 2 infringe the front yard setback to Parkdale Crescent, and the front door landing for Unit 1 also encroaches the setback. These buildings have been designed to have a good interface to the street, with separate pedestrian accesses leading to front doors providing street activation, with 1.2m high fencing maintained where practicable, and permeable landscaping in the form of specimen trees and amenity mixes creating visual interest to the street edge.

With regard to visual softening, it is noted that with regard to landscaping, the proposal remains similar to that which was approved. The proposed landscaping will include the provision of different surface treatments to assist in breaking up the expanse of hard surfaces, including within the two COAL areas. The landscaping will consist of a combination of standard and exposed aggregate, a variety of fencing types, and a mix of specimen trees, fruit trees, low shrubs and ground cover including grass.

Overall, the proposal is considered to continue to feature a carefully designed residential site layout, with residential units that address the street and public realm, and provide a good level of

visual amenity. As such, any adverse effects of the changes to the approved scheme on existing built character and amenity within the wider environment will be less than minor.

6.4.2 Land Disturbance

The total volume of earthworks is proposed to increase by 1,014m^3 above the originally consented 53m^3. This increase consists primarily of topsoil strip and replacement. No significant cuts at boundaries with neighbours are proposed.

In this regard, it is noted that the approved silt and sediment control plan will continue to be applied to the site to mitigate any potential adverse environmental effects as a result of the proposed land disturbance.

All proposed sediment and erosion control measures will be designed in accordance with the guidelines prescribed in Guideline Document 2016/005 ('GD05') as required by the FNDP. On the basis of the above, it is considered that any adverse effects associated with silt and sediment runoff (and resulting effects on water quality) will continue to be less than minor.

6.4.3 Infrastructure and Servicing

The updated provision of infrastructure to service the development has been considered in the Infrastructure Report prepared by McKenzie & Co (refer **Appendix 3**). Their report and drawings confirm that the site can be adequately serviced.

In particular:

- It is proposed to connect to the reticulated stormwater network. On-site stormwater detention is proposed to attenuate runoff to pre-development levels for the 10% AEP event. This will be by way of an aboveground stormwater detention tank for each individual lot;
- The development will connect to the existing public wastewater network via individual lot connections to the pipes traversing the site. The proposal will not extend the wastewater network as was proposed under the approved consent; and
- In terms of water supply, the proposal remains generally unchanged from the approved strategy, with one new water meter bank and two individual connections proposed to provide adequate water supply.

Having regard to the above, it is considered that the proposed changes to the approved development are appropriate and measures provided will ensure that any potential adverse effects are acceptable.

6.4.4 Transportation

Changes to the approved traffic, access and parking have been considered in the Transport Assessment prepared by Traffic Planning Consultants Ltd (refer **Appendix 10**). This report concludes the following:

> *"Vehicle and pedestrian access to the site is designed to a suitable standard such that the proposal will have less than minor effects on the surrounding road network, and to the safety of pedestrians and vehicles using the site."*

For the reasons outlined above and within the Transport Assessment, it is considered that the traffic engineering effects of the proposal can be accommodated within the existing road network

without comprising its function, capacity, or safety. It is therefore considered that any adverse effects with respect to transport will be less than minor.

6.4.5 Subdivision

The proposal involves changes to the consented subdivision, limited to the re-arrangement of lot boundaries to accommodate the new location of dwellings. Easements have also been adjusted accordingly. The design continues to be appropriate in respect of physical and legal access, servicing, and the site has been designed such that dwellings will continue to be provided with sufficient freeboard from natural hazards. As noted above, the site can be appropriately serviced with respect to civil infrastructure.

Taking the abovementioned points into account, it is considered that any potential adverse effects arising from the proposed subdivision will be less than minor.

6.5 Summary of Effects

Overall, it is considered that any adverse effects on the environment relating to this proposal will be less than minor.

6.6 Public Notification Conclusion

Having undertaken the section 95A public notification tests, the following conclusions are reached:

- Under step 1, public notification is not mandatory;
- Under step 2, public notification is not precluded;
- Under step 3, public notification is not required as it is considered that the activity will result in less than minor adverse effects; and
- Under step 4, there are no special circumstances.

Therefore, based on the conclusions reached under steps 3 and 4, it is recommended that this application be processed without public notification.

7.0 Limited Notification Assessment (Sections 95B, 95E to 95G)

7.1 Assessment of Steps 1 to 4 (Sections 95B)

If the application is not publicly notified under section 95A, the council must follow the steps set out in section 95B to determine whether to limited notify the application. These steps are addressed in the statutory order below.

7.1.1 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 (being on land, or adjacent to land, that is subject to a statutory acknowledgement area).

The above does not apply to this proposal.

7.1.2 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.

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

Step 3 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 any other activity, a person affected in accordance with s95E.

The application is not for a boundary activity, and therefore an assessment in accordance with section 95E is required and is set out below.

Overall, it is considered that any adverse effects on persons will be less than minor, and accordingly, that no persons are adversely affected.

7.1.4 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.

In this instance, having regard to the assessment in section 6.1.4 above, it is considered that special circumstances do not apply.

7.2 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).

In deciding who is an affected person under section 95E:

- Adverse effects permitted by a rule in a plan or national environmental standard (the 'permitted baseline') may be disregarded;
- Only those effects that relate to a matter of control or discretion can be considered (in the case of controlled or restricted discretionary activities); and
- The adverse effects on those persons who have provided their written approval must be disregarded.

These matters were addressed in section 6.2 above, and no written approvals have been obtained.

Having regard to the above provisions, an assessment is provided below.

7.3 Assessment of Effects on Persons

Adverse effects on persons are considered below. Wider effects were considered in section 6.5 above, and considered to be less than minor.

The following comments apply to persons at all adjacent properties:

- The buildings are considered to feature a level of modulation and articulation through their overall form, use of different materials and glazing. These features create a visually interesting development that assists in avoiding perceived bulk;
- The proposal involves landscaping throughout the site which will assist in softening views of the development;
- Shading diagrams have been provided within the Architectural Drawings that confirm that appropriate sunlight access is provided to all neighbouring persons during the equinox;
- It is considered that no persons will be adversely affected by the proposed earthworks for the reasons identified further above. The effects on adjacent properties during construction will be temporary and less than minor;
- It is considered that no persons will be adversely affected by the proposal in terms of traffic or pedestrian safety for the reasons identified within the Transport Assessment (refer Appendix 11); and
- It is considered that no persons will be adversely affected by the proposal in terms of infrastructure capacity or servicing for the reasons identified further above.

The following comments are made in relation to persons at specific adjacent properties:

7.3.1 Effects on Persons to the West

Figure 7: Adjacent property (in blue) in relation to the subject site (in red). Source: eMaps.

The property at 26 Parkdale Crescent is located to the west of the subject site and contains a single-storey dwelling. Any adverse effects on persons at this property are considered to be less than minor for the following reasons:

- With regard to privacy effects, it is noted that the proposed dwellings continue to be oriented to the north. There is minimal glazing towards the common boundary, and the north-western Unit (Unit 2) is now located further away from the common boundary compared to the approved layout; and
- In terms of dominance effects, the subject dwellings continue to be sufficiently set back from the common boundary and are compliant with the yard and recession plane control. Whilst Unit 5 and 6 exceed the maximum height plane, this is considered to be generally imperceptible to a compliant scheme, being a maximum encroachment of 160mm at the critical point. Shading studies confirm that the property at 26 Parkdale Crescent continues to receive an appropriate level of sunlight access.

Taking the above into account, it is considered that any adverse effects on persons at the aforementioned property will be less than minor.

7.3.2 Effects on Persons to the South

Figure 8: Adjacent properties (in blue) in relation to the subject site (in red). Source: eMaps.

The properties at 57 Allen Bell Drive and 18 Parkdale Crescent are located to the south of the subject site, as illustrated in Figure 8 above. Each property contains a single storey dwelling. Any adverse effects on persons at these properties are considered to be less than minor for the following reasons:

- The proposal is generally consistent with the approved scheme with regard to the dwelling bulk, noting that the two-storey four-bedroom unit which was located in the south-eastern part of site has been swapped with 2 x two-storey two-bedroom duplex units of a similar built form.
- It is noted that the vehicle access for 57 Allen Bell Drive is located to the north of its dwelling and has a width of 3m. The proposed COAL 2 is located to the south of Units 3-4 and has a width of 4.9m, providing a combined separation distance between the proposed Units 3-4 and the neighbouring dwelling of 7.9m. It is considered that this distance, and the compliance of Units 3-4 with the height in relation to boundary recession plane and rear yard setback reduces potential visual dominance effects on this property. Further, a 1.8m high timber fence will continue to be located at the common boundary, and four specimen trees will be located between the proposed Units 3-6 and the common boundary, including one kōwhai tree, and three streamside daisy specimen plants, which can grow up to 4m in height, minimising potential building dominance effects; and

- In terms of potential privacy effects, the dwellings continue to be oriented in a northerly direction. In particular, the primary outlooks and outdoor living areas continue to be provided to the north of the proposed dwellings, away from the common boundary, reducing potential overlooking effects.

Taking the above into account, it is considered that any adverse effects on persons at the aforementioned property will be less than minor.

7.3.3 Effects on Persons to the North and East

Figure 9: Adjacent properties (in blue) in relation to the subject site (in red). Source: eMaps.

The properties at 60, 60A, 60B, 62, 63, 64 Allen Bell Drive, Lot 1 DP 173052 and 29A and 29B Parkdale Crescent are located to the north and east of the subject site, as illustrated in Figure 9 above. Any adverse effects on persons at these properties are considered to be less than minor for the following reasons:

- The adjacent dwellings are afforded a generous separation distance from the subject site in excess of 15m on Parkdale Crescent, and 25m on Allen Bell Drive. A good level of landscaping is provided to the road frontage, softening views of the development site from these neighbouring properties; and
- The bulk of the dwellings are situated such that the development can effectively be viewed as one property when seen from the east, with Units 3-6 being aligned flush with each other, further reducing any potential visual dominance effects.

Taking the above into account, it is considered that any adverse effects on persons at the aforementioned property will be less than minor.

7.3.4 Summary of Effects

Taking the above into account, it is considered that any adverse effects on persons at the aforementioned properties will be less than minor. It is considered, therefore, that there are no adversely affected persons in relation to this proposal.

7.4 Limited Notification Conclusion

Having undertaken the section 95B limited notification tests, the following conclusions are reached:

- Under step 1, limited notification is not mandatory;
- Under step 2, limited notification is not precluded;
- Under step 3, limited notification is not required as it is considered that the activity will not result in any adversely affected persons; and
- Under step 4, there are no special circumstances.

Therefore, it is recommended that this application be processed without limited notification.

8.0 Consideration of Applications (Section 104)

8.1 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 discretionary 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.

8.2 Weighting of Proposed Plan Changes: Proposed Far North District Plan (PDP)

The Far North Proposed District Plan (PDP) is currently progressing through the Hearings Process. These are anticipated to extend until November 2025 before moving to a Decision.

It is considered that the proposal can be predominantly assessed against the FNDP provisions. There are some provisions of the PDP which have immediate legal effect, including Earthworks, and Indigenous Biodiversity, and the proposal will comply with all permitted activity rules that have immediate legal effect.

Under the PDP, the site is proposed to be zoned General Residential Zone. An assessment of the proposal against the relevant FNDP and PDP objectives and policies is provided below. It is considered that different outcomes would arise between the two plan versions. However, as the PDP is still going through the hearings process and no decisions have been issued, it is considered that greater weight should be given to the FNDP provisions.

9.0 Effects on the Environment (Section 104(1)(A))

Having regard to the actual and potential effects on the environment of the activity resulting from the proposal, it was concluded in the assessment above that any wider adverse effects relating to the proposal will be less than minor and that no persons would be adversely affected by the proposal.

Further, it is considered that the proposal will also result in positive effects including:

- The development of six new dwellings of a size and layout that will provide an acceptable level of amenity for future occupants; and
- New warm, healthy homes.

Overall, it is considered that the proposal will have positive effects, and any actual and potential adverse effects on the environment of allowing the activity are less than minor.

10.0 District Plan and Statutory Documents (Section 104(1)(B))

10.1 Objectives and Policies of the Far North Operative District Plan

A comprehensive assessment of the relevant objectives and policies was undertaken as part of the approved resource consent and the original proposal was found to be in accordance with the objectives and policies of the Residential Zone.

A comprehensive assessment of the relevant objectives and policies was undertaken a part of the approved resource consent 2220905-RMACOM and the proposal was found be in accordance with the objective and policies of the Residential Zone. In this case, the proposed change sought in this application remains generally consistent with the consented bulk and location of dwellings, and the proposal will continue to be consistent with the anticipated outcomes of the Zone. The proposed dwelling facades continue to provide colours, materials and textures which will articulate the facades and create visual interest.

It is therefore considered that that the objectives and policies assessed for the original application are applicable to this application and no further assessment is required.

10.2 Objectives and Policies of the Northland Regional Policy Statement

The Northland Regional Policy Statement (NRPS) covers the management of natural and physical resources across the Northland Region. The provisions within the NRPS give guidance at a higher planning level in terms of the significant regional issues. As such it does not contain specific rules that trigger the requirement for consent but rather give guidance to consent applications and the development of District Plans on a regional level.

Amongst other things the RPS presents policies regarding regional form in 5.1.1 which are relevant for the consideration of the proposed development.

5.1.1 Policy – Planned and coordinated development

Subdivision, use and development should be located, designed and built in a planned and co-ordinated manner which:

(a) Is guided by the 'Regional Form and Development Guidelines' in Appendix 2;

(b) Is guided by the 'Regional Urban Design Guidelines' in Appendix 2 when it is urban in nature;

(c) Recognises and addresses potential cumulative effects of subdivision, use, and development, and is based on sufficient information to allow assessment of the potential long-term effects;

(d) Is integrated with the development, funding, implementation, and operation of transport, energy, water, waste, and other infrastructure;

(e) Should not result in incompatible land uses in close proximity and avoids the potential for reverse sensitivity;

(f) Ensures that plan changes and subdivision to / in a primary production zone, do not materially reduce the potential for soil-based primary production on land with highly versatile soils, or if they do, the net public benefit exceeds the reduced potential for soil-based primary production activities; and

(g) Maintains or enhances the sense of place and character of the surrounding environment except where changes are anticipated by approved regional or district council growth strategies and / or district or regional plan provisions.

(h) Is or will be serviced by necessary infrastructure.

Particular consideration has been given to 5.1.1(a) and (b) and it is considered that the proposal is in accordance with the Regional Form Development Guidelines and the Regional Urban Design Guidelines. In particular, the proposed development incorporates quality urban design principles including context, character, choice, connections, creativity custodianship and collaboration.

With specific reference to 5.1.1(d) and (h), the proposal can be adequately serviced in terms of transportation, water, wastewater, and stormwater by existing and proposed infrastructure as highlighted within the Infrastructure Report.

In addition, the proposed development is considered to be compatible with the predominantly residential land uses. It is highlighted that the bulk of the built development generally complies with what is permitted in this zone and the intensity of development is similar to that which can be anticipated as a restricted discretionary activity in this zone. Thereby, the proposal is considered to satisfy 5.1.1(e) and (g).

For these reasons, it is considered that the proposal is consistent with the relevant RPS provisions.

10.3 Objectives and Policies of the Proposed Far North District Plan

10.3.1 Part 2 - Transport

The objectives and policies for Transport are contained within TRAN-O1 to O6 and TRAN-P1 to P8 of the PDP. They seek for the provision of parking and access to support the needs of land use and subdivision activities, and ensure the safe and efficient operation for users. The Transport Assessment (Appendix 11) confirms that the proposed access and parking will be safe for vehicles and pedestrians, and will not generate adverse effects on the road network. As such, the proposal is considered to be consistent with the objectives and policies.

10.3.2 Part 2 – Subdivision

The objectives and policies for Subdivision are contained within SUB-O1 to O4 and SUB-P1 to P11 of the PDP. They seek for subdivision to result in efficient use of land, including achieving objectives of each relevant zone and providing for legal and physical access.

The proposal is considered to be consistent with the objectives and policies as it comprises subdivision around dwellings that is not inconsistent with the lot sizes and general layout of an approved site plan. Legal and physical access is provided to each dwelling, and appropriate servicing easements are provided.

10.3.3 Part 3 - General Residential Zone

The objectives and policies for the General Residential Zone are contained within GRZ-O1 to O6 and GRZ-P1 to P8 of the PDP. They seek for densities, housing types and lot sizes (including multi-unit developments) that respond to housing needs and demand, capacity of infrastructure, amenity and character of the receiving environment.

As noted above, the proposal is considered to be generally consistent with the approved layout in terms of lot layout and bulk and location of dwellings. There is also an approved development at 27 Parkdale Crescent, which provides evidence of infill occurring at a greater intensity. An assessment of effects on character and amenity was undertaken in Section 6.4.1 above and effects were considered to be less than minor. An assessment of effects on neighbouring persons was undertaken in Section 7.3 above which concluded that effects in terms of privacy and sunlight will be less than minor. The proposal will provide social housing to meet the needs of the local community. As such, the proposal is considered to be consistent with the objectives and policies of the GRZ.

10.4 Summary

It is considered that the proposed development is generally in accordance with the objectives and policies of the FNDP.

11.0 Part 2 Matters

While it is not necessary to take recourse to Part 2 given that it has already been incorporated into the FNDP, we do so for completeness.

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 less than minor, and the proposal accords with the relevant FNDP, NRP and PDP objectives, policies and assessment criteria, it is considered that the proposal will not offend against the general resource management principles set out in Part 2 of the Act.

12.0 Other Matters (Section 104(1)(C))

12.1 Record of Title Interests

The Record of Title for the site are subject to a number of interests (refer **Appendix 1**). None of these are anticipated to affect the resource consent application as discussed in **Table 1** below:

Table 1: Record of Title interests

Interest	Comment
10368119.1 Certificate under 177(1) NgaiTakoto Claims Settlement Act 2015	This certificate establishes that the land is subject to a Right of First Refusal to NgaiTakoto should it be sold or leased and is of no direct relevance to the application.
10369060.1 Certificate under 106 Te Rarawa Claims Settlement Act 2015	Same as above, but the Right of First Refusal is to Te Rarawa.
Easement in Gross 'P' and 'Q'	Subject to an easement in gross in favour of Bay of Islands Electric Power Board, the easement has been shown on the subdivision scheme plan as 'P' and 'Q', and aligns with the existing transformer.
Subject to Part IV of the Conservation Act 1987	N/A – not relevant to proposal
Subject to Section 11 of the Crown Minerals Act 1991	N/A – not relevant to proposal

13.0 Section 106 Subdivision

Under section 106 of the Act, a consent authority may refuse to grant a subdivision consent if it considers that there is significant risk from natural hazards, or sufficient provision has not been made for legal and physical access to each allotment to be created by the subdivision.

The site is subject to the NRC modelled 100-year event flood extent. Flooding effects have been assessed in the Infrastructure Report included as **Appendix 3**. This assessment notes that the subject site is generally safe for vulnerable activities, given the freeboard provided to the dwellings. Flood levels will flow beneath the dwellings unhindered during flood events. Due to the minimal earthworks proposed within the natural hazard area, the effect of the development on neighbouring properties is considered by the Infrastructure Report to be negligible. Given this, it

is considered that the land is not likely to be subject to, or is likely to accelerate material damage form natural hazards.

Pursuant to Section 106(1)(c) Council may refuse subdivision consent if sufficient provision has not been made for legal and physical access to each allotment to be created by the subdivision. Vehicle crossings to the site will be provided as part of this proposal to provide access to the site. Two COALs are also proposed to provide vehicular access to the new residential units. Pedestrian access is also provided to each of the dwellings as illustrated on the site plan (refer **Appendix 2**). Therefore, it is considered that sufficient provision will be made for legal and physical access to each allotment to be created by the subdivision.

14.0 Conclusion

The proposal involves a s127 to vary conditions relating to an approved consent for six dwellings and subdivision at 59 and 61 Allen Bell Drive, Kaitaia.

Based on the above report it is considered that:

- Public notification is not required as adverse effects in relation to character and amenity, natural hazards, transportation and subdivision are considered to be less than minor. There are also positive effects including the development of six new dwellings of a size and layout that will provide an acceptable level of amenity for future occupants, and new warm, healthy homes;
- Limited notification is not required as no persons are considered to be adversely affected;
- The proposal accords with the relevant FNDP objectives and policies; and
- The proposal is considered to be 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 it can be granted on a non-notified basis.

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**NA30D/187**
Land Registration District	**North Auckland**
Date Issued	28 July 1975

Prior References
NA31B/1236

Estate	Fee Simple
Area	760 square metres more or less
Legal Description	Lot 16 Deposited Plan 74955
Registered Owners	

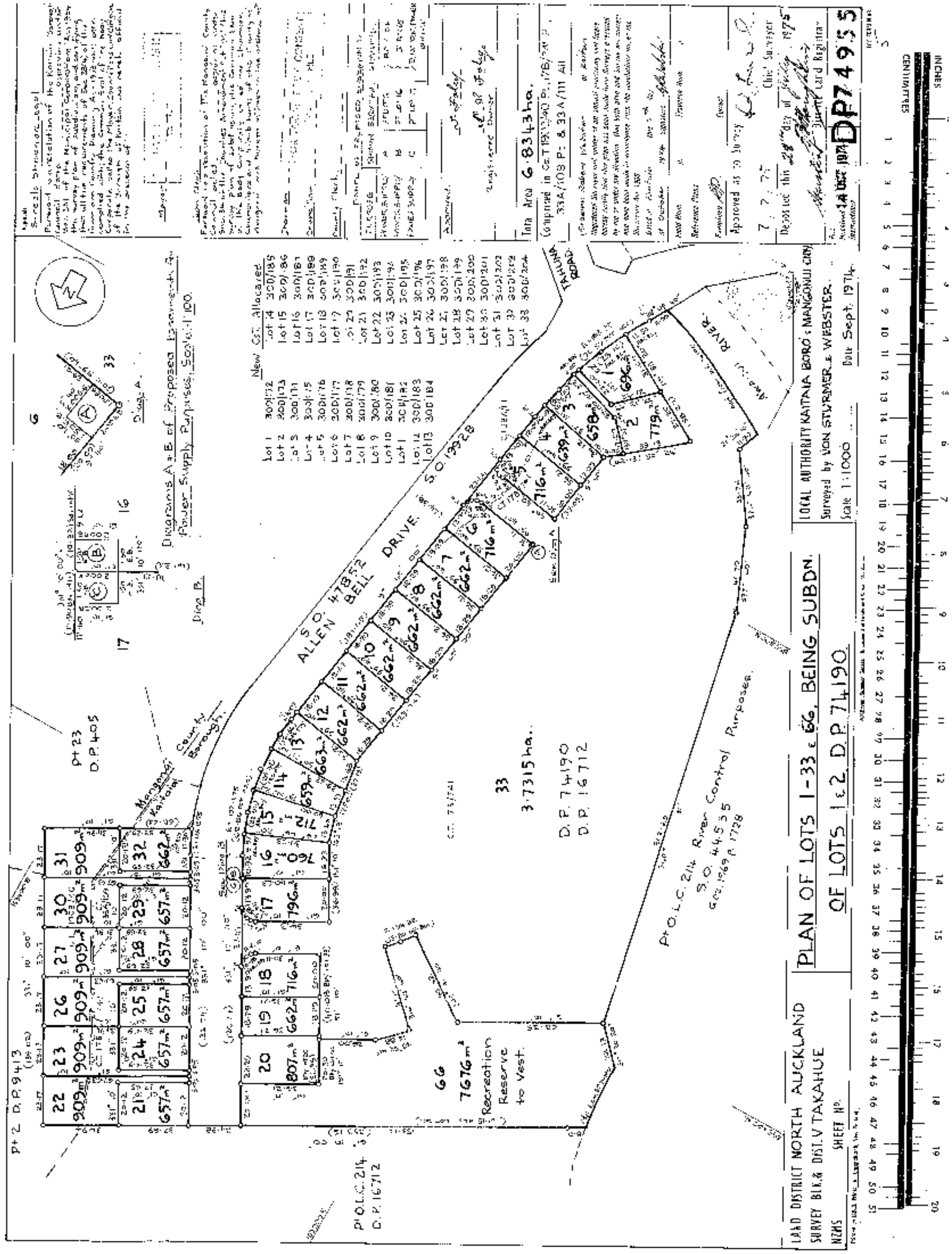
Housing New Zealand Limited

Interests

Subject to an electricity right (in gross) over part marked B on DP 74955 in favour of Bay of Islands Electric Power Board created by Transfer 185979.4 - 18.7.1975 at 11.35 am

10368119.1 Certificate under section 177(1) of the NgaiTakoto Claims Settlement Act 2015 that the within land is RFR land as defined in section 154 and is subject to Subpart 4 of Part 3 of the Act (which restricts disposal, including leasing, of the land) - 17.3.2016 at 7:00 am

10369060.1 Certificate under section 206 of the Te Rarawa Claims Settlement Act 2015 that the within land is RFR land as defined in section 183 of that Act and is subject to Subpart 4 of Part 3 of the Act (which restricts disposal, including leasing, of the land) - 17.3.2016 at 7:00 am


PLAN OF LOTS 1-33 & 66, BEING SUBDN.
OF LOTS 1 & 2 D.P. 74190
DP 74955
LOCAL AUTHORITY KAITAIA BORO' & MANGONUI CNTY
Surveyed by VON STURMER & WEBSTER
Scale 1:1000
Date Sept. 1974
LAND DISTRICT NORTH AUCKLAND
SURVEY BLK. & DIST. V TAKAHUE
S.O. 47852
ALLEN BELL DRIVE
S.O. 13928
RIVER
TAHUNA ROAD
66
7676m²
Recreation Reserve to Vest
33
3.7315ha.
D.P. 74190
D.P. 16712
Pt O.L.C. 214 River Control Purposes
S.O. 44555
Pt 2 D.P. 9413
Pt 23 D.P. 405
Diagrams A & B of Proposed Easements for Power Supply Purposes. Scale 1:100
Total Area 6.8343ha.

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**NA30D/188**
Land Registration District	**North Auckland**
Date Issued	28 July 1975

Prior References
NA31B/1236

Estate	Fee Simple
Area	796 square metres more or less
Legal Description	Lot 17 Deposited Plan 74955
Registered Owners	

Housing New Zealand Limited

Interests

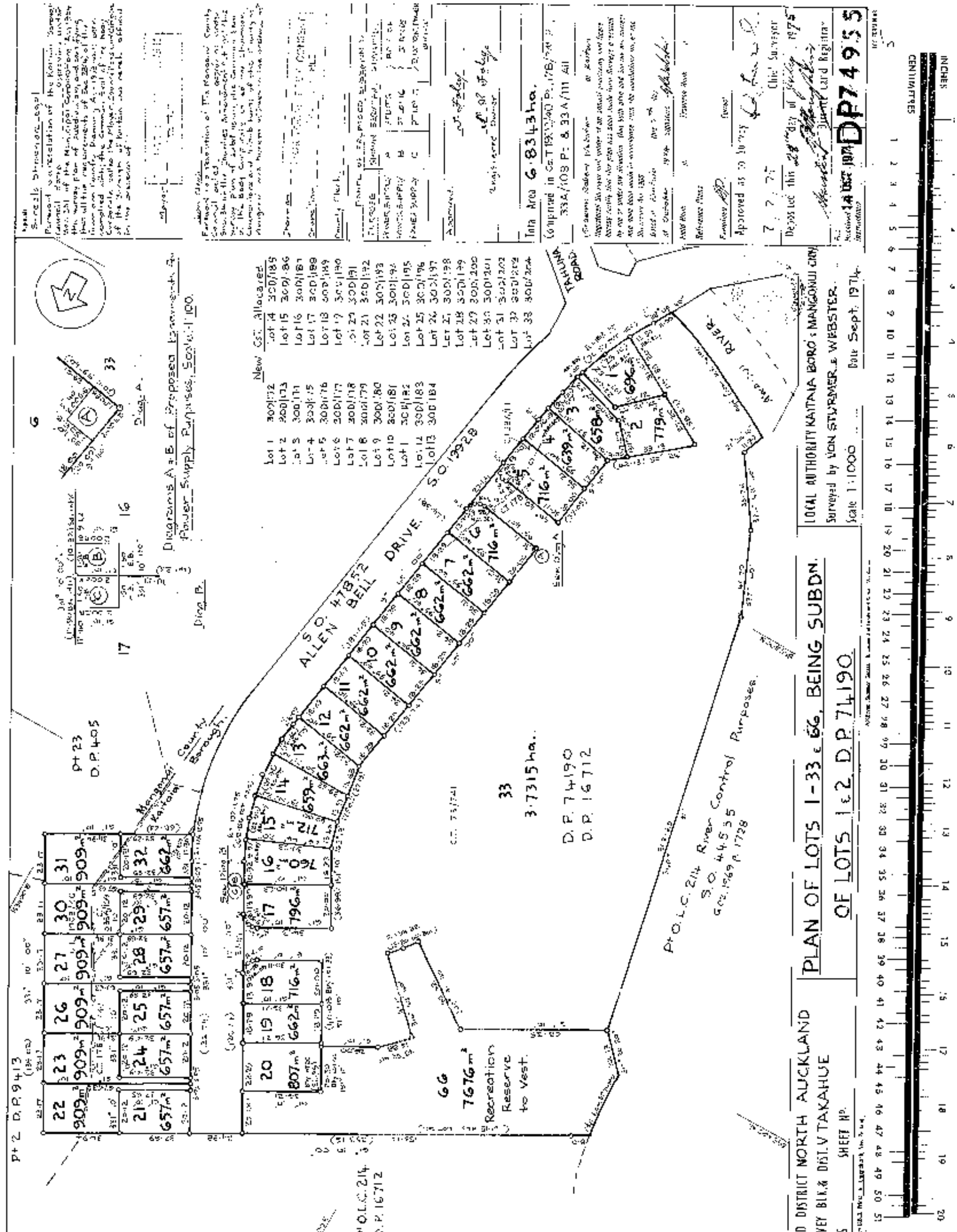
Subject to Part IV A Conservation Act 1987

Subject to Section 11 Crown Minerals Act 1991

Subject to an electricity right (in gross) over part marked C on DP 74955 in favour of Bay of Islands Electric Power Board created by Transfer 185979.4 - Produced 18.7.1975 at 11.35 am and entered 28.7.1975 at 9.53 am

10368119.1 Certificate under section 177(1) of the NgaiTakoto Claims Settlement Act 2015 that the within land is RFR land as defined in section 154 and is subject to Subpart 4 of Part 3 of the Act (which restricts disposal, including leasing, of the land) - 17.3.2016 at 7:00 am

10369060.1 Certificate under section 206 of the Te Rarawa Claims Settlement Act 2015 that the within land is RFR land as defined in section 183 of that Act and is subject to Subpart 4 of Part 3 of the Act (which restricts disposal, including leasing, of the land) - 17.3.2016 at 7:00 am


PLAN OF LOTS 1-33 & 66, BEING SUBDN.
OF LOTS 1 & 2 D.P. 74190
LAND DISTRICT NORTH AUCKLAND
ALLEN BELL DRIVE
RIVER
Recreation Reserve to Vest
DP74955

(Approved by the District Registrar, Auckland, No. 4203/74)

(New Zealand) (C)

Under the Land Transfer Act, 1952 — D.N ★★★★★★★0.40

Memorandum of Transfer 40c

185979.4 TE

WHEREAS PARKDALE DEVELOPMENT LIMITED a duly incorporated company having its registered office at Putaruru (hereinafter called "the Grantor")

is being registered as proprietor

of an estate in fee simple

subject however to such encumbrances, liens and interests as are notified by memoranda underwritten or endorsed hereon in all those pieces of land situated in the Land District of North Auckland containing SEVEN HUNDRED AND SIXTEEN SQUARE METRES (716m2) SEVEN HUNDRED AND SIXTY SQUARE METRES (760m2) and SEVEN HUNDRED AND NINETY SIX SQUARE METRES (796m2) respectively more or less being Lots 6, 16 and 17 on Deposited Plan 74955 and being all the land comprised and described in Certificates of Title Volume 30D Folio 177, Volume 30D Folio 187 and Volume 30D Folio 188 (North Auckland Registry)

AND WHEREAS the Grantor has agreed to grant to the BAY OF ISLANDS ELECTRIC POWER BOARD a Body Corporate duly constituted under the provisions of the Electric Power Boards Act, 1925 (hereinafter called "the Grantee") the rights interests and licences in respect of the said land hereinafter set forth

NOW THEREFORE in consideration of the sum of TEN CENTS ($0.10) if demanded the Grantor DOTH HEREBY TRANSFER AND GRANT unto the Grantee subject to the following covenants conditions and restrictions as an easement in gross the full free right liberty and licence TO TRANSMIT ELECTRIC CURRENT through those portions of the said lots 6, 16 and 17 on the said Deposited Plan marked A, B and C respectively

AND FOR THAT PURPOSE the Grantee its servants workmen and agents with or without vehicles laden or unladen and with tools machinery and equipment may from time to time and at all times as occasion shall require enter upon the said parcels of land marked A, B and C as aforesaid and such other areas surrounding as may be necessary or convenient and construct equip maintain repair alter renew replace and operate on the said parcels of land marked A, B and C as aforesaid such distribution substations and the machinery and equipment associated therewith as the Grantee may from time to time require

PROVIDED THAT the Grantee shall do as little damage as possible to the surface of the said land and any vegetation fences or erections thereon

AND PROVIDED ALSO that any opening in the surface of such land shall be filled in by the Grantee as soon as possible after the necessary work for which such opening was made has been completed and the surface levelled off in a proper manner and resurfaced if necessary to restore it to the condition it was in prior to the work being done and all damage (if any) to fences or other erections on the said land made good and restored to their prior condition in a proper and workmanlike manner.

AND THE GRANTOR HEREBY COVENANTS WITH THE GRANTEE that the Grantor will not place any buildings or erections or plant or allow or suffer to grow any tree or shrub on the said portion of the said land and will not at any time hereafter do permit or suffer to be done any act whereby the rights powers licences and liberties hereby granted to the Grantee may be interfered with or affected in any way.

IN WITNESS WHEREOF these presents have been executed this 11th day of July One thousand nine hundred and seventy-five (1975)

THE COMMON SEAL of PARKDALE DEVELOPMENT LIMITED was hereunto affixed in the presence of:

PARKDALE DEVELOPMENT LIMITED
The Common Seal of

Director

Director

~~**In Consideration of**~~

(the receipt of which sum is hereby acknowledged)

Do hereby Transfer to the said

all estate and interest in the

said piece of land above described

In witness whereof these presents have been executed this day of

19

Signed by the above named

~~in the presence of~~

No.

TRANSFER OR CREATING

ELECTRICITY EASEMENT

PARKDALE DEVELOPMENT LIMITED — Grantor

BAY OF ISLANDS ELECTRIC POWER BOARD — Grantee

Particulars entered in the Registers set out in the Schedules herein at the day and hour endorsed below

....

Assistant Land Registrar

of the District of

McVEAGH, FLEMING, UREN & PARTNERS
SOLICITORS
AUCKLAND

Solicitors for the Transferee

THE LAW SOCIETY OF THE DISTRICT OF AUCKLAND

Fenrose Print—3504(S)

Correct for the purposes of the Land Transfer Act.

Solicitor for the ~~Transferee~~ Grantee

I HEREBY CERTIFY THAT THIS TRANSACTION DOES NOT CONTRAVENE THE PROVISIONS OF PART IIA OF THE LAND SETTLEMENT PROMOTION AND LAND ACQUISITION ACT 1952.

....

SOLICITOR FOR THE TRANSFEREE

Produced Feb 28 9.23 am '75

Entered JUL 10 11 35 AM '75

DISTRICT LAND REGISTRY

30D/177

187

188

F 859 76.4

CERTIFICATE UNDER SECTION 177 OF THE NGĀITAKOTO CLAIMS SETTLEMENT ACT 2015 TO RECORD A RFR LAND MEMORIAL

To: Registrar-General of Land

Pursuant to the above section of the above Act, KERRY McPHAIL **HEREBY CERTIFY** that a computer register was created for the land identified in the Schedule and that this land is subject to a right of first refusal in the above Act.

Please record on each computer register in the Schedule the memorial required pursuant to Section 177 of the above Act.

SCHEDULE

Computer Register	Legal Description
307035	Section 10 Survey Office Plan 365322
427600	Section 1-2 Survey Office Plan 403346
NA100C/423	Lot 5 Deposited Plan 19622
NA100C/425	Lot 1 Deposited Plan 54761
NA100C/795	Lot 11 Deposited Plan 69291
NA100C/798	Lot 2 Deposited Plan 33834
NA102D/433	Lot 2 Deposited Plan 54761
NA102D/434	Lot 3 Deposited Plan 54761
NA102D/435	Lot 4 Deposited Plan 54761
NA102D/436	Lot 5 Deposited Plan 54761
NA102D/437	Lot 7 Deposited Plan 54761
NA102D/439	Lot 9 Deposited Plan 54761
NA102D/440	Lot 10 Deposited Plan 54761
NA102D/445	Lot 21 Deposited Plan 72868
NA1046/49	Lot 1 Deposited Plan 39759
NA105A/885	Lot 1 Deposited Plan 172135
NA105B/245	Lot 1 Deposited Plan 176707
NA105B/247	Lot 7 Deposited Plan 40908
NA105D/197	Lot 157 Deposited Plan 12724
NA105D/620	Lot 1-3 Deposited Plan 44000
NA107B/435	Lot 1 Deposited Plan 72868
NA112A/576	Lot 52 Deposited Plan 83778
NA112A/783	Lot 1 Deposited Plan 184490
NA124C/188	Lot 1 Deposited Plan 196106
NA124C/189	Lot 2 Deposited Plan 196106
NA124C/190	Lot 3 Deposited Plan 196106
NA126D/154	Lot 1 Deposited Plan 197505
NA126D/155	Lot 2 Deposited Plan 197505 & Lot 4 Deposited Plan 197505
NA126D/156	Lot 3 Deposited Plan 197505 & Lot 4 Deposited Plan 197505
NA126D/861	Lot 1 Deposited Plan 197766 & Lot 3 Deposited Plan 197766
NA126D/862	Lot 2 Deposited Plan 197766 & Lot 3 Deposited

	Plan 197766
NA129B/156	Lot 1 Deposited Plan 200573
NA129B/157	Lot 2 Deposited Plan 200573
NA129B/158	Lot 3 Deposited Plan 200573
NA129B/159	Lot 4 Deposited Plan 200573
NA129B/233	Lot 2 Deposited Plan 200776
NA129B/312	Lot 1 Deposited Plan 200918
NA129B/313	Lot 2 Deposited Plan 200918
NA129B/416	Lot 1 Deposited Plan 201146
NA129B/417	Lot 2 Deposited Plan 201146
NA130B/565	Lot 1 Deposited Plan 201807 & Lot 3 Deposited Plan 201807
NA130B/566	Lot 2 Deposited Plan 201807 & Lot 3 Deposited Plan 201807
NA130C/1	Lot 6 Deposited Plan 201965 & Lot 1 Deposited Plan 201965
NA130C/2	Lot 2 Deposited Plan 201965 & Lot 6 Deposited Plan 201965
NA130C/3	Lot 3 Deposited Plan 201965 & Lot 6 Deposited Plan 201965
NA130C/4	Lot 4 Deposited Plan 201965 & Lot 6 Deposited Plan 201965
NA130C/5	Lot 5 Deposited Plan 201965 & Lot 6 Deposited Plan 201965
NA131A/21	Lot 6 Deposited Plan 202423 & Lot 1 Deposited Plan 202423
NA131A/22	Lot 6 Deposited Plan 202423 & Lot 2 Deposited Plan 202423
NA131A/23	Lot 6 Deposited Plan 202423 & Lot 3 Deposited Plan 202423
NA131A/24	Lot 4 Deposited Plan 202423 & Lot 6 Deposited Plan 202423
NA131A/25	Lot 5 Deposited Plan 202423 & Lot 6 Deposited Plan 202423
NA131A/873	Lot 1 Deposited Plan 204212 & Lot 3 Deposited Plan 204212
NA131A/874	Lot 2 Deposited Plan 204212 & Lot 3 Deposited Plan 204212
NA132A/503	Lot 1 Deposited Plan 203447
NA132A/504	Lot 2 Deposited Plan 203447
NA132A/762	Lot 1 Deposited Plan 203565 & Lot 3 Deposited Plan 203565
NA132A/763	Lot 2 Deposited Plan 203565 & Lot 3 Deposited Plan 203565
NA135C/774	Lot 1 Deposited Plan 207384
NA135C/775	Lot 2 Deposited Plan 207384
NA13B/787	Lot 15 Deposited Plan 58828
NA1554/27	Lot 18 Deposited Plan 44802
NA1580/91	Lot 13 Deposited Plan 45867
NA1674/10	Lot 22 Deposited Plan 44802
NA17C/902	Lot 3 Deposited Plan 61030

NA17C/903	Lot 4 Deposited Plan 61030
NA17C/909	Lot 3 Deposited Plan 61779
NA1956/31	Lot 1 Deposited Plan 44687
NA19C/305	Lot 1 Deposited Plan 63426
NA19D/1066	Lot 7 Deposited Plan 46562
NA22B/1078	Lot 3 Deposited Plan 66607
NA24C/1012	Lot 9 Deposited Plan 63427
NA24C/1019	Lot 16 Deposited Plan 63427
NA24C/1025	Lot 23 Deposited Plan 63427
NA26A/668	Lot 2 Deposited Plan 61707
NA27A/332	Lot 14 Deposited Plan 70333
NA27A/346	Lot 29 Deposited Plan 70333
NA27A/343	Lot 26 Deposited Plan 70333
NA27A/345	Lot 28 Deposited Plan 70333
NA27A/347	Lot 30 Deposited Plan 70333
NA27D/255	Lot 7 Deposited Plan 71496
NA28D/91	Lot 10 Deposited Plan 72798
NA30D/181	Lot 10 Deposited Plan 74955
NA30D/187	Lot 16 Deposited Plan 74955
NA30D/188	Lot 17 Deposited Plan 74955
NA30D/189	Lot 18 Deposited Plan 74955
NA30D/192	Lot 21 Deposited Plan 74955
NA30D/199	Lot 28 Deposited Plan 74955
NA30D/200	Lot 29 Deposited Plan 74955
NA31C/762	Lot 15 Deposited Plan 45215
NA33C/156	Lot 35 Deposited Plan 77073
NA33C/171	Lot 50 Deposited Plan 77073
NA33C/174	Lot 53 Deposited Plan 77073
NA33C/175	Lot 54 Deposited Plan 77073
NA33C/183	Lot 62 Deposited Plan 77073
NA35A/1209	Lot 11 Deposited Plan 71496
~~NA36C/523~~	~~Lot 1 Deposited Plan 79788~~
NA36C/525	Lot 3 Deposited Plan 79788
NA36D/1178	Lot 18 Deposited Plan 80264
NA37B/109	Lot 69 Deposited Plan 80563
NA37B/128	Lot 88 Deposited Plan 80563
NA37B/132	Lot 92 Deposited Plan 80563
NA37B/141	Lot 101 Deposited Plan 80563
NA37B/142	Lot 102 Deposited Plan 80563
NA40A/861	Lot 42 Deposited Plan 83778 & Lot 69 Deposited Plan 83779
NA40A/862	Lot 69 Deposited Plan 83779 & Lot 43 Deposited Plan 83778
NA40A/863	Lot 44 Deposited Plan 83778 & Lot 69 Deposited Plan 83779
NA40A/864	Lot 45 Deposited Plan 83778
NA40A/879	Lot 60 Deposited Plan 83778
NA40A/881	Lot 62 Deposited Plan 83778

NA40A/885	Lot 66 Deposited Plan 83778
NA41C/102	Lot 110 Deposited Plan 85220
NA41C/104	Lot 112 Deposited Plan 85220
NA41C/108	Lot 116 Deposited Plan 85220
NA41C/110	Lot 118 Deposited Plan 85220
NA41C/112	Lot 120 Deposited Plan 85220
NA41D/1120	Lot 8 Deposited Plan 42727
NA42B/630	Lot 9 Deposited Plan 71496
NA43C/244	Lot 2 Deposited Plan 88721
NA45A/680	Lot 11 Deposited Plan 38127
NA45A/682	Lot 24 Deposited Plan 38127
NA45A/686	Lot 29 Deposited Plan 38127
NA45A/690	Lot 3 Deposited Plan 42009
NA45C/933	Lot 1 Deposited Plan 88114
NA46A/922	Lot 9 Deposited Plan 72868
NA46C/138	Lot 8 Deposited Plan 72798
NA46C/145	Lot 86 Deposited Plan 80563
NA46C/511	Lot 8 Deposited Plan 38120
NA46C/512	Lot 10 Deposited Plan 38120
NA46C/514	Lot 5 Deposited Plan 48022
NA46C/516	Lot 7 Deposited Plan 48022
NA47A/305	Lot 84 Deposited Plan 80563
NA47A/43	Lot 20 Deposited Plan 56312
NA47B/131	Lot 1 Deposited Plan 89954
NA48A/596	Lot 4 Deposited Plan 91629
NA49A/1186	Lot 5 Deposited Plan 49999
NA50B/1159	Lot 1 Deposited Plan 53857
NA50B/1160	Lot 2 Deposited Plan 53857
NA50B/1161	Lot 3 Deposited Plan 53857
NA50B/1162	Lot 4 Deposited Plan 53857
NA50B/1163	Lot 5 Deposited Plan 53857
NA50B/1374	Lot 51 Deposited Plan 77073
NA50B/579	Lot 9 Deposited Plan 78739
NA50B/580	Lot 10 Deposited Plan 78739
NA50B/584	Lot 2 Deposited Plan 70338
NA52B/801	Lot 323 Deposited Plan 14289
NA52D/1168	Lot 14 Deposited Plan 71496
NA54A/1160	Lot 20 Deposited Plan 69291
NA55A/699	Lot 28 Deposited Plan 69291
NA60A/562	Lot 4 Deposited Plan 107772
NA61A/7	Lot 11 Deposited Plan 78739
NA61C/25	Lot 3 Deposited Plan 109118
NA61D/600	Part Lot 6 Deposited Plan 40908
NA64A/12	Lot 4 Deposited Plan 78739
NA64C/380	Lot 3 Deposited Plan 113940
NA64C/384	Lot 7 Deposited Plan 113940
NA64C/386	Lot 9 Deposited Plan 113940

NA65A/459	Lot 3 Deposited Plan 114334
NA65C/57	Lot 1 Deposited Plan 115061
NA68B/421	Lot 10 Deposited Plan 118772 & Lot 2 Deposited Plan 118772
NA68C/336	Lot 74 Deposited Plan 119296
NA68C/344	Lot 82 Deposited Plan 119296
NA68C/348	Lot 86 Deposited Plan 119296
NA68C/355	Lot 93 Deposited Plan 119296
NA68C/360	Lot 98 Deposited Plan 119296
NA68C/361	Lot 99 Deposited Plan 119296
NA68C/364	Lot 102 Deposited Plan 119296
NA68C/365	Lot 103 Deposited Plan 119296
NA68C/369	Lot 110 Deposited Plan 119296 & Lot 107 Deposited Plan 119296
NA77A/455	Lot 3 Deposited Plan 131584
NA77A/476	Lot 24 Deposited Plan 131584
NA77A/478	Lot 26 Deposited Plan 131584
NA77A/482	Lot 30 Deposited Plan 131584
NA77A/485	Lot 33 Deposited Plan 131584
NA77D/209	Lot 58 Deposited Plan 83778
NA80D/192	Lot 2 Deposited Plan 131584
NA86D/810	Lot 27 Deposited Plan 76196
NA8C/187	Lot 15 Deposited Plan 56312
NA92A/364	Lot 1 Deposited Plan 153985
NA92A/365	Lot 2 Deposited Plan 153985
NA92B/598	Lot 1 Deposited Plan 154600
NA92B/599	Lot 2 Deposited Plan 154600 & Lot 6 Deposited Plan 154600
NA92B/600	Lot 3 Deposited Plan 154600 & Lot 6 Deposited Plan 154600
NA92B/601	Lot 6 Deposited Plan 154600 & Lot 4 Deposited Plan 154600
NA92B/602	Lot 5 Deposited Plan 154600
NA99C/14	Lot 15 Deposited Plan 69291
NA99C/15	Lot 21 Deposited Plan 69291
NA99C/16	Lot 22 Deposited Plan 69291

15/3/2016

Name: KERRY McPHAIL

MANAGER/ADVISOR

CROWN PROPERTY CLEARANCES

Acting under the authority of the Chief Executive of Land Information New Zealand delegated under Section 41 of the State Sector Act 1988

RFR 10368119.1 Right o
Cpy – 03/04, Pgs – 006, 16/03/16, 10:49
Copies
(Inc. original)
DocID: 613390895

MANUAL DEALING LODGEMENT FORM

Landonline Firm Code: linz cpmwe
LODGING FIRM: **Land Information New Zealand Crown**
Private Individual: Property
Address: Level 6 155 The Terrace
Wellington

ASSOCIATED FIRM: Attention: Linda Otto
Client Code / Ref: NgaiTakoto RFR Certificate
Contract Date: 2016-03-16
Tax Statement included ☐

Dealing/SUD Number: (LINZ use only)
Priority Barcode/Date Stamp (LINZ use only)
Plan NumberPre-Allocated or to be Deposited:
Rejected Dealing Number:

Priority Order	CT Ref	Type of Instrument	Names of Parties	Document Fees	Resubmission	Notices	Priority Capture*	FEES $ GST INCLUSIVE
1	Various	RFR	Te Runanga o NgaiTakoto	$176.00				176.00
2				$0.00				
3				$0.00				
4				$0.00				

Land Information New Zealand Manual Dealing Lodgement Form
Fees Receipt and Tax Invoice
GST Registered Number 17-022-896

LINZ Form P005
September 2015

Annotations (LINZ use only):
RECEIVED
16 MAR 2016
Original Signatures?

Subtotal	$176.00
Total for this dealing	$176.00
Less fees paid on Dealing #	
Debit my Landonline account for (Only available for Landonline customers)	
or Cash / Cheque enclosed for (Only pay in cash if depositing in drop box at a LINZ processing centre)	
or Eft-pos payment due for (Eft-pos only available if lodging the dealing in person at a LINZ processing centre)	**$176.00**

* Making a priority lodgement ensures the lodgement is entered into the LINZ work queue at the time and date it was handed over at the counter. Priority does not provide urgency in processing the dealing. For further details please reference the manual dealing user guide.

CERTIFICATE UNDER SECTION 206 OF THE TE RARAWA CLAIMS SETTLEMENT ACT 2015 TO RECORD A RFR LAND MEMORIAL

To: Registrar-General of Land

Pursuant to the above section of the above Act, I ZAK SUN **HEREBY CERTIFY** that a computer register was created for the land identified in the Schedule and that this land is subject to a right of first refusal in the above Act.

Please record on each computer register in the Schedule the memorial required pursuant to Section 206 of the above Act.

SCHEDULE

Computer Register	Legal Description
307035	Section 10 Survey Office Plan 365322
427600	Section 1-2 Survey Office Plan 403346
NA100C/423	Lot 5 Deposited Plan 19622
NA100C/425	Lot 1 Deposited Plan 54761
NA100C/795	Lot 11 Deposited Plan 69291
NA100C/798	Lot 2 Deposited Plan 33834
NA102D/433	Lot 2 Deposited Plan 54761
NA102D/434	Lot 3 Deposited Plan 54761
NA102D/435	Lot 4 Deposited Plan 54761
NA102D/436	Lot 5 Deposited Plan 54761
NA102D/437	Lot 7 Deposited Plan 54761
NA102D/438	Lot 8 Deposited Plan 54761
NA102D/439	Lot 9 Deposited Plan 54761
NA102D/440	Lot 10 Deposited Plan 54761
NA102D/445	Lot 21 Deposited Plan 72868
NA1046/49	Lot 1 Deposited Plan 39759
NA105A/885	Lot 1 Deposited Plan 172135
NA105B/245	Lot 1 Deposited Plan 176707
NA105B/247	Lot 7 Deposited Plan 40908
NA105D/197	Lot 157 Deposited Plan 12724
NA107B/435	Lot 1 Deposited Plan 72868
NA112A/576	Lot 52 Deposited Plan 83778
NA112A/783	Lot 1 Deposited Plan 184490
NA120B/203	Lot 1 Deposited Plan 190149
NA124C/188	Lot 1 Deposited Plan 196106
NA124C/189	Lot 2 Deposited Plan 196106
NA124C/190	Lot 3 Deposited Plan 196106
NA126D/154	Lot 1 Deposited Plan 197505
NA126D/155	Lot 2 Deposited Plan 197505 & Lot 4 Deposited Plan 197505
NA126D/156	Lot 3 Deposited Plan 197505 & Lot 4 Deposited Plan 197505
NA126D/861	Lot 1 Deposited Plan 197766 & Lot 3 Deposited Plan 197766
NA126D/862	Lot 2 Deposited Plan 197766 & Lot 3 Deposited Plan 197766
NA128C/801	Lot 2 Deposited Plan 192486

NA129B/156	Lot 1 Deposited Plan 200573
NA129B/157	Lot 2 Deposited Plan 200573
NA129B/158	Lot 3 Deposited Plan 200573
NA129B/159	Lot 4 Deposited Plan 200573
NA129B/233	Lot 2 Deposited Plan 200776
NA129B/312	Lot 1 Deposited Plan 200918
NA129B/313	Lot 2 Deposited Plan 200918
NA129B/416	Lot 1 Deposited Plan 201146
NA129B/417	Lot 2 Deposited Plan 201146
NA130B/565	Lot 1 Deposited Plan 201807 & Lot 3 Deposited Plan 201807
NA130B/566	Lot 2 Deposited Plan 201807 & Lot 3 Deposited Plan 201807
NA130C/1	Lot 1 Deposited Plan 201965 & Lot 6 Deposited Plan 201965
NA130C/2	Lot 2 Deposited Plan 201965 & Lot 6 Deposited Plan 201965
NA130C/3	Lot 3 Deposited Plan 201965 & Lot 6 Deposited Plan 201965
NA130C/4	Lot 4 Deposited Plan 201965 & Lot 6 Deposited Plan 201965
NA130C/5	Lot 5 Deposited Plan 201965 & Lot 6 Deposited Plan 201965
NA131A/21	Lot 1 Deposited Plan 202423 & Lot 6 Deposited Plan 202423
NA131A/22	Lot 2 Deposited Plan 202423 & Lot 6 Deposited Plan 202423
NA131A/23	Lot 3 Deposited Plan 202423 & Lot 6 Deposited Plan 202423
NA131A/24	Lot 4 Deposited Plan 202423 & Lot 6 Deposited Plan 202423
NA131A/25	Lot 5 Deposited Plan 202423 & Lot 6 Deposited Plan 202423
NA131A/873	Lot 1 Deposited Plan 204212 & Lot 3 Deposited Plan 204212
NA131A/874	Lot 2 Deposited Plan 204212 & Lot 3 Deposited Plan 204212
NA132A/762	Lot 1 Deposited Plan 203565 & Lot 3 Deposited Plan 203565
NA132A/763	Lot 2 Deposited Plan 203565 & Lot 3 Deposited Plan 203565
NA135C/774	Lot 1 Deposited Plan 207384
NA135C/775	Lot 2 Deposited Plan 207384
NA135D/567	Lot 1 Deposited Plan 208907
NA135D/568	Lot 2 Deposited Plan 208907
NA138C/584	Lot 1 Deposited Plan 212057
NA138C/585	Lot 2 Deposited Plan 212057
NA13B/787	Lot 15 Deposited Plan 58828
NA1554/27	Lot 18 Deposited Plan 44802
NA1580/91	Lot 13 Deposited Plan 45867
NA1674/10	Lot 22 Deposited Plan 44802
NA17C/902	Lot 3 Deposited Plan 61030
NA17C/903	Lot 4 Deposited Plan 61030
NA17C/909	Lot 3 Deposited Plan 61779
NA1956/31	Lot 1 Deposited Plan 44687
NA19C/305	Lot 1 Deposited Plan 63426
NA22B/1078	Lot 3 Deposited Plan 66607
NA241/134	Mangamuka West 3BB Block
NA24C/1012	Lot 9 Deposited Plan 63427
NA24C/1019	Lot 16 Deposited Plan 63427
NA24C/1025	Lot 23 Deposited Plan 63427
NA263/234	Section 3 Block IX Maungataniwha Survey District
NA26A/668	Lot 2 Deposited Plan 61707

NA27A/332	Lot 14 Deposited Plan 70333
NA27A/343	Lot 26 Deposited Plan 70333
NA27A/345	Lot 28 Deposited Plan 70333
NA27A/346	Lot 29 Deposited Plan 70333
NA27A/347	Lot 30 Deposited Plan 70333
NA27D/255	Lot 7 Deposited Plan 71496
NA28D/91	Lot 10 Deposited Plan 72798
NA30D/181	Lot 10 Deposited Plan 74955
NA30D/187	Lot 16 Deposited Plan 74955
NA30D/188	Lot 17 Deposited Plan 74955
NA30D/189	Lot 18 Deposited Plan 74955
NA30D/192	Lot 21 Deposited Plan 74955
NA30D/199	Lot 28 Deposited Plan 74955
NA30D/200	Lot 29 Deposited Plan 74955
NA31C/762	Lot 15 Deposited Plan 45215
NA33C/156	Lot 35 Deposited Plan 77073
NA33C/171	Lot 50 Deposited Plan 77073
NA33C/174	Lot 53 Deposited Plan 77073
NA33C/175	Lot 54 Deposited Plan 77073
NA33C/183	Lot 62 Deposited Plan 77073
NA35A/1209	Lot 11 Deposited Plan 71496
NA35B/822	Lot 4 Deposited Plan 72868
NA36C/525	Lot 3 Deposited Plan 79788
NA36D/1178	Lot 18 Deposited Plan 80264
NA37B/109	Lot 69 Deposited Plan 80563
NA37B/128	Lot 88 Deposited Plan 80563
NA37B/132	Lot 92 Deposited Plan 80563
NA37B/141	Lot 101 Deposited Plan 80563
NA37B/142	Lot 102 Deposited Plan 80563
NA40A/861	Lot 42 Deposited Plan 83778 & Lot 69 Deposited Plan 83779
NA40A/862	Lot 43 Deposited Plan 83778 & Lot 69 Deposited Plan 83779
NA40A/863	Lot 44 Deposited Plan 83778 & Lot 69 Deposited Plan 83779
NA40A/864	Lot 45 Deposited Plan 83778
NA40A/879	Lot 60 Deposited Plan 83778
NA40A/881	Lot 62 Deposited Plan 83778
NA40A/885	Lot 66 Deposited Plan 83778
NA40C/118	Lot 3 Deposited Plan 72868
NA41C/102	Lot 110 Deposited Plan 85220
NA41C/104	Lot 112 Deposited Plan 85220
NA41C/108	Lot 116 Deposited Plan 85220
NA41C/110	Lot 118 Deposited Plan 85220
NA41C/112	Lot 120 Deposited Plan 85220
NA41D/1120	Lot 8 Deposited Plan 42727
NA41D/464	Section 1 Block V Mangamuka Survey District
NA41D/465	Section 3 Block V Mangamuka Survey District
NA41D/467	Section5 Block V Mangamuka Survey District
NA41D/468	Section 6 Block V Mangamuka Survey District

NA41D/469	Section 7 Block V Mangamuka Survey District
NA41D/470	Section 8 Block V Mangamuka Survey District
NA42B/630	Lot 9 Deposited Plan 71496
NA43C/244	Lot 2 Deposited Plan 88721
NA44C/814	Part Section 27 Block X Takahue Survey District
NA45A/680	Lot 11 Deposited Plan 38127
NA45A/682	Lot 24 Deposited Plan 38127
NA45A/686	Lot 29 Deposited Plan 38127
NA45A/690	Lot 3 Deposited Plan 42009
NA45C/933	Lot 1 Deposited Plan 88114
NA469/108	Section 1 Block I Whangape Survey District
NA46A/922	Lot 9 Deposited Plan 72868
NA46C/138	Lot 8 Deposited Plan 72798
NA46C/145	Lot 86 Deposited Plan 80563
NA46C/511	Lot 8 Deposited Plan 38120
NA46C/512	Lot 10 Deposited Plan 38120
NA46C/514	Lot 5 Deposited Plan 48022
NA46C/516	Lot 7 Deposited Plan 48022
NA47A/305	Lot 84 Deposited Plan 80563
NA47A/43	Lot 20 Deposited Plan 56312
NA47B/131	Lot 1 Deposited Plan 89954
NA49A/1186	Lot 5 Deposited Plan 49999
NA50B/1159	Lot 1 Deposited Plan 53857
NA50B/1160	Lot 2 Deposited Plan 53857
NA50B/1162	Lot 4 Deposited Plan 53857
NA50B/1163	Lot 5 Deposited Plan 53857
NA50B/1374	Lot 51 Deposited Plan 77073
NA50B/579	Lot 9 Deposited Plan 78739
NA50B/580	Lot 10 Deposited Plan 78739
NA50B/584	Lot 2 Deposited Plan 70338
NA50B/807	Lot 1 Deposited Plan 92248
NA52B/801	Lot 323 Deposited Plan 14289
NA52D/1168	Lot 14 Deposited Plan 71496
NA54A/1160	Lot 20 Deposited Plan 69291
NA54B/1187	Lot 1 Deposited Plan 99670
NA55A/699	Lot 28 Deposited Plan 69291
NA55D/242	Lot 11 Deposited Plan 101232
NA56A/523	Lot 31 Deposited Plan 86
NA618/150	Part Mangamuka West 3CC Block
NA61A/7	Lot 11 Deposited Plan 78739
NA61C/25	Lot 3 Deposited Plan 109118
NA61D/600	Part Lot 6 Deposited Plan 40908
NA64A/12	Lot 4 Deposited Plan 78739
NA64C/384	Lot 7 Deposited Plan 113940
NA64C/386	Lot 9 Deposited Plan 113940
NA65C/57	Lot 1 Deposited Plan 115061
NA66B/547	Lot 1 Deposited Plan 116620

NA68B/421	Lot 2 Deposited Plan 118772 & Lot 10 Deposited Plan 118772
NA68C/336	Lot 74 Deposited Plan 119296
NA68C/344	Lot 82 Deposited Plan 119296
NA68C/348	Lot 86 Deposited Plan 119296
NA68C/355	Lot 93 Deposited Plan 119296
NA68C/360	Lot 98 Deposited Plan 119296
NA68C/361	Lot 99 Deposited Plan 119296
NA68C/364	Lot 102 Deposited Plan 119296
NA68C/365	Lot 103 Deposited Plan 119296
NA706/78	Deposited Plan 28278
NA722/100	Lot 1-3 Deposited Plan 28766
NA731/256	Lot 1 Deposited Plan 29154
NA75C/106	Lot 40 Deposited Plan 86 and Section 1 Survey Office Plan 35919
NA77A/476	Lot 24 Deposited Plan 131584
NA77A/478	Lot 26 Deposited Plan 131584
NA77A/482	Lot 30 Deposited Plan 131584
NA77A/485	Lot 33 Deposited Plan 131584
NA77D/209	Lot 58 Deposited Plan 83778
NA82C/288	Pukepoto 4A1 Block and Pukepoto 4B2 Block
NA83B/23	Lot 2 Deposited Plan 140084
NA83B/488	Lot 5 Deposited Plan 138309
NA86D/810	Lot 27 Deposited Plan 76196
NA893/178	Part Lot 4 Deposited Plan 11168
NA89C/585	Lot 1, Lot 20 and Part Lot 21 Deposited Plan 14963
NA8C/187	Lot 15 Deposited Plan 56312
NA92A/364	Lot 1 Deposited Plan 153985
NA92A/365	Lot 2 Deposited Plan 153985
NA92B/598	Lot 1 Deposited Plan 154600
NA92B/599	Lot 2 Deposited Plan 154600 & Lot 6 Deposited Plan 154600
NA92B/600	Lot 3 Deposited Plan 154600 & Lot 6 Deposited Plan 154600
NA92B/601	Lot 4 Deposited Plan 154600 & Lot 6 Deposited Plan 154600
NA92B/602	Lot 5 Deposited Plan 154600
NA99C/14	Lot 15 Deposited Plan 69291
NA99C/15	Lot 21 Deposited Plan 69291
NA99C/16	Lot 22 Deposited Plan 69291
NAPR10/35	Takanga No 2 Block

ZAK SUN

Name:
MANAGER/ADVISOR
CROWN PROPERTY CLEARANCES
Acting under the authority of the Chief Executive of
Land Information New Zealand delegated under
Section 41 of the State Sector Act 1988

MANUAL DEALING LODGEMENT FORM

RFR 10369060.1 Right o
Cpy – 03/03, Pgs – 006, 16/03/16, 14:39
Copies (inc. original)
DocID: 516391834

Landonline Firm Code: cpmwe

LODGING FIRM: **Land Information New Zealand Crown**

Private Individual: Property

Address: Level 6 155 The Terrace
Wellington

ASSOCIATED FIRM: Attention Linda Otto

Client Code / Ref: Te Rarawa RFR Certificate

Contract Date: 2016-04-16

Tax Statement included ☐

Dealing/SUD Number: (LINZ use only)

Priority Barcode/Date Stamp (LINZ use only)

Plan NumberPre-Allocated or to be Deposited:

Rejected Dealing Number:

Priority Order	CT Ref	Type of Instrument	Names of Parties	Document Fees	Resubmission	Notices	Priority Capture*	FEES $ GST INCLUSIVE
1	Certificate	RFR	Trustees of Te Rūnanga o Te Rarawa	$176.00				176.00
2				$0.00				
3				$0.00				
4				$0.00				

Land Information New Zealand Manual Dealing Lodgement Form

Fees Receipt and Tax Invoice

GST Registered Number 17-022-895

LINZ Form P005
September 2015

Annotations (LINZ use only).

RECEIVED 16 MAR 2016

Original Signatures? _____

Subtotal	$176.00
Total for this dealing	$176.00
Less fees paid on Dealing # _____	
Debit my Landonline account for (Only available for Landonline customers)	
or Cash / Cheque enclosed for (Only pay in cash if depositing in drop box at a LINZ processing centre)	
or Eft-pos payment due for (Eft-pos only available if lodging the dealing in person at a LINZ processing centre)	**$176.00**

* Making a priority lodgement ensures the lodgement is entered into the LINZ work queue at the time and date it was handed over at the counter. Priority does not provide urgency in processing the dealing. For further details please reference the manual dealing user guide.

DECISION ON COMBINED RESOURCE CONSENT APPLICATION

UNDER THE RESOURCE MANAGEMENT ACT 1991

Decision

Pursuant to section 34(1) and sections 104, 104B, and, D 106 and Part 2 of the Resource Management Act 1991 (the Act), the Far North District Council **grants** land use and subdivision resource consent for a Non-Complying activity, subject to the conditions listed below, to:

Council Reference: 2220905-RMACOM

Applicant: Kainga Ora Homes And Communities

Property Address: 59 and 61 Allen Bell Drive, Kaitaia 0410

Legal Description: LOT 16 DP 74955

The activities to which this decision relates are listed below:

Activity A – Subdivision:

The proposal seeks to subdivide Lot 16 Deposited Plan 74955 and Lot 17 Deposited Plan 74955 to create six residential allotments and a JOAL for access to Lots 1-3.

Activity B – Land Use:

It is proposed to remove the existing residential units on 59 Allen Bell Drive and 61 Allen Bell Drive, Kaitaia, and construct two stand-alone four-bedroom residential units, and two duplexes (four residential units) each with two bedrooms resulting in six residential units in total across the site.

Subdivision Conditions

Pursuant to sections 108 and 220 of the Act, this subdivision consent is granted subject to the following conditions:

1. The activity shall be carried out in accordance with the approved plans prepared by WSP, referenced Scheme Plan Lots 1-6 Being a subdivision of Lot 16 and 17 DP 74955, Sheet No: C04, Rev A, and attached to this consent with the Council's "Approved Stamp" affixed to it.

Survey plan approval (s223) conditions

2. The survey plan, submitted for approval pursuant to Section 223 of the Act shall show:

   a. All easements in the memorandum to be duly granted or reserved.

3. Prior to the issuing of a certificate pursuant to section 223(c) of the Act, the consent holder shall:
   a. Ensure that a 3m wide easement in gross shall be established over the existing sewer. (Easement shall typically be 1.5m on each side from centre of infrastructure, any variation to setbacks will require approval from Council Wastewater Asset Manager or designate).
   b. Prior to commencing construction identify and submit to Council's Resource Consents Engineer or designate for approval, a Stormwater and Flood Management Plan, including specifications & construction details prior to commencing construction. Such works shall be designed in accordance with the Council's current Engineering Standards and NZS4404:2004, by a suitably qualified and experienced engineer

In particular the plans and details shall show:

i. Overland flood and stormwater flow paths within the development.

ii. Confirmation that flood water does not pond within the development and is controlled to catchment overland flood paths.

iii. Shared private reticulated network for buildings and access road within lots 1-3 and the JOAL.

iv. Stormwater mitigation for the entire development and disposal into the reticulated network, (Note: consultation will be required with Council's Stormwater Manager or designate due to relocation and renewal of stormwater pipe in development).

v. Design statement (PS1 or schedule 1A)

c. Prior to commencing construction submit to Council's Development Engineer or designate for approval, plans, specifications & details of all works on legal road and works which are to vest in Council and are in close proximity of existing infrastructure for the approval of Council prior to commencing construction. Such works shall be designed in accordance with the Council's current Engineering Standards and NZS4404:2004 by a chartered professional engineer.

In particular the plans and details shall show:

a. Utility and piped services separation distances between private and public infrastructure. (Note: Stormwater mitigation system may need to be relocated due to proximity and crossing over of existing sewer infrastructure)
b. Reticulated sewer connection detail to existing sewer pipes.
c. Reticulated sewer drainage with a connection to lots 5 and 6.
d. Works within Parkdale Crescent Road carriageway including road reinstatement.
e. Design statement (PS1)

d. Prior to the commencing of any physical site works, a Construction Management Plan shall be submitted to and approved by the Council's Resource Consent Monitoring Officer or designate. The plan shall contain information on, and site management procedures, for the following:
    a. The timing of construction works (planned start date and duration), including hours of work, key project and site management personnel.
    b. The transportation of demolition and construction materials from and to the site and associated controls on vehicles through sign-posted site entrance/exits and the loading and unloading of materials.
    c. A traffic management plan.
    d. The bulk earthworks construction.
    e. Control of dust and noise on-site and any necessary avoidance or remedial measures.
    f. Prevention of earth and other material being deposited on surrounding roads from vehicles and remedial actions should it occur.
    g. Publicity measures and safety measures, including signage, to inform adjacent landowners and occupiers, pedestrians and other users of the road.
    h. Erosion and Sediment Control Plan in accordance with GD05 and measures to be in place for the duration of the works.

e That all construction works on the site are to be undertaken in accordance with the approved Construction Management Plan.

Section 224(c) compliance conditions

4. Prior to the issuing of a certificate pursuant to section 224(c) of the Act, the consent holder shall:
    a. Provide to Council written confirmation from a licensed cadastral surveyor that the access carriageway is fully contained within the JOAL, easements provided for access, services and easement in gross for existing wastewater infrastructure.

b. Provide evidence that each lot has a connection to Council's reticulated stormwater, sewer and water supply systems that complies with the requirements of Council's Engineering Standards and Guidelines.

c. Provide as-built drawings for development overland flood flow paths constructed in accordance with approved management plan submitted to satisfy condition 3(b) and for reference in consent notice (m)i.

d. Provide to Council's Development Engineer or designate for approval, As-built plans, CCTV inspection and asset management data for vested sewer and private infrastructure within easements in gross complying with schedule 1D of NZS 4404:2004 and section 1.5.2.5 of Council's Engineering Standards and Guidelines.

e. Upon completion of the works specified in 223 condition(s) 3(b) and 3(c) above, provide construction, testing and installation certification from contractor and certifying trades (PS3 or schedule 1B certificates)

f. Upon completion of the works specified in 223 condition 3 (c) above, provide certification of the work from a chartered professional engineer for vested works. that all work has been completed in accordance with the approved plans. A construction review statement (PS4) shall be supplied from a chartered professional engineer.

g. Upon completion of the works specified in 223 condition 3(b) above, provide certification of private works from a Suitably independent qualified engineer(IQP), that all work has been completed in accordance with the approved plans. A construction review statement (PS4) or NZS4404:2004 schedule 1C certificate supplied from a suitably independent qualified engineer(IQP).

h. Provide pre and post construction camera inspection of existing sewer infrastructure in accordance with Council's Engineering Standards and Guidelines. (Note: recommend consultation with Council's Asset Manager for information format and requirements).

i. Provide a formed and concreted double width entrance to lots 5 and 6 and shared access to JOAL which complies with the Council's Engineering Standard FNDC/S/2, section 3.3.17 of the Engineering Standard and NZS4404:2004. The entrance shall include provision for vehicle queuing space in accordance with Rule 15.1.6C.1.3 of the Far North District Plan.

j. Provide a formed and concreted entrance to lot 4 which complies with the Council's Engineering Standard FNDC/S/2 and section 3.3.17 of the Engineering Standards and NZS 4404:2004.

k. Provide evidence that the existing redundant crossing to Allen Bell Drive is removed and the concrete footpath is reinstated to match the existing concrete footpath.

l. Provide formed and concreted or sealed access on JOAL in general accordance with Proposed site plan, produced by Context Architects, dated 17/06/2022, project 21041-1, Drawing number AB-A1020. The formation shall include kerbing and or channelling to contain stormwater runoff as well as catch pits and culverts as required to control and direct the discharge of stormwater runoff.

m. Secure the conditions below by way of a Consent Notice issued under section 221 of the Act, to be registered against the titles of the affected allotments. The costs of preparing, checking and executing the Notice shall be met by the consent holder:

i. Without the prior approval of the Council, no building shall be erected, nor any works which increase impermeable surfaces be undertaken, nor any planting or structure placed which may create a flow obstruction, on any area of the site which has been proposed as a secondary / overland (Q100) flow path as identified in the overland flood management plan and as shown on the as-built drawing submitted to satisfy condition 3(b) and 4 (d) of RC 2220905. **All Lots**

ii. The lot owner shall maintain on an ongoing basis the stormwater drainage system including stormwater detention tanks, and flow attenuation devices, and/or other such devices required to provide for the proper operation of the stormwater system. **All Lots**

iii. Allotments contain areas which are identified by Council as likely to be flood susceptible, wherein there is a potential risk to life, property and the environment due to natural hazard processes. Any built development intended to be undertaken within these areas may require a suitably qualified and experienced engineer's report to be lodged, to set a floor level safe from a 1% AEP including an allowance for climate change flood event and certifies that the sub-floor design is able to withstand, the proposed flood floor levels. **All Lots**

iv. Private services located within the JOAL easement in gross are to be maintained and located a minimum of 1.5m from Council's sewer drainage. Council is to be notified if there is damage to pavement or Council assets within easement. Permission is to be obtained for any repair works that require excavation. The consent holder is also responsible for the repair and reinstatement of any underground services damaged as a result of works. If repair works are not completed to the satisfaction of Council's Asset Manager or designate, Council may instruct its infrastructure contractor to complete the works and recover any costs from owners. **Lots 1-3**

v. All buildings will require foundations specifically designed by a Chartered Professional Engineer in accordance with design parameters specified by a suitably qualified Geotechnical engineer or identified in the Geotechnical investigation report, produced by Land Tech Consulting, dated 22 January 2021, project ref LTA 20293. The foundation design details shall be submitted in conjunction with the Building Consent application. **All Lots**

Subdivision Advice Notes

Lapsing of Consent

1. *Pursuant to section 125 of the Act, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses;*
   a) *A survey plan is submitted to Council for approval under section 223 of the RMA before the lapse date, and that plan is deposited within three years of the date of approval of the survey plan in accordance with section 224(h) of the RMA; or*
   b) *An application is made to the Council to extend the period of consent, and the council decides to grant an extension after taking into account the statutory considerations, set out in section 125(1)(b) of the Act.*

General

2. *This consent has been granted on the basis of all the documents and information provided by the consent holder, demonstrating that the new lot(s) can be appropriately serviced (infrastructure and access).*

Land Use Conditions

Pursuant to Section 108 of the Act, this land use consent is granted subject to the following conditions:

1. The activity shall be carried out in accordance with the approved plans prepared by Context Architechs, referenced Kainga Ora 59-1 Allen Bell Drive, Kaitaia, and attached to this consent with the Council's "Approved Stamp" affixed to them.

i. Proposed Site Plan, Rev: RC-A
ii. RC Floor Plan, Drawing AB-BN5-A1100 Rev: RC-A
iii. RC Floor Plan, Drawing AB-BV3-A1100 Rev: RC-A
iv. RC Floor Plan, Drawing AB-HV3-A1100 Rev: RC-A
v. Site Elevations, RC-A, Drawing AB-A1200
vi. Site Elevations, RC-A, Drawing AB-A1201

Visual Amenity

vii. Exterior Finishes Elevations, drawing AB-A1202, Rev: RC-A
viii. Landscaping GA, Drawing AB-A8001, Rev: RC-A
ix. Planting Plan, Drawing AB-A8100, Rev: RC-A
x. Indicative plant schedule, Drawing AB-A8101, Rev: RC-A
xi. Fencing & Furniture Plan, Drawing, AB-A813, Rev: RC-A

Site Suitability

2. The consent holder shall prior to occupation of the buildings ensure that minimum finished floor heights are determined for buildings within development in accordance with WSP Memorandum dated 2 May 2022 produced by Sam Wilson. A licensed cadastral surveyor shall provide confirmation of actual and design finished floor levels to Council's Resource Consent Monitoring Officer or designate.

Stormwater

3. The consent holder shall not commence construction or site works within the development until the existing council stormwater drainage asset within the property is removed or decommissioned. Unless approval to commence work is obtained from Council's Asset Manager or designate. (Note: Decommissioning of asset is at Council's discretion as part of planned works)

4. Consented Impermeable surface coverage

	Total Area (m2)	Area of impermeable surfaces (m2)	Percentage of impermeable surfaces (%)
Lot 1 + 1/3 JOAL	379	223	59%
Lot 2 +1/3 JOAL	215	131	61%
Lot 3 + 1/3 JOAL	259	136	53%
Lot 4	183	92	50%
Lot 5	156	87	56%
Lot 6	366	171	47%

5. The consent holder shall ensure that the stormwater mitigation system approved under condition 3(b)(iv) is installed ,operational and connected to building roof stormwater outlets within one month of the installation of each buildings roof.

6. The consent holder shall ensure for the duration of this consent that all storm water originating from roofs, paved surfaces and tank overflow is to be piped to, and discharged into, the stormwater mitigation control and disposal system in general accordance with the approved stormwater management plan submitted to meet condition 3(b)(iv).

7. The Consent Holder shall on completion of works submit to Council's Resource Consent Monitoring officer, final "as built" plans that show the siting of all private drainage components and provide a construction certificate (PS4 or 1C) confirming that private works have been monitored by a suitably qualified engineer and constructed in general accordance with the approved drawings submitted to meet condition 3(b)(iv).

Access

8. The Consent holder shall for the duration of this consent ensure that the single carparks located within lots 2-5 are marked, kept available for vehicle parking and free from structures and obstructions preventing off street parking.

9. The consent holder shall for the duration of this consent ensure that manoeuvring areas within the shared JOAL remain free of vehicles or obstructions. Manoeuvring Areas are to be marked or delineated with different coloured pavement and "no parking" signage installed.

10. In accordance with section 128 of the Resource Management Act 1991, the Far North District Council may serve notice on the consent holder of its intention to review ongoing conditions 5 and 6 of this consent. The review may be initiated for any one or more of the following purposes:
    (i) To deal with any adverse effects on the environment that may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or to deal with any such effects following assessment of the result of the Far North District Council or duly delegated Council Officer monitoring the state of the environment in the area.
    (ii) To require the adoption of the best practicable option to remove or reduce any adverse effect on the environment.
    (iii) To deal with any inadequacies or inconsistencies the Far North District Council or duly delegated Council Officer considers there to be, in the conditions of the consent, following the establishment of the activity the subject of this consent.
    (iv) To deal with any material inaccuracies that may in future be found in the information made available with the application (notice may be served at any time for this reason).
    (v) The consent holder shall meet all reasonable costs of any such review.

Land Use Advice Notes

Lapsing of Consent

1. *Pursuant to section 125 of the Act, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses;*
   a) The consent is given effect to; or

b) An application is made to the Council to extend the period of consent, and the council decides to grant an extension after taking into account the statutory considerations, set out in section 125(1)(b) of the Act.

General Advice Notes

Right of Objection

1. *If you are dissatisfied with the decision or any part of it, you have the right (pursuant to section 357A of the Act) to object to the decision. The objection must be in writing, stating reasons for the objection and must be received by Council within 15 working days of the receipt of this decision.*

Archaeological Sites

2. *Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority issued pursuant to that Act. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately. The New Zealand Police should also be consulted if the discovery includes koiwi (human remains). A copy of Heritage New Zealand's Archaeological Discovery Protocol (ADP) is attached for your information. This should be made available to all person(s) working on site.*

General Advice Notes

1. Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority issued pursuant to that Act. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately. The New Zealand Police should also be consulted if the discovery includes koiwi (human remains). A copy of Heritage New Zealand's Archaeological Discovery Protocol (ADP) is attached for your information. This should be made available to all person(s) working on site.

2. A building consent may be required for private piped drainage works; we advise the consent holder to contact the Council's Building Consent team for further information.

3. The lot owner shall be responsible for any damage to underground pipes caused by the construction of the foundations and these shall be repaired to the satisfaction of Council, at the cost of the land owner.

Reasons for the Decision

1. The Council has determined (by way of an earlier report and resolution) that the adverse environmental effects associated with the proposed activity are no more than minor and that there are no affected persons or affected customary rights group or customary marine title group.

2. **Section 104D Assessment**
Pursuant to section 104D of the Resource Management Act 1991 if a proposal is Non-Complying then it must satisfy one or both of the subsections of 104D(1) before a decision can be granted under section 104B of the Act. If the application does not pass either test of the section 104D(1) then the application must be declined.

   It is considered that the proposal is not contrary to the Objectives and Polies of the District Plan; and it has been concluded that the adverse effects will be less than minor, as demonstrated in the accompanying s95 Report.

3. In accordance with an assessment under s104(1)(b) of the Act the proposal is consistent with the relevant statutory documents.

   a. The Northland Regional Policy Statement 2016
   b. Far North District Plan;
   c. Proposed District Plan

d. National Environmental Standard for Contaminated Soils: and
e. National Policy Statement for Urban Development 2020.

4. In terms of the Regional Policy Statement for Northland, for the following reasons the application is considered to be consistent with its Objectives and Policies:

    a. Fresh and coastal water – These items are not relevant.
    b. Indigenous ecosystems and biodiversity – New dwellings will be accompanied with appropriate landscaping and planting on their edges assisting with urban ecosystems.
    c. Economic potential and social wellbeing – The proposal provides a range of positive social and economic effects such as the increased provision of social housing in Kaitaia and employment/economic development in the construction and associated sectors.
    d. Regional form – The proposal has been designed with a range of urban design principles in mind. A clear sense of place, character and urban amenity is likely to be achieved resulting from the proposed design of the comprehensive urban development.
    e. Tangata whenua –The site does not contain any known archaeological resources or cultural resource (sites of significance / wāhi tapu) tangata whenua input has not been received or requested. An ADP is applied to the earthworks associated with development.
    f. Natural hazards – Supporting expert reports have been considered, flooding and geotechnical issues can be appropriately managed.
    g. Natural character, features / landscapes and historic heritage – These items are not relevant.

5. In terms of the Far North District Plan, for the following reasons the application is considered to be consistent with its Objectives and Policies:
    a. Urban Environment – The proposal is able to be adequately serviced and results in minimal reverse sensitivity / land use compatibility issues.
    b. Residential Zone – Each dwelling has been designed for modern liveability with key urban design principles driving development and, in this instance, this focus on liveability trumps the density setting typically required in the Residential Zone
    c. Subdivision Chapter – The proposed density and subdivision design is not envisaged through the District Plan. The site can be adequately serviced and the known hazards on the site can be appropriately mitigated to allow for the subdivision of the site. Urban design principles applied to the development ensures that although undersized, liveability in these 'tighter' sites is still appropriately catered for.
    d. Transportation Chapter – The proposal includes appropriate provision for parking, manoeuvring, and access, with traffic not being a significant issue in the existing environment.
6. In terms of the Far North Proposed District Plan, although the proposal does not breach any Proposed District Plan rules, for the following reasons the application is considered to be consistent with its Objectives and Policies:
    a. General Residential GRZ-O1- The proposal provides for a variety of housing types and lot sizes, which help achieve the housing needs of the community.
    b. GRZ-02 – The proposal is building within an area which is able to connect to council reticulated systems.
    c. GRZ-P8 – The character of the area is predominantly residential in character. Each dwelling has been designed for modern liveability with key urban design principles driving development and, in this instance, this focus on liveability trumps the density setting typically required in the Residential Zone. The proposal complies with majority of the bulk and scale of the ODP. However, the proposal has a minor sunlight breach. The sunlight breach occurs on areas of the adjacent properties which are not utilised for habitable use (e.g.: parking area, and greenspace).

7. In terms of the NPS for Urban Development Capacity 2020, the proposed infill development and subdivision is envisaged by both the planning standards of the Far North District Council and the Objectives and Policies of the NPS. Comprehensive urban development when carried out appropriately as considered in this instance, is an efficient use of urban land and meets the social housing demands for Kaitaia for current and future generations.

8. Precedent

Precedent effects are a matter that require consideration under s104(1)(c) – Other Matters, particularly as a non-complying activity. In this instance, a number of distinguishing features are noted as follows:

- The comprehensive urban development includes provision for appropriate urban design, amenity and landscaping, which is considered to offset the non-complying allotment sizes proposed. As the District Plan has minimal urban design outcomes, the presentation of these ensures that development is distinguished from general urban renewal and infill projects.
- The application has been presented as a comprehensive urban development that is consistent with local, district, and national objectives and policies associated with density, urban renewal, and broader national objectives to achieve greater social housing provision in the Far North District.

S104D

9. As a Non-Complying Activity, under s 104D, a consent authority may only grant a resource consent if it is satisfied that either:
   - The adverse effects of the activity on the environment will be minor; or
   - The application is for an activity that will not be contrary to the objectives and policies of any relevant plan.

10. In this situation, the proposal is considered to pass both statutory gateway tests.

11. Part 2 Matters

The Council has taken into account the purpose & principles outlined in sections 5, 6, 7 & 8 of the Act. It is considered that granting this resource consent application achieves the purpose of the Act.

12. In summary it is considered that the activity is consistent with the sustainable management purpose of the Act.

Approval

This resource consent has been prepared by Whitney Peat – Senior Resource Consents Planner. I have reviewed this and the associated information (including the application and electronic file material) and for the reasons and subject to the conditions above, and under delegated authority, grant this resource consent.

Name – Whitney Peat Date: 26 September 2023

Title – Senior Resource Planner

Name: William (Bill) Smith Date: 28 September 2023

Title: Independent Hearings Commissioner

LEGEND	
	EXISTING PROPERTY BOUNDARY
	EXISTING ROAD RESERVE
	PROPOSED LOT BOUNDARY
	PROPOSED EASEMENTS

MEMORANDUM OF EASEMENTS IN GROSS			
PURPOSE	IDENTIFIER	BURDENED LAND (SERVIENT TENEMENT)	GRANTEE
RIGHT TO DRAIN SEWAGE	A	LOT 4	FAR NORTH DISTRICT COUNCIL
	B	LOT 3	
	C	LOT 7	

SCHEDULE OF EXISTING EASEMENTS			
PURPOSE	IDENTIFIER	BURDENED LAND (SERVIENT TENEMENT)	BENEFITED LAND (DOMINANT TENEMENT)
ELECTRICITY	D	LOT 1	T185979.4

AMALGAMATION CONDITION
Subject to s220(1)(b)(iv)
THAT LOT 7 (LEGAL ACCESS) BE HELD AS TO THREE UNDIVIDED ONE-THIRD SHARES BY THE OWNERS OF LOTS 1, 2, 3 AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

NOTES:
1. REFER TO SHEET C01 FOR GENERAL NOTES.
2. PROPOSED LOT BOUNDARIES SUPPLIED BY CONTEXT ARCHITECTS, DWG REF: 21041-1 AB-A1030 REV 01.
3. ALL AREAS AND DIMENSIONS ARE SUBJECT TO RESOURCE CONSENT APPROVAL AND FINAL LAND TRANSFER SURVEY.

1:150@A1 1:300@A3 0 2 4 6 8 10 12 14 m

DRAFT

WORK IN PROGRESS

PRINTED 3/05/2022 11:21:50 AM

REVISION	AMENDMENT	APPROVED	DATE
A	FOR RESOURCE CONSENT	-	-

Kāinga Ora Homes and Communities

wsp
Whangarei Office
+64 9 430 1700
Private Bag 9017
Whangarei 0148
New Zealand

CIVIL

SCALES: 1:150 (A1), 1:300 (A3) — ORIGINAL SIZE: A1

DRAWN	DESIGNED	APPROVED
V. GILES	S. WILSON	APPROVER
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
VERIFIER	VERIFIER	YYYY-MM-DD

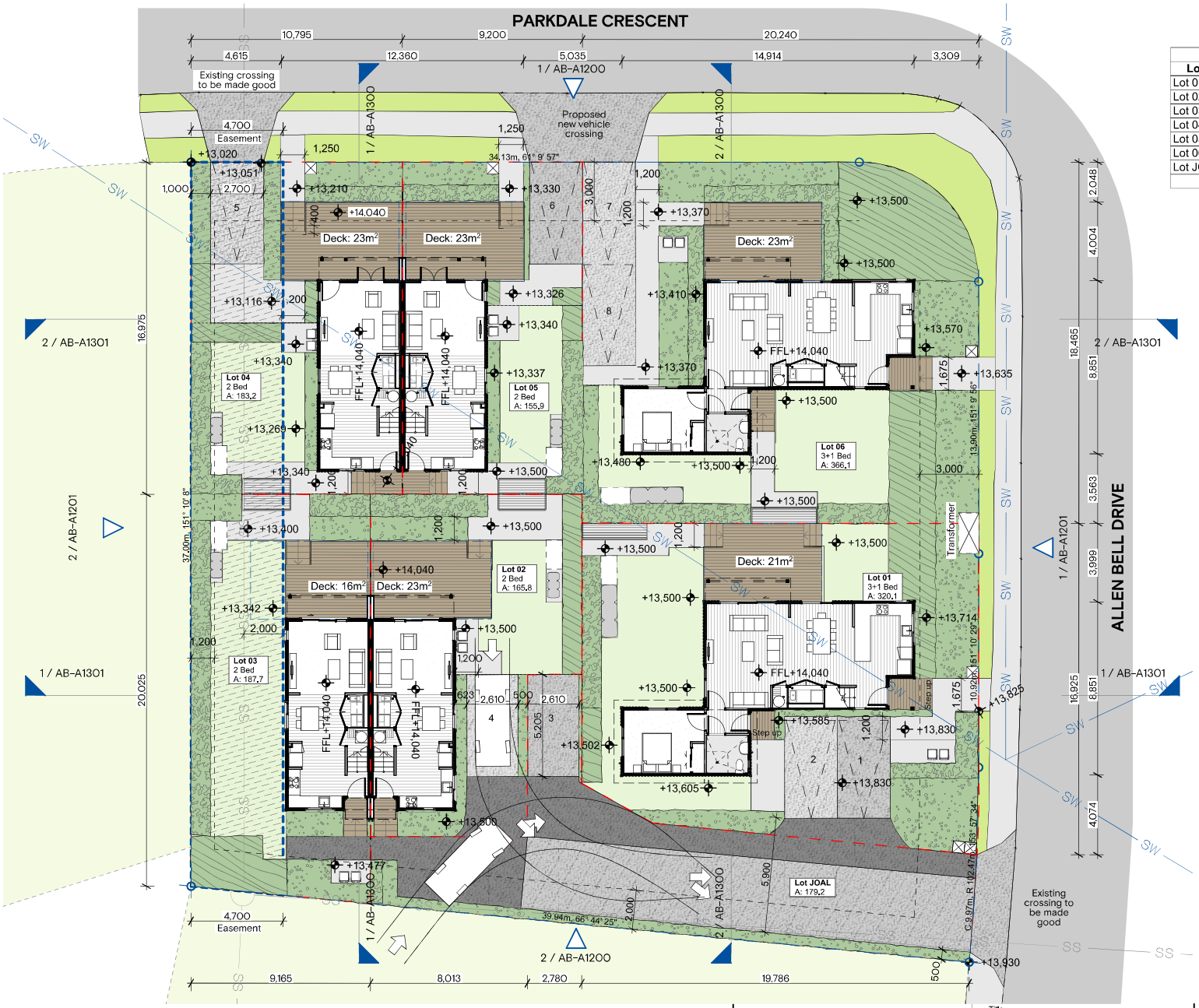
FOR RESOURCE CONSENT

PROJECT
KĀINGA ORA
59 & 61 ALLEN BELL DRIVE, KAITAIA, NORTHLAND
SUBDIVISION - PROPOSED INFILL DEVELOPMENT

TITLE
SCHEME PLAN
LOTS 1-6 BEING A SUBDIVISION OF LOT 16 AND 17 DP74955

WSP PROJECT NO. (SUB-PROJECT): 1-14454.01
SHEET NO.: C04
REVISION: A

Original sheet size A1 (841x594) Plot Date 2022-05-03 at 11:21:50 AM \\corp.pbwan.net\ANZ\ProjectsNZ\11\1-14454.01 KO Allen Bell Drive\Home\07_Technical\210 Drawings\+AutoCAD\1-14454.01-C04.dwg C04



Lot List			
Lot No.	**House Type**	**Carparks**	**Area (m²)**
Lot 01	HV3 (3+1 Bed)	2 carparks (1 & 2)	320.13
Lot 02	BV3 (2 Bed)	1 carpark (3)	165.84
Lot 03	BV3 (2 Bed)	1 carpark (4)	187.68
Lot 04	BN5 (2 Bed)	1 carpark (5)	183.18
Lot 05	BN5 (2 Bed)	1 carpark (6)	155.90
Lot 06	HV3 (3+1 Bed)	2 carparks (7 & 8)	366.08
Lot JOAL			179.18
			1,557.99 m²

SITE PLAN KEY

- Proposed Sewer Line
- Existing Sewer Line (to be demolished)
- Stormwater Line
- Contour Line
- Existing Driveway
- Boundary Line
- Proposed Fencing
- Proposed Fencing Gate
- Driveway to House Entry
- Power Pole
- Indicative Vehicle
- Tree to be replaced
- Earth works- Fills & Cuts
- Transition Zone
- Water tank
- Washing line
- Rubbish Bins
- Shed

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

context / Architects

Client: Kāinga Ora Homes and Communities

Consultants
Civil Engineer - WSP Group
Planner - Barker & Associates
Landscaping - Context Architects

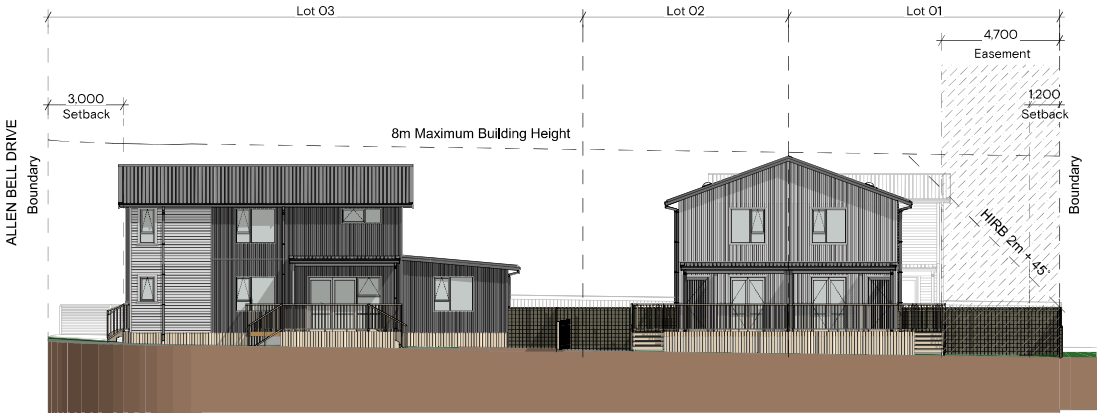
Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
03	29/04/2022	Resource Consent Issue
02	11/03/2022	Resource Consent Issue
01	4/03/2022	For Information

Title
Proposed Site Plan

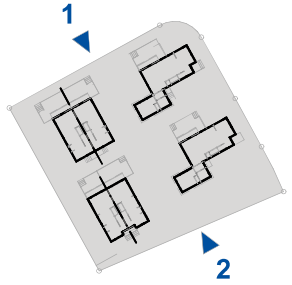
Project
Kāinga Ora
59-61 Allen Bell Drive, Kaitaia

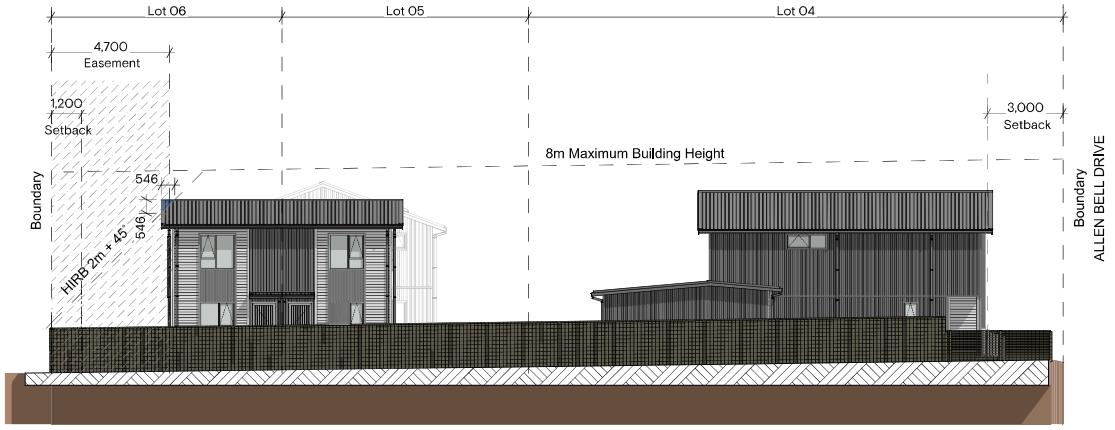
Do not scale.
The contractor shall verify all dimensions before commencing work, and all discrepancies to be referred to Context Architects Ltd for clarification. These plans are confidential and are not to be discussed or copied without the express permission of Context Architects Ltd.

Scale	Project No.	Drawing no.	Rev.
1:200 @ A3	21041-1	AB-A1020	RC-A



1 Site Elevation 1





hatch indicates infringement

2 Site Elevation 3

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

context / Architects

Client: Kāinga Ora Homes and Communities

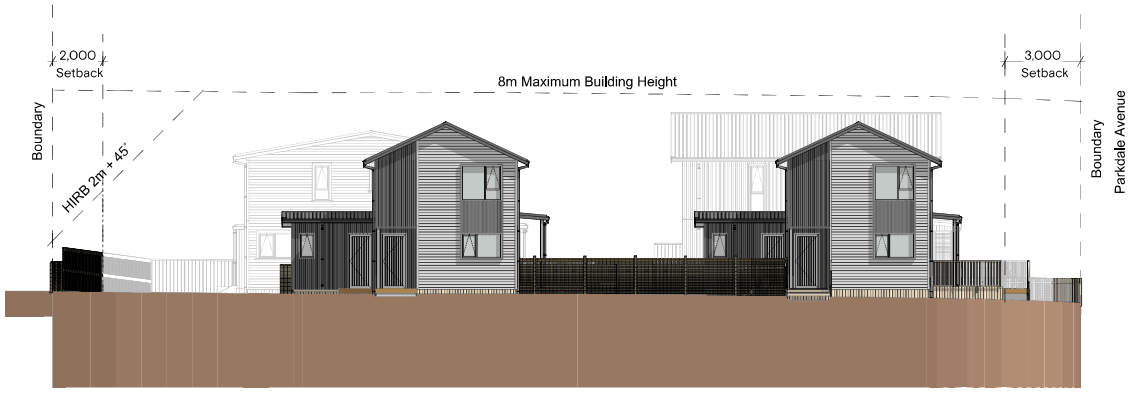
Consultants
Civil Engineer - WSP Group
Planner - Barker & Associates
Landscaping - Context Architects

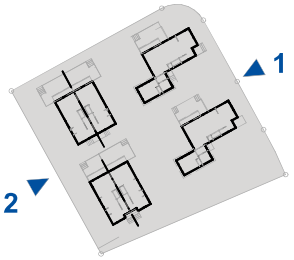
Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
02	11/03/2022	Resource Consent Issue
01	4/03/2022	For Information

Title
Site Elevations

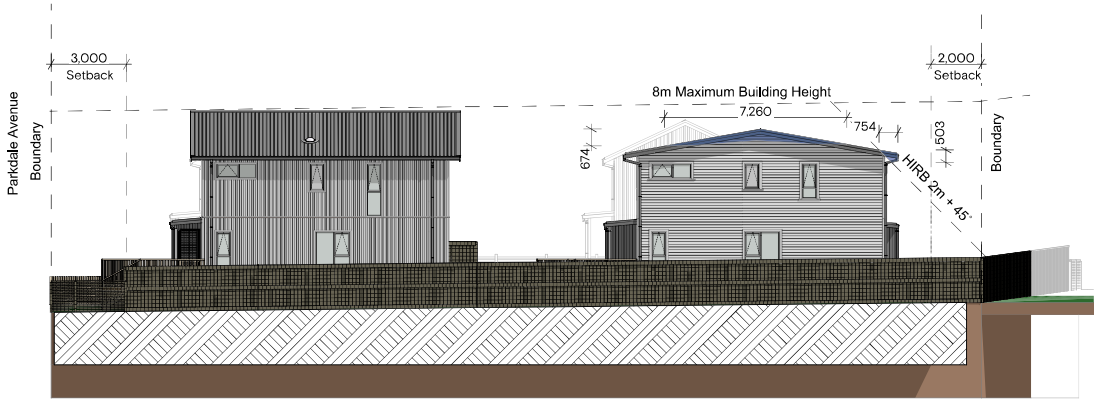
Project
Kāinga Ora
59-61 Allen Bell Drive, Kaitaia

Scale	Project No.	Drawing no.	Rev.
1:200 @ A3	21041-1	AB-A1200	RC-A





1 Site Elevation 2



2 Site Elevation 4

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

context / Architects

Client: Kāinga Ora Homes and Communities

Consultants
Civil Engineer - WSP Group
Planner - Barker & Associates
Landscaping - Context Architects

Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
02	11/03/2022	Resource Consent Issue
01	4/03/2022	For Information

Title
Site Elevations

Project
Kāinga Ora
59-61 Allen Bell Drive, Kaitaia

Scale	Project No.	Drawing no.	Rev.
1:200 @ A3	21041-1	AB-A1201	RC-A

Lot 01 & 06

Roof & Flashings
Colorsteel Karaka

*Down pipes - White

Horizontal Weatherboard (Fibre Cement)
Dulux Mangakino

Board and Batten (Timber)
Dulux Pukaki Half

Aluminium Joinery Powdercoat Finish
Dulux Titania

Aluminium Front Door Powdercoat Finish
Mannex Titania

Soffit Colour
Dulux Sandfly Point
Double

Lot 02 & 03

Roof & Flashings
Colorsteel Lichen
*Down pipes - White

Board and Batten (Timber)
Dulux Pukaki Half

Aluminium Front Door Powdercoat Finish
Mannex Titania

Soffit Colour
Dulux Sandfly Point
Double

Lot 04 & 05

Roof Paint Finish
Colorsteel Sandstone Grey

*Down pipes - White

Horizontal Weatherboard (Fibre Cement)
Dulux Maraetai

Board and Batten (Timber)
Dulux Narrow Neck

Aluminium Joinery Powdercoat Finish
Dulux Titania

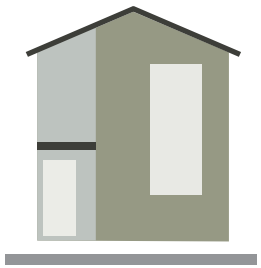
Aluminium Front Door Powdercoat Finish
Mannex Titania

Soffit Colour
Dulux Sandfly Point
Double

APPROVED PLAN

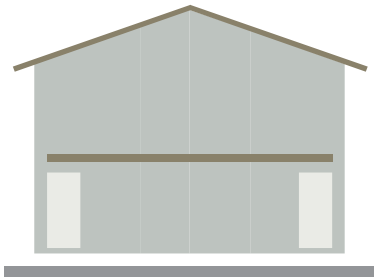
Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

Lot 01 & 06



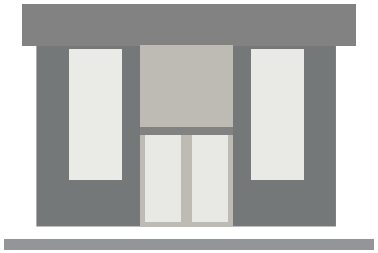
Street View - Allen Bell Dr

Lot 02 & 03



Street View - Parkdale Cres

Lot 04 & 05



East Elevation

context / Architects

Client: Kāinga Ora Homes and Communities

Consultants
Civil Engineer - WSP Group
Planner - Barker & Associates
Landscaping - Context Architects

Rev.	Date
RC-A	17/06/2022
02	11/03/2022
01	4/03/2022

Notes
For Resource Consent
Resource Consent Issue
For Information

Title
Exterior Finishes Elevations

Project
Kāinga Ora
59-61 Allen Bell Drive, Kaitaia

Scale	Project No.	Drawing no.	Rev.
1:200 @ A3	21041-1	AB-A1202	RC-A

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

Softscape Legend

- Proposed Evergreen Tree
- Proposed Deciduous Tree
- Proposed Fruiting Tree
- Existing tree to be protected and retained
- Tall shrubs (1.5-2m)
- Low Shrubs (1-1.5m)
- Ground Cover (<1m)
- Lawn

Hard Landscape Legend

- BE - Vehicle strength exposed aggregate concrete, with 6kg black oxide
- PE - Vehicle strength exposed aggregate plain concrete
- VC- Vehicle strength concrete, broom finish
- PC - Pedestrian strength plain concrete, broom finish
- DE Deck refer to architect

Fence Legend

- 1.8TP — **1.8m high Timber paling fence** 150x19mm H3.2 vertical palings, 5mm spacing.
- 1.8HS — **1.8m high good neighbour boundary fence.** Solid 1.5m base, with upper 300mm horizontal slats to achieve 50% permeability. E.g. Boundaryline 'SmartWall' or 'ColourPanel' with slat-top "
- 1.2HS — **1.2m high Horizontal slatted timber fence** 100x21mm H3.2 horzontal slats, 15mm spacing.
- 1.8HT — **1.8m high Horizontal trellis with 3mm spacing** 40x18mm H3.2 horzontal slats, 3mm spacing.
- HR — **Handrail** Along steps TBC to match adjacent fence type
- 1.4BS — **1.4m high trellis screen** 40x18mm H3.2 horzontal slats, 15mm spacing.
- **1.8m Open aluminium gate** 0.95m wide, Boundaryline 'DuraPanel Delta' (or equivalent), open aluminium gate, self-closing hinges, child proof latch, black powder coat finish
- 1.2OA — **1.2m high Open aluminium fence** Boundaryline 'DuraPanel Delta' (or equivalent), open aluminium fence, black powder coat finish.

Services Legend

- WL Washing Line
- B Rubbish/ Recycling Bins
- MB Mailbox
- TA Retention Tank
- SA Storage Shed

context / Architects

Client: Kāinga Ora Homes and Communities

Consultants
Civil Engineer - WSP Group
Planner - Barker & Associates
Landscaping - Context Architects

Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
02	11/03/2022	Resource Consent Issue
01	4/03/2022	For Information

Title: **Landscaping GA**

Project: **Kāinga Ora**
59-61 Allen Bell Drive, Kaitaia

Do not scale.
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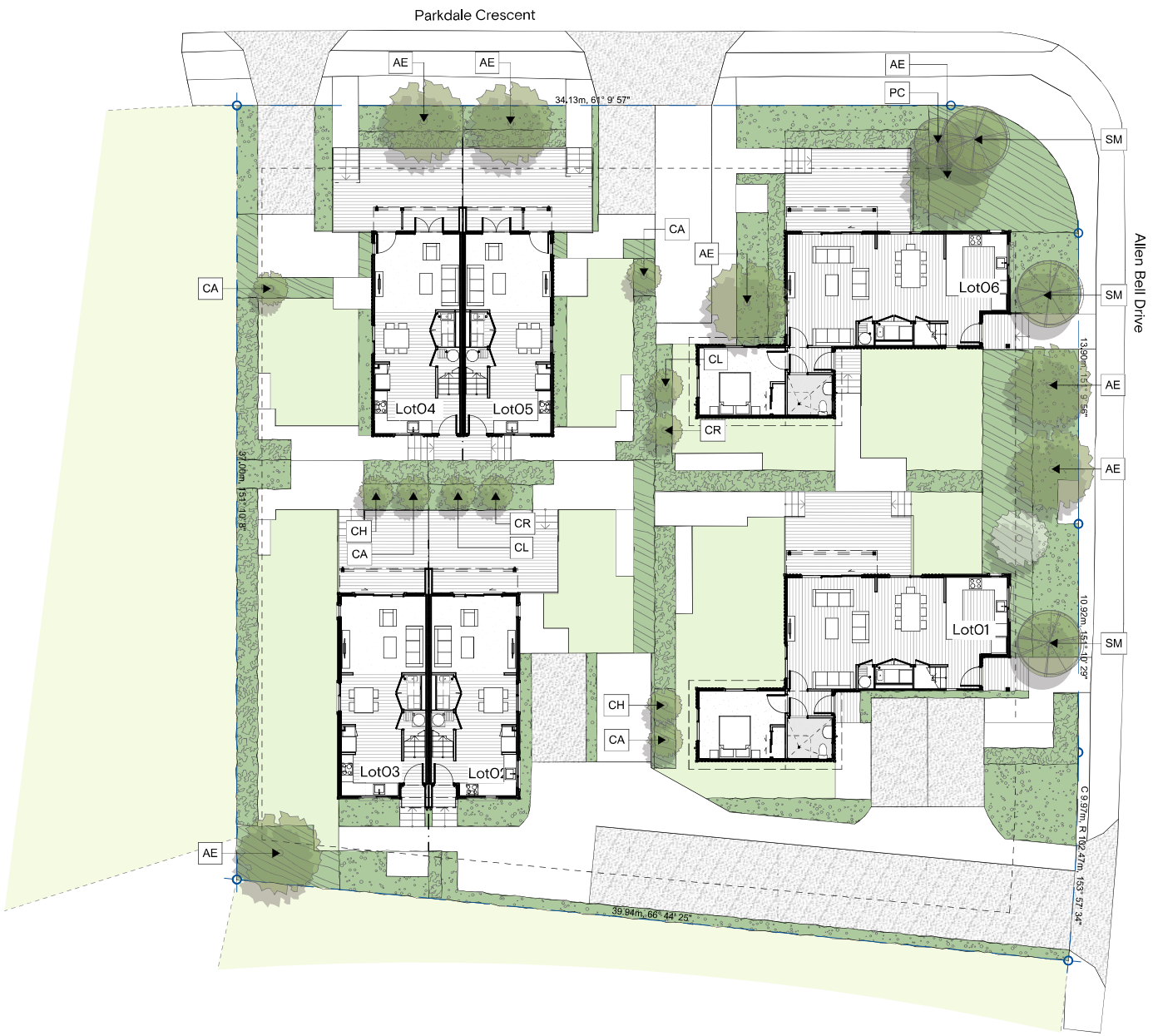
Scale	Project No.	Drawing no.	Rev.
1:200 @ A3	21041-1	AB-A8001	RC-A



Softscape Legend

- Proposed Evergreen Tree
- Proposed Deciduous Tree
- Proposed Fruiting Tree
- Existing tree to be protected and retained
- Tall shrubs (1.5-2m)
- Low Shrubs (1-1.5m)
- Ground Cover (<1m)
- Lawn

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

context / Architects

Client: Kāinga Ora Homes and Communities

Consultants
Civil Engineer - WSP Group
Planner - Barker & Associates
Landscaping - Context Architects

Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
02	11/03/2022	Resource Consent Issue
01	4/03/2022	For Information

Title: **Planting Plan**

Project: **Kāinga Ora**
59-61 Allen Bell Drive, Kaitaia

Scale	Project No.	Drawing no.	Rev.
1:200 @ A3	21041-1	AB-A8100	RC-A

Name- 59-61 Allen Bell Drive Proposed Plant Schedule (Indicative)							
CODE	BOTANICAL NAME	COMMON NAME	GRADE (L)	SPACING (m) C-C	PLANT % MIX	INDICATIVE PLANT NO.	NOTES
	Trees						
AE	*Alectryon excelsus*	Titoki	45L			7	
PC	*Pyrus calleryana 'Bradford'*	Flowering pear	45L			1	
SM	*Sophora microphylla*	Kowhai	45L			3	
	Trees - Fruit						
CR	*Citrus reticulata*	Mandarin	12L			2	
CL	*Citrus x limon*	Lemon	12L			2	
CA	*Citrus × latifolia*	Lime	12L			4	
CH	*Citrus 'Harwoods Late'*	Orange	12L			2	
				TOTAL		21	
HS	**High Shrub**	Total Area Planted (m2)		92			
	Select single species per row from:						
	Acca sellowiana	Feijoa	5L	0,8	50%	83	
	Corokia 'Geenty's Green'	Corokia	5L	0,8	50%	83	
				TOTAL	100%	166	
LS	**Low Shrub Mix**	Total Area Planted		103			
	Arthropodium cirratum	Regarenga	2L	1	30%	36	
	Carex virgata	Swamp sedge	2L	1	20%	24	
	Hebe 'Wiri Mist'	Hebe	2L	1	30%	36	
	Libertia grandiflora	Libertia	2L	1	20%	24	
				TOTAL	100%	84	
GC	**Groundcover Mix**	Total Area Planted (m2)		203			
	Coprosma 'Poor Knights'	Coprosma 'Poor Knights'	2L	0,6	30%	196	
	Fuchsia procumbens	Trailing fuchsia	2L	0,6	40%	261	
	Lobelia angulata	Panakenake	2L	0,6	30%	196	
				TOTAL	100%	653	

Notes:

1. All planting areas to be prepared with 300mm topsoil min. depth and mulched with 100mm depth of mulch, min. 75mm when settled. Refer to drawings and specification.
2. All tree pits to be prepared in accordance with drawings and specification.
3. All specimen trees to be staked with 2 x timber stakes per tree, painted black, secured with hessian ties - refer to drawings and specification.
4. Street trees to have clear steam for lower 2.5m of trunk from ground level to allow for clear line of sight for drivers.
5. Groundcover planting in car park area, select species from groundcover mix to allow for a vehicle to overhang. i.e max. height 0.3m at plant maturity.
6. Native species preferably to be ecosourced from Northland Ecological Area - refer to specification.

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

Alectryon excelsus

Pyrus calleryana 'Bradford'

Sophora microphylla

Citrus reticulata

Citrus x limon

Citrus × latifolia

Citrus 'Harwoods Late'

Acca sellowiana

Corokia 'Geenty's Green'

Arthropodium cirratum

Carex virgata

Hebe 'Wiri Mist'

Libertia grandiflora

Coprosma 'Poor Knights'

Fuchsia procumbens

Lobelia angulata

context / Architects

Client: Kāinga Ora Homes and Communities

Consultants
Civil Engineer - WSP Group
Planner - Barker & Associates
Landscaping - Context Architects

Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
02	11/03/2022	Resource Consent Issue
01	4/03/2022	For Information

Title
Indicative Plant Schedule

Project
Kāinga Ora
59-61 Allen Bell Drive, Kaitaia

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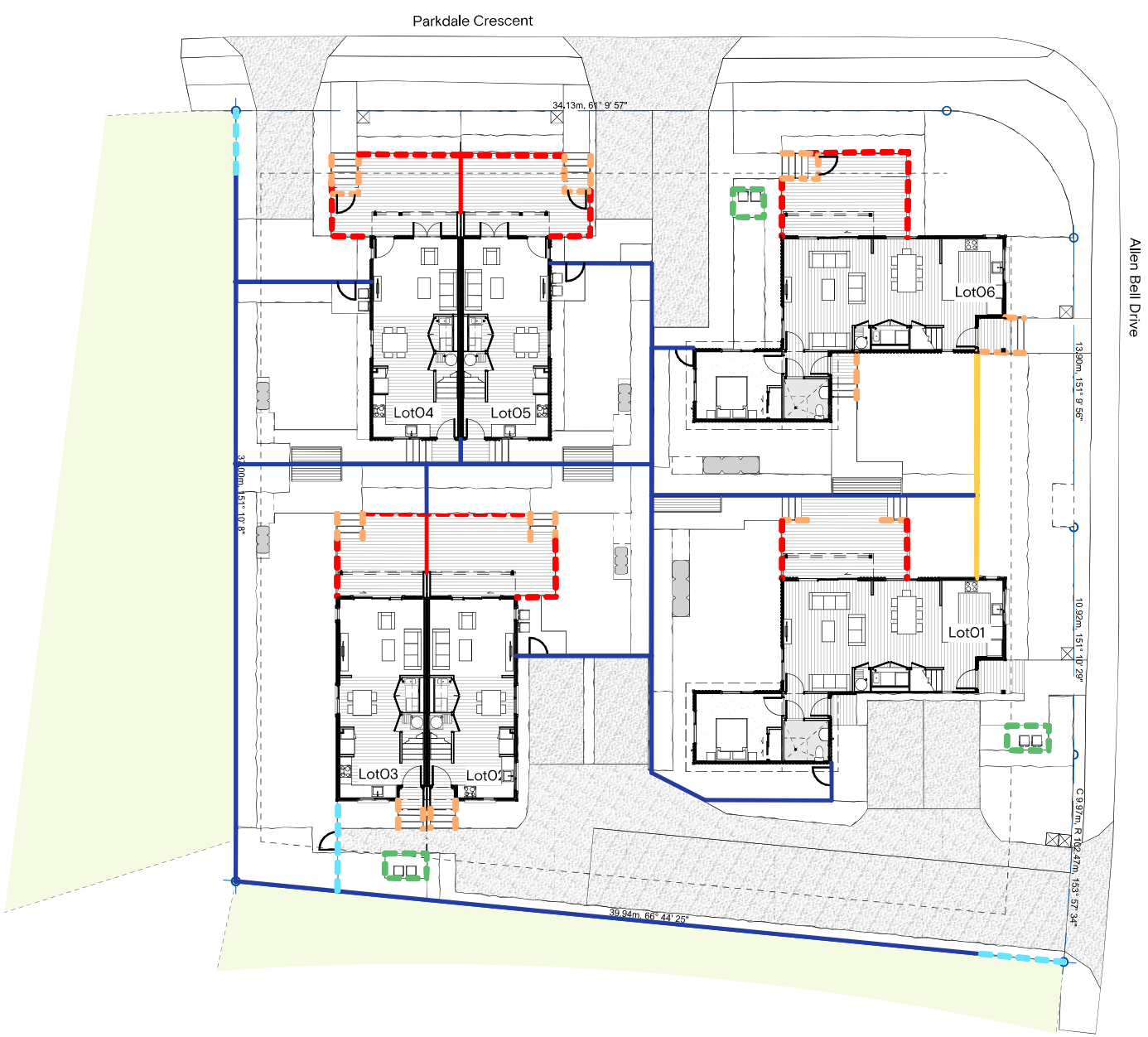
Scale	Project No.	Drawing no.	Rev.
@ A3	21041-1	AB-A8101	RC-A



Fence Legend

1.8TP	**1.8m high Timber paling fence** 150x19mm H3.2 vertical palings, 5mm spacing.	
1.8HS	**1.8m high good neighbour boundary fence.** Solid 1.5m base, with upper 300mm horizontal slats to achieve 50% permeability. E.g. Boundaryline 'SmartWall' or 'ColourPanel' with slat-top "	
1.2HS	**1.2m high Horizontal slatted timber fence** 100x21mm H3.2 horzontal slats, 15mm spacing.	
1.8HT	**1.8m high Horizontal trellis with 3mm spacing** 40x18mm H3.2 horzontal slats, 3mm spacing.	
HR	**Handrail** Along steps TBC to match adjacent fence type	
1.4BS	**1.4m high trellis screen** 40x18mm H3.2 horzontal slats, 15mm spacing.	
	1.8m Open aluminium gate 0.95m wide, Boundaryline 'DuraPanel Delta' (or equivalent), open aluminium gate, self-closing hinges, child proof latch, black powder coat finish	
1.2OA	**1.2m high Open aluminium fence** Boundaryline 'DuraPanel Delta' (or equivalent), open aluminium fence, black powder coat finish.	

Services Legend

WL	Washing Line	
B	Rubbish/ Recycling Bins	
MB	Mailbox	
TA.	Retention Tank	
SA.	Storage Shed	

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

context / Architects

Client: Kāinga Ora Homes and Communities

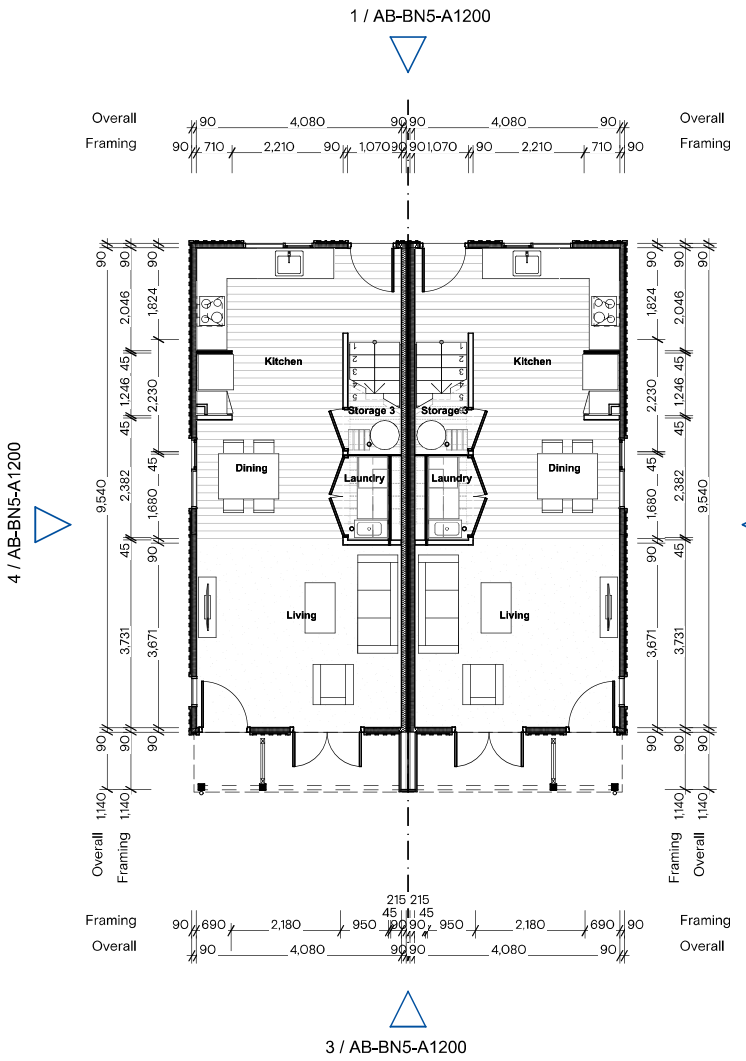
Consultants
Civil Engineer - WSP Group
Planner - Barker & Associates
Landscaping - Context Architects

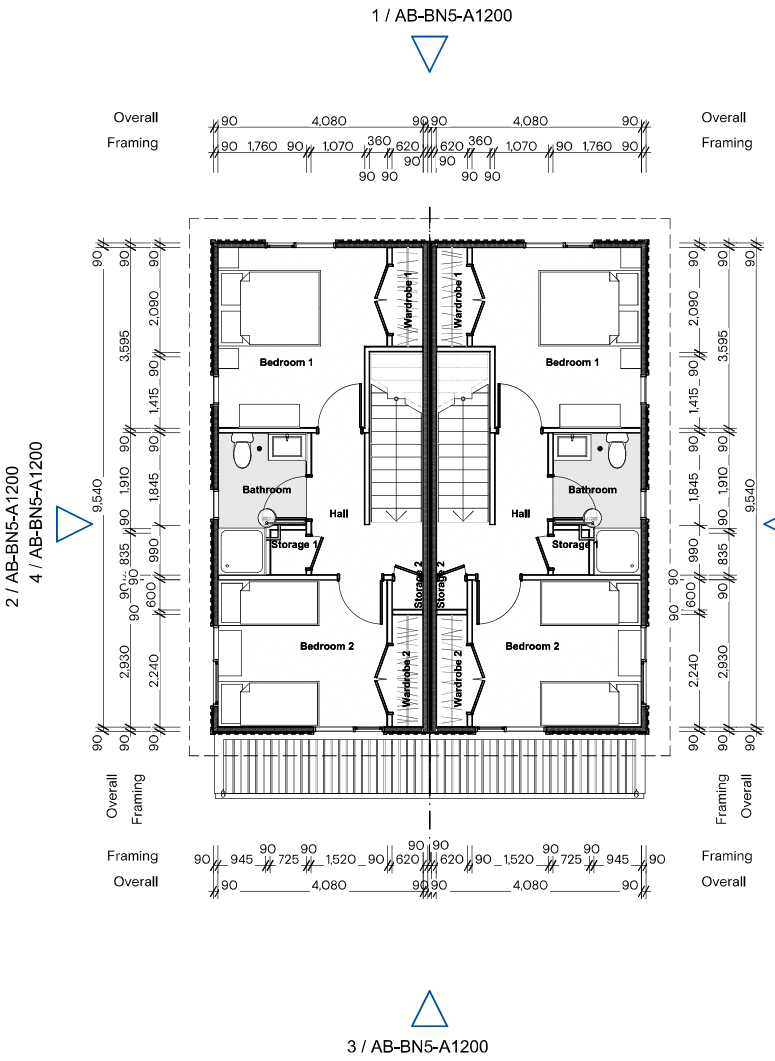
Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
02	11/03/2022	Resource Consent Issue
01	4/03/2022	For Information

Title
Fencing & Furniture Plan

Project
Kāinga Ora
59-61 Allen Bell Drive, Kaitaia

Scale	Project No.	Drawing no.	Rev.
1:200 @ A3	21041-1	AB-A8103	RC-A





Area Schedule - Lot 1 & 2 (areas per dwelling)		
	Zone Name	Area
1, ROOM		
	Bathroom	8.36
	Bedroom 1	22.88
	Bedroom 2	19.74
	Hall	8.56
		59.54 m²
2, KDL		
	Dining	13.86
	Kitchen	23.98
	Living	30.82
		68.66 m²
3, STORAGE		
	Laundry	2.72
	Storage 1	1.22
	Storage 2	0.74
	Storage 3	2.98
	Wardrobe 1	2.60
	Wardrobe 2	2.78
		13.04 m²
4, GFA		
	First Floor	82.82
	Ground Floor	82.82
		165.64 m²

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

1 1. Ground Floor

2 1. First Floor

context Architects

Client: Kāinga Ora Homes and Communities

Consultants
Civil Engineer
Planner
Landscaping
- WSP Group
- Barker & Associates
- Context Architects

Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
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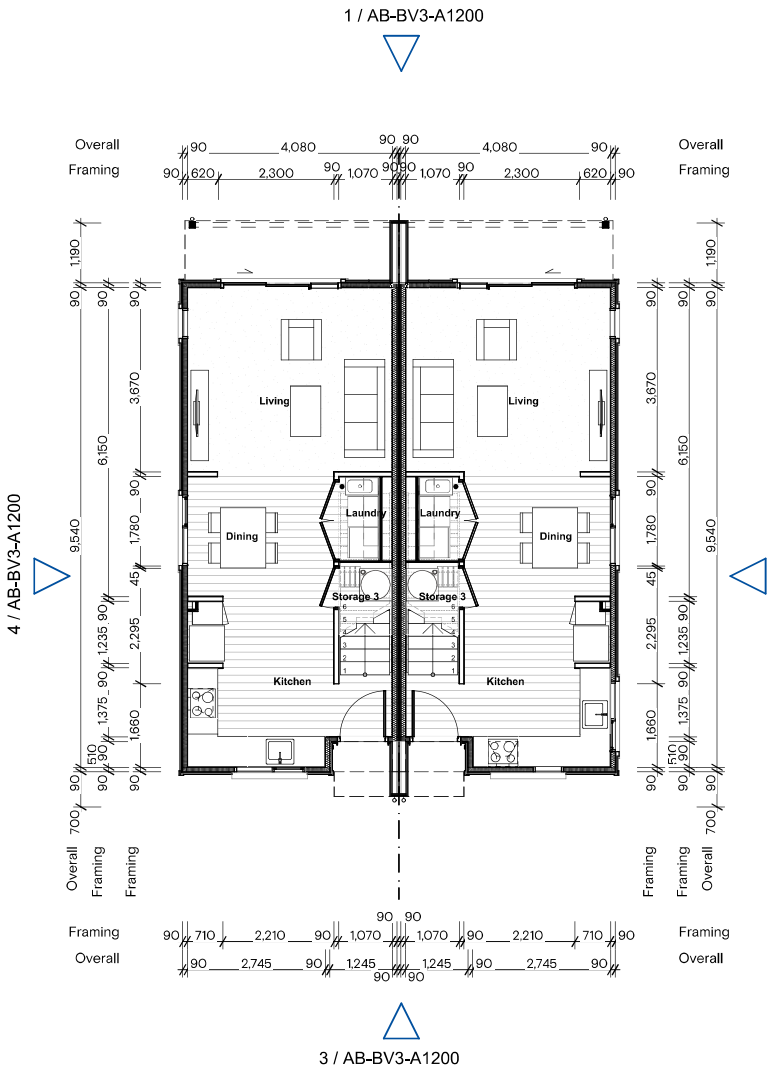
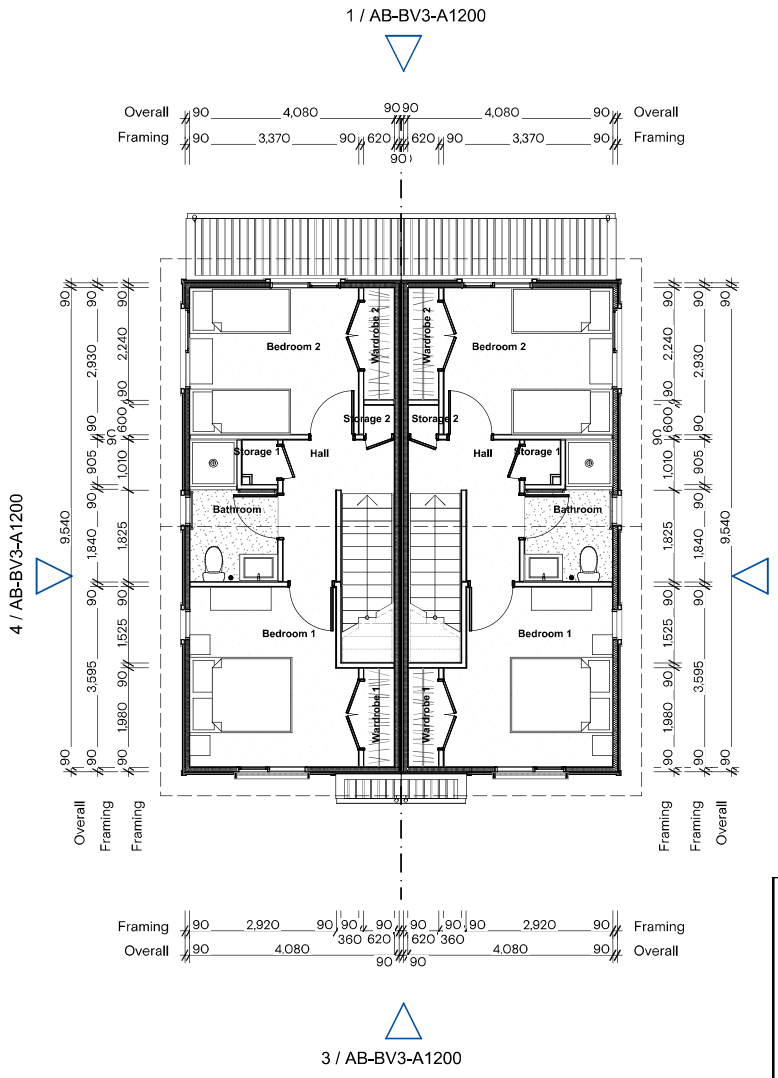
01	4/03/2022	For Information

Title
RC Floor Plans

Project
Kāinga Ora
59-61 Allen Bell Drive, Kaitaia

Scale	Project No.	Drawing no.	Rev.
1:100 @ A3	21041-1	AB-BN5-A1100	RC-A





Area Schedule - Lot 5 & 6 (Areas per dwelling)		
		Area
1, ROOM		
	Bathroom	4.18
	Bedroom 1	11.39
	Bedroom 2	9.87
	Hall	4.24
		29.68 m²
2, KDL		
	Dining	7.40
	Kitchen	10.85
	Living	15.34
		33.59 m²
3, STORAGE		
	Laundry	1.39
	Storage 1	0.66
	Storage 2	0.37
	Storage 3	1.36
	Wardrobe 1	1.23
	Wardrobe 2	1.39
		6.40 m²
4, GFA		
	First Floor	41.50
	Ground Floor	40.70
		82.20 m²

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

1 2. Ground Floor

2 2. First Floor

context / Architects

Client: Kāinga Ora Homes and Communities

Consultants
Civil Engineer - WSP Group
Planner - Barker & Associates
Landscaping - Context Architects

Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
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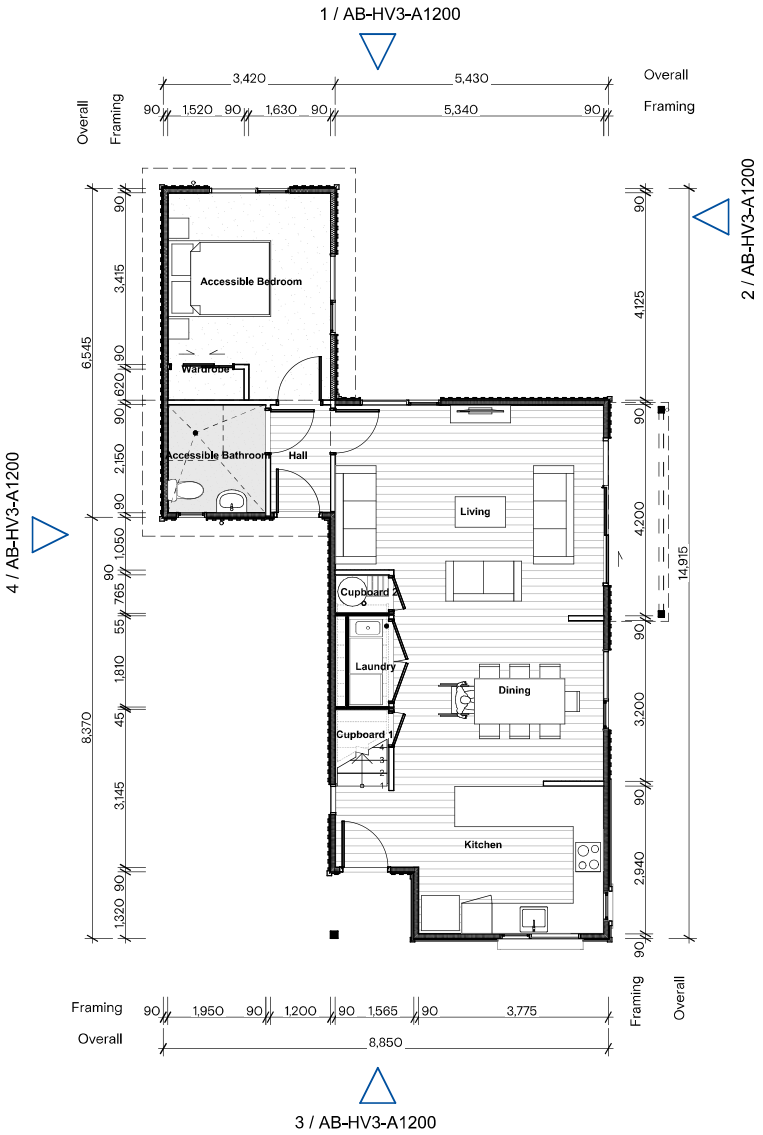
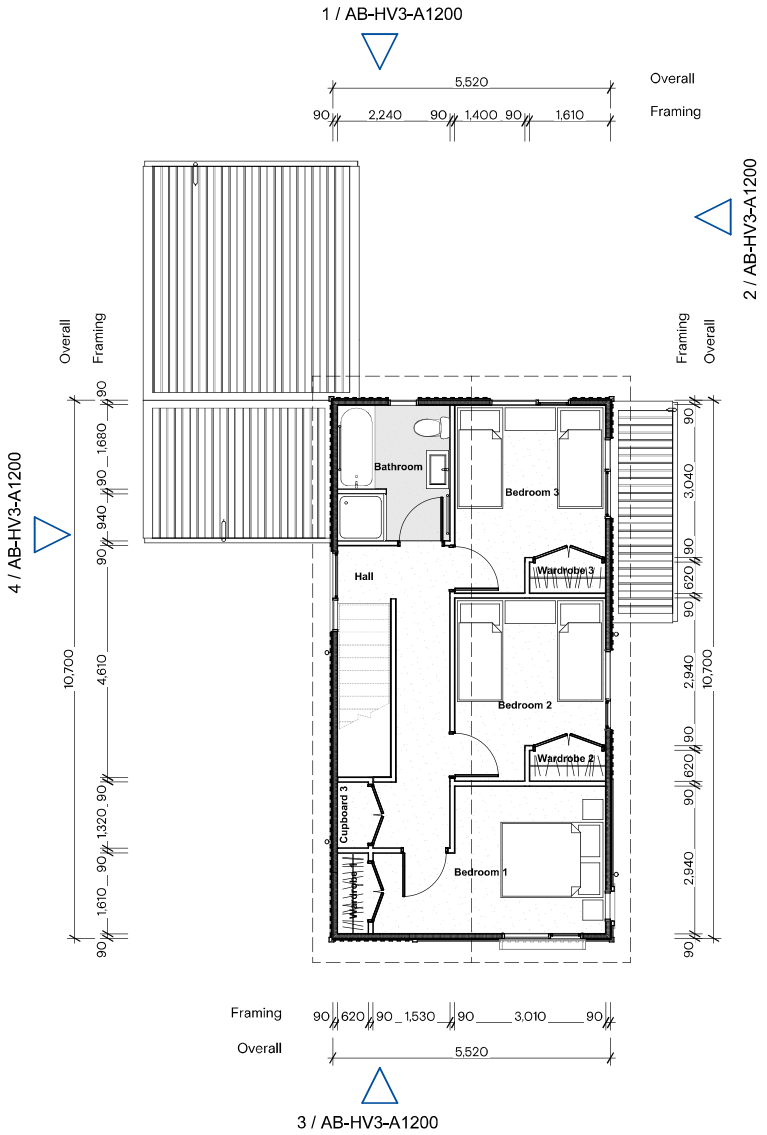
Title
RC Floor Plans

Project
Kāinga Ora
59-61 Allen Bell Drive, Kaitaia

Scale	Project No.	Drawing no.	Rev.
1:100 @ A3	21041-1	AB-BV3-A1100	RC-A





Area Schedule - Lot 3 & 4		
	Zone Name	Area
1, ROOM		
	Accessible Bathroom	4.19
	Accessible Bedroom	12.20
	Bathroom	6.07
	Bedroom 1	11.46
	Bedroom 2	9.84
	Bedroom 3	10.14
	Hall	2.61
	Hall	8.58
		65.09 m²
2, KDL		
	Dining	14.00
	Kitchen	13.40
	Living	21.37
		48.77 m²
3, STORAGE		
	Cupboard 1	1.04
	Cupboard 2	0.89
	Cupboard 3	0.82
	Laundry	1.48
	Wardrobe	0.94
	Wardrobe 1	1.00
	Wardrobe 2	0.94
	Wardrobe 3	0.94
		8.05 m²
4, GFA		
	First Floor	59.06
	Ground Floor	79.05
		138.11 m²

APPROVED PLAN

Planner: Whitney Peat
pp: ENathan
RC: 2220905-RMACOM
Date: 28/09/2023

1 3. Ground Floor

2 3. First Floor

context Architects

Client: Kāinga Ora Homes and Communities

Consultants
Civil Engineer
Planner
Landscaping
- WSP Group
- Barker & Associates
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Rev.	Date	Notes
RC-A	17/06/2022	For Resource Consent
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Title
RC Floor Plans

Project
Kāinga Ora
59-61 Allen Bell Drive, Kaitaia

Scale	Project No.	Drawing no.	Rev.
1:100 @ A3	21041-1	AB-HV3-A1100	RC-A

Proposed Consent Conditions

B&A Urban & Environmental

Subdivision

Pursuant to sections 108 and 220 of the Act, this subdivision consent is granted subject to the following conditions:

(1) The activity shall be carried out in accordance with the approved plans prepared by McKenzie & Co~~WSP~~, referenced 'LOTS 1 TO 6, 100 & 101 BEING A SUBDIVISION OF LOTS 16 & 17 DP 74955'~~Scheme Plan Lots 1-6 Being a subdivision of Lot 16 and 17 DP 74955, Sheet No: C04, Rev A~~, and attached to this consent with the Council's "Approved Stamp" affixed to it.

Survey plan approval (s223) conditions

(2) The survey plan, submitted for approval pursuant to Section 223 of the Act shall show:

(a) All easements in the memorandum to be duly granted or reserved.

(3) Prior to the issuing of a certificate pursuant to section 223(c) of the Act, the consent holder shall:

(a) Ensure that a 3m wide easement in gross shall be established over the existing sewer. (Easement shall typically be 1.5m on each side from centre of infrastructure, any variation to setbacks will require approval from Council Wastewater Asset Manager or designate).

(b) Prior to commencing construction identify and submit to Council's Resource Consents Engineer or designate for approval, a Stormwater and Flood Management Plan, including specifications & construction details prior to commencing construction. Such works shall be designed in accordance with the Council's current Engineering Standards and NZS4404:2004, by a suitably qualified and experienced engineer

In particular the plans and details shall show:

(i) Overland flood and stormwater flow paths within the development.

(ii) Confirmation that flood water does not pond within the development and is controlled to catchment overland flood paths.

(iii) Shared private reticulated network for buildings and access road within Lots 100 and 101~~lots 1-3 and the JOAL.~~

(iv) Stormwater mitigation for the entire development and disposal into the reticulated network, ~~(Note: consultation will be required with Council's Stormwater Manager or designate due to relocation and renewal of stormwater pipe in development).~~

(v) Design statement (PS1 or schedule 1A)

(c) Prior to commencing construction submit to Council's Development Engineer or designate for approval, plans, specifications & details of all works on legal road and works which are to vest in Council and are in close proximity of existing infrastructure for the approval of Council prior to commencing construction. Such works shall be designed in accordance with the Council's current Engineering Standards and NZS4404:2004 by a chartered professional engineer.

In particular the plans and details shall show:

(i) Utility and piped services separation distances between private and public infrastructure. (Note: Stormwater mitigation system may need to be relocated due to proximity and crossing over of existing sewer infrastructure)

(ii) Reticulated sewer connection detail to existing sewer pipes.

~~(iii) Reticulated sewer drainage with a connection to lots 5 and 6.~~

(iv) Works within Parkdale Crescent Road carriageway including road reinstatement.

(v) Design statement (PS1)

(d) Prior to the commencing of any physical site works, a Construction Management Plan shall be submitted to and approved by the Council's Resource Consent Monitoring Officer or designate. The plan shall contain information on, and site management procedures, for the following:

(i) The timing of construction works (planned start date and duration), including hours of work, key project and site management personnel.

(ii) The transportation of demolition and construction materials from and to the site and associated controls on vehicles through sign-posted site entrance/exits and the loading and unloading of materials.

(iii) A traffic management plan.

(iv) The bulk earthworks construction.

(v) Control of dust and noise on-site and any necessary avoidance or remedial measures.

(vi) Prevention of earth and other material being deposited on surrounding roads from vehicles and remedial actions should it occur.

(vii) Publicity measures and safety measures, including signage, to inform adjacent landowners and occupiers, pedestrians and other users of the road.

(viii) Erosion and Sediment Control Plan in accordance with GD05 and measures to be in place for the duration of the works.

(e) That all construction works on the site are to be undertaken in accordance with the approved Construction Management Plan.

Section 224(c) compliance conditions

(4) Prior to the issuing of a certificate pursuant to section 224(c) of the Act, the consent holder shall:

(a) Provide to Council written confirmation from a licensed cadastral surveyor that the access carriageway is fully contained within the JOAL, easements provided for access, services and easement in gross for existing wastewater infrastructure.

(b) Provide evidence that each lot has a connection to Council's reticulated stormwater, sewer and water supply systems that complies with the requirements of Council's Engineering Standards and Guidelines.

(c) Provide as-built drawings for development overland flood flow paths constructed in accordance with approved management plan submitted to satisfy condition 3(b) and for reference in consent notice (m)i.

(d) Provide to Council's Development Engineer or designate for approval, As-built plans, CCTV inspection and asset management data for vested sewer and private infrastructure within easements in gross complying with schedule 1D of NZS 4404:2004 and section 1.5.2.5 of Council's Engineering Standards and Guidelines.

(e) Upon completion of the works specified in 223 condition(s) 3(b) and 3(c) above, provide construction, testing and installation certification from contractor and certifying trades (PS3 or schedule 1B certificates)

(f) Upon completion of the works specified in 223 condition 3 (c) above, provide certification of the work from a chartered professional engineer for vested works. that all work has been completed in accordance with the approved plans. A construction review statement (PS4) shall be supplied from a chartered professional engineer.

(g) Upon completion of the works specified in 223 condition 3(b) above, provide certification of private works from a Suitably independent qualified engineer(IQP), that all work has been completed in accordance with the approved plans. A construction review statement (PS4) or NZS4404:2004 schedule 1C certificate supplied from a suitably independent qualified engineer(IQP).

(h) Provide pre and post construction camera inspection of existing sewer infrastructure in accordance with Council's Engineering Standards and Guidelines. (Note: recommend consultation with Council's Asset Manager for information format and requirements).

(i) Provide a formed and concreted ~~double width entrance to lots 5 and 6 and~~ shared access to ~~J~~COALs 1 and 2 which complies with the Council's Engineering Standard FNDC/S/2, section 3.3.17 of the Engineering Standard and NZS4404:2004. The entrance shall include provision for vehicle queuing space in accordance with Rule 15.1.6C.1.3 of the Far North District Plan.

(j) ~~Provide a formed and concreted entrance to lot 4 which complies with the Council's Engineering Standard FNDC/S/2 and section 3.3.17 of the Engineering Standards and NZS 4404:2004.~~

(k) Provide evidence that the existing redundant crossing to Allen Bell Drive is removed and the concrete footpath is reinstated to match the existing concrete footpath.

(l) Provide formed and concreted or sealed access on C~~J~~OAL in general accordance with Proposed site plan, produced by Hierarchy Group ~~Context Architects~~, dated 28/08/2025~~17/06/2022~~, project H2562~~21041-1, Drawing number AB-A1020~~. The formation shall include kerbing and or channelling to contain stormwater runoff as well as catch pits and culverts as required to control and direct the discharge of stormwater runoff.

(m) Secure the conditions below by way of a Consent Notice issued under section 221 of the Act, to be registered against the titles of the affected allotments. The costs of preparing, checking and executing the Notice shall be met by the consent holder:

(i) Without the prior approval of the Council, no building shall be erected, nor any works which increase impermeable surfaces be undertaken, nor any planting or structure placed which may create a flow obstruction, on any area of the site which has been proposed as a secondary / overland (Q100) flow path as identified in the overland flood management plan and as shown on the as-built drawing submitted to satisfy condition 3(b) and 4 (d) of RC 2220905. All Lots

(ii) The lot owner shall maintain on an ongoing basis the stormwater drainage system including stormwater detention tanks, and flow attenuation devices, and/or other such devices required to provide for the proper operation of the stormwater system. All Lots

(iii) Allotments contain areas which are identified by Council as likely to be flood susceptible, wherein there is a potential risk to life, property and the environment due to natural hazard processes. Any built development intended to be undertaken within these areas may require a suitably qualified and experienced engineer's report to be lodged, to set a floor level safe

from a 1% AEP including an allowance for climate change flood event and certifies that the sub-floor design is able to withstand, the proposed flood floor levels. All Lots

(iv) Private services located within the JOAL easement in gross are to be maintained and located a minimum of 1.5m from Council's sewer drainage. Council is to be notified if there is damage to pavement or Council assets within easement. Permission is to be obtained for any repair works that require excavation. The consent holder is also responsible for the repair and reinstatement of any underground services damaged as a result of works. If repair works are not completed to the satisfaction of Council's Asset Manager or designate, Council may instruct its infrastructure contractor to complete the works and recover any costs from owners. ~~Lots 1-3~~ All Lots

(v) All buildings will require foundations specifically designed by a Chartered Professional Engineer in accordance with design parameters specified by a suitably qualified Geotechnical engineer or identified in the Geotechnical investigation report, produced by Land Tech Consulting, dated 22 January 2021, project ref LTA 20293. The foundation design details shall be submitted in conjunction with the Building Consent application. All Lots

Land Use

Pursuant to Section 108 of the Act, this land use consent is granted subject to the following conditions:

(1) The activity shall be carried out in accordance with the approved plans prepared by Hierarchy Group ~~Context Architechs~~, referenced H2562 ~~Kainga Ora 59-1 Allen Bell Drive, Kaitaia~~, and attached to this consent with the Council's "Approved Stamp" affixed to them.

~~(i) Proposed Site Plan, Rev: RC-A~~ Bulk and Location Plan – Ground Floor, Rev A.

~~(ii) RC Floor Plan, Drawing AB-BN5-A1100 Rev: RC-A~~ Bulk and Location Plan – First Floor, Rev A.

~~(iii) RC Floor Plan, Drawing AB-BV3-A1100 Rev: RC-A~~ Bulk and Location Plan – Roof Plan, Rev A.

~~(iv) RC Floor Plan, Drawing AB-HV3-A1100 Rev: RC-A~~ Bulk and Location Plan – Area Plan, Rev A.

~~(v) Site Elevations, RC-A, Drawing AB-A1200~~

~~(vi) Site Elevations, RC-A, Drawing AB-A1201~~ General Arrangement HIRB, Rev A.

Visual Amenity

(vii) ~~Exterior Finishes Elevations, drawing AB-A1202, Rev: RC-A~~ General Arrangement Elevations, (0-16.01-0.16.02, Rev A.

(viii) ~~Landscaping GA, Drawing AB-A8001, Rev: RC-A~~ General Arrangement Landscape Plan, Drawing AR105956/02

(ix) ~~Planting Plan, Drawing AB-A8100, Rev: RC-A~~ Planting Plan, Drawing AR105956/03

(x) ~~Indicative plant schedule, Drawing AB-A8101, Rev: RC-A~~ Planting Details, Drawing AR105956/05

(xi) ~~Fencing & Furniture Plan, Drawing, AB-A813, Rev: RC-A~~ Fencing Plan, Drawing AR105956/08

Site Suitability

(2) The consent holder shall prior to occupation of the buildings ensure that minimum finished floor heights are determined for buildings within development in accordance with McKenzie & Co Engineering Infrastructure Report ~~WSP Memorandum~~ dated August 2025 ~~2 May 2022~~ ~~produced by Sam Wilson~~. A licensed cadastral surveyor shall provide confirmation of actual and design finished floor levels to Council's Resource Consent Monitoring Officer or designate.

Stormwater

~~(3) The consent holder shall not commence construction or site works within the development until the existing council stormwater drainage asset within the property is removed or decommissioned. Unless approval to commence work is obtained from Council's Asset Manager or designate. (Note: Decommissioning of asset is at Council's discretion as part of planned works)~~

(4) Consented Impermeable surface coverage

	Total Area (m2)	Area of impermeable surfaces (m2)	Percentage of impermeable surfaces
Lot 1 + 1/2~~3~~ ~~J~~COAL	~~379~~ 422.2	~~223~~ 221	~~59%~~ 53
Lot 2 +1/2~~3~~ ~~J~~COAL	~~215~~ 301	~~131~~ 166	~~61%~~ 56
Lot 3 + 1/4~~3~~ ~~J~~COAL	~~259~~ 241	~~136~~ 108	~~53%~~ 45
Lot 4 + 1/4 ~~J~~COAL	~~183~~ 173	~~92~~ 95	~~50%~~ 55
Lot 5 + 1/4 ~~J~~COAL	~~156~~ 173	~~87~~ 94	~~56%~~ 55
Lot 6 + 1/4 ~~J~~COAL	~~366~~ 247	~~171~~ 93	~~47%~~ 38

(5) The consent holder shall ensure that the stormwater connections ~~mitigation system approved under condition 3(b)(iv) is~~ are installed~~,~~ and operational ~~and connected to building roof stormwater outlets~~ within one month of the installation of each buildings roof.

(6) The consent holder shall ensure for the duration of this consent that all storm water originating from roofs, paved surfaces and tank overflow is to be piped to, and discharged into, the stormwater ~~mitigation control and disposal system~~ network in general accordance with the approved stormwater management plan submitted to meet condition 3(b)(iv).

(7) The Consent Holder shall on completion of works submit to Council's Resource Consent Monitoring officer, final "as built" plans that show the siting of all private drainage components and provide a construction certificate (PS4 or 1C) confirming that private works have been monitored by a suitably qualified engineer and constructed in general accordance with the approved drawings submitted to meet condition 3(b)(iv).

Access

(8) The Consent holder shall for the duration of this consent ensure that the single carparks located within lots ~~2-5~~ 100 and 101 are marked, kept available for vehicle parking and free from structures and obstructions preventing off street parking.

(9) The consent holder shall for the duration of this consent ensure that manoeuvring areas within the shared JOAL remain free of vehicles or obstructions. Manoeuvring Areas are to be marked or delineated with different coloured pavement and "no parking" signage installed.

(10) In accordance with section 128 of the Resource Management Act 1991, the Far North District Council may serve notice on the consent holder of its intention to review ongoing conditions 5 and 6 of this consent. The review may be initiated for any one or more of the following purposes:

(i) To deal with any adverse effects on the environment that may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or to deal with any such effects following assessment of the result of the Far North District Council or duly delegated Council Officer monitoring the state of the environment in the area.

(ii) To require the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

(iii) To deal with any inadequacies or inconsistencies the Far North District Council or duly delegated Council Officer considers there to be, in the conditions of the consent, following the establishment of the activity the subject of this consent.

(iv) To deal with any material inaccuracies that may in future be found in the information made available with the application (notice may be served at any time for this reason).

(v) The consent holder shall meet all reasonable costs of any such review.

AR105956

59-61 ALLEN BELL DRIVE
KAITAIA
NORTHLAND

General Arrangement Sheet List

No.	Name	Rev.
0-00.00	Cover Sheet	A
0-11.01	Existing Site Plan	A
0-11.02	Axonometric View	A
0-11.03	Bulk and Location Plan - Ground Floor	A
0-11.04	Bulk and Location Plan - First Floor	A
0-11.05	Bulk and Location Plan - Roof Plan	A
0-11.10	Bulk and Location Plan - Area Plan	A
0-16.01	General Arrangement Elevations	A
0-16.02	General Arangement Elevations	A
0-16.05	General Arrangement HIRB	A
0-17.02	Shading Diagram - Spring Equinox	A
0-17.03	Shading Diagram - Summer Solstice	A
0-17.04	Shading Diagram - Winter Solstice	A

Status:
RESOURCE CONSENT

Hierarchy Group.

Issue Date: **26/08/25**

Drawn By: **SW** Checked By: **TF**

Scale: **@ A1** Project No: **H2562**

Sheet Name:
Cover Sheet

Sheet No: 0-00.00 Rev No: A

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SCALE SUMMARY

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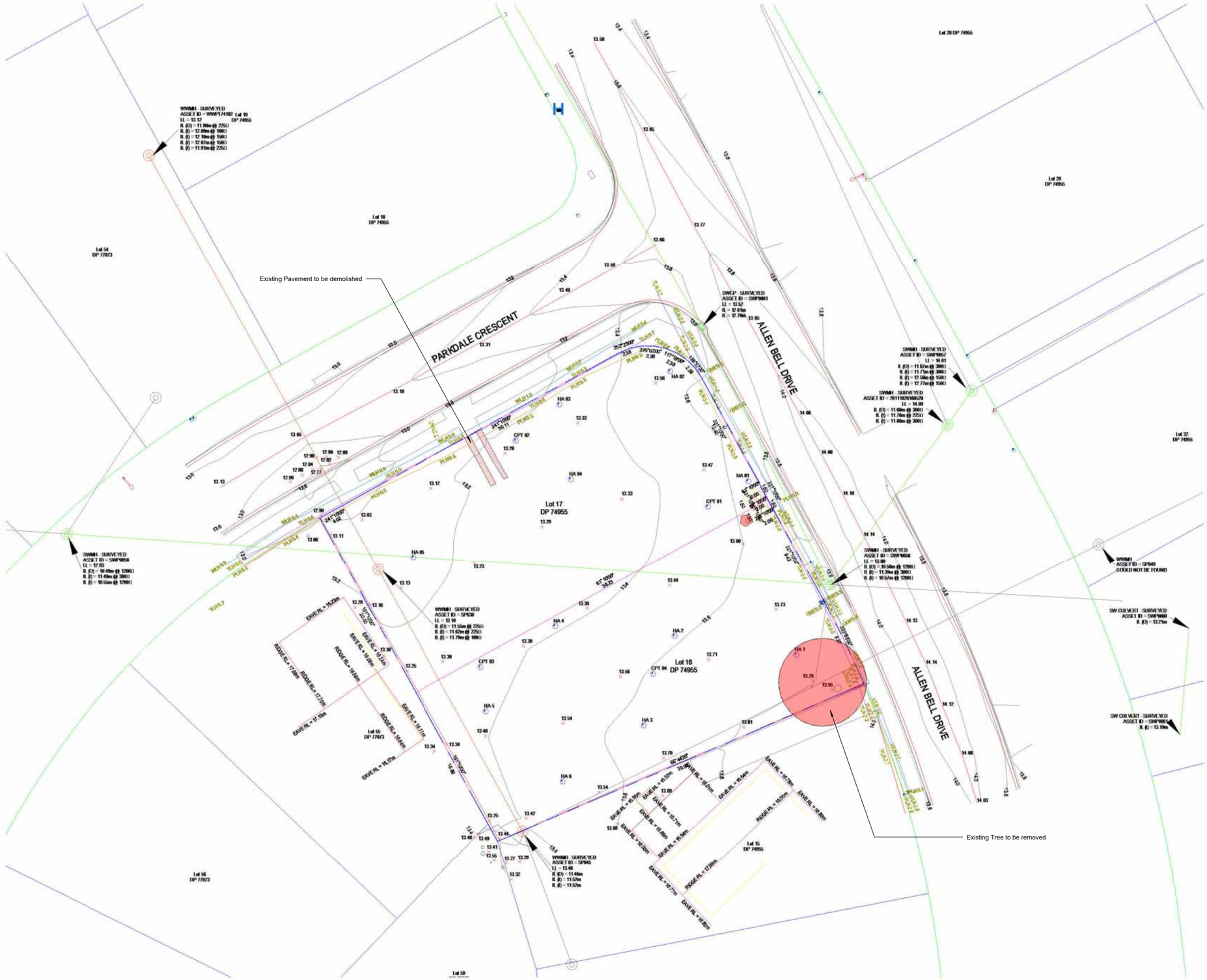

1 **Existing Site and Demolition Plan**
Scale 1 : 200 @ A1

GENERAL DEMOLITION NOTES

1. The demolition drawings are to be read in conjunction with the relevant specification sections.

2. All demolition work is to be carried out in accordance with NZDAA best practice guidelines for demolition.

3. All existing building information is to be read in conjunction with the surveyors drawings.

4. All demolition work is to be carried out in accordance with any of the local council conditions. The main contractor is to check and verify conditions that may apply prior to the commencement of demolition.

5. The words 'demolish' and 'demolition' means to pull or knock down and clear off the site completely the parts of the building required to be pulled or knocked down.

6. Ensure all existing services are located and identified prior to commencing demolition. All services that are not required to be maintained during the demolition work shall be properly disconnected and sealed off before any demolition work commences.

7. Remove all redundant services associated accessories/cap/make good all redundant drainage associated with demolition works.

8. Additional demolition work may be required to be carried out that has not been identified in red in the demolition drawings in order to construct the new works. The tenderer/contractor to visit the site to confirm the exact scope of demolition work required to be carried out and any additional work is to be included in the tender price. The demolition drawings are to be read in conjunction with the drawings associated with the proposed works.

9. Contractor to notify superintendent immediately in the event of finding materials suspected to contain asbestos.

10. Site fences and hoarding shall be in accordance with NZBC F5/AS1 Construction and Demolition Hazards. Provide and maintain a site fence of 2 metres high from ground level on the side accessible to the public.

10.1 Security fences shall be provided and all required precautionary measures taken as may be necessary to prevent unauthorized entry to the demarcated area of works. Notices displaying the words 'DANGER DEMOLITION IN PROGRESS' or similar shall be be fixed to the fencing at appropriate places to warn the public. Provision shall be made for ready access to the site by emergency services personnel in the event of fire or accident. Contractor to confirm precautionary measures prior to commencement of demolition.

11. The effects of vibration and dust shall be minimized, as far as practicable, by selecting demolition methods and equipment appropriate to the circumstances.

12. No part of any structure shall be left unsupported or unattened in such a condition that it may collapse or become dangerous. Precautions shall be taken to ensure that the stability of all parts of the structure and the safety of persons on and outside the site will be maintained in the event of sudden and severe weather changes.

13. Walls shall not be laterally loaded by accumulated debris or rubble, to the extent that they are in danger of collapse.

14. Dust generated during stripping, or during the breaking down of the building fabric to removable sized pieces, shall be kept damp until it is removed from the site or can be otherwise contained.

15. Precautions shall be taken to minimize the spreading of mud and debris by vehicles entering and leaving the site. Contractor yo take adequate measures to minimize noise levels as part of the construction process.

16. The exact extent of landscaping (both hard (concrete etc.) and soft (vegetation etc.) to be demolished or cut down and removed from site is to be determined on site. The extent of the hard landscaping is to be determined on site. The extent and quantum indicated on this drawing is indicative.

DEMOLITION LEGEND	
Extent of building demolition	
Extent of paving demolition	
Extent of vegetation removed	

SURVEY DISCLAIMER

This drawing has been prepared by Licenced Surveyor solely for the benefit and use by our client in accordance with the terms of our engagement and client instructions.

Hierarchy Group.

Client: Kāinga Ora Homes and Communities

NORTH

Project: AR105956 No: H2562

Address: 59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **As indicated @ A1**

Sheet Name: **Existing Site Plan**
Sheet No: 0-11.01 Rev No: A

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SCALE SUMMARY

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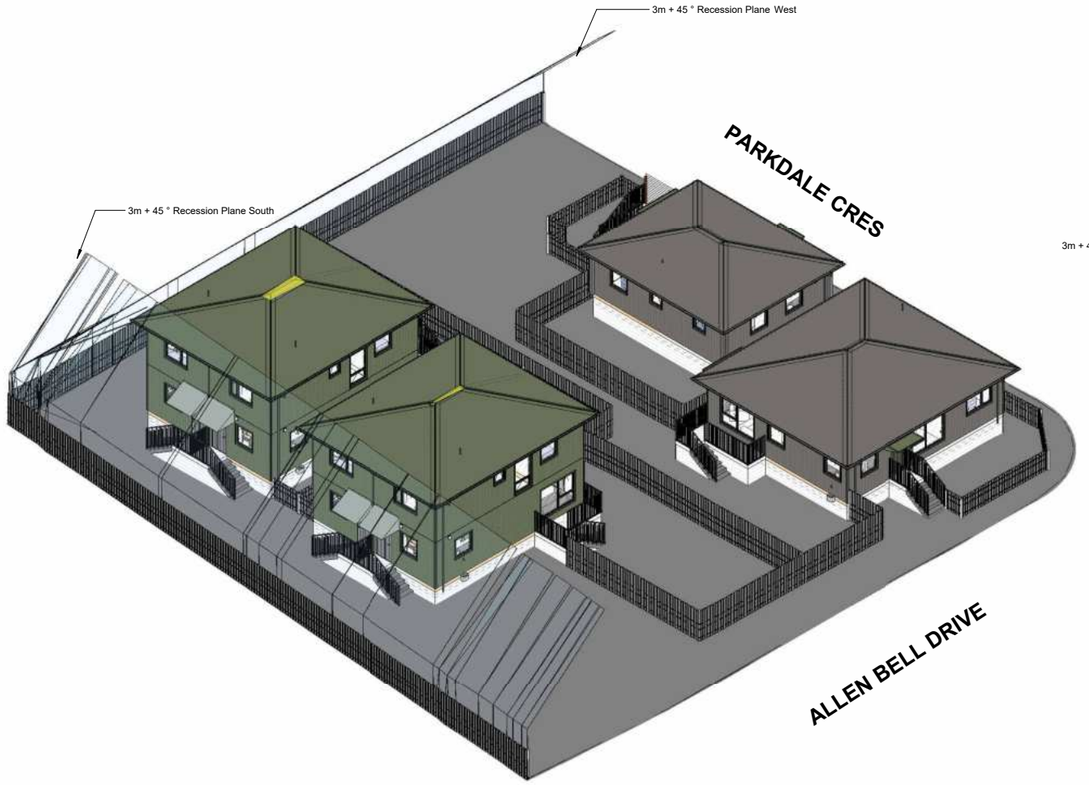
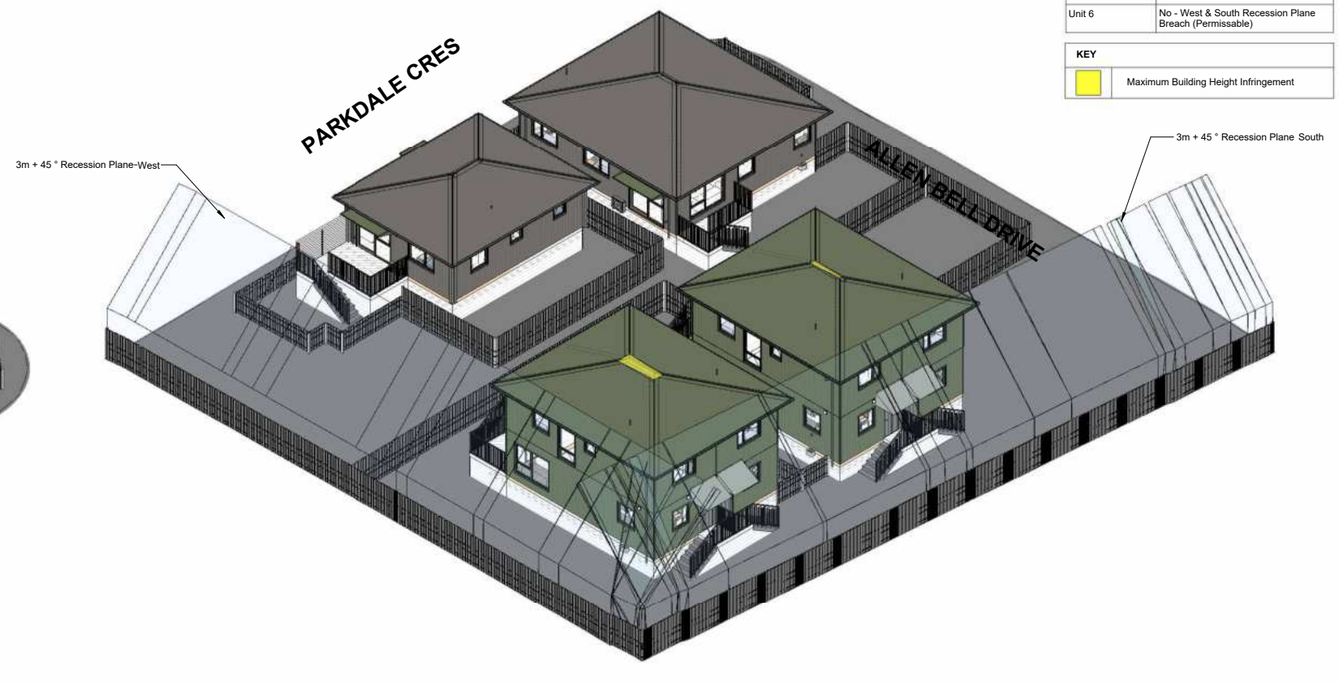


1 **Axonometric View 1**
Scale @ A1



2 **Axonometric View 2**
Scale @ A1

RECESSION PLANES	
Elevation	Description
North	3m Street Setback
South	3m + 45 ° Recession Plane
East	3m Street Setback
West	3m + 45 ° Recession Plane

COMPLIANCE WITH RECESSION PLANES	
Unit 1	Yes
Unit 2	Yes
Unit 3	Yes
Unit 4	Yes
Unit 5	Yes
Unit 6	No - West & South Recession Plane Breach (Permissable)

KEY	
	Maximum Building Height Infringement

Hierarchy Group.

Client: Kāinga Ora Homes and Communities

Project: AR105956
No: H2562
Address: 59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **1 : 100 @ A1**

Sheet Name: **Axonometric View**
Sheet No: 0-11.02
Rev No: A

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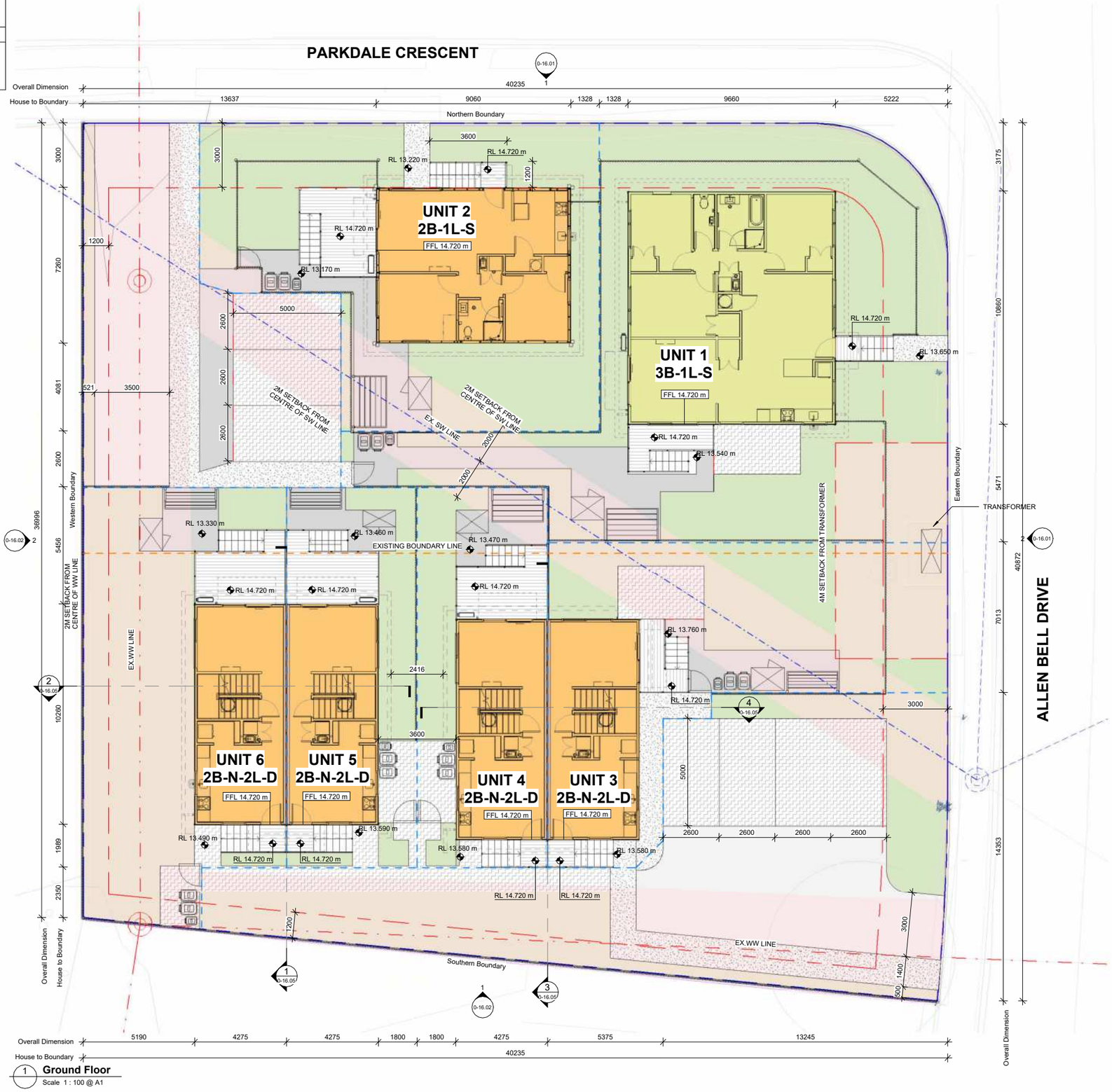


1 **Ground Floor**
Scale 1 : 100 @ A1

HANDRAILS AND RAMPS NOTES

All external steps to have a maximum riser of 180mm and a minimum tread of 300mm with a clear width of 1200mm. All stairs with 3 or more risers require handrails.

Accessible ramps are to be set at a maximum slope of 1:12 with a clear width of 1200mm.
Where the surface of an accessible route is more than 25mm above the adjacent ground, protection is to be provided by a 75 mm high ramp edge.

Balustrades are required to stairs and decks where change of level is more than 950mm. Peak balustrade system as per specification.

LEGAL DESCRIPTION

Address:	59-61 Allen Bell Drive, Kaitaia
Lot / DP / CB	16 & 17 / 74955

ZONING INFO:

Wind Region:	A
Earthquake Zone:	Zone 1
Exposure:	Zone C
Wind Zone:	High
Planning Zone:	Residential Zone
Flood Management Zone:	?

GENERAL NOTES:

All dimensions are nominal and are to be checked on site before commencing work.

Dimensions are showing to cladding face.

All work to comply with the relevant section of the New Zealand Building Code.

Location of water supply, power & phone to be confirmed.

MASTERPLANNING LEGEND

2 Bedroom House:	
3 Bedroom House:	
Permeable Paving:	
Driveway:	
Footpath:	
Lawn Area:	
Landscaping:	
Service & Patio:	
Timber Decking:	
Refuse Bins:	
Washlines	
Letter Boxes:	
New Water Meters:	WM
Lighting Bollard	
Shed	

BULK & LOCATION

Address:	59-61 Allen Bell Drive, Kaitaia	
Total Site Area:	1557.8 m²	
	Provided	**Required**
Parking:	7 bays	7 bays
Building Setback:	>1m	1m
Road Setback:	3m	3m
Building Height:	>8m	8m

Kainga Ora Typology Legend

Unit Number	Typology	GFA
1	3B-1L-S	103.7m²
2	2B-1L-S	103.7m²
3&4	2B-N-2L-D	86.6m2 per unit
5&6	2B-N-2L-D	86.6m2 per unit

LINE TYPES LEGEND

	Site Boundary
	Existing Boundary
	New internal Boundary
	Setbacks

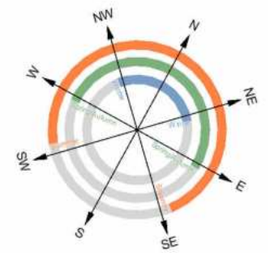
NOTE:

Exposed aggregate (if used on site) Finish to be crushed aggregate and compliant with Slip Resistance requirements of D1

Deck exempt from Building Consent
Proprietary balustrade system as per specification

Site levels for reference only.
Refer to Civil Engineers documentation for grading and site levels.

Refer to Landscape Architects drawing set
For all hard and soft landscaping setout and plant species.



Hierarchy Group.

Client: Kāinga Ora Homes and Communities

NORTH

Project: AR105956 No: H2562

Address: 59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **As indicated @ A1**

Sheet Name: **Bulk and Location Plan - Ground Floor**
Sheet No: 0-11.03 Rev No: A

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SCALE SUMMARY

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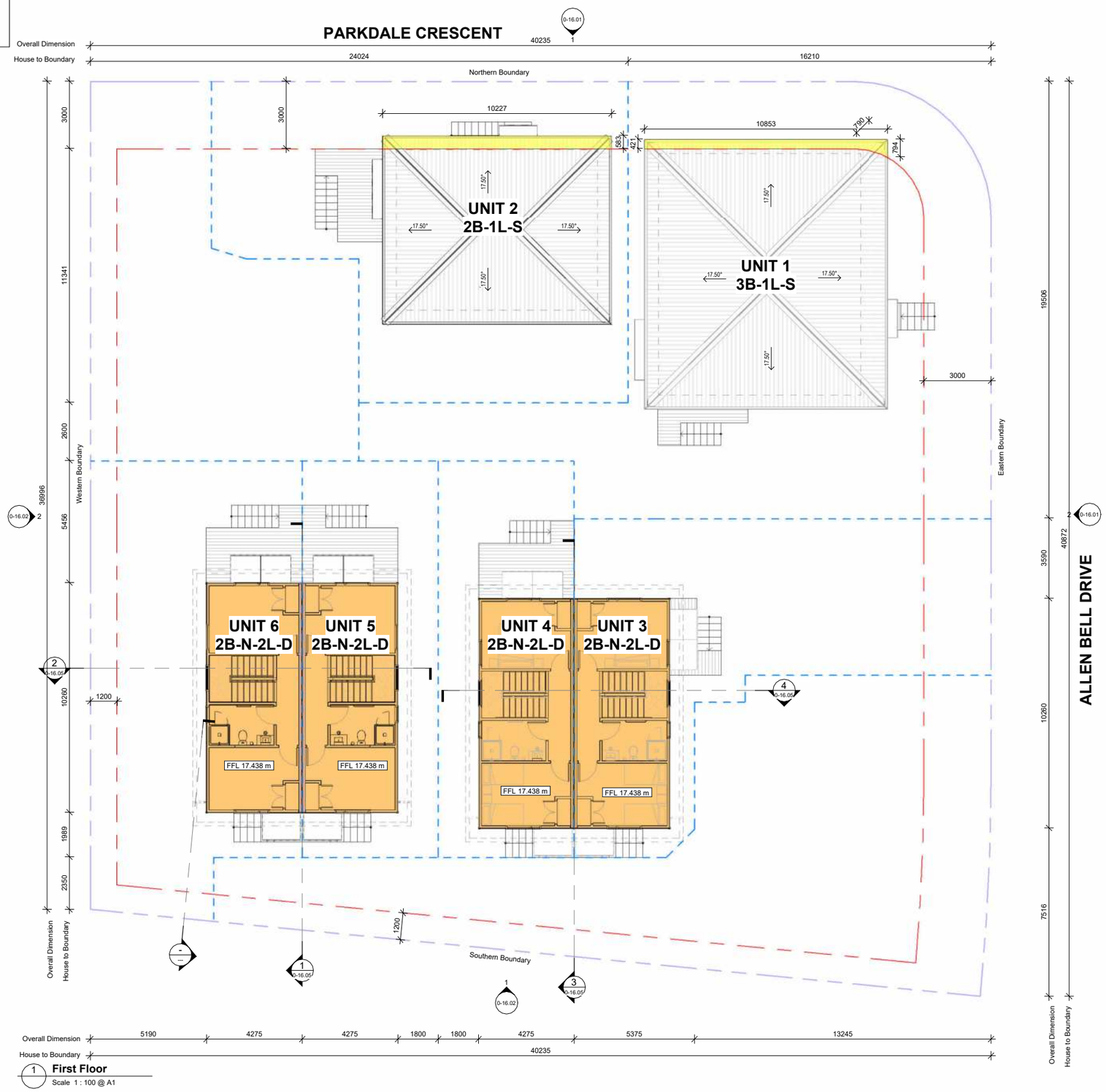


LEGAL DESCRIPTION

Address:	59-61 Allen Bell Drive, Kaitaia
Lot / DP / CB	16 & 17 / 74955

ZONING INFO:

Wind Region:	A
Earthquake Zone:	Zone 1
Exposure:	Zone C
Wind Zone:	High
Planning Zone:	Residential Zone
Flood Management Zone:	?

GENERAL NOTES:

All dimensions are nominal and are to be checked on site before commencing work.

Dimensions are showing to cladding face.

All work to comply with the relevant section of the New Zealand Building Code.

Location of water supply, power & phone to be confirmed.

MASTERPLANNING LEGEND

2 Bedroom House:	
3 Bedroom House:	
Permeable Paving:	
Driveway:	
Footpath:	
Lawn Area:	
Landscaping:	
Service & Patio:	
Timber Decking:	
Refuse Bins:	
Washlines	
Letter Boxes:	
New Water Meters:	WM
Lighting Bollard	
Shed	

BULK & LOCATION

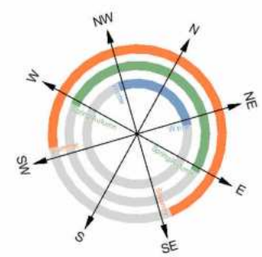
Address:	59-61 Allen Bell Drive, Kaitaia	
Total Site Area:	1557.8 m²	
	Provided	**Required**
Parking:	7 bays	7 bays
Building Setback:	>1m	1m
Road Setback:	3m	3m
Building Height:	>8m	8m

Kainga Ora Typology Legend

Unit Number	Typology	GFA
1	3B-1L-S	103.7m²
2	2B-1L-S	103.7m²
3&4	2B-N-2L-D	86.6m2 per unit
5&6	2B-N-2L-D	86.6m2 per unit

LINE TYPES LEGEND

	Site Boundary
	Existing Boundary
	New internal Boundary
	Setbacks



Hierarchy Group.

Client: Kāinga Ora Homes and Communities

NORTH

Project: AR105956 No: H2562

Address: 59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**

Issue Date: **26/08/25**

Drawn By: **SW** Checked By: **TF**

Scale: **As indicated @ A1**

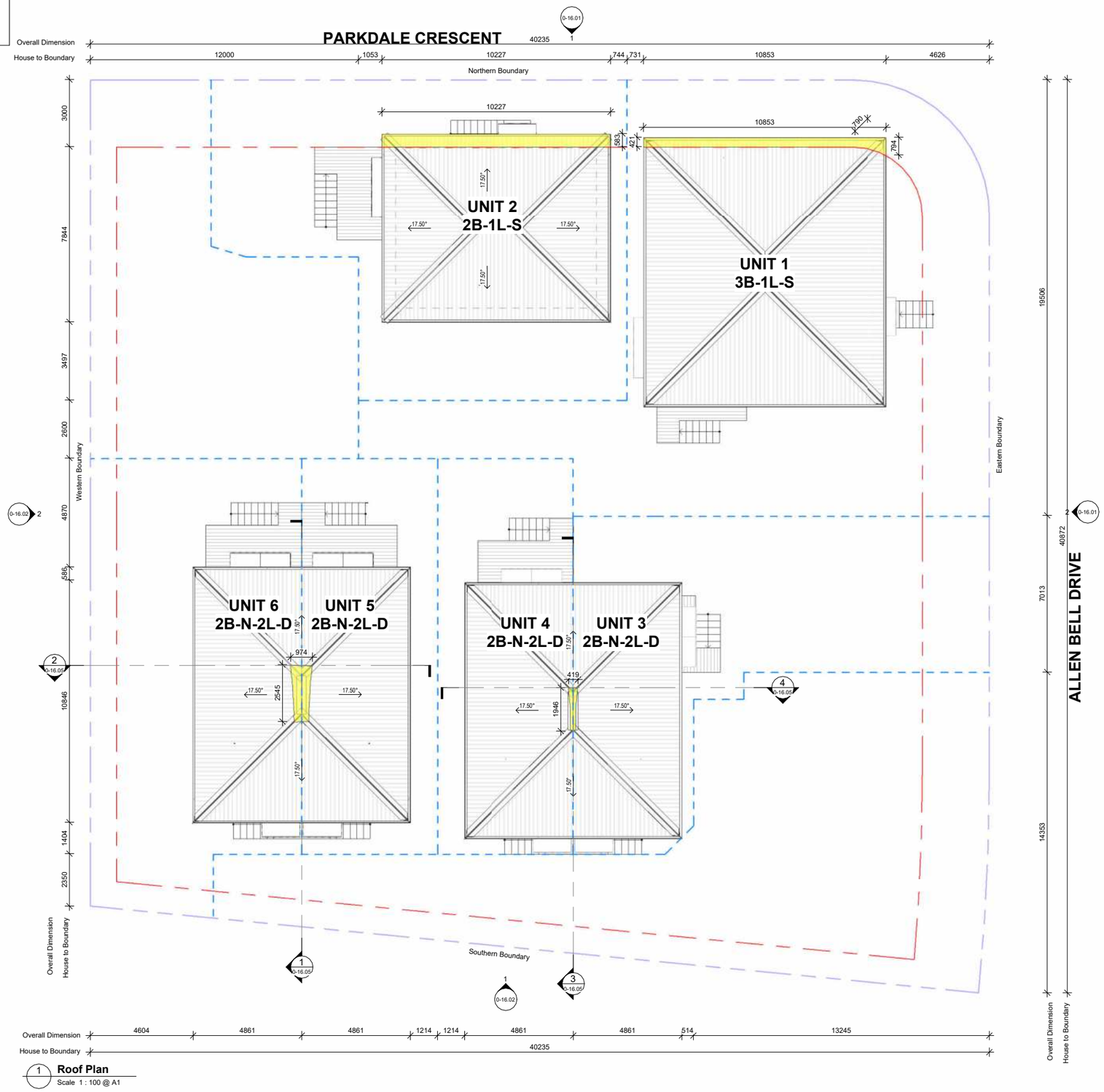
Sheet Name: **Bulk and Location Plan - First Floor**

Sheet No: 0-11.04 Rev No: A

C:\Users\sam\Documents\H2562_Allen Bell Dr 59-61_Option 3_samLCK8Q.rvt

SCALE SUMMARY

1000 @ A1	= 2000 @ A3		100 @ A1	= 200 @ A3	
500 @ A1	= 1000 @ A3		50 @ A1	= 100 @ A3	
250 @ A1	= 500 @ A3		25 @ A1	= 50 @ A3	
200 @ A1	= 100 @ A3		10 @ A1	= 20 @ A3	
150 @ A1	= 300 @ A3		5 @ A1	= 10 @ A3	



1 **Roof Plan**
Scale 1 : 100 @ A1

LEGAL DESCRIPTION

Address:	59-61 Allen Bell Drive, Kaitaia
Lot / DP / CB	16 & 17 / 74955

ZONING INFO:

Wind Region:	A
Earthquake Zone:	Zone 1
Exposure:	Zone C
Wind Zone:	High
Planning Zone:	Residential Zone
Flood Management Zone:	?

GENERAL NOTES:

All dimensions are nominal and are to be checked on site before commencing work.

Dimensions are showing to cladding face.

All work to comply with the relevant section of the New Zealand Building Code.

Location of water supply, power & phone to be confirmed.

MASTERPLANNING LEGEND

2 Bedroom House:	
3 Bedroom House:	
Permeable Paving:	
Driveway:	
Footpath:	
Lawn Area:	
Landscaping:	
Service & Patio:	
Timber Decking:	
Refuse Bins:	
Washlines	
Letter Boxes:	
New Water Meters:	WM
Lighting Bollard	
Shed	

BULK & LOCATION

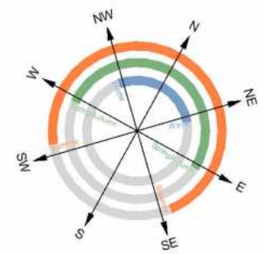
Address:	59-61 Allen Bell Drive, Kaitaia	
Total Site Area:	1557.8 m²	
	Provided	**Required**
Parking:	7 bays	7 bays
Building Setback:	>1m	1m
Road Setback:	3m	3m
Building Height:	>8m	8m

Kainga Ora Typology Legend

Unit Number	Typology	GFA
1	3B-1L-S	103.7m²
2	2B-1L-S	103.7m²
3&4	2B-N-2L-D	86.6m2 per unit
5&6	2B-N-2L-D	86.6m2 per unit

LINE TYPES LEGEND

	Site Boundary
	Existing Boundary
	New internal Boundary
	Setbacks



Hierarchy Group.

Client: Kāinga Ora Homes and Communities

NORTH

Project: AR105956 No: H2562

Address: 59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **As indicated @ A1**

Sheet Name: **Bulk and Location Plan - Roof Plan**
Sheet No: 0-11.05 Rev No: A

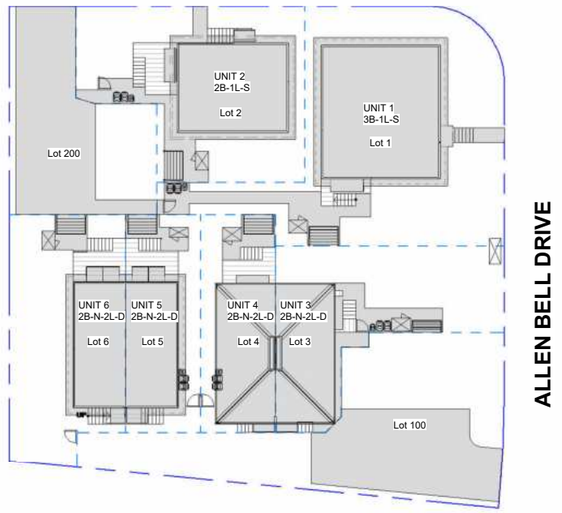
C:\Users\sam\Documents\H2562_Allen Bell Dr 59-61_Option 3_samLCK8Q.rvt

SCALE SUMMARY

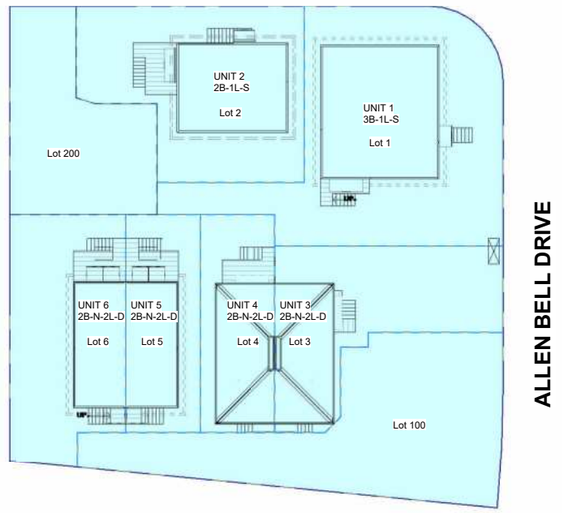
1000 @ A1	= 2000 @ A3		100 @ A1	= 200 @ A3	
500 @ A1	= 1000 @ A3		50 @ A1	= 100 @ A3	
250 @ A1	= 500 @ A3		25 @ A1	= 50 @ A3	
200 @ A1	= 100 @ A3		10 @ A1	= 20 @ A3	
150 @ A1	= 300 @ A3		5 @ A1	= 10 @ A3	

1 Building Coverage
Scale 1 : 250 @ A1

2 Impervious Coverage
Scale 1 : 250 @ A1



4 Site Area Coverage
Scale 1 : 250 @ A1



AREA CALCULATION (SITE)

Site Area (M2)	Net Site Area (M2)	Site Building Coverage (M2)	Site Building Coverage (%)	Building Compliance	Site Impervious Coverage (M2)	Site Impervious Coverage (%)	Impervious Compliance
1557.85m2	1557.85m2	499.39m2	32.05%	YES	771.14m2	49.50%	YES

AREA CALCULATION (PER LOT)

LOT NUMBER	AREA (M2)	Building Coverage (M2)	Building Coverage (%)	Building Compliance	Impervious Coverage (M2)	Impervious Coverage (%)	Impervious Compliance
1	345.67m2	137.97m2	39.91%	YES	170.02m2	49.18%	YES
2	224.31m2	99.53m2	44.37%	YES	114.76m2	51.15%	NO
3	176.14m2	58.43m2	33.17%	YES	82.71m2	46.95%	YES
4	107.56m2	67.73m2	62.96%	NO	69.41m2	64.53%	NO
5	107.56m2	67.50m2	62.75%	NO	68.16m2	63.36%	NO
6	182.03m2	68.23m2	37.48%	YES	67.53m2	37.09%	YES
100	263.16m2	0.00m2	0.00%	YES	94.96m2	36.08%	YES
200	154.41m2	0.00m2	0.00%	YES	103.60m2	68.42%	NO

Hierarchy Group.

Client: Kāinga Ora Homes and Communities

NORTH

Project: AR105956
No: H2562
Address: 59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **1 : 250 @ A1**

Sheet Name: **Bulk and Location Plan - Area Plan**
Sheet No: 0-11.10
Rev No: A

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SCALE SUMMARY

1000 @ A1	= 2000 @ A3		100 @ A1	= 200 @ A3
500 @ A1	= 1000 @ A3		50 @ A1	= 100 @ A3
250 @ A1	= 500 @ A3		25 @ A1	= 50 @ A3
200 @ A1	= 100 @ A3		10 @ A1	= 20 @ A3
150 @ A1	= 300 @ A3		5 @ A1	= 10 @ A3

1 **Elevation North**
0-11.03 Scale 1 : 100 @ A1

2 **Elevation East**
0-11.03 Scale 1 : 100 @ A1

RECESSION PLANES	
Elevation	Description
North	3m Street Setback
South	3m + 45 ° Recession Plane
East	3m Street Setback
West	3m + 45 ° Recession Plane

COMPLIANCE WITH RECESSION PLANES	
Unit 1	Yes
Unit 2	Yes
Unit 3	Yes
Unit 4	Yes
Unit 5	Yes
Unit 6	No - West & South Recession Plane Breach (Permissable)

KEY	
	Maximum Building Height Infringement

ELEVATION LEGEND		
	Wall Cladding Colour	JH Axon Panel Cladding Refer to Colour Schedule
	Roof Cladding Colour	Trapezoidal Metal Roof cladding Refer to Colour Schedule
	Baseboard Colour	Timber Baseboard Refer to Colour Schedule

LINE TYPES LEGEND	
	Site Boundary
	Existing Boundary
	New internal Boundary
	Setbacks

MAXIMUM HEIGHT	
Maximum Height	8.0 Meters

NOTE

Clothes lines, Garden Sheds, Rubbish Bins and Vehicles are excluded from views

Windows and doors flashing colour to match facings or cladding (Not window joinery)

NOTE:

Exposed aggregate (if used on site) Finish to be crushed aggregate and compliant with Slip Resistance requirements of D1

Deck exempt from Building Consent
Proprietary balustrade system as per specification

Site levels for reference only.
Refer to Civil Engineers documentation for grading and site levels.

Refer to Landscape Architects drawing set
For all hard and soft landscaping setout and plant species.

EXTERIOR COLOUR SCHEDULE - UNIT 3,4,5,6

- **Roof, Flashings and Gutter** *Colorsteel* New Denim Blue
- **Downpipes** *Marley RP80 Series* Grey Friars
- **Soffit Lining** *Resene* New Denim Blue
- **Cladding** *Resene* New Denim Blue
- **Joinery** *Dulux Duralloy +Plus Solid* New Denim Blue - Matt
- **Deck Canopy** *Colorsteel* New Denim Blue
- **Front Canopy** *Colorsteel* Titania
- **Aluminium Front Door** *Dulux Duralloy* Titania
- **Entry Decking Composite Wood** *Brown*

EXTERIOR COLOUR SCHEDULE - UNIT 1,2

- **Roof, Flashings and Gutter** *Colorsteel* Titania
- **Downpipes** *Marley RP80 Series* White
- **Soffit Lining** *Resene* Titania
- **Cladding & Baseboard** *Resene* Titania
- **Joinery** *Dulux Duralloy +Plus Solid* Titania - Matt
- **Deck Canopy** *Colorsteel* Titania
- **Front Canopy** *Colorsteel* Mist Green
- **Aluminium Front Door** *Dulux Duralloy* Mist Green - Matt
- **Entry Decking Composite Wood** *Grey*

Hierarchy Group.

Client: Kāinga Ora Homes and Communities

Project: AR105956
Address: 59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND
No: H2562

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **As indicated @ A1**

Sheet Name: **General Arrangement Elevations**
Sheet No: 0-16.01
Rev No: A

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SCALE SUMMARY

1000	@ A1	= 2000 @ A3	100	@ A1	= 200 @ A3
500	@ A1	= 1000 @ A3	50	@ A1	= 100 @ A3
250	@ A1	= 500 @ A3	25	@ A1	= 50 @ A3
200	@ A1	= 100 @ A3	10	@ A1	= 20 @ A3
150	@ A1	= 300 @ A3	5	@ A1	= 10 @ A3

1 **Elevation South**
0-11.03 Scale 1 : 100 @ A1

2 **Elevation West**
0-11.03 Scale 1 : 100 @ A1

RECESSION PLANES

Elevation	Description
North	3m Street Setback
South	3m + 45 ° Recession Plane
East	3m Street Setback
West	3m + 45 ° Recession Plane

COMPLIANCE WITH RECESSION PLANES

Unit 1	Yes
Unit 2	Yes
Unit 3	Yes
Unit 4	Yes
Unit 5	Yes
Unit 6	No - West & South Recession Plane Breach (Permissable)

KEY

Maximum Building Height Infringement

ELEVATION LEGEND

Wall Cladding Colour	JH Axon Panel Cladding Refer to Colour Schedule
Roof Cladding Colour	Trapezoidal Metal Roof cladding Refer to Colour Schedule
Baseboard Colour	Timber Baseboard Refer to Colour Schedule

LINE TYPES LEGEND

	Site Boundary
	Existing Boundary
	New internal Boundary
	Setbacks

MAXIMUM HEIGHT

Maximum Height	8.0 Meters

NOTE

Clothes lines, Garden Sheds, Rubbish Bins and Vehicles are excluded from views

Windows and doors flashing colour to match facings or cladding (Not window joinery)

NOTE:

Exposed aggregate (if used on site) Finish to be crushed aggregate and compliant with Slip Resistance requirements of D1

Deck exempt from Building Consent
Proprietary balustrade system as per specification

Site levels for reference only.
Refer to Civil Engineers documentation for grading and site levels.

Refer to Landscape Architects drawing set
For all hard and soft landscaping setout and plant species.

EXTERIOR COLOUR SCHEDULE - UNIT 3,4,5,6

- **Roof, Flashings and Gutter** *Colorsteel* New Denim Blue
- **Downpipes** *Marley RP80 Series* Grey Friars
- **Soffit Lining** *Resene* New Denim Blue
- **Cladding** *Resene* New Denim Blue
- **Joinery** *Dulux Duralloy +Plus Solid* New Denim Blue - Matt
- **Deck Canopy** *Colorsteel* New Denim Blue
- **Front Canopy** *Colorsteel* Titania
- **Aluminium Front Door** *Dulux Duralloy* Titania
- **Entry Decking Composite Wood** *Brown*

EXTERIOR COLOUR SCHEDULE - UNIT 1,2

- **Roof, Flashings and Gutter** *Colorsteel* Titania
- **Downpipes** *Marley RP80 Series* White
- **Soffit Lining** *Resene* Titania
- **Cladding & Baseboard** *Resene* Titania
- **Joinery** *Dulux Duralloy +Plus Solid* Titania - Matt
- **Deck Canopy** *Colorsteel* Titania
- **Front Canopy** *Colorsteel* Mist Green
- **Aluminium Front Door** *Dulux Duralloy* Mist Green - Matt
- **Entry Decking Composite Wood** *Grey*

Hierarchy Group.

Client: Kāinga Ora Homes and Communities

Project: **AR105956** No: **H2562**

Address: **59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND**

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **As indicated @ A1**

Sheet Name: **General Arangement Elevations**
Sheet No: **0-16.02** Rev No: **A**

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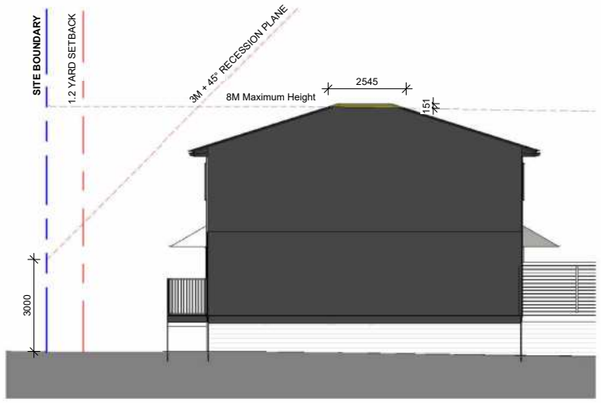
SCALE SUMMARY

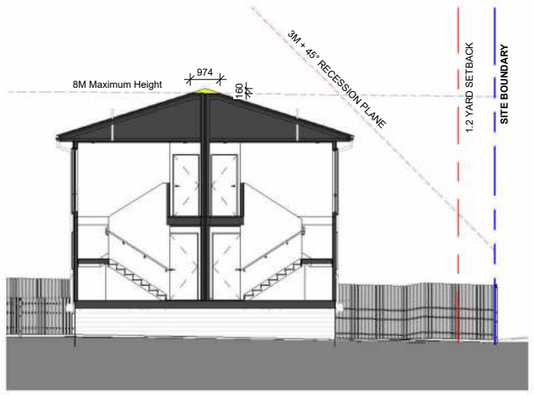
1000 @ A1	= 2000 @ A3		100 @ A1	= 200 @ A3
500 @ A1	= 1000 @ A3		50 @ A1	= 100 @ A3
250 @ A1	= 500 @ A3		25 @ A1	= 50 @ A3
200 @ A1	= 100 @ A3		10 @ A1	= 20 @ A3
150 @ A1	= 300 @ A3		5 @ A1	= 10 @ A3

RECESSION PLANES	
Elevation	Description
North	3m Street Setback
South	3m + 45 ° Recession Plane
East	3m Street Setback
West	3m + 45 ° Recession Plane

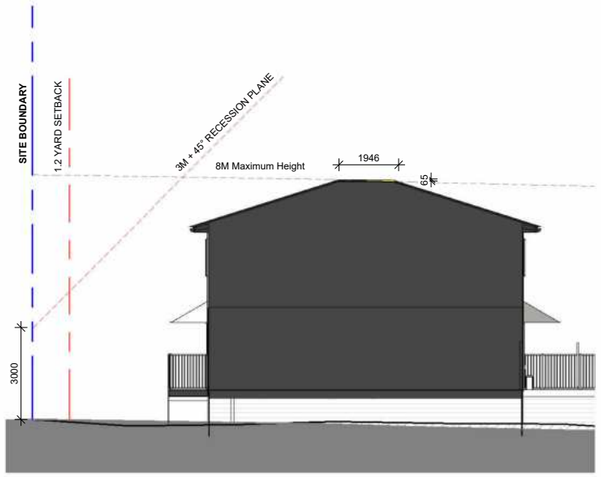
KEY	
	Maximum Building Height Infringement



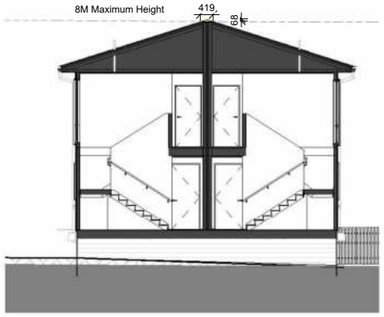
1 0-11.03 **Maximum Height Infringment Diagram Unit 5-6**
Scale 1 : 100 @ A1



2 0-11.03 **Maximum Height Infringment Diagram 2 Unit 5-6**
Scale 1 : 100 @ A1



3 0-11.03 **Maximum Height Infringment Diagram Unit 3-4**
Scale 1 : 100 @ A1



4 0-11.03 **Maximum Height Infringement Diagram 2 Unit 3-4**
Scale 1 : 100 @ A1

Hierarchy Group.

Client: Kāinga Ora Homes and Communities

Project: AR105956
No: H2562
Address: 59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND

Revision Schedule		
Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: RESOURCE CONSENT
Issue Date: 26/08/25
Drawn By: SW
Checked By: TF
Scale: 1 : 100 @ A1

Sheet Name: General Arrangement HIRB
Sheet No: 0-16.05
Rev No: A

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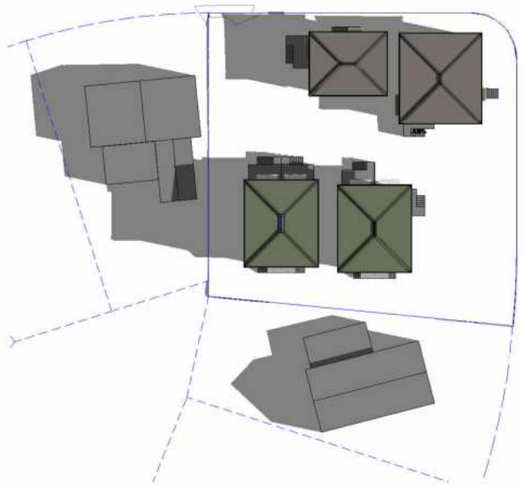
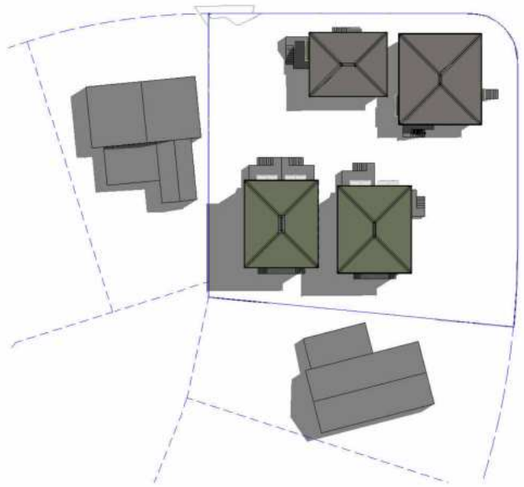
SCALE SUMMARY

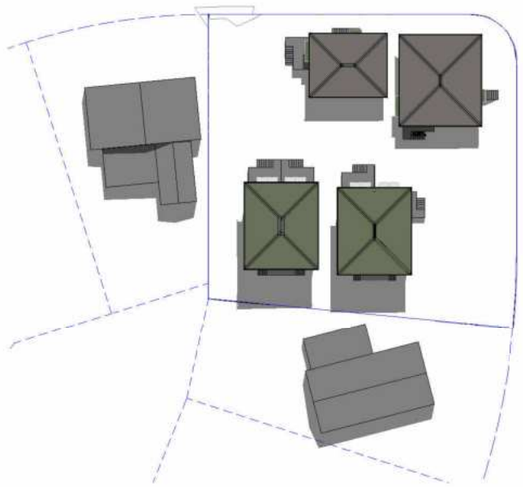
1000	@ A1	= 2000 @ A3	100	@ A1	= 200 @ A3
500	@ A1	= 1000 @ A3	50	@ A1	= 100 @ A3
250	@ A1	= 500 @ A3	25	@ A1	= 50 @ A3
200	@ A1	= 100 @ A3	10	@ A1	= 20 @ A3
150	@ A1	= 300 @ A3	5	@ A1	= 10 @ A3



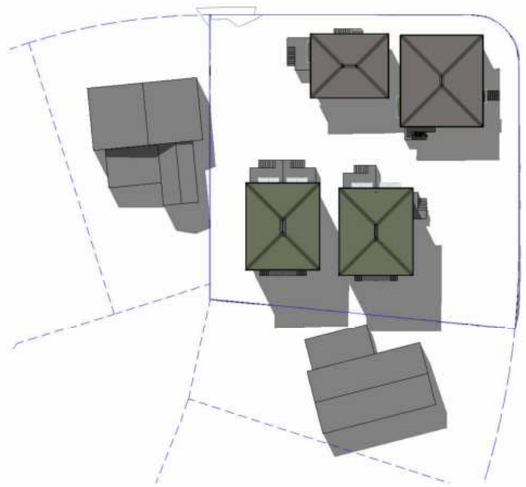
1 **Spring Equinox 9AM**
Scale 1 : 400 @ A1



2 **Spring Equinox 12PM**
Scale 1 : 400 @ A1



3 **Spring Equinox 2PM**
Scale 1 : 400 @ A1



4 **Spring Equinox 4PM**
Scale 1 : 400 @ A1

Hierarchy Group.

Client: Kāinga Ora Homes and Communities

Project: **AR105956**
No: **H2562**
Address: **59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND**

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **1 : 400 @ A1**

Sheet Name: **Shading Diagram - Spring Equinox**
Sheet No: 0-17.02
Rev No: A

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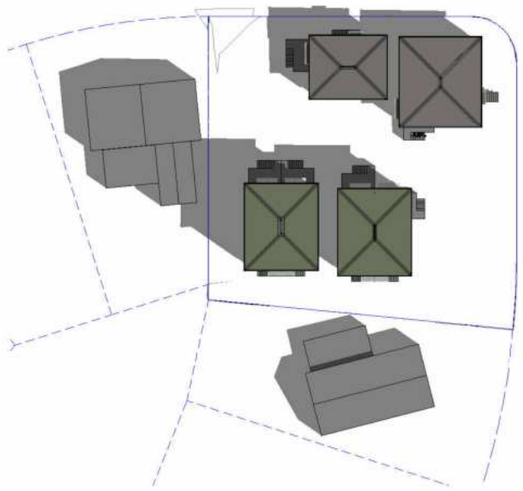
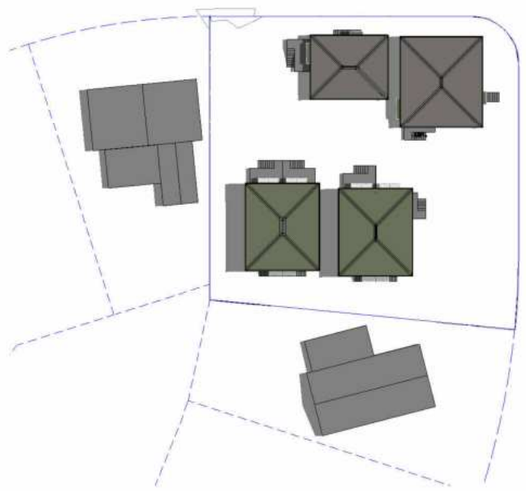
SCALE SUMMARY

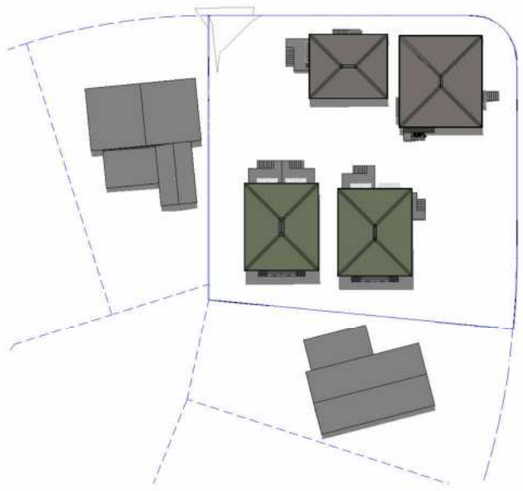
1000	@ A1	= 2000 @ A3	100	@ A1	= 200 @ A3
500	@ A1	= 1000 @ A3	50	@ A1	= 100 @ A3
250	@ A1	= 500 @ A3	25	@ A1	= 50 @ A3
200	@ A1	= 100 @ A3	10	@ A1	= 20 @ A3
150	@ A1	= 300 @ A3	5	@ A1	= 10 @ A3



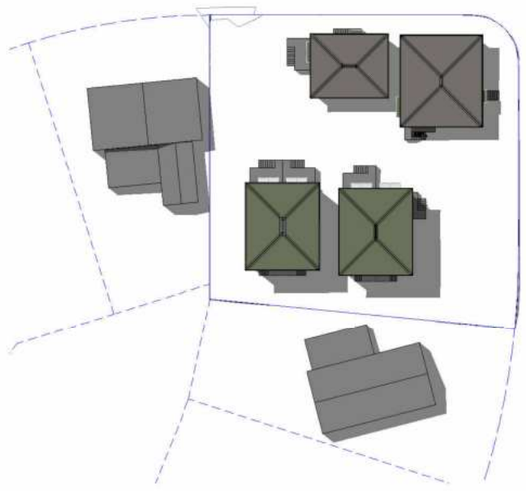
1 **Summer Solstice 9AM**
Scale 1 : 400 @ A1



2 **Summer Solstice 12PM**
Scale 1 : 400 @ A1



3 **Summer Solstice 2PM**
Scale 1 : 400 @ A1



4 **Summer Solstice 4PM**
Scale 1 : 400 @ A1

Hierarchy Group.

Client: Kāinga Ora Homes and Communities

Project: AR105956
No: H2562
Address: 59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND

Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **1 : 400 @ A1**

Sheet Name: **Shading Diagram - Summer Solstice**
Sheet No: 0-17.03
Rev No: A

C:\Users\sam\Documents\H2562_Allen Bell Dr 59-61_Option 3_samLCK8Q.rvt

SCALE SUMMARY

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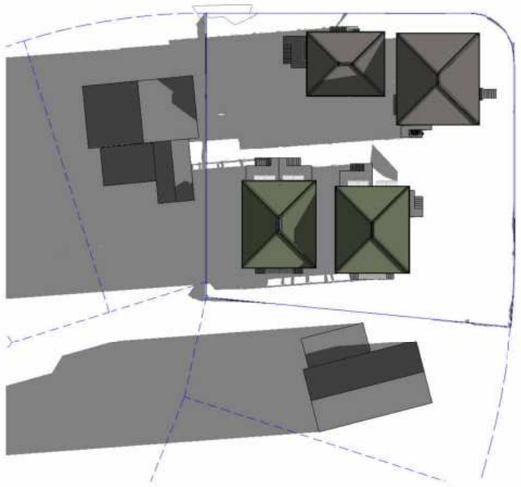
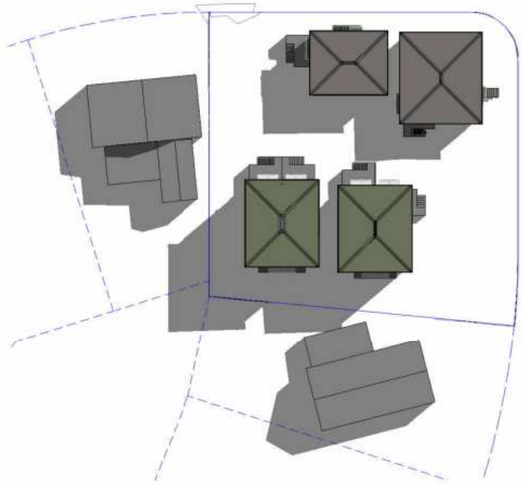
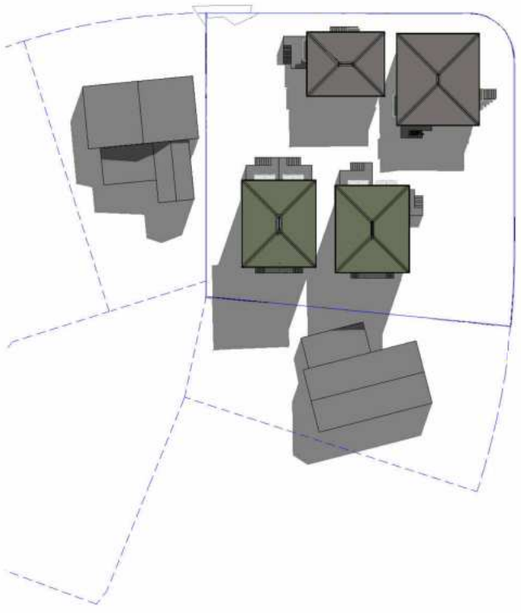
500	@ A1	= 1000 @ A3	50	@ A1	= 100 @ A3
250	@ A1	= 500 @ A3	25	@ A1	= 50 @ A3
200	@ A1	= 100 @ A3	10	@ A1	= 20 @ A3
150	@ A1	= 300 @ A3	5	@ A1	= 10 @ A3



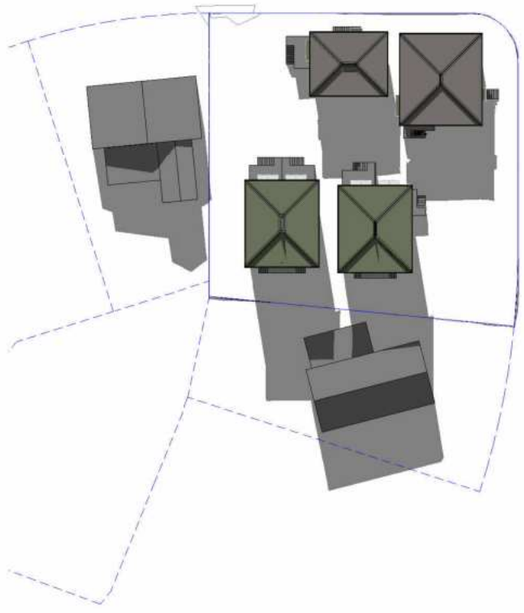
1 **Winter Solstice 9AM**
Scale 1 : 400 @ A1



2 **Winter Solstice 12PM**
Scale 1 : 400 @ A1



3 **Winter Solstice 2PM**
Scale 1 : 400 @ A1



4 **Winter Solstice 4PM**
Scale 1 : 400 @ A1

Hierarchy Group.

Client: Kāinga Ora Homes and Communities

Project: **AR105956**
No: **H2562**
Address: **59-61 ALLEN BELL DRIVE KAITAIA NORTHLAND**

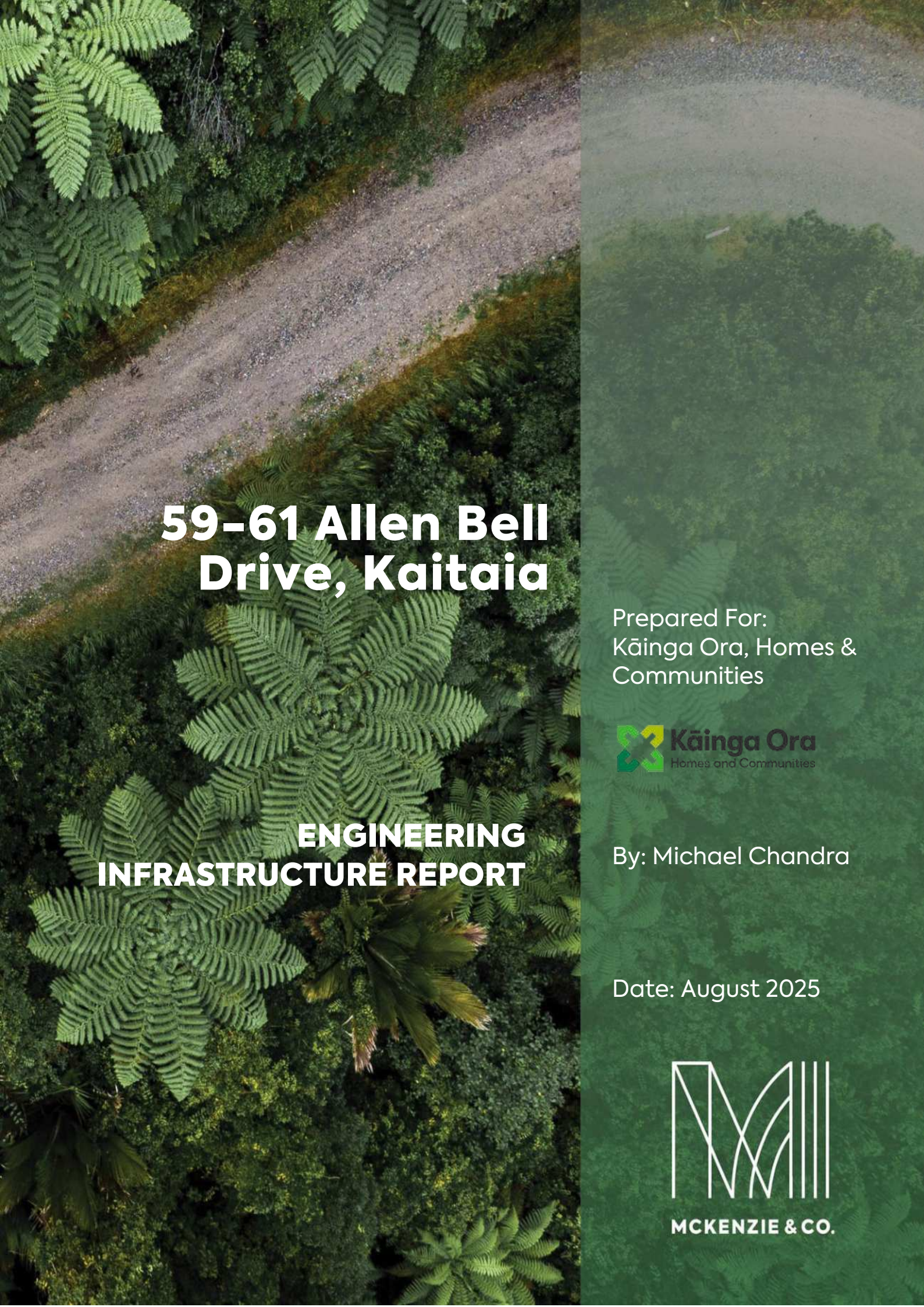
Revision Schedule

Rev.	Description	Date
A	RESOURCE CONSENT	26/08/25

Status: **RESOURCE CONSENT**
Issue Date: **26/08/25**
Drawn By: **SW** Checked By: **TF**
Scale: **1 : 400 @ A1**

Sheet Name: **Shading Diagram - Winter Solstice**
Sheet No: **0-17.04**
Rev No: **A**

C:\Users\sam\Documents\H2562_Allen Bell Dr 59-61_Option 3_samLCK8Q.rvt



59-61 Allen Bell Drive, Kaitaia

ENGINEERING INFRASTRUCTURE REPORT

Prepared For:
Kāinga Ora, Homes & Communities

Kāinga Ora
Homes and Communities

By: Michael Chandra

Date: August 2025

MCKENZIE & CO.

DOCUMENT CONTROL RECORD

Project: MBU1 Development - 59-61 Allen Bell Drive, Kaitaia

Project #: 3792-96

Client: Kāinga Ora, Homes & Communities

Location: 59-61 Allen Bell Drive, Kaitaia

Revision	Date	Originator	Checker	Approver	Description
A	25/08/25	MXC	JAN	JAN	Resource Consent

0 TABLE OF CONTENTS

1 INTRODUCTION

1.1 The Application

McKenzie and Co Consultants Ltd (MCCL) have been engaged by Kāinga Ora, Homes & Communities (the Applicant) to undertake an Engineering Infrastructure and Servicing Assessment for the proposed subdivision at 59-61 Allen Bell Drive, Kaitaia herein referred to as (the site).

1.2 Objective

The aim of this report is to identify the various necessary infrastructure provisions to adequately service the future development proposal to the satisfaction of Far North District Council (FNDC) guidelines in accordance with regulatory engineering standards laid out in the FNDC Engineering Code of Practice (FNDC CoP).

The report will provide information in support of the Resource Consent application and is based on publicly available information which includes information available on Far North District Council GIS mapping services, BeforeUDig, and 3rd party information retrieved from onsite investigations (e.g., topographical survey, geotechnical investigations, etc.).

This Report provides comment pertaining to the existing and future infrastructure relevant to the site and identifies any potential issues that may need to be addressed during the further stages of investigation, design, and planning of the redevelopment, specifically:

- Bulk earthworks associated with creating and forming building platforms, shared and private shared accessways, and parking.
- Environmental Management (i.e., Erosion & Sediment Controls) associated with the earthworks and construction operations.
- Shared Vehicular Accessway construction.
- Stormwater management and disposal.
- Wastewater collection and disposal.
- Potable water supply and including fire-fighting water supply.
- Utilities (e.g., power and communications).

This report should be read in conjunction with the consent application's Engineering drawings, calculations, and other supporting documents referred to in this report.

2 SITE INFORMATION

2.1 Site Summary

Site locality is shown in *Figure 1* below:

Figure 1: Site Location and Zoning (Source: FNDC Map Viewer, June 2023)

Table 1 – Site Summary

EXISTING SITE SUMMARY INFORMATION		
Site Address	•	59-61 Allen Bell Drive, Kaitaia
Legal Description	•	LOT 16 DP74955 & LOT 17 DP 74955
Record of Title	•	NA30D/187 & NA30D/188
Site Area	•	1,558 m^2
District Plan	•	Far North District Plan
Zone	•	Residential Zone
Hazards	•	Subject to 100-year ARI river flooding to R.L 14.01m OTP

2.2 Existing Site Features and Infrastructure

Existing site features and infrastructure located in the vicinity of the site are shown in *Figure 2* below.

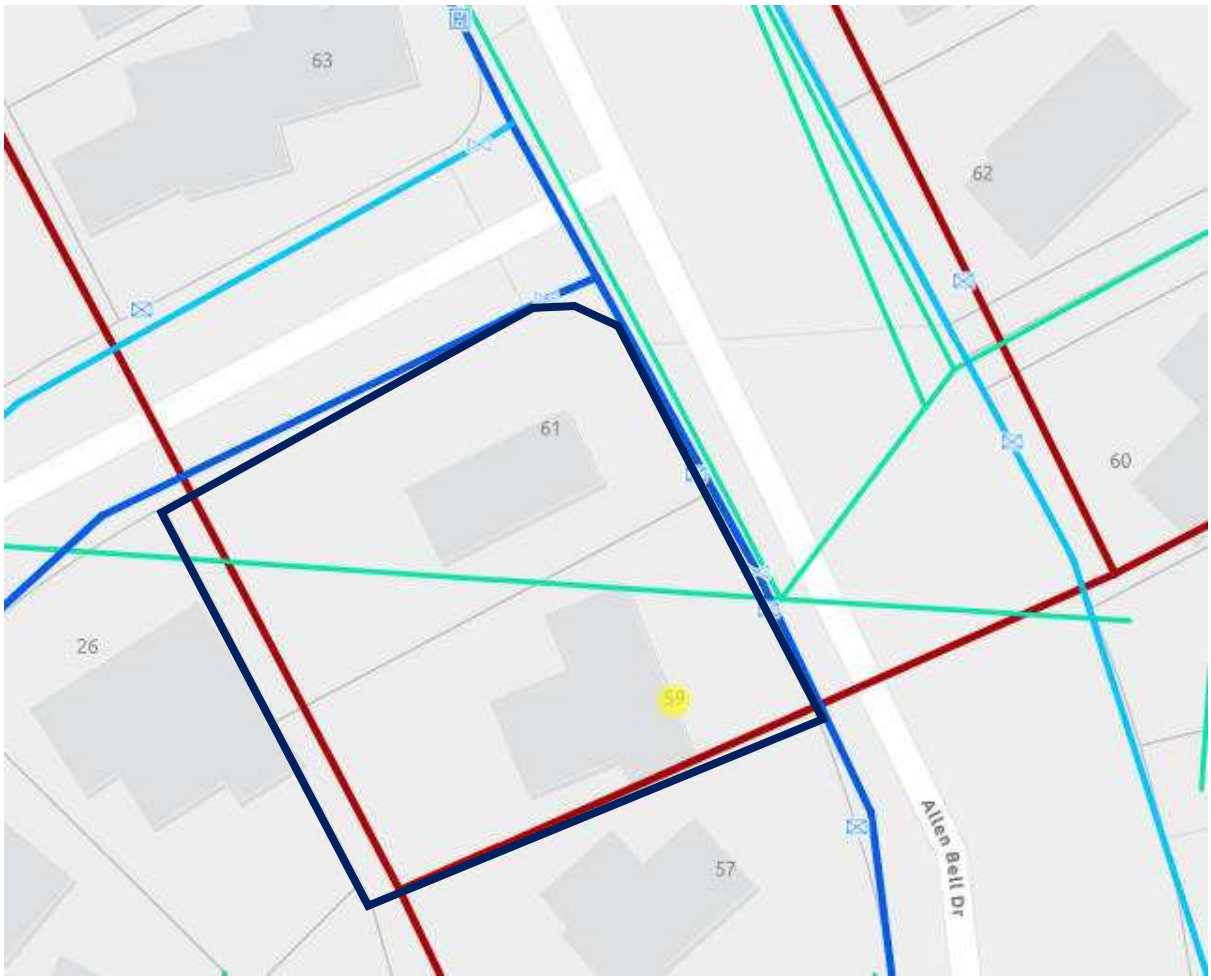


Figure 2 - Existing Site Features (Source: FNDC Map Viewer, Sept 2024)

Table 2 (below) summarises and describes the relevant site features and existing infrastructure located in the vicinity of the site.

Table 2 – Existing Site Features

EXISTING FEATURE	DETAILS
Site Coverage	• Site is currently zoned as Residential Zone and is currently vacant.
Existing Land Formation/Terrain	• The site is generally flat and has an average grade of (3.0%) towards the north-western boundary.

Refer to topographical Survey provided by MCCL Drawings 3792-189-010, 3792-189-011, 3792-189-012, 3792-189-013, 3792-189-014 & 3792-189-015 (Appendix A) for further details.

3 THE DEVELOPMENT PROPOSAL

3.1 Development Overview

Based on the architectural layout provided by Hierarchy Group, the preferred details for the development proposal shown in *Figure 3* below and are available in details in the Architects design pack.

Also refer to MCCL Drawings 3792-96-400 for further development information – (Appendix A).

Figure 3 – Proposed Development (Source: Hierarchy Group)

A summary of the infrastructure required to service the future development is summarised in the *Table 3* below:

Table 3 – Development Proposal Summary

FUTURE FEATURES	DETAILS
Dwelling/Units	• 1 x 3 bed standalone = 3 bedrooms • 1 x 2 bed standalone = 2 bedrooms • 4 x 2 bed double storey duplex = 8 bedrooms
Land Formation/Terrain	• Grading of private accessway formations/car parks/pedestrian paths for pavement construction. • Minor trimming and shaping, up to 300mm of fill in north east section of the site.

4 EARTHWORKS

4.1 Bulk Earthworks

The design best optimises and minimise earthworks and provide appropriate building platforms and accessway with carpark formations. There will be no major cut or fill expected, with only general surface profiling required to shape the site formations.

The proposed formation levels for the development are shown on MCCL Drawing 3792-96-200 and the proposed cut and fill depth contours are shown on MCCL Drawing 3792-96-210 (Appendix A).

We confirm the following summary of bulk earthworks quantities in *Table 4* below:

Table 4 – Proposed Bulk Earthworks Summary

EARTHWORKS SUMMARY	DETAILS
Extent of Bulk Earthworks	• 1,558 m^2
Total Topsoil strip	• 413m^3
Total Cut– Incl. Cuts, trenches, timber pile foundation.	• 225 m^3
Total Fill	• 395 m^3
Total Remediation Area	• 381 m^2
Extent of Bulk Earthworks	• 114 m^3

We note the assessment of the earthworks volumes for the development proposal is a direct comparison to the Existing Ground Level (EGL) information and the proposed Finished Ground Level (FGL) and does not allow for any topsoil volumes, unsuitable material, or any hardfill/concrete

4.2 Site Remediation

Earthworks remediation is required on site per the instructions by the Environmental Engineer Tonkin & Taylor Consultants Ltd. For remediation depths and soil handling requirements refer to the remedial action plan by the environmental engineer.

The approximate remediation volumes have been calculated and cut and fill depth contours have been shown on MCCL Drawing 3792-96-211 (Appendix A).

We confirm the following summary of site remediation quantities in *Table 5* below:

Table 5 – Proposed Bulk Earthworks Summary

EARTHWORKS SUMMARY	DETAILS
Cut Remediation Volume	• 114m^3

4.3 Erosion & Sediment Control

Erosion and sediment control measures are proposed for the construction operation phase as shown on MCCL Drawing 3792-96-230 & 290 (Appendix A). All sediment and erosion control measures will adopt Auckland guidelines as set out in GD05 – "Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region." Implementing these controls will aid to minimise the risk of any adverse effects from sediment laden runoff entering the receiving environment during the construction period.

Mitigation measures for the site are as follows:

- Silt fences as required to form a barrier to the sheet flow where there is the possibility of sediment-laden surface runoff leaving the site.
- Establishment of a stabilised entrance at the location of the proposed accessway.
- Stabilising the building platforms, accessway, and car parking area (i.e. metal/concrete) as soon as practical to ensure safe and tidy access for the following building construction stage of the dwellings.
- Ensure any new cesspits on the proposed accessway and any existing cesspits in the road reserve has geotextile cloth installed across the lid to filter runoff that is entering any private or public stormwater system.
- Monitor the site after any inclement weather events and repair and mitigation devices, as necessary. Regular maintenance of the devices will also be necessary to ensure their effectiveness during bulk earthworks operations.
- Adopt local guidelines around Erosion and Sediment Control Guidelines for Land Disturbing Activities as the standard for all devices and sediment control measures.

5 FLOODING AND OVERLAND FLOW

5.1 Existing Flood Hazards

The information obtained through the Far North District Council GIS shows that the development site is located within the Natural Hazard overlays as shown in *Figure 4* below – this includes river flooding on site.

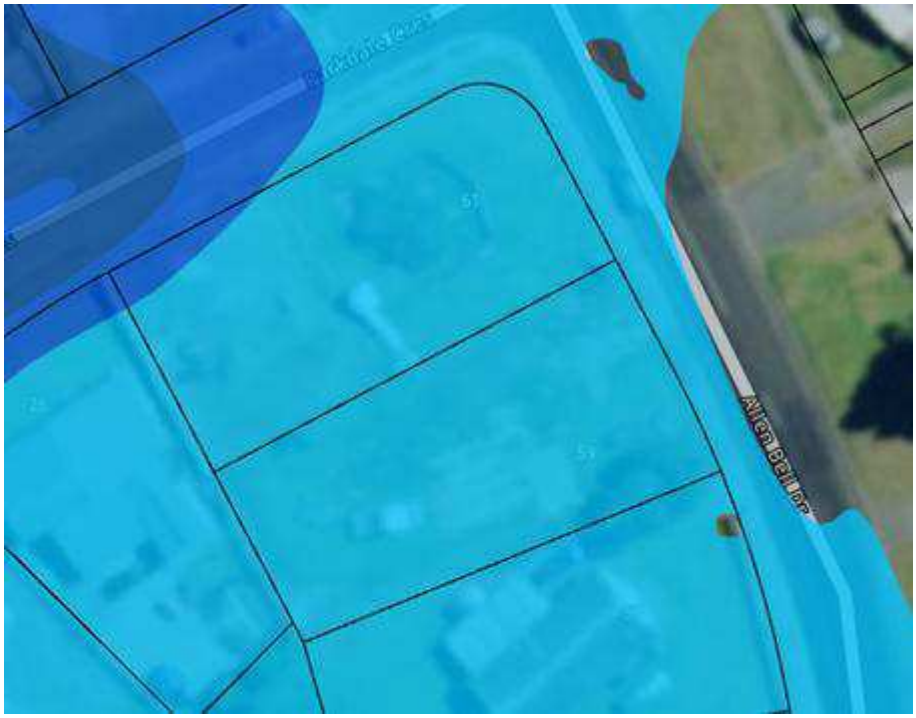


Figure 4: Natural Hazard Overlay (Source: FNDC geomaps – Public, February 2025)

5.2 Recommended Floor Levels

To minimise risk of the flood water entering the proposed building, adequate floor levels have been selected to ensure sufficient freeboard in a 1% AEP storm event. Northland Regional Council has recommended Minimum Floor Levels (MFLs) allow for the recommended freeboard of 500mm, summarised below in *Table 6* and can be seen in Appendix E.

Table 6 – Summary of recommended Minimum Floor Levels provided by Northland Regional Council.

Property Number	MFL (NZVD2016)
59 Allen Bell Drive	14.72m
61 Allen Bell Drive	14.72m

5.3 Existing Stormwater Infrastructure

The existing public stormwater supply infrastructure available to the site is outlined in the summary table below. Also see the summary in *Table 7* below:

Table 7 - Existing Stormwater Summary

EXISTING FEATURE	DETAILS
Existing Network	• An existing public stormwater manhole is located on the southeast of the site frontage on Allen Bell Drive. • A 300DIA stormwater pipe traverses the berm of Lincoln Avenue along the site frontage • A 1200DIA stormwater pipe traverses the middle of the site.
Existing Pipe Capacity	• Stormwater disposal concept will be designed to achieve total site neutrality.
Existing Development Connections	• N/A
Network Condition	• N/A

5.4 Future Stormwater Discharge /Disposal Concept

An assessment of the future stormwater demand and servicing requirements have been carried out in accordance with the FNDC CoP & Stormwater Management Guidelines for the Far North District Council. For the proposed future stormwater layout refer to MCCL Drawing 3792-96-400, (Appendix A) and refer to Stormwater Calculations, (Appendix B). Also see the summary in *Table 8* below:

Table 8 – Future Stormwater Summary

FUTURE FEATURES	DETAILS
Site Area	• 1558m^2
Site Connection/s	• Provide 2 separate lot connections into proposed stormwater line, prior to discharging into the existing 1200mm pipe in middle of site. • Provide 4 separate lot connections into proposed existing manhole in the southeastern corner of the site.
SW Mitigation Concept	• Six 1500L detention tanks.

FUTURE FEATURES	DETAILS
	• All runoff from the accessway and parking pads are to be collected by public catchpits prior to discharging into the public stormwater manhole.
Upgrade/New Network	• N/A
Works Over Approval	• N/A

It is proposed the development of the site is to be designed with complete neutrality for the post-development scenario. The concrete accessway and parking bays will be directed into stormwater catchpits prior to discharging into the proposed drainage network, as shown on MCCL Drawing 3792-96-400, (Appendix A).

6 WASTEWATER

6.1 Existing Wastewater Infrastructure

The existing public wastewater supply infrastructure available to the site is outlined in the summary in *Table 9* below.

Table 9 - Existing Wastewater Summary

EXISTING FEATURE	DETAILS
Downstream Network	• Existing 225mmØ public line running along the northwestern boundary. • Existing 150mmØ public line running along the southern boundary.
Existing Catchment Peak Flow (PWWF)	• 0.16 l/sec
Existing Connections	• 2 Existing dwellings
Existing Pipe Condition	• N/A

6.2 Future Wastewater Development

An assessment of the future wastewater demand and servicing requirements have been carried out in accordance with the FNDC guidelines. For the proposed future wastewater layout refer to Engineering Drawing 3792-96-500, (Appendix A) along with the Wastewater Calculations, (Appendix C). Also see the summary in *Table 10* below:

Table 10 – Future Wastewater Summary

FUTURE FEATURE	DETAILS
Downstream Network	• Existing 225mmØ public line running along the northwestern boundary. • Existing 150mmØ public line running along the southeastern boundary.
Future Peak Flow (PWWF)	• 0.65 l/sec
Difference in Development Peak Flow (PWWF)	• 0.49 l/sec increase
Development Connection/s	• 6 new connections to the new network
Upgrade/New Network	• 2 new connections to be connected directly to the existing 225mmØ wastewater line. • 4 new connections to be connected directly to the existing 150mmØ wastewater line.
Works Over Approval	• NA

7 WATER SUPPLY

7.1 Existing Water Supply Infrastructure

The existing public water supply infrastructure available to the site is outlined in the summary in

Table 11 below.

Table 11 - Existing Water Supply Summary

EXISTING FEATURE	DETAILS
Available Public Supply	• 150mmØ AC pipe in berm of Allen Bell Drive.
Site Connections	• 2 existing metered connection from 150mmØ GI rider main.
Capacity	• There is enough capacity for our development, confirmed by council. Refer to Appendix F.
Available Fire Hydrant	• 2 Hydrants available within 135m of the site, hence, complies with NZS PAS4509:2008.

EXISTING FEATURE	DETAILS
Fire Fighting Water Supply Classification	• FW2 in accordance with NZS PAS4509:2008. FNDC has indicated no known capacity issues, hence assuming adequate pressure and flow available.

7.2 Proposed Water Supply

An assessment of the future water demand and servicing requirements have been carried out in accordance with the FNDC guidelines. For the proposed future water layout refer to Engineering Drawing 3792-96-600 (Appendix A) along with the Water demand Calculations, (Appendix D). Also see the summary in *Table 12* below:

Table 12 - Future Water Supply Summary

FUTURE FEATURE	DETAILS
Peak Development Demand	• The existing pressure of the 150mmØ GI main is known to have adequate capacity to cater for our developments, therefore, no pressure testing is required for water main before the commencement of works.
Site Connection/s	• 2 existing water connections are to be relocated and reused if suitable. • 1 water meter with 1 individual metered residential connection are required on Parkdale Crescent. • 1 water meter bank manifold with 4 individual metered residential connections are required on Allen Bell Drive.
Public main work requirements	• New connections by FNDC approved contractor

8 UTILITIES

8.1 Existing Utilities

The existing utility infrastructure available to the site is outlined in *Table 13* below.

Table 13 - Existing Utility Services

EXISTING FEATURE	DETAILS
Power Supply	• Yes, underground power line
Telecommunications	• Yes, above and below ground
Gas	• No, there is no gas reticulation

8.2 Proposed Development infrastructure

We envisage that suitable connection to both power and telecommunications (i.e., underground) can be made to service the future dwellings; however, this would be subject to detailed design and installation by each independent utility provider. A nominal utilities design has been provided for feasibility and for contractors pricing. Refer to Engineering Drawing 3792-96-800 (Appendix A).

9 COMMON ACCESS

9.1 Existing Access

Access to the existing properties is currently via 1 vehicle crossings off Allen Bell Drive & 1 vehicle crossing off Parkdale crescent.

9.2 Future Access

The existing vehicle crossing serving LOT 16 DP74955 and LOT 17 DP 74955 will be removed, with footpaths, kerbs and berms reinstated. It is proposed to construct 1 new residential vehicle crossing to form COAL 1 which gains access from Parkdale Crescent and 1 new crossing to form COAL 2 which gains access from Allen Bell Drive. The vehicle crossing will be constructed to FNDC CoP. Refer to Engineering Drawing 3792-96-300 (Appendix A).

10 CONCLUSION

This report has been prepared for Kāinga Ora Homes & Communities for the use of a Resource Consent application.

McKenzie and Co Consultants Ltd have carried out the necessary assessments and have deemed that with the appropriate engineering design for infrastructure as discussed in this report, the future development proposal can proceed with less than minor effects on the environment and surrounding properties. That the proposed stormwater, wastewater, and

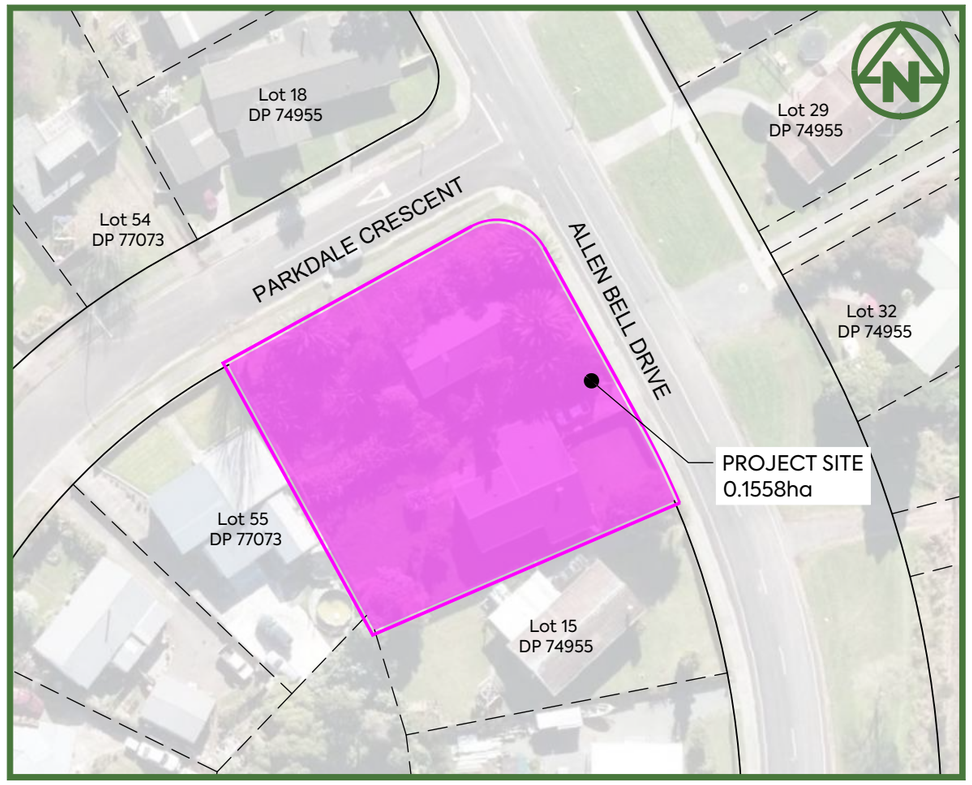
water supply infrastructure is sufficient to service the proposed subdivision. Furthermore, provisional consideration has also been taken as part of the Stormwater design to provide stormwater mitigation to ensure that site can achieve the pre-development discharge rates under the increased impervious areas for this development.

In summary, this infrastructure report concludes that the proposed development can be adequately serviced.

APPENDIX A – ENGINEERING DRAWINGS

MCKENZIE & CO.

DWG No.	DRAWING NAME	REV.
3792-96-000	COVER PAGE - DRAWING REGISTER AND SITE LOCALITY PLAN	A
3792-96-001	STANDARD NOTES PLAN	A
3493-189-010-014	TOPOGRAPHICAL SURVEY LTOS 16 AND 17 DP 74955 SHEET 1 -5	A
3493-189-100	LOT 1 TO 6, 100 & 101 BEING A SUBDIVISION OF LOTS 16 & 17 DP 74955	A
3792-96-200	PROPOSED EARTHWORKS FINISHED CONTOURS OVERALL PLAN	A
3792-96-210	PROPOSED EARTHWORKS CUT / FILL LAYOUT OVERALL PLAN	A
3792-96-230	PROPOSED EARTHWORKS EROSION AND SEDIMENT CONTROL OVERALL PLAN	A
3792-96-290	PROPOSED EARTHWORKS EROSION AND SEDIMENT CONTROL DETAILS PLAN - SHEET 1	A
3792-96-300	PROPOSED ROADING LAYOUT PLAN OVERALL PLAN	A
3792-96-310	PROPOSED ROADING LONGITUDINAL SECTION ACCESSWAY 1	A
3792-96-311	PROPOSED ROADING LONGITUDINAL SECTION ACCESSWAY 2	A
3792-96-360	PROPOSED ROADING TYPICAL CROSS SECTIONS SHEET 1	A
3792-96-361	PROPOSED ROADING TYPICAL CROSS SECTIONS SHEET 2	A
3792-96-365	PROPOSED ROADING TYPICAL PAVEMENT DETAILS	A
3792-96-400	PROPOSED DRAINAGE STORMWATER OVERALL PLAN	A
3792-96-410	PROPOSED DRAINAGE STORMWATER LONGITUDINAL SECTION SHEET 1	A
3792-96-411	PROPOSED DRAINAGE STORMWATER LONGITUDINAL SECTION SHEET 2	A
3792-96-480	PROPOSED DRAINAGE Q100 STORMWATER ABOVE GROUND DETENTION TANK TYPICAL DETAILS	A
3792-96-500	PROPOSED DRAINAGE WASTEWATER LAYOUT PLAN OVERALL	A
3792-96-510	PROPOSED DRAINAGE WASTEWATER LONGITUDINAL SECTION SHEET 1	A
3792-96-510	PROPOSED DRAINAGE WASTEWATER LONGITUDINAL SECTION SHEET 2	A
3792-96-600	PROPOSED WATER SUPPLY OVERALL PLAN	A
3792-96-800	PROPOSED NETWORK UTILITY OVERALL PLAN	A



59-61 ALLEN BELL DRIVE, KAITAIA
RESIDENTIAL DEVELOPMENT FOR KĀINGA ORA - MBU1
ENGINEERING DRAWINGS

Kāinga Ora
Homes and Communities

MCKENZIE & CO. PROJECT NO	3792-96
DATE OF ISSUE	AUGUST 2025
ISSUE STATUS	RESOURCE CONSENT DRAWINGS

EARTHWORKS NOTES:

TOPO NOTES:

1. COORDINATES ARE IN TERMS OF WELLINGTON CIRCUIT 2000. ORIGIN OF COORDINATES MARK: C85E - SM 1318 SO 62886 995803.889 m N 263357.750 m E

2. ALL LEVELS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016. ORIGIN OF LEVELS - MARK: C85E - SM 1318 ; SO 62886, RL 13.53m. THE CONTOUR INTERVAL IS: 0.10m

PROPOSED CONTOURS NOTES:

1. ALL UNSUITABLE MATERIALS AS DEFINED IN THE CONTRACT SPECIFICATION IS TO BE REMOVED AND STRIPPED AREAS INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO ANY FILLING TAKING PLACE.

2. EARTHWORKS SHALL NOT EXTEND PAST THE AREA SHOWN ON THE PLANS.

3. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING EXISTING SERVICES AND DRAINAGE ON SITE.

4. FOR PROPOSED EARTHWORKS CONTOURS PLAN REFER TO DRAWING 200.

CUT/FILL NOTES:

1. CUT / FILL VOLUMES BETWEEN EXISTING SURFACE AND FINISHED DESIGN SURFACE.

2. VOLUME OF EARTHWORKS IS SOLID MEASURE VALUES:

   SITE AREA: 1,558m^2
   MAX CUT DEPTH: 0.3 m
   MAX FILL DEPTH: 0.3 m
   MAX TRENCH DEPTH: 2.5m

   DESIGN CUT: 0m^3
   FOUNDATION CUT: 137m^3

   DESIGN FILL: 861m^3
   TOTAL CUT TO FILL:216m^3

   TOPSOIL STRIPPING: 413m^3 @ 500mm DEPTH

3. FOR PROPOSED EARTHWORKS CUT/FILL CONTOURS PLAN REFER TO DRAWING 210.

4. CUT BATTERS VARY UP TO MAXIMUM SLOPE OF 1:3. FILL BATTERS VARY UP TO MAXIMUM SLOPE OF 1:3.

5. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND PROTECTING EXISTING SERVICES AND DRAINAGE ON SITE.

SEDIMENT AND EROSION CONTROL NOTES:

1. ALL EARTHWORKS SHALL COMPLY WITH AUCKLAND COUNCIL'S PUBLISHED DOCUMENT - GD05 EROSION AND SEDIMENT CONTROL GUIDE FOR LAND DISTURBING ACTIVITIES IN THE AUCKLAND REGIONAL.

2. ALL UNSUITABLE MATERIALS AS DEFINED IN THE CONTRACT SPECIFICATION IS TO BE REMOVED AND STRIPPED AREAS INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO ANY FILLING TAKING PLACE.

3. EARTHWORKS SHALL NOT EXTEND PAST THE AREA SHOWN ON THE PLANS

4. FOR SEDIMENT AND EROSION CONTROL PLAN REFER TO DRAWING 230.

5. FOR SEDIMENT AND EROSION CONTROL DETAILS REFER TO DRAWING 290.

ROADING NOTES:

1. ALL WORK AND MATERIALS ARE TO COMPLY WITH THE FAR NORTH DISTRICT COUNCIL ENGINEERING CODE OF PRACTICE (COP) STANDARDS.

2. ANY AMBIGUITY BETWEEN DRAWINGS AND COUNCIL STANDARDS ARE TO BE REPORTED TO THE ENGINEER FOR CLARIFICATION.

3. FOR ROADING LAYOUT PLAN REFER TO DRAWING 300.

4. FOR TYPICAL CROSS SECTIONS AND ACCESSWAY PAVEMENT DESIGN REFER TO DRAWING 360.

5. FOR CONCRETE SURFACE FINISHING AND LANDSCAPE DESIGN REFER TO ARCHITECTURAL DRAWINGS.

6. SUBGRADE CBR ASSUMED AS 4%. SUBGRADE TO BE TESTED BY SCALA PENETROMETER BY CONTRACTOR FOLLOWING BULK EARTHWORKS PRIOR TO FINAL ROAD TRIMMING. RESULTS TO BE PROVIDED TO THE ENGINEER TO CONFIRM PAVEMENT DEPTH.

7. RESIDENTIAL VEHICLE CROSSINGS ARE TO BE IN ACCORDANCE WITH FAR NORTH DISTRICT COUNCIL STANDARDS SHEET NO 18.

8. COMMERCIAL VEHICLE CROSSINGS ARE TO BE IN ACCORDANCE WITH FAR NORTH DISTRICT COUNCIL STANDARDS SHEET NO 19.

9. KERB AND CHANNEL REINSTATEMENT TO BE IN ACCORDANCE WITH AFAR NORTH DISTRICT COUNCIL STANDARDS SHEET NO 13.

10. STORWMATER CONNECTION TO KERB AND CHANNEL IS TO BE IN ACCORDANCE WITH FAR NORTH DISTRICT COUNCIL STANDARDS SHEET NO 14.

11. REFER TO LANDSCAPE ARCHITECTS PLANS FOR TREE AND PLANTING DETAILS.

12. REFER TO LANDSCAPE ARCHITECTS PLANS FOR PAVEMENT FINISHES/TREATMENT.

STORMWATER DRAINAGE NOTES:

1. ALL STORMWATER WORKS AND MATERIALS TO COMPLY WITH THE FAR NORTH DISTRICT COUNCIL ENGINEERING CODE OF PRACTISE – CHAPTER 4 STORMWATER AND DRAINAGE.

2. FOR PROPOSED STORMWATER LAYOUT REFER TO DRAINAGE DRAWING 400.

3. ALL CONNECTIONS LESS THAN 3m ARE TO BE 100mm DIAMETER uPVC UNLESS SHOWN OTHERWISE. TO BE SHOWN ON BUILDING CONSENT DRAWINGS.

4. ALL CONNECTIONS MORE THAN 3m ARE TO BE 150mm DIAMETER uPVC UNLESS SHOWN OTHERWISE. TO BE SHOWN ON BUILDING CONSENT DRAWINGS.

5. CONNECTIONS ARE TO BE AS-BUILT PRIOR TO TRENCH BACKFILLING.

6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND ACCURATELY CONFIRM INVERT AND LID LEVELS OF EXISTING STORMWATER PRIOR TO COMMENCING CONSTRUCTION. WHERE LEVELS DIFFER TO THOSE SHOWN, THE CONTRACTOR SHALL ADVISE THE ENGINEER ACCORDINGLY.

7. THESE DRAWINGS DO NOT NECESSARILY SHOW ALL EXISTING SERVICES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ACCURATELY LOCATE AND PROTECT ALL EXISTING SERVICES DURING THE CONSTRUCTION PERIOD.

WASTEWATER DRAINAGE NOTES:

1. ALL WASTEWATER WORKS AND MATERIALS ARE TO COMPLY WITH THE FAR NORTH DISTRICT COUNCIL ENGINEERING CODE OF PRACTICE (COP) STANDARDS - CHAPTER 5 WASTEWATER.

2. FOR PROPOSED WASTEWATER LAYOUT LEVELS, MATERIALS, PIPE AND MANHOLE SIZES REFER TO DRAINAGE DRAWING 400.

3. ALL WASTEWATER LINES ARE TO BE uPVC SN16 UNLESS SHOWN OTHERWISE ON LONG SECTIONS.

4. ALL MANHOLES ARE TO BE 1050mm DIAMETER WITH HEAVY DUTY LIDS AND COVERS UNLESS SHOWN OTHERWISE.

5. ALL PIPE CROSSINGS UNDER CARRIAGEWAYS/TRAFFIC AREAS TO BE HARDFILL BACKFILLED 1.0m BEYOND THE EXTENT OF THE CARRIAGEWAY.

6. ALL PIPE CROSSOVERS ARE TO BE HARDFILLED BACKFILLED 1.0m EITHER SIDE OF THE CROSSOVER.

7. ALL LOT CONNECTIONS ARE TO BE 100mm DIAMETER uPVC SN16 UNLESS SHOWN OTHERWISE, AND DIMENSIONED FROM THE DOWNSTREAM MANHOLE.

8. ALL LOT CONNECTIONS TO EXTEND INTO THE LOT AT MINIMUM GRADE AND EXTEND VERTICALLY TO TERMINATE A STANDARD 1.2m BELOW FINISHED GROUND LEVEL AND STAKED. THE CONNECTION DEPTH SHOULD BE SET THAT THERE IS 1200mm COVER BELOW THE LOWEST LOT PLATFORM LEVEL.

9. CONNECTIONS ARE TO BE AS-BUILTED PRIOR TO TRENCH BACKFILLING.

10. LONG SECTION PIPE GRADES ARE CALCULATED FROM MANHOLE CENTRE TO MANHOLE CENTRE. THIS MAY RESULT IN CREEP (PARTICULARLY ON STEEP LINES). THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT LASER LEVELS ARE SET TO COMPENSATE FOR THIS.

11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND ACCURATELY CONFIRM INVERT AND LID LEVELS OF EXISTING WASTEWATER MANHOLES PRIOR TO COMMENCING CONSTRUCTION. WHERE LEVELS DIFFER TO THOSE SHOWN THE CONTRACTOR SHALL ADVISE THE ENGINEER ACCORDINGLY.

12. THESE DRAWINGS DO NOT NECESSARILY SHOW ALL EXISTING SERVICES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ACCURATELY LOCATE AND PROTECT ALL EXISTING SERVICES DURING THE CONSTRUCTION PERIOD.

WATER SUPPLY NOTES:

1. ALL WATERMAIN WORKS AND MATERIALS ARE TO COMPLY WITH THE FAR NORTH DISTRICT COUNCIL ENGINEERING CODE OF PRACTICE (COP) STANDARDS – CHAPTER 6: WATER SUPPLY.

2. FOR THE WATERMAIN LAYOUT REFER TO WATER SUPPLY DRAWING 600.

3. BEDDING AND SURROUND FOR ALL PIPES TO BE IN ACCORDANCE WITH NZS 7643 FOR PVC PIPES AND AS/NZS 2033 FOR PE PIPES.

4. CONNECTIONS TO EXISTING COUNCIL WATERMAINS ARE TO BE MADE ONLY AFTER TESTING, STERILISATION AND ACCEPTANCE BY WATERCARE.

5. ALL TRENCHES UNDER CARRIAGEWAYS TO BE BACKFILLED WITH HARDFILL.

6. THESE DRAWINGS DO NOT NECESSARILY SHOW ALL EXISTING SERVICES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ACCURATELY LOCATE AND PROTECT ALL EXISTING SERVICES DURING THE CONSTRUCTION PERIOD.

7. THE CONTRACTOR IS TO ACCURATELY FIX BY SURVEY ALL CHANGES IN DEPTH AND DIRECTION OF THE PROPOSED WATERMAIN.

8. ALL LOT CONNECTIONS ARE TO BE STANDARD RESIDENTIAL DN20mm MDPE PN12.5 PIPES WITH BACKFLOW PREVENTION UNLESS STATED OTHERWISE.

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: STANDARD NOTES PLAN

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: N.T.S.

DO NOT SCALE

DRAWING NO: 3792-96-001

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

NOTES

1. COORDINATES ARE IN TERMS OF MOUNT EDEN 2000. ORIGIN OF COORDINATES
   MARK: C85E - SM 1318 SO 62886
   995803.889 m N
   263357.750 m E
2. LEVELS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
   ORIGIN OF LEVELS
   MARK: C85E - SM 1318 SO 62886
   R.L.: 13.53 m
3. BOUNDARIES SHOWN ON THIS PLAN HAVE BEEN EXTRACTED FROM LAND INFORMATION NZ DCDB AND HAVE NOT BEEN SURVEYED. A BOUNDARY RETRACEMENT (REDEFINITION) SHOULD BE CARRIED OUT TO ESTABLISH EXACT BOUNDARY POSITIONS ON SITE.
4. SOME LAYERS MAY HAVE BEEN SWITCHED OFF FOR CLARITY.
5. DATA BY AUCKLAND COUNCIL AND LAND INFORMATION NEW ZEALAND IS LICENSED UNDER CC BY 3.0 NZ.
6. THIS PLAN IS ISSUED FOR A SPECIFIC PROJECT AND MAY NOT BE ALTERED OR USED FOR ANY OTHER PURPOSE WITHOUT PRIOR CONSENT OF MCKENZIE & CO. CONSULTANTS LTD.
7. LEGAL DESCRIPTION
   LOTS 16 AND 17 DP 74955.
8. THIS SURVEY CONTAINS UNDERGROUND UTILITY INFORMATION FROM A GROUND PENETRATING RADAR (GPR) UNDERTAKEN BY MCKENZIE & CO. THE LOCATIONS AND DEPTHS OF THESE SERVICES BELOW GROUND LEVEL ARE APPROXIMATE AND SHOWN FOR INFORMATION PURPOSES ONLY. ANY CRITICAL POSITIONS OR LEVELS SHOULD BE VERIFIED PRIOR TO DETAILED DESIGN AND CONSTRUCTION.
9. STRUCTURAL PROTECTION ZONES AND TREE PROTECTION ZONES ARE DIMENSIONED UTILIZING INFORMATION PROVIDED BY ARBORIST PEERS BROWN MILLER LTD.
10. THESE NOTES ARE AN INTEGRAL PART OF THIS PLAN.

LEGEND

- BOUNDARY (TSS)
- ABBUTTALS (EXTRACT FROM LANDONLINE)
- LEGAL EASEMENT
- MAJOR CONTOUR
- MINOR CONTOUR
- BUILDING
- BUILDING EAVE
- ROOF RIDGE
- FENCE
- ROAD CENTRELINE
- TOP OF KERB
- SEAL ROAD
- METAL ROAD
- DRIPLINE
- TRUNK
- UNKNOWN LINE (SURVEYED GPR)
- TELECOM LINE (SURVEYED GPR)
- POWER LINE (SURVEYED GPR)
- WATER LINE (SURVEYED GPR)
- STORMWATER LINE (SURVEYED)
- WASTEWATER LINE (SURVEYED)
- STORMWATER MANHOLE (SURVEYED)
- WASTEWATER MANHOLE (SURVEYED)
- STORMWATER LINE (EXISTING GIS)
- WASTEWATER LINE (EXISTING GIS)
- MANHOLE (EXISTING GIS)
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- CATCHPIT
- TELECOM BOX
- TELECOM PILLAR
- POWER TRANSFORMER
- POWER PILLAR
- GEOTECH BOREHOLE

SCHEDULE OF EXISTING EASEMENTS

PURPOSE	BURDENED LAND	SHOWN	GRANTEE
POWER SUPPLY	PART LOT 16	B	BAY OF ISLANDS ELECTRIC POWER BOARD
	PART LOT 17	C	

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59 AND 61 ALLEN BELL DRIVE, KAITAIA, NORTH AUCKLAND

TITLE: TOPOGRAPHICAL SURVEY LOTS 16 AND 17 DP 74955 SHEET 1 OF 5

PURPOSE OF ISSUE: FOR RESOURCE CONSENT

SCALE: 1:500
DO NOT SCALE

DRAWING NO: 3493-189-010

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FIRST ISSUE	MR	JN	PC	04/08/25

WWMH - SURVEYED
ASSET ID = WWPT74182
LL = 13.12
IL (O) = 11.90m @ 225Ø
IL (I) = 12.09m @ 100Ø
IL (I) = 12.10m @ 150Ø
IL (I) = 12.07m @ 150Ø
IL (I) = 11.91m @ 225Ø

Lot 19
DP 74955

Lot 18
DP 74955

Lot 54
DP 77073

Lot 17
DP 74955

PARKDALE CRESCENT

SWMH - SURVEYED
ASSET ID = SWP0856
LL = 12.93
IL (O) = 10.49m @ 1200Ø
IL (I) = 11.49m @ 300Ø
IL (I) = 10.55m @ 1200Ø

NOTES

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   MARK: C85E - SM 1318 SO 62886
   995803.889 m N
   263357.750 m E
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   R.L.: 13.53 m
3. BOUNDARIES SHOWN ON THIS PLAN HAVE BEEN EXTRACTED FROM LAND INFORMATION NZ DCDB AND HAVE NOT BEEN SURVEYED. A BOUNDARY RETRACEMENT (REDEFINITION) SHOULD BE CARRIED OUT TO ESTABLISH EXACT BOUNDARY POSITIONS ON SITE.
4. SOME LAYERS MAY HAVE BEEN SWITCHED OFF FOR CLARITY.
5. DATA BY AUCKLAND COUNCIL AND LAND INFORMATION NEW ZEALAND IS LICENSED UNDER CC BY 3.0 NZ.
6. THIS PLAN IS ISSUED FOR A SPECIFIC PROJECT AND MAY NOT BE ALTERED OR USED FOR ANY OTHER PURPOSE WITHOUT PRIOR CONSENT OF MCKENZIE & CO. CONSULTANTS LTD.
7. LEGAL DESCRIPTION
   LOTS 16 AND 17 DP 74955.
8. THIS SURVEY CONTAINS UNDERGROUND UTILITY INFORMATION FROM A GROUND PENETRATING RADAR (GPR) UNDERTAKEN BY MCKENZIE & CO. THE LOCATIONS AND DEPTHS OF THESE SERVICES BELOW GROUND LEVEL ARE APPROXIMATE AND SHOWN FOR INFORMATION PURPOSES ONLY. ANY CRITICAL POSITIONS OR LEVELS SHOULD BE VERIFIED PRIOR TO DETAILED DESIGN AND CONSTRUCTION.
9. STRUCTURAL PROTECTION ZONES AND TREE PROTECTION ZONES ARE DIMENSIONED UTILIZING INFORMATION PROVIDED BY ARBORIST PEERS BROWN MILLER LTD.
10. THESE NOTES ARE AN INTEGRAL PART OF THIS PLAN.

LEGEND

- BOUNDARY (TSS)
- ABBUTTALS (EXTRACT FROM LANDONLINE)
- LEGAL EASEMENT
- MAJOR CONTOUR
- MINOR CONTOUR
- BUILDING
- BUILDING EAVE
- ROOF RIDGE
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- ROAD CENTRELINE
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- TELECOM PILLAR
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- POWER PILLAR
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REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FIRST ISSUE	MR	JN	PC	04/08/25

MCKENZIE & CO.

Kāinga Ora Homes and Communities

CLIENT:

PROJECT:
59 AND 61
ALLEN BELL DRIVE,
KAITAIA,
NORTH AUCKLAND

TITLE:
TOPOGRAPHICAL SURVEY
LOTS 16 AND 17 DP 74955
SHEET 2 OF 5

PURPOSE OF ISSUE:
FOR RESOURCE CONSENT

SCALE:
1:200
DO NOT SCALE

DRAWING NO: 3493-189-011

REV: A

SCHEDULE OF EXISTING EASEMENTS			
PURPOSE	BURDENED LAND	SHOWN	GRANTEE
POWER SUPPLY	PART LOT 16	B	BAY OF ISLANDS ELECTRIC POWER BOARD
	PART LOT 17	C	

NOTES

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CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59 AND 61 ALLEN BELL DRIVE, KAITAIA, NORTH AUCKLAND

TITLE: TOPOGRAPHICAL SURVEY LOTS 16 AND 17 DP 74955 SHEET 3 OF 5

PURPOSE OF ISSUE: FOR RESOURCE CONSENT

SCALE: 1:200 DO NOT SCALE

DRAWING NO: 3493-189-013 REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FIRST ISSUE	MR	JN	PC	04/08/25

NOTES

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- POWER PILLAR
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CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59 AND 61 ALLEN BELL DRIVE, KAITAIA, NORTH AUCKLAND

TITLE: TOPOGRAPHICAL SURVEY LOTS 16 AND 17 DP 74955 SHEET 4 OF 5

PURPOSE OF ISSUE: FOR RESOURCE CONSENT

SCALE: 1:200
DO NOT SCALE

DRAWING NO: 3493-189-014

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FIRST ISSUE	MR	JN	PC	04/08/25

MCKENZIE & CO.

NOTES

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7. LEGAL DESCRIPTION
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LEGEND

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- POWER PILLAR
- GEOTECH BOREHOLE

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59 AND 61 ALLEN BELL DRIVE, KAITAIA, NORTH AUCKLAND

TITLE: TOPOGRAPHICAL SURVEY LOTS 16 AND 17 DP 74955 SHEET 5 OF 5

MCKENZIE & CO.

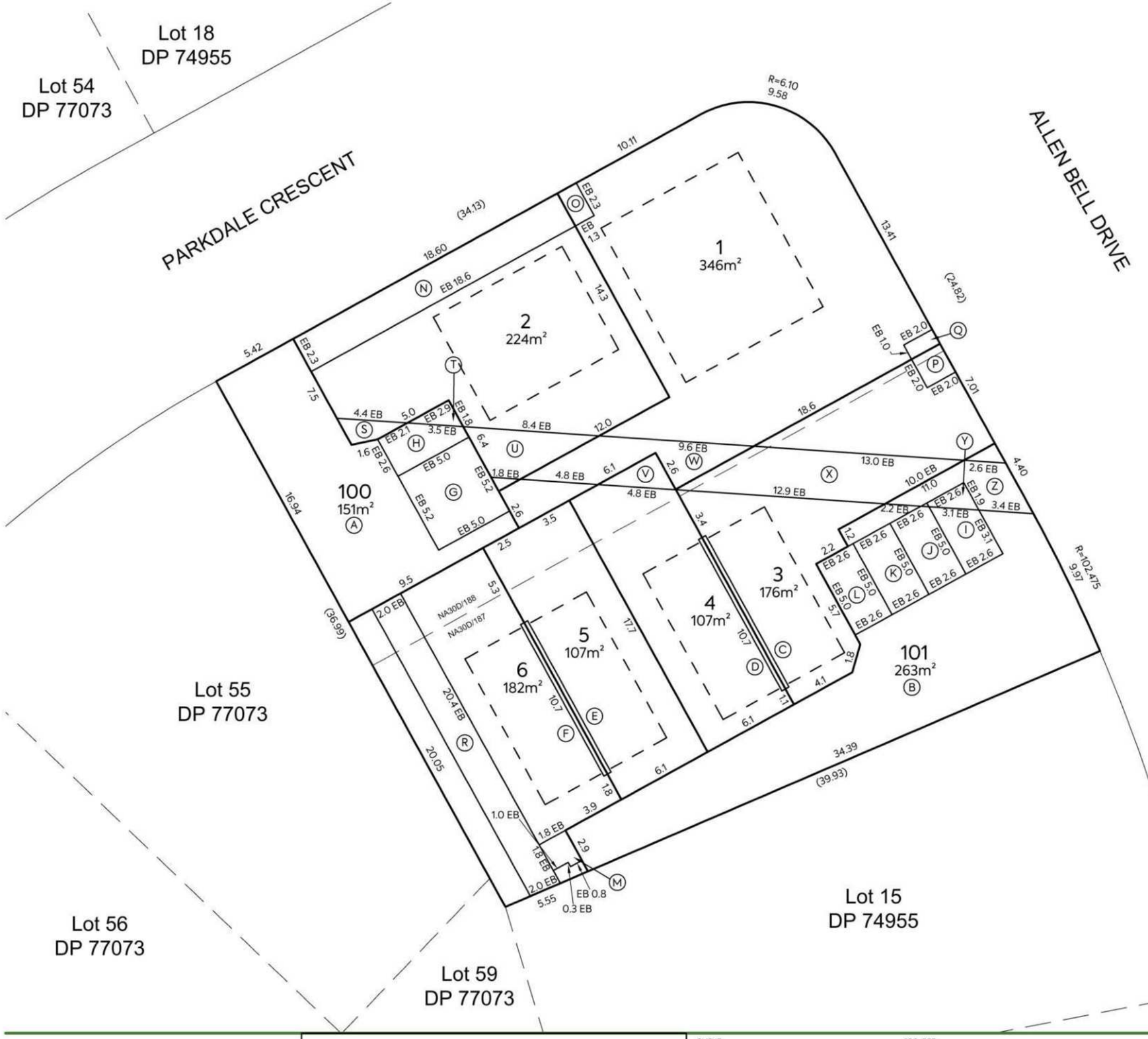
REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FIRST ISSUE	MR	JN	PC	04/08/25

PURPOSE OF ISSUE: FOR RESOURCE CONSENT

SCALE: 1:200
DO NOT SCALE

DRAWING NO: 3493-189-015 REV: A

C:\12DS\DATA\MCKFSOT\3493 AUCKLAND VELOCITY - SURVEYING_4184\05 SURVEY\PRE-CONSTRUCTION\189 - 250728 59-61 ALLEN BELL DRIVE, KAITAIA\5.3 DRAWINGS\3493-189-010.DWG



NOTES

1. COMPRISED IN: NA30D/187 & NA30D/188 (LOTS 16 & 17 DP 74955)
2. LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL
3. ALL DIMENSIONS SHOWN IN METRES UNLESS NOTED OTHERWISE
4. AREAS AND MEASUREMENTS SUBJECT TO RESOURCE CONSENT AND LINZ APPROVAL.
5. PARTY WALL EASEMENTS ARE 0.3M WIDE AND ARE SUBJECT TO FINAL SURVEY.
6. BUILDING POSITIONS ARE INDICATIVE ONLY
7. THE UNDERLYING LOT 17 DP 74955 IS SUBJECT TO PART IV A OF THE CONSERVATION ACT 1987 AND SECTION 11 OF THE CROWN MINERALS ACT 1991.

AMALGAMATION CONDITION

THAT LOT 100 HEREON (LEGAL ACCESS) BE HELD AS TO TWO UNDIVIDED ONE-HALF SHARES BY THE OWNERS OF LOTS 1 & 2 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

THAT LOT 101 HEREON (LEGAL ACCESS) BE HELD AS TO FOUR UNDIVIDED ONE-FOURTH SHARES BY THE OWNERS OF LOTS 3-6 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

SCHEDULE AND MEMORANDUM ARE ON THE NEXT PAGE

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	SF	HP	PC	27/08/25

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59 & 61 ALLEN BELL DRIVE KAITAIA

TITLE: LOTS 1 TO 6, 100 & 101 BEING A SUBDIVISION OF LOTS 16 & 17 DP 74955

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250m @ A3

DO NOT SCALE

DRAWING NO: 3493-189-100

REV: A

MEMORANDUM OF PROPOSED EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
RIGHT TO DRAIN STORMWATER	A	LOT 100 HEREON	LOTS 1-2 HEREON
	B	LOT 101 HEREON	LOTS 3-6 HEREON
	N	LOT 2 HEREON	LOT 1 HEREON
	O	LOT 1 HEREON	LOT 2 HEREON
RIGHT TO DRAIN WASTEWATER	B	LOT 101 HEREON	LOTS 3-6 HEREON
	A	LOT 100 HEREON	LOTS 1-2 HEREON
	G		LOT 1 HEREON
	R	LOT 6 HEREON	LOTS 1-2 & 100 HEREON
RIGHT TO CONVEY WATER	B	LOT 101 HEREON	LOTS 3-6 HEREON
PARTY WALL	C	LOT 3 HEREON	LOT 4 HEREON
	D	LOT 4 HEREON	LOT 3 HEREON
	E	LOT 5 HEREON	LOT 6 HEREON
	F	LOT 6 HEREON	LOT 5 HEREON
PARKING RIGHT	G	LOT 100 HEREON	LOT 1 HEREON
	H, T		LOT 2 HEREON
	I, Y	LOT 101 HEREON	LOT 3 HEREON
	J		LOT 4 HEREON
	K		LOT 5 HEREON
	L		LOT 6 HEREON
RIGHT TO CONVEY POWER & TELECOMMU-NICATIONS	A	LOT 100 HEREON	LOTS 1 & 2 HEREON
	G		LOT 1 HEREON
	B	LOT 101 HEREON	LOTS 3-6 HEREON

SCHEDULE OF EXISTING EASEMENTS IN GROSS TO RETAIN				
PURPOSE	CREATING DOCUMENTS	SHOWN	BURDENED LAND	GRANTEE
POWER SUPPLY	185979.4	P	LOT 3 HEREON	BAY OF ISLANDS ELECTRIC POWER BOARD
		Q	LOT 1 HEREON	

MEMORANDUM OF PROPOSED EASEMENTS IN GROSS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
RIGHT TO CONVEY TELECOMMU-NICATIONS	A, B	LOTS 100, 101 & 6 HEREON	CHORUS NEW ZEALAND LIMITED
RIGHT TO CONVEY POWER	M		TOP ENERGY LIMITED
RIGHT TO DRAIN WASTEWATER	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	
	R	LOT 6 HEREON	
RIGHT TO DRAIN STORMWATER	A	LOT 100 HEREON	
	B	LOT 101 HEREON	
	N	LOT 2 HEREON	
	O	LOT 1 HEREON	
	M	LOT 6 HEREON	
	S	LOT 2 HEREON	
	H	LOT 100 HEREON	
	G	LOT 100 HEREON	
	T	LOT 100 HEREON	
	U	LOT 2 HEREON	
	V	LOT 4 HEREON	
	W	LOT 1 HEREON	
	X	LOT 3 HEREON	
	Y	LOT 101 HEREON	
	Z	LOT 101 HEREON	

NOTES

1. COMPRISED IN: NA30D/187 & NA30D/188 (LOTS 16 & 17 DP 74955)
2. LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL
3. ALL DIMENSIONS SHOWN IN METRES UNLESS NOTED OTHERWISE
4. AREAS AND MEASUREMENTS SUBJECT TO RESOURCE CONSENT AND LINZ APPROVAL.
5. PARTY WALL EASEMENTS ARE 0.3M WIDE AND ARE SUBJECT TO FINAL SURVEY.
6. BUILDING POSITIONS ARE INDICATIVE ONLY
7. THE UNDERLYING LOT 17 DP 74955 IS SUBJECT TO PART IV A OF THE CONSERVATION ACT 1987 AND SECTION 11 OF THE CROWN MINERALS ACT 1991.
8. THE 'BAY OF ISLANDS ELECTRIC POWER BOARD' IS NOW OPERATED BY 'TOP ENERGY LIMITED'

AMALGAMATION CONDITION

THAT LOT 100 HEREON (LEGAL ACCESS) BE HELD AS TO TWO UNDIVIDED ONE-HALF SHARES BY THE OWNERS OF LOTS 1 & 2 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

THAT LOT 101 HEREON (LEGAL ACCESS) BE HELD AS TO FOUR UNDIVIDED ONE-FOURTH SHARES BY THE OWNERS OF LOTS 3-6 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	SF	HP	PC	27/08/25

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59 & 61 ALLEN BELL DRIVE KAITAIA

TITLE: LOTS 1 TO 6, 100 & 101 BEING A SUBDIVISION OF LOTS 16 & 17 DP 74955

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: N/A DO NOT SCALE

DRAWING NO: 3493-189-101

REV: A

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR PROPOSED CONTOURS NOTES ON DRAWING 001.

LEGEND:

- EXTENT OF WORKS
- FINISHED FLOOR LEVEL — FFL24.5
- PROPOSED (0.50m) MAJOR CONTOUR — 24.0
- PROPOSED (0.10m) MINOR CONTOUR
- EXISTING (0.50m) MAJOR CONTOUR — 24.0
- EXISTING (0.10m) MINOR CONTOUR
- PROPOSED TREE LOCATION (REFER TO LANDSCAPE ARCHITECTS PLANS FOR TREE AND PLANTING DETAILS)
- EXISTING TREE TO REMAIN

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED EARTHWORKS FINISHED CONTOURS OVERALL PLAN

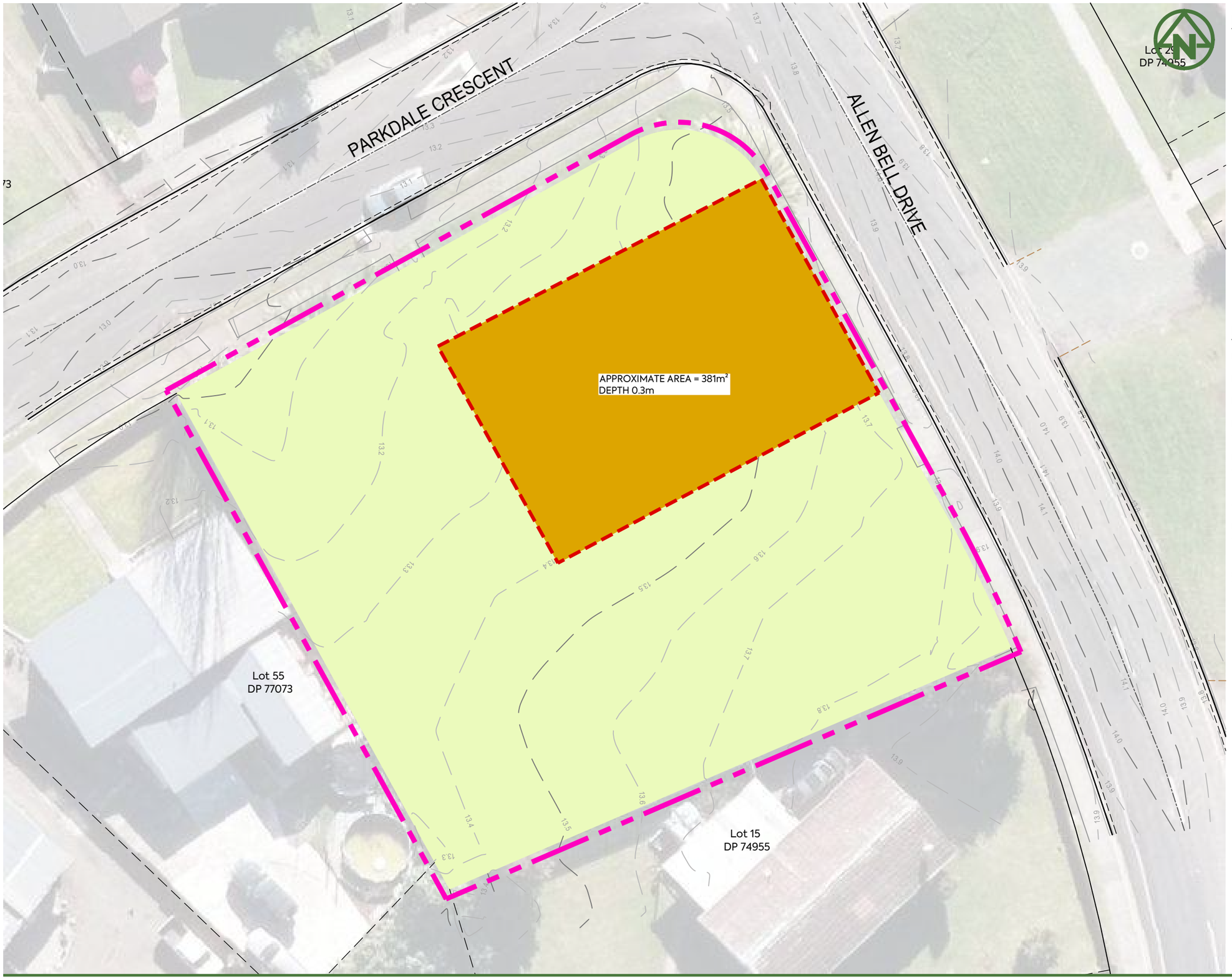
PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-200

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25



NOTES:

1. REFER TO STANDARD NOTES PLAN FOR CUT/FILL EARTHWORKS NOTES ON DRAWING 001.

2. FOR REMEDIATION DEPTHS AND SOIL HANDLING REQUIREMENTS REFER TO THE REMEDIAL ACTION PLAN BY ENVIRONMENTAL ENGINEER TONKIN & TAYLOR CONSULTANTS LTD.

   REMEDIATION DEPTH: 300mm
   REMEDIATION AREA: 381m²
   REMEDIATION VOLUME
   MANAGED FILL: 114m³

2. THE CUT/FILL VOLUMES ARE MEASURED FROM EXISTING SURFACE TO STRIPPED TOPSOIL AND DOES NOT INCLUDE THE REMOVAL OF UNSUITABLE MATERIAL OFF SITE.

   TOPSOIL STRIP DEPTH: 500mm
   TOPSOIL CUT: 413m³
   TOPSOIL PROPOSED DEPTH: 500mm
   TOPSOIL FILL: 329m³
   TOPSOIL REFUSE: 84m³

LEGEND:

EXTENT OF WORKS

PROPOSED FILL

PROPOSED CUT

PROPOSED FILL (MAJOR CONTOUR) — 0.10

PROPOSED CUT (MAJOR CONTOUR) — -0.10

CUT/FILL (ZERO CONTOUR)

REMEDIATION ZONE (REFER TO NOTE 2)

EXISTING TREE TO BE RETAINED (NO SIGNIFICANT EARTHWORKS TO BE DONE BELOW THE DRIPLINE AS INSTRUCTED BY THE ARBORIST)

CLIENT:

Kāinga Ora Homes and Communities

PROJECT:

59-61 ALLEN BELL DRIVE
KAITAIA

TITLE:

PROPOSED EARTHWORKS SOIL REMEDIATION PLAN

MCKENZIE & CO.

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-210

REV: A

PARKDALE CRESCENT

ALLEN BELL DRIVE

Lot 25
DP 74955

Lot 55
DP 77073

Lot 15
DP 74955

EXCAVATION FOR DRAINAGE LINES, UP TO 2.5m DEEP FROM EXISTING SURFACE

PROPOSED TIMBER PILE FOUNDATION (1.50m DEEP)
TOTAL APPROX VOLUME 137m².

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR CUT/FILL EARTHWORKS NOTES ON DRAWING 001.

2. THE CUT/FILL VOLUMES ARE MEASURED FROM STRIPPED EXISTING SURFACE TO FINISHED GROUND SURFACE LEVELS AND DOES NOT INCLUDE THE REMOVAL OF UNSUITABLE MATERIAL OFF SITE. VOLUME OF EARTHWORKS IS SOLID MEASURE VALUES:

   SITE AREA: 1,558m²

   MAX CUT DEPTH: 0.3 m
   MAX FILL DEPTH: 0.3 m
   MAX TRENCH DEPTH: 2.5m

   DESIGNED CUT: 0m³
   FOUNDATION CUT: 137m³

   DESIGNED FILL: 395m³
   TOTAL CUT TO FILL:225m³

   TOPSOIL STRIP DEPTH: 500mm
   TOPSOIL CUT: 413m³
   TOPSOIL PROPOSED DEPTH: 500mm
   TOPSOIL FILL: 329m³
   TOPSOIL DISPOSAL: 84m³

3. FOR REMEDIATION DEPTHS AND SOIL HANDLING REQUIREMENTS REFER TO THE REMEDIAL ACTION PLAN BY ENVIRONMENTAL ENGINEER TONKIN & TAYLOR CONSULTANTS LTD.

LEGEND:

- EXTENT OF WORKS
- PROPOSED FILL
- PROPOSED CUT
- PROPOSED FILL (MAJOR CONTOUR) — 0.10
- PROPOSED CUT (MAJOR CONTOUR) — -0.10
- CUT/FILL (ZERO CONTOUR)
- REMEDIATION ZONE (REFER TO NOTE 5.)
- PROPOSED UNDERCUT LOCATION FOR FOUNDATION DESIGN (REFER STRUCTURAL ENGINEERS DETAILS)
- PROPOSED DRAINAGE TRENCH LOCATION
- EXISTING TREE TO BE RETAINED (NO SIGNIFICANT EARTHWORKS TO BE DONE BELOW THE DRIPLINE AS INSTRUCTED BY THE ARBORIST)

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

MCKENZIE & CO.

Kāinga Ora Homes and Communities

CLIENT:

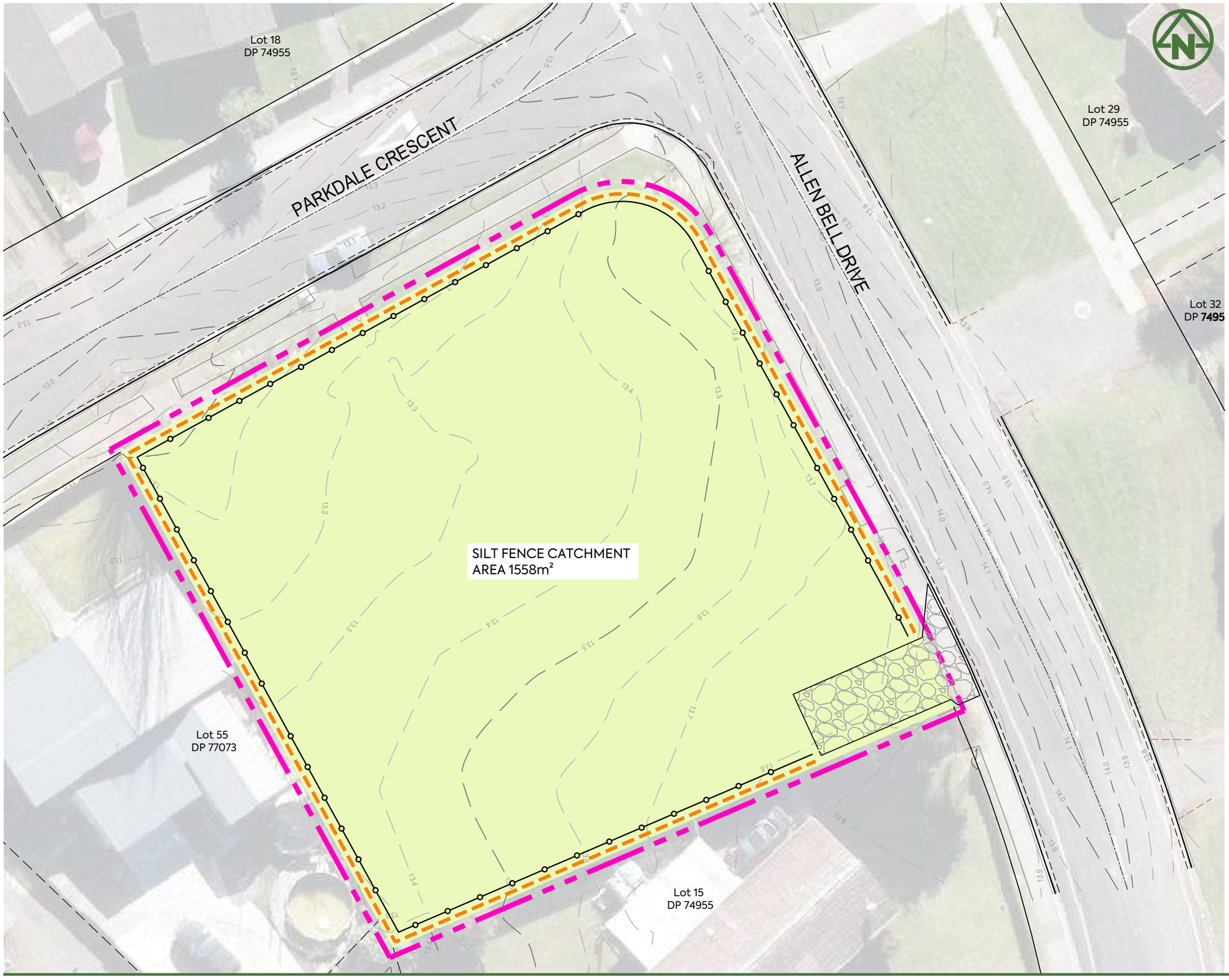
PROJECT:
59-61 ALLEN BELL DRIVE
KAITAIA

TITLE:
PROPOSED EARTHWORKS
CUT FILL PLAN

PURPOSE OF ISSUE:
RESOURCE CONSENT

SCALE:
1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-211
REV: A



NOTES:

1. REFER TO STANDARD NOTES PLAN FOR SEDIMENT AND EROSION CONTROL NOTES ON DRAWING 001.

LEGEND:

- EXTENT OF WORKS
- SUPER SILT FENCE
- CATCHMENT BOUNDARIES
- RUNOFF DIVERSION BUND
- STABILISED ENTRANCE
- EXISTING (0.50m) MAJOR CONTOUR — 24.0
- EXISTING (0.10m) MINOR CONTOUR

MCKENZIE & CO.

Kāinga Ora Homes and Communities

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

CLIENT:

PROJECT:
59-61 ALLEN BELL DRIVE
KAITAIA

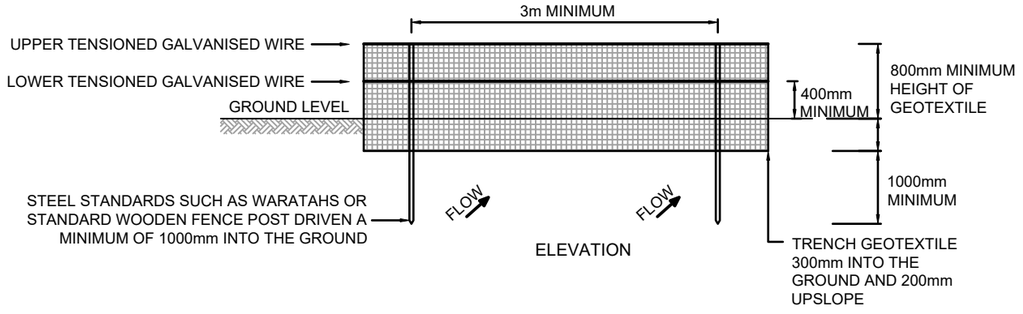
TITLE:
PROPOSED EARTHWORKS
EROSION AND SEDIMENT CONTROL
OVERALL PLAN

PURPOSE OF ISSUE:
RESOURCE CONSENT

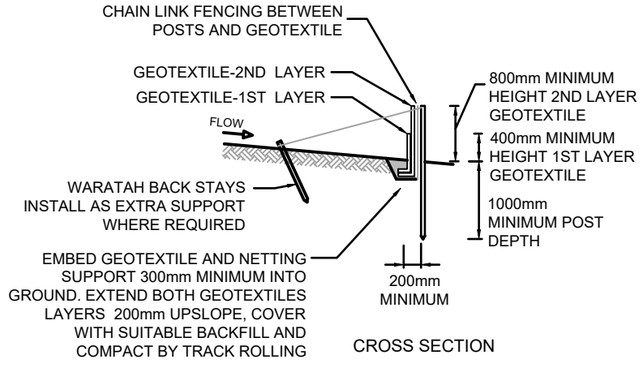
SCALE:
1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-230

REV: A



ELEVATION



CROSS SECTION

SUPER SILT FENCE DESIGN CRITERIA:

SLOPE STEEPNESS %	SLOPE LENGTH (m) (MAXIMUM)	SPACING OF RETURNS (m)
0-10%	UNLIMITED	60
10-20%	60	50
20-33%	30	40
33-50%	30	30
>50%	15	20

SUPER SILT FENCE CONSTRUCTION

STABILISED CONSTRUCTION ENTRANCE SPECIFICATIONS:

APPLICATION

USE A STABILISED CONSTRUCTION ENTRANCE AT ALL POINTS OF CONSTRUCTION SITE INGRESS AND EGRESS WITH A CONSTRUCTION PLAN LIMITING TRAFFIC TO THESE ENTRANCES ONLY. THEY ARE PARTICULARLY USEFUL ON SMALL CONSTRUCTION SITES BUT CAN BE UTILISED FOR ALL PROJECTS.

DESIGN:

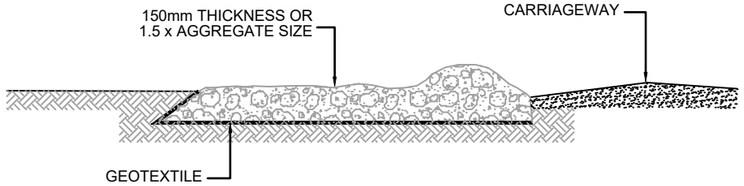
1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS AND OTHER UNSUITABLE MATERIAL AND PROPERLY GRADE IT.
2. LAY WOVEN GEOTEXTILE; PIN DOWN EDGES AND OVERLAP JOINTS.
3. PROVIDE DRAINAGE TO CARRY RUNOFF FROM THE STABILISED CONSTRUCTION ENTRANCE TO A SEDIMENT CONTROL MEASURE.
4. PLACE AGGREGATE TO THE SPECIFICATIONS BELOW AND GRADE IT.

STABILISED CONSTRUCTION ENTRANCE AGGREGATE SPECIFICATIONS:

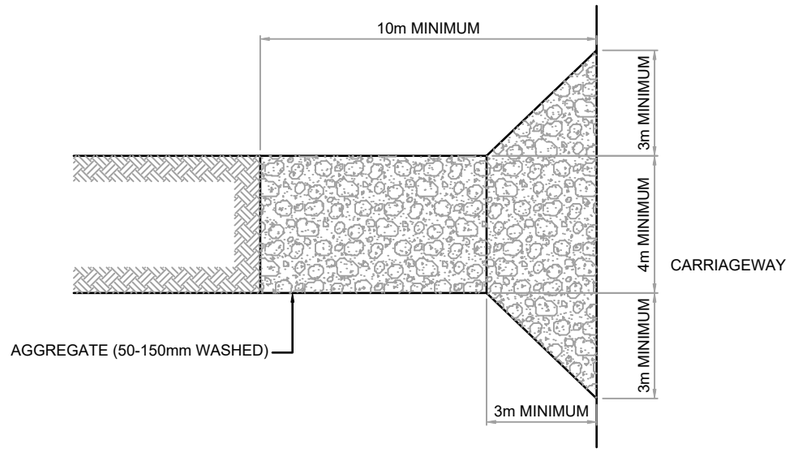
AGGREGATE SIZE	5-150mm WASHED AGGREGATE
THICKNESS	150mm MINIMUM OR 1.5 X AGGREGATE SIZE
LENGTH	10m MINIMUM LENGTH RECOMMENDED
WIDTH	4m MINIMUM

MAINTENANCE

1. MAINTAIN THE STABILISED CONSTRUCTION ENTRANCE IN A CONDITION TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. AFTER EACH RAINFALL INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT FROM THE STABILISED CONSTRUCTION ENTRANCE AND CLEAN OUT AS NECESSARY.
2. WHEN WHEEL WASHING IS ALSO REQUIRED, ENSURE THIS IS DONE ON AN AREA STABILISED WITH AGGREGATE WHICH DRAINS TO AN APPROVED SEDIMENT RETENTION FACILITY.



SIDE ELEVATION



PLAN VIEW

STABILISED CONSTRUCTION ENTRANCE

MCKENZIE & CO.

Kāinga Ora Homes and Communities

CLIENT:

PROJECT:
59-61 ALLEN BELL DRIVE
KAITAIA

TITLE:
PROPOSED EARTHWORKS
EROSION AND SEDIMENT CONTROL
DETAILS PLAN
SHEET 1

PURPOSE OF ISSUE:
RESOURCE CONSENT

SCALE:
N.T.S.
DO NOT SCALE

DRAWING NO: 3792-96-290

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

C:\12DS\DATA\MCKFS01\3792-96 (59-61 ALLEN BELL DR, KAITAIA) - AR105956_5763\06. ENGINEERING DESIGN\6.5 DRAWINGS\3792-96-290.DWG

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR ROADING NOTES ON DRAWING 001.

LEGEND:

- EXTENT OF WORKS
- PROPOSED TRAFFICABLE PAVEMENT- BROOMED CONCRETE (REFER TO DRAWING 365 FOR DETAILS)
- PROPOSED TRAFFICABLE PERMEABLE PAVERS (REFER TO DRAWING 365 FOR DETAILS)
- PROPOSED NON TRAFFICABLE PERMEABLE PAVERS (REFER TO DRAWING 365 FOR DETAILS)
- PROPOSED EXPOSED AGGREGATE PAVEMENT (TRAFFICABLE AND NON-TRAFFICABLE REFER TO DRAWING 365 FOR DETAILS)
- PROPOSED BROOMED CONCRETE PAVEMENT (REFER TO DRAWING 365 FOR DETAILS)
- PROPOSED ACCESSWAY CENTRELINE AND CHAINAGES
- PROPOSED VEHICLE CROSSING
- EXISTING VEHICLE CROSSING TO BE DECOMMISSIONED
- FINISHED FLOOR LEVEL — FFL24.50
- EXISTING STREET LIGHT
- PROPOSED CATCHPIT (PRIVATE) TYPE-TWO SUMP PIT (675x450)
- PROPOSED FLOW PATH (SURFACE WATER DIRECTION)
- PROPOSED FLOW PATH (CHANNELISED DIRECTION)
- EXISTING TRANSFORMER
- PROPOSED TREE LOCATION (REFER TO LANDSCAPE ARCHITECTS PLANS FOR TREE AND PLANTING DETAILS)
- EXISTING TREE TO REMAIN

CLIENT:

PROJECT:
59-61 ALLEN BELL DRIVE
KAITAIA

TITLE:
PROPOSED ROADING
OVERALL PLAN

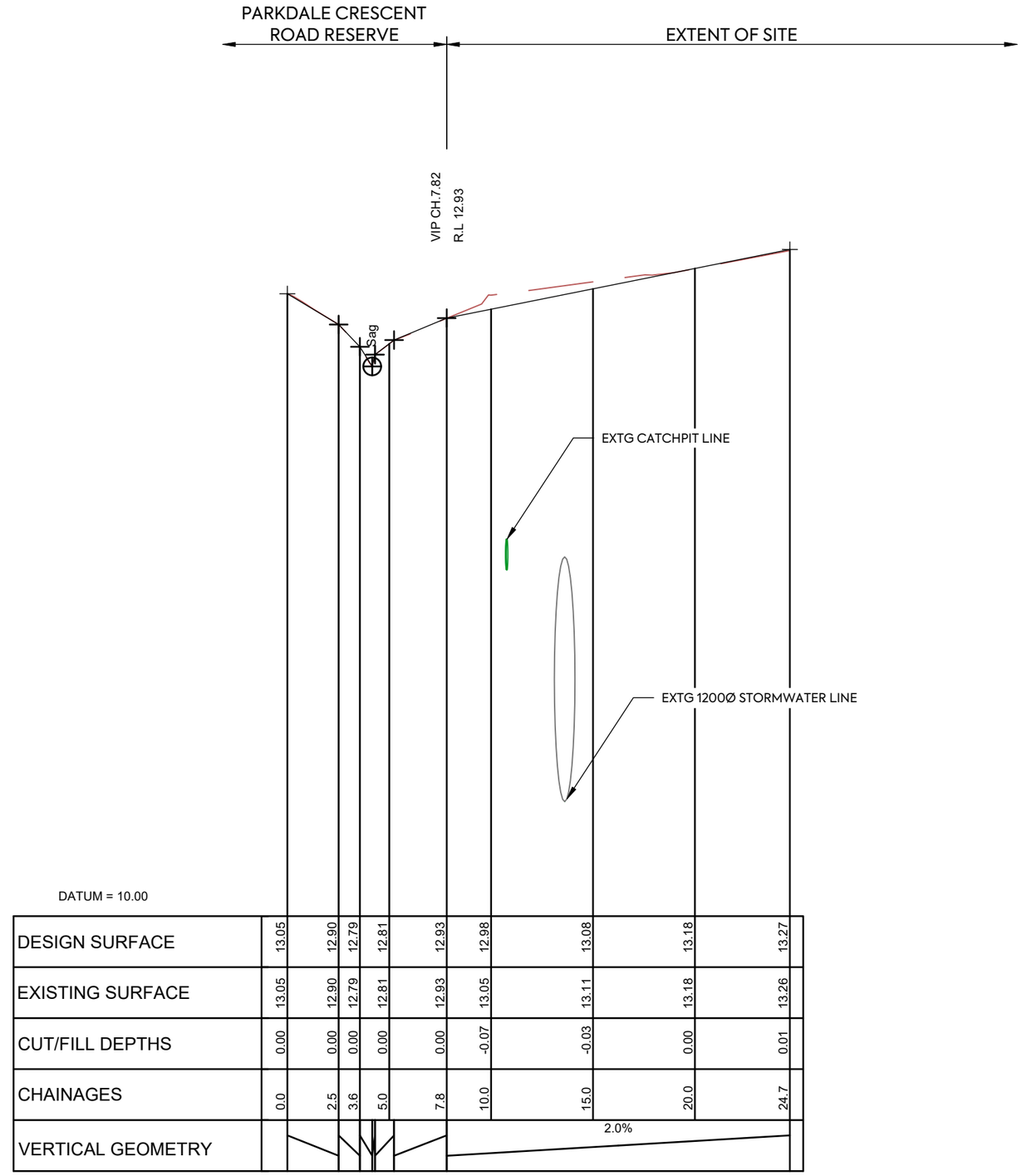
PURPOSE OF ISSUE:
RESOURCE CONSENT

SCALE:
1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-300

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25



LONGITUDINAL SECTION ACCESSWAY 1

SCALE HORIZ=1:250 @ A3 / VERT=1:25 @ A3

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR ROADING NOTES ON DRAWING 001.

LEGEND:

NATURAL SURFACE

FINISHED SURFACE

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

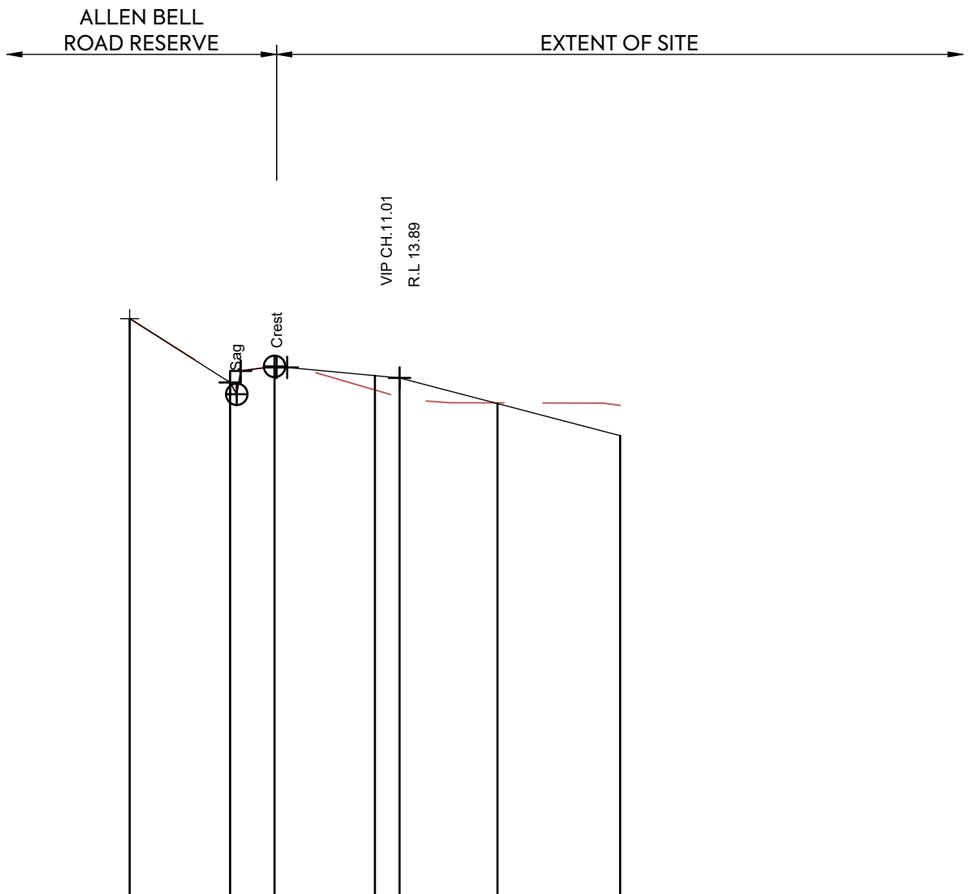
TITLE: PROPOSED ROADING LONGITUDINAL SECTION ACCESSWAY 1 SHEET 1

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250(H) 1:25(V) DO NOT SCALE

DRAWING NO: 3792-96-310

REV: A



DATUM = 11.00

DESIGN SURFACE	14.14	13.88	13.94	13.90	13.89	13.79	13.66
EXISTING SURFACE	14.14	13.88	13.94	13.85	13.81	13.79	13.78
CUT/FILL DEPTHS	-0.00	0.00	-0.00	0.06	0.09	-0.00	-0.12
CHAINAGES	0.0	4.1	5.9	10.0	11.0	15.0	20.0
VERTICAL GEOMETRY			0.0%	-0.9%		-2.6%	

LONGITUDINAL SECTION ACCESSWAY 2

SCALE HORIZ=1:250 @ A3 / VERT=1:25 @ A3

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR ROADING NOTES ON DRAWING 001.

LEGEND:

NATURAL SURFACE

FINISHED SURFACE

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED ROADING LONGITUDINAL SECTION ACCESSWAY 1 SHEET 2

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250(H) 1:25(V) DO NOT SCALE

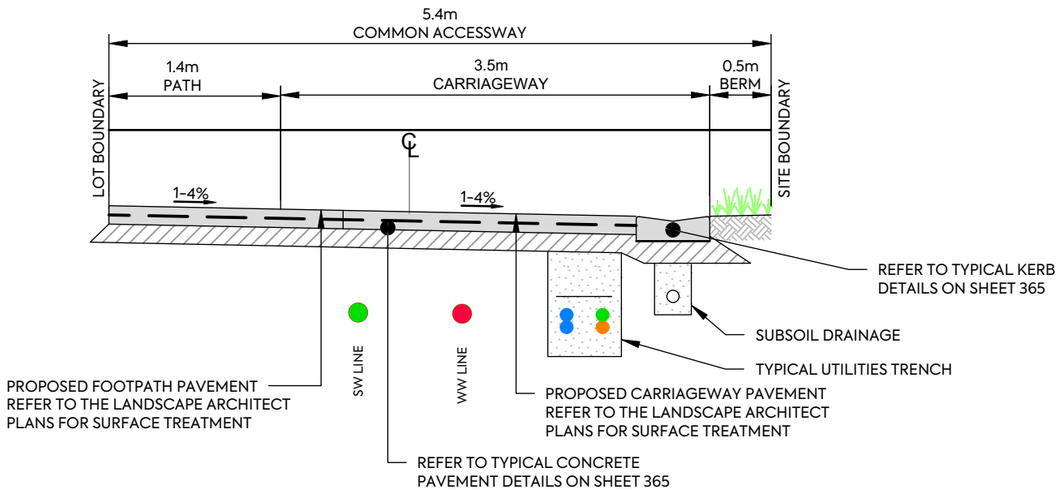
DRAWING NO: 3792-96-311

REV: A

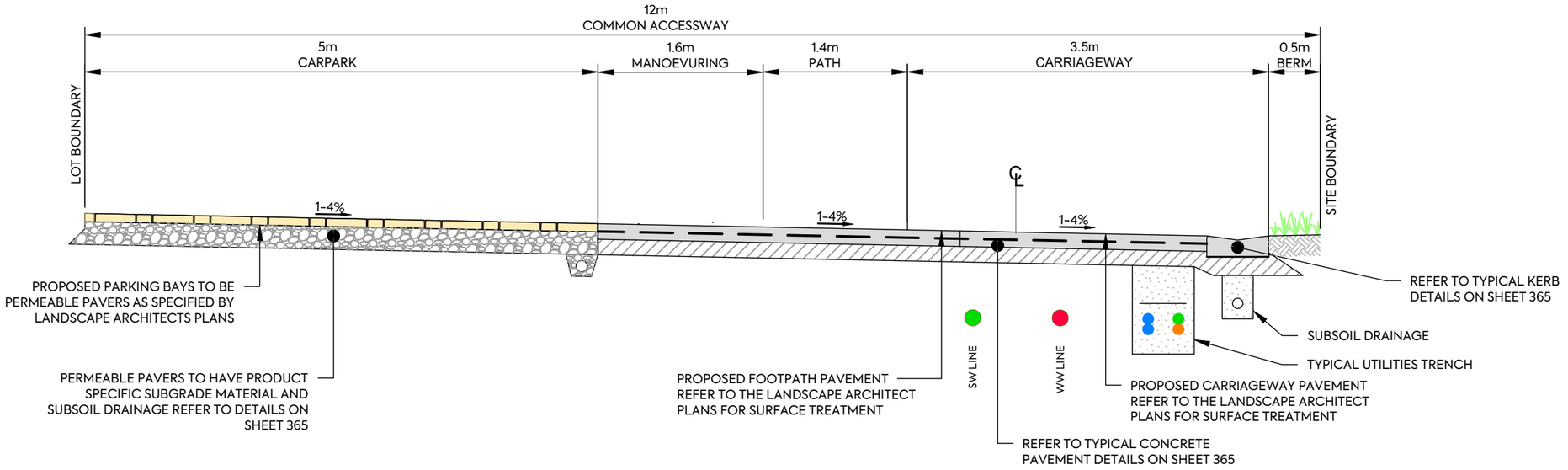
C:\12DS\DATA\MCKFS01\3792-96 (59-61 ALLEN BELL DR, KAITAIA) - AR105956_5763\06. ENGINEERING DESIGN\6.5 DRAWINGS\3792-96-310.DWG

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR ROADING NOTES ON DRAWING 001.
2. PROVIDE EXPANSION JOINTS AT 5m (OR LESS) INTERVALS.
3. BASECOURSE TO ACHIEVE A MINIMUM CIV 32 DURING CLEGG TESTING.
4. REFER TO THE LANDSCAPE ARCHITECT PLANS FOR SURFACE TREATMENTS.



A 300 TYPICAL CROSS SECTION 5.4m ACCESSWAY - WITH 3.5m CARRIAGEWAY
SCALE 1:50



B 300 TYPICAL CROSS SECTION 12.0m ACCESSWAY - WITH 3.50m CARRIAGEWAY
SCALE 1:50

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED ROADING TYPICAL CROSS SECTIONS SHEET 1

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:50m @ A3
DO NOT SCALE

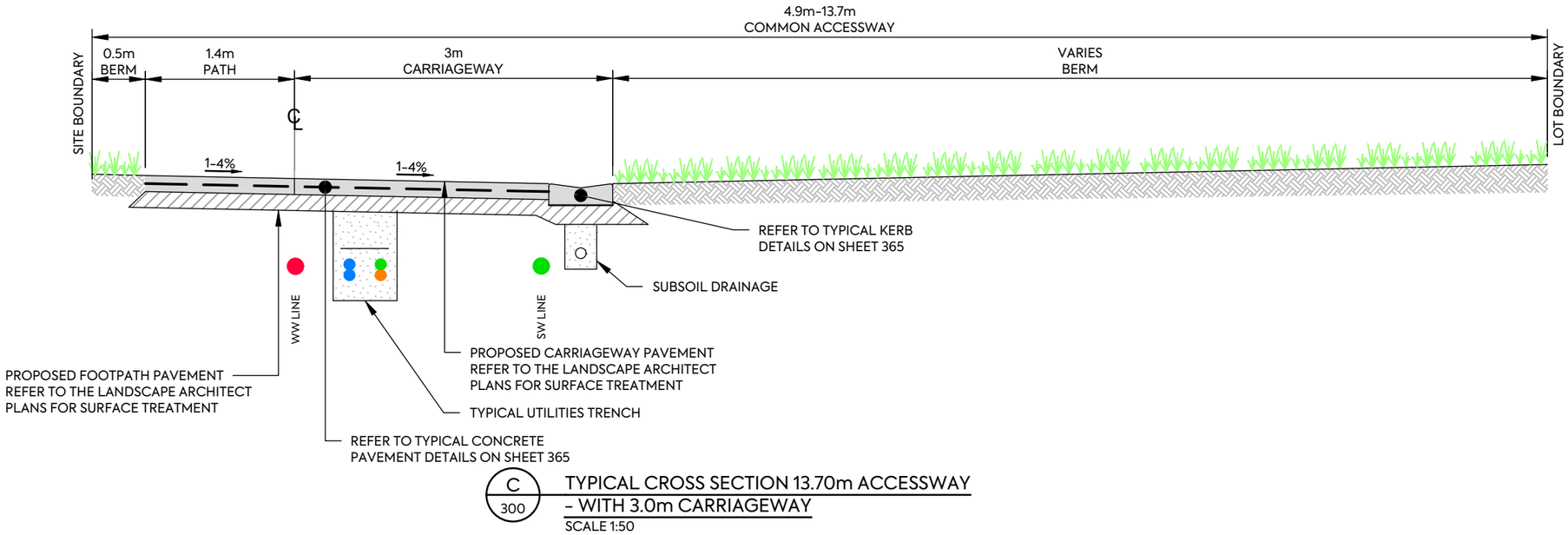
DRAWING NO: 3792-96-360

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

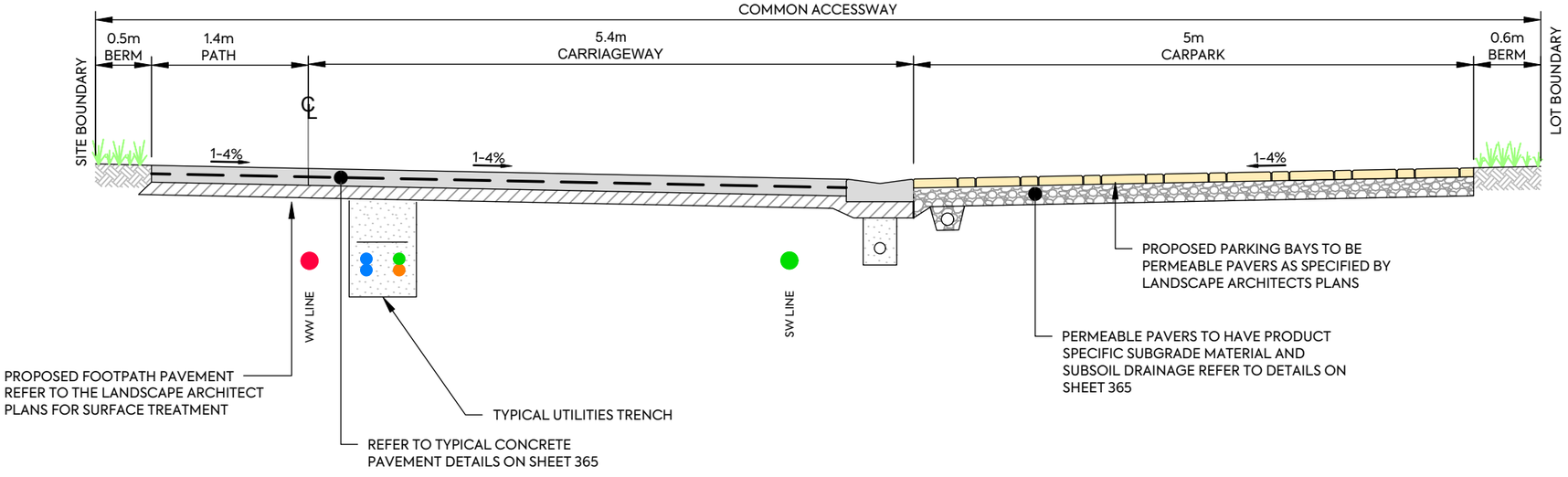
NOTES:

1. REFER TO STANDARD NOTES PLAN FOR ROADING NOTES ON DRAWING 001.
2. PROVIDE EXPANSION JOINTS AT 5m (OR LESS) INTERVALS.
3. BASECOURSE TO ACHIEVE A MINIMUM CIV 32 DURING CLEGG TESTING.
4. REFER TO THE LANDSCAPE ARCHITECT PLANS FOR SURFACE TREATMENTS.



C / 300 TYPICAL CROSS SECTION 13.70m ACCESSWAY – WITH 3.0m CARRIAGEWAY
SCALE 1:50

12.9m



D / 300 TYPICAL CROSS SECTION 12.90m ACCESSWAY – WITH 5.40m CARRIAGEWAY
SCALE 1:50

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED ROADING TYPICAL CROSS SECTIONS SHEET 2

PURPOSE OF ISSUE: RESOURCE CONSENT

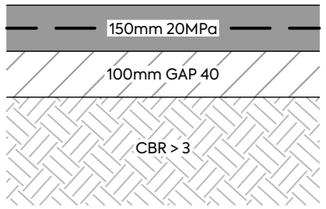
SCALE: 1:50m @ A3

DO NOT SCALE

DRAWING NO: 3792-96-361

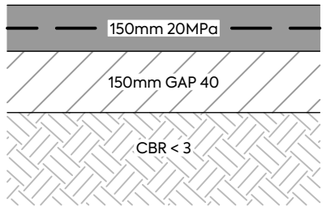
REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25



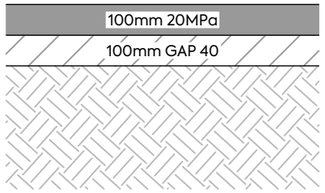
PAVEMENT DESIGN :
150mm CONCRETE 20 MPa WITH
665 MESH CENTRALLY PLACED
100mm GAP 40 SUBBASE

TYPICAL CONCRETE - TRAFFICABLE PAVEMENT DETAIL
SCALE 1:20



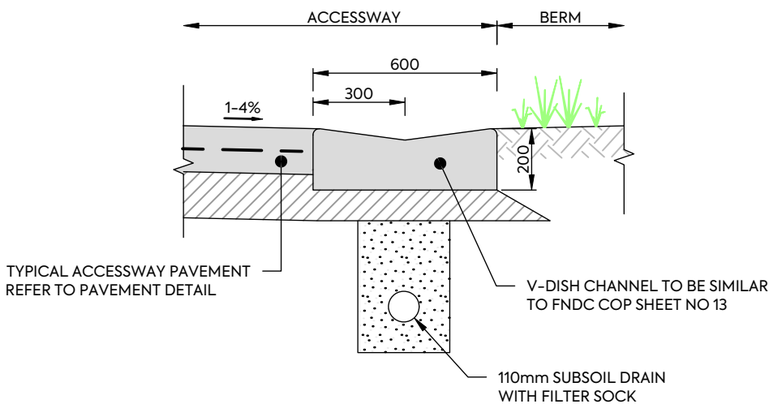
PAVEMENT DESIGN :
150mm CONCRETE 20 MPa WITH
665 MESH CENTRALLY PLACED
150mm GAP 40 SUBBASE

TYPICAL CONCRETE - TRAFFICABLE PAVEMENT DETAIL
SCALE 1:20

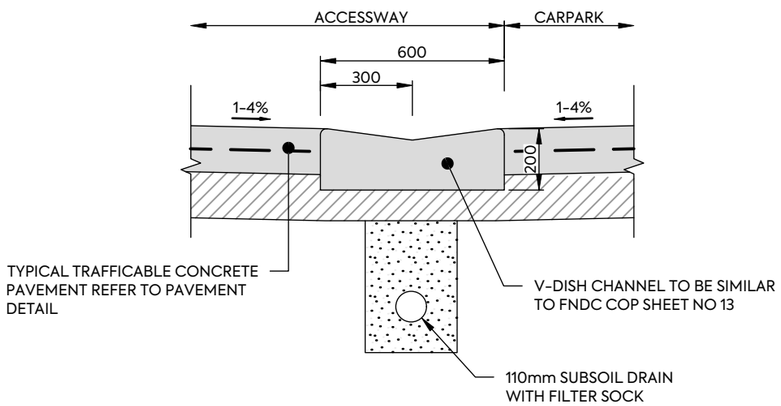


PAVEMENT DESIGN :
100mm CONCRETE 20 MPa
100mm GAP 40 SUBBASE

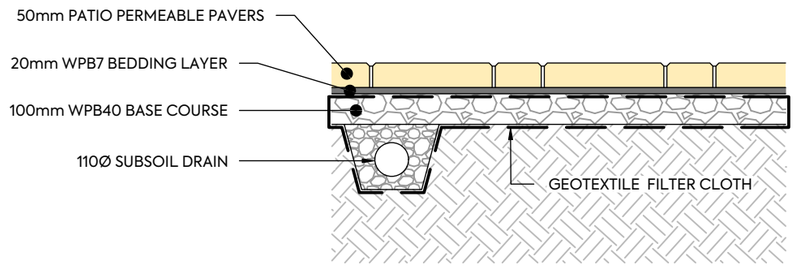
TYPICAL CONCRETE - PEDESTRIAN PAVEMENT DETAIL
SCALE 1:20



TYPICAL ACCESSWAY KERB PROFILE - V-DISH CHANNEL (PAVEMENT EDGE)
SCALE 1:20

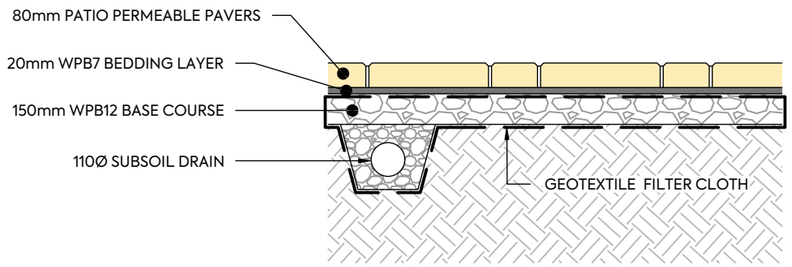


TYPICAL ACCESSWAY KERB PROFILE - V-DISH CHANNEL (PLACED CENTRALLY)
SCALE 1:20



PAVEMENT DESIGN :
PAVEMENT DESIGN FOR FIRTH PERMEABLE PATIO PAVERS OR EQUIVALENT PRODUCT. FOR ADDITIONAL DETAILS REFER TO MANUFACTURERS DETAILS FOR INSTALLATION INSTRUCTIONS.

TYPICAL PERMEABLE PAVER DETAIL (PATIO)
SCALE 1:20

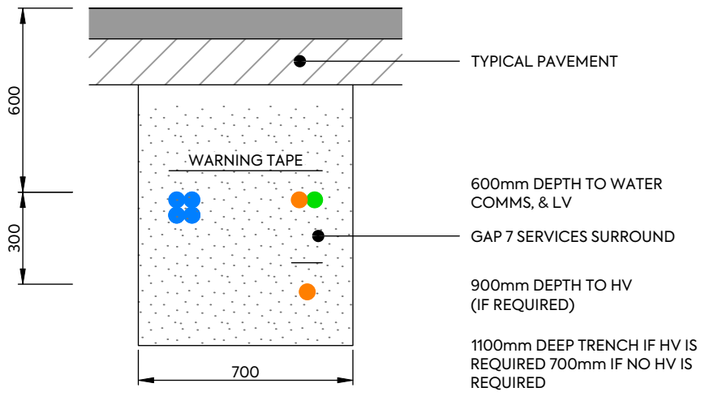


PAVEMENT DESIGN :
PAVEMENT DESIGN FOR FIRTH PERMEABLE PAVERS OR EQUIVALENT PRODUCT. FOR ADDITIONAL DETAILS REFER TO MANUFACTURERS DETAILS FOR INSTALLATION INSTRUCTIONS.

TYPICAL PERMEABLE PAVER DETAIL (FLOWPAVE)
SCALE 1:20

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR ROADING NOTES ON DRAWING 001.



TYPICAL UTILITIES SERVICE TRENCH DETAIL - FOR TRAFFICABLE AREAS
SCALE 1:20

MCKENZIE & CO.

Kāinga Ora Homes and Communities

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

CLIENT:

PROJECT:
59-61 ALLEN BELL DRIVE
KAITAIA

TITLE:
PROPOSED ROADING
TYPICAL PAVEMENT DETAILS

PURPOSE OF ISSUE:
RESOURCE CONSENT

SCALE:
1:20m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-365

REV: A

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR STORMWATER AND WASTEWATER DRAINAGE NOTES ON DRAWING 001.

LEGEND:

- EXTENT OF WORKS
- PROPOSED STORMWATER LINE (PUBLIC LINE)
- EXISTING STORMWATER LINE
- EXISTING LINE TO BE REMOVED
- PROPOSED SW LOT CONNECTION (PRIVATE LINE)
- PROPOSED SW CATCHPIT LEAD (PUBLIC LINE)
- PROPOSED SUBSOIL DRAIN
- PROPOSED WASTEWATER LINE (PUBLIC LINE)
- EXISTING WASTEWATER LINE
- PROPOSED WW LOT CONNECTION (PRIVATE LINE)
- PROPOSED BELOW DWELLING ABOVE GROUND RAINTANK (FATSAM©)
- PROPOSED CATCHPIT (PUBLIC) TYPE-TWO SUMP PIT (675x450)
- PROPOSED TREE LOCATION (REFER TO LANDSCAPE ARCHITECTS PLANS FOR TREE AND PLANTING DETAILS)
- EXISTING TREE TO REMAIN

MCKENZIE & CO.

Kāinga Ora Homes and Communities

CLIENT:

PROJECT:
59-61 ALLEN BELL DRIVE
KAITAIA

TITLE:
PROPOSED DRAINAGE
STORMWATER
OVERALL PLAN

PURPOSE OF ISSUE:
RESOURCE CONSENT

SCALE:
1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-400

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

C:\12DS\DATA\MCKFS01\3792-96 (59-61 ALLEN BELL DR, KAITAIA) - AR105956_5763\06. ENGINEERING DESIGN\6.5 DRAWINGS\3792-96-400.DWG

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR STORMWATER DRAINAGE NOTES ON DRAWING 001.

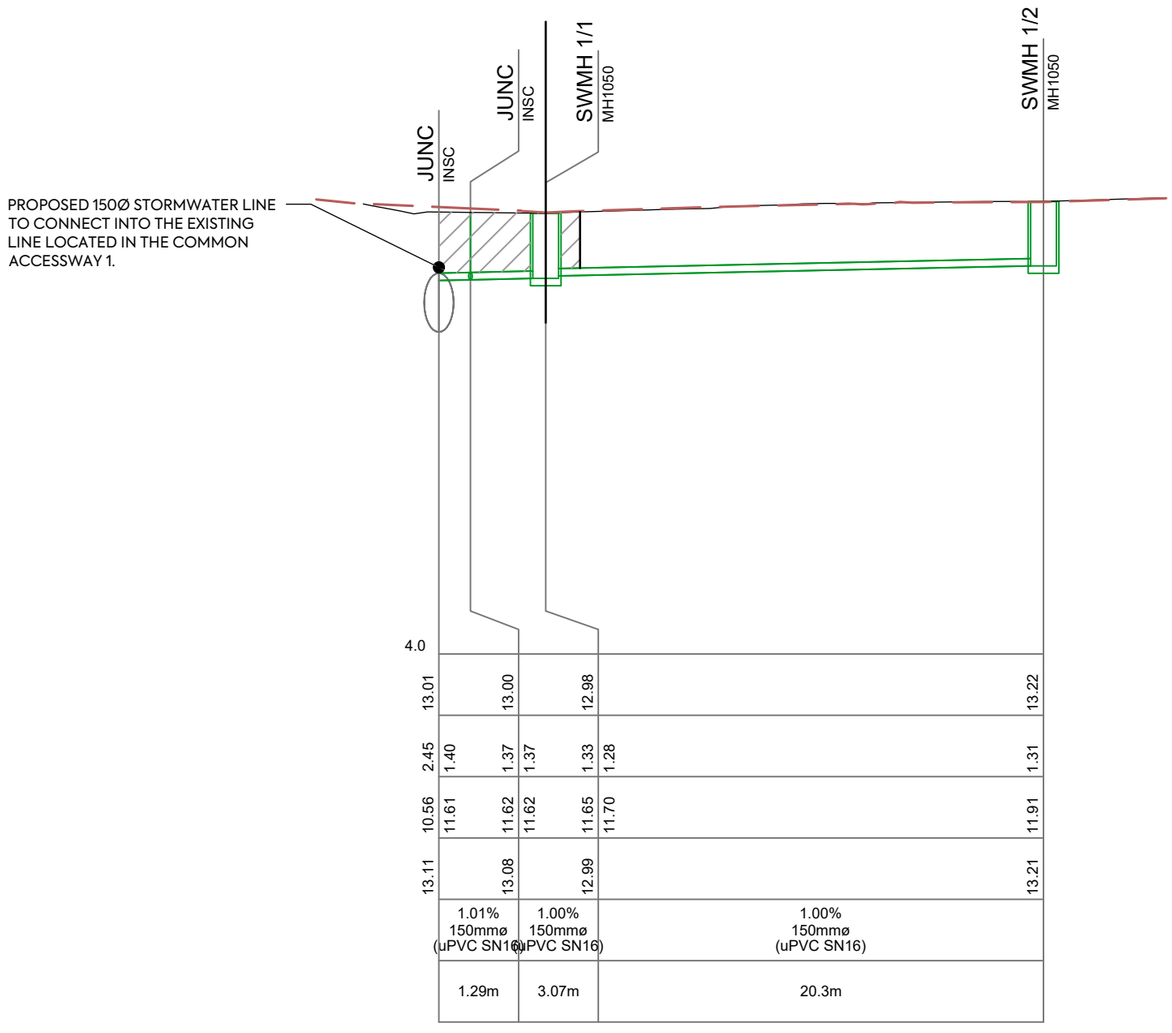
LEGEND:

NATURAL SURFACE

FINISHED SURFACE

PROPOSED DRAINAGE LINE

PROPOSED HARDFILL BACKFILL



STORMWATER DRAINAGE LINE D SW

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

MCKENZIE & CO.

Kāinga Ora Homes and Communities

CLIENT:

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED DRAINAGE STORMWATER LONGITUDINAL SECTION SHEET 2

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250(H) 1:10(V) DO NOT SCALE

DRAWING NO: 3792-96-410

REV: A

C:\12DS\DATA\MCKFS01\3792-96 (59-61 ALLEN BELL DR, KAITAIA) - AR105956_5763\06. ENGINEERING DESIGN\6.5 DRAWINGS\3792-96-410.DWG

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR STORMWATER DRAINAGE NOTES ON DRAWING 001.

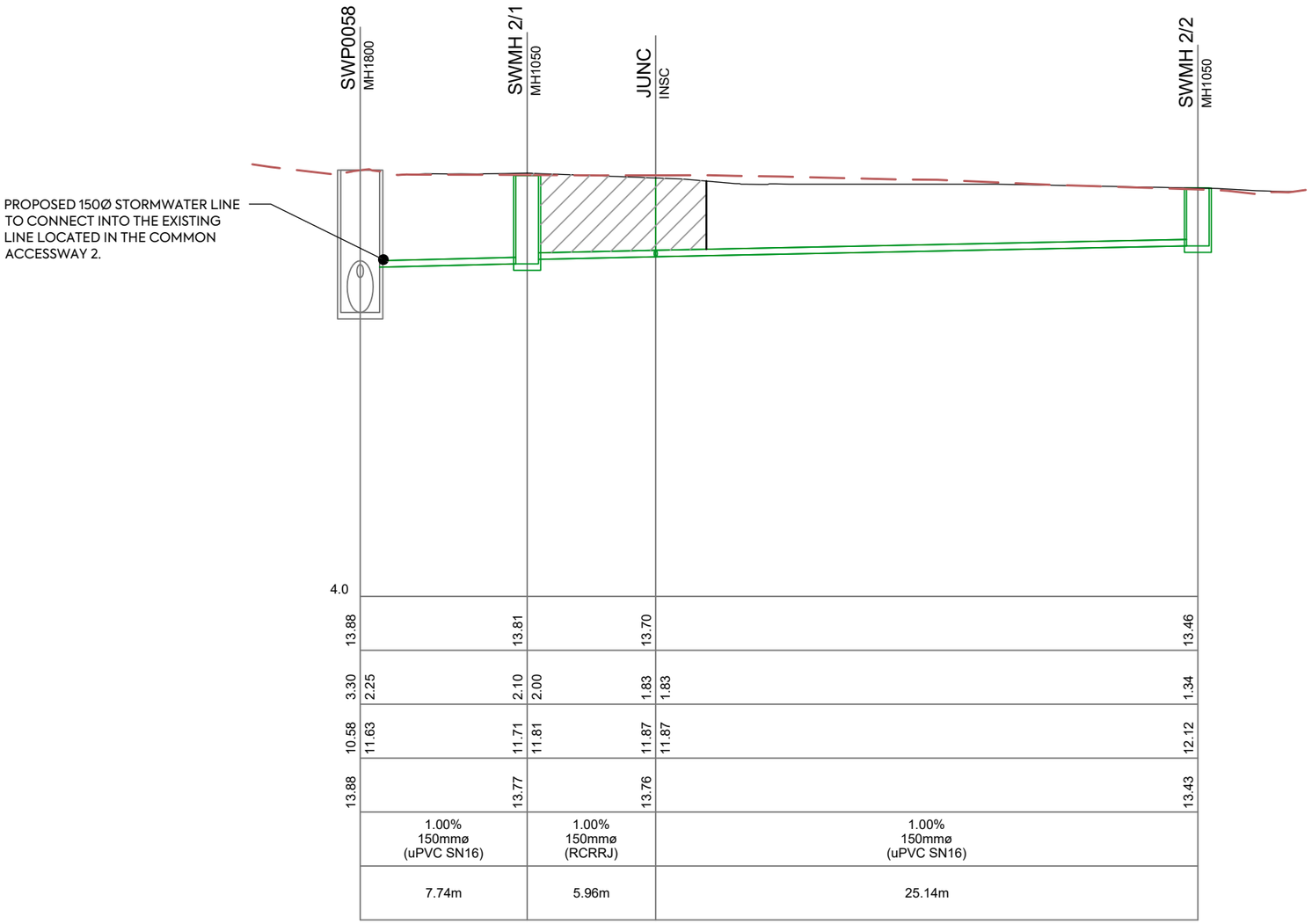
LEGEND:

NATURAL SURFACE

FINISHED SURFACE

PROPOSED DRAINAGE LINE

PROPOSED HARDFILL BACKFILL



STORMWATER DRAINAGE LINE D SW 2

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED DRAINAGE STORMWATER LONGITUDINAL SECTION SHEET 4

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250(H) 1:10(V) DO NOT SCALE

DRAWING NO: 3792-96-411

REV: A

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR STORMWATER DRAINAGE NOTES ON DRAWING 001.

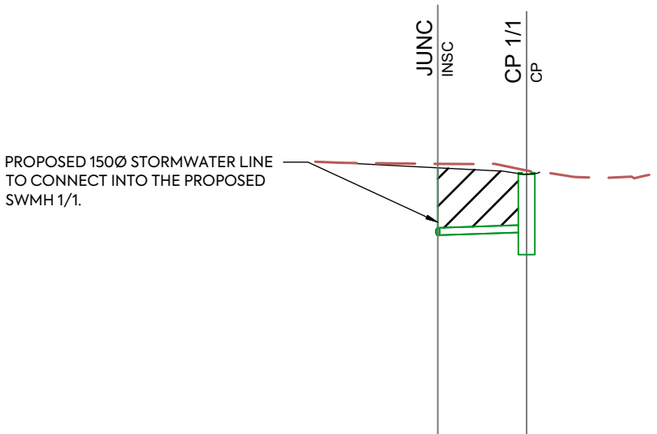
LEGEND:

NATURAL SURFACE

FINISHED SURFACE

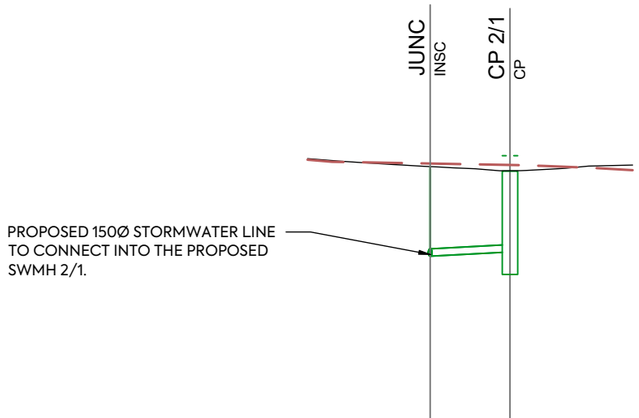
PROPOSED DRAINAGE LINE

PROPOSED HARDFILL BACKFILL



DATUM = 4.0				
FINISHED LEVEL	13.00		12.87	
DEPTH TO INVERT	1.37	1.37	1.19	1.64
INVERT LEVEL	11.62	11.63	11.68	11.23
EXISTING SURFACE	13.08		12.94	
PIPE DETAILS		1.52% 150mmø (uPVC SN16)		
LENGTH		3.62m		

STORMWATER DRAINAGE LINE D SW CP 1



5.0				
	13.70		13.61	
	1.83	1.83	1.66	2.11
	11.87	11.87	11.95	11.50
	13.76		13.73	
		2.43% 150mmø (uPVC SN16)		
		3.25m		

STORMWATER DRAINAGE LINE D SW CP 2

MCKENZIE & CO.

Kāinga Ora Homes and Communities

CLIENT:

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED DRAINAGE STORMWATER LONGITUDINAL SECTION SHEET 5

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250(H) 1:10(V) DO NOT SCALE

DRAWING NO: 3792-96-412

REV: A

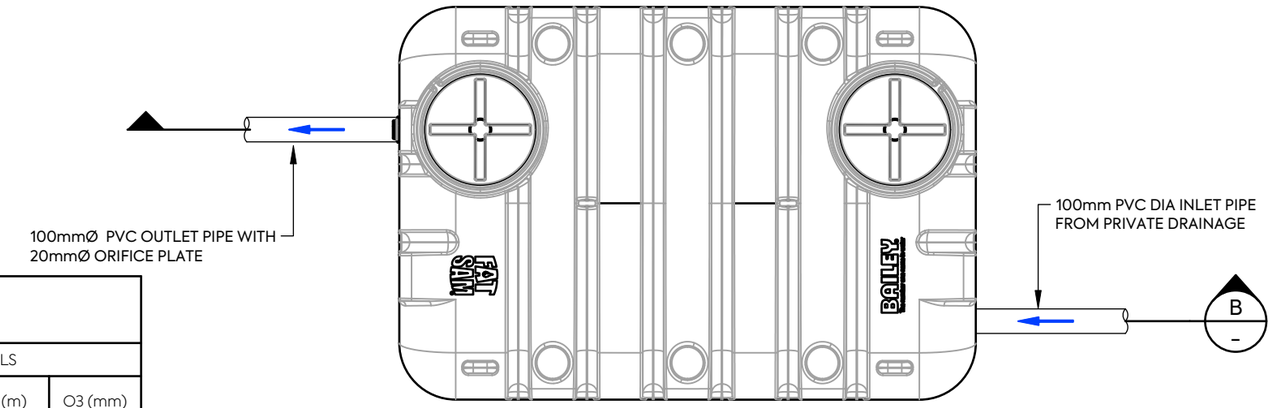
REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

C:\12DS\DATA\MCKFS01\3792-96 (59-61 ALLEN BELL DR, KAITAIA) - AR105956_5763\06. ENGINEERING DESIGN\6.5 DRAWINGS\3792-96-410.DWG

NOTES:

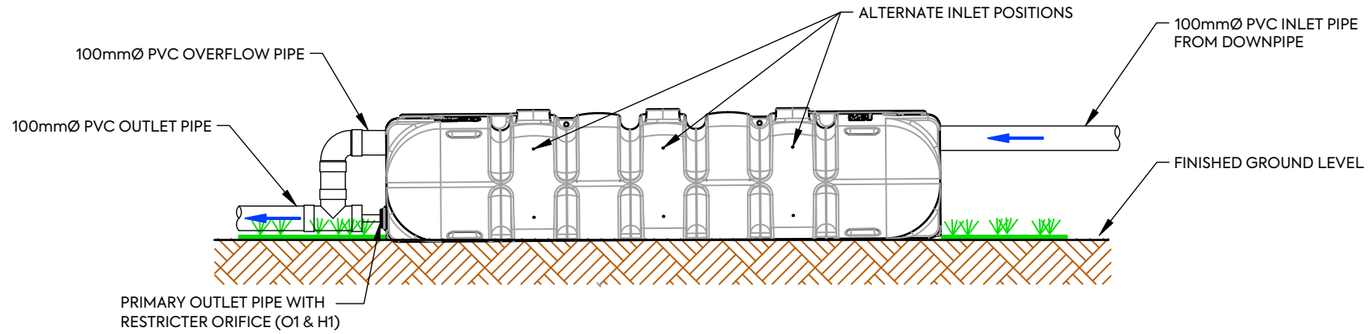
1. ENGINEERS PLANS TO BE USED FOR TANK SIZING AND INLET/OUTLET GEOMETRY ONLY. FOR ALL OTHER SPECIFICATIONS REFER TO MANUFACTURERS DETAILS.

RAINWATER DETENTION TANK DETAILS								
LOT NUMBER	TANK SIZE	TANK GEOMETRY DETAILS			OUTLET DETAILS			
		HEIGHT (mm)	LENGTH (mm)	WIDTH (mm)	H1 (m)	O1 (mm)	H3 (m)	O3 (mm)
LOT 1	1500L RAIN TANK	550	2350	1600	0.02	28	0.43	100
LOT 2	1500L RAIN TANK	550	2350	1600	0.02	28	0.43	100
LOT 3	1500L RAIN TANK	550	2350	1600	0.02	28	0.43	100
LOT 4	1500L RAIN TANK	550	2350	1600	0.02	28	0.43	100
LOT 5	1500L RAIN TANK	550	2350	1600	0.02	28	0.43	100
LOT 6	1500L RAIN TANK	550	2350	1600	0.02	28	0.43	100
LOT 7	1500L RAIN TANK	550	2350	1600	0.02	28	0.43	100
LOT 8	1500L RAIN TANK	550	2350	1600	0.02	28	0.43	100



PLAN: TYPICAL RAINWATER TANK PLAN VIEW
SCALE: 1:25 (A3)

RAINWATER DETENTION TANK DETAILS			
LOT NUMBER	TANK SIZE	Q100 VOLUME (L)	Q100 depth (mm)
LOT 1	1500L RAINTANK	1340	384
LOT 2	1500L RAINTANK	1340	384
LOT 3	1500L RAINTANK	1340	384
LOT 4	1500L RAINTANK	1340	384
LOT 5	1500L RAINTANK	1340	384
LOT 6	1500L RAINTANK	1340	384
LOT 7	1500L RAINTANK	1340	384
LOT 8	1500L RAINTANK	1340	384



B – SECTION: TYPICAL RAINWATER TANK SECTION
SCALE: 1:25 (A3)

PROPOSED PRIVATE RAINTANK - FATSAM® TANK

MCKENZIE & CO.

Kāinga Ora Homes and Communities

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

CLIENT:

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED DRAINAGE Q100 STORMWATER ABOVE GROUND DETENTION TANK TYPICAL DETAILS

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-480

REV: A

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR STORMWATER AND WASTEWATER DRAINAGE NOTES ON DRAWING 001.

LEGEND:

- EXTENT OF WORKS
- PROPOSED STORMWATER LINE (PUBLIC LINE) — SW
- EXISTING STORMWATER LINE — SW
- EXISTING LINE TO BE REMOVED — SW
- PROPOSED SW LOT CONNECTION (PRIVATE LINE)
- PROPOSED SW CATCHPIT LEAD (PUBLIC LINE)
- PROPOSED SUBSOIL DRAIN
- PROPOSED WASTEWATER LINE (PUBLIC LINE) — WW
- EXISTING WASTEWATER LINE — WW
- PROPOSED WW LOT CONNECTION (PRIVATE LINE)
- PROPOSED BELOW DWELLING ABOVE GROUND RAINTANK (FATSAM©)
- PROPOSED CATCHPIT (PUBLIC) TYPE-TWO SUMP PIT (675x450)
- PROPOSED TREE LOCATION (REFER TO LANDSCAPE ARCHITECTS PLANS FOR TREE AND PLANTING DETAILS)
- EXISTING TREE TO REMAIN

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED DRAINAGE WASTEWATER OVERALL PLAN

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-500

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR WASTEWATER DRAINAGE NOTES ON DRAWING 001.

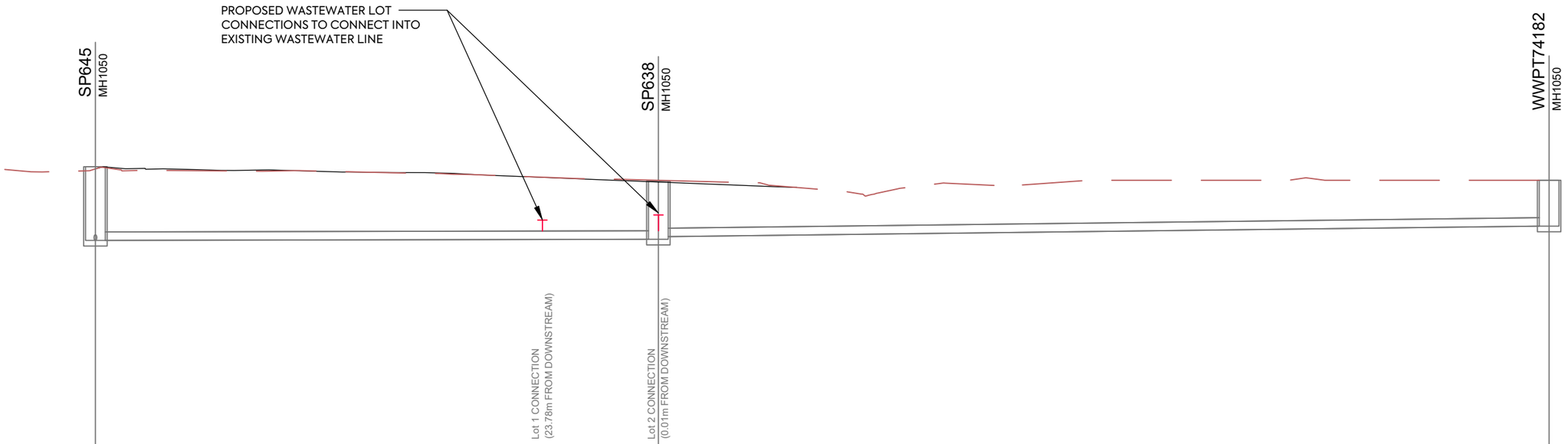
LEGEND:

NATURAL SURFACE

FINISHED SURFACE

PROPOSED DRAINAGE LINE

PROPOSED HARDFILL BACKFILL



DATUM = 5.0						
FINISHED LEVEL	13.48			13.07		13.12
DEPTH TO INVERT	1.96	1.96		1.52	1.45	1.22
INVERT LEVEL	11.52	11.52		11.55	11.62	11.90
EXISTING SURFACE	13.42			13.12		13.12
PIPE DETAILS		0.10% 225mmø (EXISTING)			0.59% 225mmø (EXISTING)	
LENGTH		29.95m			47.39m	

WASTEWATER DRAINAGE LINE D WW

MCKENZIE & CO.

Kāinga Ora Homes and Communities

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

CLIENT:

PROJECT: 59-61 ALLEN BELL DRIVE KAITAIA

TITLE: PROPOSED DRAINAGE WASTEWATER LONGITUDINAL SECTION SHEET 1

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250(H) 1:25(V) DO NOT SCALE

DRAWING NO: 3792-96-510

REV: A

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR WASTEWATER DRAINAGE NOTES ON DRAWING 001.

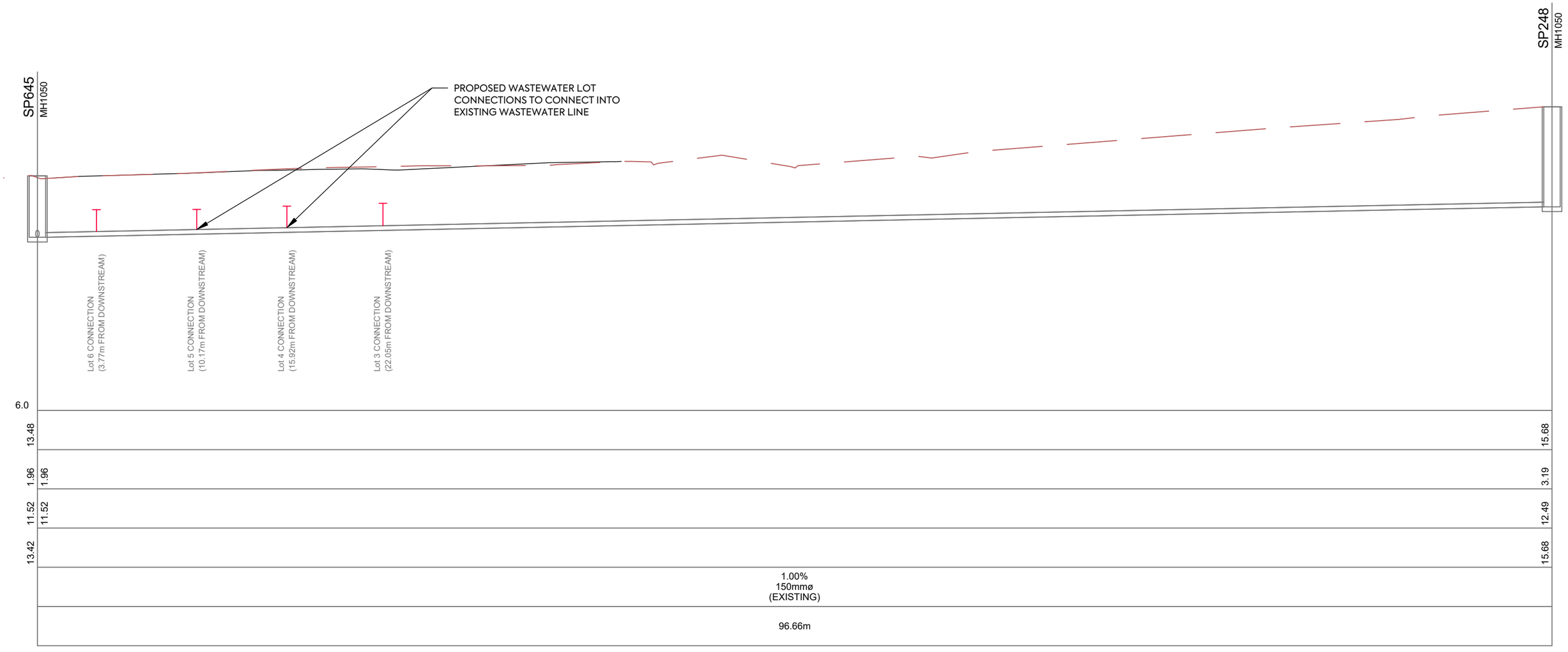
LEGEND:

NATURAL SURFACE

FINISHED SURFACE

PROPOSED DRAINAGE LINE

PROPOSED HARDFILL BACKFILL



WASTEWATER DRAINAGE LINE D WW

MCKENZIE & CO.

Kāinga Ora Homes and Communities

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

CLIENT:

PROJECT:
59-61 ALLEN BELL DRIVE
KAITAIA

TITLE:
PROPOSED DRAINAGE
WASTEWATER
LONGITUDINAL SECTION
SHEET 2

PURPOSE OF ISSUE:
RESOURCE CONSENT

SCALE:
1:250(H) 1:25(V)
DO NOT SCALE

DRAWING NO: 3792-96-511

REV: A

PARKDALE CRESCENT

ALLEN BELL DRIVE

PROPOSED TYPICAL WATER METER TO SERVE LOT 2

EXISTING WS LINE @ 100mm AC

EXISTING METER TO BE RELOCATED AND REUSED FOR LOT 1 IF SUITABLE.

EXISTING WS LINE @ 150mm AC

EXISTING METER TO BE RELOCATED AND REUSED FOR LOT 3 IF SUITABLE.

PROPOSED TYPICAL METER BANK MANIFOLD TO SERVE LOT 4,5,6.

Lot 1
FFL 14.72m

Lot 2
FFL 14.72m

Lot 3
FFL 14.72m

Lot 4
FFL 14.72m

Lot 5
FFL 14.72m

Lot 6
FFL 14.72m

COMMON ACCESSWAY 1

COMMON ACCESSWAY 2

Lot 55
DP 77073

Lot 15
DP 74955

Lot 25
DP 74955

NOTES:

1. REFER TO STANDARD NOTES PLAN FOR WATER SUPPLY NOTES ON DRAWING 001.

LEGEND:

- EXTENT OF WORKS
- PROPOSED WATERMAIN — W
- EXISTING WATERMAIN — W
- PROPOSED WATER CONNECTION
- EXISTING WATER CONNECTION
- PROPOSED WATER METER CONNECTION — WM
- PROPOSED WATER METERBANK MANIFOLD — MB
- PROPOSED FLUSH OUT VALVE
- EXISTING WATER METER CONNECTION TO BE RELOCATED — WM
- EXISTING PUBLIC FIRE HYDRANT — H
- EXISTING PUBLIC VALVE
- PROPOSED TREE LOCATION (REFER TO LANDSCAPE ARCHITECTS PLANS FOR TREE AND PLANTING DETAILS)
- EXISTING TREE TO REMAIN

MCKENZIE & CO.

Kāinga Ora Homes and Communities

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

CLIENT:

PROJECT:
59-61 ALLEN BELL DRIVE
KAITAIA

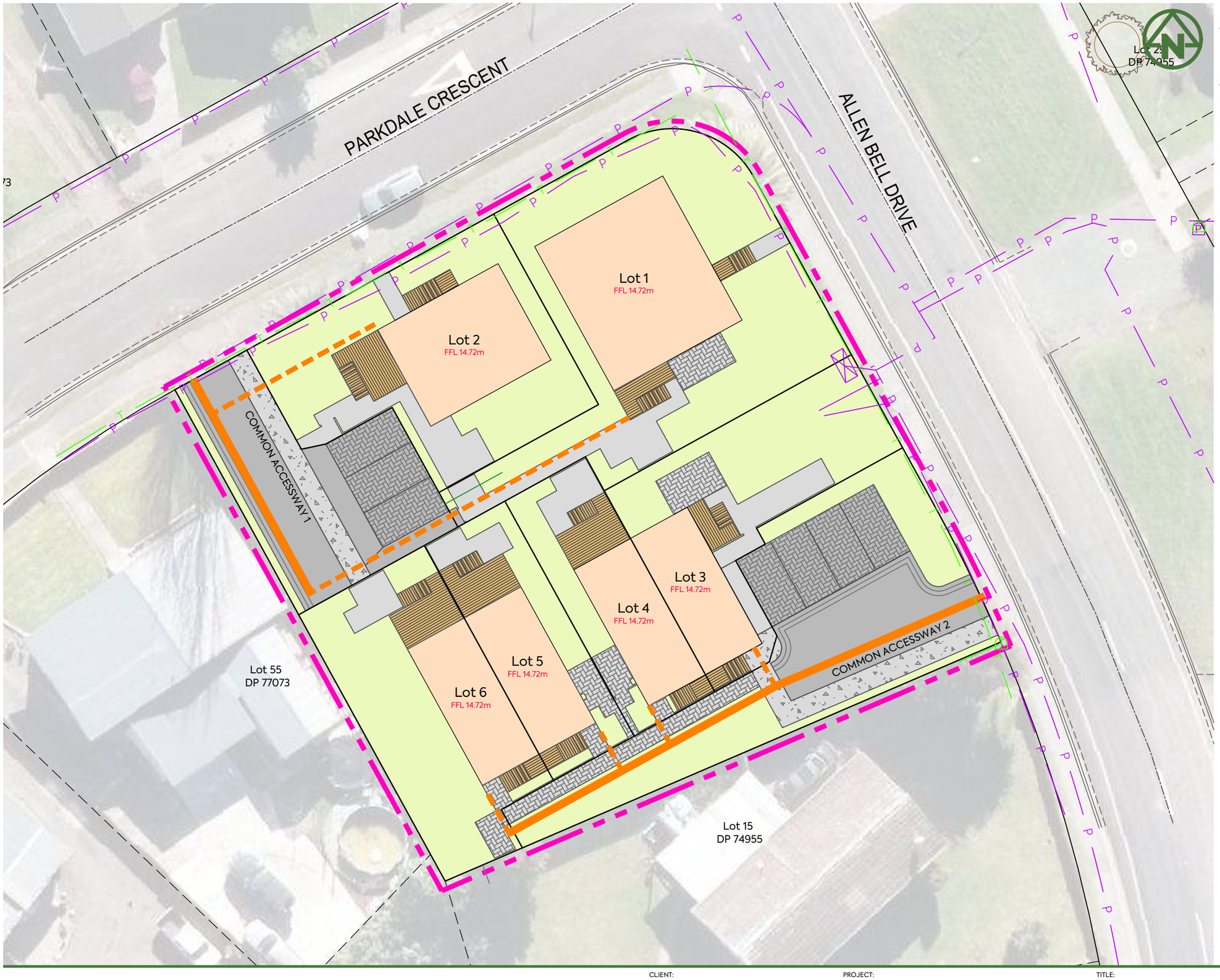
TITLE:
PROPOSED WATER SUPPLY
OVERALL PLAN

PURPOSE OF ISSUE:
RESOURCE CONSENT

SCALE:
1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-600

REV: A



NOTES:

1. REFER TO STANDARD NOTES PLAN FOR UTILITIES NOTES ON DRAWING 001.

LEGEND:

- EXTENT OF WORKS
- PROPOSED TYPICAL UTILITY TRENCH
- PROPOSED UTILITY CONNECTION
- EXISTING POWER LINE
- EXISTING POWER POLE
- EXISTING POWER PILLAR
- EXISTING STREET LIGHT
- EXISTING TELECOM LINE
- EXISTING TELECOM PILLAR
- EXISTING GAS LINE
- PROPOSED TREE LOCATION (REFER TO LANDSCAPE ARCHITECTS PLANS FOR TREE AND PLANTING DETAILS)
- EXISTING TREE TO REMAIN

MCKENZIE & CO.

Kāinga Ora Homes and Communities

CLIENT:

PROJECT:
59-61 ALLEN BELL DRIVE
KAITAIA

TITLE:
NETWORK UTILITIES
OVERALL PLAN

PURPOSE OF ISSUE:
RESOURCE CONSENT

SCALE:
1:250m @ A3
DO NOT SCALE

DRAWING NO: 3792-96-800

REV: A

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	MXC	JAN	JAN	26/08/25

APPENDIX B – STORMWATER CALCULATION

MCKENZIE & CO.

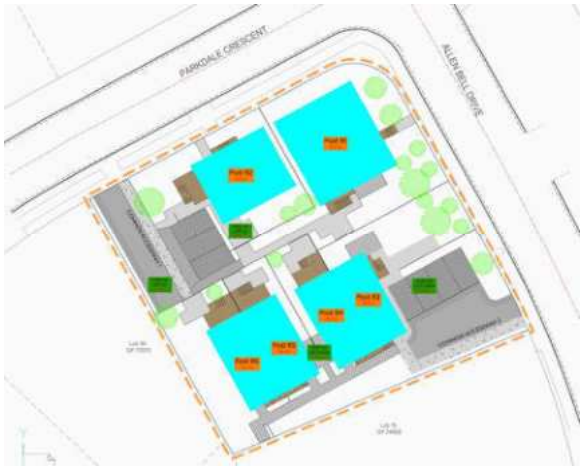
CATCHMENT AREA SUMMARY FOR PRE & POST DEVELOPMENT

Project Name:	59-61 Allen Bell	**Modelling:**	Rational Calculation Method				
Project No:	3792-96	**Designed By:**	MC	**Date:**	24/08/25	**Rev:**	A
Local Authority:	FAR NORTH DISTRICT COUNCIL	**Checked By:**	JAN	**Date:**	24/08/25	**PAGE NO:**	1 OF 2
Rainfall Information:	HIRDS NIWA, OR REGIONAL CODE OF PRACTICE	**Design Storm:**	100-YR 10 Minute				

STORMWATER CATCHMENT AND PIPE CAPACITY ASSESSMENT

Pre-Development Catchment Area

Post-Development Catchment Area



Pre-Development Catchment Area

Area (A) 1558 m²

0.1558 Ha

	Runoff Coeffiecient	C	Area
Perv	Grass/lawn	0.3	1206.00
Imp	Roof	0.9	285.00
Imp	Hardstand	0.85	67.00

Total:

$C = \frac{\sum C_i A i}{A}$ 0.43 1558

Rainfall Intensity 176 mm/hr

$Q_{10} = 2.78CIA$ 33.0386 l/sec

Post-Development Catchment Area

Area (A) 1558

0.1558

	Runoff Coeffiecient	C	Area
Perv	Grass/lawn	0.3	657.00
Imp	Roof	0.9	440.00
Imp	Hardstand	0.85	461.00

Total:

$C = \frac{\sum C_i A i}{A}$ 0.63 1558

Rainfall Intensity 176 mm/hr

$Q_{10} = 2.78CIA$ 48.1916 l/sec

MCKENZIE & CO.

CATCHMENT AREA SUMMARY FOR PRE & POST DEVELOPMENT

Project Name:	59-61 Allen Bell	**Modelling:**	HEC-HMS v 4.12				
Project No:	3792-96	**Designed By:**	MC	**Date:**	21/08/25	**Rev:**	A
Local Authority:	FAR NORTH DISTRICT COUNCIL	**Checked By:**	JAN	**Date:**	21/08/25	**PAGE NO:**	2 OF 2
Rainfall Information:	HIRDS NIWA, OR REGIONAL CODE OF PRACTICE	**Design Storm:**	100-YR 10 Minute				

1.1 Pre-Development Catchments

HEC HMS CODE	Description	Area (km^2)	CN	Ia	Time Concentration (Tc)
PRE R 1	EX IMP ROOF - (Dwelling/garage)	0.0002850	98	0	10
PRE D1	EX IMP D'WAY - (Concrete)	0.0000670	89	2.5	10
PRE PERV 1	EX PERV - (Lawn/ vegatation)	0.0012060	74	5	10
	TOTAL	**0.00156**	% Imp =	23%	

1.2 Post-Development Catchments

HEC HMS CODE	Description	Area (km^2)	CN	Ia	Time Concentration (Tc)
POST R1	Lot 1 - Roof	0.00013	98	0	10
POST R2	Lot 2 - Roof	0.00009	98	0	10
POST R3 ,R4,R5,R6	Lot 3,4,5,6 - Roof	0.00022	98	0	10
POST D3	Lot 3,4,5,6,- Sealed Imp (e.g. Driveways)	0.00020	89	2.5	10
POST A1	SHARED ACCESSWAY	0.00026	89	2.5	10
POST PERV 1-5	Perv Balance - (lawn landscape)	0.00066	74	5	10
	TOTAL	**0.00156**	% Imp =	58%	

MCKENZIE & CO.

DETENTION TANK CALCULATIONS FOR LOTS 1-8 - FAT SAM®: UNDER DECK/DWELLING RAINTANK

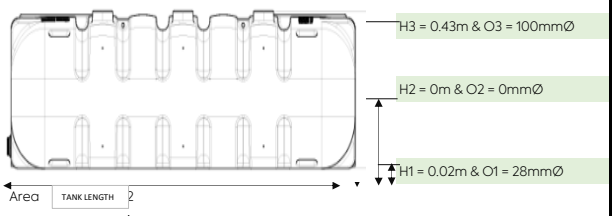
Project Name:	59-61 Allen Bell	**Modelling:**	HEC-HMS v 4.12				
Project No:	3792-91	**Product Name:**	FAT SAM®: Under Deck/Dwelling Raintank				
Local Authority:	Auckland City Council	**Tank No:**	Lots 1-8				
Design Storm:	100 YR - 24H	**Designed By:**	MXC	**Date:**	14/08/25	**Rev:**	A
Rainfall Information:	TP108 24H Design Storm with Climate Change	**Checked By:**	JN	**Date:**	14/08/25	**PAGE NO:**	1 OF 3

LOTS 1-8 - DETENTION TANK DIMENSIONS FOR THE 100 YR - 24H DESIGN STORM

Tank Inflow/Outflow Geometry

Tank Length	2.35	m
Tank Width	1.6	m
O1 (Orifice Diameter)	0.028	m
O2 (Orifice Diameter)	0.00	m
O3 (Orifice Diameter)	0.10	m
H1 (Orifice Height)	0.02	m
H2 (Orifice Height)	0.00	m
H3 (Orifice Height)	0.43	m
Min Tank Volume Required	1,500	L

Tank Specifications



FAT SAM®: Under Deck/Dwelling Raintank 1500L
Dimensions = 2.35L x 1.6W x 0.43H

TANK OUTFLOW RESULTS FOR FAT SAM®: UNDER DECK/DWELLING RAINTANK

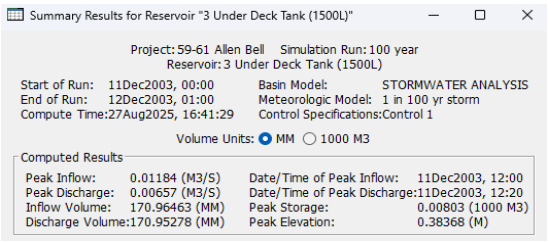
PROPOSED OUTFLOW RESULTS FOR A SINGLE TANK

H1 (m) Elevation	H2 (m) Elevation	H3 (m) Elevation	V1	Q1	V2	Q2	V3	Q3	Volume Storage	Q tot Discharge
0	0	0	0	0	0.000	0.000	0.000	0.000	0.00000	0.00000
0.1	0.1	0	1.40071	0.00056	1.401	0.000	0.000	0.000	0.00035	0.00056
0.2	0.2	0	1.98091	0.00079	1.981	0.000	0.000	0.000	0.00070	0.00079
0.3	0.3	0	2.42611	0.00097	2.426	0.000	0.000	0.000	0.00105	0.00097
0.4	0.4	0	2.80143	0.00112	2.801	0.000	0.000	0.000	0.00140	0.00112

Lots 1-8

Total Storage	Total Discharge
0.00000	0.00000
0.00209	0.00336
0.00419	0.00475
0.00628	0.00582
0.00837	0.00672

LOTS 1-8 - HEC-HMS MODEL RESULTS


Summary Results for Reservoir "3 Under Deck Tank (1500L)"

Project: 59-61 Allen Bell Simulation Run: 100 year
Reservoir: 3 Under Deck Tank (1500L)

Start of Run: 11Dec2003, 00:00 Basin Model: STORMWATER ANALYSIS
End of Run: 12Dec2003, 01:00 Meteorologic Model: 1 in 100 yr storm
Compute Time: 27Aug2025, 16:41:29 Control Specifications: Control 1

Volume Units: (•) MM ( ) 1000 M3

Computed Results

Peak Inflow: 0.01184 (M3/S) Date/Time of Peak Inflow: 11Dec2003, 12:00
Peak Discharge: 0.00657 (M3/S) Date/Time of Peak Discharge: 11Dec2003, 12:20
Inflow Volume: 170.96463 (MM) Peak Storage: 0.00803 (1000 M3)
Discharge Volume: 170.95278 (MM) Peak Elevation: 0.38368 (M)

Results output from HEC-HMS v 4.12

Results Overall Site		Tank Volume =	1500	Peak Volume =	1.34 m³	Peak Inflow =	1.97 l/s	Peak discharge =	1.10 l/s
Lot	6	Tot. Tank Volume =	9,000	Tot. Peak Volume =	8.03 m³	Tot. Peak Inflow =	11.84 l/s	Tot. Peak discharge =	6.57 l/s

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The preliminary assessment indicates that in order to mitigate peak flow runoff for the 100 YR - 24H design storm. A 1500L above ground tank with a 28mmØ orifice control on the outlet is required for each lot. The proposed mitigation concept will reduce post development peak flow rate from 11.84l/s to 6.57l/s which is less than the pre-development levels previously seen during the 100 YR - 24H storm event.

APPENDIX C – WASTEWATER CALCULATION

MCKENZIE & CO.

WASTEWATER CATCHMENT PARAMETERS - CATCHMENT AND FLOW DEMAND ASSESMENT

For Far North District Council - Far North District Council Code Of Practice

Project Name:	59-61 Allen Bell Drive, Kaitaia	Designed By:	MXC	Date:	21/08/25	Rev:	A
Project No:	3792-96	Checked By:	JAN	Date:	21/08/25	PAGE NO:	1 OF 1
Local Authority:	Far North District Council	Design Guide:	Far North District Council Code of Practice				

Catchment Area - Wastewater Assessment

DESIGN CRITERIA

Domestic/Residential			Assumption
Domestic Average Daily Flow (ADF)	140	L/p/d	FNDC COP Table 5-1
Peaking Factor (PF)	2.50		
Peaking Factor (PF)	5.00		
Population equivalent	4.0	p/dwelling	FNDC COP Table 5-2

EXISTING WASTEWATER DEMAND

			Remarks	
Population Equivalent	8.0	persons	2	Ex Dwellings (actual)
Average Daily Weather Flow - ADWF	0.01	L/s		
Dry Weather Peak Daily Flow	0.03	L/s		
Peak Daily Flow - PWWF	**0.16**	L/s		

FUTURE WASTEWATER DEMAND

			Remarks	
Future Population Equivalent	32.0	persons	0	Ex Dwellings (actual to remain)
Future Population Increase	24.0	persons	8	Proposed Additional Dwellings
Average Daily Weather Flow - ADWF	0.05	L/s		
Dry Weather Peak Daily Flow	0.13	L/s		
Peak Daily Flow - PWWF	**0.65**	L/s		

POST DEVELOPMENT WASTEWATER DEMAND DIFFERENTIAL

Difference in Average Daily Flow (m^3/s) - ADWF	0.04	L/s	
Difference in Peak Daily Flow (L/s) - PDWF	0.10	L/s	
Difference in Peak Design Flow (L/s) - PWWF	**0.49**	L/s	Increase on existing Network

APPENDIX D –WATER SUPPLY CALCULATION

MCKENZIE & CO.

WATER SUPPLY CATCHMENT PARAMETERS - CATCHMENT AND FLOW DEMAND ASSESMENT

For Far North District Council - Far North District Council Code Of Practise

Project Name:	59-61 Allen Bell	Designed By:	MXC	Date:	21/08/25	Rev:	A
Project No:	3792-96	Checked By:	CIM	Date:	21/08/25	PAGE NO:	1 OF 1
Local Authority:	Far North District Council	Design Guide:	Far North District Council Code of Practise				

Catchment Area - Water Supply Assessment

DESIGN CRITERIA

Domestic/Residential			Assumption
Domestic Average Daily Flow (ADF)	300	L/p/d	Far North District Council 6.2.2.3
Population Density	50	p/ha	WCCOP 6.3.5.6
Peak Factor (below 2,000) - PDD	2.0		Far North District Council 6.2.2.5
Peak Factor (below 2,000) - PHD	5.0		Far North District Council 6.2.2.5

EXISTING WATER SUPPLY DEMAND

			Remarks			
Contributing Catchment Area	0.16	ha				
Population Equivalent	10.0	persons	2	Ex Dwellings (actual)		
Existing Design Peak Factor	5.0	L/Ha/d	WCCOP 6.3.5.3			
Average Daily Demand - ADD	3000.00	L/d				
Peak Daily Demand - PDD	6000.0	L/d	WCCOP 6.3.5.3			
Peak Hourly Demand - PD/h	1250.00	L/h				

FUTURE WATER SUPPLY DEMAND

			Remarks			
Contributing Catchment Area	0.16	ha				
Population Equivalent	0.0	persons	0	Ex Dwellings (actual)		
Design Peak Factor	5.0	L/Ha/d	WCCOP 6.3.5.3			
Additional (Design) Population	30.00	persons	0	1 Beds	6	2-4 Beds
Average Daily Demand - ADD	9000.00	L/d				
Peak Daily Demand - PDD	18000.0	L/d	WCCOP 6.3.5.3			
Peak Hourly Demand - PD/h	3750.00	L/h				

POST DEVELOPMENT WATER SUPPLY DEMAND DIFFERENTIAL

Difference in Average Peak Daily Demand (L/d) - PDD	12000.00	L/d	
Difference in Peak Demand (L/h) - PDD	2500.00	L/h	

APPENDIX E – COUNCIL CORRESPONDENCE

Michael Chandra

From: Nicole Basher <nicoleb@nrc.govt.nz>
Sent: Tuesday, 12 August 2025 8:37 am
To: Michael Chandra
Subject: FW: [#3792-93] REQ.627280 McKenzie and Co Flood level request 59 61 Allen Bell Drive Kaitaia 20250805
Attachments: Outlook-NRC Logo S; Outlook-uruecmvx; Outlook-NRC Logo S; Outlook-2x3bzg5e; 100yr CC Level m OTP 59 61 Allen Bell Drive A3 Map.pdf; 100yr CC Depth 59 61 Allen Bell Drive A3 Map.pdf; 100yr CC Velocity 59 61 Allen Bell Drive A3 Map.pdf

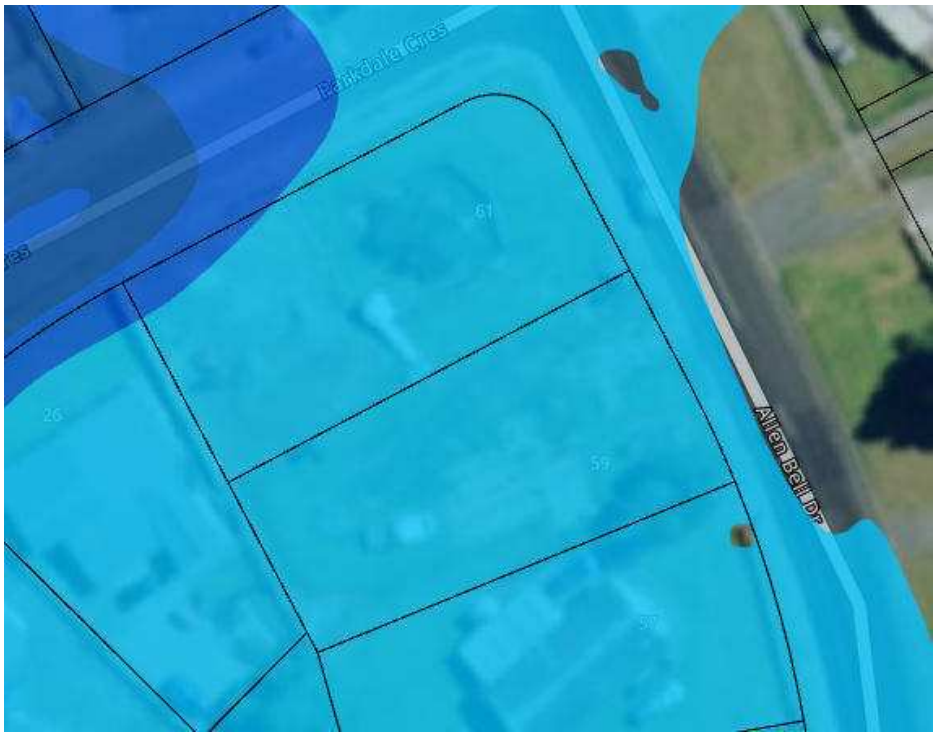
Morning Michael,

As discussed over the phone on Friday, attached are three maps:

- 100 year + CC Level in m OTP
- 100 year + CC Depth
- 100 year + CC Velocity

They display the rasters from the Awanui Prioirty Rivers status quo model at 59 & 61 Allen Bell Drive, Kaitaia. A screenshot of the prioirty model extents is below.

Note that the attached flood level map only displays one colour. This is because the flood level value across the area falls within the same 0.05m interval. Across those two properties (59 and 61) the level is 14.01m OTP.



Also as discussed over the phone, we can provide the model results for the Awanui Prioirty Rivers status quo model. However, it can take couple days or so to get IT to set you up with access and also to get the model on to OneDrive where it can be shared from.

Again noting it is a DHI/MIKE model so you would either need the software/skills inhouse, or to be able to provide it to someone with the software and skillset to pull data out of it.

Happy to do this, would likely be able to get to you early next week. But am also happy to do this once you know you require the model and have the software to view the results, whether that be in three weeks or three months. Just let me know.

Our modelling disclaimers are linked below:
Coastal Flood Hazard Disclaimer
River Flood Map Disclaimer

Kind regards,

Ngā mihi

Nicole Basher
Rivers and Natural Hazards Officer
Northland Regional Council » Te Kaunihera ā rohe o Te Taitokerau

M 0272162199
P 09 470 1210 | **EXT** 9240

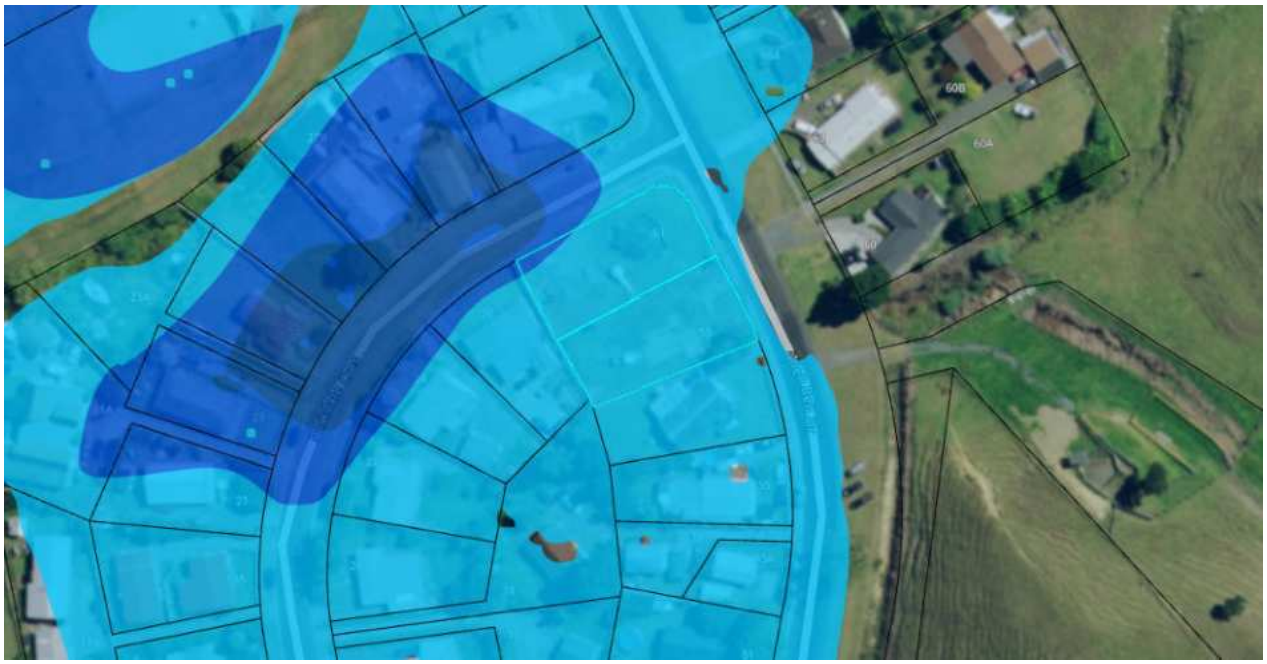
Northland REGIONAL COUNCIL
Te Kaunihera ā rohe o Te Taitokerau

P 0800 002 004 **»** **W** www.nrc.govt.nz

From: Nicole Basher <nicoleb@nrc.govt.nz>
Sent: Thursday, August 7, 2025 2:05 PM
To: Michael Chandra <michael.chandra@mckenzieandco.co.nz>
Subject: Re: REQ.627280 McKenzie and Co Flood level request 59 61 Allen Bell Drive Kaitaia 20250805

Kia ora Michael,

Regardign your below query; we have two models for the Awanui catchment, the priority rivers model and the regionwide model, you will have likely seen both in our online Natural Hazards map. The priority model (image below) takes precedent over the regionwide for this catchment.



Please note that this model is the status quo model for Awanui. Once the flood scheme works in Kaitaia are completed, there will be a new model released that takes into account the scheme works.

I can provide you with the model files, it is a MIKE model so you would either need the software/skills inhouse, or to be able to provide it to someone with the software and skillset to pull data out of it. Unfortunately, our rivers team member with a modelling background recently changed roles at council and we don't have yet have anyone with a modelling skillset.

But that model would contain all the variables you are after: Flow/Discharge, Depth and Level.

If you are unable to view the model, then there are some GIS outputs that I could provide but they are only variable for the following variables: Level, Depth & Velocity. So not for flow/discharge, those are only in the model results. We use ArcGIS Pro here so the rasters were delivered on a geodatabase and that is how we provide them. You can view that data type in QGIS.

If you wanted the model files and results or those rasters (clipped to your area of interest); I can aim to get them to you in the next few business days. The IT team here would need to set you up in order to download that data once I have collated it as they are much too large to send via email.

If neither of those options would work i.e. you don't have MIKE for the model and you don't have any GIS software to view the raster outputs. Then we can provide pdf maps showing the raster data, however, we would likely not be able to get those to you until mid next week.

Let me know how you'd like to proceed.

Our modelling disclaimers are linked below:
Coastal Flood Hazard Disclaimer
River Flood Map Disclaimer

Kind regards,

Ngā mihi

Nicole Basher
Rivers and Natural Hazards Officer
Northland Regional Council » Te Kaunihera ā rohe o Te Taitokerau

M 0272162199
P 09 470 1210 | **EXT** 9240

P 0800 002 004 **»** **W** www.nrc.govt.nz

From: Michael Chandra <michael.chandra@mckenzieandco.co.nz>
Sent: Tuesday, 5 August 2025 9:58 am
To: Mailroom <info@nrc.govt.nz>
Cc: Chris Mellican <Chris.Mellican@mckenzieandco.co.nz>
Subject: REQ.627280 McKenzie and Co Flood level request 59 61 Allen Bell Drive Kaitaia 20250805

Kia Ora,

I have been advised by FNDC to reach out to NRC.

Please see the email below for the correspondence from FNDC advising me to reach out to NRC regarding flooding advise as the flooding matters that have been raised as the cause is more from river flooding than from the piped network.

I have attached a draft pipe layout for the proposed development on **59 – 61 Allen Bell Drive, Kaitaia**.

The site has **two** existing dwellings which will be **demolished** to propose a new **6-lot** subdivision; please see the draft layout attached.
I was hoping for your assistance with the existing flooding conditions of the area to support an upcoming Resource consent. The proposed development is expected to yield 6 new dwellings, increasing the existing number of dwellings by 4.

Could you send the most recent flood model including relevant flood information on site and the information below if the OLFP crosses the sites?

- Modelled Peak Flow Rate
- Modelled Peak Volume
- Modelled Peak Flood depths
- Modelled Peak Flood levels

Looking at NRC Natural Hazard GIS's it appears that our site has flooding issues.
Please let me know if you require any further information. Given that this is a **Kāinga Ora development, the matter is very time sensitive**.

Thanks

Regards,

Michael Chandra
Civil Design Engineer

021 867 643

Level 6, 41 Shortland Street, Auckland 1010
PO Box 259309, Botany 2163
09 320 5707

MCKENZIE & CO.

mckenzieandco.co.nz

From: Infrastructure Support Inbox <infra.support@fndc.govt.nz>
Sent: Monday, 4 August 2025 8:50 am
To: Michael Chandra <michael.chandra@mckenzieandco.co.nz>
Cc: Chris Mellican <Chris.Mellican@mckenzieandco.co.nz>
Subject: RE: [#3792-96] 59 - 61 Allen Bell Drive, Kaitaia 0410- Capacity & Flooding Check

Kia ora Michael.

Thank you for contacting the Far North District Council.

For your first query on the Stormwater, Water and Wastewater capacity issues at 59-61 Allen Bell Drive. Please see my colleague's Ranjan Khadka's attached email.

For your second query, I have spoken with our Infrastructure Development Engineer, and we advise you to get in touch with NRC re: the flooding matters you have raised as the cause is more from river flooding than from our piped network.

If you have any further queries, feel free to get back in touch.

Ngā Mihi

Ryan

Infrastructure Support Inbox
Infrastructure Support
infra.support@fndc.govt.nz
Te Kaunihera o Te Hiku o te Ika | Far North District Council

Pokapū Kōrero 24-hāora | 24-hour Contact Centre 0800 920 029
fndc.govt.nz

From: Michael Chandra <michael.chandra@mckenzieandco.co.nz>
Sent: Tuesday, 29 July 2025 10:55 am
To: Infrastructure Support Inbox <infra.support@fndc.govt.nz>

Cc: Chris Mellican <Chris.Mellican@mckenzieandco.co.nz>
Subject: [#3792-96] 59 - 61 Allen Bell Drive, Kaitaia 0410- Capacity & Flooding Check

Kia Ora,

Please see draft pipe layout for the proposed development on **59 – 61 Allen Bell Drive, Kaitaia**.

The site has **two** existing dwellings which will be **demolished** to propose a new **6-lot** subdivision; please see the draft layout attached.
Could you please confirm whether there are any known capacity issues for stormwater or water or wastewater in this area?

Additionally, I was hoping for your assistance with the existing flooding conditions of the area to support an upcoming Resource consent. The proposed development is expected to yield 6 new dwellings, increasing the existing number of dwellings by 4.

Looking at Far North District Council GIS's it appears that our site has flooding issues.
Please let me know if you require any further information. Given that this is a Kāinga Ora development, the matter is very time sensitive.

Thanks for your help.

Michael Chandra
Civil Design Engineer

021 867 643

Level 6, 41 Shortland Street, Auckland 1010
PO Box 259309, Botany 2163
09 320 5707

MCKENZIE & CO.

mckenzieandco.co.nz

Michael Chandra

From: Ranjan Khadka <Ranjan.Khadka@fndc.govt.nz>
Sent: Wednesday, 23 July 2025 4:14 pm
To: Chris Mellican
Subject: RE: RFS 4261176 Priority 3: Water and WasteWater Correspondence.

Kia Ora Chris,

Based on the information provided, I've outlined the following preliminary comments to assist with early-stage feasibility and servicing considerations.

Wastewater / Sewer
At this stage, there are no known capacity concerns at the connection point for this development. However, further downstream — particularly in the Kitchener Street and Dunn Street catchment area — the wastewater network is known to experience capacity limitations and overflows during wet weather events. As a result, the potential for downstream impacts should be considered early. Additional wastewater flows from this development may require further network assessment and potentially mitigation measures once the detail design has been completed.

Water Supply
At this stage, the water reticulation network in the area remains within operational thresholds for service delivery. However, observed head losses are approaching the upper range of acceptable engineering standards, and as such, pressure availability may become a limiting factor, particularly during peak demand periods. Firefighting flow capacity for the proposed development has not yet been verified and should be assessed further through a servicing assessment or pressure/flow testing as part of your next design steps.

Stormwater
The general area is flat and low-lying, which contributes to poor natural drainage and can lead to surface flooding during heavy rainfall. While the site's proximity to the Awanui River may help in terms of downstream discharge, local drainage and runoff management will still be important.

Council's GIS mapping shows a 1200 mm diameter stormwater pipe running through the properties at 59 and 61 Allen Bell Drive. This is a key part of the stormwater network and, based on engineering standard, building over this pipe is not permitted. If you're considering development on these properties, you'll likely need to adjust the layout to avoid this pipe. Alternative building layouts or site configurations should be explored to ensure adequate protection of the pipe.

Note:
These comments are provided as preliminary guidance only and are limited to existing capacity constraints within Council's reticulated infrastructure networks — wastewater, water, and stormwater. For any other engineering or planning matters — such as stormwater attenuation, engineering standard, site layout, asset protection or easements— I recommend arranging a **Concept Development Meeting** with Council's Resource Consents and Development Engineering teams. This will allow you to get early

guidance on how to manage the 3 Waters infrastructure on or near the site, and to discuss any other considerations that could affect your development.

Nga mihi,

Ranjan Khadka He/him Hours: Mon-Fri 8:30-17:00
Waters Engineer - Infrastructure Engineering
M 273876286 | **P** 6494070359 | Ranjan.Khadka@fndc.govt.nz
Te Kaunihera o Te Hiku o te Ika | Far North District Council

Pokapū Kōrero 24-hāora | 24-hour Contact Centre 0800 920 029
fndc.govt.nz

From: Chris Mellican <Chris.Mellican@mckenzieandco.co.nz>
Sent: Tuesday, 22 July 2025 11:26 am
To: Ranjan Khadka <Ranjan.Khadka@fndc.govt.nz>
Subject: RE: RFS 4261176 Priority 3: Water and WasteWater Correspondence.

Hi Ranjan,

Thanks for the prompt response – the proposed development will be for 4 new units for a total of 6 across both 59 and 61 Allen Bell Drive.

This is very early concept.

Yield Plan

Chris Mellican CMEngNZ, CPEng, IntPE(NZ)
Senior Civil Engineer

021 687 575

Level 6, 41 Shortland Street, Auckland 1010
PO Box 259309, Botany 2163
09 320 5707

MCKENZIE & CO.

mckenzieandco.co.nz

From: Ranjan Khadka <Ranjan.Khadka@fndc.govt.nz>
Sent: Tuesday, 22 July 2025 10:18 am
To: Chris Mellican <Chris.Mellican@mckenzieandco.co.nz>
Subject: RFS 4261176 Priority 3: Water and WasteWater Correspondence.

Kia Ora Chris,

Thank you for your RFS regarding potential capacity constraints on the 3-Water networks in relation to your proposed development.

From the map, I can see that 61 Allen Bell Drive appears to be vacant. Could you please confirm whether the intention is to develop both 59 and 61 Allen Bell Drive into six new dwellings (a net increase of four) or just 59 Allen Bell Drive?

I will need about this before I can provide any comments on the capacity of the existing reticulation networks. Please send through this information, and I'll be happy to provide general comments based on what we know of the current network.

For flood hazard information and flood level report, please liaise directly with Northland Regional Council (NRC), as they are responsible for flood mapping and flood level reporting in this area.

Please don't hesitate to get in touch once you have more information about the proposal.

Nga mihi,

Ranjan Khadka He/him Hours: Mon-Fri 8:30-17:00
Waters Engineer - Infrastructure Engineering
M 273876286 | **P** 6494070359 | Ranjan.Khadka@fndc.govt.nz
Te Kaunihera o Te Hiku o te Ika | Far North District Council

Pokapū Kōrero 24-hāora | 24-hour Contact Centre 0800 920 029
fndc.govt.nz

REPORT

Detailed Site Investigation

59 & 61 Allen Bell Drive, Kaitaia

Prepared for
Kāinga Ora – Homes and Communities
Prepared by
Tonkin & Taylor Ltd
Date
August 2025
Job Number
1018898.4000 v1

Together we create and sustain a better world
www.tonkintaylor.co.nz

Document control

Title: Detailed Site Investigation – 59-61 Allan Bell Drive, Kaitaia					
Document Reference: 59-61ALL-AR105956-CN-RPT-Preliminary and Detailed Site Investigation					
Date	**Version**	**Description**	**Prepared by:**	**Reviewed by:**	**Authorised by:**
August 2025	1	DSI report for client	J. Gibbons	R. Pickett	L. Phuah

Distribution:

Kāinga Ora – Homes and Communities	1 electronic copy
Tonkin & Taylor Ltd (FILE)	1 electronic copy

Table of contents

Executive summary

Kāinga Ora Homes and Communities (Kāinga Ora) has engaged Tonkin & Taylor Ltd (T+T) to undertake a Detailed Site Investigation (DSI) at 59-61 Allen Bell Drive (hereafter referred to as the Site). This assessment is based on high density residential land use. T+T have used this scenario to select appropriate contaminant standards and identify potential exposure pathways.

The table below summarises the key findings and considerations for the future use and redevelopment of the land. It is important that the information presented be read in conjunction with the relevant detail included in the main body of the report.

This assessment should be revisited if the final development is not for high density residential land use.

Consideration	Background	Outcome
Site history	The Site has been residential since at least 1981	• The Site has a history of residential land use and has been occupied since at least 1981, prior to which it appeared to be in pastoral land use. • The dwelling at 61 Allen Bell Drive had an extension added to the southwest which was removed prior to 2022 • A small shed was constructed at 59 Allen Bell Drive in 1985 and then demolished or removed in 2003. • No significant changes were observed at the Site until 2022 when the dwellings were demolished. • No evidence of significant filling of the land was noted during the historical review. **[refer Section 3]**
Potential for contamination	Site history review and the Far North District land use database indicate the Site has not been subjected to an activity on the Hazardous Activities and Industry List (HAIL).	• Far North District Council/Northland Regional Council do not hold any record of HAIL activities having occurred on the Site. • Based on the Kāinga Ora Conceptual Site Model V4[1] dated July 2022 it is anticipated that some asbestos and lead impacts, exceeding background levels, will exist based on age of the Site structures. These impacts will likely be confined to shallow soil and be localised to the building halo areas. The surface (0-0.3) topsoil layer up to 2m around the halo is most likely to be affected by the asbestos and lead impacts. **[refer Sections 3 and 4]**
Soil sample results and future development implications	If impacted soil is present on the Site, there could be implications relating to future soil disturbance. In particular human health and environmental implications.	• Soils sampled reported metals at concentrations below high-density residential land use NESCS[2] Soil Contaminant Standards (SCSs); • Asbestos fragments were observed and confirmed by laboratory testing within the halo of 61 Allen Bell Drive (61ALL-HA07). Impacted soil will need to removed with the appropriate controls in place (Class B Asbestos removal). [**refer Section 5**]

[1] Kāinga Ora Homes and Communities, July 2022. Conceptual Site Model - Residential Property, Version 4. Prepared by EHS Support New Zealand Limited

[2] Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011

Consideration	Background	Outcome
Resource consenting implications	There are rules and national regulations that apply to contaminated land in the Northland region.	• There is no evidence of HAIL activity at the Site. Therefore, as per Regulation 5(1)b, the NESCS does not apply to the piece of land. • In addition, contaminated land related consents are not considered to be required under the Northland Regional Plan for site redevelopment. **[refer Section 6]**
Recommendations		• A Soil Management Plan (SMP) is recommended which sets out health, environmental and safety controls, the redevelopment earthwork contractor must employ during the redevelopment earthwork phase. The SMP will also provide mitigation controls to manage unexpected discovery of contaminants, including Asbestos Containing Material (ACM). **[refer Section 8]**

1 Introduction and background

Tonkin & Taylor Ltd (T+T) has been engaged by Kāinga Ora – Homes and Communities (Kāinga Ora) to undertake a Detailed Site Investigation (DSI) at 59 & 61 Allen Bell Drive, Kaitaia (the site) to support Kāinga Ora's site redevelopment.

The scope of work has been undertaken in accordance with the Housing Delivery System contract, effective 1 July 2025. The scope of work generally follows a standard contaminated site assessment protocol developed by Kāinga Ora. The key aims of the DSI were to determine:

- Concentrations of contaminants of concern in the near surface soils on the Site.
- Whether resource consents may be required to address ground contamination issues as part of the proposed redevelopment work with respect to the NESCS and Far North District Council Operative District Plan.
- Whether contamination at the Site requires remedial work, poses material handling issues and/or off-site disposal/landfill constraints as part of the redevelopment programme.

The contaminated site assessment work performed follows the general reporting and investigation methodology presented in the MfE Contaminated Land Management Guidelines (CLMG) No. 1[3] and CLMG No. 5[4]. In addition, the requirements outlined in the New Zealand Asbestos in Soil Guidelines has also been followed where appropriate.

The persons undertaking, managing, reviewing, and certifying this investigation are suitably qualified and experienced practitioners (SQEP), as required by the NESCS and defined in the NESCS Users' Guide[5].

Should the Site redevelopment land use scenario change from the current (high density residential option) as read on the MfE Table B1 of the NESCS users guide, a suitably qualified and experienced practitioner / contaminated land consultant (e.g. T+T) should be re-engaged to review the new re-development scenario and make any applicable changes to the conceptual site model and/or associated soil removal plan described in this report.

2 Site description

The Site is located Kaitaia in a predominantly residential area. The Site is currently vacant with an approximate site area of 1500 m^2. The site identification details are presented in Table 2.1.

Table 2.1: Site identification

Address	Legal Description	Area (m^2)
59 Allen Bell, Kaitaia	Lot 16	760
61 Allen Bell, Kaitaia	Lot 17	796
Total site area		1,526

Source: Land Information New Zealand (LINZ)[6]

[3] MfE, 2021, Contaminated Land Management Guidelines No. 1. Reporting on Contaminated Sites in New Zealand (Revised 2021)
[4] MfE, 2021, Contaminated Land Management Guidelines No. 5. Site Investigation and Analysis of Soils (Revised 2021)
[5] MfE, 2012, Users Guide National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health
[6] LINZ Data Service. (2024, July 8). NZ Primary Parcels. Retrieved from https://data.linz.govt.nz/layer/50772-nz-primary-parcels/

2.1 Client provided information

As part of HDS Auckland, an indicative business case (IBC) meeting is held with all of the consultants involved with the site's redevelopment. The IBC and pipeline review study[7] provides a summary of the known Kāinga Ora held information on the site, the following of which is considered relevant:

- The dwelling on 59 Allen Bell Drive was demolished in November 2022 based on a post completion summary[8]. 61 Allen Bell is also demolished but the date is unknown;
- The anticipated redevelopment is for two stand alone units and two duplexes;
- The pipeline review study indicates that the site is not a HAIL site.

Kāinga Ora plans to re-develop the Site with high-density residential housing. We understand that the topsoil shall be removed (where required) to prepare for re-development, i.e. to about 0.3 m depth beneath hardstands (e.g. dwellings, driveways). Some of the underlying soils will also be removed to prepare for services and for site contouring.

2.2 Site Inspection

T+T performed a site inspection on 31 July 2025. A summary of observed conditions is presented Table 2.2. A photographic log of the Site is presented as Appendix A.

Table 2.2: Site condition

Condition	Observation
Buildings	Site is vacant
Site slope	Generally flat
Standing water	None
Visible signs of plant stress	Not observed on-site
Visible signs of potential contamination sources	None
Nearest surface water body	The Awanui River is located approximately 160m west of the Site
Geology[9]	Published geological information shows the site to be underlain by holocene estuary, river and swamp deposits

3 Preliminary Site Investigation

ENGEO Ltd prepared a Preliminary and Detailed Site Investigation[10] (PSI/DSI) for the site in December 2020. The site history review confirmed that the site had been developed for residential purposes in in the late 1970s/early 1980s, with few significant changes, a shed added to 59 Allen Bell Drive and an extension to the southwest of 61 Allen Bell Drive.

Based on the PSI/DSI review it is concluded that the Site is unlikely to have been subjected to a specific activity on the HAIL.

Since the PSI/DSI was undertaken the buildings at the Site have been demolished. Kāinga Ora post site clearance records confirm the dwelling at 59 Allen Bell Drive was demolished in November 2022. The records for 61 Allen Bell indicate the dwelling was likely demolished between November 2021

[7] 59-61 Allen Bell Drive, Pipeline Review Study, dated 12 May 2025. December 2020 Project Brief, 59-61 Allen Bell Drive
[8] 'Post Site Clearance Report – 59 Allen Bell Drive Kaitaia" produced by Kāinga Ora – Homes and Communities, dated 1 November 2022
[9] GNS Science, viewed on 29 July 2025, https://data.gns.cri.nz/geology/
[10] ENGEO – Preliminary and Detailed Site Investigation – 59 & 61 Allen Bell Drive, Kaitaia. Prepared 23 December 2020.

and March 2022, based on historical aerial photographs and a clearance certificate. The clearance certificate[12] states that the date of the demolition was unknown and that the site was vacant at the time of inspection. Although fragments of demolition debris were noted, no asbestos fragments were reportedly observed on the Site (refer Appendix B).

Given the age of the dwellings on site, based on the Kāinga Ora Conceptual Site Model V4[13], there is the potential for the use of asbestos and/or lead based paint on or in the structures providing potential impact to site soils.

4 Site investigation

4.1 Previous Investigation

A previous PSI/DSI was undertaken by ENGEO Ltd in October 2020 for the properties at 59 and 61 Allen Bell Drive, Kaitaia. Soil sampling included two composite samples, one from each property address, comprising of four subsamples from across the property address. Samples were also collected from the principal location at 0.0–0.1 m, 0.3 m, and 0.5 m, deeper samples were not analysed. Samples were tested for heavy metals (composites) and asbestos (primary only). Results of laboratory testing showed:

- Heavy metals were detected below high-density residential land use and environmental screening criteria.
- No asbestos fibres were detected in either of the primary samples. However two fragments of asbestos-containing cement board (ACM) were identified near the driveway at 61 Allen Bell Drive. ENGEO recommended the removal of ACM from buildings prior to demolition and a post-demolition scrape of the building footprint and halo.
- Topsoil meets regional cleanfill acceptance limits, though approval must be sought from the receiving facility prior to disposal.

The report concluded that no HAIL activities were identified within the investigation area, and the redevelopment is unlikely to require NESCS soil disturbance consent.

4.2 Soil sampling and analysis plan

As discussed in Section 3.1, a PSI/DSI was undertaken by ENGEO Ltd in October 2020. Further sampling was conducted by T+T in July 2025 to meet the current Kāinga Ora Sampling and Analysis Plan[15].

In accordance with Kāinga Ora site investigation methodology[16] a soil sampling density of fourteen samples was required for the site.

[12] Asbestos Clearance Certificate – 61 Allen Bell Drive, Kaitaia" produced by Asbestos Advice Northland Region, dated 30 March 2022

[13] Kāinga Ora Homes and Communities, July 2022. Conceptual Site Model - Residential Property, Version 4. Prepared by EHS Support New Zealand Limited

[15] Residential Property – Soil Sampling and Analysis Plan, Version 8. May 2024. Prepared by EHS Support New Zealand Ltd.

[16] Kāinga Ora, May 2024. Residential Property – Soil Sampling and Analysis Plan, Version 8. Prepared by EHS Support New Zealand Limited

Table 4.1: Soil sampling and analysis plan

Sample Number	Sample Type (per cell)	Sample Design	Depths (m below ground level (bgl))	Sample Analysis*
59ALL-HA01 59ALL-HA04 59ALL-HA05 59ALL-HA06 61ALL-HA04 61ALL-HA05	One sample within each sampling cell	Systematic	Surface to 0.1[+], 0.3 and 0.5 m bgl unless refusal encountered	Metals screen Asbestos semi-quantitative
59ALL-HA02 59ALL-HA03 61ALL-HA02	Targeted	Targeted	Surface to 0.1[+], 0.3 m bgl unless refusal encountered	Metals screen Asbestos semi-quantitative

Notes:

[+] Surface to 0.1 m bgl sample consists of a soil sample from designated sample cell, using a 0.3m x 0.3m test pit.

* Analysis was performed on deeper sample(s) (0.3 and 0.5 m bgl) where shallow sample(s) result(s) (surface to 0.1 m bgl) reported elevated concentrations.

** Semi Quantitative asbestos analyses were performed on 500 ml samples (primary location only).

The soil investigation was performed by T+T on 31 July 2025 in accordance with the sampling analysis plan above with no deviations. Soil analyses were carried out by IANZ accredited laboratories using industry standard methods. The soil sampling locations are shown in Figure 1.

4.3 Field observations

The following field observations were recorded during the soil investigations.

- Topsoil or organic silt was observed at the surface to depths of 0.1 – 0.3 m across all locations. The topsoil comprised dark brown SILT, moist or wet, and contained rootlets. No odour, staining, or rubbish was noted. Black streaks and charcoal inclusions were observed at HA03, HA04, and HA05.
- Refusal on buried concrete was observed at HA04 from 0.1 m depth.
- Sandy silt or clayey silt was generally observed below the topsoil from 0.3 – 0.5 m depth.

4.4 Data quality

A quality assurance and quality control (QA/QC) programme was implemented as part of field procedures to confirm data was fit for purpose and included:

- Decontamination of sampling equipment between sampling locations.
- Preservation of samples with ice during transport from the field to the laboratory.
- Transportation of samples with accompanying chain of custody documentation.
- Compliance with sample holding times.

The IANZ accredited laboratory has stated that standard laboratory QA/QC testing was conducted internally and reported by the lab to have passed within their control limits.

4.5 Analytical results

The soil analysis results are discussed in Table 4.2 below. The laboratory reports are provided in Appendix D.

Soil sample laboratory results were compared against criteria for the assessment of regulatory requirements, the proposed redevelopment land use and acceptance criteria for local soil disposal sites to meet the objectives of the investigation (refer Table 4.3). The adopted assessment acceptance criteria included:

- For the protection of human health:
  - NESCS[6] criteria for high density residential land use have been used as a proxy based on the future proposed development.
  - Human health soil guideline values presented in the NZ Asbestos in Soil Guidelines[17].
- Background/cleanfill disposal criteria:
  - Published background ranges[18] for soils in Northland based on the site and surrounding geology.
- Alternative disposal criteria:
  - Published acceptance criteria of a typical managed fill disposal site and licenced landfill site to assess spoil disposal options.

Table 4.2: Results discussion

Condition	Observation
Human health – metals	No exceedances of the NESCS SCS high density residential land use.
Human health – asbestos	Asbestos fragments were observed in the house halo of 61 Allen Bell Drive (in line with observations made by ENGEO). Semi quantitative analysis on the soil found no detection of asbestos fibres.
Cleanfill/background	No topsoil samples exceed published background. Underlying natural soil returned metal concentrations within background ranges for Northland.

[17] Building Research Association of New Zealand (BRANZ), 2017, New Zealand Guidelines for Assessing and Managing Asbestos in Soil

[18]3. Landcare Research Information Services (LRIS) Portal. Predicted Background Soil Concentrations, 95% prediction confidence ranging from gravels, mudstone, sandstone and breccia, Palmerston North.

Table 4.3: Soil analytical results for metal and asbestos with regulatory criteria

						Asbestos[1]			Heavy Metals - Screen						
						Asbestos Containing Material (ACM) (Presence / absence and type)	Asbestos Containing Material (ACM) (% w/w)	Fibrous asbestos (FA) / Asbestos fines (AF) (% w/w)	Arsenic	Cadmium	Chromium	Copper	Lead	Nickel	Zinc
						-	%w/w	%w/w	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BRANZ Asbestos[1]						**Presence**	**0.01%**	**0.001%**							
NES Soil - Commercial / Industrial[2]						**-**	**-**	**-**	**70**	**1,300**	**>10,000**	**>10,000**	**3,300**	**6,000 [4]**	**400,000 [4]**
NES Soil - High Density Residential[2]						**-**	**-**	**-**	**45**	**230**	**1,500**	**>10,000**	**500**	**1,200 [4]**	**60,000 [4]**
Northland Background Concentrations (Predicted Background Concentration)[3]						**NAD**	**<LoR**	**<LoR**	**33.77**	**0.5**	**84.8**	**75.52**	**46.71**	**44.96**	**207**
Property Address	**Consultant**	**Sample ID**	**Sample depth (m bgl)**	**Material Type**	**Sampled Date**										
59 Allen Bell Drive	T+T	59ALL-HA01	0.10	-	31/07/2025	NAD	<0.001	<0.001	4	0.13	23	19	14.4	12	65
59 Allen Bell Drive	T+T	59ALL-HA02	0.10	-	31/07/2025	NAD	<0.001	<0.001	2	< 0.10	27	12	7.4	9	32
59 Allen Bell Drive	T+T		0.30	-	31/07/2025	-	-	-	2	< 0.10	31	14	7	10	34
59 Allen Bell Drive	T+T	59ALL-HA03	0.10	-	31/07/2025	NAD	<0.001	<0.001	< 2	< 0.10	19	11	7.1	6	19
59 Allen Bell Drive	T+T	59ALL-HA04	0.10	-	31/07/2025	NAD	<0.001	<0.001	13	0.29	56	48	15.8	25	149
59 Allen Bell Drive	T+T	59ALL-HA05	0.10	-	31/07/2025	NAD	<0.001	<0.001	3	0.16	41	22	10.4	19	80
59 Allen Bell Drive	T+T	59ALL-HA06	0.10	-	31/07/2025	NAD	<0.001	<0.001	4	0.15	27	30	11.1	13	54
59 Allen Bell Drive	T+T		0.30	-	31/07/2025	-	-	-	3	< 0.10	16	16	8.1	7	29
59 Allen Bell Drive	ENGEO	CS01	0.10	Soil	14/12/2020	-	-	-	9.3	<0.4	24	22	13	8.4	77
59 Allen Bell Drive	ENGEO	PS02	0.10	Soil	14/12/2020	NAD	<0.001	<0.001	-	-	-	-	-	-	-
61 Allen Bell Drive	T+T	61ALL-HA02	0.10	-	31/07/2025	NAD	<0.001	<0.001	5	< 0.10	31	28	10.9	9	59
61 Allen Bell Drive	T+T		0.30	-	31/07/2025	-	-	-	4	< 0.10	12	9	6.9	4	15
61 Allen Bell Drive	T+T	61ALL-HA04	0.10	-	31/07/2025	NAD	<0.001	<0.001	11	< 0.10	19	21	18.5	8	87
61 Allen Bell Drive	T+T	61ALL-HA05	0.10	-	31/07/2025	NAD	<0.001	<0.001	2	0.3	54	29	7.2	21	80
61 Allen Bell Drive	T+T	61ALL-HA07 ACM	0.00	Surface	31/07/2025	Amosite (Brown Asbestos) detected. Chrysotile (White Asbestos) detected.	-	-	-	-	-	-	-	-	-
61 Allen Bell Drive	ENGEO	CS02	0.10	Soil	14/12/2020	-	-	-	6.6	<0.4	37	23	15	18	64
61 Allen Bell Drive	ENGEO	PS01	0.10	Soil	14/12/2020	NAD	<0.001	<0.001	-	-	-	-	-	-	-
61 Allen Bell Drive	ENGEO	PACM1	1.10	Fibre cement sheet	14/12/2020	Chrysotile and amosite asbestos detected	-	-	-	-	-	-	-	-	-

Comments

1. BRANZ soil guideline value for asbestos based on relevant land use
2. MfE, June 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health.
3. Landcare Research Information Services (LRIS) Portal. Predicted Background Soil Concentrations, 95% prediction confidence ranging from gravels, mudstone, sandstone and breccia, Palmerston North. Retrieved from https://lris.scinfo.org.nz/layer/48470-pbc-predicted-background-soil-concentrations-new-zealand-deprecated/
4. In the absence of available NES Soil criterion for nickel and zinc, the criterion has been adopted from Assessment of Site Contamination National Environment Protection Measures (ASC NEPM) Toolbox – http://www.nepc.gov.au/nepms/assessment-site-contamination/toolbox.

Key

NA	Not Applicable
AD	Asbestos detected
NAD	No asbestos detected
<LoR	below laboratory reporting limits.
Red and bold	exceeded commercial / industrial NESCS SCS
Blue and bold	exceeded one or more NESCS SCS
Underline	above background concentrations

5 Conceptual site model

A conceptual site model (CSM) as defined by the MfE Contaminated Land Guideline No. 5[6], sets out known and potential sources of contamination, potential exposure pathways, and potential receptors. For there to be an effect from the proposed activity there has to be a contamination source and a mechanism (pathway) for contamination to affect human health or the environment (receptor).

The preliminary conceptual site model (used as a screening assessment) is an update of the Kainga Ora CSM Version 4[19] and based on future high density site use, our review of available For North District Council ground contamination information, aerials and soil results. Findings are found below in Table 5.1.

Table 5.1: Conceptual site model

Source	Exposure pathway	Potential receptor	Pathway complete?
Asbestos in soil from dwelling/structure	Inhalation of asbestos fines	Site re-development workers Future site users Surrounding residents Receiving environment (in surrounds and at disposal facility)	**Yes.** Bulk ACM confirmed 61ALL-HA07, 61 Allen Bell Drive.
Metal concentrations in soil from anthropogenic activity	Direct contact Ingestion of soil Inhalation of airborne dust Off-site discharge	Site re-development workers Surrounding residents	**No.** Soils sampled on Site are below Commercial/Industrial NESCS SCS.
	Direct contact Ingestion of soil Inhalation of airborne dust Off-site discharge	Future site users	**No.** Heavy metals were below High Density NESCS SCS.
	Off-site discharge	Receiving environment (in surrounds and at disposal facility)	**No**. Any soil will be disposed to a facility consented to receive impacted soil and where soil is managed in an appropriate manner to prevent future discharges. Remaining soils are not expected to result in discharges from the site.

Based on the source, pathway and receptor linkage, asbestos (in particular, soils within the former dwelling footprint 61 Allen Bell Drive – 61ALL-HA07) are considered to have the potential to pose a

[19] Kāinga Ora Homes and Communities, July 2022. Conceptual Site Model - Residential Property, Version 4. Prepared by EHS Support New Zealand Limited

risk to Site re-development workers and surrounding residents. Planned excavation and removal of any impacted soil (above adopted cleanup criteria) as part of site remediation removes any potential risk to the health of future land users, surrounding residents and/or the environment. Site re-development workers must use appropriate controls as outlined in the forthcoming SMP.

6 Regulatory requirements

The rules and associated assessment criteria relating to the control of contaminated sites in the Northland are specified in the following documents:

- The National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS); and
- Proposed Regional Plan for Northland (PRPN); and
- Health and Safety at Work (Asbestos) Regulations 2016 (hereafter Asbestos Regulations)

The NESCS considers issues relating to land use and the protection of human health while the PRPN has regard to issues relating to the protection of the general environment, including ecological receptors.

6.1 NESCS

The findings of this DSI show that a HAIL activity has not taken place at the Site. On this basis, the NESCS does not apply. No consents under the NESCS will be required for the proposed redevelopment.

6.2 PRPN

Proposed Northland Regional Plan (February 2024) has a number of rules relating to contaminated land (Section C.6.8), however, it does not contain any environmental acceptance criteria specific to the Northland Region.

With exception of the presence of asbestos fragments (which is not an environmental risk), all the soil results from the site are below the published background for the Northland Region and therefore are not considered to pose a risk to the environment. Hence no contaminated land related consents are considered to be required for soil disturbance on the Site.

6.3 Asbestos Regulations

Based on the asbestos detection in topsoil at sample location HA07, around the historic house Halo of 61 Allen Bell Drive, Class B asbestos work controls will be required for topsoil disturbance. Refer to Figure 2 and forthcoming SMP for additional detail.

7 Recommendations

Based on the findings of this investigation, T+T recommends the preparation of an SMP outlining human health and environmental protection controls, protocols to manage unexpected discovery of contaminants including ACM, and soil disposal options.

8 Applicability

This report has been prepared for the exclusive use of our client Kāinga Ora – Homes and Communities , with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

In accordance with your instructions, in carrying out our services we have relied upon, and presumed accurate, the information in the following reports which you have provided to use ("Existing Information"):

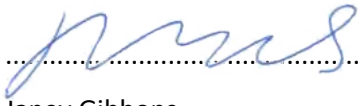
- "Kainga Ora Conceptual Site Model Residential Properties" produced by EHS Support New Zealand Limited, dated July 2022; and,
- "Residential Property Sampling and Analyses Plan Final Version 8" produced by EHS Support New Zealand Limited, dated May 2024; and,
- "Asbestos Clearance Certificate – 61 Allen Bell Drive, Kaitaia" produced by Asbestos Advice Northland Region, dated 30 March 2022; and,
- Post Site Clearance Report – 59 Allen Bell Drive Kaitaia" produced by Kāinga Ora – Homes and Communities, dated 1 November 2022; and,
- "Preliminary and Detailed Site Investigation – 59 & 61 Allen Bell Drive, Kaitaia". Produced by ENGEO, dated 23 December 2020; and,
- "59-61 Allen Bell Drive– Pipeline Review Study" produced by Kāinga Ora – Homes and Communities.

We have not attempted to verify the accuracy or completeness of the Existing Information. If any of the information in the Existing Information is subsequently determined to be false, inaccurate or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

Recommendations and opinions in this report are based on discrete sampling data. The nature and continuity of subsoil away from the sampling points are inferred and it must be appreciated that actual conditions could vary from the assumed model.

Tonkin & Taylor Ltd
Environmental and Engineering Consultants

Report prepared by:



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Janey Gibbons
Environmental Consultant

Authorised for Tonkin & Taylor Ltd by:

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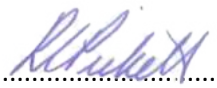
Lean Phuah
Project Director

Report reviewed by:



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Rachel Pickett
Senior Contaminated Land Consultant (SQEP 16 years experience)

JAGI

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Figures

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NOTES:

CRS: WGS 1984 Web Mercator Auxiliary Sphere Credits: Northland RC, LINZ, Stats NZ, Esri, HERE, Garmin, Maxar

LOCATION PLAN

PROJECT No.	1018898.3000		
DESIGNED	JAGI	AUG.25	
DRAWN	-WEB-	AUG.25	
CHECKED			
APPROVED		DATE	

CLIENT Kāinga Ora - Homes and Communities Housing Delivery Program

PROJECT 59 & 61 Allen Bell Drive, Kaitaia, Northland

TITLE Soil Sampling Plan

SCALE (A3) 1:282 FIG No. FIGURE 1. REV 0

Date: 15/08/2025 9:48 AM

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LOCATION PLAN

PROJECT No.	1018898.3000		
DESIGNED	JAGI	AUG.25	
DRAWN	-WEB-	AUG.25	
CHECKED			
		APPROVED	DATE

CLIENT Kāinga Ora - Homes and Communities Housing Delivery Program

PROJECT 59 & 61 Allen Bell Drive, Kaitaia, Northland

TITLE Soil Disposal - 0.0 - 0.3 m bgl - AKL

SCALE (A3) 1:282 FIG No. FIGURE 2. REV 0

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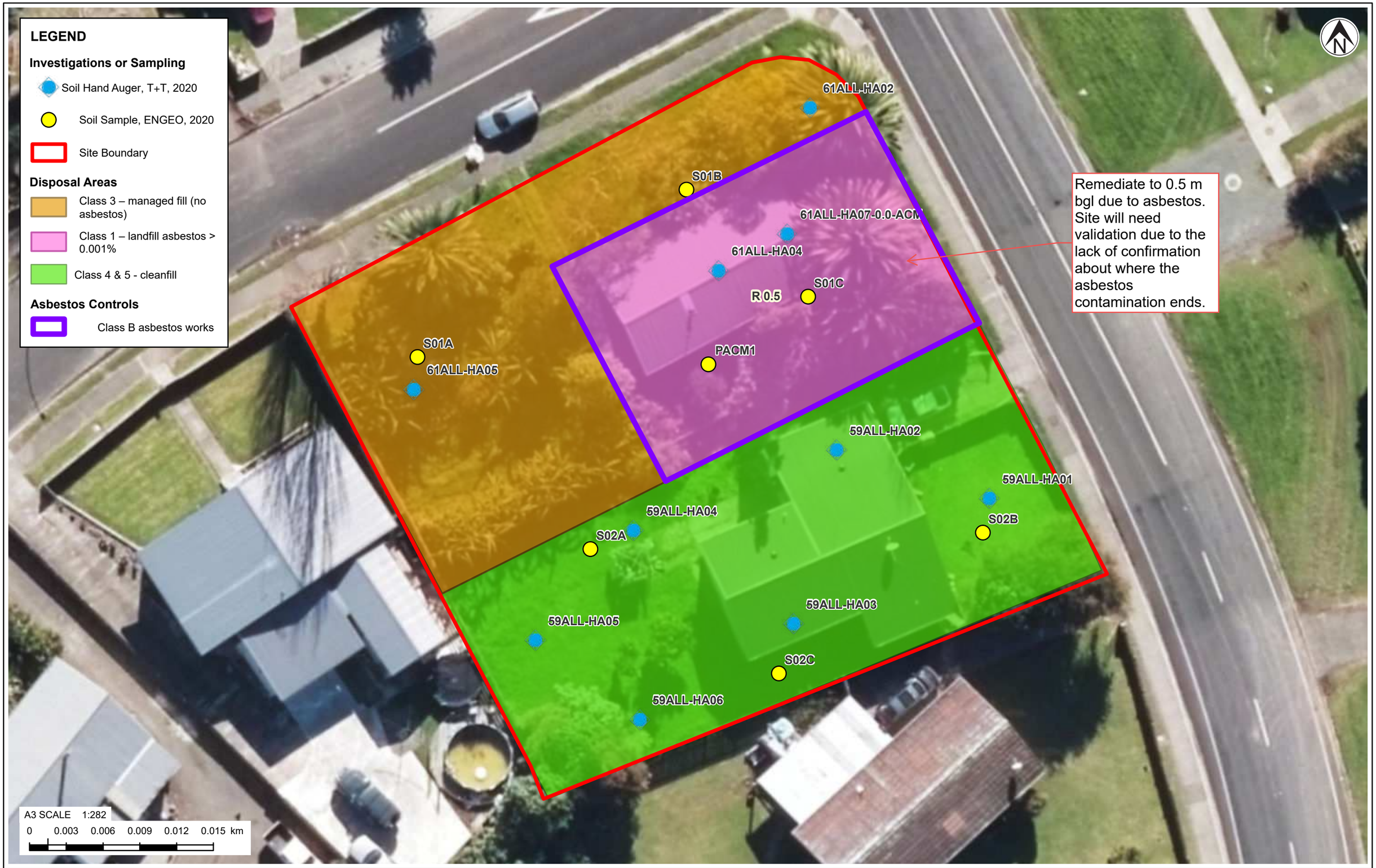

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NOTES:

CRS: WGS 1984 Web Mercator Auxiliary Sphere Credits: Northland RC, LINZ, Stats NZ, Esri, HERE, Garmin, Maxar

LOCATION PLAN

PROJECT No.	1018898.3000		
DESIGNED	JAGI	AUG.25	
DRAWN	-WEB-	AUG.25	
CHECKED			
		APPROVED	DATE

CLIENT Kāinga Ora - Homes and Communities Housing Delivery Program

PROJECT 59 & 61 Allen Bell Drive, Kaitaia, Northland

TITLE Soil Disposal - 0.3 - 0.5 m bgl - AKL

SCALE (A3) 1:282 FIG No. FIGURE 3. REV 0

Appendix A Site photos

Photograph Appendix A.1: 61 Allen Bell Drive from the northern corner, facing south.

Photograph Appendix A.2: 59 Allen Bell Drive facing north.

Photograph Appendix A.3: Potential ACM fragments on 61 Allen Bell Drive.

Photograph Appendix A.4: Corner of 61 Allen Bell Drive facing east.

Appendix B Supporting Information

- ENGEO PSI/DSI
- Post demolition clearance certificate 59 Allen Bell Drive
- Asbestos clearance certificate 61 Allen Bell Drive

23 December 2020

18096.000.001_01

Kāinga Ora
Te Kaporeihana ā Whare o Aotearoa
205 Great South Road
Greenlane Auckland

Attention: Andrew Rose
Senior Programme Manager – Hazardous Substances

RE: Preliminary and Detailed Site Investigation – 59 & 61 Allen Bell Drive, Kaitaia

Executive Summary

Kāinga Ora (KO) propose to intensify the residential development on the piece of land located at 59 and 61 Allen Bell Drive in Kaitaia. To assess the potential for contamination issues on-site, ENGEO has undertaken a Preliminary Site Investigation and Detailed Site Investigation (PSI / DSI). The objective and findings of the PSI / DSI are summarised as follows:

- The primary objective of the investigation was to identify disposal options for excess soil that may be required to be removed from site during development. At the request of Kāinga Ora, soil from the former building footprints and surrounding "halo" were excluded from the investigation.
- Based on historical records and aerial imagery, the buildings on site were constructed between the late 1970s to early 1980s. Prior to this the land appeared to be in pastoral use.
- Laboratory testing performed as part of the DSI indicates that concentrations of heavy metals / metalloids were below the high-density residential land use and environmental screening criteria.
- Based on the results of this investigation it is considered that a HAIL activity (MfE, 2011b) has not occurred within the investigation area at 59 and 61 Allen Bell Drive.
- Redevelopment works are unlikely to require a consent under NES regulations as no HAIL activities were identified. No further contaminated land work is considered necessary to support the redevelopment works.
- This DSI found that the topsoil from these properties meets the regional limits for cleanfill acceptance; however, acceptance for excess topsoil shall be sought from the receiving site prior to initiating earthworks.
- Earthwork activities shall stop and a suitably qualified environmental consultant contacted if evidence of potential contamination is encountered.

- Two fragments of cement board were collected from the driveway area adjacent to the dwelling at 61 Allen Bell Drive. Laboratory analysis confirmed the presence of asbestos in this material. The fragments appeared to be the same material as that of the existing building construction. ENGEO recommend that asbestos containing material (ACM) is removed from the residential dwellings before demolition and that a post demolition scrape of the building footprint and halo is completed before earthworks commences. Due to the positive identification of ACM at 61 Allen Bell Drive, it is recommended that the building halo is extended to a minimum of 2 metres from the building edge at this site to capture the location of this material.

1 Introduction

ENGEO Ltd was requested by Kāinga Ora to undertake a combined preliminary and detailed site investigation (PSI / DSI) for the properties located at 59 and 61 Allen Bell Drive in Kaitaia (herein referred to as 'the site'; Figure 1 below, and attached Figure 2). This work has been carried out in accordance with proposal number P2020.002.613_01, which was executed on 19 November 2020.

ENGEO understands that the property is to be redeveloped for high-density residential housing. The redevelopment works will involve soil disturbance and off-site disposal; therefore, information is required on the soil quality to assess disposal options.

2 Scope of the Assessment

The PSI component of the work comprised a desktop review of historical site information and review / assessment of information gathered during the site walkover undertaken on 14 December 2020. The objective of the PSI was to gather information relating to current and historical potentially contaminating activities at the site.

The DSI was an intrusive investigation, and was undertaken to assess:

- The type, extent and level of contamination within the proposed development site but outside of the building footprints. At the request of Kāinga Ora, soil from the former building footprints and surrounding "halo" was excluded from the investigation.
- Whether contaminants of concern identified present an unacceptable risk to human health or environmental receptors.
- Disposal options for the potentially impacted soil that may be required to be removed from site during development.
- Whether the soils remaining on-site are suitable for the proposed end use.

This investigation was undertaken in general accordance with the Ministry for the Environment's (MfE's) Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand (MfE, 2011a) and Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils (MfE, 2011c). For asbestos in soil sampling, analysis and data interpretation, the Building Research Association New Zealand (BRANZ) New Zealand Guidelines for Assessing and managing Asbestos in Soil were referenced.

ENGEO's statement of limitations for the project are included as Attachment A.

3 Site Details

Site information is summarised in the table below.

Table 1: Site Information

Item	Description
Legal Description	Lot 16 and 17 DP 74955
Site Investigation Area	Approx. 1,225 m^2 (excludes the portion of the property comprised of building footprints and halos, namely approximately 330 m^2)
Regional Authority	Northland Regional Council (NRC)
Territorial Authority	Far North District Council (FNDC)

The site location is shown in Figure 1 below and the attached Figure 2. The site setting is summarised in Table 2 below.

Figure 1: Site Layout Plan

IMAGE SOURCED FROM LINZ

Table 2: Site Setting

Item	Description
Local Setting	The site is located in a predominantly residential area. There are no areas identified as being of significant ecological value within the immediate vicinity of the site.
Nearest Surface Water & Use	The Awanui River is located approximately 150 metres (m) to the west of the site.
Geology	The site is mapped by the Institute of Geological and Nuclear Sciences (GNS, 2001) as being underlain by Late Pleistocene - Holocene estuary, river and swamp deposits comprising unconsolidated to poorly consolidated sand, peat, mud and shell deposits (estuarine, lacustrine, swamp, alluvial and colluvial). The site is also mapped near the contact with Awhitu Group sedimentary rocks comprising cemented dune sands and associated facies.
Hydrogeology	No information was obtained on depth to groundwater. Based on site topography and nearby surface water bodies, shallow groundwater is inferred to flow in a westerly direction towards the Awanui River.
Topography and Drainage	The site and surrounding area is generally flat.

4 Regional Council Data Review

Information sourced from Far North District Council and Northland Regional Council GIS maps are summarised below.

Table 3: Far North District Council

Zoning	Under the Operative District Plan layer of the FNDC GIS, the site is zoned as residential land.
Floodplains	Under the Operative District Plan layer of the FNDC GIS, the site is not recorded as being NRC Flood susceptible land.
Selected Land Use Register (SLUR) - *documents properties on which potentially hazardous activities have been undertaken. The potentially hazardous activities are defined on the HAIL.*	The site is not identified on the FNDC SLUR. Additionally, there are no SLUR sites identified in close proximity to the site.

Table 4: Northland Regional Council

Selected Land Use Register (SLUR) *- documents properties on which potentially hazardous activities have been undertaken. The potentially hazardous activities are defined on the HAIL.*	The site in not identified on the NRC SLUR. Additionally, there are no SLUR sites identified in close proximity to the site.
Soil Classification	No soil types are mapped for the site, however land on the opposite side of Allen Bell Drive is identified as comprising mature sandstone soils (specifically Awanui fine sandy loam and sandy clay).
Natural Hazards *(Coastal Hazard, River Flood Hazard, Land Hazard, and Tsunami Hazard)*	The site is recorded as being in a River Flood Hazard area. The maps show the site overlying a modelled floodplain for a 100 year event, and within close proximity to a modelled floodplain for a 10 year and 500 year event.
Northland Water Priority Areas and Water Resources	The site is not located within a recorded Waiora Northland Priority Catchment Area.
Northland Regional Council Biodiversity Wetlands	The site is not located within or near a biodiversity wetland area.

5 Historical Aerial Photograph Review

Limited aerial photographs for the area are available on the Northland Regional Council or Far North District Council websites. Aerial photographs available on the Retrolens website dating from 1950 have been reviewed and the images identifying key changes on-site are included in Attachment B for reference.

Relevant visible features on the site and surrounding area are summarised in Table 5 below.

Table 5: Historical Aerial Photograph Summary

Date	Site Description	Surrounding Area
1950 - 1973	The site and surrounding area comprise pastoral land. No crop growing areas can be observed in these aerial photograph.	
1981	The existing dwellings have been constructed. The dwelling at 61 Allen Bell Drive appears to have an extension to the southwest, which is not currently observed on site.	No significant changes are observed.
1985	A small shed is observed on the western boundary of 59 Allen Bell Drive. The balance of the site appears unchanged.	Increased residential development in the surrounding area.

Date	Site Description	Surrounding Area
2003	The shed has been demolished or removed from 59 Allen Bell Drive. The balance of the site appears unchanged.	No significant changes are observed.
2020	No significant changes are observed.	

6 Site Investigation

The site walkover and sampling was completed on 14 December 2020 by an ENGEO environmental scientist. Sampling locations are shown on attached Figure 2.

6.1 Site Walkover and Sampling Observations

Observations of activities and conditions present at the site are summarised in Table 6. ENGEO did not conduct an interview with current site occupants during the walkover.

Photographs taken during the site visit are included in Attachment C.

Table 6: Current Site Conditions

Site Conditions	Comments
General Site Observations	Both dwellings appeared to be constructed of cement board cladding (potential asbestos containing material [PACM]). Weathering and broken sections were observed. The shed attached to the carport at 61 Allen Bell Drive was constructed of concrete breeze blocks. Fences were timber and were in variable condition from good to poor.
Surface Water Appearance	No surface water was observed on-site.
Current Surrounding Land Use	Residential to the north, south, and west, and agricultural land to the west.
Local Sensitive Environments	The Awanui River is located approximately 150 m to the west of the site. No sensitive environments were observed in the immediate vicinity of the site.
Visible Signs of Plant Stress	No obvious signs of plant stress were observed on site, or on site boundaries.
Ground Cover	Primarily grassed or with raised garden beds, with the exception of access ways and paving around sections of the site buildings.
Potential for On - Or - Off - Site Migration of Contaminants	Considered unlikely, the site and surrounding land use are both residential (i.e. minimal contaminant sources).

Site Conditions	Comments
Visible Signs of Contamination	Two large empty containers (IBCs) were present on the northern boundary of 59 Allen Bell Drive. The former contents of the IBCs is not known. Domestic refuse was noted to the south of the dwelling.No evidence of contamination (e.g. staining or odours) were observed in the vicinity of these containers or refuse, and therefore the storage of these items is considered unlikely to have significantly impacted underlying soil. Minor domestic refuse was observed inside the small shed attached to the carport at 61 Allen Bell Drive. The shed is constructed on concrete slab, therefore the storage of these items is highly unlikely to have impacted underlying soil. Two small pieces of PACM were collected from the surface approximately 2 metres from the southern building edge. No other building debris was observed, and based on the appearance of the PACM, the source of the building fragments is likely to be the existing dwelling.

Generally, an approximately 300 – 350 mm layer of topsoil, comprising brown clayey silt with sand, gravel and rootlets, was encountered across the site. Topsoil was underlain by a brown clayey silt intermixed with brown and grey mottles, becoming more orange at depth. Deeper soils were not assessed as part of this investigation – the maximum vertical extent of the investigation locations was 600 mm below ground level.

Groundwater was not encountered in any of the sample locations. No visual or olfactory indicators of contamination were observed in the soil samples collected. Please see Figure 2 for the sample locations.

6.2 Potential Contaminants of Concern

Activities included on the Ministry for the Environment's Hazardous Activities and Industries List (HAIL; MfE, 2011b) trigger the requirement for an intrusive contaminated land investigation prior to redevelopment.

Due to the age of the existing site buildings, it is likely that asbestos products and lead-based paint were used in their construction. However, soil in the building footprints and "halos" were excluded from our investigation area as this material will be / has been removed from site. Therefore potential soil contamination as a result of lead-based paints or asbestos building materials was not considered applicable to this investigation.

To characterise soil for disposal purposes, the surface material to be removed from the balance of the site was analysed for heavy metals/metalloids (including mercury) and asbestos.

6.3 Investigation Methodology

ENGEO completed the intrusive environmental investigation on 13 October 2020. A judgemental sampling approach was undertaken and is summarised below.

- Hand auger to 0.5 m – 0.6 m depth at two "principal" soil sample locations (labelled 'PS' on Figure 2), with soil samples collected from 0.0 - 0.1 m, 0.3 m, and 0.5 m below ground.
- Surrounding each of the principal sample locations, three samples were collected in surface soils (0.0 - 0.1 m depth); these are labelled 'S' on Figure 2.
- The laboratory prepared a four-point composite sample from the surface soil collected at each principal location and surrounding three step-out locations. These were analysed for heavy metals / metalloids (labelled 'CS' on Figure 2).
- Surface samples from principal locations were also analysed for semi-quantitative analysis of asbestos.
- As previously noted, a PACM sample was collected approximately two metres from the southern building edge at 61 Allen Bell Drive. This sample was submitted to the laboratory for analysis of asbestos.

6.4 Soil Sampling Procedures

During the investigation, all soil samples were screened for visual and olfactory evidence of contamination. To help ensure that soil sample results accurately reflect the soil conditions at the site, the following was undertaken:

- Samples were compressed directly into laboratory supplied sample containers using a new pair of nitrile gloves for each sample. Prior to sampling, the equipment was decontaminated using a triple wash procedure with potable water, Decon 90 solution and deionised water.
- All samples were placed directly into an insulated and cooled container prior to transport to Eurofins laboratory under ENGEO standard chain of custody. Samples were given a unique sample ID to identify the location and depth from where they were collected on-site. No samples were reported as received broken or compromised by the laboratory.
- All fieldwork and sampling was undertaken in general accordance with the procedures for the appropriate handling of potentially contaminated soils as described in the MfE Contaminated Land Management Guidelines No.5: Site Investigation and Analysis of Soils (MfE, 2011c).

6.5 Quality Assurance and Quality Control

The quality assurance / quality control (QA / QC) procedures undertaken during the works included:

- The use of standard sample registers and chain of custody records for all samples collected.
- Samples were given a unique sample ID to identify the location and depth from where they were collected on-site.
- Sampling equipment was decontaminated using the triple wash method (as previously stated) between each sample location.

7 Analytical Results

7.1 Acceptance Criteria

Human Health Criteria

High-density residential human health criteria referenced in this report were selected from the:

- NES (MfE, 2012) – for chemical contaminants.
- BRANZ guidelines (BRANZ, 2017) – for asbestos.
- In accordance with the MfE's Contaminated Land Management Guidelines No.2 – Hierarchy and Application in New Zealand of Environmental Guideline Values (MfE, 2011d) – for chemical contaminants not included in the NES.

When comparing contaminant concentrations in composite samples with human health criteria, the criteria are often adjusted by dividing each criterion by the number of sub-samples used to create the composite. This accounts for the potential dilution of 'hotspots' that could occur when mixing soil from different parts of the site. The human health criteria were adjusted in this report for an initial screening of the data given the limited historical information available for the site and the recommendation to do so in the MfE's Contaminated Land Management Guideline No. 5 which forms part of the NES regulations (incorporated by reference).

Background Criteria

The soil analysis results have also been compared to the Predicted Background Soil Concentrations levels for heavy metals from Land Information New Zealand (LINZ) GIS. This comparison provides information regarding consent requirements under the NES and the possibility of disposal of site soil at a cleanfill facility during future redevelopment works.

Background criteria were not adjusted when compared to composite sample results as, unlike human health exposures which would be assessed on a lot by lot basis, potential discharges to the environment are assessed on a site-wide basis.

7.2 Laboratory quality assurance / quality control

Eurofins are accredited by International Accreditation New Zealand (IANZ) for the analyses performed, except for asbestos which they are accredited to AS 4964-2004 in accordance with the BRANZ (2017) Guidelines. To maintain their accreditation, Eurofins undertake rigorous cross checking and routine duplicate sample testing to ensure the accuracy of their results.

7.3 Analytical Results

Table A (attached) compares soil contaminant concentrations in the samples tested with the adopted investigation criteria. Full analytical laboratory reports are included in Attachment D.

7.4 Discussion of Results

The concentration of heavy metals in composite samples were below the adjusted human health criteria and environmental screening criteria. No exceedances of regional background criteria were identified. Asbestos was not detected in the principal samples.

The PACM fragment collected at 61 Allen Bell Drive was confirmed to be asbestos containing material.

8 Site Characterisation – Regulatory Compliance

- No confirmed HAIL activities within the investigation area, therefore the NES does not apply to site redevelopment works.
- No exceedances of environmental discharge criteria, therefore no environmental discharge consent required under the Auckland Unitary Plan for soil disturbance associated with redevelopment activities.

9 Remediation / Material Handling Requirements

No additional soil handling or disposal costs associated with site contamination are anticipated (assuming no contamination is discovered during the works).

Two fragments of cement board were collected from the driveway area adjacent to the dwelling at 61 Allen Bell Drive. Laboratory analysis confirmed the presence of asbestos in this material. The fragments appeared to be the same material as that of the existing building construction. ENGEO recommend that ACM is removed from the residential dwellings before demolition and that a post demolition scrape of the building footprint and halo is completed before earthworks commences. Due to the positive identification of ACM at 61 Allen Bell Drive, it is recommended that the building halo is extended to a minimum of 2 metres from the building edge at this site (refer to Figure 3).

10 Recommendations

No further contaminated land work is considered necessary to support the redevelopment works. Acceptance for excess topsoil as “cleanfill” shall be sought from receiving site prior to initiating earthworks. Although samples below the topsoil layer were collected, these deeper samples were not analysed. Given (1) the absence of contamination in the topsoil layer, (2) that no evidence of potentially contaminating activities were identified during the desktop investigation and (3) that no visual or olfactory evidence of contamination was observed during the soil sampling works, it has been assumed contaminant concentrations in the deeper soil on-site are below the human health and environmental acceptance criteria. However, the receiving site for excess deeper material generated from the site may request additional testing to support this assumption.

We understand that the construction practices shall include good management of health and safety risks, dust, stormwater and sediment. Works shall stop and a suitably qualified environmental consultant contacted if evidence of potential contamination is encountered.

11 References

BRANZ, 2017. The Building Research Association New Zealand. (2017). New Zealand Guidelines for Assessing and Managing Asbestos in Soil.

FNDC, 2020. Far North District Council website to (http://mapping.gw.govt.nz/). Accessed 18 December 2020.

Landcare, 2020. Landcare Research Limited. LRIS portal – Predicted Background Soil Concentrations, New Zealand (https://lris.scinfo.org.nz/layer/48470-pbc-predicted-background-soil-concentrations-new-zealand/).

MfE, 1997. Ministry for the Environment. (1997). Guidelines for assessing and managing contaminated gasworks sites in New Zealand.

MfE, 2011a. Ministry for the Environment. (2011). Contaminated Land Management Guidelines No.1: Reporting on Contaminated Sites in New Zealand.

MfE, 2011b. Ministry for the Environment. (2011). Hazardous Activities and Industries List (HAIL).

MfE, 2011c. Ministry for the Environment. (2011). Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils.

MfE, 2011d. Ministry for the Environment. (2011). Contaminated Land Management Guidelines No.2: Hierarchy and Application in New Zealand of environmental guideline values.

MfE, 2011f. Ministry for the Environment. (2011). Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health.

MfE, 2012. Ministry for the Environment. (2012). Users' Guide National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health.

NEPM, 2013. Australian National Environmental Protection Council. (2013). National Environmental Protection (Assessment of Site Contamination) Measure 1999, Schedule B(1): Guideline on the Investigation Levels for Soil and Groundwater.

NES, 2011. The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations (2011).

NRC, 2020. Northland Regional Council website to (http://mapping.gw.govt.nz/). Accessed 18 December 2020.

WAMINZ, 2018. Technical Guidelines for Disposal to Land.

We trust that this information meets your current requirements. Please do not hesitate to contact the undersigned on (09) 972 2205 if you require any further information.

Report prepared by

Claire Davies, CEnvP

Senior Environmental Consultant

Report reviewed by

Erika McDonald, CMEngNZ

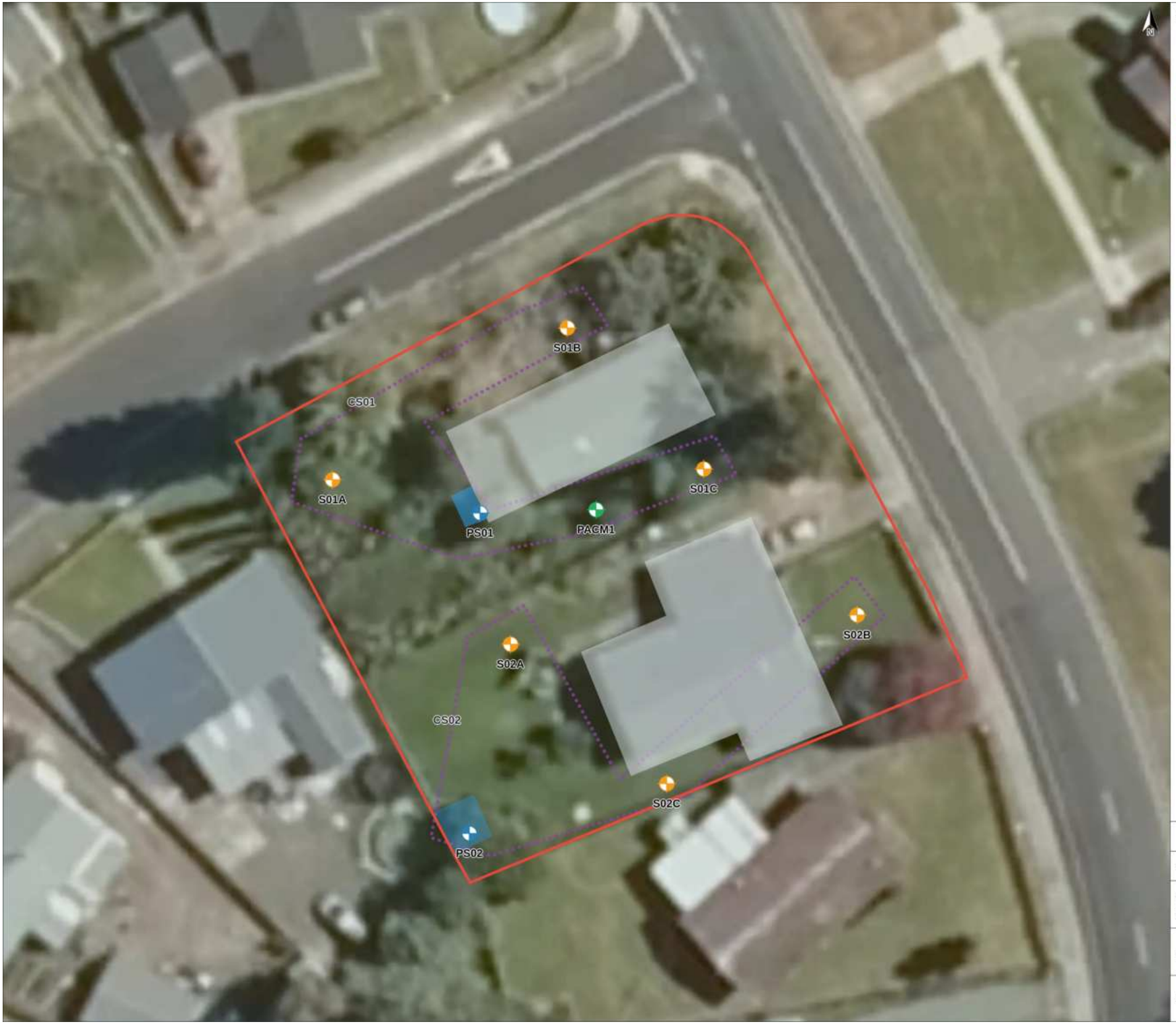
Principal Environmental Engineer

Figures

Tables

Attachments

FIGURES



Legend

- Site Boundary
- Building footprint(s) excluded from investigation area
- Former Building Footprint
- Principal Sample Location
- Surface Sample Location
- PACM Sample Location
- Composite Sample Group

0 5 10m

ENGEO

Produced by **Evalu8.earth**

Title: Site Investigation Plan

Client: Kāinga Ora		Figure No: 2
Project: 59 & 61 Allen Bell Drive, Kaitaia	Drawn: CD	
Date: 22-12-2020	Checked: EM	Size: A4
Proj No: 18096.000.001		Version: 1.0

Legend

- Site Boundary
- Building footprint(s) excluded from investigation area
- Former Building Footprint
- Principal Sample Location
- Surface Sample Location
- PACM Sample Location

0 5 10m

ENGEO

Produced by **Evalu8.earth**

Title: Management Zones

Client: Kāinga Ora		Figure No: 3
Project: 59 & 61 Allen Bell Drive, Kaitaia	Drawn: CD	Size: A4
Date: 22-12-2020	Checked: EM	
Proj No: 18096.000.001		Version: 1.0

TABLES

TABLE A: Soil Results									
Sample Date	**Predicted Background Range based on LINZ published soil type (sandstone Pakihi) (cleanfill acceptance criteria) [1]**	**High-Density Residential Human Health Criteria[2]**	**Redvale Landfill**	**Landfill Acceptance Criteria[3]**	14/12/2020	14/12/2020	14/12/2020	14/12/2020	14/12/2020
Sample Name					CS01 (PS01)	PS01	CS02 (PS02)	PS02	PACM1
Sample Depth (m)				**Class A**	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1	0 - 0.1
Lab Number					K20-De35429	K20-De35431	K20-De35430	K20-De35435	K20-De35445
Heavy Metals (mg/kg dry weight)									
Arsenic	12.67	11.3 (45)	30	100	9.3	-	6.6	-	-
Cadmium	0.28	57.5 (230)[4]	20	20	< 0.4	-	< 0.4	-	-
Chromium	60.5	375 (1,500)[5]	400	100	24	-	37	-	-
Copper	40.17	2,500 (>10,000)	325	100	22	-	23	-	-
Lead	30.08	125 (500)	250	100	13	-	15	-	-
Mercury	-	250 (1,000)	-	4	< 0.1	-	< 0.1	-	-
Nickel	32.88	300 (1,200)[6]	320	200	8.4	-	18	-	-
Zinc	101.8	15,000 (60,000)[6]	1,160	200	77	-	64	-	-
Asbestos (% w/w)									
Asbestos from ACM in Soil	<LOR	0.04[7]	NGV	NGV	-	No asbestos detected	-	No asbestos detected	Chrysotile and Amosite detected
Asbestos from FA & AF in Soil	<LOR	0.001[7]	NGV	NGV	-	No asbestos detected	-	No asbestos detected	-

Only detected contaminants are included in the data table. For a full list of results refer to Attachment D.

1. Predicted Background Range based on LINZ published soil type (sandstone Pakihi). Exceedances indicate material cannot be considered cleanfill for disposal purposes.
2. Resouce Management (National Environmental Standard for Assessing and managing Contaminants in Soil to Protect Human Health) Regulation 2012 (NES:CS) - Soil contaminant standards (SCS) applicable to 'high-density residentail land use' have been selected. Adjusted criteria calculated for four-point composite samples, followed by the original criterion in parentheses.
3. Landfill disposal criteria (MfE, 2004).
4. Assumes soil pH of 5.
5. Criteria for Chromium VI were conservatively selected.
6. Criteria sourced from National Environment Protection (Assessment of Site Contamination) Measure (NEPM). Residential B crtieria listed, which assumes minimal opportunities for soil access (i.e. higher density residential).
7. Criteria sourced from BRANZ, 2017. ACM: Asbestos Containing Material; FA & AF: Fibrous Asbestos and Asbestos Fines. <LOR indicates that a detectable concentration of asbestos was detected, however the laboratory has recorded 'no asbestos detected at the reporting limit of 0.001 % w/w', and is considered an exceedance of cleanfill acceptance criteria.

Underlined:	above background concentrations
Highlighted Yellow:	above cleanfill acceptance criteria
Highlighted Red:	above the Class B acceptance criteria (Note: landfills have varying acceptance limits)
Highlight Black:	above Class A acceptance criteria - no exceedances
RED :	exceeded adjusted High-Density Residential Human Health Criteria - no exceedances
- :	not tested for

ATTACHMENT A:

Statement of Limitations

Limitations

i. We have prepared this report in accordance with the brief as provided. This report has been prepared for the use of our client, Kāinga Ora, their professional advisers and the relevant Territorial Authorities in relation to the specified project brief described in this report. No liability is accepted for the use of any part of the report for any other purpose or by any other person or entity.

ii. The recommendations in this report are based on the ground conditions indicated from published sources, site assessments and subsurface investigations described in this report based on accepted normal methods of site investigations. Only a limited amount of information has been collected to meet the specific financial and technical requirements of the Client's brief and this report does not purport to completely describe all the site characteristics and properties. The nature and continuity of the ground between test locations has been inferred using experience and judgement and it should be appreciated that actual conditions could vary from the assumed model.

iii. Subsurface conditions relevant to construction works should be assessed by contractors who can make their own interpretation of the factual data provided. They should perform any additional tests as necessary for their own purposes.

iv. This Limitation should be read in conjunction with our terms of engagement with the Client.

v. This report is not to be reproduced either wholly or in part without our prior written permission.

ATTACHMENT B:

Historical Aerial Photographs

Rev	Date	Description	Drwn	Chkd

ENGEO
Expect Excellence

Title:

Historical Aerial Photographs

Client: Kāinga Ora

Project:
59 & 61 Allen Bell Drive, Kaitaia

Designed: CD
Drawn: CD
Checked: EM
Date: Dec '20

Project No: 18096.000.001

Scale: NTS

Attachment:
B
Size: A4

Revision: 0

Rev	Date	Description	Drwn	Chkd

ENGEO
Expect Excellence

Title:

Historical Aerial Photographs

Client: Kāinga Ora

Project:
59 & 61 Allen Bell Drive, Kaitaia

Designed: CD
Drawn: CD
Checked:
Date: Dec-20

Project No: 18096.000.001

Scale: NTS

Attachment:
B
Size: A4

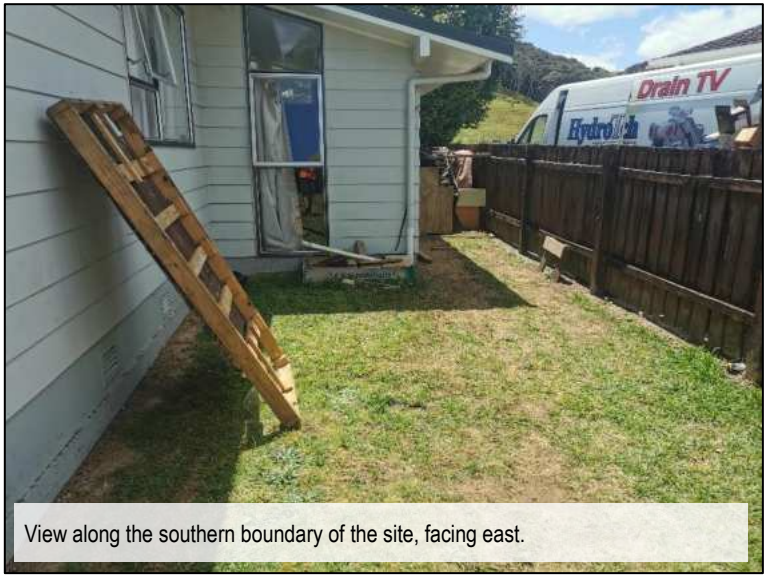
Revision: 0

ATTACHMENT C:

Site Photographs

Eastern portion (front) of the site.

View along the northern boundary of the site, facing west.



View along the southern boundary of the site, facing east.

View across the western portion of the site, facing west (IBCs on right hand side of photo).

Rev	Date	Description	Drwn	Chkd

ENGEO
Expect Excellence

Title:

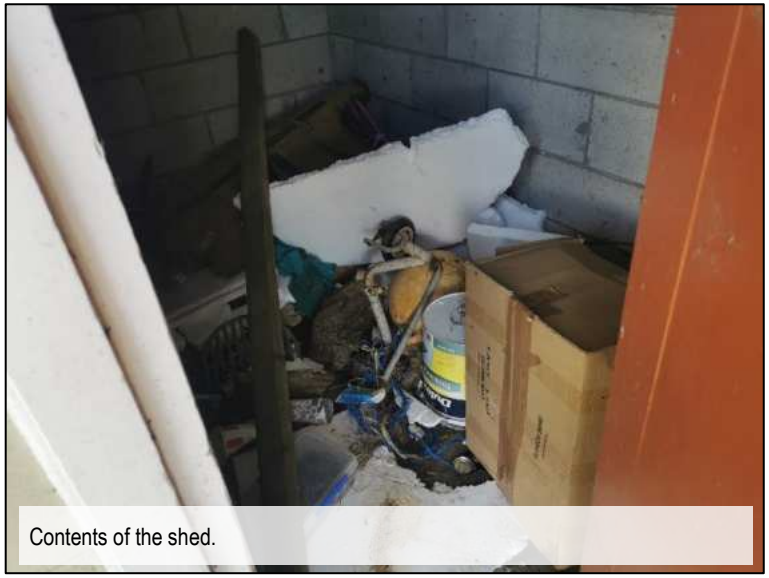
Site Photographs

Client: Kāinga Ora		Attachment: C
Project: 59 Allen Drive, Kaitaia	Designed: CD Drawn: CD Checked: EM Date: Dec '20	Size: A4
Project No: 18096.000.001	Scale: NTS	Revision: 0

View of the eastern side of the dwelling, facing west.

View of the western side of the dwelling, facing east.

Carport and shed attached to the western side of the dwelling.



Contents of the shed.

Rev	Date	Description	Drwn	Chkd

ENGEO
Expect Excellence

Title:

Site Photographs

Client: Kāinga Ora

Project: 61 Allen Drive, Kaitaia

Designed: CD
Drawn: CD
Checked: EM
Date: Dec '20

Project No: 18096.000.001

Scale: NTS

Attachment: C

Size: A4

Revision: 0

ATTACHMENT D:

Laboratory Documentation

eurofins | Environment Testing

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

ENGEO Ltd
6 Antares Place
Rosedale
Auckland New Zealand 0632

Attention: **Claire Davies**

Report **764303-S**
Project name ALLEN BELL DRIVE
Project ID 18096.000.001
Received Date Dec 16, 2020

Client Sample ID			**CS01**	**CS02**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**K20-De35429**	**K20-De35430**
Date Sampled			**Dec 14, 2020**	**Dec 14, 2020**
Test/Reference	LOR	Unit		
Metals M8 (NZ MfE)				
Arsenic	2	mg/kg	9.3	6.6
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	24	37
Copper	5	mg/kg	22	23
Lead	5	mg/kg	13	15
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	8.4	18
Zinc	5	mg/kg	77	64
% Moisture	1	%	15	21

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Metals M8 (NZ MfE)	Auckland	Dec 17, 2020	6 Months
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Auckland	Dec 17, 2020	14 Days
- Method: LTM-GEN-7080 Moisture Content in Soil by Gravimetry			

eurofins | Environment Testing

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NATA # 1261
Site # 1254 & 14271

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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

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NATA # 1261
Site # 23736

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Project Name: ALLEN BELL DRIVE
Project ID: 18096.000.001

Order No.:
Report #: 764303
Phone: 0011 64 9 9722 205
Fax:

Received: Dec 17, 2020 12:00 AM
Due: Dec 22, 2020
Priority: 4 Day
Contact Name: - ALL INVOICES

Eurofins Analytical Services Manager : Swati Shahaney

Sample Detail						Asbestos - WA guidelines	HOLD	Moisture Set	Metals M8 (NZ MfE)
Auckland Laboratory - IANZ# 1327						X	X	X	X
Christchurch Laboratory - IANZ# 1290									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	CS01	Dec 14, 2020		Soil	K20-De35429			X	X
2	CS02	Dec 14, 2020		Soil	K20-De35430			X	X
3	PS01 0.1	Dec 14, 2020		Soil	K20-De35431	X			
4	PS01A	Dec 14, 2020		Soil	K20-De35432		X		
5	PS01B	Dec 14, 2020		Soil	K20-De35433		X		
6	PS01C	Dec 14, 2020		Soil	K20-De35434		X		
7	PS02 0.1	Dec 14, 2020		Soil	K20-De35435	X			
8	PS02A	Dec 14, 2020		Soil	K20-De35436		X		
9	PS02B	Dec 14, 2020		Soil	K20-De35437		X		
10	PS02C	Dec 14, 2020		Soil	K20-De35438		X		
11	PS01 0.3	Dec 14, 2020		Soil	K20-De35439		X		
12	PS01 0.5	Dec 14, 2020		Soil	K20-De35440		X		

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Site # 1254 & 14271

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NATA # 1261 Site # 18217

Brisbane
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NATA # 1261 Site # 20794

Perth
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Kewdale WA 6105
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NATA # 1261
Site # 23736

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Auckland New Zealand 0632

Project Name: ALLEN BELL DRIVE
Project ID: 18096.000.001

Order No.:
Report #: 764303
Phone: 0011 64 9 9722 205
Fax:

Received: Dec 17, 2020 12:00 AM
Due: Dec 22, 2020
Priority: 4 Day
Contact Name: - ALL INVOICES

Eurofins Analytical Services Manager : Swati Shahaney

Sample Detail						Asbestos - WA guidelines	HOLD	Moisture Set	Metals M8 (NZ MfE)
Auckland Laboratory - IANZ# 1327						X	X	X	X
Christchurch Laboratory - IANZ# 1290									
External Laboratory									
13	PS02 0.3	Dec 14, 2020		Soil	K20-De35441		X		
14	PS02 0.5	Dec 14, 2020		Soil	K20-De35442		X		
15	PS02A 0.3-0.5	Dec 14, 2020		Soil	K20-De35443		X		
16	PS02C 0.3-0.5	Dec 14, 2020		Soil	K20-De35444		X		
17	PACM1	Dec 14, 2020		Soil	K20-De35445		X		
Test Counts						2	13	2	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Metals M8 (NZ MfE)							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Metals M8 (NZ MfE)							
Arsenic	%	105			80-120	Pass	
Cadmium	%	99			80-120	Pass	
Chromium	%	94			80-120	Pass	
Copper	%	95			80-120	Pass	
Lead	%	99			80-120	Pass	
Mercury	%	102			80-120	Pass	
Nickel	%	98			80-120	Pass	
Zinc	%	106			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Metals M8 (NZ MfE)				Result 1					
Arsenic	K20-De35313	NCP	%	96			75-125	Pass	
Cadmium	K20-De35313	NCP	%	100			75-125	Pass	
Chromium	K20-De35313	NCP	%	95			75-125	Pass	
Copper	K20-De35313	NCP	%	91			75-125	Pass	
Lead	K20-De35313	NCP	%	96			75-125	Pass	
Mercury	K20-De35313	NCP	%	100			75-125	Pass	
Nickel	K20-De35313	NCP	%	95			75-125	Pass	
Zinc	K20-De35313	NCP	%	100			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Metals M8 (NZ MfE)				Result 1	Result 2	RPD			
Arsenic	K20-De35312	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	K20-De35312	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	K20-De35312	NCP	mg/kg	14	14	1.0	30%	Pass	
Copper	K20-De35312	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	K20-De35312	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Mercury	K20-De35312	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	K20-De35312	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	K20-De35312	NCP	mg/kg	5.0	< 5	4.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	K20-De35063	NCP	%	28	28	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Authorised By

Swati Shahaney	Analytical Services Manager
Irene Suresh	Senior Analyst-Asbestos (NZN)
Shasti Ramachandran	Senior Analyst-Metal (NZN)

Michael Ritchie
Head of Semi Volatiles (Key Technical Personnel)

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates IANZ accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Certificate of Analysis

All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

ENGEO Ltd
6 Antares Place
Rosedale
Auckland New Zealand 0632

Attention:	Claire Davies
Report	764303-AID
Project Name	ALLEN BELL DRIVE
Project ID	18096.000.001
Received Date	Dec 16, 2020
Date Reported	Dec 22, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence IANZ Accreditation does not cover the performance of this service (non-IANZ results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name ALLEN BELL DRIVE
Project ID 18096.000.001
Date Sampled Dec 14, 2020
Report 764303-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
PS01 0.1	20-De35431	Dec 14, 2020	Approximate Sample 607g Sample consisted of: Fine grained soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected.
PS02 0.1	20-De35435	Dec 14, 2020	Approximate Sample 535g Sample consisted of: Fine grained soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected.
PACM1	20-De35445	Dec 14, 2020	Approximate Sample 106g / 130 x 50 x 8mm Sample consisted of: Fibre cement sheet	Chrysotile and amosite asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Auckland	Dec 17, 2020	Indefinite
Asbestos - LTM-ASB-8020	Auckland	Dec 17, 2020	Indefinite

eurofins | Environment Testing

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
PO Box 60 Wickham 2293
Phone : +61 2 4968 8448

NZBN: 9429046024954 web: www.eurofins.com.au email: EnviroSales@eurofins.com

Company Name: ENGEO Ltd
Address: 6 Antares Place
Rosedale
Auckland New Zealand 0632

Project Name: ALLEN BELL DRIVE
Project ID: 18096.000.001

Order No.:
Report #: 764303
Phone: 0011 64 9 9722 205
Fax:

Received: Dec 17, 2020 12:00 AM
Due: Dec 22, 2020
Priority: 4 Day
Contact Name: Claire Davies

Eurofins Analytical Services Manager : Swati Shahaney

Sample Detail						Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	Moisture Set	Metals M8 (NZ MfE)
Auckland Laboratory - IANZ# 1327						X	X	X	X	X
Christchurch Laboratory - IANZ# 1290										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	CS01	Dec 14, 2020		Soil	K20-De35429				X	X
2	CS02	Dec 14, 2020		Soil	K20-De35430				X	X
3	PS01 0.1	Dec 14, 2020		Soil	K20-De35431	X				
4	PS01A	Dec 14, 2020		Soil	K20-De35432			X		
5	PS01B	Dec 14, 2020		Soil	K20-De35433			X		
6	PS01C	Dec 14, 2020		Soil	K20-De35434			X		
7	PS02 0.1	Dec 14, 2020		Soil	K20-De35435	X				
8	PS02A	Dec 14, 2020		Soil	K20-De35436			X		
9	PS02B	Dec 14, 2020		Soil	K20-De35437			X		
10	PS02C	Dec 14, 2020		Soil	K20-De35438			X		
11	PS01 0.3	Dec 14, 2020		Soil	K20-De35439			X		
12	PS01 0.5	Dec 14, 2020		Soil	K20-De35440			X		

eurofins | Environment Testing

NZBN: 9429046024954 web: www.eurofins.com.au email: EnviroSales@eurofins.com

New Zealand

Auckland
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Christchurch
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IANZ # 1290

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Site # 1254 & 14271

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Unit F3, Building F
16 Mars Road
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Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

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Project Name: ALLEN BELL DRIVE
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Contact Name: Claire Davies

Eurofins Analytical Services Manager : Swati Shahaney

Sample Detail						Asbestos - WA guidelines	Asbestos Absence /Presence	HOLD	Moisture Set	Metals M8 (NZ MfE)
Auckland Laboratory - IANZ# 1327						X	X	X	X	X
Christchurch Laboratory - IANZ# 1290										
External Laboratory										
13	PS02 0.3	Dec 14, 2020		Soil	K20-De35441			X		
14	PS02 0.5	Dec 14, 2020		Soil	K20-De35442			X		
15	PS02A 0.3-0.5	Dec 14, 2020		Soil	K20-De35443			X		
16	PS02C 0.3-0.5	Dec 14, 2020		Soil	K20-De35444			X		
17	PACM1	Dec 14, 2020		Building Materials	K20-De35445		X			
Test Counts						2	1	12	2	2

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

Irene Suresh	Senior Analyst-Asbestos (NSW)

Authorised by:

Katyana Gausel	Senior Analyst-Asbestos (NSW) (Key Technical Personnel)

Irene Suresh
Senior Analyst-Asbestos (Key Technical Personnel)

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates ISO/IEC 17025:2017 accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Post Site Clearance Report

Address of the Site: 59 Allen Bell Drive Kaitaia

Kāinga Ora – Homes and Communities aims to minimise the amount of waste going to landfill and has recently adopted the waste minimization hierarchy across our demolition work streams. This will see houses relocated, deconstructed and or as a last resort demolished with landfill diversion targets in place, ensuring the better utilization of materials from buildings that would formally end up in landfill.

The purpose of this form is to collect information so that we are able to report on the actual site clearance methodology approach being taken as well as the percentages of waste diverted from landfill.

Overview			
Organisation:	Northzone Contractors	**Project Completion date:**	01/11/2022
Contact Person:	Rachael Smith	**Email address:**	rachael@northzonecontractors.co.nz
Project or TOC ID	59ALL		
Number of units Relocated	0		
Number of units Deconstructed	1		
Number of units Demolished	0		
Building description:	3 bedroom single storey home deconstructed		

Non-contaminated materials

The table below should cover the majority of non-contaminated materials that were cleared from the site.

Non-contaminated materials			
Material	**Tonnes Recovered**	**Tonnes to landfill**	**Commentary what happened to the material?**
Concrete	18	6.6	'unclean' concrete to landfill
Treated Timber	3	1	All doors and wall framing recovered, laminated beams, truss joists, treated timbers/posts, joinery, engineered timber panels, some fencing and foundations damaged/unusable disposed
Untreated Timber	2	0.12	Untreated timber recovered, 'unclean' unusable timber disposed and untreated timbers/posts, joinery, engineered timber panels
Windows	1		
Aluminium	0.6		
Copper			
Other metals	0.4		
Glass			
Gypsum			
Cladding/ Roofing	3		iron roofing recovered , cladding ACM disposed
Other	0		
Total amount of waste (t)	29.6 (t)	7.72 (t)	
Total % diverted from landfill	**79%**		

Notes:

- If materials are shipped internationally for re use, the contractor is to provide a Bill of Lading certificate, as proof of evidence for goods shipped (including materials and quantities)
- If Green Gorilla is used for bulk recycling, please provide a copy of the Green Gorilla Report
- If the recycled goods are sold on the private market for re use purposes, please provide a copy of the trading invoice and or sale agreement.

All of the above are for audit requirements.

Contaminated materials

The table below should cover all hazardous materials that were cleared from the site.

The Contractor is to provide tipping receipt and crush and bury certification for this waste.

Contaminated materials			
Material	**Quantity**	**Tonnes**	**Commentary** **what happened to the material**
Asbestos Containing Materials		2	Asbestos containing material sent to controlled landfill using a licensed contractor
Contaminated Soil	0	0	
Other	0	0	

ASBESTOS CLEARANCE CERTIFICATE

Site Address: 61 Allen Bell Drive, Kaitaia

Asbestos Advice
NORTHERN REGION

Asbestos Advice
NORTHERN REGION

A Division of Onederus Ltd
PO Box 3185, Onerahi, 0142
Phone: 021 899 206
E-Mail: info@asbestosadvice.co.nz

Client / PCBU

DKL Projects Ltd

Site Address

61 Allen Bell Drive, Kaitaia

Asbestos Removal Date(s)

Unknown

Site Inspection Conducted

30.03.2022 – 0900hrs

Site Inspection and Report Prepared by

Greg Fallon - info@asbestosadvice.co.nz – Ph (m) 021 899 206

Inspector Qualifications

BOHS IP402 International proficiency in surveying and sampling strategies for asbestos in buildings.	**BOHS IP404** International proficiency in air monitoring, clearance inspections and reoccupation following the removal of asbestos.	**CPCCBC4051A** Supervise Asbestos Removal
CPCCDE3015A Friable Asbestos Removal	**CPCCDE3014A** Non-friable asbestos Removal	**Licensed Assessor - AA21030009**

Asbestos Advice
NORTHERN REGION

A Division of Onederus Ltd
PO Box 3185, Onerahi, 0142
Phone: 021 899 206
E-Mail: info@asbestosadvice.co.nz

Removal Details

This report relates to a vacant section where the house has been either removed or demolished at some stage prior to the inspection.

The footprint of the house is clearly visible, a walkover and visual inspection was completed.

Although pieces of concrete and timber were visible, at the time of inspection no material suspected to be asbestos containing was located.

All works prior to the inspection are unknown, other than there was previously temporary site fencing on the perimeter of the site.

Licenced Asbestos Remover – DKL Projects Ltd - RB18070093 Supervisor – Steve Kenely 027 223 3665	
Asbestos Survey has been completed prior to removal?	Unknown
Asbestos Removal Control Plan (ARCP) and WorkSafe NZ Notification has been provided to Asbestos Advice Northern Region prior to removal/clearance?	No
Correct signage, barriers and documentation is in place?	Unknown
Correct decontamination facilities are in place. (DCU)?	Unknown
Enclosure and equipment inspection required?	No
Air monitoring required?	No
If air monitoring was conducted, is the result below 0.01 asbestos fibres/ml of air?	N/A
As far as can be determined, the removal has been completed in accordance with ARCP, appropriate legislation and best practice?	Unknown
Asbestos removal area and surrounding area(s) is clean and free from visible asbestos containing debris, dust and/or residue (including transit route, DCU, Exclusion Zones(s), Waste Loading Areas)?	Yes
Has waste been removed from site?	Yes
Is further sampling and/or air monitoring required?	No
Are there any matters or areas requiring further attention?	No
Is the area(s) safe for asbestos controls to be removed, site work to continue and/or reoccupation?	Yes

Asbestos Advice
NORTHERN REGION

A Division of Onederus Ltd
PO Box 3185, Onerahi, 0142
Phone: 021 899 206
E-Mail: info@asbestosadvice.co.nz

I, Gregory Fallon, being an independent licenced asbestos assessor – AA21030009 declare that:

- I found no visible asbestos residue from asbestos removal work in the area, or in the vicinity of the area, where the work was carried out
- As far as can be determined from the clearance inspection, the asbestos removal area does not pose a risk to health and safety from exposure to asbestos.

30.03.2022

Signed

Date

Asbestos Advice
NORTHERN REGION

A Division of Onederus Ltd
PO Box 3185, Onerahi, 0142
Phone: 021 899 206
E-Mail: info@asbestosadvice.co.nz

Other Photos or Relevant Documents:

A Division of Onederus Ltd

PO Box 3185, Onerahi, 0142

Phone: 021 899 206

E-Mail: info@asbestosadvice.co.nz

Appendix C Soil logs

Appendix B Table 1: Soil log descriptions

Sampling location	Depth (m bgl)	Soil description
59ALL-HA01	0.0–0.3	Organic sandy silt, dark brown, moist, rootlets. No odour, staining or rubbish.
	0.3–0.5	Sandy silt, brown, mottled orange and dark brown, coarse sand, moist.
	0.5–end	Dark brown speckled orange.
59ALL-HA02	0.0–0.3	Sandy silt, light brown mottled orange and dark brown, moist. No odour, staining or rubbish.
	0.3–0.5	As above.
	0.5–end	Dark brown.
59ALL-HA03	0.0–0.3	Sandy silt, light brown with orange specks, slightly moist, rootlets. No odour, staining or rubbish. With black streaks.
	0.3–0.5	Sandy silt, mottled black, white and orange, moist.
59ALL-HA04	0.0–0.3	Organic silt, dark brown, moist, rootlets. Black streaks and charcoal inclusions. No odour.
	0.3–0.5	Sandy silt, dark brown with orange and white streaks, moist.
	0.5–end	Sandier.
59ALL-HA05	0.0–0.3	Organic silt, dark brown, moist, rootlets. No odour, staining or rubbish.
	0.3–0.5	Dark brown sandy silt with orange and black streaks, moist.
	0.5–end	Orange with dark brown streaks.
59ALL-HA06	0.0–0.3	Organic silt, dark brown, wet, rootlets. No odour, staining or rubbish.
	0.3–0.5	Clayey silt, brown with orange streaks, moist.
	0.5–end	Sand, moist, orange brown.
61ALL-HA02	0.0–0.3	Organic silt, dark brown, wet, rootlets. No odour, staining or rubbish.
	0.3–0.5	Clayey silt, light brown with orange and dark brown streaks, moist.
	0.5–end	As above.
61ALL-HA04	0.0–0.1	Organic silt, dark brown, wet, rootlets. No odour, staining or rubbish.
	0.1–end	UTP (buried concrete).
61ALL-HA05	0.0–0.3	Organic silt, dark brown, moist, rootlets. Black streaks. No odour or rubbish.
	0.3–0.5	Dark brown silt, minor sand, black specks, moist.
	0.5–end	Silty clay, light brown, minor sand, moist, orange and black flecks.
61ALL-HA07-0.0-ACM	0.0-	Asbestos fragments located on the surface. Uncovered brown ground, dry.

Appendix D Laboratory reports

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

0508 HILL LAB (44 555 22)
+64 7 858 2000
mail@hill-labs.co.nz
www.hill-labs.co.nz

Certificate of Analysis

Client:	Tonkin & Taylor	**Lab No:**	3955780 SPv2
Contact:	R Pickett	**Date Received:**	07-Aug-2025
	C/- Tonkin & Taylor	**Date Reported:**	18-Aug-2025 **(Amended)**
	PO Box 5271	**Quote No:**	139488
	Auckland 1141	**Order No:**	7855475
		Client Reference:	59 & 61 Allen Bell Drive
		Submitted By:	Sienna Xue

Sample Type: Soil

Sample Name:		59ALL-HA01-0.0 31-Jul-2025 1:00 pm	59ALL-HA02-0.0 31-Jul-2025 1:20 pm	59ALL-HA02-0.3 31-Jul-2025 1:20 pm	59ALL-HA03-0.0 31-Jul-2025 12:30 pm	59ALL-HA04-0.0 31-Jul-2025 2:15 pm
Lab Number:		3955780.1	3955780.4	3955780.5	3955780.7	3955780.10
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	4	2	2	< 2	13
Total Recoverable Cadmium	mg/kg dry wt	0.13	< 0.10	< 0.10	< 0.10	0.29
Total Recoverable Chromium	mg/kg dry wt	23	27	31	19	56
Total Recoverable Copper	mg/kg dry wt	19	12	14	11	48
Total Recoverable Lead	mg/kg dry wt	14.4	7.4	7.0	7.1	15.8
Total Recoverable Nickel	mg/kg dry wt	12	9	10	6	25
Total Recoverable Zinc	mg/kg dry wt	65	32	34	19	149

Sample Name:		59ALL-HA05-0.0 31-Jul-2025 1:50 pm	59ALL-HA06-0.0 31-Jul-2025 11:40 am	59ALL-HA06-0.3 31-Jul-2025 11:40 am	61ALL-HA02-0.0 31-Jul-2025 4:00 pm	61ALL-HA02-0.3 31-Jul-2025 4:00 pm
Lab Number:		3955780.13	3955780.16	3955780.17	3955780.19	3955780.20
Heavy Metals, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	3	4	3	5	4
Total Recoverable Cadmium	mg/kg dry wt	0.16	0.15	< 0.10	< 0.10	< 0.10
Total Recoverable Chromium	mg/kg dry wt	41	27	16	31	12
Total Recoverable Copper	mg/kg dry wt	22	30	16	28	9
Total Recoverable Lead	mg/kg dry wt	10.4	11.1	8.1	10.9	6.9
Total Recoverable Nickel	mg/kg dry wt	19	13	7	9	4
Total Recoverable Zinc	mg/kg dry wt	80	54	29	59	15

Sample Name:		61ALL-HA04-0.0 31-Jul-2025 4:10 pm	61ALL-HA05-0.0 31-Jul-2025 2:45 pm
Lab Number:		3955780.22	3955780.23
Heavy Metals, Screen Level			
Total Recoverable Arsenic	mg/kg dry wt	11	2
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	0.30
Total Recoverable Chromium	mg/kg dry wt	19	54
Total Recoverable Copper	mg/kg dry wt	21	29
Total Recoverable Lead	mg/kg dry wt	18.5	7.2
Total Recoverable Nickel	mg/kg dry wt	8	21
Total Recoverable Zinc	mg/kg dry wt	87	80

Analyst's Comments

Amended Report: This certificate of analysis replaces report '3955780-SPv1' issued on 11-Aug-2025 at 8:03 am.
Reason for amendment: Additional testing added as per clients request.

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	1-25
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required. US EPA 200.2 (modified), APHA 3125 B: Online Edition.	0.10 - 4 mg/kg dry wt	1, 4-5, 7, 10, 13, 16-17, 19-20, 22-23

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 07-Aug-2025 and 18-Aug-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

Kim Harrison MSc
Client Services Manager - Environmental

R J Hill Laboratories Limited
1/17 Print Place
Middleton
Christchurch 8024 New Zealand

0508 HILL LAB (44 555 22)
+64 7 858 2000
mail@hill-labs.co.nz
www.hill-labs.co.nz

Certificate of Analysis

Client:	Tonkin & Taylor	**Lab No:**	3956064 A2Pv1
Contact:	R Pickett	**Date Received:**	07-Aug-2025
	C/- Tonkin & Taylor	**Date Reported:**	11-Aug-2025
	PO Box 5271	**Quote No:**	139488
	Auckland 1141	**Order No:**	7855475
		Client Reference:	59 & 61 Allen Bell Drive
		Submitted By:	Sienna Xue

Sample Type: Soil

Sample Name:		59ALL-HA01-0.0 31-Jul-2025 1:00 pm	59ALL-HA02-0.0 31-Jul-2025 1:20 pm	59ALL-HA03-0.0 31-Jul-2025 12:30 pm	59ALL-HA04-0.0 31-Jul-2025 2:15 pm	59ALL-HA05-0.0 31-Jul-2025 1:50 pm
Lab Number:		3956064.1	3956064.2	3956064.3	3956064.4	3956064.5
Asbestos Presence / Absence		Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.
Description of Asbestos Form		-	-	-	-	-
Asbestos in ACM as % of Total Sample*	% w/w	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Combined Fibrous Asbestos + Asbestos Fines as % of Total Sample*	% w/w	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Asbestos as Fibrous Asbestos as % of Total Sample*	% w/w	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Asbestos as Asbestos Fines as % of Total Sample*	% w/w	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
As Received Weight	g	525.1	522.1	607.8	477.7	480.3
Dry Weight	g	343.7	433.2	491.8	326.1	276.5
Moisture*	%	35	17	19	32	42
Sample Fraction >10mm	g dry wt	< 0.1	< 0.1	31.4	6.9	0.5
Sample Fraction <10mm to >2mm	g dry wt	77.7	64.1	87.3	36.5	58.2
Sample Fraction <2mm	g dry wt	264.6	367.9	371.4	281.9	216.4
<2mm Subsample Weight	g dry wt	59.8	50.0	58.2	50.4	57.9
Weight of Asbestos in ACM (Non-Friable)	g dry wt	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Weight of Asbestos as Fibrous Asbestos (Friable)	g dry wt	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Weight of Asbestos as Asbestos Fines (Friable)*	g dry wt	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001

Sample Name:		59ALL-HA06-0.0 31-Jul-2025 11:40 am	61ALL-HA02-0.0 31-Jul-2025 4:00 pm	61ALL-HA04-0.0 31-Jul-2025 4:10 pm	61ALL-HA05-0.0 31-Jul-2025 2:45 pm	61ALL-HA07-0.0 ACM 31-Jul-2025 3:45 pm
Lab Number:		3956064.6	3956064.7	3956064.8	3956064.9	3956064.10
Asbestos Presence / Absence		Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.	Asbestos NOT detected.
Description of Asbestos Form		-	-	-	-	-
Asbestos in ACM as % of Total Sample*	% w/w	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Combined Fibrous Asbestos + Asbestos Fines as % of Total Sample*	% w/w	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Asbestos as Fibrous Asbestos as % of Total Sample*	% w/w	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Asbestos as Asbestos Fines as % of Total Sample*	% w/w	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
As Received Weight	g	447.3	407.3	497.6	408.0	532.8
Dry Weight	g	274.8	257.9	371.9	262.9	410.1

Sample Type: Soil						
Sample Name:		59ALL-HA06-0.0 31-Jul-2025 11:40 am	61ALL-HA02-0.0 31-Jul-2025 4:00 pm	61ALL-HA04-0.0 31-Jul-2025 4:10 pm	61ALL-HA05-0.0 31-Jul-2025 2:45 pm	61ALL-HA07-0.0 ACM 31-Jul-2025 3:45 pm
Lab Number:		3956064.6	3956064.7	3956064.8	3956064.9	3956064.10
Moisture*	%	39	37	25	36	23
Sample Fraction >10mm	g dry wt	< 0.1	6.8	26.6	43.4	13.0
Sample Fraction <10mm to >2mm	g dry wt	60.0	73.0	131.5	128.2	108.7
Sample Fraction <2mm	g dry wt	213.8	176.9	212.9	90.5	287.0
<2mm Subsample Weight	g dry wt	54.2	52.7	50.5	50.9	55.1
Weight of Asbestos in ACM (Non-Friable)	g dry wt	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Weight of Asbestos as Fibrous Asbestos (Friable)	g dry wt	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Weight of Asbestos as Asbestos Fines (Friable)*	g dry wt	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001

Glossary of Terms

• Loose fibres (Minor) - One or two fibres/fibre bundles identified during analysis by stereo microscope/PLM.
• Loose fibres (Major) - Three or more fibres/fibre bundles identified during analysis by stereo microscope/PLM.
• ACM Debris (Minor) - One or two small (<2mm) pieces of material attached to fibres identified during analysis by stereo microscope/PLM.
• ACM Debris (Major) - Large (>2mm) piece, or more than three small (<2mm) pieces of material attached to fibres identified during analysis by stereo microscope/PLM.
• Unknown Mineral Fibres - Mineral fibres of unknown type detected by polarised light microscopy including dispersion staining. The fibres detected may or may not be asbestos fibres. To confirm the identities, another independent analytical technique may be required.
• Trace - Trace levels of asbestos, as defined by AS4964-2004.
For further details, please contact the Asbestos Team.

Please refer to the BRANZ New Zealand Guidelines for Assessing and Managing Asbestos in Soil.
https://www.branz.co.nz/asbestos

The following assumptions have been made:

1. Asbestos Fines in the <2mm fraction, after homogenisation, is evenly distributed throughout the fraction
2. The weight of asbestos in the sample is unaffected by the ashing process.

Results are representative of the sample provided to Hill Laboratories only.

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
New Zealand Guidelines Semi Quantitative Asbestos in Soil			
As Received Weight	Measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g	1-10
Dry Weight	Sample dried at 100 to 105°C, measurement on balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g	1-10
Moisture*	Sample dried at 100 to 105°C. Calculation = (As received weight - Dry weight) / as received weight x 100.	1 %	1-10
Sample Fraction >10mm	Sample dried at 100 to 105°C, 10mm sieve, measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g dry wt	1-10
Sample Fraction <10mm to >2mm	Sample dried at 100 to 105°C, 10mm and 2mm sieve, measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g dry wt	1-10
Sample Fraction <2mm	Sample dried at 100 to 105°C, 2mm sieve, measurement on analytical balance. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch.	0.1 g dry wt	1-10
Asbestos Presence / Absence	Examination using Low Powered Stereomicroscopy followed by 'Polarised Light Microscopy' including 'Dispersion Staining Techniques'. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples.	0.01%	1-10
Description of Asbestos Form	Description of asbestos form and/or shape if present.	-	1-10

Sample Type: Soil			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Weight of Asbestos in ACM (Non-Friable)	Measurement on analytical balance, from the >10mm Fraction. Weight of asbestos based on assessment of ACM form. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.00001 g dry wt	1-10
Asbestos in ACM as % of Total Sample*	Calculated from weight of asbestos in ACM and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1-10
Weight of Asbestos as Fibrous Asbestos (Friable)	Measurement on analytical balance, from the >10mm Fraction. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.00001 g dry wt	1-10
Asbestos as Fibrous Asbestos as % of Total Sample*	Calculated from weight of fibrous asbestos and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1-10
Weight of Asbestos as Asbestos Fines (Friable)*	Measurement on analytical balance, from the <10mm Fractions. Analysed at Hill Laboratories - Asbestos; Unit 1, 17 Print Place, Middleton, Christchurch. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.00001 g dry wt	1-10
Asbestos as Asbestos Fines as % of Total Sample*	Calculated from weight of asbestos fines and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1-10
Combined Fibrous Asbestos + Asbestos Fines as % of Total Sample*	Calculated from weight of fibrous asbestos plus asbestos fines and sample dry weight. New Zealand Guidelines for Assessing and Managing Asbestos in Soil, November 2017.	0.001 % w/w	1-10

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed on 11-Aug-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

Dexter Paguirigan Dip Chem Engineering Tech
Laboratory Technician - Asbestos

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Pipitea
Wellington 6011 New Zealand

0508 HILL LAB (44 555 22)
+64 7 858 2000
mail@hill-labs.co.nz
www.hill-labs.co.nz

Certificate of Analysis

Client:	Tonkin & Taylor	**Lab No:**	3956065	A2Pv1
Contact:	R Pickett	**Date Received:**	07-Aug-2025	
	C/- Tonkin & Taylor	**Date Reported:**	11-Aug-2025	
	PO Box 5271	**Quote No:**	139488	
	Auckland 1141	**Order No:**	7855475	
		Client Reference:	59 & 61 Allen Bell Drive	
		Add. Client Ref:	Date Sampled: 31/7/25	
		Submitted By:	Sienna Xue	

Sample Type: Building Material

Sample Name	Lab Number	Sample Category*	Sample Weight on receipt (g)	Asbestos Presence / Absence	Description of Asbestos in Non Homogeneous Samples
61ALL-HA07-0.0 ACM	3956065.1	Fibre Cement	398.92	Amosite (Brown Asbestos) detected. Chrysotile (White Asbestos) detected.	N/A

Glossary of Terms

- Loose fibres (Minor) - One or two fibres/fibre bundles identified during analysis by stereo microscope/PLM.
- Loose fibres (Major) - Three or more fibres/fibre bundles identified during analysis by stereo microscope/PLM.
- ACM Debris (Minor) - One or two small (<2mm) pieces of material attached to fibres identified during analysis by stereo microscope/PLM.
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- Trace - Trace levels of asbestos, as defined by AS4964-2004.

For further details, please contact the Asbestos Team.

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Building Material

Test	Method Description	Default Detection Limit	Sample No
Asbestos in Bulk Material			
Sample Category*	Assessment of sample type. Analysed at Hill Laboratories - Asbestos; 204 Thorndon Quay, Wellington.	-	1
Sample Weight on receipt	Sample weight (approximate). Analysed at Hill Laboratories - Asbestos; 204 Thorndon Quay, Wellington.	0.01 g	1
Asbestos Presence / Absence	Examination using Low Powered Stereomicroscopy followed by 'Polarised Light Microscopy' including 'Dispersion Staining Techniques'. Analysed at Hill Laboratories - Asbestos; 204 Thorndon Quay, Wellington. AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples.	0.01%	1
Description of Asbestos in Non Homogeneous Samples	Form, dimensions and/or weight of asbestos fibres present. AS 4964 (2004) - Method for the Qualitative Identification of Asbestos in Bulk Samples.	-	1

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed on 11-Aug-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

Zandra Fenton BSc
Team Leader - Asbestos

greenwood associates

Resource Consent Landscape Package for

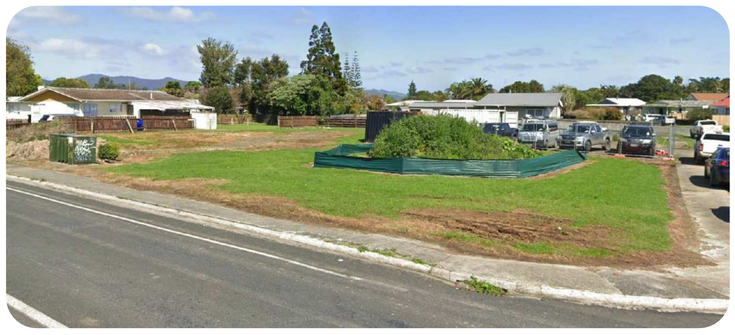
Kāinga Ora

59-61 Allen Bell Drive, Kaitaia, Northland

Drawing Number:		Drawing Description:	Drawing Issue Date:
AR105956/01	-	Site Context & Local Character	27/08/2025
AR105956/02	-	General Arrangement Landscape Plan	27/08/2025
AR105956/03	-	Planting Plan	27/08/2025
AR105956/04	-	Planting Palette	27/08/2025
AR105956/05	-	Planting Details	27/08/2025
AR105956/06	-	Hardscape Plan	27/08/2025
AR105956/07	-	Levels Plan	27/08/2025
AR105956/08	-	Fencing Plan	27/08/2025
AR105956/09	-	Fencing Details 01	27/08/2025
AR105956/10	-	Fencing Details 02	27/08/2025

File: /Volumes/GA-DATA/00 PROJECTS/KO OSM Project Velocity/Sites/Kaitaia - Northland/KO Allen Bell Dr 59 - 61, Kaitaia - AR105956/01 Drawing Files/01 RC/01 KO 59-61 Allen Bell Drive - AR105956 - RC.pln Issued: 12:37 PM, 27/08/2025

V1: Existing frontage of 59 (left) and 61 (right) Allen Bell Drive looking West. The frontages are currently unfenced, and the site is vacant with no buildings present. Trees are located near the boundary adjoining 57 Allen Bell Drive.



V2: Existing frontage of 61 Allen Bell Drive looking South West. A transformer is situated within the berm along Allen Bell Drive. The rear section of the property is currently used as a car parking area.

V3: Existing view of 61 Allen Bell Drive looking from the Parkdale Crescent towards South. A wide vehicle crossing on this frontage provides access to the car park. The existing boundary fence, approximately 1.8 metres high, is in good condition.

Client
Kāinga Ora
Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/01 Site Context & Local Character

Issue Date
27/08/2025

Issue
RC

Drawn
NL

Checked
MB

greenwood associates

- Existing trees to remain
- Existing tree to remove
- Specimen trees
- Fruit trees
- Specimen shrubs
- Narrow strip planting
- Amenity planting mix
- Under planting mix
- Frontage planting mix
- Standard concrete - broom
- Standard concrete - exposed
- Permeable pavers
- Timber decking
- Lawn
- Bark
- Wheelstops
- Folding clotheslines
- Letterboxes - post mounted
- Letterboxes - fence mounted
- Storage sheds
- Bin storage
- Fencing < 1.2m
- Fencing > 1.2m
- Gates

NOTES:

Confirm set out of all dimensions on site prior to commencing work.

Do not scale off of drawings.

All drawings are in mm (unless specified)

All drawings are to be read in conjunction with planting, hardscape and fencing plans.

All plans are to be read in conjunction with Hierarchy Architecture Plan Set, McKenzie & Co Civil Plan Set and Kirk Roberts Engineering Plan Set.

Levels shown for reference only. Refer to McKenzie & Co Civil Plan Set.

SERVICES:

- POTABLE WATER
- STORM WATER
- WASTE WATER
- POWER

Client
Kāinga Ora
Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/02 General Arrangement Landscape Plan

N

Scale
1:100@A1
1:200@A3

Issue Date
27/08/2025
Issue
RC

Drawn
NL
Checked
MB

greenwood associates

Code	Name	Common Name	PB	Spacing
Specimen Trees / Shrubs				
AE	*Alectryon excelsus*	tītoki	45L	As Shown
SM	*Sophora microphylla*	kōwhai	45L	As Shown
CW	*Pseudopanax lessonii 'Cyril Watson'*	houpara	10L	As Shown
OC	*Olearia cheesemanii*	streamside daisy	10L	As Shown
Fruit Trees				
LE	*Citrus × limon*	lemon	10L	As Shown
MA	*Citrus × reticulata*	mandarin	10L	As Shown
OR	*Citrus × sinensis*	orange	10L	As Shown
NS	**Narrow Strip Planting Mix**			
33%	*Libertia peregrinans (LP)*	mīkoikoi	2L	400mm
33%	*Phormium 'Sweet Mist' (PS)*	harakeke	2L	400mm
33%	*Lobelia angulata (LA)*	pānakenake	2L	400mm
AM	**Amenity Planting Mix**			
25%	*Arthropodium cirratum (AC)*	renga renga	2L	750mm
25%	*Carex virgata (CV)*	purei	2L	750mm
25%	*Libertia grandiflora (LG)*	tukauki	2L	750mm
25%	*Hebe 'Wiri Mist' (HW)*	hebe wiri mist	2L	750mm
UP	**Under Planting Mix**			
33%	*Coprosma repens 'Poor Knights' (CR)*	taupata	2L	600mm
33%	*Fuchsia procumbens (FP)*	trailing fuchsia	2L	600mm
33%	*Lobelia angulata (LA)*	pānakenake	2L	600mm
FP	**Frontage Planting Mix**			
20%	*Phormium cookianum 'Emerald Gem' (PC)*	dwarf mountain flax	2L	750mm
20%	*Anemanthele lessoniana (AL)*	hunangāmoho	2L	750mm
15%	*Carex dipsacea (CD)*	sedge	2L	750mm
15%	*Astelia fragrans (AF)*	kakaha	2L	750mm
10%	*Hebe 'Wiri Mist' (HW)*	hebe wiri mist	2L	750mm
10%	*Phormium 'Black Rage' (PB)*	harakeke	2L	750mm
10%	*Coprosma repens 'Poor Knights' (CR)*	taupata	2L	750mm

* *planting mixes to be planted in species groups of 3 min. for small garden beds (<9m2) and 5 min. for larger gardens beds (>9m2)*

** *Specimen trees to be crown lifted to min. 1.4m retain site lines*

Alectryon excelsus

Sophora microphylla

Pseudopanax lessonii 'Cyril Watson'

Code	Name
NV	**Existing vegetation in neighbouring property to remain & be protected during all site works**
1	Neighbouring trees/vegetation to remain
ER	**Existing trees / vegetation to be removed**
1	Existing trees located on site to be removed

* *Any other trees or vegetation located within the site boundary not highlighted on the planting plan*

NOTES:

Confirm set out of all dimensions on site prior to commencing work.

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All drawings are to be read in conjunction with planting, hardscape and fencing plans.

All plans are to be read in conjunction with Hierarchy Architecture Plan Set, McKenzie & Co Civil Plan Set and Kirk Roberts Engineering Plan Set.

All trees shall be at least 1.5m high at the time of planting and once established must be maintained at a height of at least 3m thereafter (with the exception of any proposed fruit trees)

All specimen trees located within 2m of driveway crossings are to be crown lifted to ensure visual sightlines are maintained.

Prior to and during excavation of pathways which are shown within the drip line/root zone of ***Existing trees to remain***', an Arborist must be present onsite. Planting within this area is to be built up over the roots where possible and only localised excavation can occur for each plant rather than full excavation of the planted area.

SERVICES NOTES:

All service lines are shown for information only and are not to be used to locate services. Refer to McKenzie & Co Civil Plan Set drawings for services set out and details.

Prior to excavating tree pits and planting specimen trees, confirm on site there are no clashes with underground services. Notify the Landscape Architect if any clashes are likely to occur.

A root barrier is required to specimen trees located within 2m of waste water, water and stormwater service lines and electrical lines 11kv and under. Root barrier to be located a minimum of 0.3m away from service lines.

A root barrier is required to specimen trees located within 5m of electrical lines 33kv and over. Root barrier to be located a minimum of 2.0m away from service lines.

SERVICES:

POTABLE WATER
STORM WATER
WASTE WATER
POWER

Client
Kāinga Ora
Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/03 Planting Plan

Scale
1:100@A1
1:200@A3

Issue Date
27/08/2025

Issue
RC

Drawn
NL

Checked
MB

greenwood associates

Specimen Trees / Feature Shrubs

Alectryon excelsus
tītoki

Sophora microphylla
kōwhai

Pseudopanax lessonii 'Cyril Watson'
houpara

Olearia cheesemanii
streamside daisy

Fruit Trees

Citrus × limon
lemon

Citrus × reticulata
mandarin

Citrus × sinensis
orange

Narrow Strip Planting Mix

Libertia peregrinans
mīkoikoi

Phormium 'Sweet Mist'
harakeke

Lobelia angulata
pānakenake

Amenity Planting Mix

Arthropodium cirratum
renga renga

Carex virgata
purei

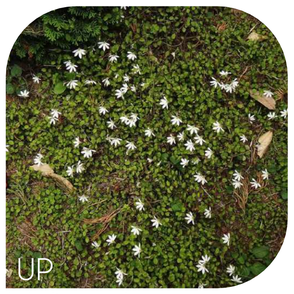
Libertia grandiflora
tukauki

Hebe 'Wiri Mist'
hebe wiri mist

Under Planting Mix

Coprosma repens 'Poor Knights'
taupata

Fuchsia procumbens
trailing fuchsia



Lobelia angulata
pānakenake

Frontage Planting Mix

Phormium cookianum 'Emerald Gem'
dwarf mountain flax

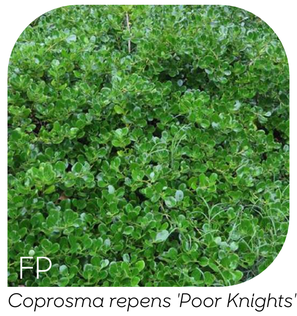
Anemanthele lessoniana
hunangāmoho

Carex dipsacea
sedge

Astelia fragrans
kakaha

Hebe 'Wiri Mist'
hebe wiri mist

Phormium 'Black Rage'
harakeke



Coprosma repens 'Poor Knights'
taupata

Client
Kāinga Ora
Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/04 Planting Palette

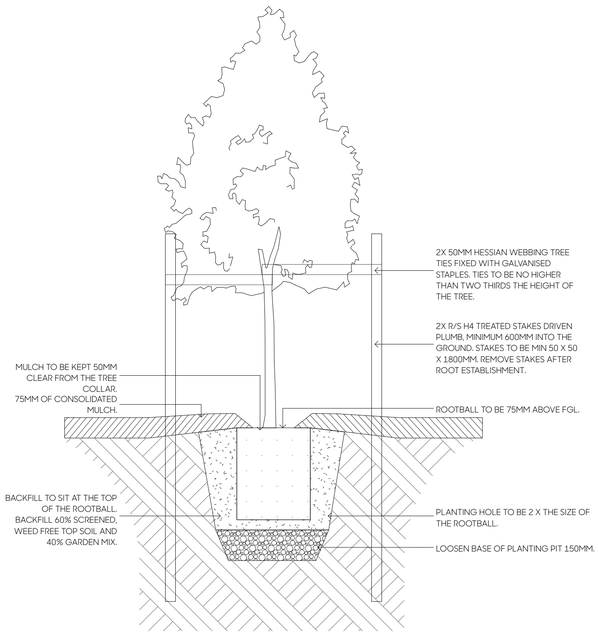
Issue Date
27/08/2025

Issue
RC

Drawn
NL

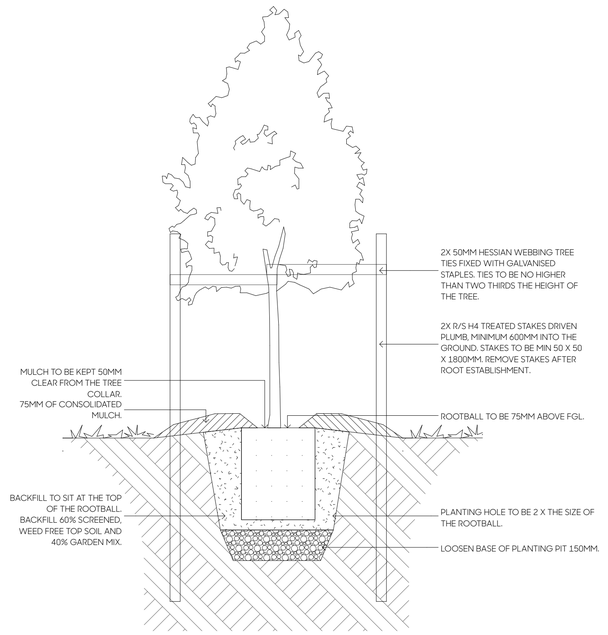
Checked
MB

greenwood associates



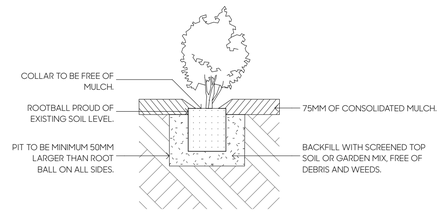
PD-01: TREE IN GARDEN

1:15 @ A1, 1:30 @ A3



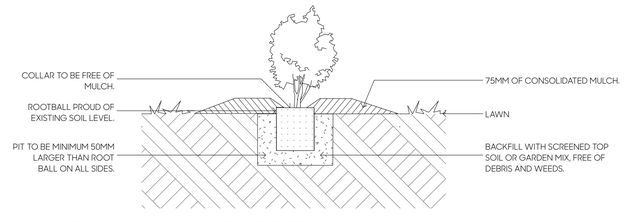
PD-02: TREE IN LAWN

1:15 @ A1, 1:30 @ A3



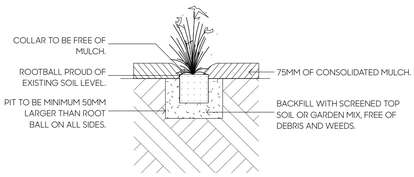
PD-03: PB18 (10L) SHRUB / FRUIT TREE IN GARDEN

1:15 @ A1, 1:30 @ A3



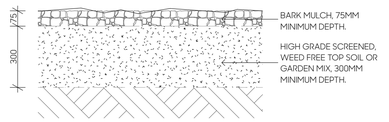
PD-04: PB18 (10L) SHRUB / FRUIT TREE IN LAWN

1:15 @ A1, 1:30 @ A3



PD-05: PB3 (2L) SHRUB/GRASSES IN GARDEN

1:15 @ A1, 1:30 @ A3



PD-06: GARDEN BEDS

1:15 @ A1, 1:30 @ A3

NOTES:

Confirm set out of all dimensions on site prior to commencing work.

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All plans are to be read in conjunction with Hierarchy Architecture Plan Set, McKenzie & Co Civil Plan Set and Kirk Roberts Engineering Plan Set.

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SERVICES NOTES:

All service lines are shown for information only and are not to be used to locate services. Refer to McKenzie & Co Civil Plan Set drawings for services set out and details.

Prior to excavating tree pits and planting specimen trees, confirm on site there are no clashes with underground services. Notify the Landscape Architect if any clashes are likely to occur.

A root barrier is required to specimen trees located within 2m of waste water, water and stormwater service lines and electrical lines 11kv and under. Root barrier to be located a minimum of 0.3m away from service lines.

A root barrier is required to specimen trees located within 5m of electrical lines 33kv and over. Root barrier to be located a minimum of 2.0m away from service lines.

Client
Kāinga Ora Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/05 Planting Details

Issue Date
27/08/2025

Issue
RC

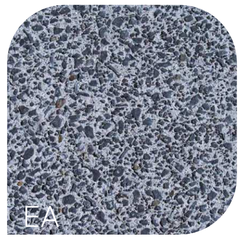
Drawn
NL

Checked
MB

greenwood associates

Code	Name	Specification
	Hardscape Surfaces	
SC	Standard concrete - Pedestrian	100mm thick, low carbon standard concrete, broom finish
SC1	Standard concrete - Vehicular	150mm thick, low carbon standard concrete, broom finish
EA	Exposed concrete - Vehicular	150mm thick, low carbon standard concrete, exposed finish
PP	Permeable pavers - Vehicular	Firth Holland Flowpave permeable paver, (L200xW100xD80mm) black sands colour, pavers to be laid in a herringbone pattern
PE	Permeable pavers - Vehicular	Firth Holland Flowpave permeable paver, (L200xW100xD80mm) natural colour, pavers to be laid in a herringbone pattern
DE	Timber decking / steps	Refer to architectural / structural engineers drawings for detailed specification
LA	Lawn	PGG Wrightson DuraVeg® Kerbside Mix Sowing Rate: 30-50g/m2
BA	Bark / mulch	Min. 75mm thick layer of un-stained reharvest or cambium bark mulch
	Hardscape Elements	
WS	Wheel stop	Vanguard rubber wheel stop 1650mm, black, fixed to concrete with 3xM12 150mm concrete screws, positioned in accordance with AS2890.1:2004
FC	Folding clothesline *(fence mounted)*	Austral Standard 2.4m, (2.49m x 1.5m) (28.5m line), woodland grey colour, securely mounted to timber fence at a max. height of 1.8m
CL	Compact folding clothesline *(fence mounted)*	Austral Compact 2.4m, (2.49m x 0.94m) (28.5m line), woodland grey colour, securely mounted to timber fence at a max. height of 1.8m
WT	Parking line	75mm thick, white parking line, applied to ground surface to product specifications
LE	Post mounted letterbox	Metware Fliptop metal letterbox (H1180xW230xD380mm) black powdercoat finish, pad-lockable with 58mm adheisive street numbers, securely mounted on standard Metware 1050mm long black powdercoated letterbox stand
FL	Fence mounted letterbox	Metware Slimline top opening letterbox (H450mmxW395mmxD120mm) black powdercoat finish, pad-lockable, with 58mm adheisive street numbers, secured to fence with manufacturers supplied fixings
GS	Storage shed	Garden shed, Zinc Aluminium finish, W1.53xD0.78xH1.8m, with timber floor kit to be securely fixed to concrete pad w/ 4 No. M12 galvanised angle brackets
SS	Storage shed	Garden shed, Zinc Aluminium finish, W1.53xD1.08xH1.8m, with timber floor kit to be securely fixed to concrete pad w/ 4 No. M12 galvanised angle brackets
BS	Bin storage	Bin storage area for 240L, 140L & 45L bins

Standard Concrete - Broom



Standard Concrete - Exposed

NOTES:

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All plans are to be read in conjunction with Hierarchy Architecture Plan Set, McKenzie & Co Civil Plan Set and Kirk Roberts Engineering Plan Set.

Levels shown for reference only. Refer to McKenzie & Co Civil Plan Set.

SERVICES:

POTABLE WATER
STORM WATER
WASTE WATER
POWER

Permeable pavers

Timber Decking / Steps

Lawn *Bark*

Wheelstops

Fence mounted letterboxes

Storage Sheds

Folding clothesline

Post mounted letterboxes

Client
Kāinga Ora
Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/06 Hardscape Plan

N

Scale
1:100@A1
1:200@A3

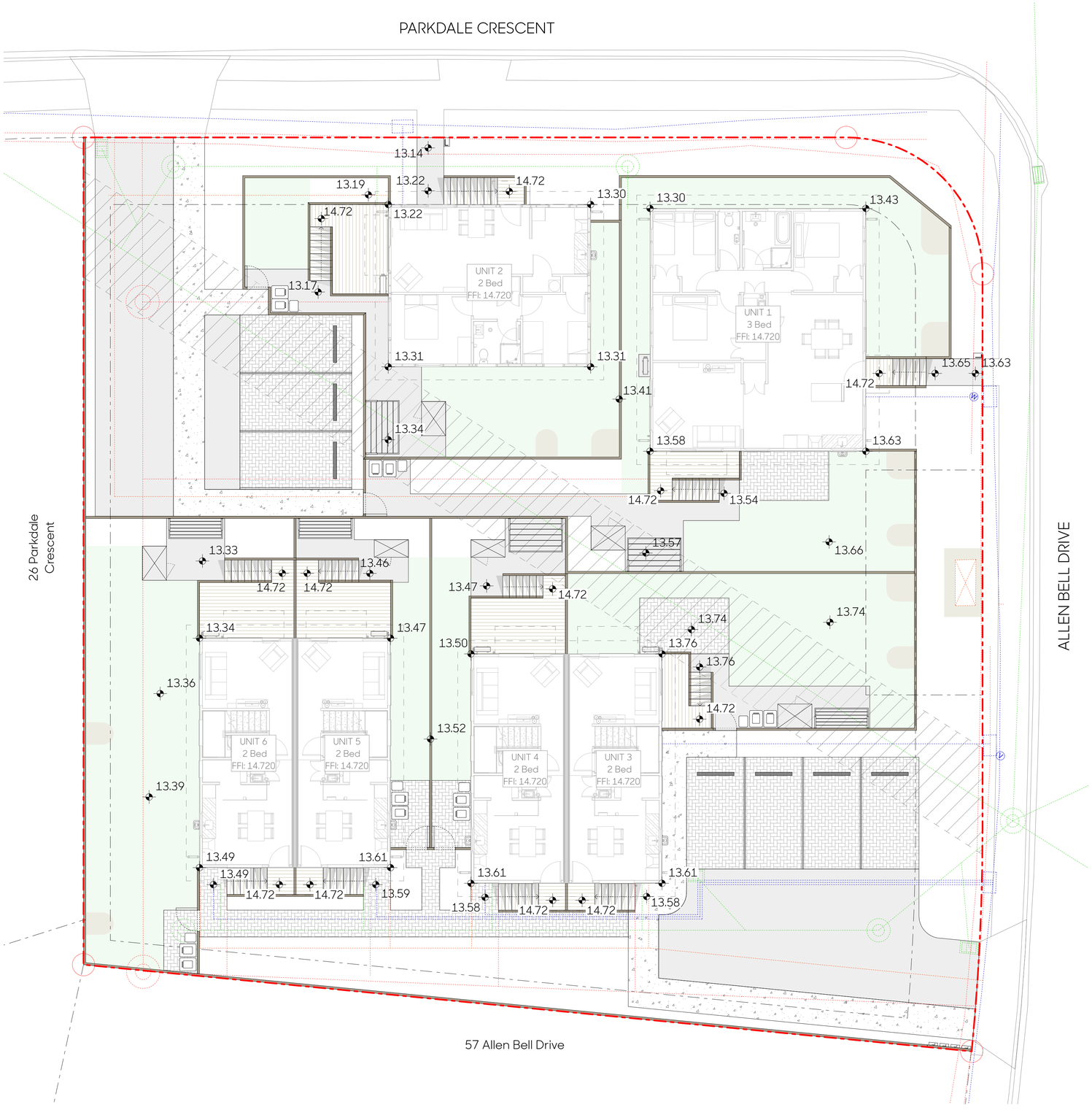
Issue Date
27/08/2025

Issue
RC

Drawn
NL

Checked
MB

greenwood associates



NOTES:

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All drawings are to be read in conjunction with planting, hardscape and fencing plans.

All plans are to be read in conjunction with Hierarchy Architecture Plan Set, McKenzie & Co Civil Plan Set and Kirk Roberts Engineering Plan Set.

Levels shown for reference only. Refer to McKenzie & Co Civil Plan Set.

SERVICES:

POTABLE WATER
STORM WATER
WASTE WATER
POWER

Client
Kāinga Ora
Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/07 Levels Plan

Scale
1:100@A1
1:200@A3

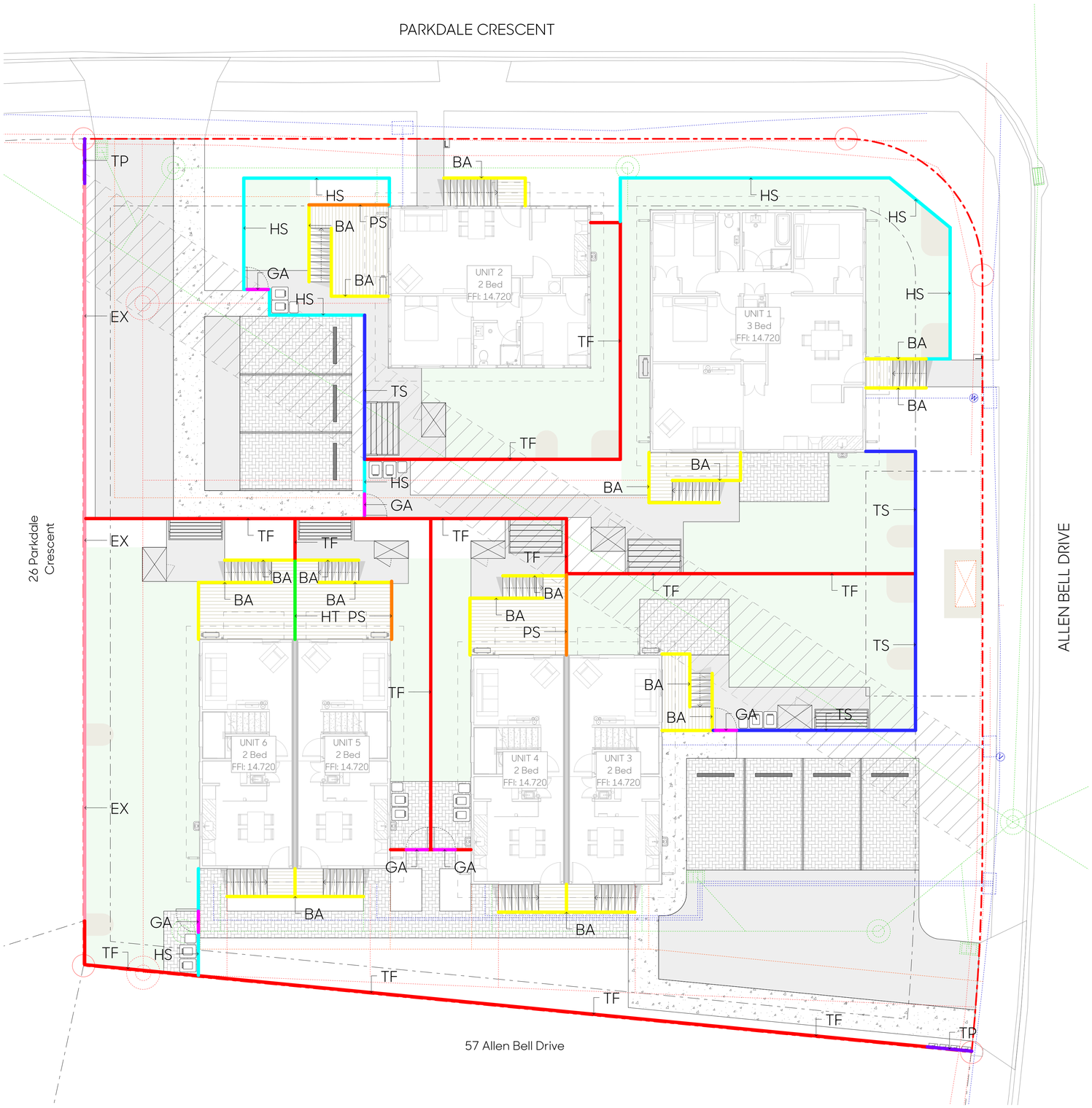
Issue Date
27/08/2025

Issue
RC

Drawn
NL

Checked
MB

greenwood associates



Code	Name	Specification	Detail
TF	Timber paling fence	1.8m high, 150x25mm H3.2, RS vertical palings, no spacing, no stain	FD-TF
TP	Timber paling fence	1.0m high, 150x25mm H3.2, RS vertical palings, no spacing, no stain	FD-TP
TS	Horizontal timber slat fence	1.8m high, 100x25mm H3.2, RS horizontal slats, 10mm spacing, no stain	FD-TS
PS	Horizontal timber slat fence *(1.8m from deck FFL)*	1.8m high, 100x25mm SG8 H3.2, RS horizontal slats, 10mm spacing, no stain, fence to be 1.8m measured from the deck FFL, timber slats to be fixed on deck facing side	FD-PS
HS	Horizontal timber slat fence	1.2m high, 100x25mm H3.2, RS horizontal slats, 10mm spacing, no stain	FD-HS
HT	Horizontal timber slat fence *(double sided slats)*	1.8m high, 100x25mm H3.2, RS, double sided horizontal slats, 10mm spacing, no stain	FD-HT
GA	Open aluminium gate	1.2m high, 0.95m wide, Boundaryline 'DuraPanel Polo' open aluminium gate, black powdercoat finish, self-closing hinges, child proof latch mounted 1.5m above ground level, discourages climbing	N/A
BA	Balustrade	1.1m high aluminium balustrade. Refer to architectural / structural engineers drawings for specification and details	N/A
EX	Existing fence to remain	Existing boundary fence to remain, if in poor condition remove and replace any palings where required, pressure wash to clean & remove any algae build-up	N/A

1.8m High double sided horizontal timber slat fence

1.8m High timber paling fence

1.2m High open aluminium fence

1.0m High timber paling fence

1.8m High horizontal timber slat fence

1.2m High horizontal timber slat fence

NOTES:

Confirm set out of all dimensions on site prior to commencing work.

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All drawings are in mm (unless specified)

All drawings are to be read in conjunction with planting, hardscape and fencing plans.

All plans are to be read in conjunction with Hierarchy Architecture Plan Set, McKenzie & Co Civil Plan Set and Kirk Roberts Engineering Plan Set.

All gates to match adjacent fencing type, unless specified elsewhere.

All gates for standard housing units to be 0.95m wide unless otherwise specified (excl. FUD and accessible housing units).

All gates for FUD and accessible units to be 1.2m wide with a low latch and self-closing hinges.

Stain is to be applied to all publicly visible fence surfaces (including any existing fencing to remain). Selected fence stain: **NO STAIN.**

All fence posts to be in 350mm diameter concrete encasement to a minimum depth that is 1/3 of the total fence height unless otherwise specified.

Prior to excavating fence post holes, confirm on site there are no clashes with underground services. Notify the Landscape Architect if any clashes are likely to occur.

All fixings to be galvanised finish unless specified elsewhere.

SERVICES:

POTABLE WATER
STORM WATER
WASTE WATER
POWER

Client
Kāinga Ora
Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/08 Fencing Plan

Scale
1:100@A1
1:200@A3

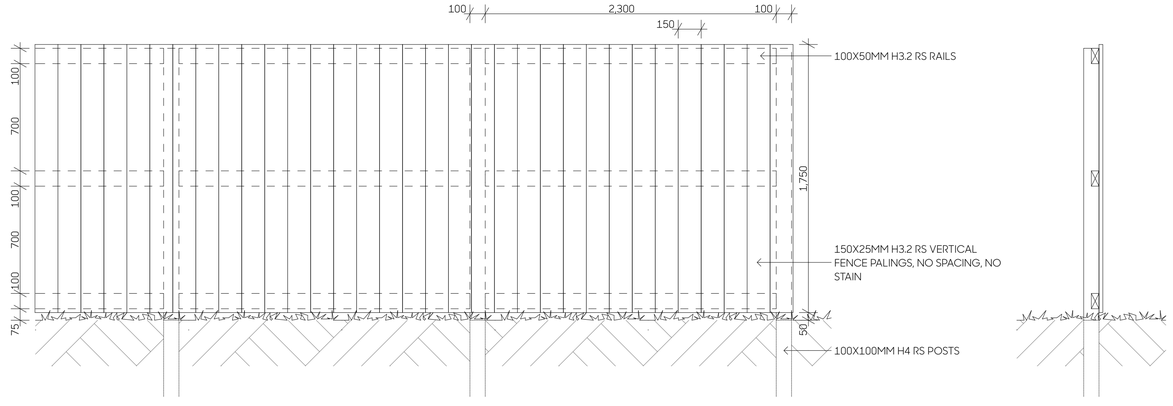
Issue Date
27/08/2025

Issue
RC

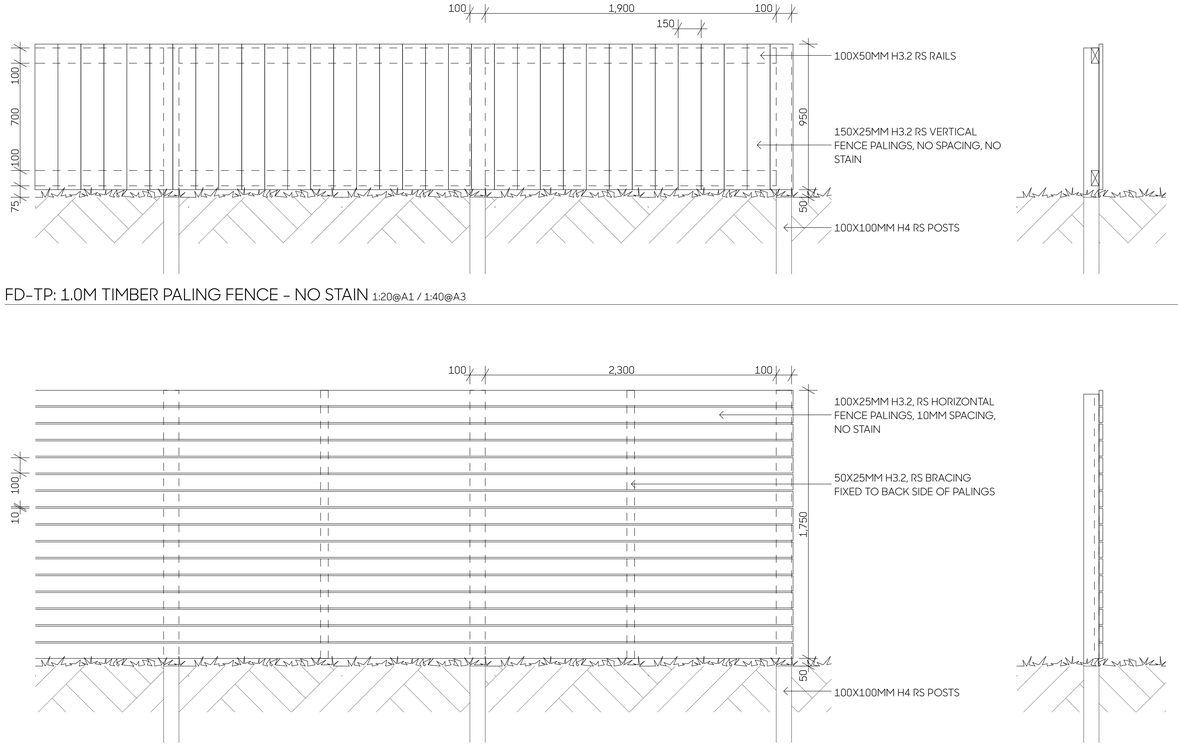
Drawn
NL

Checked
MB

greenwood associates



FD-TF: 1.8M TIMBER PALING FENCE - NO STAIN 1:20@A1 / 1:40@A3



FD-TP: 1.0M TIMBER PALING FENCE - NO STAIN 1:20@A1 / 1:40@A3

FD-TS: 1.8M HORIZONTAL TIMBER SLATTED FENCE - SINGLE SIDED - NO STAIN 1:20@A1 / 1:40@A3

NOTES:

Confirm set out of all dimensions on site prior to commencing work.

Do not scale off of drawings.

All drawings are in mm (unless specified)

All drawings are to be read in conjunction with planting, hardscape and fencing plans.

All plans are to be read in conjunction with Hierarchy Architecture Plan Set, McKenzie & Co Civil Plan Set and Kirk Roberts Engineering Plan Set.

All gates to match adjacent fencing type, unless specified elsewhere.

All gates for standard housing units to be 0.95m wide unless otherwise specified (excl. FUD and accessible housing units).

All gates for FUD and accessible units to be 1.2m wide with a low latch and self-closing hinges.

Stain is to be applied to all publicly visible fence surfaces (including any existing fencing to remain). Selected fence stain: **NO STAIN.**

All fence posts to be in 350mm diameter concrete encasement to a minimum depth that is 1/3 of the total fence height unless otherwise specified.

Prior to excavating fence post holes, confirm on site there are no clashes with underground services. Notify the Landscape Architect if any clashes are likely to occur.

All fixings to be galvanised finish unless specified elsewhere.

Client
Kāinga Ora
Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/09 Fencing Details 01

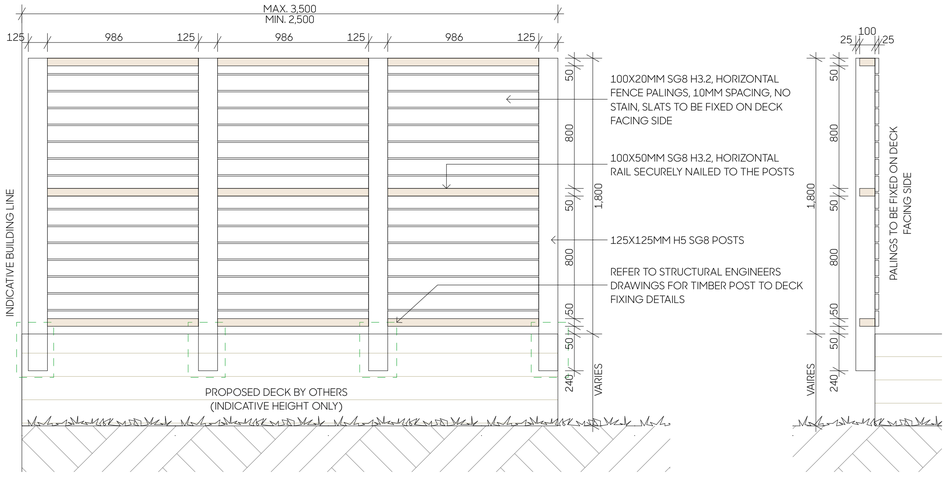
Issue Date
27/08/2025

Issue
RC

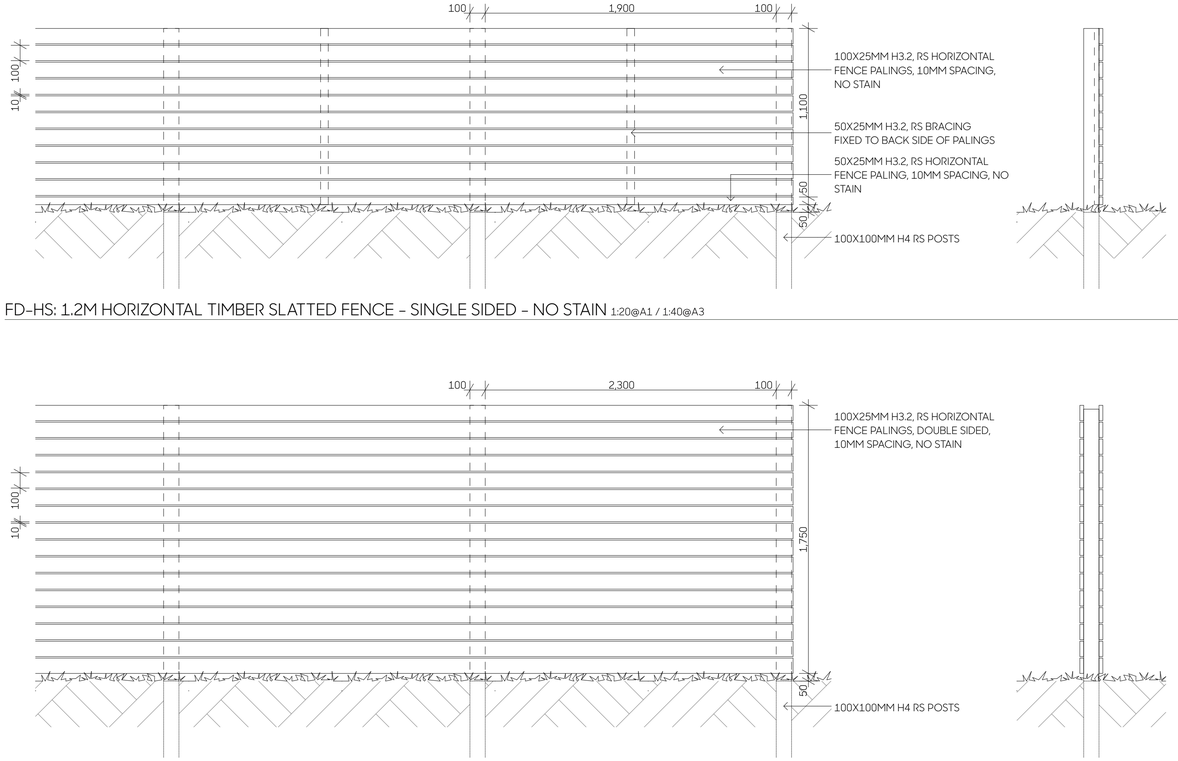
Drawn
NL

Checked
MB

greenwood associates

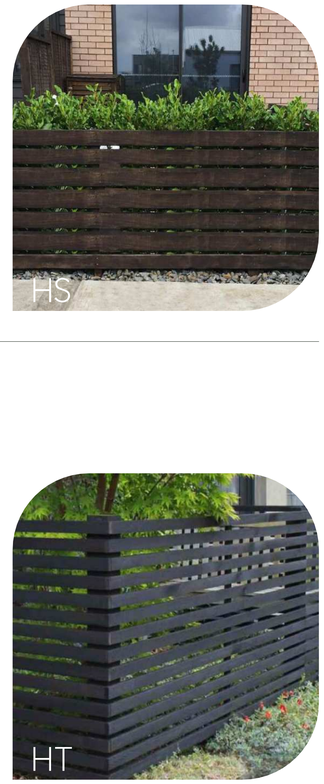


FD-PS: 1.8M HORIZONTAL TIMBER SLATTED FENCE - MEASURED FROM DECK FFL - NO STAIN 1:20@A1 / 1:40@A3



FD-HS: 1.2M HORIZONTAL TIMBER SLATTED FENCE - SINGLE SIDED - NO STAIN 1:20@A1 / 1:40@A3

FD-HT: 1.8M HORIZONTAL TIMBER SLATTED FENCE - DOUBLE SIDED - NO STAIN 1:20@A1 / 1:40@A3



NOTES:

Confirm set out of all dimensions on site prior to commencing work.

Do not scale off of drawings.

All drawings are in mm (unless specified)

All drawings are to be read in conjunction with planting, hardscape and fencing plans.

All plans are to be read in conjunction with Hierarchy Architecture Plan Set, McKenzie & Co Civil Plan Set and Kirk Roberts Engineering Plan Set.

All gates to match adjacent fencing type, unless specified elsewhere.

All gates for standard housing units to be 0.95m wide unless otherwise specified (excl. FUD and accessible housing units).

All gates for FUD and accessible units to be 1.2m wide with a low latch and self-closing hinges.

Stain is to be applied to all publicly visible fence surfaces (including any existing fencing to remain). Selected fence stain: **NO STAIN.**

All fence posts to be in 350mm diameter concrete encasement to a minimum depth that is 1/3 of the total fence height unless otherwise specified.

Prior to excavating fence post holes, confirm on site there are no clashes with underground services. Notify the Landscape Architect if any clashes are likely to occur.

All fixings to be galvanised finish unless specified elsewhere.

Client
Kāinga Ora
Homes and Communities

Project
59-61 Allen Bell Drive, Kaitaia, Northland

Drawing
AR105956/10 Fencing Details 02

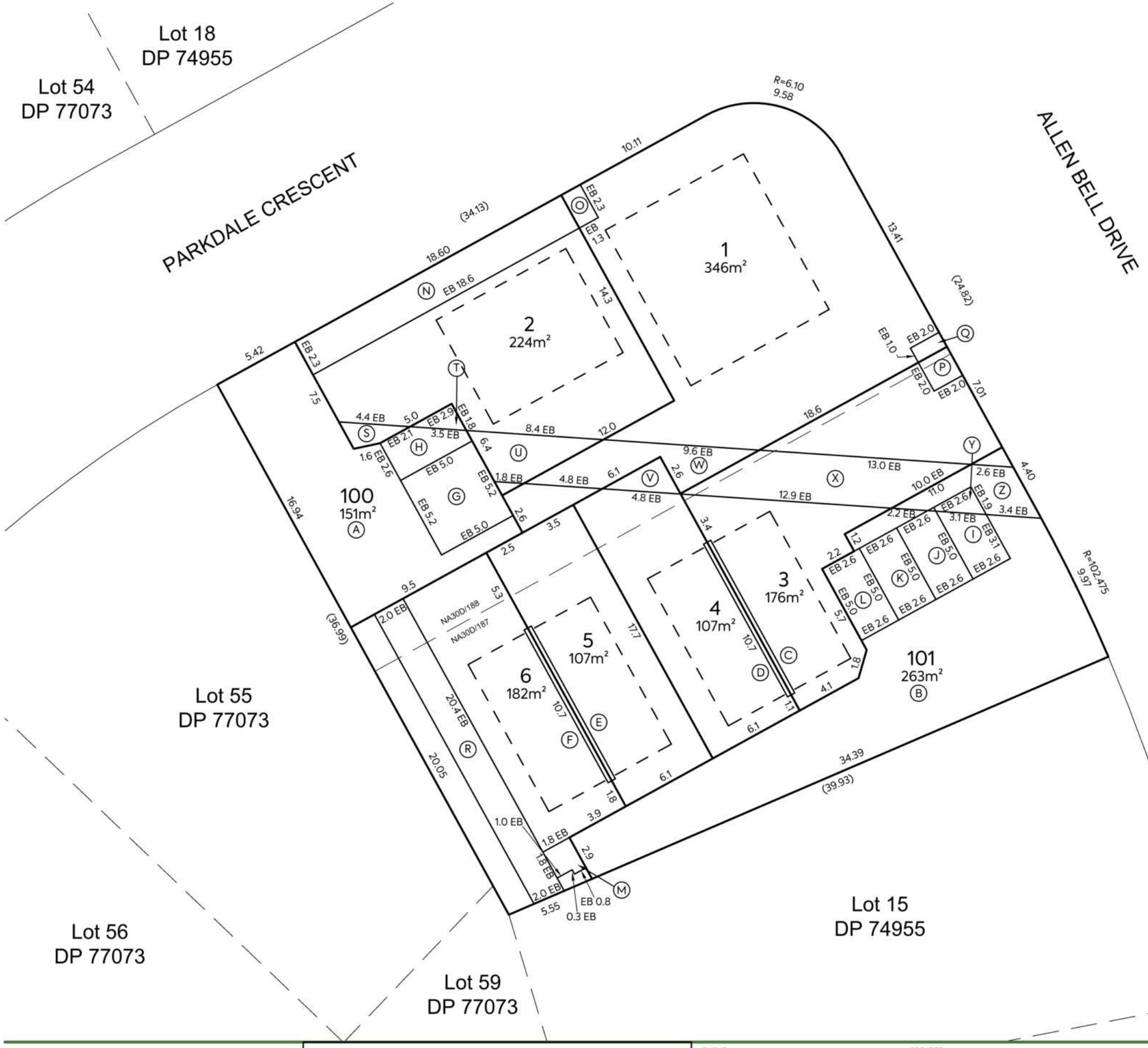
Issue Date
27/08/2025

Issue
RC

Drawn
NL

Checked
MB

greenwood associates



NOTES

1. COMPRISED IN: NA30D/187 & NA30D/188 (LOTS 16 & 17 DP 74955)
2. LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL
3. ALL DIMENSIONS SHOWN IN METRES UNLESS NOTED OTHERWISE
4. AREAS AND MEASUREMENTS SUBJECT TO RESOURCE CONSENT AND LINZ APPROVAL.
5. PARTY WALL EASEMENTS ARE 0.3M WIDE AND ARE SUBJECT TO FINAL SURVEY.
6. BUILDING POSITIONS ARE INDICATIVE ONLY
7. THE UNDERLYING LOT 17 DP 74955 IS SUBJECT TO PART IV A OF THE CONSERVATION ACT 1987 AND SECTION 11 OF THE CROWN MINERALS ACT 1991.

AMALGAMATION CONDITION

THAT LOT 100 HEREON (LEGAL ACCESS) BE HELD AS TO TWO UNDIVIDED ONE-HALF SHARES BY THE OWNERS OF LOTS 1 & 2 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

THAT LOT 101 HEREON (LEGAL ACCESS) BE HELD AS TO FOUR UNDIVIDED ONE-FOURTH SHARES BY THE OWNERS OF LOTS 3-6 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

SCHEDULE AND MEMORANDUM ARE ON THE NEXT PAGE

REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	SF	HP	PC	27/08/25

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59 & 61 ALLEN BELL DRIVE KAITAIA

TITLE: LOTS 1 TO 6, 100 & 101 BEING A SUBDIVISION OF LOTS 16 & 17 DP 74955

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: 1:250m @ A3

DO NOT SCALE

DRAWING NO: 3493-189-100

REV: A

C:\12DS\DATA\MCKFS01\3493 AUCKLAND VELOCITY - SURVEYING_4184\05. SURVEY\PRE-CONSTRUCTION\189 - 250728 59-61 ALLEN BELL DRIVE, KAITAIA\5.3. DRAWINGS\3493-189-100.DWG

MEMORANDUM OF PROPOSED EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
RIGHT TO DRAIN STORMWATER	A	LOT 100 HEREON	LOTS 1-2 HEREON
	B	LOT 101 HEREON	LOTS 3-6 HEREON
	N	LOT 2 HEREON	LOT 1 HEREON
	O	LOT 1 HEREON	LOT 2 HEREON
RIGHT TO DRAIN WASTEWATER	B	LOT 101 HEREON	LOTS 3-6 HEREON
	A	LOT 100 HEREON	LOTS 1-2 HEREON
	G		LOT 1 HEREON
	R	LOT 6 HEREON	LOTS 1-2 & 100 HEREON
RIGHT TO CONVEY WATER	B	LOT 101 HEREON	LOTS 3-6 HEREON
PARTY WALL	C	LOT 3 HEREON	LOT 4 HEREON
	D	LOT 4 HEREON	LOT 3 HEREON
	E	LOT 5 HEREON	LOT 6 HEREON
	F	LOT 6 HEREON	LOT 5 HEREON
PARKING RIGHT	G	LOT 100 HEREON	LOT 1 HEREON
	H, T		LOT 2 HEREON
	I, Y	LOT 101 HEREON	LOT 3 HEREON
	J		LOT 4 HEREON
	K		LOT 5 HEREON
	L		LOT 6 HEREON
RIGHT TO CONVEY POWER & TELECOMMU-NICATIONS	A	LOT 100 HEREON	LOTS 1 & 2 HEREON
	G		LOT 1 HEREON
	B	LOT 101 HEREON	LOTS 3-6 HEREON

SCHEDULE OF EXISTING EASEMENTS IN GROSS TO RETAIN				
PURPOSE	CREATING DOCUMENTS	SHOWN	BURDENED LAND	GRANTEE
POWER SUPPLY	185979.4	P	LOT 3 HEREON	BAY OF ISLANDS ELECTRIC POWER BOARD
		Q	LOT 1 HEREON	

MEMORANDUM OF PROPOSED EASEMENTS IN GROSS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
RIGHT TO CONVEY TELECOMMU-NICATIONS	A, B	LOTS 100, 101 & 6 HEREON	CHORUS NEW ZEALAND LIMITED
RIGHT TO CONVEY POWER	M		TOP ENERGY LIMITED
RIGHT TO DRAIN WASTEWATER	A	LOT 100 HEREON	FAR NORTH DISTRICT COUNCIL
	B	LOT 101 HEREON	
	R	LOT 6 HEREON	
RIGHT TO DRAIN STORMWATER	A	LOT 100 HEREON	
	B	LOT 101 HEREON	
	N	LOT 2 HEREON	
	O	LOT 1 HEREON	
	M	LOT 6 HEREON	
	S	LOT 2 HEREON	
	H	LOT 100 HEREON	
	G	LOT 100 HEREON	
	T	LOT 100 HEREON	
	U	LOT 2 HEREON	
	V	LOT 4 HEREON	
	W	LOT 1 HEREON	
	X	LOT 3 HEREON	
	Y	LOT 101 HEREON	
	Z	LOT 101 HEREON	

NOTES

1. COMPRISED IN: NA30D/187 & NA30D/188 (LOTS 16 & 17 DP 74955)
2. LOCAL AUTHORITY: FAR NORTH DISTRICT COUNCIL
3. ALL DIMENSIONS SHOWN IN METRES UNLESS NOTED OTHERWISE
4. AREAS AND MEASUREMENTS SUBJECT TO RESOURCE CONSENT AND LINZ APPROVAL.
5. PARTY WALL EASEMENTS ARE 0.3M WIDE AND ARE SUBJECT TO FINAL SURVEY.
6. BUILDING POSITIONS ARE INDICATIVE ONLY
7. THE UNDERLYING LOT 17 DP 74955 IS SUBJECT TO PART IV A OF THE CONSERVATION ACT 1987 AND SECTION 11 OF THE CROWN MINERALS ACT 1991.
8. THE 'BAY OF ISLANDS ELECTRIC POWER BOARD' IS NOW OPERATED BY 'TOP ENERGY LIMITED'

AMALGAMATION CONDITION

THAT LOT 100 HEREON (LEGAL ACCESS) BE HELD AS TO TWO UNDIVIDED ONE-HALF SHARES BY THE OWNERS OF LOTS 1 & 2 HEREON AS TENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLE BE ISSUED IN ACCORDANCE THEREWITH.

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REV	DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
A	FOR RESOURCE CONSENT	SF	HP	PC	27/08/25

MCKENZIE & CO.

CLIENT: Kāinga Ora Homes and Communities

PROJECT: 59 & 61 ALLEN BELL DRIVE KAITAIA

TITLE: LOTS 1 TO 6, 100 & 101 BEING A SUBDIVISION OF LOTS 16 & 17 DP 74955

PURPOSE OF ISSUE: RESOURCE CONSENT

SCALE: N/A DO NOT SCALE

DRAWING NO: 3493-189-101

REV: A

Minutes

Project: 59 and 61 Allen Bell Drive, Kaitaia

Date: 19 August 2025

Time: 11:00am

Location: Teams

Attendees:

Name	Role/Organisation
Nikki Callinan (NC)	Planner - FNDC
Losaline Finekifolau (LF)	Development Engineer - FNDC
Gourav Rana (GR)	Development Engineer - FNDC
Sujeet Tikaram (ST)	Senior Resource Consents Planner - FNDC
Nicola McCreesh	2IC - Kainga Ora
Jeremiah Nogales	Engineer – McKenzie & Co
Alvin Jung (AJ)	Planner - Barker and Associates
Liam Milne	Planner - Barker and Associates
Gus Finlayson	Planner - Barker and Associates

Item	Detail
1	AJ gave synopsis of proposal and noted civil constraints – in terms of SW pipe. AJ shared the design of approved design, and noted the difference between approved and proposed.
2	Engineering (ST): Access/parking – it isn't 100% clear whether vehicles will be able to turnaround in the site and exit in forward gear. Applicant needs to consider, especially crossing onto Allen Bell Drive – FNDC want to review those. Is the proposal compliant with parking requirements? AJ: Confirmed 1 carpark per dwelling, traffic report will be provided to show tracking. ST: Vehicle crossing to Parkdale will be formed away from the nearby intersection. Is there any lighting proposed? AJ: No lighting currently proposed. ST: Confirmed that is ok given number of parking spaces proposed. Consider engineering standards in terms of vehicle crossings. LF: 3 Waters, not much out of ordinary. SW – attenuation requested. WW – in principle there is capacity to connect but need to confirm w WW discharge flows. WW lines to west and south – avoid these. Trafficable areas atop public lines, coverage needs to be achieved. Water – hydrant testing needed. Reminder of daily water consumption. ST: Easements over existing WW/SW lines needed for survey plan approval. Location of water meters – be careful not to locate in the middle of VX/driveways. Internal easements – need to register these. Site and surrounding areas highly prone to flooding so need to look at SW

	mitigation/attenuation measures for detention and flood control measures. Assessment of daily wastewater consumption so FNDC can assess any alterations to infrastructure is required. Don't see major roadblocks as what is proposed is similar to approved. Jeremiah: What WW lines need to be avoided? LF: WW lines to the west. ST: If coverage is less than 900mm then concrete capping is needed for driveways over pipes. Jeremiah: Confirmed.
3	NC: Planning – yield is similar to previous consent. NC: Any new breaches? AJ: Contained within site as much as possible. NC: If no new major infringements, might be s127 but need to confirm with Whitney. AJ: A s127 is ideal, but if not, application will be relying on the existing consent for receiving environment NC: Updated landscape plan? AJ: Whole new pack will be provided. NC: Comment on the site layout – not massive changes. On the whole, think it will be fine.

TRAFFIC PLANNING CONSULTANTS LTD

PROPOSED RESIDENTIAL DEVELOPMENT
TRANSPORT ASSESSMENT

59-61 ALLEN BELL DRIVE
KAITAIA

Project Information:

Client	Kāinga Ora – Homes and Communities
Job Number	240498
Title	Proposed Residential Development, 59-61 Allen Bell Drive, Kaitaia
Prepared By	Peter Kelly
Date	August 2025
Report Status	Final

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1.0 INTRODUCTION

The proposal consists of constructing five × two-bedroom dwellings and one × three-bedroom dwelling. A total of seven parking spaces will be provided on-site accessed via two vehicle crossings, one onto Allen Bell Drive and one onto Parkdale Crescent. The site is zoned as Residential under the Far North District Council (FNDC) Operative District Plan. **Figure 1** displays the subject site location and proposed access point.

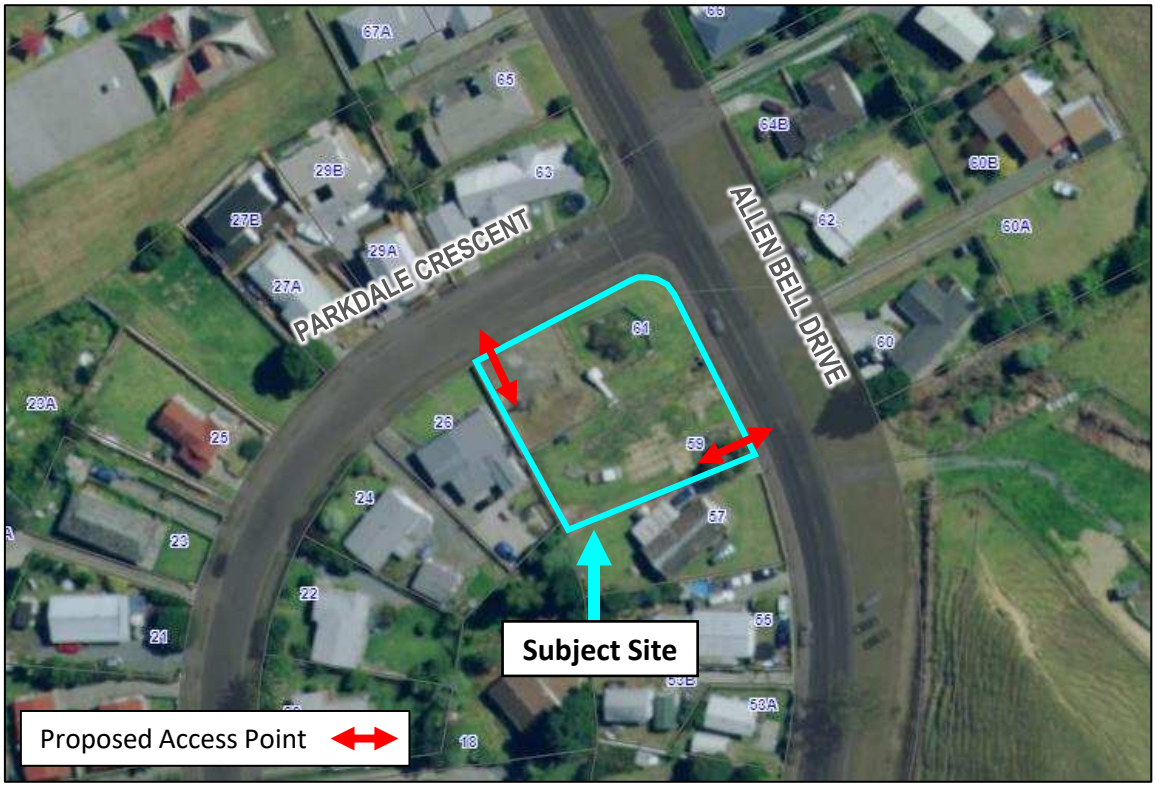


Figure 1: Site Location
Image Source: Far North GIS Maps

2.0 EXISTING TRANSPORT ENVIRONMENT

2.1 Road Network

2.1.1 Allen Bell Drive

Allen Bell Drive is a local road which forms an intersection with Donald Road at its northern end and with Commerce Street at its southern end. Near the subject site Allen Bell Drive has a carriageway width of some 8.5 metres providing one traffic lane in each direction. On-street parking is permitted on both sides of the carriageway. A footpath measuring some 1.4-1.5 metres wide is provided along the western side of the carriageway and there is no footpath provided along the eastern side of the carriageway. It has a posted speed limit of 50 km/h.

No traffic data was available for Allen Bell Drive, and the scale of the proposal does not warrant detailed data to be collected. Using Information from Mobil Road[1] and applying engineering judgement to determine the traffic volumes suggests that Allen Bell Drive carries some 1,700 vehicles per day and 170 vehicles during peak hours.

2.1.2 Parkdale Crescent

Parkdale Crescent is a local road which forms an intersection with Allen Bell Drive at both its northern and southern ends. Near the subject site Parkdale Crescent has a carriageway width of some 7.5 metres providing one traffic lane in each direction. On-street parking is permitted on both sides of the carriageway. Footpaths measuring some 1.4-1.5 metres wide are provided along both sides of the carriageway. It has a posted speed limit of 50 km/h.

No traffic data was available for Parkdale Crescent, and the scale of the proposal does not warrant detailed data to be collected. Using Information from Mobil Road and applying engineering judgement to determine the traffic volumes suggests that Parkdale Crescent carries some 400 vehicles per day and 40 vehicles during peak hours.

2.2 Crash History

Information from the New Zealand Transport Agency's "Crash Analysis System" for the five+ year period from January 2020 to present (2025 data subject to reporting delays) midblock along Allen Bell Drive between Terry Crescent and Korimako Lane, and along Parkdale Crescent indicates that a total of 16 crashes were reported which are summarised in **Table 1** below.

Table 1: Area Crash History

Location	Reported Crashes			Key Factors
	Total	Injury	Non-Injury	
Intersection: Allen Bell Dr and Terry Cres	2	2 minor	-	1 – motorcyclist travelling at speed, lost control when turning (minor) 1 – fatigued driver lost control while turning, hitting a pole (minor)
Allen Bell Dr (midblock): Terry Cres to Parkdale Cres (N)	3	1 minor	2	1 – driver under influence of alcohol lost control of vehicle and hit kerb 1 – driver under influence of alcohol, overtaking, hit another vehicle and then fence/house (minor) 1 – driver following too closely, hit rear end of vehicle in front

[1] Mobil Road - https://mobileroad.org/

Location	Reported Crashes			Key Factors
	Total	Injury	Non-Injury	
Intersection: Allen Bell Dr and Parkdale Cres (N)	1	1 minor	-	1 – driver failed to give-way to oncoming vehicle (minor)
Allen Bell Dr (midblock): Parkdale Cres (N) to Parkdale Cres (S)	5	1 fatal 3 minor	1	1 – driver under influence of alcohol performing stunt driving, lost control and when off-road 1 – driver under influence of drugs/alcohol travelling at speed, lost control and hit tree (fatal) 1 – driver lost control and hit fence (minor) 1 – driver under influence of alcohol, lost control and hit fence (minor) 1 – driver under influence of alcohol, lost control and hit fence/parked vehicle (minor)
Intersection: Allen Bell Dr and Parkdale Cres (S)	1	-	1	1 – driver reversing at intersection to turn around, hit vehicle approaching from behind
Intersection: Allen Bell Dr and Korimako Ln	2	-	2	1 – distracted driver hit rear-end of vehicle in front 1 – drive lost control of vehicle and it slid down grassed bank
Parkdale Cres (midblock): Allen Bell Dr (N) to Allen Bell Dr (S)	2	-	2	1 – driver under influence of drugs/alcohol, lost control and hit parked vehicle 1 – driver under influence of alcohol, evading law enforcement, hit vehicle turning from driver
TOTAL	**16**	**1 fatal 7 minor**	**8**	

Given the relatively low traffic volumes along Allen Bell Drive, significantly more crashes have been reported in this area than would typically be expected over this period of time. When reviewing the crash factors, substance impairment was involved in 50% of the reported instances and in 63% of crashes that resulted in an injury. Reviewing the road formation, there is noting to suggest any inherent road safety issues. However, with the relatively wide travel lanes (Allen Bell Drive) and traffic low volumes these factors may contribute to higher operating speeds than the designed road environment. As this is an existing condition, Council should investigate the installation of traffic calming measures for Allen Bell Drive to increase overall road safety.

3.0 THE PROPOSAL

The proposal consists of constructing five × two-bedroom dwellings and one × three-bedroom dwelling. Each two-bedroom dwelling will be provided with one parking space, and the three-bedroom dwellings will be provided with two parking spaces. The site will be accessed via two shared access, one onto Parkdale Crescent and one onto Allen Bell Drive. The plan used for the basis of this assessment is shown in **Figure 2**.

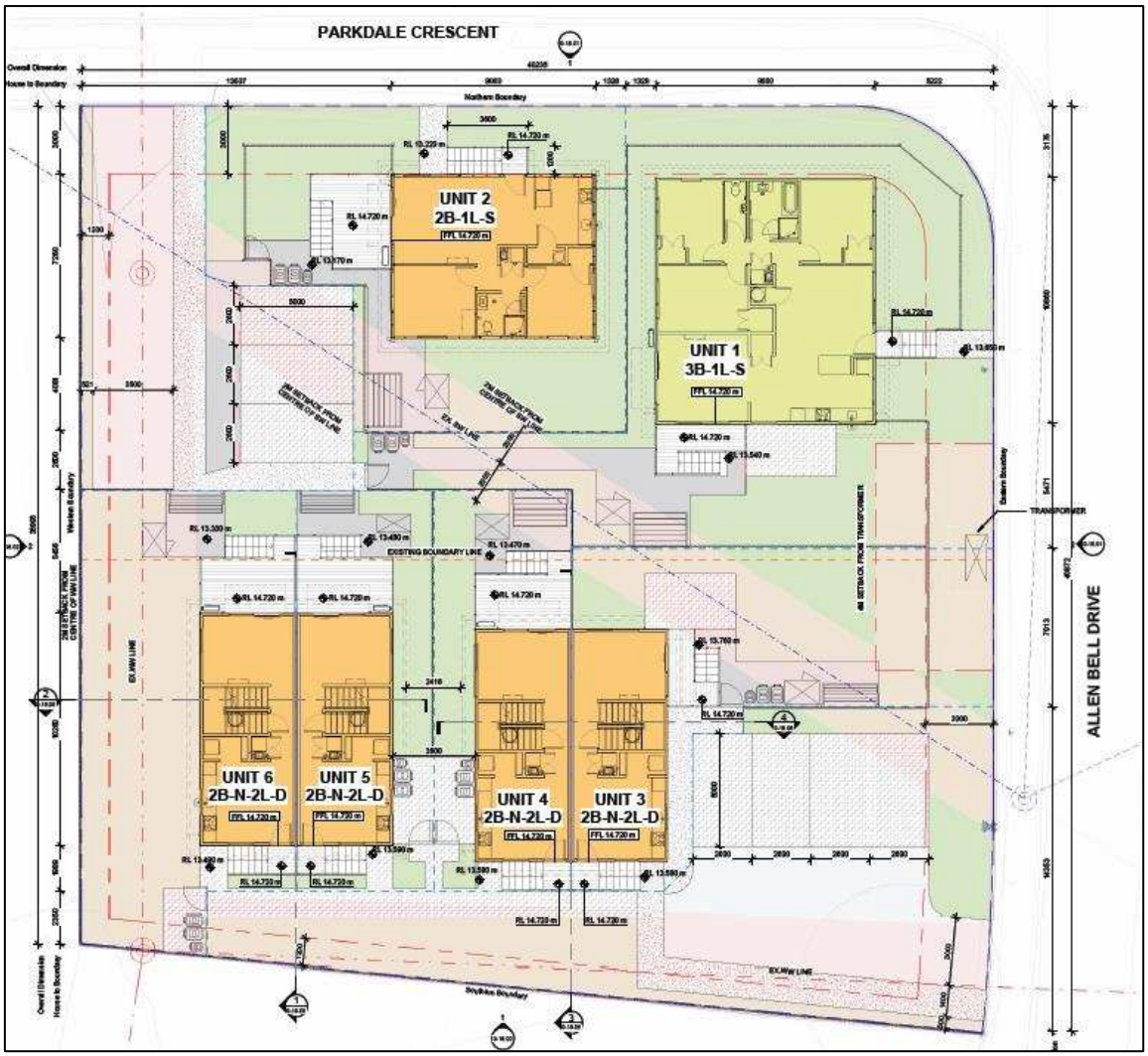


Figure 2: Proposed Site Plan
Image Source: Hierarchy Group

3.1 Trip Generation

Residential trip generation data taken from the Road and Marine Services' (New South Wales) publication "Guide to Traffic Generating Developments", provides trip generation estimates based on dwelling sizes within low and medium density developments:

- For medium density one/two-bedroom dwellings, it indicates a rate of 4.0-5.0 daily trips (0.4-0.5 peak hour trips) per dwelling.
- For medium density three-bedroom+ dwellings, it indicates a rate of 5.0-6.5 daily trips (0.5-0.65 peak hour trips) per dwelling.

Utilising these rates, the trip generation for the site was estimated for the proposed development and is summarised in Table 1.

Table 1: Site Estimated Trip Generation

Dwelling Size	Number of Dwellings	Daily Generation Rate	Estimated Daily Generation	Peak Hour Generation Rate	Estimated Peak Hour Generation
2-bed	5	5	25	0.50	2.5 (3)
5-bed	1	9	9	0.85	0.85 (1)
TOTAL	**6**	-	**34**	-	**4**

The result of the site's proposed 34 daily vehicle movements is not considered to have significant effects onto the local or wider environment (when spread out across the day), as this would be unnoticeable within the daily fluctuations in local traffic flows. Most likely the additional trips would occur during the morning peak period (7-10am), mid-day peak period (11am-1pm) and the afternoon peak period (3-6pm). During these periods, traffic volumes are generally higher and as a result the additional movement would represent a small portion of the existing hourly volume.

For these reasons, the site's trip generation is forecast to have less than minor effects onto the surrounding road environment.

4.0 FAR NORTH DISTRICT PLAN STANDARDS

Chapter 15 – Transportation, Section 1 – Traffic, Parking and Access of the Far North District Council – Operative Plan (FNDP) sets out the objectives, policies, and rules relating to transportation within the context of this development. The transportation objectives of the FNDP are:

- 15.1.3.1: To minimise the adverse effects of traffic on the natural and physical environment.
- 15.1.3.2: To provide sufficient parking spaces to meet seasonal demand in tourist destinations.
- 15.1.3.3: To ensure that appropriate provision is made for on-site car parking for all activities, while considering safe cycling and pedestrian access and use of the site.
- 15.1.3.4: To ensure that appropriate and efficient provision is made for loading and access for activities.
- 15.1.3.5: To promote safe and efficient movement and circulation of vehicular, cycle and pedestrian traffic, including for those with disabilities.

The transportation policies of the FNDP are:

- 15.1.4.1: That the traffic effects of activities be evaluated in making decisions on resource consent applications.
- 15.1.4.2: That the need to protect features of the natural and built environment be recognised in the provision of parking spaces.
- 15.1.4.3: That parking spaces be provided at a location and scale which enables the efficient use of parking spaces and handling of traffic generation by the adjacent roading network.
- 15.1.4.4: That existing parking spaces are retained or replaced with equal or better capacity where appropriate, so as to ensure the orderly movement and control of traffic.
- 15.1.4.5: That appropriate loading spaces be provided for commercial and industrial activities to assist with the pick-up and delivery of goods.
- 15.1.4.6: That the number, size, gradient and placement of vehicle access points be regulated to assist traffic safety and control, taking into consideration the requirements of both the New Zealand Transport Agency and the Far North District Council.
- 15.1.4.7: That the needs and effects of cycle and pedestrian traffic be taken into account in assessing development proposals.
- 15.1.4.8: That alternative options be considered to meeting parking requirements where this is deemed appropriate by the Far North District Council.

Table 2 lists the relevant standards that apply to this development and comments on compliance. Where there is non-compliance, further assessment has been undertaken against the criteria set out in the FNDP.

Table 2: Transport Development Standards

Development Standard	Requirement/Details	Comment
15.1.6A Traffic	Sets the threshold for when activities are classified as permitted (P), controlled (C), Restricted Discretionary (RC), or Discretionary (D), and the associated assessment criteria.	The site activity is estimated to have a trip generation of 34 vehicle movements, within a residential zone (TIF of 60) – Discretionary Activity
15.1.6B.1.1 On-Site Car Parking Spaces	Defines the number of parking spaces required for new developments.	The site will provide seven parking spaces for the site's six dwellings. Units 2-6 will only be provided with one parking space each – does not comply
15.1.6B.1.4 Accessible Car Parking Spaces	Defines the number and dimensions of accessible parking spaces required for new developments.	The site will be residential in nature and does not require accessible parking to be provided – **does not apply**
15.1.6B.1.5 Car Parking Space Standards	Defines the size and layout requirements for new parking spaces.	Parking within the site will be within sealed areas – **complies** 90-degree spaces are at least 2.6 metres wide, 5.0 metres deep and have at least 6.4 metres of manoeuvring depth (with a minimum of 0.5 metres of kerb overhang) – does not comply
15.1.6B.1.6 Loading Spaces	Defines the number and dimensions of loading spaces required for new developments.	The site is located within a residential zone, where loading spaces are not required – **does not apply**
15.1.6C.1.1.a Private Access Widths	Defines the minimum access widths.	The access onto Frank Bell Drive will serve four dwellings and will be provided with a formed width of at least 4.4 metres and legal width of at least 4.8 metres (7.5 metres required) – does not comply The access onto Parkdale Crescent will serve two dwellings and will be provided with a formed width of at least 4.9 metres and legal width of at least 5.4 metres – **complies**
15.1.6C.1.1.b Private Access Gradients	Defines the minimum access gradients.	The gradients within the accesses will be no steeper than 1 in 20 (5%) within a residential zone – **complies**
15.1.6C.1.1.c Number of Sites by Private Access	Defines the number of sites permitted to be served by a private access.	The accesses will serve two/four dwellings, where a maximum of eight are permitted to be served via a private access –**complies**
15.1.6C.1.1.e Private Accessway Location	Defines the suitable locations for private access.	The accesses are located onto Allen Bell Drive and Parkdale Crescent – **complies**

Development Standard	Requirement/Details	Comment
		The access locations are more than 30 metres from any nearby intersection – **complies**
15.1.6C.1.2 Private Accessways in Urban Zones	Defines the access requirements in urban zones.	The access will not serve more than four dwellings or be longer than 60 metres – **does not apply** The accesses will be sealed – **complies**
15.1.6C.1.3 Passing Bays on Private Accessways	Defines the requirements for passing bay dimensions and spacing.	The accesses where serving two or more sites will not provide passing bays where connecting to the legal road – **does not comply**
15.1.6C.1.4 Access Over Footpaths	Defines the number of and width of vehicle crossings, where formed across a footpath.	Two vehicle crossings are proposed – **complies** The width of the vehicle crossings will not exceed 6 metres – **complies**
15.1.6C.1.6 Vehicle Crossing Standards in Urban Zones	Defines the structural and surfacing requirements for vehicle crossings.	The vehicle crossing will be sealed from the carriageway edge to the site boundary – **complies** The vehicle crossings will not be formed with a two-way width where serving 2+ dwellings – **does not comply**
15.1.6C.1.7 General Access Standards	Defines access requirements with respect to vehicle circulation and on-site manoeuvring.	Vehicles will enter and exit the site in a forward direction as illustrated in **Attachment 1** – **complies**
15.1.6C.1.8 Frontage to Existing Roads	Defines the requirements for public road improvements as a result of site development.	The site will be provided access via Allen Bell Drive and Parkdale Crescent – **complies**
15.1.6C.1.11 Road Designations	Defines the requirements for a site where the frontage road is subject to a road designation.	Allen Bell Drive, Parkdale Crescent and the subject site are not subject to any designations, as per Zone Maps 71/72 – **does not apply**

5.0 FAR NORTH DISTRICT COUNCIL PLAN ASSESSMENT CRITERIA

Chapter 15 – Transportation, Section 1 – Traffic, Parking and Access of the Far North District Council – Operative Plan (FNDP) sets out the assessment criteria for activities and design elements which do not comply with the standard. For this proposal, consent is required under the following standards of the FNDP:

- 15.1.6A – Traffic
- 15.1.6B.1.1 – On-site Car Parking Spaces
- 15.1.6B.1.5 – Car Parking Space Standards
- 15.1.6C.1.1.a – Private Access Widths
- 15.1.6C.1.3 – Passing Bays on Private Accessways
- 15.1.6C.1.6 – Vehicle Crossing Standards in Urban Zones

The following lists the relevant assessment criteria for these standards and comments as applied to this development:

15.1.6A.7 – Traffic Assessment Criteria (Criteria 1):

a) The extent by which the expected traffic intensity for a proposed activity exceeds the assumed value set by the Traffic Intensity Factor contained in Appendix 3A in Part 4 of the Plan.

b) The time of day when the extra vehicle movements will occur.

c) The distance between the location where the vehicle movements take place and any adjacent properties.

d) The width and capability of any street to be able to cope safely with the extra vehicle movements.

e) The location of any footpaths and the volume of pedestrian traffic on them.

f) The sight distances associated with the vehicle access onto the street.

g) The existing volume of traffic on the streets affected.

h) Any existing congestion or safety problems on the streets affected.

i) With respect to effects in local neighbourhoods, the ability to mitigate any adverse effects through the design of the access, or the screening of vehicle movements, or limiting the times when vehicle movements occur.

j) With respect to the effects on through traffic on arterial roads, strategic roads and State Highways, any measures such as right-turn bays, flush medians, left turn deceleration tapers, etc. proposed to be installed on the road as part of the development to accommodate traffic turning into and out of the site.

k) The extent to which the activity may cause or exacerbate natural hazards or may be adversely affected by natural hazards, and therefore increase the risk to life, property and the environment.

l) Whether providing or having access to bicycle parking, shower/changing facilities or alternative transportation would reduce the number of vehicle movements associated with the proposed activity.

m) the provision of safe access for pedestrians moving within or exiting the site.

15.1.6B.5 – Parking Assessment Criteria (Criteria 2):

a) Whether it is physically practicable to provide the required car parks on site.

b) Whether there is an adequate alternative supply of parking in the vicinity, such as a public car park or angled road parking.

c) Whether there is another site nearby where a legal agreement could be entered into with the owner of that site to allow it to be used for the parking required for the application.

d) Whether it can be shown that the actual parking demand will not be as high as that indicated in Appendix 3C.

e) Adequacy of the layout and design of the car parking areas in terms of other recognised standards, including the provision made to mitigate the effects of stormwater runoff, and any impact of roading and access on waterways, ecosystems, drainage patterns or the amenities of adjoining properties.

f) Degree of user familiarity with the car park and length of stay of most vehicles.

g) Total number of spaces in the car park.

h) Clear space for car doors to be opened even if columns, walls and other obstructions intrude into a car parking space.

i) For sites with a frontage with Kerikeri Road between its intersection with SH10 and Cannon Drive:

j) Whether cycling facilities or open green space have been considered or are appropriate as an alternative to car parking.

k) Whether adequate consideration has been given to providing accessible car parking spaces for those with disabilities, the location of these spaces and regulating inappropriate use of the spaces.

l) The extent to which the site can be accessed by alterative transport means such as buses, cycling or walking.

m) The extent to which the reduced number of car parking spaces may increase congestion along arterial and strategic roads.

n) The degree to which provision of on-site car parking spaces may have resulted in adverse visual effects or fragmented pedestrian links.

o) Whether a financial contribution in lieu of car parking spaces is appropriate.

p) Consideration given to shared parking options between adjacent sites and activities that have varying peak parking demands.

q) The varying parking requirements for staff and customers.

15.1.6C.4 – Access Assessment Criteria (Criteria 3):

a) Adequacy of sight distances available at the access location.

b) Any current traffic safety or congestion problems in the area.

c) Any foreseeable future changes in traffic patterns in the area.

d) Possible measures or restrictions on vehicle movements in and out of the access.

e) The adequacy of the engineering standards proposed and the ease of access to and from, and within, the site.

f) The provision of access for all persons and vehicles likely to need access to the site, including pedestrian, cycle, disabled and vehicular.

g) The provision made to mitigate the effects of stormwater runoff, and any impact of roading and access on waterways, ecosystems, drainage patterns or the amenities of adjoining properties.

h) For sites with a road frontage with Kerikeri Road between its intersection with SH10 and Cannon Drive:

i. the visual impact of hard surfaces and vehicles on the natural character.

ii. the cumulative effects of additional vehicle access onto Kerikeri Road and the potential vehicle conflicts that could occur;

iii. possible use of right of way access and private roads to minimise the number of additional access points onto Kerikeri Road;

iv. the vehicle speed limit on Kerikeri Road at the additional access point and the potential vehicle conflicts that could occur.

i) The provisions of the roading hierarchy, and any development plans of the roading network.

j) The need to provide alternative access for car parking and vehicle loading in business zones by way of vested service lanes at the rear of properties, having regard to alternative means of access and performance standards for activities within such zones.

k) Any need to require provision to be made in a subdivision for the vesting of reserves for the purpose of facilitating connections to future roading extensions to serve surrounding land; future connection of pedestrian accessways from street to street; future provision of service lanes; or planned road links that may need to pass through the subdivision; and the practicality of creating such easements at the time of subdivision application in order to facilitate later development.

l) Enter into agreements that will enable the Council to require the future owners to form and vest roads when other land becomes available (consent notices shall be registered on such Certificates of Title pursuant to Rule 13.6.7).

m) With respect to access to a State Highway that is a Limited Access Road, the effects on the safety and/or efficiency on any SH and its connection to the local road network and the provision of written approval from the New Zealand Transport Agency.

5.1 Assessment of Non-Compliance: 15.1.6A – Traffic

The proposed development has an estimated trip generation of 34 daily vehicle movements for the six dwellings, which would classify the activity as Restricted Discretionary. Utilising the Traffic Intensity Factors (TIF), included within the site FNDP, the site has a TIF of 60. As the site is located within a Residential zone, activities with a TIF over 40 are Discretionary Activity. The following is provided with respect to the identified Assessment Criteria with the FNDP:

- The proposal is to provide six units, which includes five × two-bedroom dwellings and one × three-bedroom dwelling. The FNDP suggests a TIF of 10 per each dwelling however the two-bedroom dwellings are not expected to have higher levels of trip generation. These dwellings will also be provided with a single parking space which imply a lower level of trip generation. As set out in Section 3.1 of this report, the site will generate some 34 daily movements and four peak hour trips.
- The highest level of vehicle movements to and from the site will occur on weekdays between 07:00 and 09:00 and 15:00 and 18:00. The peak hours of the site's trip generation overlap with the typical peaks of the surrounding road network.
- The vehicle access point for the site onto Parkdale Crescent will have a separation of more than 10 metres in both direction from adjacent vehicle crossings.
- The vehicle access point for the site onto Allen Bell Drive will effectively be combined with the adjacent vehicle crossing to south but will provide good intervisibility between the two through low height side boundary fencing.
- Allen Bell Drive is formed width a width of 8.5 metres providing one lane in each direction and operates with a good safety record, with respect to property access. Allen Bell Drive is a local/access road carrying low traffic volumes, with a daily vehicle flow of approximately 1,700 vehicles, with 170 vehicles during peak hour. The site will generate low levels of traffic which can easily be accommodated on the current traffic environment on Allen Bell Drive, and the surrounding network.
- Parkdale Crescent is formed width a width of 7.5 metres providing one lane in each direction and operates with a good safety record, with respect to property access. Parkdale Crescent is a local/access road carrying low traffic volumes, with a daily vehicle flow of approximately 400 vehicles, with 40 vehicles during peak hour. The site will generate low levels of traffic which can easily be accommodated on the current traffic environment on Parkdale Crescent, and the surrounding network.
- Parking within the site has been designed to allow vehicles to enter and exit in a forward direction, allowing for increased visibility towards other users in the public realm.
- Footpaths along the respective frontages are located along the kerbside edge (Allen Bell Drive) and less than 1 metre from the kerbside edge (Parkdale Crescent). Combined with minimising fencing treatments/heights along the frontage, the vehicle accesses have been designed to allow good forward visibility towards the carriageway and the footpath which will allow for safe ingress/egress from the site.
- The vehicle accesses have been designed within suitable visibility along both directions from the vehicle access onto Allen Bell Drive and Parkdale Crescent.

Considering these points, the proposed development's trip generation will have less than minor effects onto the surrounding road environment.

5.2 Assessment of Non-Compliance: 15.1.6B.1.1 – On-Site Car Parking Spaces

The reason for consent under this standard relates to the number of parking spaces provided for Lots 2-6. These five dwellings will be provided with a single parking space each, where under the FNDC standard, two parking spaces are required. The following points are made in support of the non-compliance:

- There is ability to provide some additional parking within the site. However, a conscience decision has been made by Kāinga Ora nationwide to provide two-bedroom dwelling with one car parking space, based on the general demographics and trends of likely tenants. Further additional on-site parking would increase impermeable coverage within the site, decrease landscaped amenity area, and have worse urban design outcomes, by having large areas of carparking visible to the street.
- There are many on-street parking spaces available along the site's frontage and in close vicinity for the residents to park. The site has a road frontage of some 65 metres and is considered sufficient to accommodate at least five parking spaces.
- Kāinga Ora, being the largest housing provider within the country, has internal parking policies, based upon extensive data collected throughout New Zealand with respect to parking supply. Kāinga Ora has found that a parking provision of one space per two-bedroom dwelling is suitable to meet the likely demands.
- The site will predominantly serve residents (regular users) who will stay parked for typically long periods of time (6+ hours). Occasional visitor parking will occur with causal users and are expected to stay for short to medium periods of time (2-6 hours) but is not anticipated to regularly occur on site.
- The site will provide a total of seven parking spaces within the communal parking areas of the site, parking spaces will be assigned to respective dwellings through the associated land titles prepared as part of the development.
- The parking spaces have been designed to generally comply with the FNDP standard, with appropriate on-site vehicle manoeuvring provided.
- Each dwelling will be provided with a secure rear yard and garden shed to allow for the safe storage of a bicycle if desired.
- There is no requirement for accessible parking spaces to be provided for residential dwellings. Some of the parking spaces within the site, with adjacent pathways are able to be utilised by those with accessible needs (allowing for car doors to open wider).
- Allen Bell Drive and Parkdale Crescent are low volume local/access streets and the proposed parking supply for the site is not considered to have any detrimental effect on the existing traffic operations on Allen Bell Drive or Parkdale Crescent.
- The site's parking is unlikely to have adverse visual effects or impact onto pedestrian links.
- Residents of the site are not likely to heavily rely on the use on-street parking or publicly available parking. As such no financial contributions are considered appropriate, as there are many on-street parking spaces available in the wider area and will be available on a first-come, first-serve basis.

Considering these points, the proposed parking supply for Lots 2-6 will have less than minor effects onto the surrounding road environment.

5.3 Assessment of Non-Compliance: 15.1.6B.1.5 – Car Parking Space Standards

The reason for consent under this standard relates to the proposed parking spaces (Lots 1-2) within the site being provided with a kerb overhang of 0.5 metres, where a minimum of 1.0 metre is required under the FNDP. The following points are made in support of the non-compliance:

- The parking spaces are provided with a formed depth of 5.0 metres, with a landscape overhang of 0.5 metres. The overhang is 0.5 metres less than what is required and is not considered to raise any safety concern for the parked vehicles.
- The parking spaces within the site have been designed with a total formed depth of 11.5 metres which includes a depth of 5.0 metres and 6.5 metres of manoeuvring space. These dimensions exceed the minimum requirements of the FNDP (4.9 metre parking space depth and 6.3 metres manoeuvring depth). The proposal exceeds the minimum "total depth" required under the FNDC i.e., 11.2 metres. Therefore, the additional depth will aid the vehicle manoeuvring and provide sufficient overhang space in front of the parking
- The length of a B85 design vehicle is 4.9 metres. With parking spaces proposed to be 5.0 metres deep, with 0.5 metres of overhang, the vehicle will be able to park fully within the provided space.
- Some drivers prefer not to utilise kerb overhangs when parking as their vehicle may have a lower profile and as such run the risk of under-striking their vehicle. Notwithstanding the dimensions provided allow for these vehicles to park within the space.
- The dimension of the parking spaces provided will be in accordance with "AS/NZS 2890.1:2004 – Off Street Car Parking" which is the underlying guidelines for parking space dimension for other district plans across New Zealand. Therefore, the dimensions of the proposed parking spaces are considered acceptable for operational and safety purposes.
- The parking will serve regular users who will be familiar with the layout of the site and their vehicle and will be able to park effectively within the space.

Considering these points, the proposed parking dimensions and non-provision of a kerb overhang will have less than minor effects onto the safe and functional operation of the site's parking spaces and the surrounding environment.

5.4 Assessment of Non-Compliance: 15.1.6C.1.1.a – Private Access Width

The reason for consent under this standard relates to the legal width provided within the site's shared private access. The access will have a minimum legal width of 4.8 metres, where under the FNDP standard, a private access serving four dwellings is to provide a minimum legal width of 7.5 metres. The following points are made regarding the proposal:

- The access has been designed to accommodate the number of vehicle movements likely to be associated with the site, as well as the likely types of vehicles which will access the site. The access has been designed to have a formed width of 4.4 metres allowing for one-way vehicle movement along the access.
- The access has been designed to accommodate the required civil infrastructure to suitably service the development.
- The access is provided with a varied surface treatment, which is 1.4 metres wide, to denote pedestrian space. This will allow for vehicles and pedestrians to safely share the same access space, reducing the potential for vehicle-pedestrian conflict.
- The vehicle access is forecast to accommodate two peak hour vehicle movements. As such, there is a low probability that more than one vehicle will utilise the access at the same time.
- It is considered very unlikely that two opposing vehicle movements would meet along the access at the same time. It is even less likely that a pedestrian would also be utilising the access at the same time. If this rare event were to occur, with good forward visibility along the access, drivers would likely give way to the pedestrian, before proceeding along the access. This would be no different to drivers encountering a pedestrian along the footpath, where under the NZ Road Code, they are required to give way.
- Space is provided within the respective lots for tree planting adjacent to the access, which will be visually borrowed against to soften the appearance of the access.
- The vehicle access can suitably accommodate emergency vehicles along its length with the formed and legal widths provided; however, it is more likely that emergency vehicles would park along Allen Bell Drive.
- Providing a legal width of 7.5 metres, for a land-use led application would serve no significant benefit to the development, as there is a known end-condition. Conversely, if a compliant legal width were to be provided, there would be informal spaces created along the access which would easily serve as additional parking and require vehicles to reverse to/from the site. Considering this, providing a compliant legal width would have negative amenity/safety effects onto the proposal.

Overall, it is considered that the proposed 4.8 metre legal width for the shared access will have less than minor effects onto the users of the site and onto the surrounding road network and therefore is acceptable.

5.5 Assessment of Non-Compliance: 15.1.6C.1.3 – Passing Bays on Private Accessways and 15.1.6C.1.6 – Vehicle Crossing Standards in Urban Zones

The reason for consent under these standards relates to the formed width of the vehicle access, where connecting to the road reserve. Under the FNDC standards, where an access serves more than two dwellings, it is to provide a two-way vehicle access, where connecting to the road reserve. The proposal will see the vehicle accesses for the site accommodate one-way vehicle access. As these standards relate to the same aspect of site design and have been assessed together so to avoid unnecessary repetition. The following points are made in support of the non-compliance:

- The accesses will accommodate two dwellings and four dwelling respectively. Based on this the accesses are likely to accommodate one and two peak hour vehicle movements respectively.
- Based on the likely peak hour vehicle movements, there is a low probability of more than one vehicle utilising the access at any given time.
- In the rare event that more than one vehicle looks to utilised one of the accesses at the same time, the event would resolve either by a vehicle reversing back into the site to allow the entering vehicle in, or by the entering vehicle queueing temporarily within the carriageway of Allen Bell Drive or Parkdale Crescent.
- With relatively low traffic volumes along both Allen Bell Drive (170 peak hour) and Parkdale Crescent (40 peak hour), combined with good forward visibility should vehicles temporarily queue within the carriageway, approaching drivers will be able to see and safely react to them avoiding any collision.

Based on these points, the proposal to provide a one-way vehicle access for the two site accesses will have less than a minor effect onto the safety, functionality, or amenity to users of the site and the public realm.

6.0 CONCLUSION

Based on the assessment described in this report, the following conclusions can be made in respect of the proposal to establish six residential dwellings at 59-61 Allen Bell Drive, Kaitaia:

- A review of the transport standards has identified six items that require consent under the FNDP, where pertaining to the following transport matters:
  - 15.1.6A – Traffic
  - 15.1.6B.1.1 – On-site Car Parking Spaces
  - 15.1.6B.1.5 – Car Parking Space Standards
  - 15.1.6C.1.1a – Private Access Widths
  - 15.1.6C.1.3 – Passing Bays on Private Accessways
  - 15.1.6C.1.6 – Vehicle Crossing Standards in Urban Zones
- Vehicle and pedestrian access to the site are designed to a suitable standard such that the proposal will have less than minor effects on the surrounding road network.

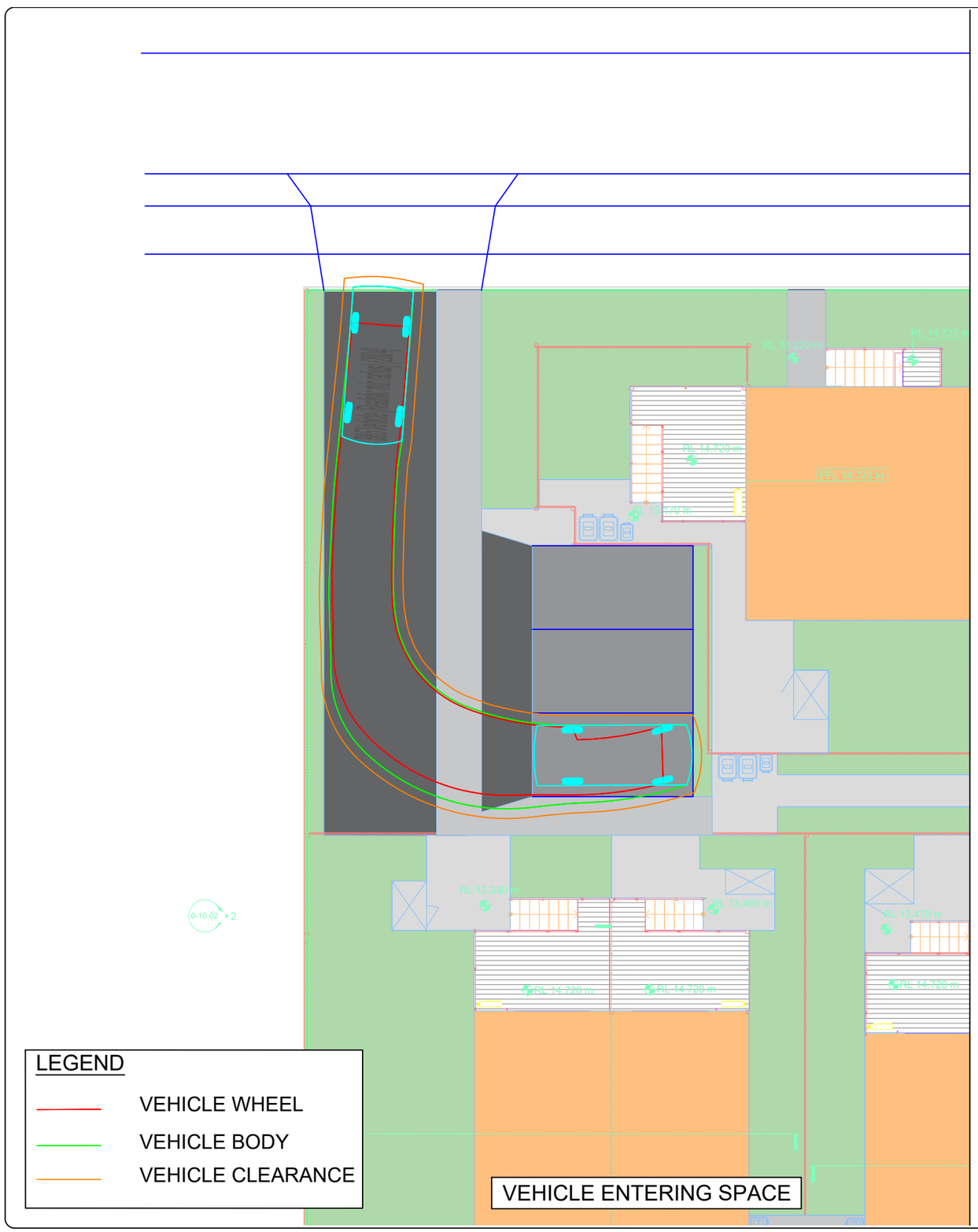
Overall, it is considered that the traffic engineering effects of the proposal can be accommodated on the road network without compromising its function, capacity, or safety.

Prepared by,

Peter Kelly
Director
Traffic Planning Consultant Ltd.

ATTACHMENT 1:

VEHICLE TRACKING DIAGRAMS



LEGEND

- VEHICLE WHEEL
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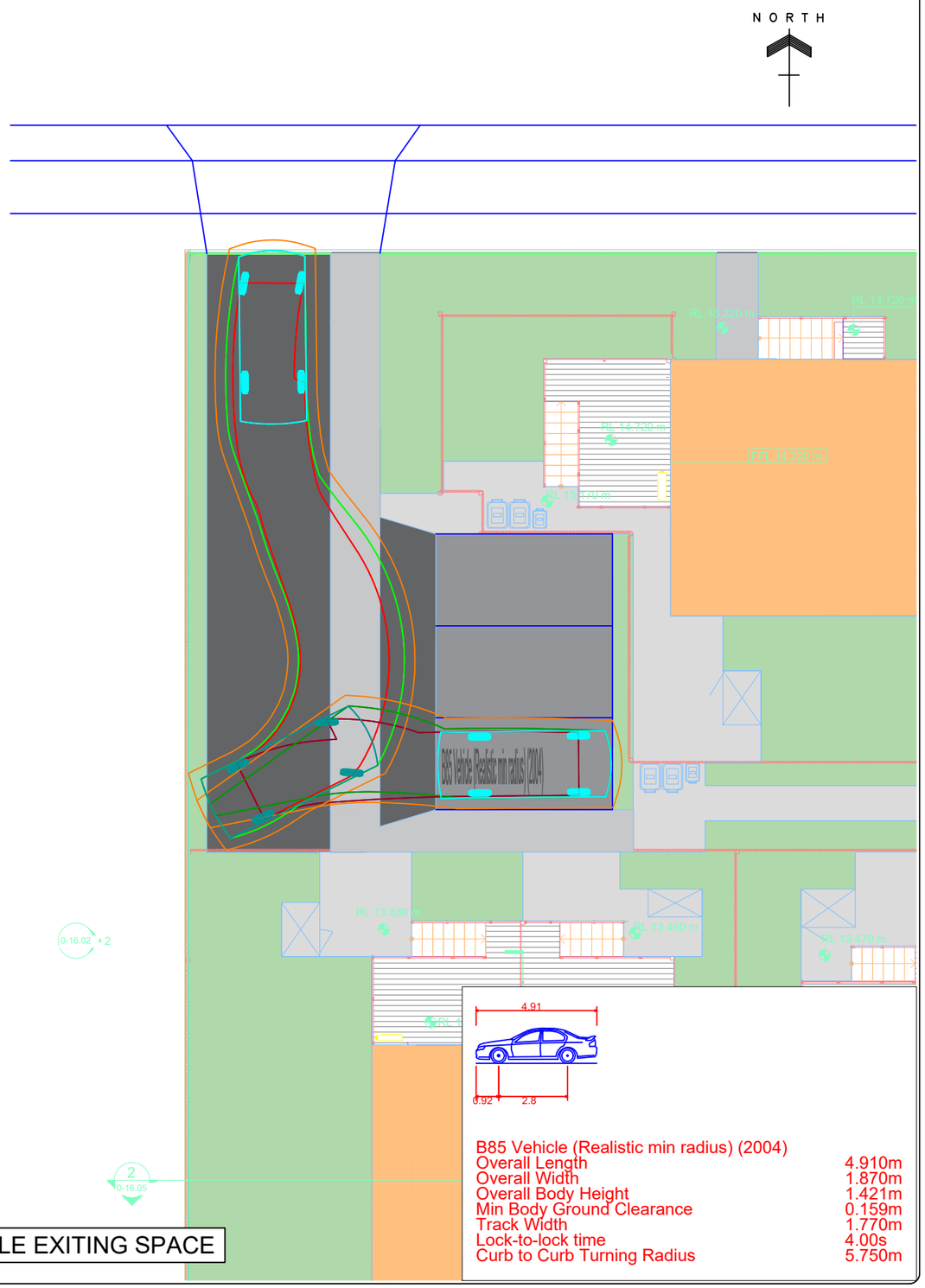

VEHICLE EXITING SPACE

B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m

Rev	Revisions	By	Date

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Project Title: Residential Development
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Sheet Title: Vehicle Tracking - B85 Design Vehicle

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Checked	PK	Approved	PK	250498-VTA - (1)	Date 31.08.25

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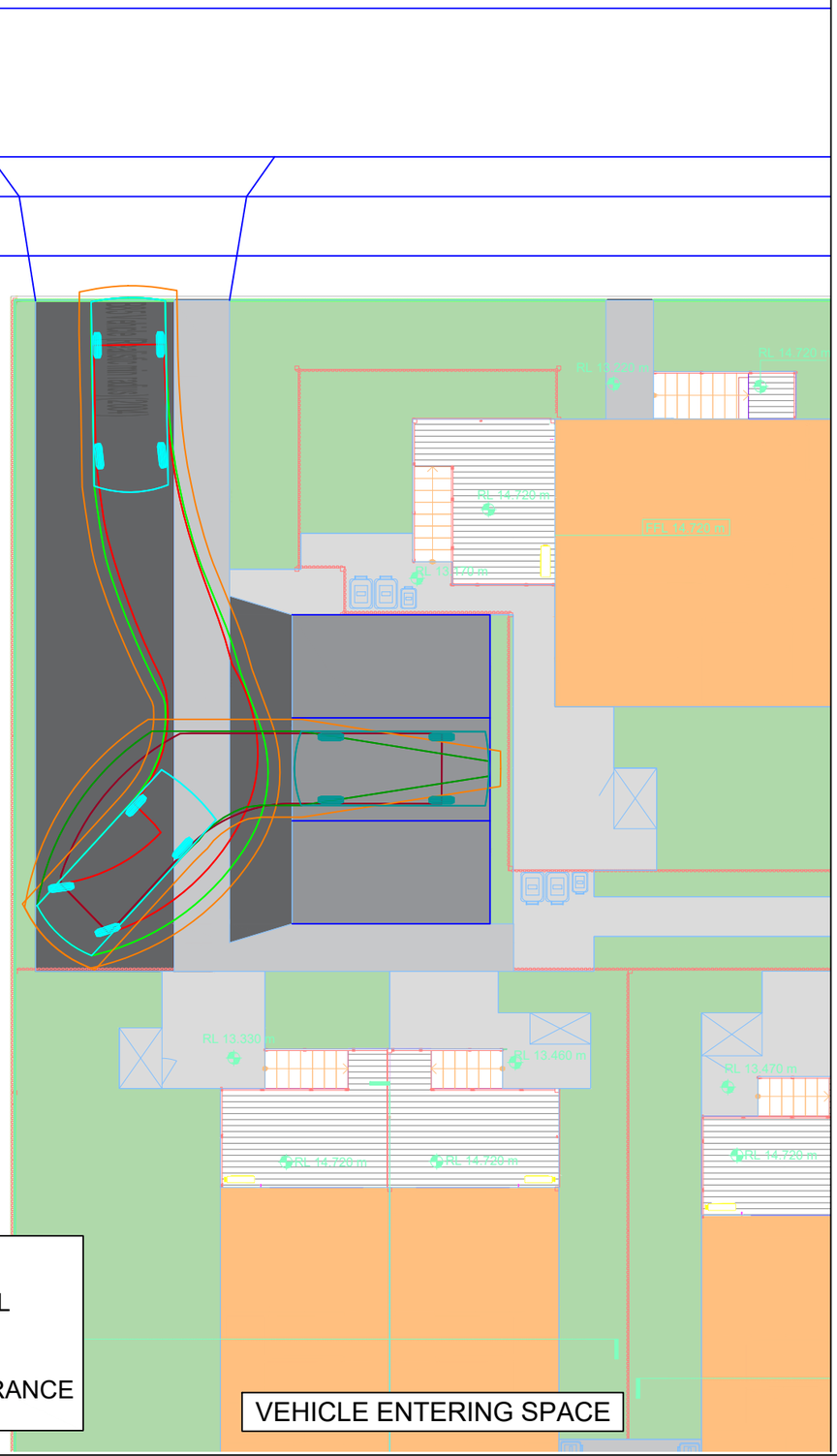

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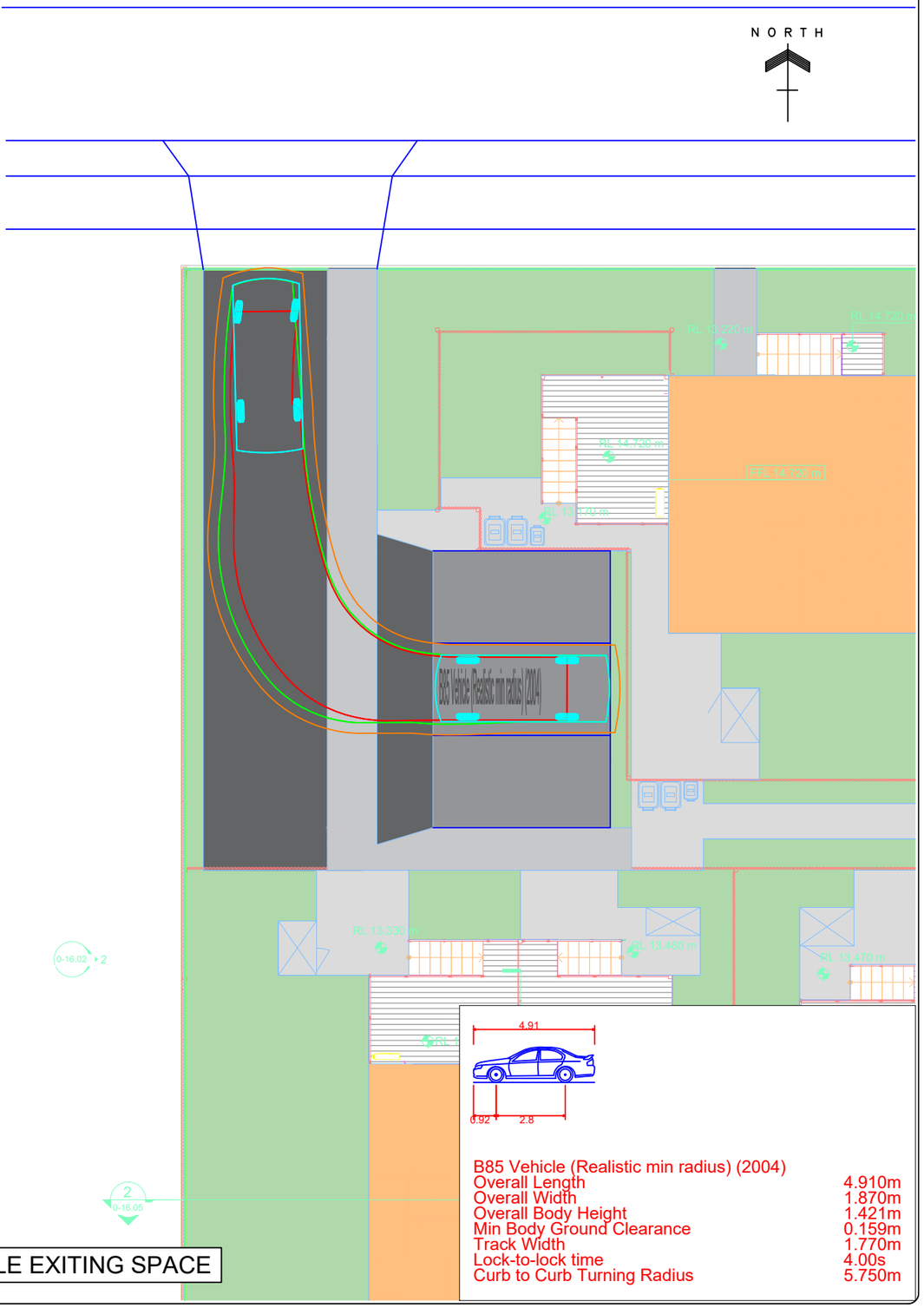

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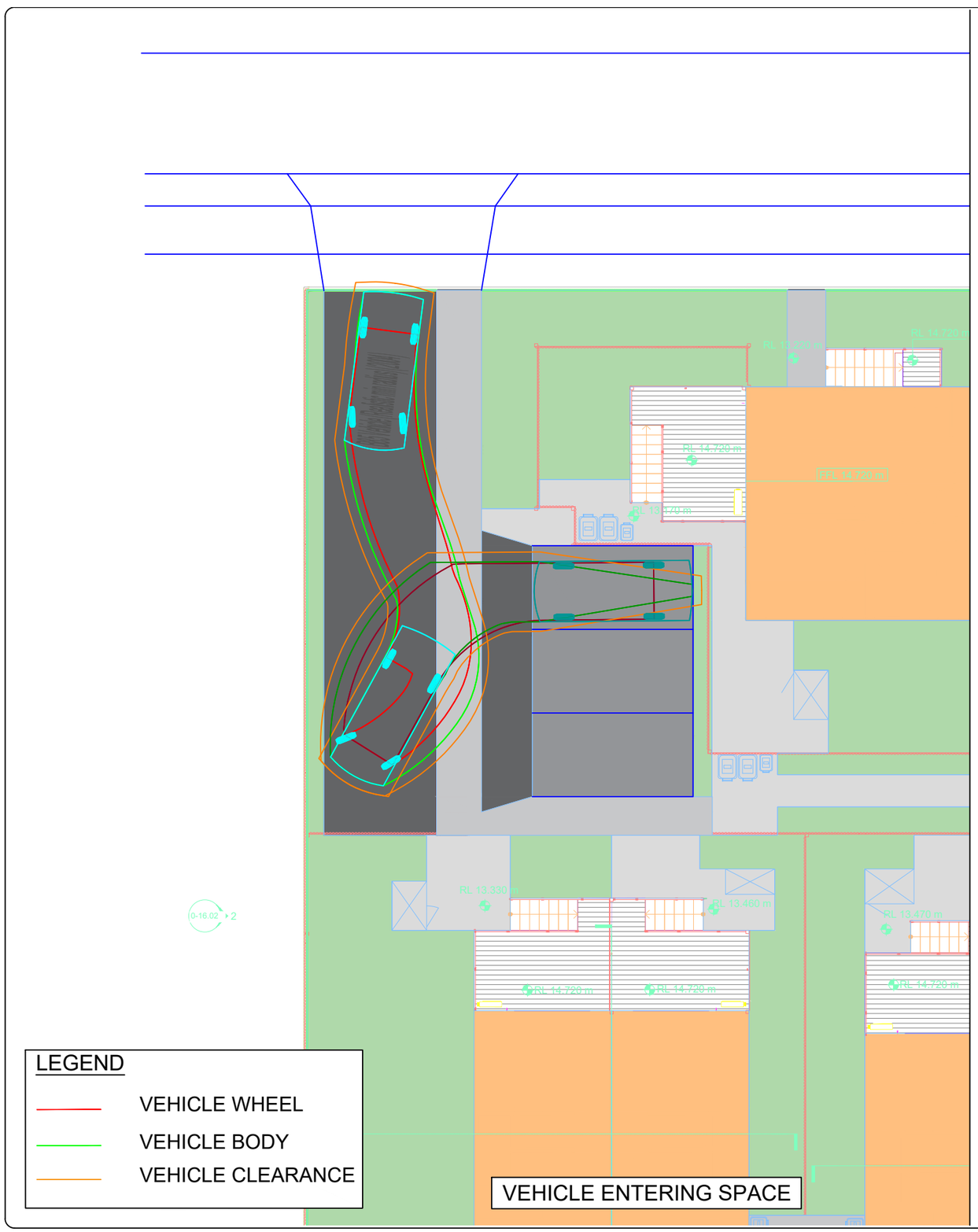

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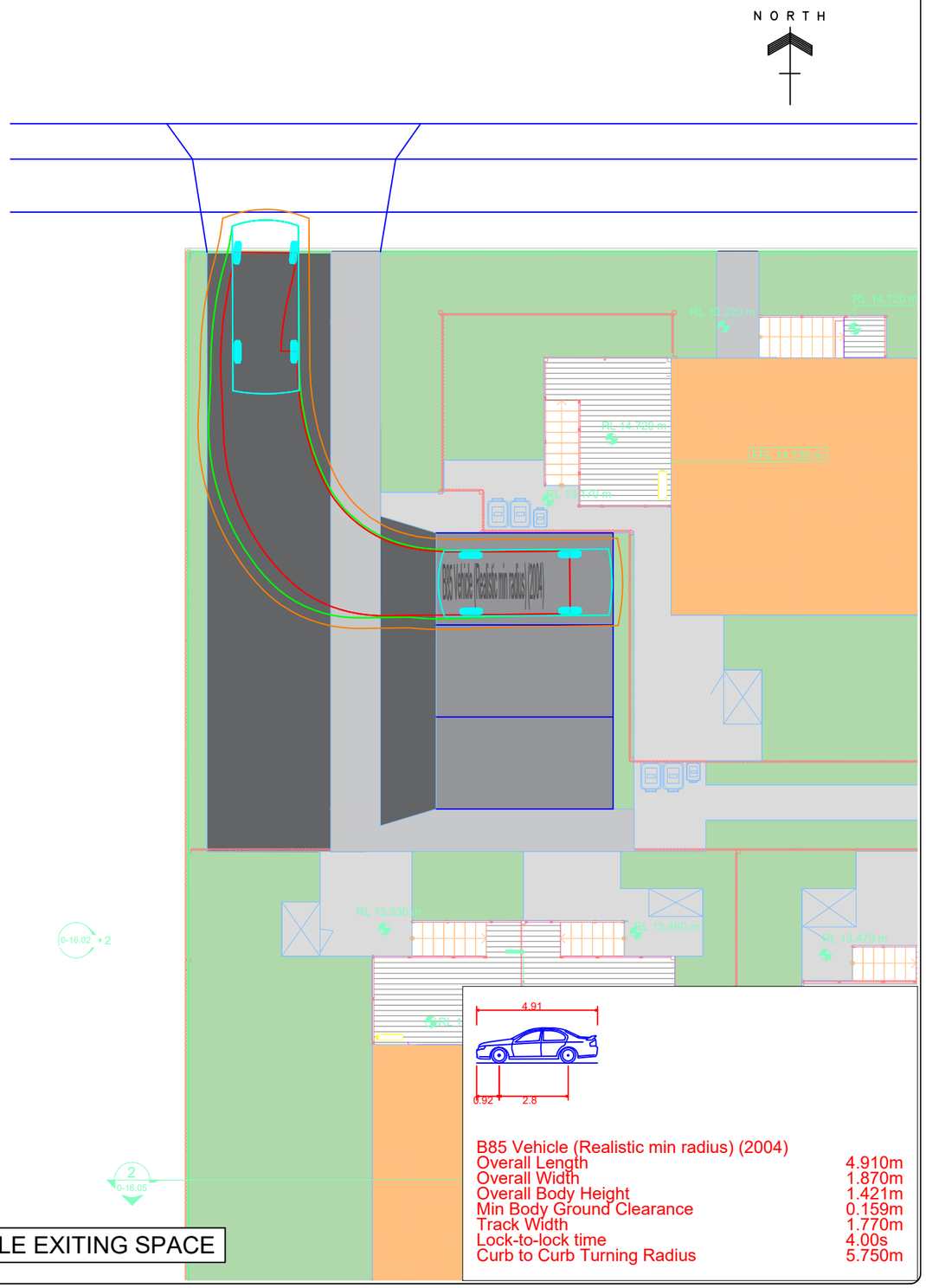

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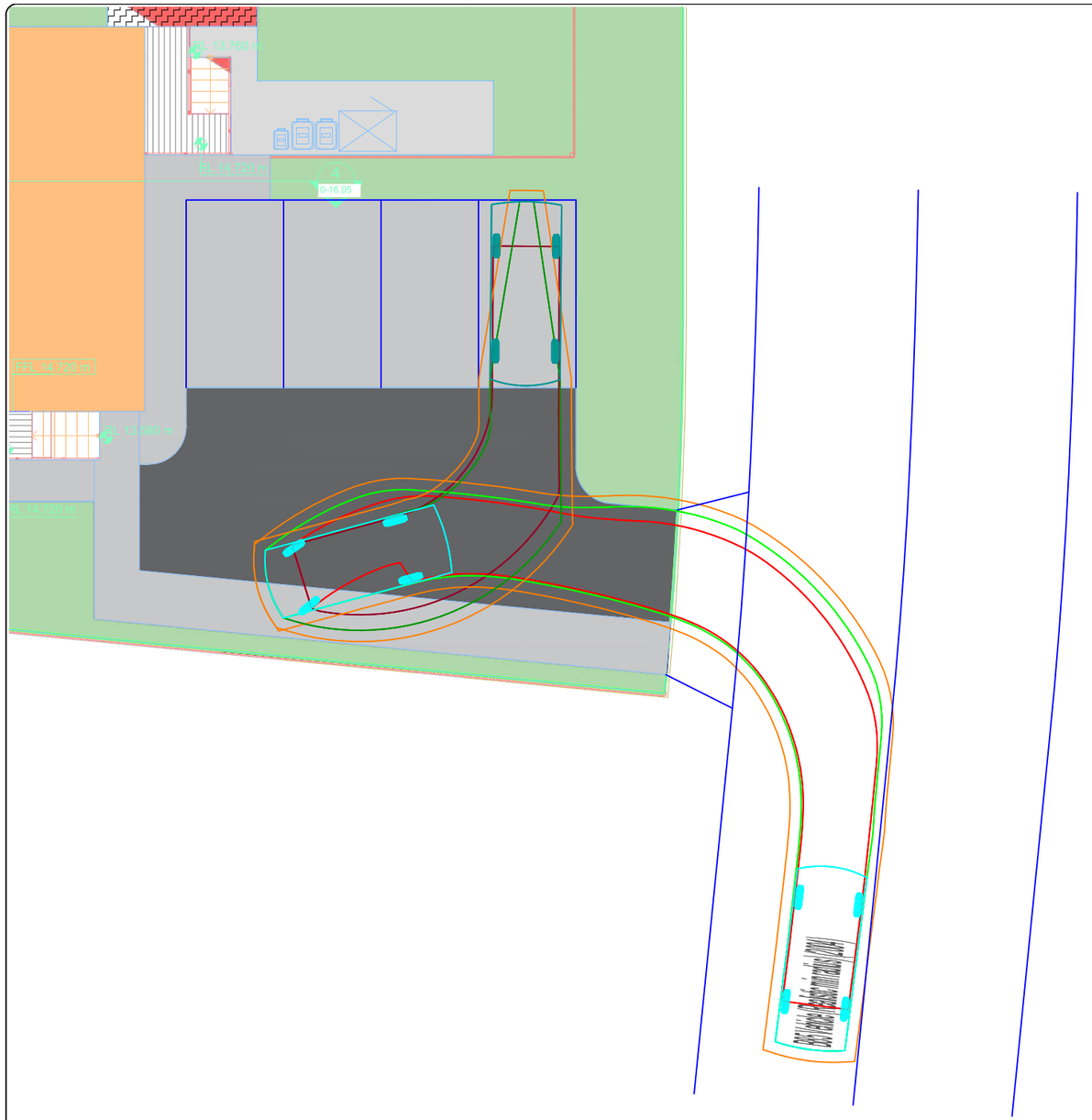

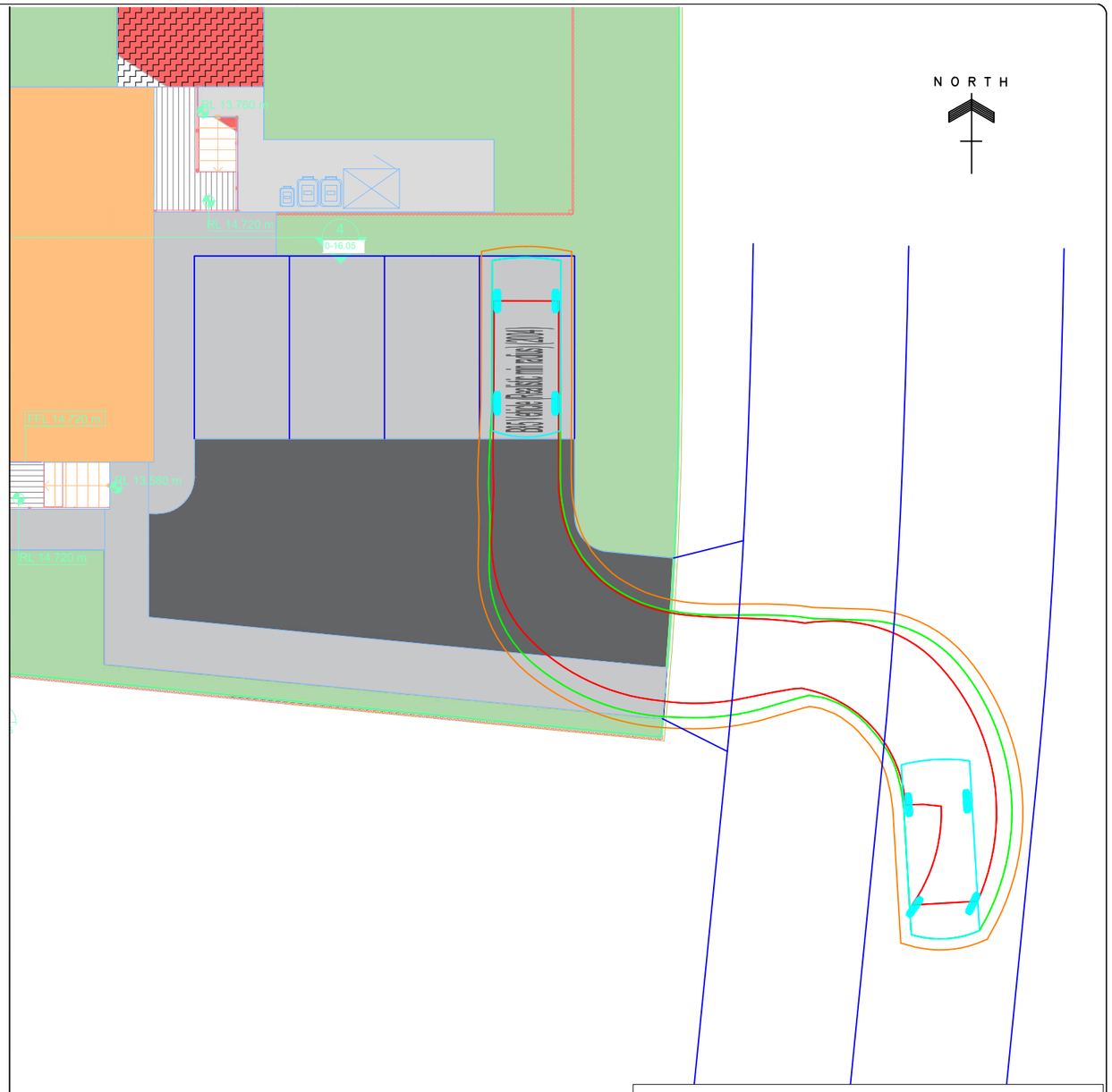

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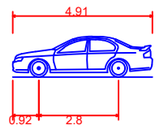

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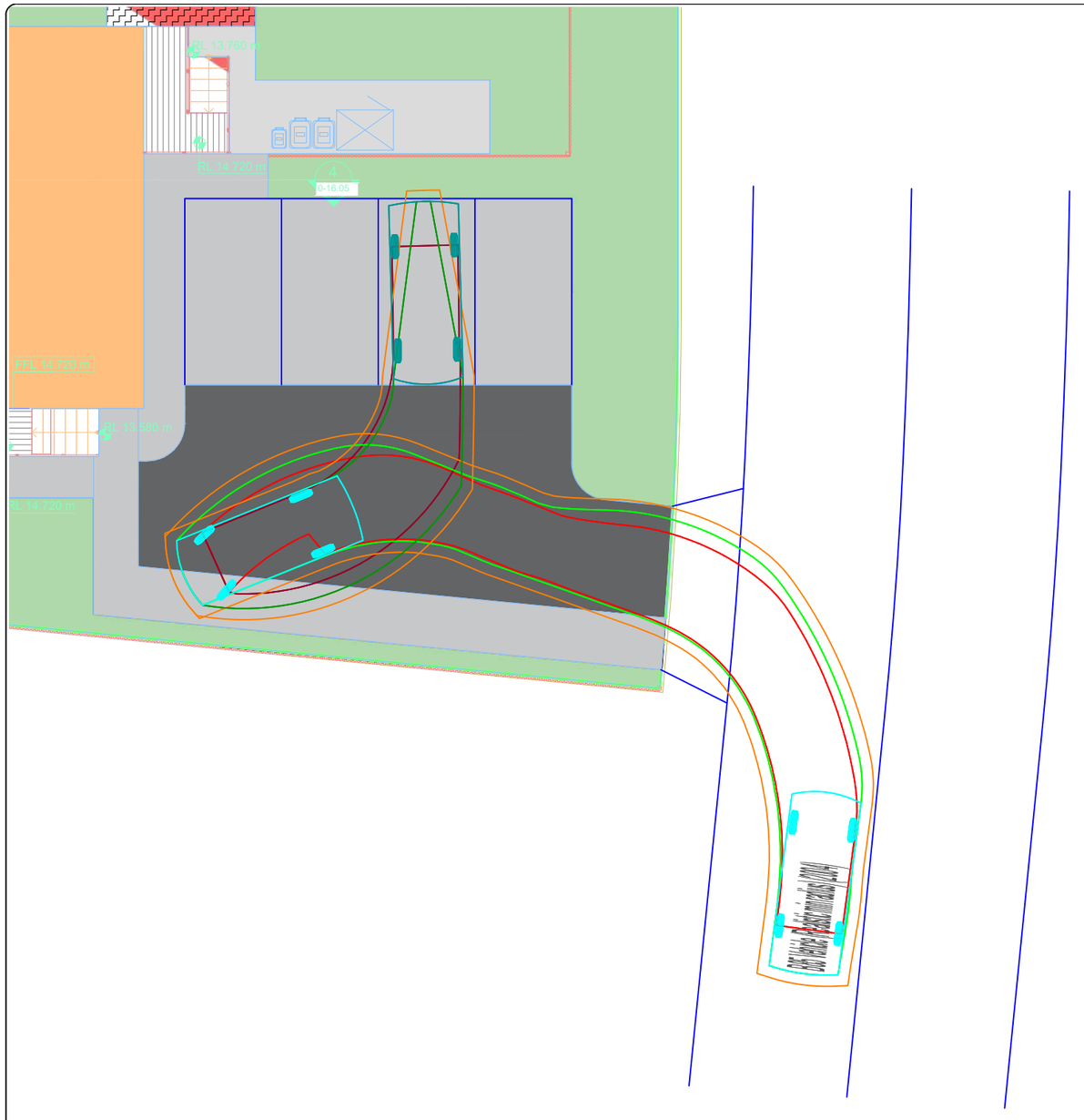

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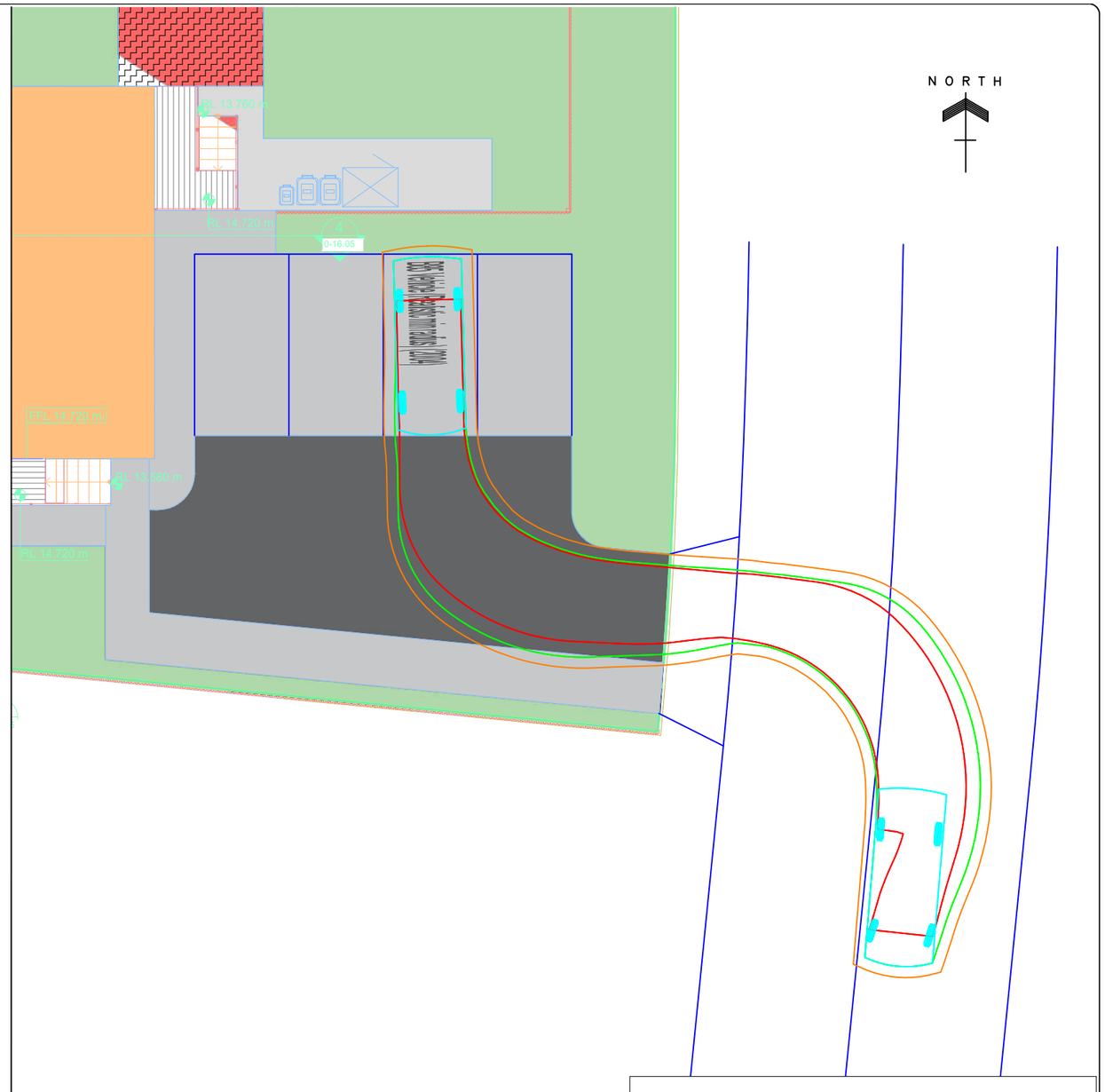

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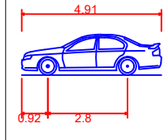

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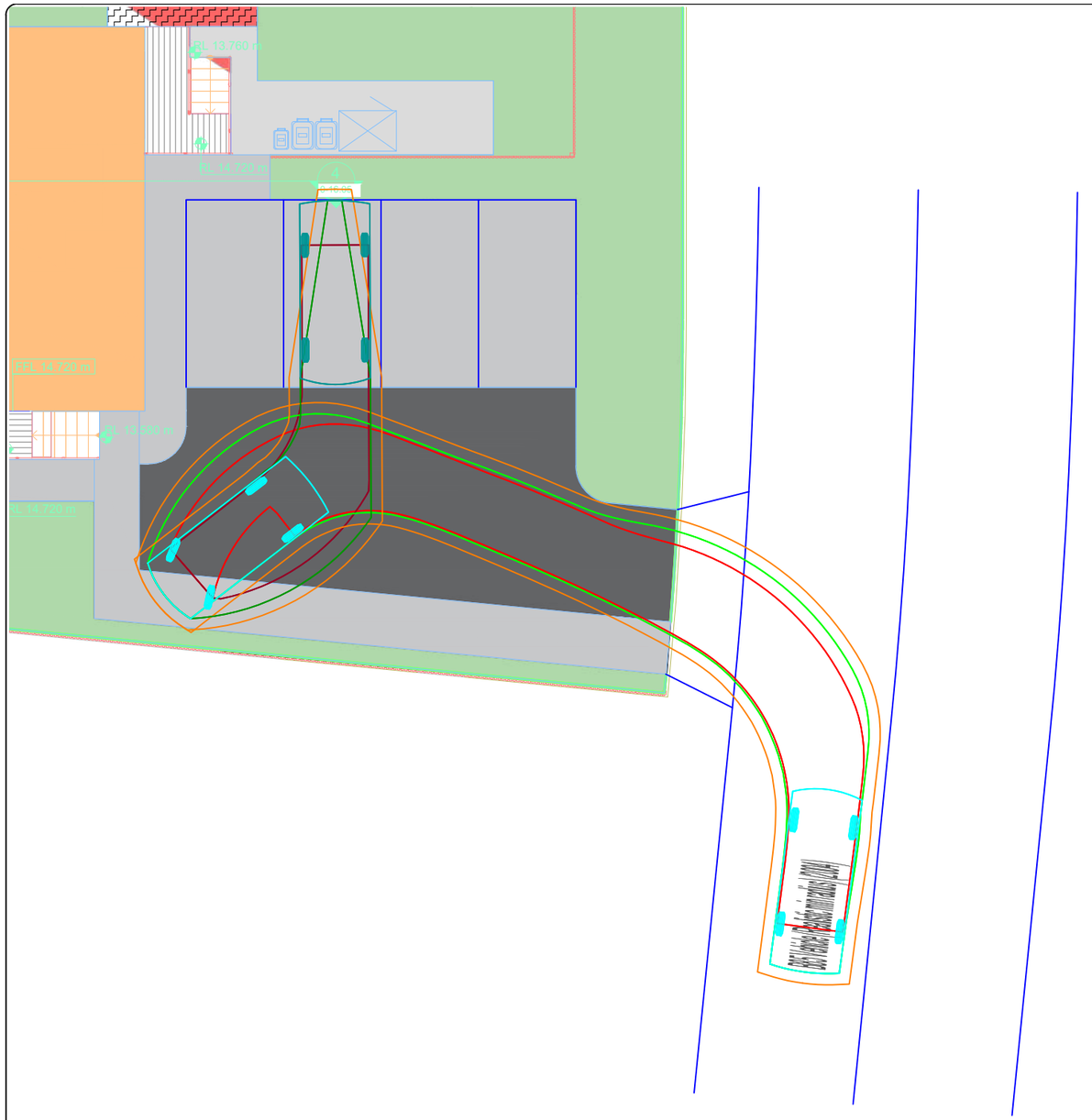

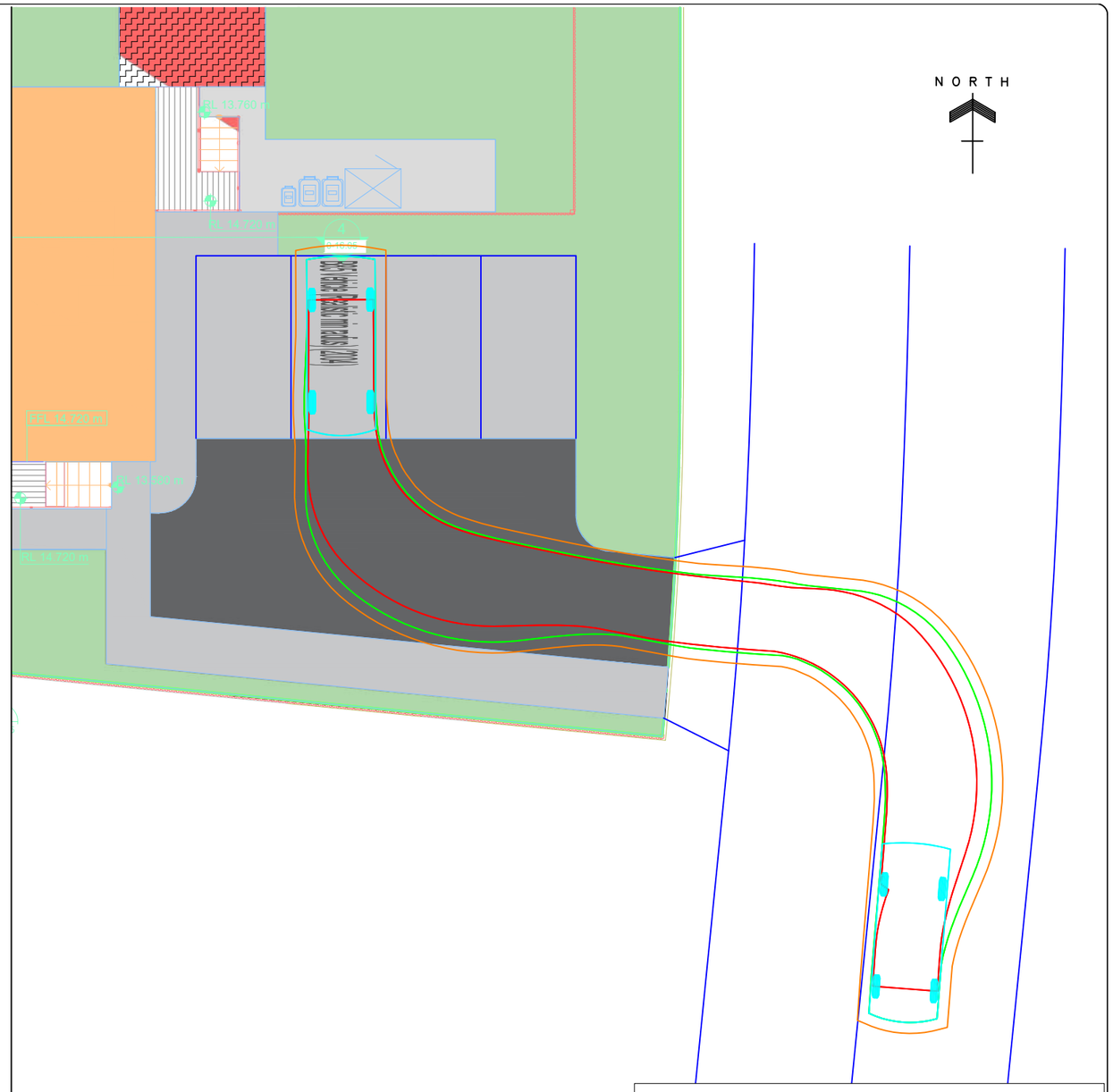

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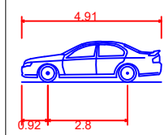

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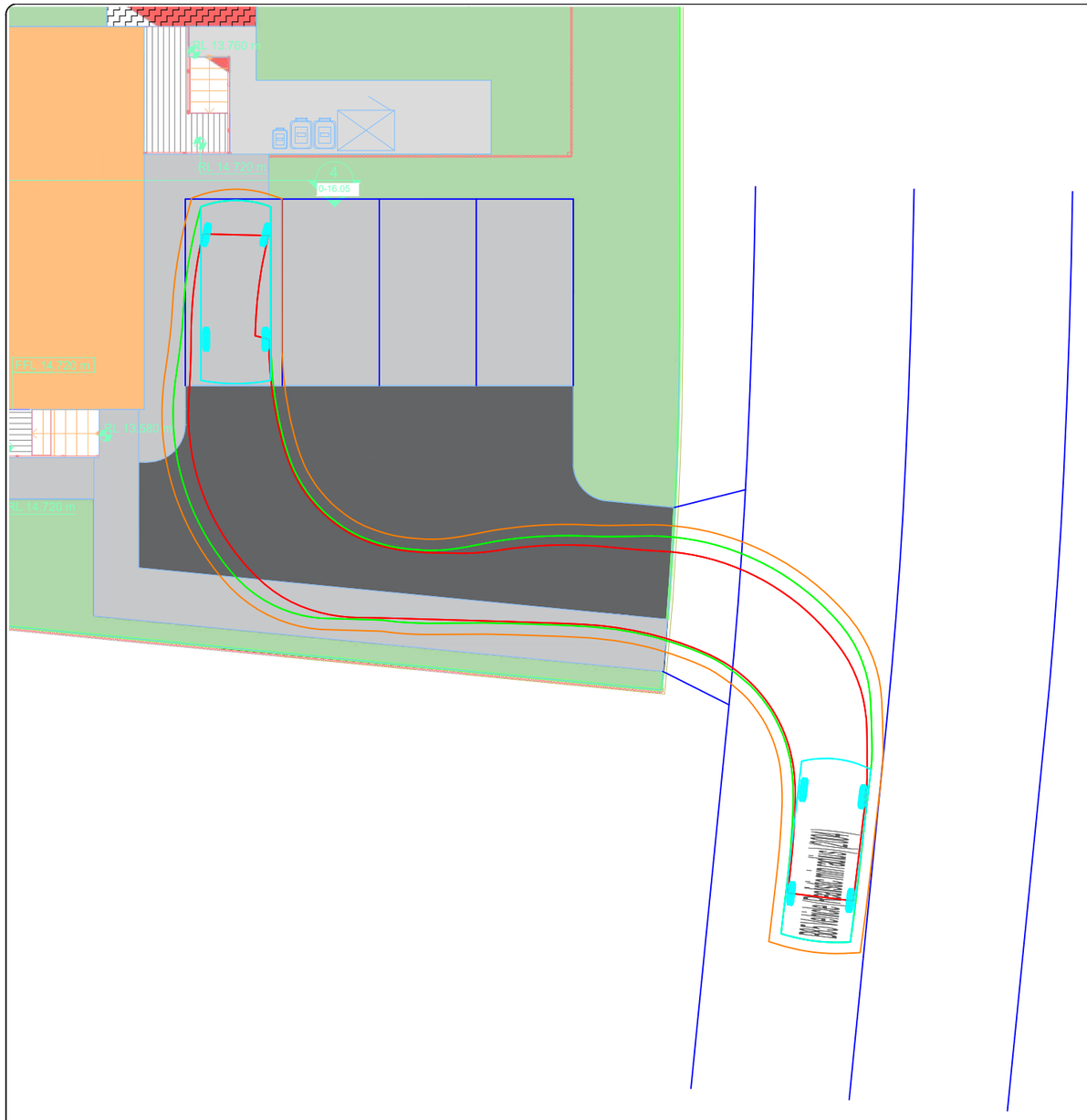

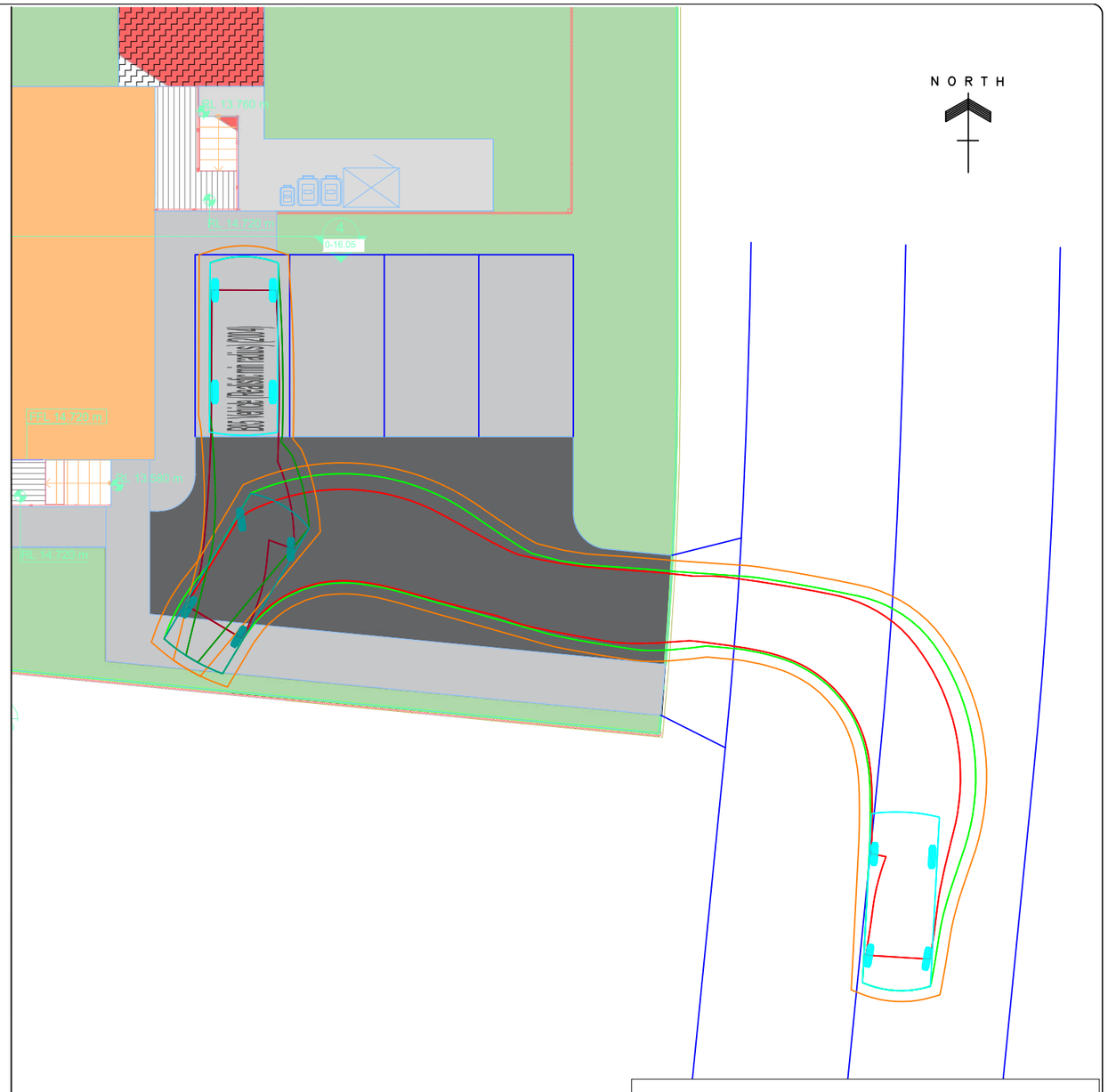

LEGEND

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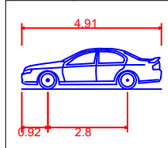
VEHICLE ENTERING SPACE

VEHICLE EXITING SPACE



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m

Rev	Revisions	By	Date

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Phone: 09 817-2500 www.trafficplanning.co.nz

Project Title: Residential Development
59-61 Allen Bell Drive, Kaitaia

Sheet Title: Vehicle Tracking - B85 Design Vehicle

Designed	PK	Drawn	PK	Project No - (Sheet No)	Scales 1:150 (A3)
Checked	PK	Approved	PK	250498-VTA - (7)	Date 31.08.25

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