APPLICATION

SURVEY & PLANNING SOLUTIONS (2010) LTD

Trading as **Von Sturmers** in Kaitaia and **Williams & King** in the Bay of Islands
LAND SURVEYORS - RESOURCE PLANNERS
www.saps.co.nz

13 November 2018

Far North District Council
Private Bag 752,
Memorial Avenue,
KAIKOHE 0440
Attention: Mineeta Patel

Dear Mineeta,

RE: RC2190056 – The NAGS HEAD HORSE HOTEL – KERIKERI INLET ROAD, KERIKERI

On 21 September 2018 The Nags Head Horse Hotel submitted a revised engineering report including an analysis of the issues raised in Council's request for further information of 5 September 2018. The information was accepted by Council on 23 October 2018. To remove any apparent inconsistencies in the information submitted, the application has now been amended as follows –

- An updated assessment of environmental effects which has regard to the revised documents below. Please note the change of address for service, with Williams and King acting as agents hereon. Williams and King have worked closely as part of the team from the initial design concept.
- A revised engineering assessment, namely an '*Engineering Report for Proposed Subdivision Lot 1 DP 167657 at 405 Kerikeri Inlet Road, Kerikeri for Nags Head Horse Hotel Ltd*' prepared by Haigh Workman Civil and Structural Engineers, dated September 2018 -

  A new Section 7.4 has been added the farm track construction and tidal levels. Details of sea level rise have been added to Section 7.2. It is noted in Section 7.4 that the farm track can be topped up.

  Section 10.5.2 of the original Haigh Workman report and the easement schedule on the scheme plan addressed concentrated stormwater discharges from the proposed building sites. Another bullet point has been added noting that the existing dispersed flows will continue.

  This report was submitted to Council on 21 September 2018. On 23 October 2018, Council's resource consent's engineer confirmed "*I am comfortable with response, so long as there is some restrictions on proposed R.O.W it is not suitable for residential purposes. I would expect if a consent notice or limitation on R.O.W easement use is placed on access then that should be sufficient i.e. Farm purposes only, access not for residential use*".

  In having regard to the staff comment, page 4 of the revised application attached volunteers a consent notice to this effect, confirming that "*right of way I will have adequate freeboard above current mean high water springs for farm access. Further consent may be required in the future to raise the access to service a habitable building (should this be established to the north of right of way I)*".

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- An email from Littoralis Landscape Architecture confirming that the access alignment assessed in the updated Haigh Workman report is as per the alignment anticipated and considered in the *'Assessment of landscape, visual, rural amenity and natural character effects'* prepared by Littoralis Landscape Architecture, dated June 2018.
- A revised plan of the metal volumes to replace the plan within Appendix 1.

Please find attached a revised application, complete with all attachments. This is intended to replace the current application and we would request that it be used for notification purposes please.

Please don't hesitate to contact me should you require any further clarification and we will be happy to clarify any matters. We look forward to your advice of notification dates within the near future, with notification anticipated early next week to ensure that the notification period closes before 20 December please.

Yours sincerely

Natalie Watson
Senior planner
Williams & King

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ASSESSMENT OF ENVIRONMENTAL EFFECTS

RESOURCE CONSENT APPLICATION TO FAR NORTH DISTRICT COUNCIL BY THE NAGS HEAD HORSE HOTEL SEEKING TO SUBDIVIDE LOT 1 DP 167657 AT KERIKERI INLET ROAD AND UPGRADE RIGHT OF WAY ACCESS OVER LOT 2 DP 210733

Supported by -

Williams and King Surveyors
Littoralis Landscape Architecture
Haigh Workman Civil and Structural Engineers
Geometria Ltd
4Sight Consulting

November 2018

EXECUTIVE SUMMARY

The Nags Head Horse Hotel is applying to subdivide 17.705 hectares of vacant land legally described as Lot 1 DP 167657; creating four vacant lots ranging in size from 4.128 hectares to 5.106 hectares as a restricted discretionary activity in the South Kerikeri Inlet zone. The proposed lots will be accessed by a network of rights of way, including an existing right of way over Lot 2 DP 210733 in favour of the site, as shown on the memorandum of easements on the subdivision plan prepared by Williams and King Surveyors.

Impermeable surface areas on Lot 1 DP 167657 to develop the subdivision will increase to an estimated 3,391 m² over 17.706 hectares or 1.92% of the title area. Impermeable surface coverage within Lot 2 DP 210733 will increase to an estimated 2,735 m² or 1.35% as a result of the upgrade to the existing rights of way. Breaches to the District Plan's permitted activity thresholds relating to stormwater management on Lot 1 DP 167657 and Lot 2 DP 210733, and the setback of impermeable surfaces from a wetland area, require resource consent as a discretionary activity to give effect to the subdivision.

As shown on the subdivision plan, building envelopes have been defined on each of the lots. Lots 2, 3 and 4 include single building envelopes. There are two options on Lot 1, providing alternatives for single unit residential development on either:

- a building site on Te Korau Island, referred to as the 'island' building site, adjacent to landscape amenity covenants O and R, or
- an 'inland' building site on the southernmost part of the lot.

Each lot will contain a single residential unit following subdivision which is consistent with the District Plan's permitted activity threshold applying to the existing title, as per Rule 10.10.5.1.2 which limits residential development to one unit per 4 hectares of land as a permitted activity. This rule requires that each unit shall have at least 3,000 m² for its exclusive use surrounding the unit plus a minimum of 3.7 hectares elsewhere on the property. The subdivision meets this threshold.

Landscape amenity covenants O and R, and vegetation protection covenant P are proposed on Lot 1. These covenants are intended to mitigate the visual effects of a residential unit on the adjacent building site as opposed to offering any natural/ecological value. A number of additional mitigation measures are proposed addressing building design, landscape treatments and planting on each of the lots.

The application is supported by a number of technical assessments which have guided and informed our opinion that any actual and potential effects on the environment of allowing the subdivision will be no more than minor and can be readily avoided, remedied or mitigated by conditions of consent. These documents are attached to the assessment of effects prepared by Willliams and King, and include the following:

- *'Assessment of landscape, visual, rural amenity and natural character effects'* prepared by Littoralis Landscape Architecture, dated June 2018

- *'Engineering Report for Proposed Subdivision Lot 1 DP 167657 at 405 Kerikeri Inlet Road, Kerikeri for Nags Head Horse Hotel Ltd'* prepared by Haigh Workman Civil and Structural Engineers, dated September 2018
- *'Ecology report'* prepared by 4Sight Consulting, dated May 2017
- *'Archaeological Assessment of the Proposed Subdivision of Lot 1 DP 167657 Kerikeri Inlet Road, Kerikeri' prepared by Geometria Ltd, dated 11 August 2017*
- *'Archaeological Assessment of the Proposed Subdivision of Lot 1 DP 167657 Kerikeri Inlet Road, Kerikeri'* prepared by Geometria Ltd, dated 11 August 2017
- *'Archaeological Assessment of the Proposed Subdivision of Lot 1 DP 167657 Kerikeri Inlet Road, Kerikeri'* prepared by Geometria Ltd, dated 11 August 2017

The Nags Head Horse Hotel also undertook to commission a cultural impact assessment which is attached to the application; being a *'Cultural impact assessment prepared for Nags Head Horse Hotel Ltd - Proposal for development of subdivision on Lot 1 DP167657, Kerikeri Inlet Road, Kerikeri'* prepared by Kaire Edmonds Whānau Trust and Otahuao Burial Trust, dated April 2018.

In terms of future siteworks, plantings and management on Te Korau Island and in the vicinity of P05/460, this does not form part of the subdivision works. Although there are known to be archaeological remains on the 'island', the location and extent of surviving subsurface archaeological remains on the 'island' building site has not been confirmed and will require further investigation. The Nags Head Horse Hotel therefore requests that the landowner/s have the opportunity to undertake further investigation if they wish to develop the 'island' building site. The Nags Head Horse Hotel volunteers to register a consent notice condition against Lot 1 advising the requirement for an archaeological authority. The 'island' building site has not been subject to geotechnical investigation and this will form part of any application required for an archaeological authority by future landowners.

The proposal is regarded as consistent with the objectives and policies of the New Zealand Coastal Policy Statement, the Regional Policy Statement, and the Far North District Plan, as well as the Act's purpose and principles.

As addressed in the assessment, special circumstances exist through the District Plan requiring limited notification to the property owners within the South Kerikeri Inlet zone and the Department of Conservation. Council may also determine Kaire Edmonds Whānau Trust and the Otahuao Burial Trust to be affected parties.

CONTENTS

- Northland Regional Council decision relating to wetland crossing

Appendix 6: *'Ecology report'* prepared by 4Sight Consulting, dated May 2017

Appendix 7: *'Archaeological Assessment of the Proposed Subdivision of Lot 1 DP 167657 Kerikeri Inlet Road, Kerikeri'* prepared by Geometria Ltd, dated 11 August 2017

Appendix 8: *'Cultural impact assessment prepared for Nags Head Horse Hotel Ltd - Proposal for development of subdivision on Lot 1 DP167657, Kerikeri Inlet Road, Kerikeri'* prepared by Kaire Edmonds Whānau Trust and Otahuao Burial Trust, dated April 2018

Appendix 9: District Plan map 84 and Far North potential flooding map FL3

Appendix 10: Northland Regional Council maps

Appendix 11: District Plan objectives and policies

1. SUMMARY DETAILS

APPLICANT: The Nags Head Horse Hotel

PROPOSAL: The Nags Head Horse Hotel proposes to subdivide Lot 1 DP 167657, being 17.705 hectares of vacant land in the South Kerikeri Inlet zone, creating four lots ranging in size from 4.128 hectares to 5.106 hectares. The site includes a one-third share in Lot 4 DP 167657 and this share shall transfer to proposed Lot 1.

Consent is also sought to upgrade right of way easements G and X over Lot 2 DP 210733 as per Council's engineering standards.

Resource consent is required as a restricted discretionary activity under the rules relating to allotment sizes.

Breaches to the permitted activity thresholds for stormwater management on Lot 1 DP 167657 and Lot 2 DP 210733, and the setback of impermeable surfaces from a wetland area require resource consent as a discretionary activity to give effect to the subdivision.

LOCATION: Kerikeri Inlet Road, Kerikeri

LEGAL DESCRIPTION: Subdivision site - Lot 1 DP 167657 and including a one-third share in Lot 4 DP 167657 (CFR NA101C/992) - owned by The Nags Head Horse Hotel

Access - Rights of way G and X over Lot 2 DP 210733 (CFR NA138C/239) - owned by Angela Houry

DISTRICT PLAN ZONING: South Kerikeri Inlet

The site is excluded from the areas specifically identified as being 'sensitive'

DISTRICT PLAN RESOURCE NOTATIONS: None

OTHER:

The soils on Lot 1 DP 167657 have land use capability classifications of 4e2 and 4e7, which are not considered highly versatile.

'Tsunami Evacuation Zone', as identified by the Northland Regional Council (orange and yellow zones).

NATURAL HAZARDS:

Far North potential flooding map FL3 shows the site as susceptible to flooding.

Northland Regional Council's natural hazard maps include the majority of the site within a *'coastal hazard flood 0'* zone.

NORTHLAND REGIONAL COUNCIL:

The regional council has confirmed that the site falls outside of the coastal marine area.

REGIONAL POLICY STATEMENT

The Northland Regional Policy Statement maps the site as part of the *'Coastal environment'*. There are no *'Outstanding Natural Landscapes or features'* shown on the site or within the locality.

Okura River, to the west of the site, is identified as being of *'High natural character'*. This is separated from the site by an area of reserve.

PROPOSED REGIONAL PLAN

The Proposed Regional Plan maps the site within a *'Groundwater management unit – coastal aquifer and other aquifers'*, a *'livestock exclusion area - lowland'*, and a *'river water quality management area - coastal river'*. It is adjacent to a *'coastal water quality management area - Okura River tidal creek'*.

The Plan also identifies a significant ecological area within the coastal marine area to the north of the site, being the *'Kerikeri Inlet Pickmere Channel shellfish bed'*, and a *'mooring zone'* to the north, as per the blue and green areas on the following map. The Okura River to the west is identified as being high in natural character.

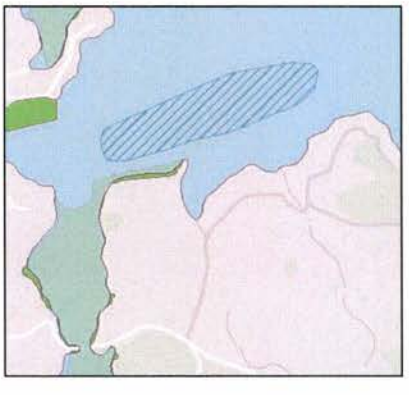


Figure 1: Proposed Regional Plan notations

STATUS

All rules in the Proposed Plan have immediate legal effect. Therefore, the rules in the Proposed Plan as well as the rules in the existing operative regional plans (Air, Water and Soil, and Coastal) require consideration at the current time.

To enable internal access to part of Lot 1 within the subdivision, Northland Regional Council has granted consents to The Nags Head Horse Hotel to construct a causeway and rights of way I within proposed Lot 3 and J within proposed Lot 4 on the bed of an indigenous wetland or in the riparian management zone adjacent to it (reference AUT.040047.01.01 and AUT.040047.02.01).

No other consenting requirements have been identified under the regional documents.

NATIONAL ENVIRONMENTAL STDS: None known to influence the subdivision

PRELODGEMENT DISCUSSION: General discussions with Council staff in 2017 regarding the zone, associated rules and notification requirements, and earthworks.

Pre-lodgement meeting with Team Leader Resource Consents

CONSULTATION: Kaire Edmonds Whanau Trust

Otahuao Burial Trust

No other parties have been consulted as there is a mandatory requirement in the District Plan for limited notification of the proposal. Council advised that written approval/s would not remove the requirement to serve notice of the application on the properties identified in the District Plan.

ADDRESS FOR SERVICE: Williams and King, PO Box 937, Kerikeri 0230
P 09 407 6030 E natalie@saps.co.nz

Please direct all correspondence via email to Natalie Watson

2. THE PROPOSAL

2.1 Subdivision layout

This assessment has been prepared in support of an application by The Nags Head Horse Hotel (the applicant) to subdivide 17.705 hectares of vacant land in the South Kerikeri Inlet zone; creating four vacant lots ranging in size from 4.128 hectares to 5.106 hectares.

The site includes a one-third share in Lot 4 DP 167657 and this share shall transfer to proposed Lot 1. The subdivision does not affect the land within Lot 4 DP 167657 as there shall be no increase in the number of shares, management or use of that lot.

The proposed lots will be accessed by a network of rights of way as shown on the memorandum of easements on the subdivision plan prepared by Williams and King Surveyors, '*Proposed subdivision of Lot 1 DP 167657*', reference 21916, drawn June 2017 and revised 15 June 2018. Refer to **Appendix 1** for the subdivision plan.

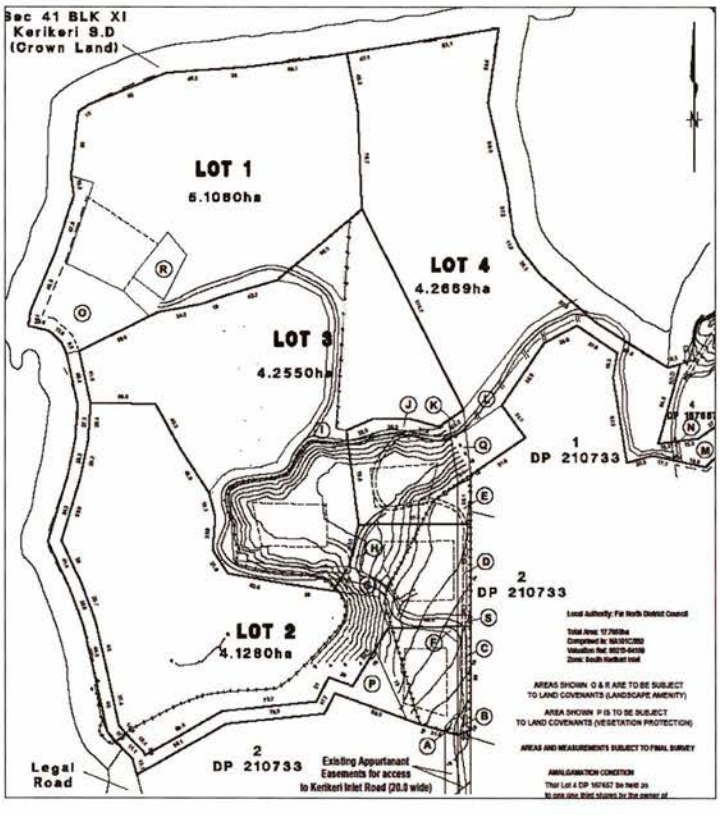


Figure 2: Subdivision plan

Right of way I is to be formed to a standard suitable to maintain farm access; enabling stock, farm utility vehicle and quad bike access. A consent notice is volunteered to this effect, confirming that right of way I will have adequate freeboard above current mean high water springs for farm access. Further consent may be required in the future to raise the access to service a habitable building (should this be established to the north of right of way I).

Existing rights of way G and X over Lot 2 DP 210733 to the south will provide access for each of the lots onto Kerikeri Inlet Road. Following the subdivision, these rights of way will serve up to six titles. **Appendix 2** includes a copy of the certificates of title and the details of the easements over Lot 2 DP 210733.

Landscape amenity covenants O and R, and vegetation protection covenant P are proposed on Lot 1. As described in the landscape assessment completed by Littoralis Landscape Architecture (Littoralis) included in **Appendix 3**, landscape amenity covenants O and R include a high proportion of invasive weeds. These covenants are intended to mitigate the visual effects of a residential unit on the adjacent building site as opposed to offering any natural/ecological value.

2.2 Building sites

Each lot will contain a single residential unit following subdivision which is consistent with the District Plan's permitted activity threshold applying to the existing title, as per Rule 10.10.5.1.2 which limits residential development to one unit per 4 hectares of land as a permitted activity. This rule requires that each unit shall have at least 3,000 m² for its exclusive use surrounding the unit plus a minimum of 3.7 hectares elsewhere on the property. The subdivision meets this threshold.

Note: Following the subdivision, Rule 10.10.5.1.1, visual amenity, will require resource consent for future development on each of the lots where any new building not for human habitation exceeds 50 m² or a building for human habitation exceeds 25 m². The landscape assessment prepared by Littoralis in **Appendix 3** will form a reference document registered by consent notice against the titles that will guide future development on the lots.

As shown on the subdivision plan, building envelopes have been defined on each of the lots. Lots 2, 3 and 4 include single building envelopes. There are two options on Lot 1, providing alternatives for single unit residential development on either:

- a building site on Te Korau Island, referred to as the 'island' building site, adjacent to landscape amenity covenants O and R, or
- an 'inland' building site on the southernmost part of the lot.

The building areas on the lots are as follows:

Lot 1	'Inland' site	1,585 m²	Lot 2	2,250 m²
	'Island' site	2,800 m²		
Lot 3	1,800 m²		Lot 4	1,430 m²

The survey plan will be required to show the designated building sites, with built development to be restricted to these locations.

Landscape amenity covenants O and R are proposed to mitigate the effects of a residential unit/habitable building on the 'island' lot. Therefore if the landowner/s of Lot 1 elect to restrict built development to the 'inland' building site, then landscape amenity covenants O and R will not be required. If development on the 'island' building site is limited to an accessory building/s, the landscape mitigation required to address the effects of such development is likely to be much more moderate and under these circumstances, landscape amenity covenants O and R would be unnecessary. Under this scenario, the preference is to require landscaping which is more responsive to

the actual effects of the smaller scale of development. This is as discussed in the landscape assessment in **Appendix 3**.

A consent notice condition is intended which will require site development to be undertaken in accordance with the mitigation measures outlined in the landscape assessment, which address building design, landscape treatments and planting. In terms of Lot 1, landscape amenity covenants O and R will be maintained at least until such point in time as a residential unit is established on the lot and this will determine if the covenants are required on an ongoing basis. Any conditions should be drafted to reflect this, with the mitigation measures designed to correspond with the scale of the building.

2.3 Earthworks

As outlined in the engineering assessment completed by Haigh Workman Civil and Structural Engineers (Haigh Workman) in **Appendix 4**, earthworks to complete the subdivision are anticipated to comprise excavation and filling to form the proposed rights of way and disestablishment of part of the existing track on Lot 4. The maximum depth of cut or fill is not expected to exceed 1 metre. The proposal requires 2,860 m^3 of earthworks (including placing aggregate) on Lot 1 DP 167657. 370 m^3 of this is required to upgrade the rights of way over Lot 2 DP 210733. An erosion and sediment control plan is to be provided before earthworks commence. (As explained in section 4.6 below, there is no requirement under the District Plan for separate landuse resource consent for earthworks as they will be completed as part of the subdivision.)

2.4 Impermeable surfaces

Where possible the existing track alignment through Lot 1 DP 167657 has been adopted to service the subdivision. The applicant proposes to reinstate (grass) the current access through Lot 4 where it falls outside of the proposed rights of way.

Impermeable surface areas on Lot 1 DP 167657 to develop the subdivision will increase to an estimated 3,391 m^2 over 17.706 hectares or 1.92% of the title area. Impermeable surface coverage within Lot 2 DP 210733 will increase to an estimated 2,735 m^2 or 1.35% as a result of the upgrade to the existing rights of way.

Rights of way I and J include a causeway, establishing a culverted metalled crossing through a wetland.

2.5 Section 88

Section 88 of the Resource Management Act 1991 (the Act) requires that every resource consent application shall be made in the prescribed form and manner, and include the information relating to the activity, including an assessment of the activity's effects on the environment, as required by Schedule 4.

Schedule 4 of the Act outlines the matters which must be included within an application for resource consent, including:

- a description of the activity:
- a description of the site at which the activity is to occur:

- the full name and address of each owner or occupier of the site:
- a description of any other activities that are part of the proposal to which the application relates:
- a description of any other resource consents required for the proposal to which the application relates:
- an assessment of the activity against the matters set out in Part 2:
- an assessment of the activity against any relevant provisions of a document referred to in section 104(1)(b).

Schedule 4 also defines the matters to be consicered when preparing an assessment of effects on the environment. These statutory requirements are addressed in the application.

3. SITE AND LOCALITY

3.1 Lot 1 DP 167657

The site and locality are described in detail in the following documents which form an integral part of the application and are to be read in conjunction with this assessment of environmental effects:

- *'Assessment of landscape, visual, rural amenity and natural character effects'* prepared by Littoralis Landscape Architecture, dated May 2018, refer to **Appendix 3**
- *'Engineering Report for Proposed Subdivision Lot 1 DP 167657 at 405 Kerikeri Inlet Road, Kerikeri for Nags Head Horse Hotel Ltd'* prepared by Haigh Workman Civil and Structural Engineers, dated September 2018, refer to **Appendix 4**
- 405 Kerikeri Inlet Road: Access Track Construction within a Wetland prepared by Mortimer Consulting, dated October 2018, refer to **Appendix 5**
- *'Ecology report'* prepared by 4Sight Consulting, dated May 2017, refer to **Appendix 6**
- *'Archaeological Assessment of the Proposed Subdivision of Lot 1 DP 167657 Kerikeri Inlet Road, Kerikeri'* prepared by Geometria Ltd, dated 11 August 2017, refer to **Appendix 7**
- *'Cultural Impact Assessment Prepared for Nags Head Horse Hotel Ltd - Proposal for development of subdivision on Lot 1 DP167657, Kerikeri Inlet Road, Kerikeri'* prepared by Kaire Edmonds Whānau Trust and Otahuao Burial Trust, dated April 2018, refer to **Appendix 8**

3.2 Lot 4 DP 167657

Lot 1 DP 167657, that is the subdivision site, has a one-third share in Lot 4 DP 167657 of 5.235 hectares. Adjacent Lots 1 and 2 DP 210733 each own a one-sixth share in Lot 4 DP 167657, with the remaining third held by Lot 2 DP 442820. The share held by Lot 1 DP 167657 will transfer to proposed Lot 1 upon titles issuing to the proposal.

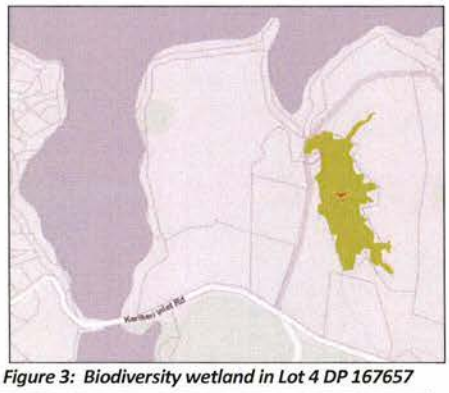


Figure 3: Biodiversity wetland in Lot 4 DP 167657

Lot 4 DP 167657 includes a wetland area which is subject to land covenant in deed D088754.3. As per this document, the wetland area in Lot 4 DP 167657 is managed by a management committee comprising a representative of each of the titles with a share in Lot 4 DP 167657. As the subdivision proposal is not affecting the wetland or increasing the number of interests in Lot 4 DP 167657 the existing management structure will not alter.

Northland Regional Council's mapping database shows the area of Lot 4 DP 167657 as including a biodioversity wetland: shallow water, also referred to as P05/083 in the Department of Conservation's protected natural areas programme.

3.3 Lot 2 DP 210733

Lot 2 DP 210733 is not part of the subdivision site. Right of way easements G and X do however provide access from Kerikeri Inlet Road over Lot 2 DP 210733 to the subject site.

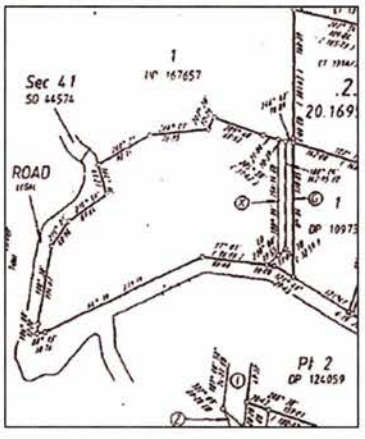


Figure 4: Title plan to Lot 2 DP 167657

Easement G was created by easement certificate C871824.10 in 1995. It is shown as easement A in the schedule, establishing a right of way, and rights to convey electricity and telecommunications over Lot 3 DP 167657 in favour of the site. (Lot 3 DP 167657 has since been subdivided into Lots 1 and 2 DP 210733) The rights and powers established by the easement are as follows:

- *While the local authority planning requirements restrict the number of rear allotments that may be served from the right of way the registered proprietor of the servient tenement will be entitled to subdivide his property serviced by the right of way marked A to a maximum of one-half of such entitlement and the registered proprietor of the dominant tenement will be entitled to subdivide his property served by the right of way marked A to a maximum of one-half of such entitlement.*
- *After the initial formation of the right of way marked A either the registered proprietor of the servient tenement or the registered proprietor of the dominant tenement may further upgrade the right of way marked A provided that if the other party does not require the upgrading the costs thereof will be paid solely by the party desiring the upgrade.*

Rule 15.1.6C.1.1 of the District Plan relating to private accessways provides that a private accessway may serve a maximum of eight household equivalents, and where a subdivision serves nine or more sites, access shall be by public road. As the applicant is proposing four lots, the application complies with the above conditions as it meets the above entitlement over easement A (G) for half of the eight lots allowed on a private right of way.

Easement X was created by transfer document D587086.4 in 2001. The following terms apply:

- The cost of formation will be borne by the party requiring the right of way to be formed unless there is a clearly disproportionate benefit to the other party arising from such formation in which case that party will make a reasonable contribution to the costs of formation.

- Should any dispute arise between owners for the time being of the servient land and the owners for the time being of the dominant land relating to the grant of the right of way and its terms such dispute shall be referred to arbitration in accordance with the provisions of the Arbitration Act 1996 and any amendment thereof or any other statutory provision then relating to arbitration.

Refer to **Appendix 2** for the title detail.

4. DISTRICT PLAN ASSESSMENT – OPERATIVE FAR NORTH DISTRICT PLAN

4.1 The site is located within the South Kerikeri Inlet zone which is a unique zone in the Far North District applying to a limited number of properties on Kerikeri Inlet Road. These properties are highlighted on the following plan. The zone also includes areas identified as 'sensitive', none of which are identified on the site however. Refer to **Appendix 9** for planning map 84.

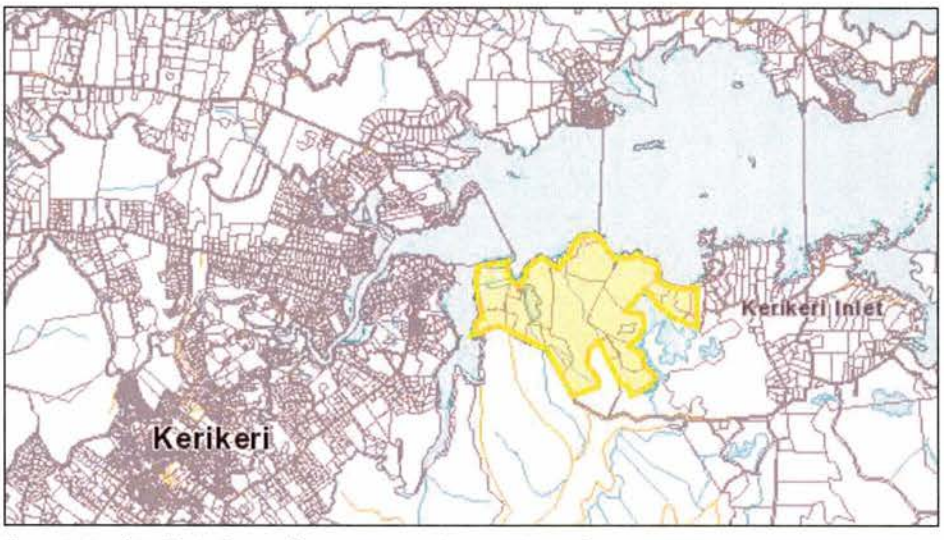


Figure 5: South Kerikeri Inlet zone (Source annotated Far North Maps)

4.2 The South Kerikeri Inlet zone was created as a result of appeals to the Proposed District Plan challenging Council's proposal to rezone an area of land from Coastal 1 under the Transitional District Plan to Coastal Living. It is understood that this was the final appeal to be resolved through the Environment Court. The zoning and rules are a reflection of the scope of the appeal.

4.3 There are no registered archaeological sites, sites of significance to Maori, outstanding natural features, outstanding landscape features or outstanding landscapes referenced to the site through the District Plan.

4.4 **Lot sizes**

With the exception of boundary adjustments between existing titles, there are no controlled activity subdivision standards applying within the South Kerikeri Inlet zone. Therefore the allotment area thresholds for restricted discretionary subdivision proposals provide an indication of the levels of development likely to be considered acceptable within the zone (for non-sensitive areas, these align

with Rule 10.10.5.1.2 which limits residential development to one unit per 4 hectares of land as a permitted activity).

In terms of lot sizes, the proposal is submitted as a restricted discretionary activity as the site does not include any 'sensitive' areas and a minimum lot size of 4 hectares is proposed. As indicated above, this is the most permissive density anticipated by the District Plan subdivision rules applying in the zone. In considering the application, Council's discretion has been restricted to the following matters that are regarded as relevant to the proposal:

- *the location of access to the lots;*
- *the location of utility services;*
- *the location of building envelopes;*
- *the effect of earthworks and utilities;*
- *the location of lot boundaries;*
- *the mitigation of fire hazards for health and safety of residents;*
- *natural or other hazards;*
- *water supply;*
- *stormwater disposal;*
- *sanitary sewage disposal;*
- *energy supply and telecommunications;*
- *easements for any purpose;*
- *access to reserves and waterways;*
- *land use compatibility;*
- *whether provision for access to the subdivision has been made in a manner that will avoid, remedy or mitigate adverse effects on the environment, including but not limited to traffic effects, visual effects, effects on vegetation and habitats, and natural character; and*
- *whether the effects of earthworks and the provision of services to the subdivision will have an adverse effect on the environment and whether these effects can be avoided, remedied or mitigated.*

4.5 Stormwater management

The site – Lot 1 DP 167657

Rule 10.10.5.1.6 of the District Plan relating to stormwater management limits the maximum proportion or amount of the gross site area that may be covered by buildings and other impermeable surfaces to 10% or 600 m² whichever is the lesser.

Based upon the area of the formed carriageways (including the rights of way and causeway which will be constructed to Council's engineering standards); impermeable surface areas on Lot 1 DP 67657 to develop the subdivision have been calculated by Haigh Workman as follows. Existing impermeable surfaces are approximately 2,016 m² and this is projected to increase to 3,391 m² over 17.706 hectares, or 1.92% of the title area. Table 10.2 of the engineering assessment in **Appendix 4** provides a breakdown of the impermeable surface areas on each of the lots. Therefore in establishing internal access to the lots, the proposal does not satisfy the permitted activity threshold relating to stormwater management and consent is required.

The District Plan requires resource consent as a discretionary activity under Rule 10.10.5.4 for stormwater management on Lot 1 DP 167657. In assessing an application under this provision Council has restricted its discretion to the matters outlined in section 11.3 of the District Plan as follows:

- *The extent to which building site coverage and impermeable surfaces result in increased stormwater runoff and contribute to total catchment impermeability and the provisions of any catchment or drainage plan for that catchment.*
- *The extent to which Low Impact Design principles have been used to reduce site impermeability.*
- *Any cumulative effects on total catchment impermeability.*
- *The extent to which building site coverage and impermeable surfaces will alter the natural contour or drainage patterns of the site or disturb the ground and alter its ability to absorb water.*
- *The physical qualities of the soil type.*
- *Any adverse effects on the life supporting capacity of soils.*
- *The availability of land for the disposal of effluent and stormwater on the site without adverse effects on the water quantity and water quality of water bodies (including groundwater and aquifers) or on adjacent sites.*
- *The extent to which paved, impermeable surfaces are necessary for the proposed activity.*
- *The extent to which landscaping may reduce adverse effects of run-off.*
- *Any recognised standards promulgated by industry groups.*
- *The means and effectiveness of mitigating stormwater run-off to that expected by the permitted activity threshold.*
- *The extent to which the proposal has considered and provided for climate change.*
- *The extent to which stormwater detention ponds and other engineering solutions are used to mitigate any adverse effects.*

Note: Table 10.3 of the engineering assessment in **Appendix 4** provides a breakdown of the impermeable surface areas anticipated on the lots in the future. Future site development on each of the lots will require resource consent under the stormwater management rules and this will be applied for separately when the site specific development is finalised. Haigh Workman does not anticipate that any stormwater attenuation would be required for future development.

Lot 2 DP 210733

Lot 2 DP 210733 includes existing rights of way G and X which provide the only site access to Kerikeri Inlet Road. The track over the rights of way is currently metalled to an estimated width of 3 metres. Following the subdivision, the rights of way will serve up to six titles; being Lots 1 and 2 DP 210733 and the four proposed lots. The District Plan requires a 5 metre wide formed carriageway to serve this number of lots/titles. The increase in width will increase the level of impermeable surfaces on Lot 2 DP 210733 by approximately 362 m².

Lot 2 DP 210733 currently includes a number of buildings and tracks/rights of way through the 20.1695 hectare property which Haigh Workman have roughly estimated as being 2,373 m² in area. This is anticipated to increase to approximately 2,735 m² or 1.35% following the upgrade to rights of way G and X. Whilst the increase in impermeable surfaces is relatively low and consistent with the purpose of the right of way easements, resource consent is required as a discretionary activity as the level of impermeable surfaces over Lot 2 DP 210733 exceeds 1,500 m². The matters for Council to consider are outlined above with respect to Lot 1 DP 167657.

4.6 Earthworks

Earthworks undertaken in 2017

Rule 12.3.6.1.2 limits excavation and/or filling on the site to 300 m³ in any 12 month period as a permitted activity. Any cut or filled face is limited to 1.5 metres in height.

In mid-February 2017, the applicant sought advice regarding scraping and re-metalling the surface of existing farm tracks on the site which were formed by previous owners over 20 years ago. Provided that no new areas were being metalled, Council confirmed that such works would be regarded as track maintenance and existing use rights would apply. These works were undertaken soon after on this understanding.

Observing the works afterwards, which included raising some parts of the track within right of way L to avoid irregular periods of inundation, further clarification was sought regarding Council's definition of 'maintenance'. Council's resource consents engineer advised that in their opinion track maintenance would be expected to include a layer of gravel as opposed to raising/reconstructing access. No accepted thresholds were provided and for the purposes of the following assessment we have adopted any increase above 200 mm as falling outside of farm track maintenance. This being the case, the metal on right of way L was raised in places by approximately 500 – 600 mm (not taking into account the estimated farm maintenance allocation of say 200 mm). On average, the fill undertaken on site over and above 'farm maintenance' in February 2017 has been estimated at 350 – 400 mm, with the volume being less than 300 m^3. Therefore the excavation undertaken on Lot 1 DP 167657 in 2017 met the permitted activity thresholds and no resource consent was required.

The applicant also placed a layer of metal on the right of way over Lot 2 DP 210733, with these works falling within the thresholds described above for maintenance.

Proposed earthworks

Rule 13.6.8 of the District Plan, subdivision consent before work commences, provides that:

- except where prior consent has been obtained to excavate or fill land pursuant to rules under Section 12.3, or
- consent to vegetation clearance has been obtained pursuant to rules under Sections 12.1 or 12.2, and/or
- relevant consents have been obtained from the Regional Council,

no work, other than investigatory work, involving the disturbance of the land or clearance of vegetation shall be undertaken until a subdivision consent has been obtained. The proposal is presented on this basis.

When the subdivision consent is granted, provided all the necessary calculations and assessment of effects is provided with the application, the subdivision consent application shall be deemed to include consent to excavate or fill land, and clear vegetation to the extent authorised by the consent and subject to any conditions in the consent. This does not exempt a consent holder from also obtaining any relevant resource consent or approvals from the Regional Council or Heritage New Zealand Pouhere Taonga for earthworks, vegetation clearance or disturbance of an archaeological site.

Those earthworks associated with the subdivision of Lot 1 DP 167657 include upgrading existing access, forming new access tracks, reinstating access where it is no longer required, and forming the causeway within right of way easement I. As part of the current site works associated with the subdivision, the applicant is proposing a maximum depth of cut or fill of up to 1 metre. The proposal requires 2,860 m^3 of earthworks (including placing aggregate) on Lot 1 DP 167657. 370 m^3 of this is required to upgrade the rights of way over Lot 2 DP 210733), this is as shown on the plan of the '*Proposed access and*

upgrade over Lot 1 DP 167657' prepared by Williams and King Surveyors, refer to **Appendix 1**. Table 9.1 of the engineering report prepared by Haigh Workman in **Appendix 4** summarises the volume and area of earthworks. This material will be sourced off site. The volume does not include works required to establish building sites on the lots and this will be determined by future landowners.

The subdivision also relies upon right of way access over Lot 2 DP 210733 (the neighbouring site to the south). As per above, any works required to widen the formed access from 3 metres to 5 metres have been estimated as being 370 m^3.

An erosion and sediment control plan will be submitted to Council for their approval prior to works commencing, with all works to proceed in accordance.

4.7 **Setback of impermeable surfaces from a wetland**

Rule 12.7.6.1.2 applies a minimum setback of 30 metres to impermeable surfaces from the boundary of any wetland that is 1 hectare or more in area. Although the majority of the rights of way proposed over the formed farm tracks have existing use rights in this regard, there is some uncertainty regarding the maximum width of the former track underlying the proposed causeway within right of way I and whether it would have existing use rights by virtue of its period of progressive inundation. In terms of the balance of right of way I and the western portion of right of way J which also follow existing farm tracks, there is no firm evidence on site indicating the width of these tracks and this may be due to inundation, brown rock turning to clay etc. Regardless of this the fence line within right of way I confirms its historic use as a farm track. Adopting a conservative approach, consent is being sought as a discretionary activity under Rule 12.7.6.3 to increase the width of impermeable surfaces on the farm tracks within right of way I (including the causeway) and the western portion of right of way J. Section 12.7.7 specifies the following assessment criteria:

- *the extent to which the activity may adversely affect cultural and spiritual values;*
- *the extent to which the activity may adversely affect wetlands;*
- *the extent to which the activity may exacerbate or be adversely affected by natural hazards;*
- *the potential effects of the activity on the natural character and amenity values of lakes, rivers, wetlands and their margins or the coastal environment;*
- *the history of the site and the extent to which it has been modified by human intervention;*
- *the potential effects on the biodiversity and life supporting capacity of the water body or coastal marine area or riparian margins;*
- *the potential and cumulative effects on water quality and quantity, and in particular, whether the activity is within a water catchment that serves a public water supply;*
- *the extent to which any proposed measures will mitigate adverse effects on water quality or on vegetation on riparian margins;*
- *whether there are better alternatives for effluent disposal;*
- *the extent to which the activity has a functional need to establish adjacent to a water body;*
- *whether there is a need to restrict public access or the type of public access in situations where adverse safety or operational considerations could result if an esplanade reserve or strip were to vest.*

4.8 Haigh Workman has confirmed that no part of the effluent and disposal system for each of the building sites would fall within 30 metres of the wetland or coastal marine area. Therefore, future development on any of the building sites will be a permitted activity under Rule 12.7.6.1.4, land use activities involving discharges of human sewage effluent.

4.9 The subdivision has been designed to achieve compliance with the relevant permitted activity thresholds outlined in subsection 15.1.6C of Chapter 15 of the District Plan relating to access. Council's *'Engineering Standards and Guidelines'* and the District Plan outline the standards that will apply to the vehicle crossing and rights of way.

4.10 Overall, consent is sought as a **restricted discretionary** activity for the lot sizes; with breaches to the permitted activity thresholds relating to stormwater management and the impermeable surface setback from a wetland area requiring consent as a **discretionary** activity to give effect to the subdivision. The associated effects are addressed in section 7 that follows.

5. PUBLIC NOTIFICATION AND LIMITED NOTIFICATION OF APPLICATIONS

PUBLIC NOTIFICATION –

5.1 Section 95A of the Act specifies the steps to be taken to determine whether to publicly notify an application.

Step 1: Mandatory public notification in certain circumstances

Has the applicant requested public notification, is there any outstanding information or has the applicant declined Council commissioning a report?

The Nags Head Horse Hotel does not request public notification and it is assumed that the latter two criteria will not occur.

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

A national environmental standard precludes public notification.

The application is for a resource consent for 1 or more of the following, but no other, activities:

(i) a controlled activity:

(ii) a restricted discretionary or discretionary activity, but only if the activity is a subdivision of land or a residential activity:

(iii) a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity:

(iv) a prescribed activity (section 360H(1)(a)(i)).

The subdivision is a restricted discretionary activity and the associated land use breaches are required to give effect to the subdivision activity. Therefore public notification is precluded.

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

The criteria for step 3 are as follows:

(a) the application is for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification:

(b) the consent authority decides, in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor.

Public notification is precluded by Step 2.

Step 4: Public notification in special circumstances

Determine whether special circumstances exist in relation to the application that warrant the application being publicly notified

As demonstrated in the following assessment, we are of the opinion that there are no special circumstances to warrant public notification.

LIMITED NOTIFICATION –

5.2 Section 95B of the Act specifies the steps to be taken to determine whether to limited notify an application.

Step 1: Certain affected groups and affected persons must be notified

Determine whether there are any affected protected customary rights groups; or affected customary marine title groups (in the case of an application for a resource consent for an accommodated activity).

Determine whether the proposed activity is on or adjacent to, or may affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in Schedule 11; and whether the person to whom the statutory acknowledgement is made is an affected person under section 95E.

Kerikeri Inlet is identified as a 'Customary Area' by the Ministry for Primary Industries, with the area in proximity to the site being the customary rohe moana area of Nga Hapu o Taiamai Ke Ti Marangi. The subdivision is unlikely to undermine the special relationship between tangata whenua and the customary food gathering area, particularly given the technology available to ensure that any effects of onsite wastewater treatment will be neutral. The '*On-site Wastewater Feasibility Report*' prepared by Haigh Workman (refer to **Attachment 4**) advises that the likelihood of a discharge from a household secondary (aeration) treatment plant is less than minor. Haigh Workman has confirmed that no part of the effluent and disposal system for each of the building sites would fall within 30 metres of the wetland or coastal marine area. All earthworks will be undertaken in accordance with an approved erosion and sediment control plan.

In summary, there are no affected protected customary rights groups or affected customary marine title groups, and the proposal will not affect any land subject to a statutory acknowledgment. The site is not a Treaty of Waitangi Settlement Property.

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

The criteria for step 2 are as follows:

(a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes limited notification:

(b) the application is for a resource consent for either or both of the following, but no other, activities:

(i) a controlled activity that requires consent under a district plan (other than a subdivision of land):

(ii) a prescribed activity (see section 360H(1)(a)(ii)).

None of the above apply to the activity

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

Determine whether, in accordance with section 95E, the following persons are affected persons:

(a) in the case of a boundary activity, an owner of an allotment with an infringed boundary; and

(b) in the case of any activity prescribed under section 360H(1)(b), *a prescribed person in respect of the proposed activity.*

In the case of any other activity, determine whether a person is an affected person in accordance with section 95E.

Notify each affected person identified above of the application.

Council must decide a person is an affected person if the activity's adverse effects on them are minor or more than minor (but are not less than minor).

In identifying affected persons and determining which properties are adjacent to the site; adjacent properties have been identified as the three properties sharing a common boundary with the site and the rights of way.

As assessed in Section 8 of this assessment, Lot 1 DP 109734 (identified by the red star on figure 6) has been identified as potentially affected (in the short term until landscaping associated with future built development establishes and matures, refer to the landscape assessment in **Appendix 3**).

Figure 6: Adjacent properties (Source Far North Maps)

Step 4: Further notification in special circumstances

Determine whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined to be eligible for limited notification under this section (excluding persons assessed under section 95E as not being affected persons).

Section 13.8.5 of the District Plan requires that subdivision applications for restricted discretionary activities within the South Kerikeri Inlet zone will be treated as limited notified applications requiring notification of all property owners within the zone and DH Ellis (being the property owner of Lot 2 DP 114410) at least. As DH Ellis no longer owns Lot 2 DP 114410 which

is on the opposite side of the Inlet at Skudders Beach (2 Paretu Drive), we submit that there is no requirement to serve a copy of the application upon this person.

Rule 12.7.6.3 relating to the setback of impermeable surfaces requires that where an application is made in terms of this rule for any activity that relates to significant indigenous wetlands the Northland Regional Council and the Department of Conservation shall be considered an affected party. As Northland Regional Council has granted consent to construct the causeway and parts of the rights of way it is our opinion that there is no requirement to serve a copy of the application upon the regional council (refer to **Appendix 5** for the decisions).

5.3 Based upon the above, special circumstances exist through the District Plan requiring limited notification to the property owners within the South Kerikeri Inlet zone and the Department of Conservation. Council may also determine Kaire Edmonds Whānau Trust and the Otahuao Burial Trust to be affected parties by virtue of the subdivision design and the recommendations contained in the cultural impact assessment attached in **Appendix 8**.

6. STATUTORY REQUIREMENTS

6.1 Section 104(1) of the Act provides that when considering an application for a resource consent, Council must, subject to Part 2, have regard to–

(a) any actual and potential effects on the environment of allowing the activity; and

(ab) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity; and

(b) any relevant provisions of—

(i) a national environmental standard:

(ii) other regulations:

(iii) a national policy statement:

(iv) a New Zealand coastal policy statement:

(v) a regional policy statement or proposed regional policy statement:

(vi) a plan or proposed plan; and

(c) any other matter Council considers relevant and reasonably necessary to determine the application.

6.2 Section 7 below considers the environmental effects of the proposal, concluding that the effects will be no more than minor.

6.3 There are no national environmental standards known to influence the site development.

6.4 The site is included within the coastal environment and therefore the New Zealand Coastal Policy Statement is a relevant consideration. This is addressed in section 10.

6.5 In terms of the significant resource management issues addressed in Part 2 of the *'Regional Policy Statement for Northland'* (RPS), Section 11 below concludes that the proposal will achieve the environmental results anticipated. (We note that the allotment areas are a restricted discretionary activity.)

6.6 The *'Regional air quality' and 'Regional coastal'* Plans are not relevant to the proposal. There are no outstanding consenting requirements identified under the *'Water and Soil Plan for Northland'* or the *'Proposed Regional Plan'*.

6.7 Section 11 below also includes a general analysis of the proposal against the relevant objectives and policies of the District Plan.

6.8 An assessment of the proposal and Part 2 of the Act is provided in section 12.

6.9 As demonstrated in section 4 above, resource consent is being sought for a restricted discretionary activity under the allotment area provisions. Section 104C of the Act provides that when considering an application for a restricted discretionary activity, Council must only consider those matters over which it has restricted its discretion. Council may grant or refuse the application. Where consent is granted, Council may only impose conditions over which it has restricted its exercise of control.

6.10 Overall, the proposal is a discretionary activity by virtue of the rules relating to stormwater management and the setback of impermeable surfaces from a wetland area. Section 104B of the Act provides that Council may grant or refuse the application; and if it grants the application, may impose conditions under section 108.

7. ASSESSMENT OF EFFECTS ON THE ENVIRONMENT

7.1 Resource consent is sought as a restricted discretionary activity for the lot sizes; with breaches to the permitted activity thresholds relating to stormwater management and the setback of impermeable surfaces from a wetland area requiring consent as a discretionary activity to give effect to the subdivision. The following assesses the environmental effects of the subdivision and the infringements to the permitted activity thresholds, having regard to the District Plan assessment criteria where relevant. (The effects upon adjacent properties is considered in section 8 below relating to limited notification.)

7.2 Access

As described on page 7 of the landscape assessment prepared by Littoralis (refer to **Appendix 3**), access to the site and proposed lots is as follows:

> *An access corridor from Kerikeri Inlet Road ... provides a drive to the southern corner of the main body of the Site. At that point, the drive would follow the eastern boundary for a short distance, skirting an area allocated for a "mainland" shed or house as part of proposed Lot 1, which would take in the island. A second building envelope for that lot is identified at the toe of the raised island form, where it would be accessed by a causeway which will be described shortly.*
>
> *After running along this segment of eastern boundary for a small stretch, the main access would then veer sharply to the south, providing a stub into a second defined building as it does so. Soon after, the access splits, providing stubs into two building locations occupying the front tier of the plateau above the main body of wetland.*
>
> *... Having provided access to these proposed Lots 3 and 4, the balance of the indicated drive would be devoted to serving the island. After descending the route currently defined by the historic farm track, this drive would skirt the toe of the coastal flank before traversing across the wetland, approximately along the line of a relic farm race that is indicated on the Site by a fence that continues to bisect the wetland area.*

It is understood that the causeway would be a simple gravel structure, approximately 120m long and 5m wide at its base, with a carriageway width of 3m. Its maximum height is expected to be around 600mm RL. Some excavated material would be overlaid on the lower extent of the causeway face to provide a medium for initial mitigating wetland planting and to encourage further colonisation by indigenous wetland/saltmarsh species. A report prepared by Mortimer Consultants as part of an application to Northland Regional Council describes the parameters of the causeway more fully.

... For any portions of the access that are to be permanently surfaced, it is anticipated that this would consist of either asphalt, chip seal, or concrete with a coarse broom finish which either incorporates 4% by volume of cement black oxide or has black concrete stain applied by spray approximately two months after pouring so that the concrete is completely dry. Any informally surfaced access ways should be finished in dark crushed aggregate (as opposed to pale crushed lime rock).

In terms of visual effects and the effects on natural character, Littoralis has concluded that the effects of the access (including the associated earthworks) will be less than minor with the access alignments assigned to work with existing tracks, where present, and the natural topography of the site.

Section 8 of the engineering report prepared by Haigh Workman summarises the network of rights of way; addressing site access and traffic effects, refer to **Appendix 4**. The report assesses sight distance standards, vehicle speeds, minimum sight distances, the vehicle crossing, rights of way, driveways, parking and maneouvring. It outlines Council's standards that will apply to the formed widths.

As outlined previously. Lot 1 will retain a one-third share in Lot 4 DP 167657. Rights of way J, K, L, N and M are proposed over an existing farm track on Lot 4 to allow for recreational access between Lot 1 and Lot 4 DP167657. The track was upgraded in February 2017 and is suitable for vehicle access. The track will not be used for regular vehicle access and in reality it will serve the equivalent of one lot (or one household equivalent). Therefore the current track over rights of way J, K, L, N and M is considered adequate for serving the requirements of proposed Lot 1 and the applicant requests that Council's engineers recognise this.

Visibility from the vehicle crossing complies with Council standards. The crossing is to be formed as a double width crossing in accordance with drawing FNDC/S/6B of Council's engineering standards. It shall be sealed to the watertable culvert, approximately 6 metres from the edge of Kerikeri Inlet Road.

Provided that the rights of way and vehicle entrance are formed to Council's engineering standards and guidelines, any effects of the subdivision upon the level of service on Kerikeri Inlet Road are regarded as no more than minor, with the surrounding network able to accommodate the traffic associated with three additional lots. (As indicated previously, the number of lots proposed aligns with Rule 10.10.5.1.2 which limits residential development to one unit per 4 hectares of land as a permitted activity.)

The effects of the culverted crossing through the wetland area are considered in section 7.3 below.

In summmary, any effects asspciated with vehicle access are regarded as no more than minor.

7.3 The effect of earthworks

Section 2.3 of this assessment describes the earthworks required to complete the subdivision. The plan of the '*Proposed access and upgrade over Lot 1 DP 167657*' prepared by Williams and King Surveyors shows the excavation areas over Lot 1 DP 167657, refer to **Appendix 1**. This does not include works required to establish building sites on the lots and this will be determined by future landowners. Earthworks within Lot 2 DP 210733 are limited to rights of way G and X.

None of the works proposed include a cut or fill face over 1 metre, with the majority of works below 600 mm.

An erosion and sediment control plan will be provided before earthworks commence. Earthworks will be carried out in accordance with NZS 4404 and Council's Engineering Standards and Guidelines

Section 9 of the engineering report prepared by Haigh Workman addresses the earthworks associated with upgrading the access tracks and forming the new rights of way, refer to **Appendix 4**. The assessment does not comment specifically on the causeway, with design plans to be provided and approved through conditions of consent. The causeway is discussed below.

Haigh Workman has assessed the earthworks and provided that the works are undertaken in accordance with an approved erosion and sediment control plan, any effects will be temporary in nature and no more than minor.

The causeway – earthworks and impermeable surfaces

Whilst currently there are no regional rules restricting stock access from the impounded wetland area on site, the applicant has elected to do so through the subdivision. Stock will be removed from the wetland area with access to the northern pasture to be via a proposed causeway within easement I. This is proposed as an environmental off-set enhancing the long term ecological *and* amenity values of the wetland. **Appendix 6** includes an ecological report prepared by 4Sight Consulting that provides a description of the tidal/wetland areas on site, the local ecology, and the potential for ecological improvements to be achieved. The report concludes:

> *"The site currently has a very low ecological value. All habitats are either modified exotic (a small area of elevated farmland; rank margins of wet intermittently grazed land; eucalypt stand) or severely degraded estuarine area. On this basis, the site in its current state has a low ecological sensitivity to development.*
>
> *A well-designed subdivision development could achieve the following ecological and water quality improvements:*
>
> - *De-stocking all or most of the site.*
> - *Management of the tidally inundated area and its margins to encourage the return of saline wetland including saltmarsh.*
> - *In the event of the establishment of a causeway to access the slightly elevated ground in the northwestern corner of the site, the ensuing potential to manage an area above a causeway (which would need to be flood gated) as a freshwater habitat.*
> - *The development of enhancement plantings associated with individual lots which would increase the botanical and general biodiversity on the site.*
> - *The control of weeds and exotic vegetation on the site.*
> - *The improvement of water quality leaving the site and entering the Kerikeri Inlet."*

The subdivision has been designed to achieve the above. The landscape assessment prepared by Littoralis places emphasis upon the opportunity for the proposal to significantly enhance the value of the wetland area through the subdivision, stating that "*from a landscape perspective, the resulting area creates a subtle and diverse matrix of levels and habitats that promises a rich landscape with the benefit of stock exclusion and sensitive management, despite the gridded pattern of open drains that remain as a sign of past drainage efforts.*"

The landscape assessment recommends that "*as an overarching control, species selection should be reflective of locally common native plants but may involve relatively low growing plants in areas identified for such height control. Plants should be eco-sourced from the local Ecological District.*

... A management plan for the control and sequential replacement of invasive exotic species would be prepared as a condition of consent. Since a reasonable quantum of indigenous species exists within most of those naturally vegetated areas, a management plan could realistically rely upon a measure of colonisation, but would need to set realistic timeframes, protocols for monitoring, and identify circumstances where supplementary planting would be required to achieve a robust canopy within a reasonable timeframe. Such additioncl planting would fall under the obligations imposed upon the future owners of each title. Weed management on the island would not be required in advance of titles being issued".

Excluding stock from the wetland area, whilst providing access to an area for grazing and the 'island' building area on Lot 1, will require a raised causeway across the wetland, shown as part of easement I over Lot 3. The location and route of the proposed causeway is shown on the subdivision plan in **Appendix 1**. The general route follows the western side of an existing fence-line and submerged track which runs along the highest elevation of the flat land. At the northern end, the route swings 45 degrees westward away from the fence-line to link with Lot 1. The easement instrument relating to the causeway will specify that the owner/s of Lot 1 shall be responsible for all future maintenance requirements over the right of way.

The causeway will be constructed by depositing gravel directly onto the land surface. No foundational works or water tabling is necessary. The total volume of the earthworks for the causeway is estimated at approximately 850 m^3.

Northland Regional Council has granted consent to construct the causeway on the bed of the indigenous wetland. Refer to **Appendix 5** for a copy of the applications prepared by Mortimer Consulting and the regional council's decisions. The applications to the regional counci are submitted as part of the current application to the district council.

The environmental effects assessments supporting the applications to the regional council address the general protection of the wetland, the wetland vegetation and habitat values, the effects on the water quality and quantity, and the cultural values associated with the wetland, concluding that the potential adverse effects of the construction of the crossing and rights of way are considered minimal. The regional council has granted consent on this basis.

Archaeological and cultural effects

Appendix 7 includes an '*Archaeological Assessment of the Proposed Subdivision of Lot 1 DP 167657 Kerikeri Inlet Road, Kerikeri*' prepared by Geometria Ltd, dated 11 August 2017. **Appendix 8** includes a '*Cultural impact assessment prepared for Nags Head Horse Hotel Ltd - Proposal for development of subdivision on Lot 1 DP167657, Kerikeri Inlet Road, Kerikeri*' prepared by Kaire Edmonds Whānau Trust and Otahuao Burial Trust, dated April 2018. These assessments were obtained to inform the subdivision design process.

The assessment prepared by Geometria relates to an earlier subdivision layout, as per figures 2 and 3 of the report. The primary difference to the current proposal being the alignment of the rights of way, including the causeway. On the current plan, the causeway generally follows the western side of an existing fence-line which runs along the highest elevation of the flat land (as shown in the subdivision plan in **Appendix 1**). The changes to the alignment are considered unlikely to undermine the recommendations in section 9 of the archaeological assessment.

There are five recorded archaeological sites on or near Lot 1 DP 167657, being midden and pits as summarised in section 5.2 of the archaeological assessment.

Section 5.5 provides an historic background to the locality and site, this includes Maori settlement and subsequent Crown purchase of the site. Whilst not addressed in the archaeological assessment, locals recall the 'island' being developed to include accommodation for a European settler. The cultural impact assessment in **Appendix 8** also acknowledges that a single pākeha resident lived on the land. The landscape assessment by Littoralis comments on this – "*There is evidence of historic cultural use of the island, as reported by the archaeological assessment prepared by Geometria. Ancient grapevines that remain in one location survive as a vegetative acknowledgement of some of that history. Substantial gums (Eucalyptus sp.) that can be seen in the photograph that follows may be related to the island's former occupation*".

In terms of the physical site investigation described in section 6 of the archaeological assessment, no attention was paid to the reclaimed mudflats as the archaeological potential of this landform was regarded as low. Investigations on Te Korau Island were difficult due to dense root mass preventing probing. Given the form, location of the island at the head of the Okura River and adjacent to the Kerikeri Inlet, the recorded features, and the lack of obvious historic or modern development on the island, it was however considered that archaeological features are likely to be present and potentially significant on the 'island'.

The archaeological assessment recommends that while there are no major archaeological constraints on the subdivision of Lot 1 DP 167657 and proposed new Lots 2, 3 and 4; based on current information Te Korau Island on proposed Lot 1 is archaeologically sensitive and further assessment will be required. The archaeological assessment states "*P05/460 is recorded on the island and any ground disturbing activity such as the creation of vehicle access, building platforms and associated services and landscaping, are likely to have archaeological effects. These will require further assessment as plans for that area are progressed. S. Lowndes should consider identifying an alternative building site/access on proposed Lot 1 which avoids Te Korau, should this prove necessary*". Accordingly the subdivision plan includes two building sites on Lot 1.

Iwi consultation involved a site visit meeting with Kaire Edmonds Whānau Trust and Otahuao Burial Trust. The proposal was introduced and discussed during a site walkover. A copy of the archaeological and ecological assessments were circulated following this. **Appendix 8** includes the cultural impact assessment which expresses opposition to the causeway and the building site on Te Korau Island. Ian Mitchell, Trustee of the Kaire Edmonds Whānau Trust, and Liz Searle, consultant planner for the applicant, have discussed these concerns briefly.

In terms of the wetland area and the comments/concerns raised in the cultural impact assessment, as discussed previously this area has been assessed as currently having a very low ecological value, with habitats either highly modified exotic or severely degraded estuarine areas. A number of ecological and water quality improvements will be achieved through the subdivision within the inundated lowland area. It is therefore submitted that the proposal is unlikely to undermine the mauri of the waterways, traditional breeding ground of fisheries or traditional sources of kai moana.

The applicant acknowledges the recommendations of Geometria to manage any accidental discoveries, including the requirement to apply for an archaeological authority prior to undertaking siteworks. This would include an archaeological management process outlining the requirements and procedures for archaeological monitoring of preliminary earthworks; accidental discovery of archaeological remains; and the recording of any archaeological evidence that may be exposed during groundworks. If any sites of significance are identified, then all works will be required to cease, further consultation undertaken, and, where necessary, development would be modified or avoided altogether.

The applicant accepts that Te Korau Island is culturally, spiritually and traditionally sensitive, and recognises its heritage value and interest. In terms of future development on the 'island', the archaeological assessment does not advise against future development, recommending measures to manage any potential accidental discoveries during the course of the subdivision and development. The Trusts adopt a more rigid approach requesting that no development, earthworks, or other construction take place on Te Korau Island.

Whilst the applicant is respectful of the Trusts' concerns, as outlined below they request the opportunity for landowner/s to undertake further ground investigation work and consultation – as opposed to applying a 'blanket' development exclusion to the 'island' on the basis of the limited preliminary investigations which have been frustrated by the dense tree roots. This will not prevent development on Lot 1, with the 'inland' building site providing an alternative should it be required, i.e. should landowners prefer the 'inland' building site or if there are difficulties in obtaining an archaeological authority.

In applying for an archaeological authority from Heritage New Zealand Pouhere Taonga, this could include seeking an authority for an exploratory investigation to establish the presence or absence of an archaeological site for a specific building site. Advice would be sought from Heritage New Zealand regarding the most appropriate process. It is anticipated that any authority would require consultation with the Trusts.

In summary, In terms of future siteworks, plantings and management on Te Korau Island and in the vicinity of P05/460, this does not form part of the subdivision works. Although there are known to be archaeological remains on the 'island', the location and extent of surviving subsurface archaeological

remains on the 'island' building site has not been confirmed and will require further investigation. The applicant therefore requests that the landowner/s have the opportunity to undertake further investigation if they wish to develop the 'island' building site. The applicant volunteers to register a consent notice condition against Lot 1 advising the archaeological report's recommendations and the prerequisites for development on the 'island' building site within Lot 1, including the requirement for an archaeological authority. The 'island' building site has not been subject to geotechnical investigation and this will form part of any application required for an archaeological authority by future landowners.

7.4 The location of lot boundaries and building envelopes

Whilst the lots are irregular in shape, this is in response to the site's landscape character and the natural elements/processes on site. It also acknowledges the archaeological survey and cultural impact assessment.

As indicated previously, as per Rule 10.10.5.1.2 which limits residential development to one unit per 4 hectares of land as a permitted activity, future residential units will have at least 3,000 m² for their exclusive use surrounding the unit plus a minimum of 3.7 hectares elsewhere on the property.

The subdivision layout and building envelopes have been highly influenced by a number of distinctive landform types which are described in detail in the *'Assessment of landscape, visual, rural amenity and natural character effects'* prepared by Littoralis, dated June 2018, refer to **Appendix 2**. This includes:

- low-lying, periodically flooded terrain in the northern portion of the site which was once part of the intertidal flats of the southern Kerikeri Inlet;
- a portion of raised land near the confluence of the Okura River and Kerikeri Inlet that would once have featured as an island and which includes a proposed building site (Lot 1);
- steep flanks to the south of the low-lying, wet area and in the eastern sector of the site; and
- simpler topography and vegetative cover where building sites on each of Lots 1 to 4 is proposed.

The landscape assessment addresses the South Kerikeri Inlet Zone visual amenity assessment criteria. Detailed landscape mitigation measures and building controls are volunteered to integrate future development, as per Attachment 3 to the landscape assessment. This includes establishing a framework for future planting on the lots to guide more specific site assessments at the development stage when resource consent will be required to establish a single residential unit on each of the lots. Built heights are to be limited to 6 metres as opposed to 8 metres as permitted under the District Plan.

The engineering assessment prepared by Haigh Workman in **Appendix 4** advises that of the four development platforms investigated, they are stable with a low risk of ground instability in their present form, with the lots regarded as suitable for final low-rise residential end-use. Recommendations are made with respect to future building foundations, earthworks and retaining structures.

7.5 The mitigation of fire hazards

In terms of mitigation measures relating to fire hazards, Council's standard consent notice condition will be registered against each of the lots requiring that in conjunction with the construction of any residential unit on the lot and in addition to a potable water supply, a water collection system with

sufficient supply for firefighting purposes shall be provided by way of tank or other approved means, to be positioned so that it is safely accessible for this purpose. These provisions are to be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509 which recommends a minimum water storage capacity of 45 m^3 within 90 metres of the dwelling for firefighting supply

The nearest fire station is located at 5 Cobham Road in Kerikeri, approximately 5 kilometres from the site allowing for a relatively quick emergency response time in the unlikely event of a fire occurring. The design and standard of access proposed will accommodate emergency vehicles.

The site does not contain any tracts of significant indigenous flora or significant habitats of indigneous fauna in close proximity to the 'inland' building sites. In terms of the 'island' building site, resource consent would be required under Rule 12.4.6.1.2 of the District Plan for a residential unit to be located within 20 metres of the dripline of adjacent vegetation. Building design and the fire retardant qualities of adjacent vegetation/supplementary plantings will be taken into consideration through this process. Of note, Kerikeri Inlet, Okura Stream and the wetland area will impede the spread of fire to/from any development on the 'island' site.

Northland Regional Council has imposed backyard burning rules in Kerikeri through the Proposed Regional Plan. Resource consent is required within the Kerikeri 'airshed' for burning rubbish or vegetation 100 metres upwind or 50 metres in any other direction of a sensitive area, such as a residential unit. The site is not included within the airshed which includes urban Kerikeri and extends up to Okura River.

Overall, provided that good fire risk safety practices are applied to building construction and site management, subdividing the site as proposed is unlikely to heighten the risk of fire significantly.

7.6 Natural and other hazards

Haigh Workman have identified flooding as the primary hazard potentially applicable to the site.

Far North Potential Flooding Map FL3 shows the site as susceptible to flooding. Northland Regional Council includes the majority of the site within a '*coastal hazard flood 0*' zone (CHFZ 0 zone), this is shown as excluding the raised 'island' within Lot 1. The CHFZ 0 area represents a current day storm surge event with a 1% (1 in 100) chance of happening in any one year. The maps also show the potential extent of coastal erosion and flood hazard from storm surge over 50 years (zone 1), and 100 years (zone 2) into the future, none of these zones are shown as affecting the site. The zones are based upon predicted sea level rise scenarios. **Appendices 9 and 10** include the mapping notations.

Haigh Workman have investigated a house site on each of the lots, confirming that the building sites are located at an elevation at least 6 metres One Tree Point datum, at least 3 metres above any coastal flood level, and are therefore not subject to natural hazards.

7.7 Site servicing

All utility services will be underground.

Water supply

Water supply for each of the lots will be from stored rainwater collected from building roofs. Section 11 of the engineering report prepared by Haigh Workman recommends that the system be fitted with a first flush device or filtration to comply with drinking water standards (refer to **Appendix 4**). A typical water supply is expected to comprise two 25,000 litre water tanks, to provide an adequate supply of water for drinking water and firefighting. This will be addressed by Council's standard consent notice condition that will be registered against the titles, as per the wording outlined previously in section 7.5.

Stormwater management

Rule 10.10.5.1.6 of the District Plan relating to stormwater management limits the maximum proportion or amount of the gross site area of each of the lots that may be covered by buildings and other impermeable surfaces to 10% or 600 m² whichever is the lesser. Section 2.4 above confirms that the impermeable surface areas on Lot 1 DP 67657 will increase to approximately 3,391 m² or 1.92% of the title area, and the surface coverage within Lot 2 DP 210733 will increase to approximately 2,735 m² or 1.35% of that title area.

The rule does not consider lot sizes and therefore the 600 m² control is particularly onerous for large lots and rear sites requiring rights of way, as is the case for the current subdivision. Given the lengths of access required to service the subdivision it would be reasonable to expect that in providing all-weather access, there would be some difficulty in the applicant complying with the permitted baseline threshold for stormwater management. Whilst the level of impermeable surfaces proposed exceeds 600 m² for each of the titles and this does not include any provision for built development, overall it equates to less than 2% for the current title areas. Future built development on the lots will be addressed separately and is unlikely to increase the percentage of coverage significantly. Haigh Workman has anticipated the levels associated with future built development in their assessment.

Note: Under the current rules relating to visual amenity, resource consent will be required to establish a residential unit greater than 50 m² or a non-habitable building greater than 100 m² on any of the lots. Additional consenting requirements under the rule relating to stormwater management for built development will be addressed through these applications. Smaller scale built development that does not trigger resource consent under the visual amenity rule will also need to be addressed.

Section 10 of the engineering report prepared by Haigh Workman addresses stormwater management and outlines the proposed stormwater system (refer to **Appendix 4**). It consists of an armoured swale drain following the internal accessway and an existing interception drain that will continue along the eastern boundary of proposed Lots 1, 2 and 4.

The engineering report addresses the assessment criteria included in section 13.10.4 of the District Plan. Whilst the criteria outlined in section 11.3 of the District Plan (which are listed in section 4.5 above) differ from section 13.10.4, these matters have been taken into consideration by the engineers where relevant.

The engineering assessment concludes that the effects of the impermeable surface areas can be mitigated with suitable design of culverts and overland flowpaths. Stormwater detention will not be required as the site flows directly to a tidal wetland. It is anticipated that specific engineering design of the stormwater system would be a requirement of any resource consent issuing for the subdivision, with the design to be consistent with Haigh Workman's recommendations.

In summary, the site can be developed to the proposed level of impermeable surface coverage without detrimental effect on neighbouring sites or the receiving environment. Any environmental effects in this regard are therefore considered no more than minor.

Sanitary sewage disposal

Section 11 of the engineering report prepared by Haigh Workman addresses onsite effluent disposal, outlining the permitted activity thresholds under the Operative Regional Water and Soil Plan, the Proposed Regional Plan and the Far North District Plan (refer to **Appendix 4**). The report demonstrates that future on-site wastewater disposal on each lot can comply with both the operative and proposed wastewater discharge rules, within no off-site effects likely to be detectable and low/negligible risk of detectable cumulative effects, provided that their recommendations are followed. In terms of the 'island', there appears to be adequate land available for buildings and wastewater disposal fields clear of the required setback distances.

Energy supply and telecommunications

The applicant has elected to rely upon wireless telephone services for the lots. Whilst Top Energy has not raised any issues regarding electricity supply, the applicant wishes to defer reticulating new connections to the boundary of each lot until after titles have issued. Therefore a consent notice condition is volunteered advising that underground electricity and telecommunication services have not been reticulated to the lots as part of the rural subdivision. The notice will be amended as required after any services have been established.

Ducting and a draw-wire will be provided along the edge of the causeway to facilitate the installation of services to the 'island' if required in the future.

Summary

Overall, each lot is capable of being serviced on-site for water supply; sewage and stormwater collection, treatment and disposal; energy supply and telecommunications.

7.8 *Easements for any purpose*

The subdivision plan in Appendix 1 shows the easements required to establish access and services to the lots.

7.9 *Access to reserves and waterways*

As shown on the subdivision plan in **Appendix 1**, each of the lots abuts an area of Crown land reserve which is shown on the title plan as being 20 metres wide. The reserve includes a stopbank with flood-gated culverts and mangroves. Whilst physical access over the full length of the reserve is restricted, it is considered unlikely that volunteering any additional land to vest as reserve would further enhance public access and/or protect any conservation values.

Part of the access on Lot 4 that is adjacent to right of way L falls within the adjacent reserve that is Section 41 BLK XI. This follows the historic alignment of the track which is understood to have been formed well over 20 years ago. The current alignment avoids a rocky outcrop and significant works would otherwise be required to realign the carriageway to fall within the proposed easement. Despite numerous requests to Land Information New Zealand and Council staff since February 2017, we have been unable to verify management of the reserve. The applicant is aware that the matter is outstanding and anticipates that any consent issuing would likely require the matter to be rectified prior to titles issuing. A condition can be imposed to this effect.

The applicant's preferred option is to seek consent for the historic encroachment as opposed to undertaking significant works to realign the access and bring it closer to the curtilage area associated with the adjacent property, being Lot 1 DP 210733.

7.10 Land use compatibility

Given the surrounding pattern of lifestyle development and pastoral use, no issues have been identified with respect to land use compatibility.

7.11 Summary

Based upon the above and the assessments/recommendations in the attached reports which form part of the application, in our opinion any adverse effects of the proposal upon the environment are considered to be no more than minor and can be addressed through the mitigation measures offered by the applicant. No special circumstances have been identified to warrant full notification. Therefore, as per Steps 2 and 4 of Section 95A of the Act, we consider that there is no requirement for full notification.

8. AFFECTED PERSONS

8.1 Section 5.2 above identifies those properties which are regarded as adjacent to the site, being three properties sharing a common boundary with the site and rights of ways. The above discussion relating to access, earthworks, fire hazards, site servicing and land use compatibility are regarded as relevant to the adjacent sites. For the reasons discussed, any adverse effects upon these properties relating to these matters is considered less than minor.

8.2 The primary consideration in terms of the effects upon adjacent properties therefore relates to visual amenity and privacy. This matter has been addressed in the landscape assessment prepared by Littoralis in **Appendix 2** which concludes *"that the landscape, natural character and rural character of the proposal would be generally be less than minor, provided that the development occurs in accordance with the parameters described in this report. Visual effects are predicted to be equally subdued, including upon Lot 2 DP114410, but with the exception of those experienced from the home found immediately to the south east of the Site (Lot 1, DP 109734). For that property, initial impacts are anticipated to be more than minor but to subside to being minor as the development moves through its early years of maturity"*.

8.3 In summary, based upon the landscape assessment, with the exception of Lot 1 DP 109734, any effects upon adjacent properties are regarded as less than minor. Any effects upon Lot 1 DP 109734 have been assessed as subsiding to minor and they are identified as potentially affected.

9. OTHER MATTERS

9.1 No other matters have been identified as requiring consideration.

10. NEW ZEALAND COASTAL POLICY STATEMENT 2010 (NZCPS)

10.1 The NZCPS is of primary relevance to the proposal due to its location within the coastal environment. One of the objectives of the Statement is to safeguard the integrity, form, functioning, and resilience of the coastal environment and sustain its ecosystems. The Statement seeks to preserve the natural character of the coastal environment and protect natural features and landscapes. It recognises however that the protection of values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits.

10.2 The NZCPS encourages development that maintains the character of the existing built environment, and where development resulting in change in character would be acceptable. In terms of preserving natural character, the NZCPS also places emphasis upon avoiding significant adverse effects and preserving natural character and protecting it from inappropriate subdivision, use and development.

10.3 The Statement addresses the discharge of contaminants into the marine environment; including the sensitivity of the receiving environment, the nature of the contaminants to be discharged and the capacity of the receiving environment to assimilate the contaminants. Subdivision should not result in a significant increase in sedimentation in the coastal marine area or other coastal water. The Statement gives priority to requiring stock to be excluded from the coastal marine area, adjoining intertidal areas and other water bodies and riparian margins in the coastal environment.

10.4 The NZCPS also seeks to ensure that coastal hazard risks are managed by locating new development away from such areas.

10.5 Emphasis is also placed upon recognising and protecting characteristics of the coastal environment that are of special value to tangata whenua.

10.6 Based upon the above assessment and attached reports, and the mitigation measures volunteered by the applicant, the development is considered to meet the intent of the NZCPS.

11. OBJECTIVES AND POLICIES

11.1 Northland Regional Policy Statement (RPS)

The RPS includes a number of provisions that are of particular relevance to the current proposal, being:

Issues *2.1 Fresh and coastal water – Key pressures relating to the proposal are identified as:*

Elevated levels of fine sediments, nutrients, and faecal pathogens in freshwater bodies, estuaries, and harbours, mainly from diffuse run-off and leaching from land used for primary production, eroding beds and banks of streams and rivers, historical human induced erosion, and in some areas discharges of untreated and poorly treated wastewater and stormwater.

Drainage and diversion of wetlands.

2.2 Indigenous ecosystems and biodiversity – Key pressures relating to the proposal are identified as:

Elevated levels of fine sediments, nutrients, and faecal pathogens in freshwater bodies, estuaries, and harbours, mainly from diffuse run-off and leaching from land use for primary production, eroding beds and banks of streams and rivers, historical human induced erosion, and in some areas discharges of untreated and poorly treated wastewater and stormwater.

Modification and loss of wetlands, including by drainage and diversion of water within and adjoining wetlands and as a result of stock access.

2.6 Issues of significance to tangata whenua – natural and physical resources – Key pressures relating to the proposal are identified as:

The decline of the mauri of natural resources (in particular water and land).

2.7 Natural hazards – Key pressures relating to the proposal are identified as:

Natural hazards, particularly flooding and coastal erosion and inundation, have the potential to create significant risk to human life, property, community and economic wellbeing in Northland. This risk is projected to increase as a result of a changing climate.

2.7 Natural character, features / landscapes and historic heritage– Key pressures relating to the proposal are identified as:

The impacts of inappropriate subdivision, use and development. The primary activities of concern are built development, earthworks, significant water extractions / discharges to water, vegetation clearance and coastal structures.

The above issues are addressed in Part 3 'Objectives', and Parts 4 to 8 'Policies and methods' of the RPS. These matters have been addressed previously in the above assessment, where it has been concluded that the associated effects would be no more than minor. On the basis of this assessment, the application is regarded as achieving the environmental outcomes anticipated by the RPS, and its objectives and policies.

The application to the regional council for the causeway prepared by Mortimer Consulting provides further assessment of the proposal against the RPS and Proposed Regional Plan, refer to **Appendix 5**. The regional council concluded that their granting of the resource consent was consistent with the objectives and policies contained within the Regional Water and Soil Plan and the Proposed Regional Plan. The granting of the consent was not regarded as contrary to the objectives and policies contained within Te Rūnanga o Ngāti Rehia's iwi management plan and there were no identified customary activities which would be put at risk by the causeway.

11.2 Far North District Plan (FNDP)

District Plan context – The South Kerikeri Inlet zone is located along the southern edge of the Kerikeri Inlet. Whilst predominantly rolling pastoral country, the landform also includes low-lying backshore flats, coastal flanks and areas of very steep and unstable terrain. The Okura River to the west and the Waitangi Wetland to the east form natural boundaries to the zone. Because of its undulating nature, the entire area is not visible from any one location. The more elevated portions of the land which are visible from a wide area and those slopes facing the Inlet are particularly sensitive. Other areas, such as the site, are more introspective and contained. The natural character, open space and rural nature of the area are important to the visual context of the wider area.

Sections 10.10.3 and 10.10.4 of the District Plan include the objectives and policies relating to the South Kerikeri Inlet zone. A copy of these in attached in **Appendix 11**. Of particular relevance to the proposal is policy 10.10.4.1 –

> *Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the coastal-rural character of the zone in regards to Section 6 matters, and shall avoid adverse effects as far as practicable by using techniques including:*
>
> *(a) clustering and grouping development (including new buildings) within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns and on open space and rural amenity values, including by clustering and grouping development (including new buildings) outside the visually sensitive areas of the South Kerikeri Inlet Zone as defined on Map 84;*
>
> *(c) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;*

Based upon the matters discussed previously, the proposal is considered consistent with the District Plan objectives and policies relating to the South Kerikeri Inlet zone.

The subdivision is a restricted discretionary activity under the rules applying through Chapter 13 to subdivision in the South Kerikeri Inlet zone. As previously discussed, this is the most permissive density anticipated by the District Plan subdivision rules applying in the zone and provides an indication of the levels of development likely to be considered acceptable within the zone. For non-sensitive areas, these align with Rule 10.10.5.1.2 which limits residential development to one unit per 4 hectares of land as a permitted activity. Taking this into consideration and the matters discussed previously in the assessment of effects, the proposal is considered to achieve consistency with the objectives and policies relating to subdivision. **Appendix 11** includes a copy of the objectives and policies relating to subdivision.

Chapter 12.7 of the District Plan addresses lakes, rivers, wetlands and the coastline, requiring land use consent to construct the causeway on the bed of an indigenous wetland. The objectives and policies seek to protect the natural, cultural, heritage and landscape values and to promote the protection of the amenity and spiritual values associated with indigenous wetlands and the coastal environment, from the adverse effects of land use activities, through proactive restoration/rehabilitation/revegetation. As discussed previously, a number of ecological and water quality improvements will be achieved through the subdivision within the inundated lowland area. The landscape assessment in Appendix 2 concludes that *"The partial spatial and topographic separation of the Site from the Inlet water body and the sporadic pockets of development lining the Inlet shores,*

combined with controls proposed to apply to the development, significantly suppress any potential effect upon natural character to a point that is considered to be at a low level". The current proposal is therefore considered consistent with all of the relevant provisions in Chapter 12.7.

On balance, it is therefore reasonable to conclude that the proposal is consistent with the intent of the District Plan's objectives and policies relating to the zone, subdivision, coastal environment and wetlands.

12. PART 2 OF THE ACT

12.1 Part 2 of the Resource Management Act sets out the purpose and principles of the Act, including matters of national importance. The purpose of the Act as outlined in section 5(1) is to promote the sustainable management of natural and physical resources. The proposal will enable the lot owners to provide for their needs without compromising those of future generations, whilst safeguarding the life-supporting capacity of air, water, soil and ecosystems and avoiding, remedying, or mitigating any adverse effects of activities on the environment. The proposal will establish positive environmental effects in terms of enhancing the wetland area on site. Therefore the development is regarded as achieving the purpose of the Act in that any associated effects are considered to be no more than minor.

12.2 Section 6 of the Act lists eight matters of national importance that must be recognised and provided for in the decision on this application. Those matters of relevance to the current proposal are:

- the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
- the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
- the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:
- the protection of historic heritage from inappropriate subdivision, use, and development:
- the management of significant risks from natural hazards.

As discussed previously, the proposal recognises and provides for these matters.

12.3 In terms of section 7, this section of the Act lists eleven matters that Council must have particular regard to. The primary considerations in this instance relate to the efficient use and development of natural and physical resources, the maintenance and enhancement of amenity values, the intrinsic value of ecosystems, the maintenance and enhancement of the quality of the environment, and the effects of climate change. Based upon the previous assessment, the proposal is unlikely to have any significant impact in terms of these matters.

12.4 Section 8 of the Act requires that all persons exercising functions and powers under the Act take into account the principles of the Treaty of Waitangi in managing the use, development and protection of natural and physical resources. Provided that the measures outlined in section 7.3 previously are

implemented, which require further investigation and provide two options for development on Lot 1, it is considered unlikely that the proposal would have an adverse effect upon the relationship of Maori and their culture and traditions with their ancestral land, water, sites, waahi tapu, and other taonga, with the proposal satisfying section 8 in that it is unlikely to undermine the principles of the Treaty of Waitangi.

13. CONCLUSION

13.1 The above assessment concludes that any actual and potential effects on the environment of allowing the subdivision will be no more than minor and can be readily avoided, remedied or mitigated by conditions of consent.

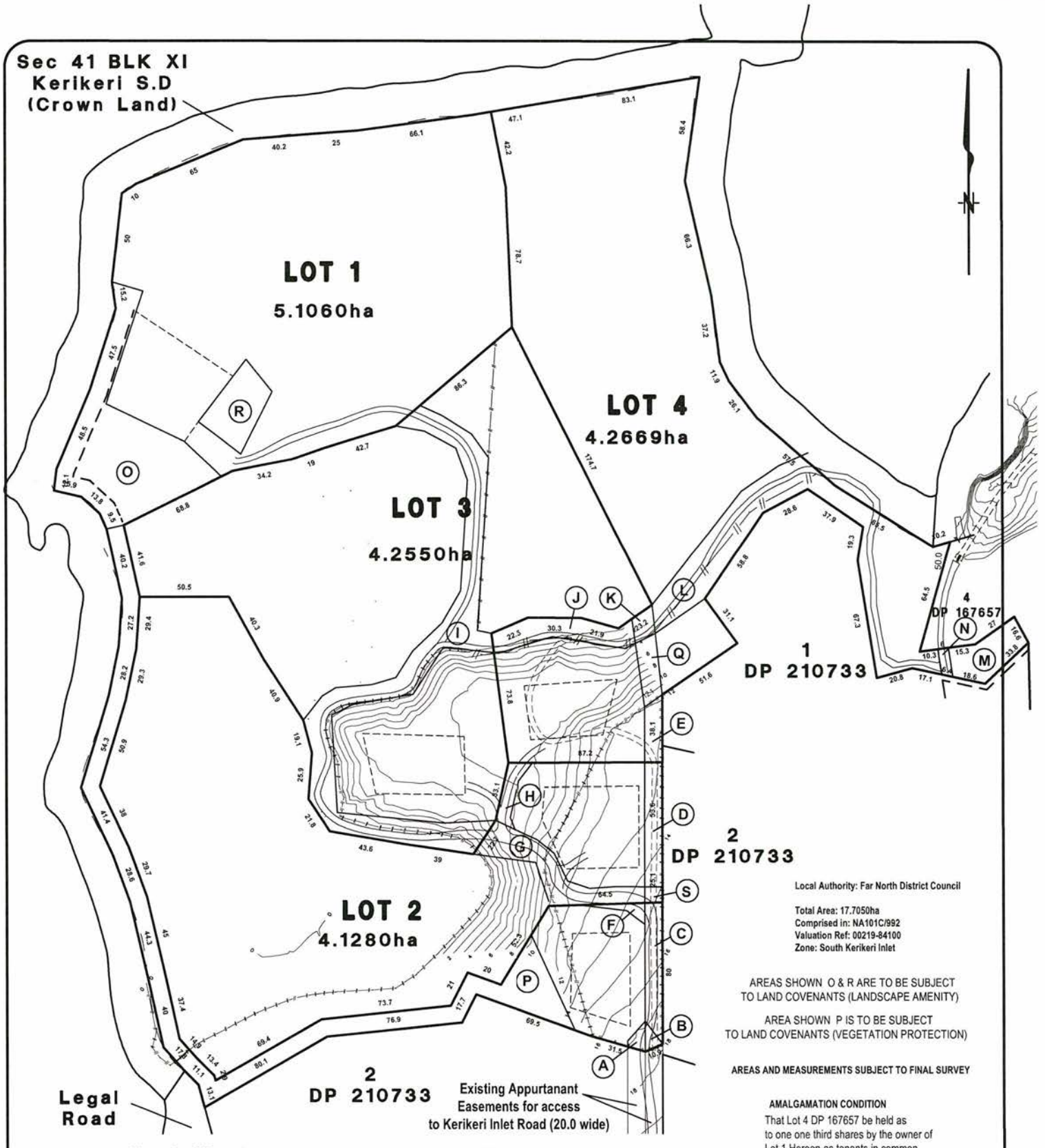
13.2 For the reasons outlined in this report, the proposal is considered to be consistent with the objectives and policies of the New Zealand Coastal Policy Statement, the Regional Policy Statement, and the Far North District Plan, as well as the Act's purpose and principles.

13.3 As addressed in section 5.2, special circumstances exist through the District Plan requiring limited notification to the property owners within the South Kerikeri Inlet zone and the Department of Conservation. Council may also determine Kaire Edmonds Whānau Trust and the Otahuao Burial Trust to be affected parties.

APPENDIX 1: Plans –

'*Proposed subdivision of Lot 1 DP 167657*' prepared by Williams and King Surveyors, reference 21916, drawn June 2017 and revised 15 June 2018

'*Proposed access and upgrade over Lot 1 DP 167657*' prepared by Williams and King Surveyors, reference 21916, dated February 2018



Local Authority: Far North District Council

Total Area: 17.7050ha
Comprised in: NA101C/992
Valuation Ref: 00219-84100
Zone: South Kerikeri Inlet

AREAS SHOWN O & R ARE TO BE SUBJECT TO LAND COVENANTS (LANDSCAPE AMENITY)

AREA SHOWN P IS TO BE SUBJECT TO LAND COVENANTS (VEGETATION PROTECTION)

AREAS AND MEASUREMENTS SUBJECT TO FINAL SURVEY

AMALGAMATION CONDITION

That Lot 4 DP 167657 be held as to one one third shares by the owner of Lot 1 Hereon as tenants in common in the said shares and that a singe computer register be issued in accordance therewith.
See [request number]

Memorandum of Easements

Purpose	Shown	Servient Tenement	Dominant Tenement
Right of Way Right to Convey Electricity, Computer Media & Telecommunications	A, B, C & F	Lot 1 Hereon	Lots 2 - 4 Hereon
	S & G	Lot 2 Hereon	Lot 1 & 3 - 4 Hereon
	H	Lot 2 Hereon	Lots 3 & 4 Hereon
	I	Lot 3 Hereon	Lot 1 Hereon
Right of Way	J, K, L, M & N	Lot 4 Hereon	Lot 1 Hereon
Right to Drain Water	D	Lot 2 Hereon	Lot 1 Hereon
	E, Q, &, K	Lot 4 Hereon	Lots 1 - 2 Hereon
	G	Lot 2 Hereon	Lots 1 & 4 Hereon
	H	Lot 2 Hereon	Lot 4 Hereon

Existing Easements

Purpose	Shown	Servient Tenement	Document:
Right of Way Right to Convey Electricity & Telecommunications	A	Lot 1 Hereon	D587086.2
	B & C	Lot 1 Hereon	C871824.10
	S & D	Lot 2 Hereon	C871824.10
	E	Lot 4 Hereon	C871824.10
Right of Way	N	Lot 4 Hereon	B442108.5

Existing Easements in Gross

Purpose	Shown	Servient Tenement	Document:
Telecommunciations	N	Lot 4 Hereon	c874249.1

0 20 40 60 80 100 120 140 160m

Prepared for: Nags Head Horse Hotel Limited

WILLIAMS AND KING
Registered Land Surveyors, Planners & Land Development Consultants
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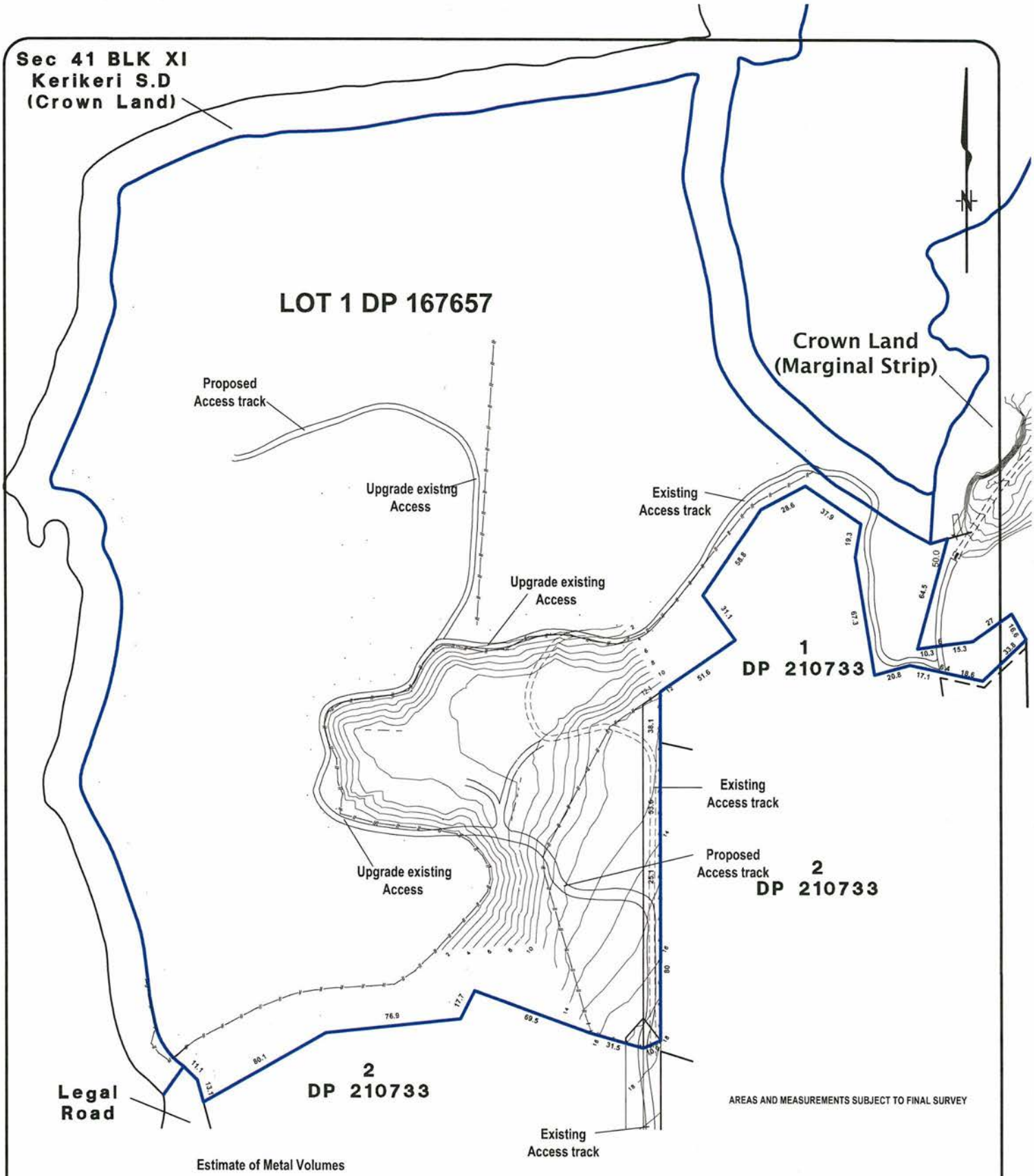
27 Hobson Ave
PO Box 937 Kerikeri

PROPOSED SUBDIVISION OF LOT 1 DP 167657

	Name	Date
Survey		
Design		
Drawn	CW	June 2017
Rev		June 15 2017

ORIGINAL SCALE 1:2000 SHEET SIZE A3

21916



Estimate of Metal Volumes

Appellation	Comment	Metal Volume	Cut/Fill Volume	Total
Lot 1 DP 167657	Upgrade existing access & Proposed access	1400m³	1460m³	2490m³
Lot 2 DP 210733		100m³	270m³	370m³

0 20 40 60 80 100 120 140 160m

Prepared for: Nags Head Horse Hotel Limited

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Ph: (09) 407 6030
Fax: (09) 407 6032
Email: kerikeri@saps.co.nz
27 Hobson Ave
PO Box 937 Kerikeri

Proposed access & upgrade over Lot 1 DP 167657 and Lot 2 DP 210733

	Name	Date
Survey		
Design		
Drawn	CW	Feb 2018
Rev		2018

ORIGINAL SCALE 1:2000 SHEET SIZE A3

21916

APPENDIX 2: Certificates of title

COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**552855**
Land Registration District	**North Auckland**
Date Issued	08 March 2013

Prior References
NA101C/993

Estate	Fee Simple
Area	14.3750 hectares more or less
Legal Description	Lot 2 Deposited Plan 442820

Proprietors
Nags Head Horse Hotel Limited

Estate	Fee Simple - 1/3 share
Area	5.2350 hectares more or less
Legal Description	Lot 4 Deposited Plan 167657

Proprietors
Nags Head Horse Hotel Limited

Interests

Saving and excepting from the land formerly described Section 42 Block XI Kerikeri Survey District all minerals within the meaning of the Land Act 1924 on or under the land and reserving always to Her Majesty the Queen and all persons lawfully entitled to work the said minerals a right of ingress egress and regress over the said land

Subject to a right of way over part Lot 4 DP 167657 marked H on DP 167657 and over part Lot 2 DP 442820 marked A on DP 442820 specified in Easement Certificate B442108.5 - 30.7.1985 at 2:08 pm

The easements specified in Easement Certificate B442108.5 are subject to Section 309 (1) (a) Local Government Act 1974

Appurtenant hereto is an electricity right specified in Easement Certificate B578021.4 - 8.9.1986 at 1:32 pm

Appurtenant hereto is a right of way and telecommunications and electricity rights specified in Easement Certificate C871824.10 - 31.7.1995 at 2.34 pm

The easements specified in Easement Certificate C871824.10 are subject to Section 243 (a) Resource Management Act 1991

Subject to a telecommunications right (in gross) over part Lot 4 DP 167657 marked H on DP 167657 and over part Lot 2 DP 442820 marked A on DP 442820 in favour of Telecom New Zealand Limited created by Transfer C874249.1 - 4.8.1995 at 2.55 pm

D088754.3 Deed of Land Covenant - 20.1.1997 at 1.26 pm

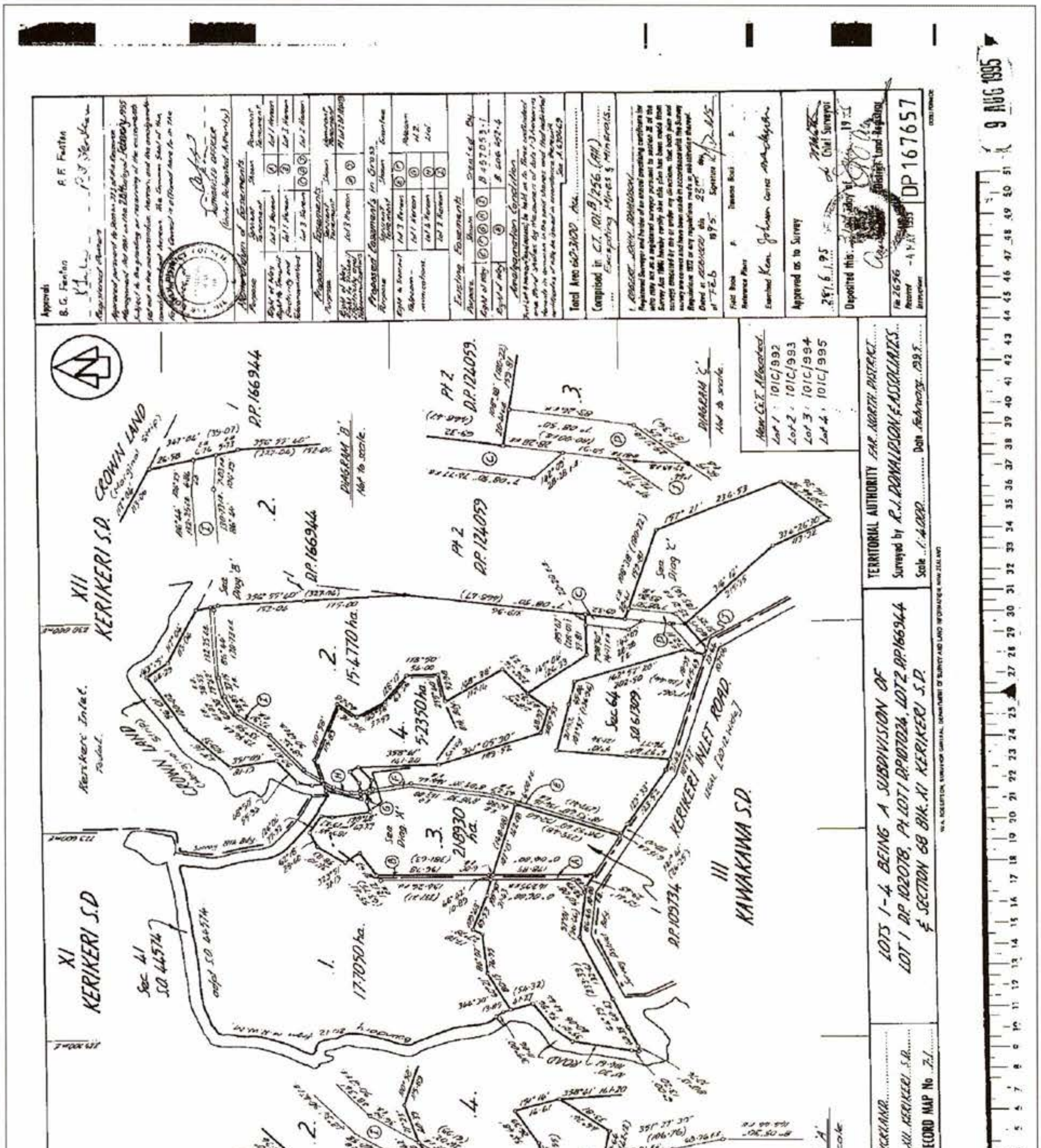
D088754.4 Variation of Easement Certificate C871824.10 - 20.1.1997 at 1.26 pm

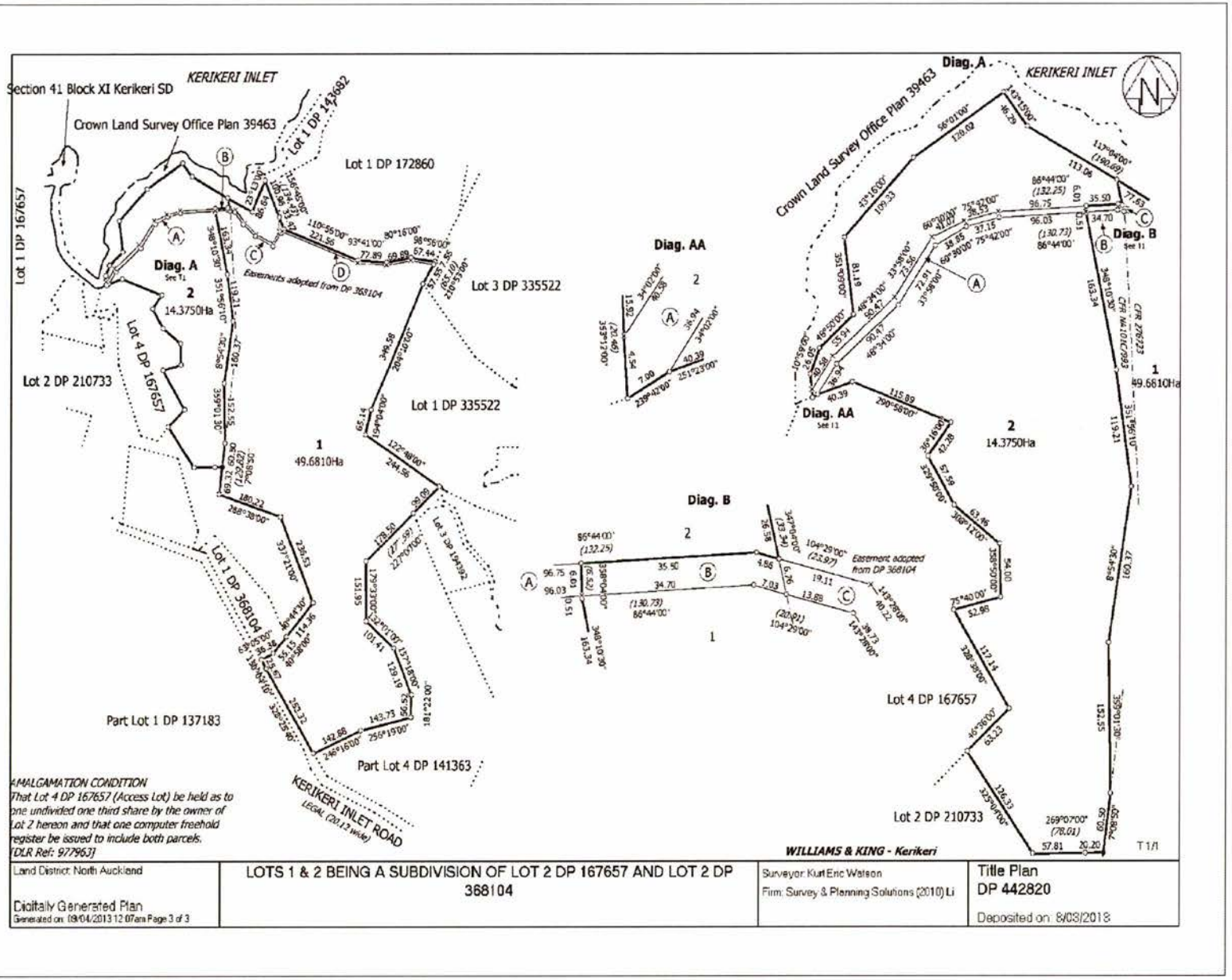
Appurtenant hereto is a right of way and an electricity and telecommunications right created by Transfer D587086.3 - 14.3.2001 at 11.04 am

Land Covenant in Transfer D587086.3 - 14.3.2001 at 11.04 am

9315062.1 Surrender of Land Covenant D088754.3 as to the benefit of Part Lot 1 DP 442820 formerly contained in CT NA101C/993 - 8.3.2013 at 11:39 am

Subject to Section 241(2) Resource Management Act 1991 (affects DP 442820)


DP 167657
XI KERIKERI S.D
XII KERIKERI S.D.
III KAWAKAWA S.D.
CROWN LAND
KERIKERI INLET ROAD
9 AUG 1995


KERIKERI INLET
Section 41 Block XI Kerikeri SD
Crown Land Survey Office Plan 39463
Lot 1 DP 143692
Lot 1 DP 172860
Lot 1 DP 167657
Diag. A
See T1
2
14.3750Ha
Lot 4 DP 167657
Lot 2 DP 210733
Lot 3 DP 335522
Lot 1 DP 335522
1
49.6810Ha
Lot 1 DP 368104
Part Lot 1 DP 137183
Part Lot 4 DP 141363
KERIKERI INLET ROAD
LEGAL (20.12 wide)
Easements adopted from DP 368104
Diag. AA
See 11
Diag. B
See 11
AMALGAMATION CONDITION
That Lot 4 DP 167657 (Access Lot) be held as to one undivided one third share by the owner of Lot 2 hereon and that one computer freehold register be issued to include both parcels.
[DLR Ref: 977963]
WILLIAMS & KING - Kerikeri
T1/1
Land District: North Auckland
Digitally Generated Plan
Generated on: 08/04/2013 12:07am Page 3 of 3
LOTS 1 & 2 BEING A SUBDIVISION OF LOT 2 DP 167657 AND LOT 2 DP 368104
Surveyor: Kurt Eric Watson
Firm: Survey & Planning Solutions (2010) Li
Title Plan
DP 442820
Deposited on: 8/03/2018

D088754.3 COV

DEED CREATING LAND COVENANTS

THIS DEED made the 28th day of June 1996

BETWEEN **BRUCE GORDON FENTON** of Auckland, Manager and **PAMELA FRANCES FENTON**, His Wife ("the first registered proprietors") of the one part;

A N D **BRUCE GORDON FENTON** of Auckland, Manager and **PAMELA FRANCES FENTON**, His Wife ("the second registered proprietors") of the other part.

WHEREAS:

A. The first registered proprietors are registered as proprietors of estates in fee simple in all those pieces of land described in the schedule hereto.

B. The first registered proprietors have entered into an Agreement for Sale and Purchase for the sale of part of the land described in the Schedule hereto.

C. The first registered proprietors have agreed with the purchaser that they will for the benefit of the registered proprietors from time to time of each of the pieces of land described in the schedule restrict and regulate the activities that may be carried on at any time on any part of Lot 4 on Deposited Plan 167657.

D. The expression "the Registered Proprietors" shall mean the registered proprietors or any of them as appropriate of all or any parts of Lots 1, 2 and 3 on Deposited Plan 169657.

NOW THEREFORE THIS DEED WITNESSETH that the first registered proprietors and the second registered proprietors do hereby covenant with and agree with the intention of binding themselves and any subsequent Registered Proprietors of any parts of Lots 1, 2 and 3 on Deposited Plan 169657 for the benefit of the Registered Proprietors that the following covenants, conditions and restrictions shall apply in respect of Lot 4 on Deposited Plan 167657:

A. The Registered Proprietors will not at any time suffer or permit any act, matter or thing which does or may alter the natural boundaries of the lake situated on Lot 4 Deposited Plan 167657 ("the lake").

B. The Registered Proprietors will not at any time allow the lake to expand beyond the boundary shown as Lot 4 on Deposited Plan 167657. Should any such expansion of the lake occur at any time over the boundary between Lot 4 Deposited Plan 167657 and the other lots on Deposited Plan 167657 the Registered Proprietor of the affected lot in each case will restore the lake to within the boundaries of Lot 4 Deposited Plan 167657 at that Registered Proprietor's expense unless such alteration has been caused by the actions of one or more of the other Registered Proprietors in which case that Registered Proprietor or those Registered Proprietors shall be responsible for such restoration.

C. The Registered Proprietors will not at any time use the lake for any purpose other than passive recreation purposes and in particular will not at any time allow or permit the lake to be used for power boating or water skiing or any other activity likely to cause an annoyance to the other Registered Proprietors.

D. The Registered Proprietors will not at any time shoot or trap wildlife on or into Lot 4 on Deposited Plan 167657 nor permit any

such activity without the prior written approval of the other Registered Proprietors.

E. The Registered Proprietors will not at any time take nor permit the taking of water from the lake for any purpose other than reasonable domestic needs or the reasonable needs of animals for drinking water (subject to the provisions of the Resource Management Act 1991 or any Act in substitution therefor) to be taken from one point only on the lake for each of Lots 1, 2 and 3.

Such water use shall be restricted in quantity to a maximum of 20,000 litres for each of Lots 1, 2 and 3 per 24 hour period (as measured by restrictor valve to be installed and maintained by the Registered Proprietors) or such lesser daily quantity or such greater or lesser daily quantity as may be agreed taking into account the management of the lake and in particular in relation to reductions adverse conditions such as drought and the potentially adverse affect on the lake.

F. The Registered Proprietors will not at any time erect or permit to be erected on Lot 4 on Deposited Plan 167657 any structure whether temporary or otherwise other than:

(a) One pumphouse for each of Lots 1, 2 and 3 to enable the taking of water for the purposes of Covenant E above.

(b) One jetty for each of Lots 1, 2 and 3 on the lake for the sole purpose of servicing one water intake point per Lot (subject to prior compliance with the provisions of the Resource Management Act 1991 or any Act in substitution therefor governing lake beds). Any such jetty will be of a size and type of construction consented to by all of the Registered

Proprietors such consent not to be unreasonably or arbitrarily withheld.

(c) A conduit for the transmitting of electricity or other fuel to the pumphouse from each Lot by the shortest practicable route.

(d) Each Registered Proprietor will not at any time use nor permit to be used any pumphouse erected by and for the purposes of the Registered Proprietors of any other Lot.

G. The management and supervision of Lot 4 shall be carried out by a committee ("the Management Committee") comprising a representative nominated by the Registered Proprietor(s) of each Lot. If there is more than one Registered Proprietor of each of Lots 1, 2 and 3 election of a representative to the Management Committee for that Lot shall be by a majority of the Registered Proprietors for that Lot with each of such Registered Proprietors having one vote and in the event of equality of votes the majority vote shall be determined by reference to the respective areas owned by each of the Registered Proprietors of such Lot. In the absence of agreement otherwise, the costs of any works or maintenance decided upon by the Management Committee shall be spread evenly between Lots 1, 2 and 3. The Management Committee shall also have the power to implement and maintain terms and conditions of easements affecting Lot 4. Decisions of the Management Committee shall be by basis of majority decision unless the decision involves either expenditure of more than $1,000.00 per Lot (increased by any Consumer Price All Groups index or other agreed or replacement measure of inflation commencing with a base point of 31 March 1996) or any decision which permanently affects the use or enjoyment of Lot 4 in relation

to any one or more of the Registered Proprietors in which case such decision shall be unanimous.

Any decision by the Management Committee involving demonstrable benefit to all or part of any one or two out of the three Lots shall be borne solely by the Registered Proprietors of the Lot or Lots receiving such demonstrable benefit.

H. If there is any dispute between the Registered Proprietors as to the management or supervision of Lot 4 the Registered Proprietors shall attempt to mediate a solution to the issue in dispute and in the event of failure to reach a mediated settlement any Registered Proprietor may refer the matter in dispute to an arbitrator to be appointed for the purpose by agreement between the parties or failing agreement to an arbitrator nominated by the President for the time being of the Auckland District Law Society and the arbitration shall otherwise be conducted in accordance with the Arbitration Act 1908, any amendments thereto, or reenactment thereof.

IN WITNESS WHEREOF these presents have been executed the day and year first above written.

SIGNED by BRUCE GORDON FENTON and PAMELA FRANCES FENTON as the first registered proprietors in the presence of:-

) Bruce Gordon Fenton
) and Pamela Frances Fenton
) by their Attorney Rhonda
) Margot Graham

JULIE F VIDOVICH
LEGAL EXECUTIVE
AUCKLAND

SIGNED by BRUCE GORDON FENTON and PAMELA FRANCES FENTON as the second registered proprietors in the presence of:-

) Bruce Gordon Fenton and
) Pamela Frances Fenton by
) their Attorney Rhonda Margot
) Graham

JULIE F VIDOVICH
LEGAL EXECUTIVE
AUCKLAND

SCHEDULE

1. 18.3970 hectares more or less being Lot 1 on Deposited Plan 167657 together with an undivided one-third share in 5.2350 hectares more or less being Lot 4 Deposited Plan 167657 All Certificate of Title 101C/992.

2. 15.4770 hectares more or less being Lot 2 on Deposited Plan 167657 together with an undivided one-third share in 5.2350 hectares more or less being Lot 4 Deposited Plan 167657 All Certificate of Title 101C/993.

3. 21.8930 hectares more or less being Lot 3 on Deposited Plan 167657 together with an undivided one-third share in 5.2350 hectares more or less being Lot 4 Deposited Plan 167657 All Certificate of Title 101C/994.

CERTIFICATE OF NON-REVOCATION

I, **RHONDA MARGOT GRAHAM** of Auckland, Solicitor

HEREBY CERTIFY:-

1. THAT by Deed dated the 29th day of March 1995 (a copy of which Deed is deposited in the Land Transfer Office at Auckland under Number) **PAMELA FRANCES FENTON** of Kerikeri, Married Woman appointed me her Attorney on the terms and subject to the conditions set out in the said Deed.

2. THAT at the date hereof I have not received any notice or information of the revocation of that appointment by the death of the said **PAMELA FRANCES FENTON** or otherwise.

SIGNED at Auckland this 28 day of June 1996

.....

CERTIFICATE OF NON-REVOCATION

I, **RHONDA MARGOT GRAHAM** of Auckland, Solicitor

HEREBY CERTIFY:-

1. THAT by Deed dated the 29th day of March 1995 (a copy of which Deed is deposited in the Land Transfer Office at Auckland under Number) **BRUCE GORDON FENTON** of Kerikeri, Company Director appointed me his Attorney on the terms and subject to the conditions set out in the said Deed.

2. THAT at the date hereof I have not received any notice or information of the revocation of that appointment by the death of the said **BRUCE GORDON FENTON** or otherwise.

SIGNED at Auckland this 28th day of June 1996

.....

1.26 20 JAN 97 D 088754-3

PARTICULARS ENTERED IN REGISTER
LAND REGISTRY NORTH AUCKLAND
ASST. LAND REGISTRAR.....
101C/992-994

C

M

COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Search Copy

R.W. Muir
Registrar-General of Land

Identifier	**NA101C/992**
Land Registration District	**North Auckland**
Date Issued	31 July 1995

Prior References
NA101B/256

Estate	Fee Simple
Area	17.7050 hectares more or less
Legal Description	Lot 1 Deposited Plan 167657

Proprietors
Nags Head Horse Hotel Limited

Estate	Fee Simple - 1/3 share
Area	5.2350 hectares more or less
Legal Description	Lot 4 Deposited Plan 167657

Proprietors
Nags Head Horse Hotel Limited

Interests

Subject to Section 241(2) Resource Management Act 1991

All minerals within the meaning of the Land Act 1924 on or under the land and reserving always to Her Majesty the Queen and all persons lawfully entitled to work the said minerals a right of ingress egress and regress over the said land

Subject to a right of way over parts marked G and H on DP 167657 specified in Easement Certificate B442108.5

The easements specified in Easement Certificate B442108.5 are subject to Section 309 (1) (a) Local Government Act 1974

Appurtenant hereto is an electricity supply right specified in Easement Certificate B578021.4 (affects part)

The easements specified in Easement Certificate B578021.4 are subject to Section 309 (1) (a) Local Government Act 1974

C871824.8 Certificate pursuant to Section 321(3) (c) Local Government Act 1974 - 31.7.1995 at 2.34 pm

Subject to a right of way and to telecommunications and electricity rights over part marked B on DP 167657 specified in Easement Certificate C871824.10 - 31.7.1995 at 2.34 pm

Appurtenant hereto is a right of way, and telecommunications and electricity rights specified in Easement Certificate C871824.10 - 31.7.1995 at 2.34 pm

The easements specified in Easement Certificate C871824.10 are subject to Section 243 (a) Resource Management Act 1991

Subject to a telecommunications right (in gross) over parts marked G and H on DP 167567 in favour of Telecom New Zealand Limited created by Transfer C874249.1 - 4.8.1995 at 2.55 pm

Land Covenant in Deed D088754.3 - 20.1.1997 at 1.26 pm

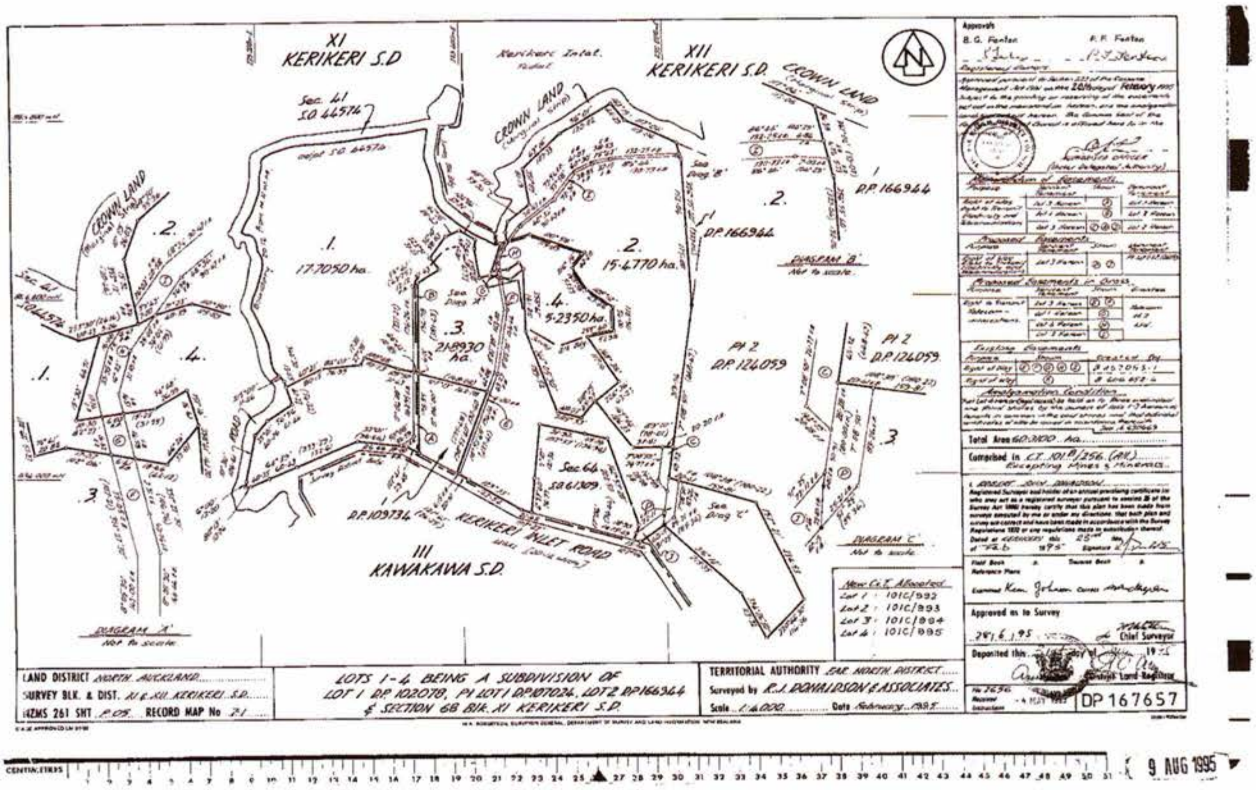
D088754.4 Variation of the easements specified in Easement Certificate C871824.10 - 20.1.1997 at 1.26 pm

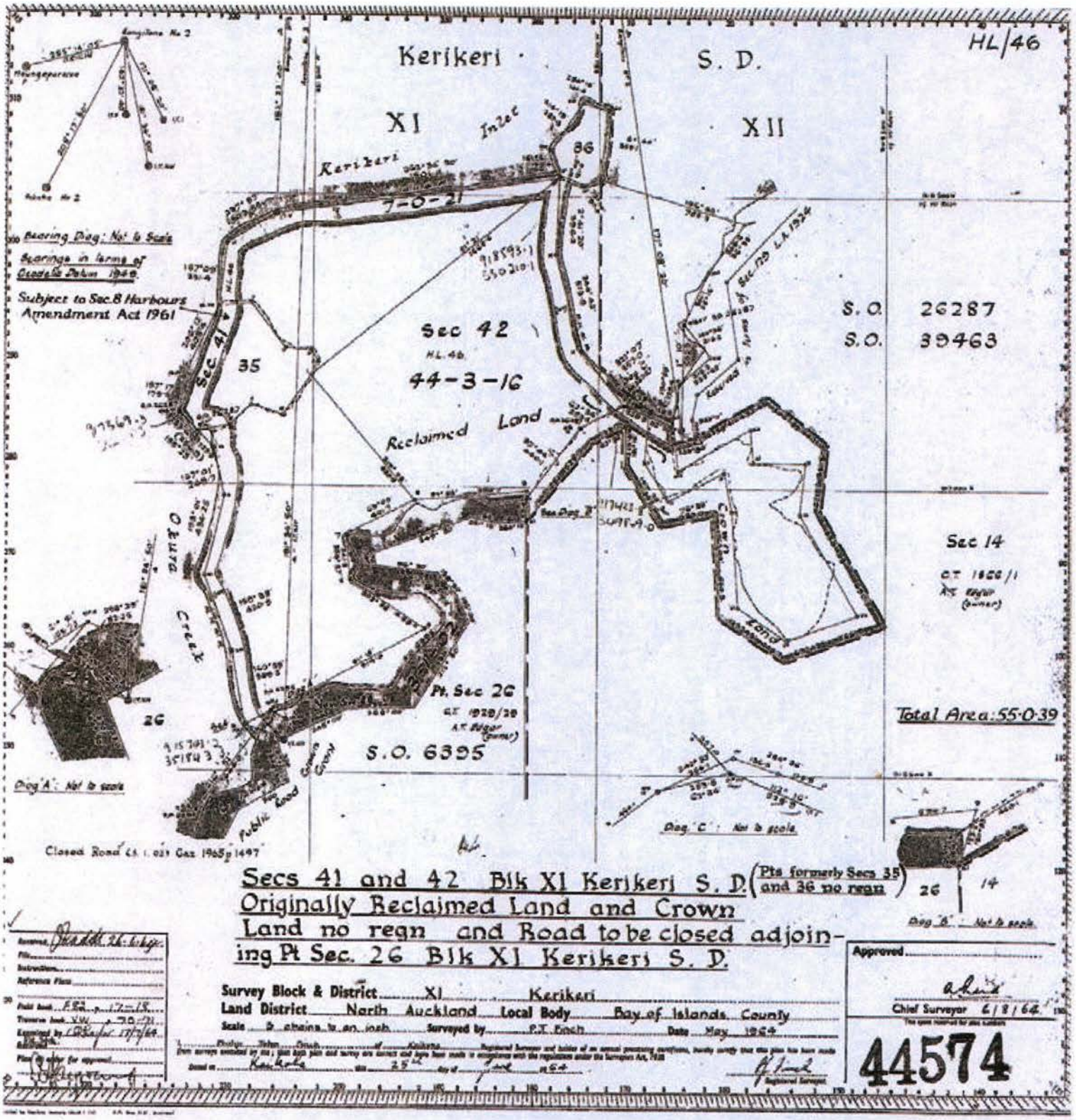
Subject to a right of way and to telecommunications and electricity rights over part marked Y on DP 180325 created by Transfer D587086.2 - 14.3.2001 at 11.04 am

Land Covenant in Transfer D587086.2 - 14.3.2001 at 11.04 am

Appurtenant hereto is a right of way, and telecommunications and electricity rights created by Transfer D587086.4 - 14.3.2001 at 11.04 am

9315062.1 Surrender of Land Covenant D088754.3 as to the benefit of Part Lot 1 DP 442820 formerly contained in NA101C/993 - 8.3.2013 at 11:39 am


XI
KERIKERI S.D
XII
KERIKERI S.D.
CROWN LAND
Sec. 41
S.O. 44574
1.
17.7050 ha.
2.
15.4770 ha.
3.
21.8930 ha.
4.
5.2350 ha.
D.P. 166944
DIAGRAM 'B'
Not to scale
Pt 2
D.P. 124059
Sec. 64
S.O. 61309
D.P. 109734
KERIKERI INLET ROAD
III
KAWAKAWA S.D.
DIAGRAM 'A'
Not to scale
DIAGRAM 'C'
Not to scale
New C.T. Allocated
Lot 1 : 101C/992
Lot 2 : 101C/993
Lot 3 : 101C/994
Lot 4 : 101C/995
Total Area 60.3100 ha.
Approved as to Survey
Chief Surveyor
Deposited this
District Land Registrar
LAND DISTRICT NORTH AUCKLAND
SURVEY BLK. & DIST. XI & XII KERIKERI S.D.
NZMS 261 SHT. P.05 RECORD MAP No 2/
LOTS 1-4 BEING A SUBDIVISION OF
LOT 1 D.P. 102078, P1 LOT 1 DP107024, LOT 2 DP166944
& SECTION 6B BLK. XI KERIKERI S.D.
TERRITORIAL AUTHORITY FAR NORTH DISTRICT
Surveyed by R.J. DONALDSON & ASSOCIATES
Scale 1:4000
Date February 1995
DP 167657
CENTIMETRES
9 AUG 1995


HL/46
Kerikeri S. D.
XI
XII
Inlet
Kerikeri
7-0-21
Bearing Diag: Not to Scale
Bearings in terms of Cadastre Datum 1949.
Subject to Sec.8 Harbours Amendment Act 1961
Sec 42
HL.46
44-3-16
Reclaimed Land
Sec 41
35
36
S.O. 26287
S.O. 39463
Sec 14
CT 1808/1
Crown Land
Pt. Sec 26
CT 1928/28
S.O. 6395
Total Area: 55-0-39
Diag 'A': Not to scale
Diag 'B': Not to scale
Diag 'C': Not to scale
Closed Road (S.I. 021) Gaz 1965 p 1497
Secs 41 and 42 Blk XI Kerikeri S. D. (Pts formerly Secs 35 and 36 no regn)
Originally Reclaimed Land and Crown Land no regn and Road to be closed adjoining Pt Sec. 26 Blk XI Kerikeri S. D.
Survey Block & District XI Kerikeri
Land District North Auckland Local Body Bay of Islands County
Scale 8 chains to an inch Surveyed by P.T. Finch Date May 1964
Approved
Chief Surveyor 6/8/64
44574

D 587086.4TE

TRANSFER

Land Transfer Act 1952

If there is not enough space in any of the panels below, cross-reference to and use the approved Annexure Schedule: no other format will be received.

Land Registration District
North Auckland

Certificate of Title No.	All or Part?	Area and legal description — *Insert only when part or Stratum, CT*
101C/994	All	

Transferor *Surnames must be underlined*

BRUCE GORDON FENTON and PAMELA FRANCES FENTON

Transferee *Surnames must be underlined*

GOOD MOVE NZ PROPERTY CO LIMITED

Estate or Interest or Easement to be created: *Insert e.g. Fee simple; Leasehold in Lease No. .....; Right of way etc.*

Easements of Right of Way and Right to Convey Electricity and Telecommunications (contained on page 2 annexure schedule)

Consideration

$1.00

Operative Clause

For the above consideration (receipt of which is acknowledged) the TRANSFEROR TRANSFERS to the TRANSFEREE all the transferor's estate and interest described above in the land in the above Certificate(s) of Title and if an easement is described above such is granted or created.

Dated this 21st **day of** December 2007

Attestation

Signed in my presence by the Transferor
Signature of Witness

Witness to complete in BLOCK letters
(unless typewritten or legibly stamped)

Witness name
Occupation
Address

RHONDA M GRAHAM
SOLICITOR
AUCKLAND

Signature, or common seal of Transferor

Certified correct for the purposes of the Land Transfer Act 1952

Solicitor for the Transferee

REF: 4135

X0011236.GRA:lbb.v1

Approved by Registrar-General
of Land under No. 1995/1004

TRANSFER

Land Transfer Act 1952

LINZ COPY

Law Firm Acting

MORGAN COAKLE
BARRISTERS & SOLICITORS
P.O. BOX 114, AUCKLAND

Auckland District Law Society
REF: 4135

This page is for Land Registry Office use only.
(except for "Law Firm Acting")

Approved by Registrar-General of Land under No 1995/1004

Annexure Schedule

TRANSFER Dated _____ Page ___ of ___ Pages

Continuation of Estate or Interest to be created

The Transferee shall have a right of way and right to convey electricity and telecommunications over that part of the land in Certificate of 101C/994 marked "X" on Deposited Plan 180325 ("the specified area") being forever appurtenant to the land of the Transferee in Certificate of Title 101C/992.

The right of way easement shall be subject to the following terms, covenants, conditions or restrictions:

(a) The cost of formation will be borne by the party requiring the right of way to be formed unless there is a clearly disproportionate benefit to the other party arising from such formation in which case that party will make a reasonable contribution to the costs of formation.

(b) Should any dispute arise between the owners for the time being of the servient land and the owners for the time being of the dominant land relating to the grant of right of way and its terms such dispute shall be referred to arbitration in accordance with the provisions of the Arbitration Act 1996 and any amendment thereof or any other statutory provision then relating to arbitration.

The right to convey electricity and telecommunications is the full, free, uninterrupted and unrestricted right, liberty and privilege for the transferee to convey electric power and telecommunications above the surface of the specified area by means of cable on poles or under the surface of or through the soil of the specified area by means of cables at an appropriate depth below the surface of the soil in accordance with the requirements of the territorial authority, local body or agency having jurisdiction thereover and in order to construct or maintain the efficiency of any such cable or cables the full, free, uninterrupted and unrestricted right, liberty and privilege for the transferee and the transferees servants, tenants, agents and workmen with any tools, implements, machinery, vehicles or equipment of whatsoever nature necessary for the purpose to enter upon the specified area and to remain there for any reasonable time for the purpose of laying, installing, inspecting, repairing, maintaining and renewing such cable or cables or any part thereof and of opening up the soil of the land to such extent as may be necessary and reasonable in that regard provided that the transferee shall restore the surface of the land as nearly as practicable to its former condition.

If this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or their solicitors must put their signatures or initials here.

CONSENT OF MORTGAGEE

THE NATIONAL BANK OF NEW ZEALAND LIMITED hereby consents to the creation of the easements set out in the attached Memorandum of Transfer. This Consent is without prejudice to the Banks rights and remedies pursuant to mortgage C890797.1.

DATED at 28 DEC 2000 day of 2000

SIGNED by **NATIONAL BANK OF NEW ZEALAND LIMITED** by its Attorney)

CHERYL KATHERINE SEGEDIN

in presence of:)

Witness Signature :

Witness Name:

Witness Occupation: ANIL SURESH CHANDRA
BANK OFFICER

Witness Address: AUCKLAND

The National Bank of New Zealand Limited

CERTIFICATE OF NON-REVOCATION OF POWER OF ATTORNEY

I, **CHERYL KATHERINE SEGEDIN** Manager Lending Services of Auckland in New Zealand **HEREBY CERTIFY:**

1. **THAT** by Deed dated 28 June 1996 deposited in the Land Registry Offices situated at:

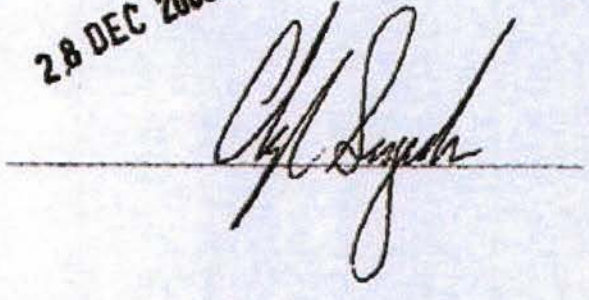
Auckland	as No	D.016180	Hokitika	as No	105147
Blenheim	as No	186002	Invercargill	as No	242542.1
Christchurch	as No	A.256503.1	Napier	as No	644654.1
Dunedin	as No	911369	Nelson	as No	359781
Gisborne	as No	G.210991	New Plymouth	as No	433509
Hamilton	as No	B.355185	Wellington	as No	B.530013

The National Bank of New Zealand Limited (the "Bank") appointed me its Attorney with the powers and authorities specified in that Deed.

2. **THAT** at the date of this Certificate, I am the Manager Lending Services, Auckland Regional Support Centre of the Bank.

3. **THAT** at the date of this certificate, I have not received any notice or information of the revocation of that appointment by the winding-up or dissolution of the Bank or otherwise.

DATED at Auckland this 28 DEC 2000 day of 20



LINZ COPY

11.04 14.MAR01 D 587086.4

PARTICULARS ENTERED IN THE
LAND REGISTRY NORTH AUCKLAND
for REGISTRAR-GENERAL OF LAND

C871824.10
EC

Approved by the District Land Registrar, South Auckland No. 351560
Approved by the District Land Registrar, North Auckland, No. 4380/81
Approved by the Registrar-General of Land, Wellington, No. 436748.1/81

EASEMENT CERTIFICATE

IMPORTANT: Registration of this certificate does not of itself create any of the easements specified herein).

X~~I~~/We **BRUCE GORDON FENTON** of Auckland, Manager and **PAMELA FRANCES FENTON**, His Wife

as tenants in common in equal shares

being the registered proprietor(s) of the land described in the Schedule hereto hereby certify that the easements specified in that Schedule, the servient tenements in relation to which are shown on a plan of survey deposited in the Land Registry Office at Auckland on the day of 19 under No. 167657 are the easements which it is intended shall be created by the operation of section 90A of the Land Transfer Act 1952.

SCHEDULE

DEPOSITED PLAN NO. 167657

Nature of Easement (e.g., Right of Way, etc.)	Servient Tenement		Dominant Tenement Lot No.(s) or other Legal Description	Title Reference
	Lot No.(s) or other Legal Description	Colour, or Other Means of Identification, of Part Subject to Easement		
Right of Way	Lot 3 DP 167657	A	Lot 1 DP 167657	101C/992
Right of Way	Lot 1 DP 167657	B	Lot 3 DP 167657	101C/994
Right of Way	Lot 3 DP 167657	C/D and J	Lot 2 DP 167657	101C/993
Right to convey electricity and telecommunications	Lot 3 DP 167657	A	Lot 1 DP 167657	101C/992
Right to convey electricity and telecommunications	Lot 1 DP 167657	B	Lot 3 DP 167657	101C/994
Right to convey electricity and telecommunications	Lot 3 DP 167657	C/D and J	Lot 2 DP 167657	101C/993

State whether any rights or powers set out here are in addition to or in substitution for those set out in the Seventh Schedule to the Land Transfer Act 1952.

1. Rights and powers:

Rights and Powers:

1. In addition to the rights and powers set out in the Seventh Schedule to the Land Transfer Act 1952 the following rights and powers shall apply to the right of way marked "A" on Deposited Plan 167657 :

   (a) While the Local Authority planning requirements restrict the number of rear allotments that may be served from the right of way the registered proprietor of the servient tenement will be entitled to subdivide his property serviced by the right of way marked "A" to a maximum of one-half of such entitlement and the registered proprietor of the dominant tenement will be entitled to subdivide his property serviced by the right of way marked "A" to a maximum of one-half of such entitlement.

   (b) After the initial formation of the right of way marked "A" either the registered proprietor of the servient tenement or the registered proprietor of the dominant tenement may further upgrade the right of way marked "A" provided that if the other party does not require the upgrading the costs thereof will be paid solely by the party desiring the upgrade.

2. In addition to the rights and powers set out in the Seventh Schedule to the Land Transfer Act 1952 the following rights and powers shall apply to the right of way marked "B" on Deposited Plan 167657 :

   (a) The registered proprietor of the dominant tenement will be solely responsible for the formation of the right of way marked "B". The owner of the dominant tenement may at any time upgrade the right of way marked "B" to a sufficient standard to permit further subdivision of the dominant tenement and servicing of those additional Lots by the right of way marked "B".

3. In addition to the rights and powers set out in the Seventh Schedule to the Land Transfer Act 1952 the following rights and powers shall apply to the right of way marked "C" on Deposited Plan 167657 :

   (a) The registered proprietor of the dominant tenement will be solely responsible for the formation and maintenance of the right of way marked "C".

4. **RIGHT TO CONVEY ELECTRICITY AND TELECOMMUNICATIONS**
The Grantee shall have the full free uninterrupted and unrestricted right limiting privilege to convey electric power and telecommunications under the surface of or

Copy

2. Terms, conditions, covenants, or restrictions in respect of any of the above easements:

Dated this 24th day of July 1995

Signed by the above-named

BRUCE GORDON FENTON and

PAMELA FRANCES FENTON
in the presence of

Witness .....

Occupation ..... Solicitor .....

Address ..... Auckland .....

B G Fenton

P F Fenton

EASEMENT CERTIFICATE

(IMPORTANT): Registration of this certificate does not of itself create any of the easements specified herein.

Correct for the purposes of the Land Transfer Act

Solicitor for the registered proprietor

11F EC - 35

2.54 31.JUL95 C871824 16

APPENDIX 3: ***'Assessment of landscape, visual, rural amenity and natural character effects'*** **prepared by Littoralis Landscape Architecture, dated June 2018**

Additional comment by Littoralis Landscape Architecture, dated 28 September 2018

ATTACHMENTS

PROPOSED SUBDIVISION
KERIKERI INLET ROAD

Prepared for Nags Head Horse Hotel

LITTORALIS
LANDSCAPE ARCHITECTURE

ATTACHMENT ONE
VANTAGE POINT LOCATIONS

LITTORALIS
LANDSCAPE ARCHITECTURE

ATTACHMENT TWO
SITE PHOTOGRAPHS

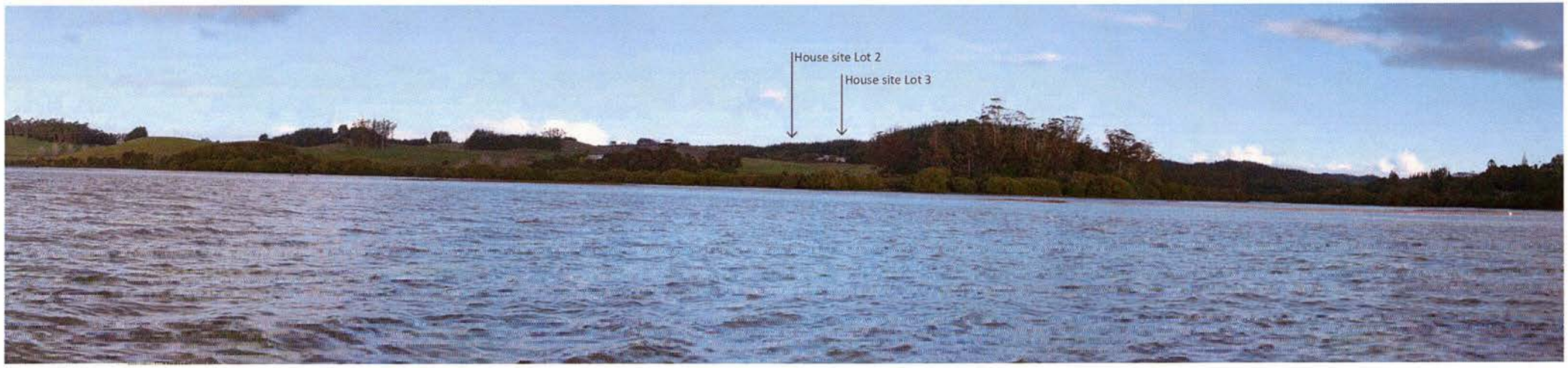
Panorama VP1:
Looking inland from the point where the ROW enters the Site, towards the neighbouring home on Lot 1 DP109734.

Panorama VP2:
The view from the junction of the Waipapa Stream, Kerikeri River and Pickmere Channel, as experienced by those departing Waipapa Landing by boat. The Site is not visible from this position, being blocked by the headland associated with Reinga Road.

LITTORALIS
LANDSCAPE ARCHITECTURE

ATTACHMENT TWO
SITE PHOTOGRAPHS

Panorama VP3:
Just upstream of the Skudders Beach pile moorings where only the "island" portion of the Site can be witnessed, as marked by the lofty, pale trunks of the Eucalyptus seen to the right of the image.



Panorama VP4:
Taken from almost due north of the Site at the confluence of Pickmere Channel and the Okura River. Proposed Lots 2, 3 and 4 occupy the grassy slope seen just to right of centre and below the existing neighbouring house visible above.

LITTORALIS
LANDSCAPE ARCHITECTURE

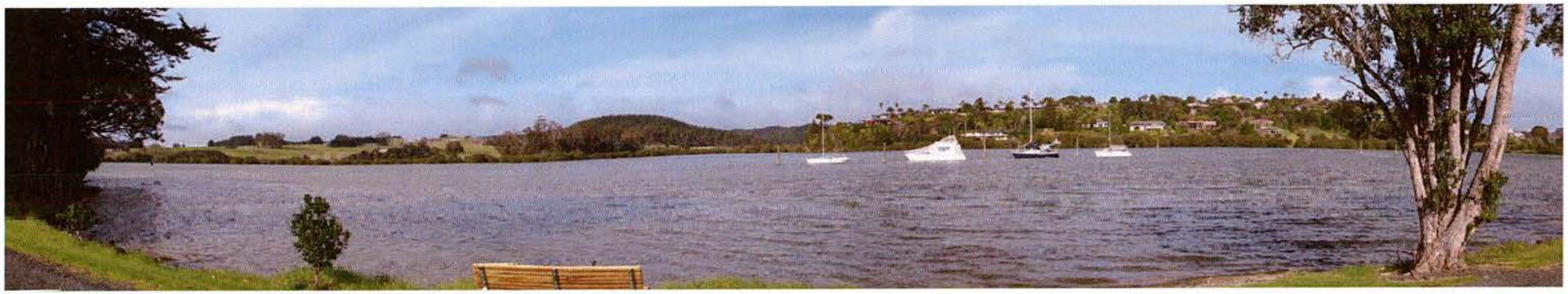
ATTACHMENT TWO
SITE PHOTOGRAPHS

Panorama VP5:
An image taken from offshore of the northern edge of Skudders Beach settlement. The Site is sits midway between the red and green channel marking beacons.

Panorama VP6:
A more distant water-based view as experienced from vessels returning upstream as they pass between Wainui Islanand and Rangitane settlement. The Site can be barely distinguished to the right of the sunlit knoll/headland seen near the left margin of the image.

LITTORALIS
LANDSCAPE ARCHITECTURE

ATTACHMENT TWO
SITE PHOTOGRAPHS



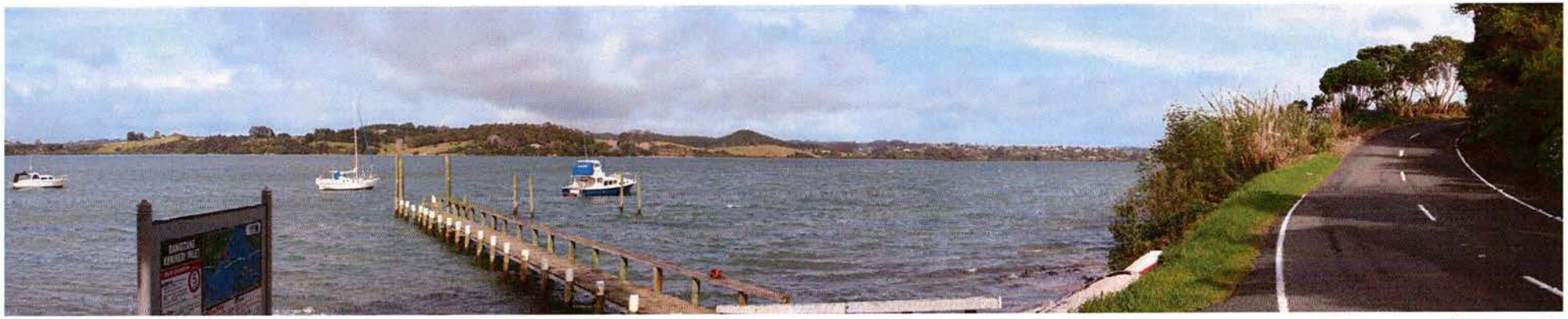
Panorama VP7:
A land-based shot from the roadside at Skudders Beach. The extent of the Site coincides almost perfectly with the back of the seat in the foreground. The "island" occupies much of that extent above the right hand half of the seat.

Panorama VP8:
Viewed from elevated terrain associated with the newly-formed road extending on from Landing Road, and further inland to the north west. A small portion of proposed Lots 2 and 4 are visible in the distance, above the neatly trimmed hedge in the midground.

LITTORALIS
LANDSCAPE ARCHITECTURE

ATTACHMENT TWO
SITE PHOTOGRAPHS

Panorama VP9:
A glimpse between the houses on Ragitane Loop Road, with the Site vaguely discernible to the left of the apex of the roof and with the peak of a small Norfolk Island pine serving as a pointer.



Panorama VP10:
Looking south west from alongside the Rangitane wharf. The Site lies in the distance, immediately above a joint in the middle of the white barrier rail at the bottom of the image.

LITTORALIS
LANDSCAPE ARCHITECTURE

ATTACHMENT TWO
SITE PHOTOGRAPHS

Panorama VP11:
Sighting through a gap in roadside vegetation in the quiet, largely private western section of Kurapati Road.
The Site sits immediately above the fencepost seen in the foreground.

Panorama VP12:
Looking across toward the building sites from near the northern end of Reinga Road
during a passing shower. The "island" is obscured to the left.

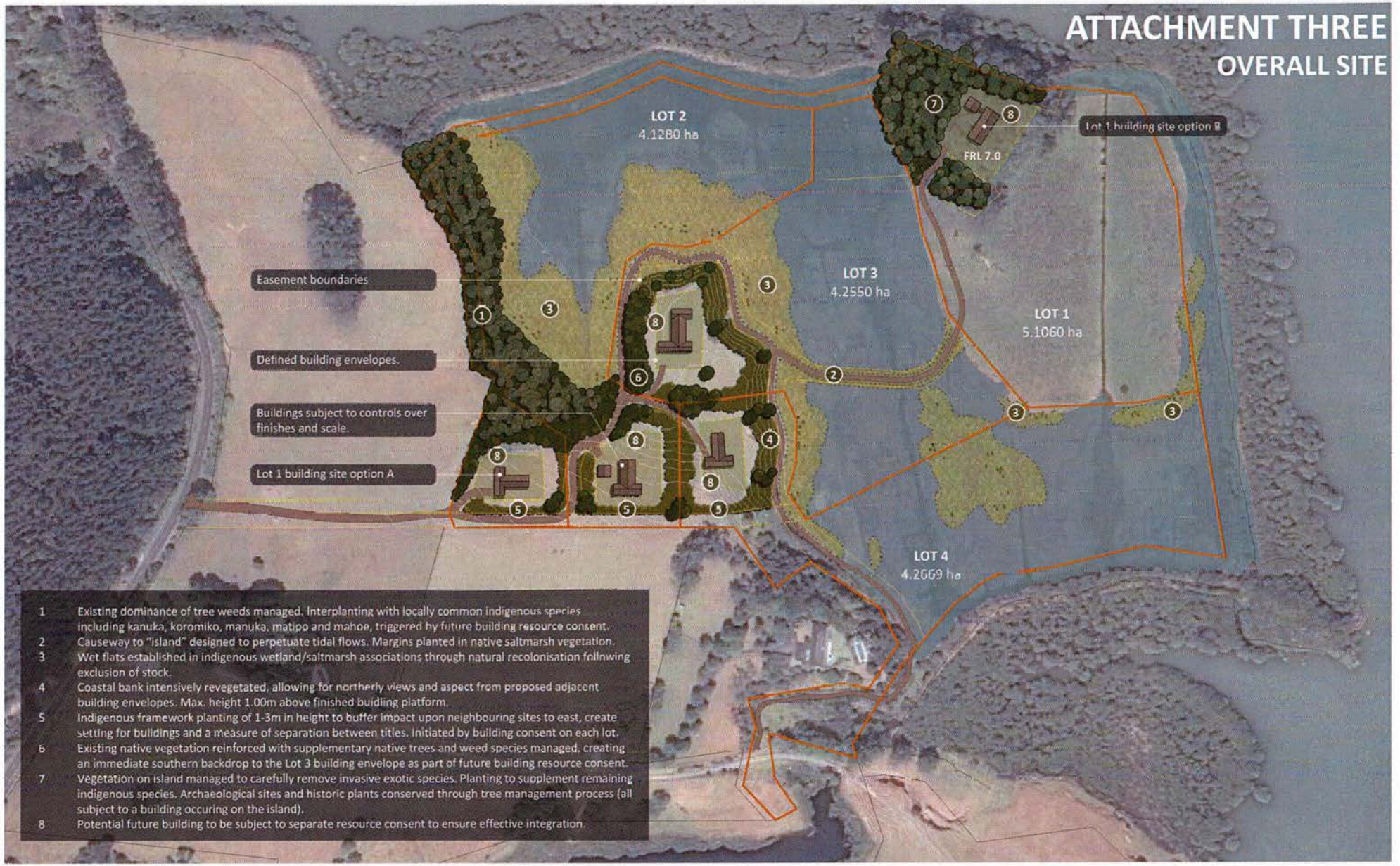
LITTORALIS
LANDSCAPE ARCHITECTURE

ATTACHMENT TWO
SITE PHOTOGRAPHS

Panorama VP13:
A fleeting glimpse through a break in vegetation descending Kerikeri Inlet Road towards the Okura River bridge. The gums of the "island" feature to the left, whilst the building sites for proposed lots 2 and 3 can be seen in the centre of the image. Proposed Lot 4's building envelope is obscured in this view.

LITTORALIS
LANDSCAPE ARCHITECTURE

ATTACHMENT THREE
OVERALL SITE



1 Existing dominance of tree weeds managed. Interplanting with locally common indigenous species including kanuka, koromiko, manuka, matipo and mahoe, triggered by future building resource consent.
2 Causeway to "island" designed to perpetuate tidal flows. Margins planted in native saltmarsh vegetation.
3 Wet flats established in indigenous wetland/saltmarsh associations through natural recolonisation follnwing exclusion of stock.
4 Coastal bank intensively revegetated, allowing for northerly views and aspect from proposed adjacent building envelopes. Max. height 1.00m above finished buidling platform.
5 Indigenous framework planting of 1-3m in height to buffer impact upon neighbouring sites to east, create setting for buildings and a measure of separation between titles. Initiated by building consent on each lot.
6 Existing native vegetation reinforced with supplementary native trees and weed species managed, creating an immediate southern backdrop to the Lot 3 building envelope as part of future building resource consent.
7 Vegetation on island managed to carefully remove invasive exotic species. Planting to supplement remaining indigenous species. Archaeological sites and historic plants conserved through tree management process (all subject to a building occuring on the island).
8 Potential future building to be subject to separate resource consent to ensure effective integration.

0 50 75 100 125 150 m

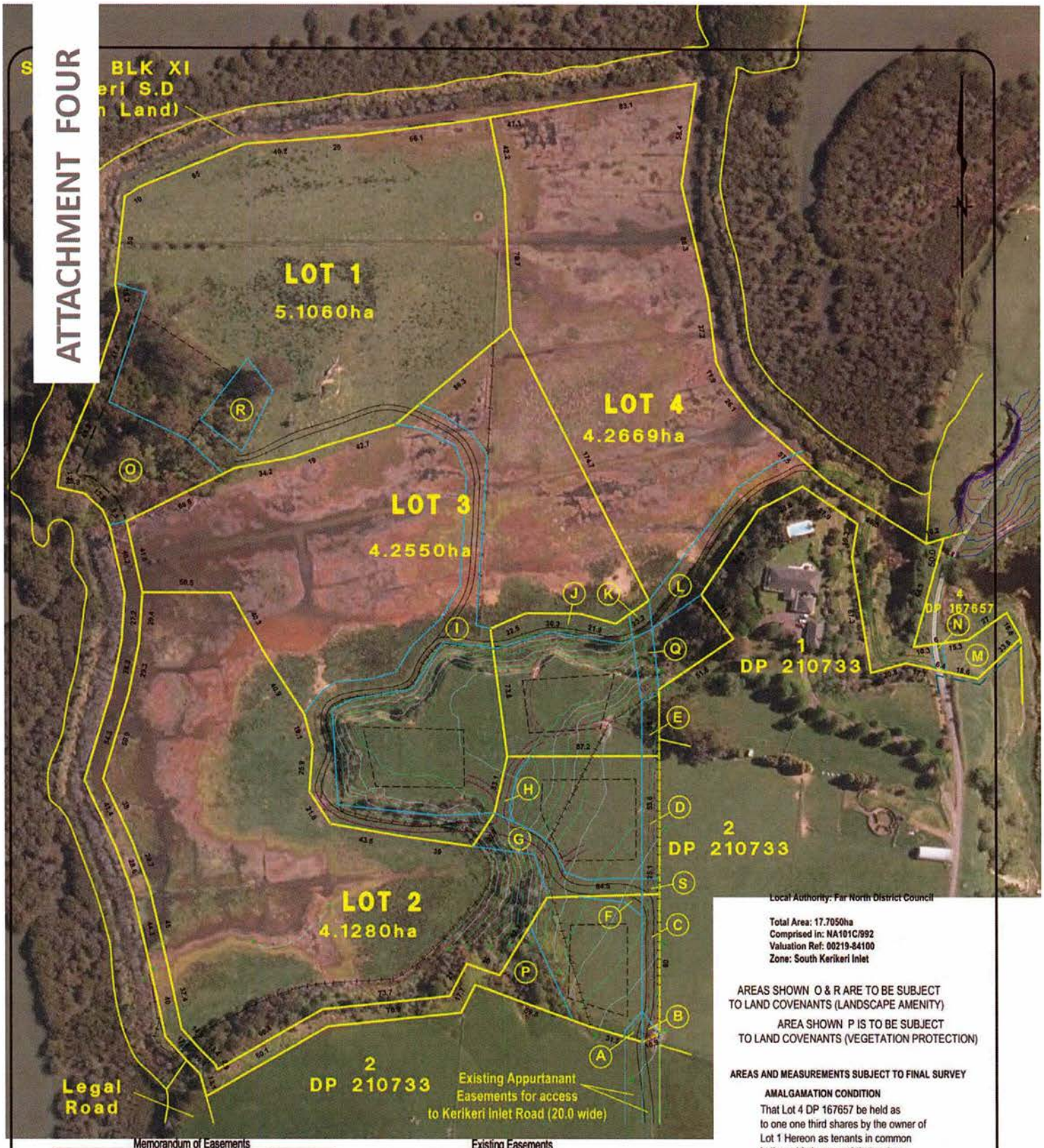
SCALE 1 : 2500 @ A3

Ref: 1225_DC1_2500_20180704

LITTORALIS
LANDSCAPE ARCHITECTURE

PROPOSED SUBDIVISON
KERIKERI INLET ROAD
Prepared for Nags Head Horse Hotel

ATTACHMENT FOUR



Local Authority: Far North District Council

Total Area: 17.7050ha
Comprised in: NA101C/992
Valuation Ref: 00219-84100
Zone: South Kerikeri Inlet

AREAS SHOWN O & R ARE TO BE SUBJECT TO LAND COVENANTS (LANDSCAPE AMENITY)

AREA SHOWN P IS TO BE SUBJECT TO LAND COVENANTS (VEGETATION PROTECTION)

AREAS AND MEASUREMENTS SUBJECT TO FINAL SURVEY

AMALGAMATION CONDITION

That Lot 4 DP 167657 be held as to one one third shares by the owner of Lot 1 Hereon as tenants in common in the said shares and that a singe computer register be issued in accordance therewith.
See [request number]

Memorandum of Easements

Purpose	Shown	Servient Tenement	Dominant Tenement
Right of Way Right to Convey Electricity, Computer Media & Telecommunications	A, B, C & F	Lot 1 Hereon	Lots 2 - 4 Hereon
	S & G	Lot 2 Hereon	Lot 1 & 3 - 4 Hereon
	H	Lot 2 Hereon	Lots 3 & 4 Hereon
	I	Lot 3 Hereon	Lot 1 Hereon
Right of Way	J, K, L, M & N	Lot 4 Hereon	Lot 1 Hereon
Right to Drain Water	D	Lot 2 Hereon	Lot 1 Hereon
	E, Q, & K	Lot 4 Hereon	Lots 1 - 2 Hereon
	G	Lot 2 Hereon	Lots 1 & 4 Hereon
	H	Lot 2 Hereon	Lot 4 Hereon

Existing Easements

Purpose	Shown	Servient Tenement	Document:
Right of Way Right to Convey Electricity & Telecommunications	A	Lot 1 Hereon	D587086.2
	B & C	Lot 1 Hereon	C871824.10
	S & D	Lot 2 Hereon	C871824.10
	E	Lot 4 Hereon	C871824.10
Right of Way	N	Lot 4 Hereon	B442108.5

Existing Easements in Gross

Purpose	Shown	Servient Tenement	Document:
Telecommunciations	N	Lot 4 Hereon	c874249.1

0 20 40 60 80 100 120 140 160m

Prepared for: Nags Head Horse Hotel Limited

WILLIAMS AND KING
Registered Land Surveyors, Planners & Land Development Consultants
Ph: (09) 407 6030
Fax: (09) 407 6032
Email: kerikeri@saps.co.nz
27 Hobson Ave
PO Box 937 Kerikeri

PROPOSED SUBDIVISION OF LOT 1 DP 167657

	Name	Date
Survey		
Design		
Drawn	CW	June 2017
Rev		June 15 2017

ORIGINAL SCALE 1:2000 SHEET SIZE A3

21916

PROPOSED SUBDIVISION AT KERIKERI INLET ROAD, KERIKERI

ASSESSMENT OF LANDSCAPE, VISUAL, RURAL AMENITY & NATURAL CHARACTER EFFECTS

June 2018

LITTORALIS
LANDSCAPE ARCHITECTURE

LITTORALIS
LANDSCAPE ARCHITECTURE

INTRODUCTION

Nags Head Horse Hotel is seeking to subdivide a title at Kerikeri Inlet Road, to the East of Kerikeri. The land has an area of 17.705ha and is legally described as Lot 1, DP 167657 (the Site). Whilst not directly involved in the proposal in terms of development activities, Lot 1 has a one third share in an adjacent Lot 4, DP167657, which is largely occupied by a fresh waterbody to the east.

The Site is located within the South Kerikeri Inlet Zone under the Far North District Plan but lies outside any of the identified "sensitive areas" found across other parts of that zone. All proposed lots are in excess of 4 ha in area, resulting in the application qualifying as a restricted discretionary activity in terms of allotment sizes.

The provisions of the Zone require all residentially-scaled buildings to be subject to assessment under visual amenity rules, so there is no permitted baseline existing. Subject to sensitive approaches to development of the land, however, it is realistic to expect a measure of construction to occur on the property under the FNDP.

This assessment will focus upon of the potential effects of the proposed subdivision upon rural amenity, natural character and landscape values. The status of the application is more fully described in the planning report prepared by Scope Environmental Planning.

CONTEXT

Kerikeri Inlet Road is the primary road moving out of the south eastern sector of Kerikeri's central area of settlement on its route to near the southern apex of Kerikeri Inlet. It passes through the primary areas of distinct landscape character found to the south of the Inlet and is therefore a useful theme for describing those areas of identity.

The first couple of kilometres of its passage sees it traversing extremely gentle terrain as it passes through groves of citrus established in the high-quality soils surrounding Kerikeri and protected by trimmed shelter belts. It then runs onto an increasingly narrow ridge overlooking the upper Kerikeri Inlet before passing the entrance to Reinga Heights, a residential enclave set well apart from Kerikeri's urban centre and positioned on a headland that provides views down to the Inlet and Pickmere Channel to one side and out to the mouth of the Inlet (and for some, over the Site) and beyond to the other.

After passing Reinga Road, Kerikeri Inlet Road then drops steeply on a winding course down to cross the Okura River with its heavy fringe of mangrove (*Avicinea marina* subsp. *australasica*), which borders the Site in its lowest, eastern reach. Rising from the river crossing, Kerikeri Inlet Road passes the entrance to the Site to the north whilst skirting the northern margin of Waitangi Forest to the left. Moving alongside the moderately steep, rolling terrain of the Kerikeri South Inlet Zone, where a number of rural residential properties are established around the coastal flanks, as can be seen in Attachment One.

It then descends again to the wetland-dominated lowlands and volcanic geology associated with Edmonds Road and Hauparua Inlet, where residential development has an even more consistent presence. By this point on the south inlet, Kerikeri Inlet Road is moving well beyond the immediate context of the Site. Remaining to the east are more remote-feeling, convoluted pockets of terrain related to the containing headlands at the mouth of Kerikeri Inlet, reaching most of the way out to Moturoa Island with its eastern-most Day Point.

Estuarine Kerikeri Inlet is the dominant element to the north of the Site in spatial terms, although in a more physical, perceptual sense that relationship is not so emphatic, as will be explained later in this report. To the west, the Inlet is relatively narrow and complex, defined by the number of small tributaries including Kerikeri River, Waipapa Stream (via its mooring-filled Waipapa Basin) and Okura River, each framed by a steep headland and discharging into the confined width of Pickmere Channel. Heading seaward, the Inlet progressively widens as it passes the mouth of Rangitane River and Aroha Island before narrowing again as it nears the wider Bay of Islands beyond Doves and Opito Bays. Whilst broad, these central reaches of the Inlet are remarkably shallow, with a well-marked navigation channel skirting the northern coast providing the only sure passage for the majority of vessels.

Scattered along the north shore of the Inlet are a sequence of small settlements, commencing with Skudders Beach and progressing through Rangitane, Doves Bay and Opito Bay (with these latter two being entirely divorced from influence by the Site.

Redcliffs Road traces the skyline ridge some way inland to the north but provides occasional and distant glimpses back to the southern side of the Inlet. Extensjve recent development inland of Skudders Beach and accessed by Kingfisher Drive and an even newer, parallel road to the north, offer views south over the inlet but that vista tends to be curtailed towards the site by the intervening spur that backs Skudders Beach.

Scrutiny of Attachment One, followed by scrolling through the photographic panoramas that form Attachment Two, provides an overview of the wider context of the Site. A description of viewing audiences that follows later in this report will offer a further perspective.

THE SITE

The Vantage Point Locations plan provided as Attachment One highlights the position of the application site, which lies a short distance to the north of Kerikeri Inlet Road, with an orange outline. The proposed subdivision format is indicated within that perimeter. The photograph featuring on the cover of this assessment is taken from approximately the centre of the Site, looking across a central wet area towards the main concentration of proposed allotments and with Waitangi Forest

seen in the background. Photograph 1, below, is taken looking across the wet area in the opposite, northern direction, with Kerikeri Inlet just visible beyond.

The northern portion of the Site is largely characterised by this low-lying, periodically flooded terrain which was once part of the intertidal flats of the southern Kerikeri Inlet. A narrow, constructed berm, evident in the aerial photograph underlaying Attachment Three, was created many decades ago in an effort to develop the resulting contained flats as pasture. A number of floodgates were installed to allow fresh stormwater to escape but hold the sea at bay.

Photograph 1: the wetland area in an inundated state, as seen from the brink of the bank within proposed Lot 3.

Those gates largely fell into disrepair many years ago, allowing marine waters to once again enter to establish a brackish ecology that is described more fully in the 4Sight ecological assessment which is attached as a separate document to the subdivision application. From a landscape perspective, the resulting area creates a subtle and diverse matrix of levels and habitats that promises a rich landscape with the benefit of stock exclusion and sensitive management, despite the gridded pattern of open drains that remain as a sign of past drainage efforts.

Sitting out near the confluence of the Okura River and Kerikeri Inlet is a portion of raised land that would once have featured as an island. It can be seen to centre right in Photograph 2 which follows and is annotated with a numeral 8 in Attachment Three. This landform feature will be referred to as the "island" hereafter. As can be seen below, a broad fringe of marginally elevated grassland extends to the east, whilst the western side of the island drops to the tidal shore of Okura River. The relic flood-bank berms abut the northern and southern ends of the island.

There is evidence of historic cultural use of the island, as reported by the archaeological assessment prepared by Geometria. Ancient grapevines that remain in one location survive as a vegetative acknowledgement of some of that history. Substantial gums (*Eucalyptus sp.*) that can be seen in the photograph that follows may be related to the island's former occupation. Other species contributing to the consistent canopy of the island include naturally colonised indigenous species such as kanuka (*Kunzea ericoides*), karaka (*Corynocarpus laevigatus*), mapou (*Myrsine australis*), hangehange (*Geniostoma ligustrifolium*) and ponga (*Cyathea dealbata*).

Exotic, invasive plants that are well established on the island include tree privet (Ligustrum lucidum), bamboo (*Bambusa* sp.), Taiwan cherry (*Prunus campanulata*) and *Cotoneaster glaucophyllus*. The understorey of the hillock is largely quite open; quite likely as a result of the supressing effect of the dominant gums.

Photograph 2: looking west across the minor tidal inlet on the margin of proposed Lot 4 to "the island" with its grassed flats and heavily vegetated hillock from the raised ground of Lot 2, DP 442820 further to the east. Reinga Heights can be seen beyond.

A steep flank to the south of the low-lying, wet area and denoted by the number 2 in Attachment Three, continues much of the island's vegetative theme in its composition, but without the presence of the gums. Interestingly, there is a block of free-standing eucalyptus found in a neighbouring paddock outside the Site, as can be seen in Photograph 3 opposite. That image also emphasises the high proportion of invasive plants found amongst the vegetation of the flank that is within the Site, with tree privet being particularly prominent in its flowering state.

Photograph 3: a portion of the flank to the south of the flooded flat, showing the dominance of the yellow-flowered tree privet.

A comparable area of steep coastal flank lies in the eastern sector of the Site, where it forms part of a wider pattern that is largely located within the adjoining Lot 1, DP210733. That belt contains a wider diversity of indigenous species, a number of larger canopy trees and a lesser component of weeds, but tree privet continues as

a theme, as can be seen in Photograph 4 below. Also evident in that image are the belts of rushes that are establishing within the wet areas associated with the toe of that slope.

Photograph 4: a view east along the low coastal flank associated with proposed Lot 4, with the home on the neighbouring title obscured by the trees relative to this vantagepoint.

The balancing, south eastern portion of the Site, where the majority of development is proposed to be located, is simpler topography and vegetative cover, as can be distinguished from close scrutiny of Attachment One. Photograph 5 opposite, further clarifies that reality. Here the site rises gradually to the east from a slight plateau set almost as a stubby peninsula above the wetland area described previously. An historic farm track drops through a small cleft to the south at the base of that peninsula, whilst a recently refurbished access descends the flank to the east to connect with the farm track seen in Photograph 4 above.

Photograph 5: looking north towards the main body of the Site from half way up the access strip. The southern edge of proposed Lots 2 and 4 is demarked by the low trees (including pale, flowering tree privet) seen to left of the apex of the logs. The "island" is evident slightly above and to the left, whilst proposed Lots 3 and 4 would lay beyond the fence visible above the logs. Note the curve of water defining the mouth of the Okura River to centre left.

In essence, the Site is composed of a number of distinctive landform types and these are highly influential in the layout of the proposal that is about to be described.

THE PROPOSAL

Nags Head Horse Hotel is proposing to subdivide the property into four, relatively evenly sized titles, ranging in size from 4.128a (Lot 2) to 5.106ha (Lot 1).

An access corridor from Kerikeri Inlet Road (labelled 1 in Attachment Three) provides a drive to the southern corner of the main body of the Site. At that point, the drive would follow the eastern boundary for a short distance, skirting an area allocated for a "mainland" shed or house as part of proposed Lot 1, which would take in the island. A second building envelope for that lot is identified at the toe of the raised island form, where it would be accessed by a causeway which will be described shortly.

After running along this segment of eastern boundary for a small stretch, the main access would then veer sharply to the south, providing a stub into a second defined building as it does so. Soon after, the access splits, providing stubs into two building locations occupying the front tier of the plateau above the main body of wetland. One of these, Lot 4, may require a modest volume of cut earthworks to bench a flat building platform into a second tier of slope found there (as seen on an enlarged sheet forming part of Attachment Three). It is envisaged that the resulting spoil would be used to create bunding between some of the sites and the access driveway to assist with noise attenuation and create a measure of immediate privacy and containment. Such earthworks are anticipated to be less than $300m^3$ in volume.

Having provided access to these proposed Lots 3 and 4, the balance of the indicated drive would be devoted to serving the island. After descending the route currently defined by the historic farm track, this drive would skirt the toe of the coastal flank before traversing across the wetland, approximately along the line of a relic farm race that is indicated on the Site by a fence that continues to bisect the wetland area.

It is understood that the causeway would be a simple gravel structure, approximately 120m long and 5m wide at its base, with a carriageway width of 3m. Its maximum height is expected to be around 600mm RL. Some excavated material would be overlaid on the lower extent of the causeway face to provide a medium for initial mitigating wetland planting and to encourage further colonisation by indigenous wetland/saltmarsh species. A report prepared by Mortimer Consultants[1] as part of an application to Northland Regional Council describes the parameters of the causeway more fully.

As Attachment Three illustrates, the proposed titles are configured to provide a defined dry, stable building platform to each lot and for the majority of the balance of their area to be made up – for all but the island lot 1 – by a portion of the wetland.

[1] *405 Kerikeri Inlet Road: Wetland Crossing. Assessment of Environmental Effects*. May 2018. Mortimer Consultants

It is anticipated that proposed lot boundaries within the wet areas would not be demarcated, so that the wetland would read and function as a cohesive whole, broken only by the construction of the causeway required to achieve access to the island. Existing agricultural fences associated with the wetland area that are not required for excluding stock from that area will be removed as part of the site development.

The raised knoll portion of the island is proposed to be subject to a pair of landscape amenity covenants lettered as O and R in the subdivision concept plan forming Attachment Four. These are backed to the west by the 20m esplanade reserve bordering Okura River. A modest residue of the knoll is allocated to a defined building envelope and access corridor (as seen in Attachments Three and Four).

Two options exist for the future development of proposed Lot 1, consisting of a single residential unit on either a northern 'island' building site adjacent to landscape amenity covenants O and R, or an 'inland' building site on the southernmost part of the lot. In the event that a residential unit is constructed upon the 'island' site, consent may also be sought for a non-habitable shed/building to be constructed on the southern defined building area or this area may remain undeveloped.

Alternatively, future landowners may choose not to develop the 'island' and prefer instead to build in the southern area. In the event that a building – whether a residential unit or some other structure - is established on the northern 'island' building site, then the management measures set out in this report in relation to landscape amenity covenants O and R shall form part of any resource consent application required to establish the building on the lot. In the alternative scenario of a building/s only being established on the southern building site, the landscape amenity covenants indicated for the island shall cease to have effect from that point.

As the 'island' building site is reliant upon a vegetative framework to ensure that the effects of built development are no more than minor, it is important that the existing vegetation within the indicated covenant areas is retained in the interim period before built development occurs. Therefore, a consent notice condition is intended, requiring that the vegetative cover within covenants O and R to be maintained until such point in time as a residential unit upon proposed Lot 1 has been completed.

A network of indigenous vegetation is proposed as part of the project. For the wetland, this would take the form of a mix of fresh water and saltmarsh communities, founded upon a diversity of rush and reed species reflecting the inevitable natural colonisation that results as waterborne seed is distributed by water movement and wind transportation to margins where farm stock is no longer present. It is predicted that a natural process of expansion will occur as the wetland/saltmarsh plant associations build a critical mass and the dynamics of the hydrology stabilise in terms of water levels and salinity.

In tandem, terrestrial planting would focus upon creating a setting for each building platform, with the exception of the island envelope, where the vegetation of the hillock provides an immediate backdrop.

The enlarged version of Attachment Three demonstrates how moderately low native planting would be installed by purchasers of titles to form a northern foreground across the currently grassed coastal flank (numbered 4) and as a buffer to the neighbouring properties to the east (numbered 5). It is intended that this planting consist of species not exceeding 1m in height in those parts of the slope where there is potential for the vegetation to block views to the north, with the exception of the scattered specimen trees shown on Attachment Three (drawing ref: 1225_DC1_2500_20180710). It is also anticipated that future residents will retain an ability to trim that installed vegetation – other than indicated specimens - within those height-restricted zones down to a level of 1m relative to the building platform level (in other words, allowing for taller vegetation to exist on the lower portion of the flank).

Where critical easterly or northerly solar access or views are not at stake, a more substantial backdrop of indigenous shrubland planting is proposed (numbered 6). Species indicated on Attachment 3 are selected to allow for a continued north westerly view from the neighbouring home to the south east of the Site. Scattered specimens are indicated amongst lower planting as groves or individuals in an effort to provided further buffering, scale and spatial variety.

As an overarching control, species selection should be reflective of locally common native plants but may involve relatively low growing plants in areas identified for such height control. Plants should be eco-sourced from the local Ecological District. It is strongly recommended that provisions for managing myrtle rust (as may be provided by MPI or NRC) be incorporated into plant supply, transportation and installation contracts or guidelines.

All of the planting indicated in Attachment Three would be triggered by resource consent applications for the development of individual lots. Formation earthworks will therefore have occurred prior to all of the indicated planting areas being implemented.

It is also anticipated that a management plan for the control and sequential replacement of invasive exotic species would be prepared as a condition of consent. Since a reasonable quantum of indigenous species exists within most of those naturally vegetated areas, a management plan could realistically rely upon a measure of colonisation, but would need to set realistic timeframes, protocols for monitoring, and identify circumstances where supplementary planting would be required to achieve a robust canopy within a reasonable timeframe. Such additional planting would fall under the obligations imposed upon the future owners of each title. Weed management on the island would not be required in advance of titles being issued.

For any portions of the access that are to be permanently surfaced, it is anticipated that this would consist of either asphalt, chip seal, or concrete with a coarse broom finish which either incorporates 4% by volume of cement black oxide or has black concrete stain applied by spray approximately two months after pouring so that the concrete is completely dry. Any informally surfaced access ways should be finished in dark crushed aggregate (as opposed to pale crushed lime rock).

Maximum finished roof levels, defined against the survey RL established by Williams and King, are proposed for building envelopes, other than that on the island. These relate to a maximum building height of 6.0m above finished ground level following site preparation that is proposed to apply to all titles. On the island it is intended that a building height of 6m above finished ground level would apply. Collectively, these height limitations are below the 8m limit provided for under the South Kerikeri Inlet Zone and would deliberately preclude any level stepping or modulation that would ordinarily be provided for under a rolling height measurement or averaging method (as described in the Definitions of the FNDP). It is anticipated that each building platform would be provided in a level form and typically in close proximity to the average or prevailing natural ground level within the defined building envelopes.

Building colour controls would limit roof colours to those with a light reflectance value of 20%, and facade finishes with a maximum reflectance value of 30%. Natural materials such as stained timber and stone would need to fall within those reflectance values. Mirror glazing would be expressly prohibited. These finish restrictions would apply to all titles within the proposed subdivision and either match or are below those established under the Far North District Plan (FNDP) for the underlying zone.

Notwithstanding the proposed controls over building scale and finish under this application, it is noted that the FNDP requires that any new building(s) not for human habitation greater than $50m^2$ or for human habitation exceeding $25m^2$ will require resource consent as part of a second application process for the development of each lot, thereby providing for a more site/development-specific assessment to be undertaken by Council. *This* landscape assessment establishes the parameters to inform those subsequent individual assessments.

SUMMARY OF EFFECTS

Adverse effects impact negatively on the landscape and result in landscape or visual amenity values being diminished. ***Benign* or *neutral effects*** are those in which a proposed change neither degrades nor enhances the landscape setting when considered in the whole. In circumstances where ***positive effects*** arise from a development, the changes that have been brought are deemed to be beneficial relative to the landscape state of the site prior to that change.

Effect ratings that will be used:

Very high: resulting in a dramatic or total loss of the defining landscape characteristics of the site/context, or visual amenity associated with that setting.

High: leading to a major change in the characteristics site or setting, or significantly diminishing key attributes, and/or comparable impacts upon visual amenity.

Moderate – high: an interim measure of effect in which impact of the development results in a change of some significance to the qualities or perception subject landscape.

Moderate: a self-explanatory magnitude in which effects sit midway between the extremes this spectrum of magnitude. Can also be considered as an "average" level.

Moderate – low: impacts on landscape characteristics and attributes are relatively contained. The threshold defining "minor" in relation to the S104D gateway test sits within this level of magnitude, typically towards the lower end of its spectrum.

Low: effects are generally very limited and do not result in compromising the characteristics of a landscape or perceptions of it in a more than subtle way.

Very low: negligible or imperceptible effects result upon the landscape and/ or perceptions of it.

Visual effects

Preceding sections describe the characteristics of the site and its setting. These are followed by a description of the proposal to provide for a subdivision and assumed future buildings that would follow on from that division of the property.

The purpose of *this* section of the report is to define the effects of the application upon the site and setting, to consider how the proposal would impact upon the experience of people viewing development that would result from the subdivision from outside of the site, and to comment upon the resulting level of effect upon landscape character and visual amenity.

To assist with predicting the level of visual and landscape effect that the proposal would generate, publicly accessible vantage points in the area were visited and the potential impact of the proposal considered from each.

The degree of adverse visual / landscape effect generated by a proposed change or development depends upon the character of the surrounding landscape (the context), existing levels of development on the application site, the contour of the land, the presence or absence of screening and/or backdrop vegetation, and the characteristics of the proposed development.

Immediately adjacent residents

A home sitting to the south east of the south eastern corner of the main body of the Site (on Lot 1 DP 109734) appears to have a commanding view over the property. It can be seen within the arrowed arms of the marking for VP1 On Attachment One and centrally with Panorama VP1 of Attachment Two.

This house appears to be elevated at least 10m above the highest portion of the Site and approximately 20m above the finished floor height of the indicated buildings upon proposed Lots 3 and 4. As such its view to Kerikeri Inlet and beyond would be

well above the level of those parts of the Site that are proposed for built development, particularly given what is, in effect, a 6 metre height restriction which is recommended to apply to all future built development within the subdivision. The portion of the view from this property that the proposed development would fall within coincides with the narrow portion of the inlet associated with the mouth of the Okura River, the apex of the Reinga Heights headland and Skudders Beach settlement.

Proposed inland, backdrop planting shown in Attachment Three would buffer each of the four southern buildings (on proposed Lots 2-4 inclusive), with the remaining impact of elements of exposed structure being subdued by proposed controls over building fabric. Sinking the Lot 4 building envelope back into the slope would result in a combination of remaining landform topped by vegetation between Lots 2 and 4 to almost entirely screen a Lot 4 building from this inland vantagepoint. Existing trees seen in preceding Photograph 5 illustrate how backdrop vegetation can effectively mitigate views down across the Site from further inland. Coupled with the buffering effect of proposed vegetation are the building controls over finishes and height that have been described previously. Those measures would ensure that any elements of building that were to be visible would have a recessive presence rather than being visually emphatic.

Collectively, this combination of viewing circumstances and the characteristics of the proposal are considered to contain potential adverse visual effects to within the lower end of the moderate – low spectrum in relation to this neighbouring property.

A well- established home on Lot 1 DP109733 lies immediately to the east of the Site, where it sits within a semi-mature frame of vegetation partially seen in Photograph 4 earlier in this report and witnessed in plain view in Attachment 3 (where it sits at the lower central portion of the image. That established vegetation, further supplemented by planting seen in Attachment Three, precludes views from this neighbouring house to the main body of proposed development to the south of the wetland area, although a building on proposed Lot 2 would potentially bring a measure of visibility from the paddock inland of this neighbouring house, with this visibility being largely restricted to the roof of that building due to the defined floor level for that building being approximately 1.5m below natural ground at the boundary and provisions for low to moderate height planting along that frontage.

Views to the island and seaward portion of the proposed access causeway appear to be substantially filtered and buffered by native vegetation on the flank immediately adjacent to that neighbouring home. I note here that I have not visited that property, so my observation is based entirely upon viewing back to the house from within the Site. Continued growth and consolidation of the shrubland / forest on the flank associated with this neighbouring house appears to ensure that any remaining future views to the Site will be relatively short-lived and entirely obscured within 5 years, unless the owners of the property undertake trimming of that vegetation. Vegetation within proposed covenant area R would entirely blocked from any view to a future house on the island from the outset.

Based upon these observations, it is assessed that adverse visual effects upon the occupants of Lot 1 Dp109733 would be low following establishment of prescribed screen planting to proposed Lot 2 and very low to benign from the house on that property as natural vegetation on the flank continues to develop, and subject to that vegetation not being trimmed or felled.

Pickmere Channel and upper Kerikeri Inlet coastal marine area (CMA)

Panoramas VP2 and VP3 provide a sense of the relationship between the Site and the marine area approximately 1km away. From the mouth of the Waipapa Basin (a popular mooring area, launching ramp destination and navigation point for boats travelling downstream from Kerikeri Basin) the Site is obscured by the Reinga Heights Headland. Continuing downstream to the Skudders Beach pile moorings (immediately alongside the navigation channel) the island on the Site serves to block views to all potential building areas.

Moving a further 300m east along the channel to the mouth of the Okura River (VP4) sees the view into the Site open up to allow views to the positions of building envelopes on proposed Lots 2, 3 (both marked on Panorama VP4) and 4 a little further inland. The island house site, meanwhile, would be entirely screened by the existing vegetation lying with proposed covenant area O and the related flora within the contiguous esplanade reserve. Also visible in this image are the white façades of the existing homes immediately to the south and east.

Of note in this image is the simplicity of the land cover, with uninterrupted grassland running from beyond the Site to the brink of the flank above the wetland and then wrapping over that slope. Proposed planting would substantially alter that situation, with future vegetation across the flank drawing the dark tones and textures of the natural vegetation seen on the slope to the east (associated with the neighbouring house) and then being solidly supported by the backdrop planting proposed for a little further inland. Little, if any, of the currently viewed pasture would be seen to endure under this regime. The pale finishes of the existing neighbouring homes offer a useful gauge for the lesser impact of the tightly controlled future buildings within the Site.

An intention to limit reflectance values to 20/30% would place the prominence of those structures on par with or darker than the grey roof of the house to the east (left as seen in VP4). When set amidst the frame of dark planting being proposed, the measure of contrast resulting would be significantly lower than either of the existing homes. It is predicted that the collective prominence of the 3 buildings that would be potentially visible from this position would be less than the singular impact of either of the nearby homes that exist.

Accordingly, the adverse visual effect upon the maritime viewing audience represented by VP4 would be between very low and low.

Residents and users of Skudders Beach, Skudders Beach Road and Paretu Drive

Panorama VP5 is set a little further downstream still; on the approximate eastern end of Pickmere Channel and off the apex of the peninsula capped by Paretu Drive. Despite the poor lighting quality of the image, the slender pale grass lip marking the edge of the plateau immediately above the wetland is evident. That "lip" would be wider and related buildings more evident when seen from the more elevated vantagepoint of the homes strung along Paretu Drive (including Lot 2, DP114410 on that road, which is specifically referred to in the provisions found under the South Kerikeri Inlet Zone), although not dramatically so.

When seen from this general viewing area it would be buildings upon proposed Lots 1 (island) 3 and 4 that would be visible. Once again, the replacement of the grass flank with native planting and installation of an immediate vegetated backdrop would remove the contrast of the grassed lip and unify that backshore area with the forest-covered terrain to either side in relation to Lots 3 and 4. A building on the island would sit within the wings formed by covenant areas O and R, and substantially backed by vegetation situated with the Okura River esplanade beyond. When combined with the muted presence of potential buildings that are compliant with the proposed controls discussed previously, the measure of contrast and prominence experienced would be very suppressed.

The combined impact of those two potential buildings is predicted to be substantially less than the neighbouring house to the east, which can be seen just to the right of the red channel marker in Panorama VP5. As such, adverse visual effects are assessed as being in the order of very low to low.

Panorama VP7 is land-based from Skudders Beach Road. It is closer to the Site than VP5. The "island" (and its conserving esplanade and proposed covenants O and R) obscures that part of the plateau above the wetland where a Lot 3 house is proposed, along with building envelopes on Lot 2 and inland Lot 1, leaving just the Lot 4 building location visible (noting that proposed taller planting would entirely obscure a building on the south eastern fragment of proposed Lot 1.

Once again, a combination of changing cover and vegetation pattern with building control measures are considered pivotal. The simple grassed slope above the left side of the seat back in the foreground of the image would be almost entirely consumed by planted cover that would see it merge with the vegetation of the flank found immediately to the left. The building would sit amongst that frame with a limited level of contrast against the darkened setting. Whilst a structure would be discernible, its presence would be considerably less than any currently found in this outlook, including those established in the Reinga Heights neighbourhood seen to the right of this image.

When experienced within this context, it is considered that the buildings would have a very low adverse visual effect.

Future residents and users of a new, road corridor parallel to Kingfisher Place

An area of gently sloping terrain lying north west of Skudders Beach is being rapidly developed for moderately scaled residential use, as seen in Panorama VP8.

Close inspection of that image reveals an element of somewhat elevated, pastoral land rising in the midground to the south. This pocket sits immediately inland of Skudders Beach itself and conceals most of the lower section of the opposing southern shore of the Inlet, including much of the Site, but does provide for a narrow glimpse between two pockets of intervening vegetation. That view is only available from a small extent of this new neighbourhood and that public viewing extent will be contained further still as the land around this vantage point is developed with housing. It will also be further limited as intervening vegetation grows further.

Preceding discussion about proposed vegetation patterns and limited contrast being created by future buildings on the Site apply particularly over this 2.3km distance and where so little of the context of the Site is available to view.

In these circumstances, it is considered that the change resulting from the proposal will be barely perceptible and that adverse visual effects would be very low.

Residents of Rangitane and users of the wharf and reserve area

Rangitane is approximately the same distance from the Site as the preceding vantage point. Views to the site can be gained from many of the house arranged along the south-facing slope that is served by Rangitane Loop Road, where the Site forms a small portion of much wider views of the Inlet. Panorama VP9 provides some sense of those views as it sneaks a glimpse from the roadside between vegetation and houses. In so doing, it illustrates that views from the road corridor itself are virtually impossible until it descends to the unimpeded outlook attained as it reaches the waterside at Rangitane wharf, as presented by Panorama VP10. Further, similar outlooks are provided from the riparian reserve found a short distance along the road to the east.

Whilst there is some difference in elevation between these various Rangitane viewing positions, the outlook is very similar and can be grouped for the purpose of assessment. From this more oblique viewing area, the Site tends to largely fall into the lee of a bold and more elevated shoreside landform set a short distance to the east of the Site. This serves to block views to all but the Lot 3 and island building locations.

Over this distance, the detail of even the reasonably conspicuous neighbouring houses is difficult to distinguish, so the proposal to create an extensive planted context to the intended building envelopes and to then manage the material characteristics of future buildings will render them virtually imperceptible. Accordingly, effects upon this audience are assessed as very low.

VP11 captures a glimpsed view from Kurapati Road from amongst vegetation that lines that lightly used corridor. Whilst closer to the Site and less oblique than the main Rangitane settlement, distance still plays a role in diminishing detail and distinction within the view. Adverse visual effects upon this small audience are considered to rest between low and very low.

Wainui Island and users of the adjacent navigation channel

Panorama VP6 was taken from the channel near Wainui Island to represent the view from vessels returning up the inlet. It is very similar to the views from Rangitane just described but is even more oblique (and therefore more concealing of much of the Site. As such adverse visual effects are assessed as being very low.

Reinga Heights

This pocket of settlement overlooks parts of the Site from elevated terrain to the west of Okura River. Panorama VP12, taken during a passing shower, represents that view from the roadside in what is one of the more unimpeded vistas relative to buildings and a well-developed framework of vegetation that buffers the view available from many of the homes.

Markings on the image show how house envelopes on proposed Lots 2 and 3 are positioned within the presently open, grassed structure of the Site. Proposals for planting will stitch together the present fragments of natural vegetation seen within this image to create a considerably more robust and cohesive pattern that buildings would sit within. Over time, that planted structure would serve to substantially screen those future homes, as Attachment Three demonstrates. In the intervening period of 5-10 years, the patterning would combine with the muted characteristics of those new homes to limit prominence and significantly mitigate adverse visual effects. That level of mitigation would not be as complete as would occur within more distant views but would limit it to being at a low level.

Kerkeri Inlet Road

There is only one brief and passing view to the Site from Kerikeri Inlet Road and it is represented by VP13. It occurs as the road descends its winding route to the southern edge of the Okura River and opens momentarily (as experienced from within a passing car) from amongst roadside vegetation. Continued growth of those plants on the flank is likely to close this sole view over coming years, but in the meantime, the effect is very similar to that described to for the Reinga Heights audience, being at the lower end of the low spectrum.

The island building envelope for Lot 1 is entirely screened by vegetation established within the Okura esplanade and related proposed covenant O, whilst the inland envelope for that same proposed title would be substantially buffered by vegetation seen below the portion of label "... Lot 2" and intervening rising land.

South Kerikeri Inlet Zone Visual Amenity Assessment Criteria

The following are the matters within which Council is required to restrict its discretion to when assessing restricted discretionary activities in the South Kerikeri Inlet Zone. Commentary is provided in relation to each:

(i) the location of the building;

Building envelopes are positioned in positions where gentle topography provides for structures to be installed with limited ground disturbance. The terrain is of limited elevation and set back from the Kerikeri Inlet, so the potential for any form of domination is inherently limited.

(ii) the size, bulk, and height of the building or utility services in relation to areas of high sensitivity (as defined on Map 84), ridgelines and natural features;

The Site is outside of identified areas of high sensitivity and does not involve ridgelines or natural features. Building heights are proposed to be constrained below the 8m limit generally provided for within the zone.

(iii) the colour and reflectivity of the building;

Volunteered finish conditions limit building reflectance values to 20% for roof surfaces and 30% for building facades, placing these parameters below or in alignment with the 30% limit set within the permitted activity standards applying to the zone.

(iv) the extent to which planting can mitigate visual effects;

As the landscape integration concept (Attachment Three) illustrates, the proposal provides for a substantial structure of indigenous planting that builds out from natural patterns of vegetation that exist upon the Site. This framework is confidently predicted to comprehensively mitigate the limited level of potential adverse visual effects that would arise following other initiatives that seek to minimise impacts, such as building controls.

(v) any earthworks and/or vegetation clearance associated with the building;

With building envelopes having been configured to relate to the relatively gentle topography of the Site, the need for earthworks to accommodate buildings is predicted to be very restricted. There is no vegetation existing within any of the defined building envelopes or access corridors.

(vi) the location and design of associated vehicle access, manoeuvring and parking areas;

Each building envelope is of generous scale and provides more than adequate scope, particularly when associated with adjacent space, for vehicular requirements. Access alignments are assigned to work with existing tracks, where present, and the natural topography of the Site.

(vii) the extent to which the building will be visually obtrusive;

Building locations, coupled with finish and height controls and planting requirements, will ensure that buildings will have a subdued presence and a low level of obtrusiveness.

(viii) the cumulative visual effects of all the buildings on the site;

The spatial configuration of the subdivision does carry the potential for cumulative visual effects. An awareness of that potential has led to particular care in building level controls, finishes and the planted structure of the proposal, such that structures would be essentially recessive relative to a vegetated context and to avoid houses being perceived as either "stacked" above each other or as a continuous band of built fabric.

(ix) the degree to which the landscape will retain the qualities that give it its naturalness, visual and amenity values;

The Site has a moderate measure of these values as a starting point, so is not of particularly heightened sensitivity in terms of its naturalness, amenity and visual values. The configuration and component elements of the proposal, as mentioned in relation to previous clauses, will allow these qualities to endure in large part, albeit in a somewhat different form where new planting and restoration of the wetland area provide fresh elements and patterns.

(x) the extent to which private open space can be provided for future uses;

Each proposed lot has a generous measure of dedicated space for outdoor enjoyment, reinforced by the structure of planting that is proposed.

(xi) the extent to which the siting, setback and design of building(s) avoid visual dominance on landscapes, adjacent sites and the surrounding environment;

As mentioned in response to preceding clauses, the positioning of buildings seeks to capitalise upon the natural form of the topography offered by the Site. When combined with proposed planting scale and patterns, this combination is expected to significantly limit the potential for visual dominance, as explained in greater detail in the preceding portion of this assessment.

(xii) the extent to which non-compliance affects the privacy, outlook and enjoyment of private open spaces on adjacent sites.

There are three adjacent sites potentially affected. Lot 2 DP210733 lies as a vacant title to the south of the primary access and would be almost entirely screened from passing vehicles by proposed planting within that corridor.

The home on Lot 1, DP 109734 is set well back from the Site, as seen in photographs found within the Attachments, and well elevated above the highest part of the Site. Impacts upon the privacy and private open spaces experienced at are predicted to be negligible, but the outlook from that home is forecast to be

in the order of moderate to low (as defined more fully on pp10-11 of this report), but progressively diminishing as installed vegetation diminishes.

A house on Lot 1 DP210733 to the east is largely screened by existing native vegetation, with the exception of a limited view toward the northern end of the proposed causeway and a possible future building on the island. The proposal is assessed as having no impact upon the privacy and enjoyment of the private outdoor spaces of this property and a very limited impact upon outlook from those areas.

Landscape effects

The wider setting of the site is characterised by a matrix of land use that includes pastoral farms, forestry areas, scattered examples of rural residential development and patterns of indigenous vegetation. The recurrent positioning of residential-type activities along the lower coastal flanks associated with the wider Kerikeri Inlet setting is an important element within this wider landscape setting.

The site planning of the proposal has deliberately provided for buildings to be set amongst the vegetative and topographic frame intimated by the natural patterns of the site. Intentions to bridge along the coastal flank and to back that new vegetation with further tiers of backdrop planting would form a tight and immediate setting for each of the proposed envelopes found to the south of the wetland and island.

Controls over the relationship between buildings and landform, the characteristics and scale of future buildings themselves, and requirements for backdrop / buffer blocks of vegetation - which in turn relate to local vegetation patterns and composition - are intended to complement the spatial placement of future structures in a way that comprehensively minimises the potential for adverse landscape effects to result.

In the context of the pattern of settlement occurring along this broader segment of coastal landscape, it is considered that the proposal would bring effects upon landscape values and identity that lie in the range of low to the lower end of the moderate to low spectrum.

Natural Character

Section 6(a) of the Resource Management Act (1991) states that the following matter of national importance shall be recognised and provided for:

"The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins and the protection of them from inappropriate subdivision, use and development."

A working definition of natural character is derived from research undertaken for the Ministry of the Environment in relation to Environmental Performance Indicators (Boffa Miskell Ltd 2002). This states that:

"Natural character is a term used to describe the naturalness of all coastal environments. The degree or level of natural character within an area depends on the extent to which natural elements, patterns and processes occur; and the nature and extent of modifications to the ecosystems and landscape / seascape. The highest degree of natural character (greatest naturalness) occurs where there is least modification. The effect of different types of modification upon the natural character of an area varies with the context, and may be perceived differently by different parts of the community."

Natural character exists on a continuum, from totally modified at one extreme, to entirely natural at the other. The majority of Kerikeri Inlet lies a little above the middle of that spectrum in my opinion, being clearly less compromised than more urban or industrial coastal areas, but less intact that some of the District's more pristine areas such as Cape Brett or much of the Bay of Islands.

Although the Site lies within the coastal environment, its relationship with the CMA is influenced by a screening fringe of mangroves and blocking presence of the island (for upper parts of the channel), as seen in many of the attached panoramas. The historic coastal functioning of what is now the wetland of the Site has been dramatically compromised by the flood bank berms, installed drains and legacy of long term grazing. Some of that heritage would be undone by the proposal to manage and restore the wetland area to a much more natural state (with resulting improvements to natural character values in that part of the Site), but that initiative can only go a small part of the way towards the significant reduction in natural character that has come with past actions to hold back estuarine functioning.

Measures to return indigenous growth to much of the Site and to manage the adverse effects of invasive plant species also come with incremental enhancements to natural character, providing a further offset to the impact brought by proposed built development.

The partial spatial and topographic separation of the Site from the Inlet water body and the sporadic pockets of development lining the Inlet shores, combined with controls proposed to apply to the development, significantly suppress any potential effect upon natural character to a point that is considered to be at a low level.

Rural character and amenity effects

Impacts upon rural character need to be considered in the context of the pattern of residential development that prevails in pockets around the rural hinterland of most of the coastline associated with Kerikeri Inlet.

Whilst the Site itself is currently free of built development, it lays in close context with the considerably more conspicuous residential settlement of Reinga Heights to the west and the influence of scattered rural residential dwellings stretching east towards more intensive development that then occurs around Edmonds Road. The characteristics of the site and the way that the proposal seeks to carefully merge

future development with those natural and rural characteristics would result in the proposal having only muted impacts upon rural character.

CONCLUSION

A combination of topographic and vegetation patterns found on the Site provide an opportunity for carefully considered development to occur in a way that results in very limited wider impacts.

It is concluded that the landscape, natural character and rural character of the proposal would be generally be less than minor, provided that the development occurs in accordance with the parameters described in this report. Visual effects are predicted to be equally subdued, including upon Lot 2 DP114410, but with the exception of those experienced from the home found immediately to the south east of the Site (Lot 1, DP 109734). For that property, initial impacts are anticipated to be more than minor but to subside to being minor as the development moves through its early years of maturity.

In relation to section 13.8.5 of the District Plan - where applications for restricted discretionary activities within the South Kerikeri Inlet Zone require notification of all property owners within the Zone and DH Ellis (being the property owner of Lot 2 DP 114410) – it is my opinion that it is not warranted for Council to serve the application on any other parties beyond that defined grouping.

The intention of the majority of framework planting to occur as part of the subdivision stage is advantageous in providing an initial "head start" to that pattern of vegetation in advance of development occurring on individual building developments.

The proposal allows for two options for building upon the lot that would include the "island', with one providing for a home or other building to be developed on the southernmost part of that title in the event that a building doesn't occur on the island. The other scenario allows for a shed or some other form of non-habitable building to be constructed on the southern defined building envelope in the event that a dwelling is constructed upon the island.

The proposed causeway to the island would be a low-lying structure that would be progressively fringed (and partially obscured) by vegetation establishing on the margins of the wetland. Its effects would be contained to being almost entirely within the Site, with the potential for a glimpsed view to its northern extent from the existing, neighbouring house to the east.

Mike Farrow ANZILA Registered Landscape Architect
LITTORALIS LANDSCAPE ARCHITECTURE
June 2018

Chris Williams

From: Mike Farrow <mike@lla.co.nz>
Sent: Friday, 28 September 2018 3:05 PM
To: Liz Searle (liz@scopeenvironmental.co.nz)
Subject: Nags Head Horse Hotel application - Kerikeri Inlet Road

Dear Liz

You have recently provided me with a copy of the updated Haigh Workman report for the above proposal and asked that I comment upon any potential visual effect implications of the farm track as detailed in the new section 7.4 of that report.

From my reading of the document, I understand that the access track to the island will typically be in the range of 300mm to 600mm above existing ground (mud) level and you have advised that there would be a short segment of track that is slightly more elevated to 1.1m as it passes over a culvert in the causeway. As you know, my earlier reporting was prepared in the absence of detailed engineering reporting, so I speculated upon the finished height of the causeway and its related approaches. On p7 (describing the proposal) of my report a height of 600mm RL is offered, with further commentary about the intention to ramp growing media along the lower extent of the causeway flank in which to establish vegetation.

It is my expectation that the indigenous, maritime wetland/saltmarsh vegetation that is to be established alongside/on the causeway batters would have a height of approximately 750mm above the apex of its root structure, with some species such as salt-marsh ribbonwood reaching up to 2m in height. If the soil ramp placed alongside the causeway were to be up to the 500mm thickness that I anticipate, the vegetation would serve to contain all horizontal and low oblique views to the causeway itself, subject to appropriate vegetation and structure detailing. There may be a very brief break in the continuity of that vegetation at the point of the culvert, where a causeway toe obviously can't exist due to the presence of the culvert channel.

In summary, and to answer your question, I confirm that the vegetation anticipated by my assessment reporting would effectively screen the island causeway from horizontal and low oblique views. Accordingly the findings of my reporting remain relevant.

Kind regards,

Mike Farrow
Principal Registered Landscape Architect

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LITTORALIS
LANDSCAPE ARCHITECTURE

Natalie Watson

From: Mike Farrow <mike@lla.co.nz>
Sent: Friday, 28 September 2018 3:05 PM
To: Liz Searle
Subject: Nags Head Horse Hotel application - Kerikeri Inlet Road

Dear Liz

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It is my expectation that the indigenous, maritime wetland/saltmarsh vegetation that is to be established alongside/on the causeway batters would have a height of approximately 750mm above the apex of its root structure, with some species such as salt-marsh ribbonwood reaching up to 2m in height. If the soil ramp placed alongside the causeway were to be up to the 500mm thickness that I anticipate, the vegetation would serve to contain all horizontal and low oblique views to the causeway itself, subject to appropriate vegetation and structure detailing. There may be a very brief break in the continuity of that vegetation at the point of the culvert, where a causeway toe obviously can't exist due to the presence of the culvert channel.

In summary, and to answer your question, I confirm that the vegetation anticipated by my assessment reporting would effectively screen the island causeway from horizontal and low oblique views. Accordingly the findings of my reporting remain relevant.

Kind regards,

Mike Farrow
Principal Registered Landscape Architect

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LITTORALIS
LANDSCAPE ARCHITECTURE

APPENDIX 4: ***'Engineering report for proposed subdivision of Lot 1 DP 167657 at 405 Kerikeri Inlet Road for Nags Head Horse Hotel Ltd'*** **prepared by Haigh Workman Civil and Structural Engineers, dated September 2018**

HAIGH WORKMAN LTD
Civil & Structural Engineers

Engineering Report for Proposed Subdivision
Lot 1 DP 167657 at 405 Kerikeri Inlet Road, Kerikeri
for
Nags Head Horse Hotel Ltd

Supporting report for resource consent to Far North District Council

FNDC Reference 2190056-RMASUB

Haigh Workman reference 17 229

September 2018

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Revision History

Revision Nº	Issued By	Description	Date
A	Rory Howell	For consent	13 October 2017
B	Michael Winch	For Consent (amended rights of way)	15 July 2018
B	Michael Winch	For Consent (amended earthworks)	17 September 2018

Prepared by	Reviewed By	Approved by
Rory Howell	Michael Winch	John Papesch
Environmental Engineer	Senior Civil Engineer	Senior Civil Engineer/Director

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FIGURES

Executive Summary

Haigh Workman Ltd (Haigh Workman) was commissioned by Nags Head Horse Hotel (the client) to undertake a site suitability assessment of land at 405 Kerikeri Inlet Road, Kerikeri (the 'site') for subdivision purposes. The site currently comprises a mixture of pasture, tidal mudflats, wetland and native bush. No structures exist on the site. It is proposed to subdivide the property into four lots. The proposed lots have areas ranging between four and six hectares. A proposed subdivision plan was made available to Haigh Workman at the time of writing.

The site is currently zoned as 'South Kerikeri Inlet'.

According to available geological plans and the Haigh Workman walkover survey, the underlying soils across the hillside development area comprise 'Hukerenui silt loam with yellow subsoil', categorised as *'imperfectly to very poorly drained'*. Soil overlays solid geology comprising interbedded sandstone and argillite of the Waipapa Group.

Fieldworks were undertaken by a Haigh Workman engineer on 7 September 2017. These works comprised site mapping and the drilling of four hand augured boreholes to 1.2 m below ground level.

It is concluded and recommended that:

- An appropriate freeboard is available above the coastal flood level for all development areas.
- All investigated house sites are suitable for a final low-rise residential end-use.
- Standard foundation depths are suitable on Lots 3 and 4.
- Foundations should be extended to beneath the podsolized soils on Lots 1 and 2. Podsolized soils are not expected to extend more than 1 m below ground level. We recommend specific engineering design for foundations on Lots 1 and 2.
- The proposed building sites are located at an elevation at least 6.0m OTP datum, at least 3.0m above any coastal flood level and are therefore not subject to natural hazards.
- We have not carried out geotechnical investigations or assessed the natural hazard risk of any potential building site on the island. Should any building be proposed for this site, geotechnical investigations and an assessment of coastal flood risk (including the effects of sea level rise, storm surge, wave run-up and tsunami) should be carried out prior to building consent stage.
- Access to the proposed subdivision is via an existing right of way off Kerikeri Inlet Road that currently serves 3 lots. On completion of the proposed subdivision, this right of way will serve 6 lots.
- Visibility from the vehicle crossing complies with Council standards.
- The crossing is to be formed as a double width crossing in accordance with FNDC Engineering Standards drawing FNDC/S/6B. The crossing shall be sealed to the watertable culvert, approximately 6 metres from the edge of Kerikeri Inlet Road.
- The existing gate is set back 16 metres from the edge of Kerikeri Inlet Road and opens towards the road. We recommend that the gate be duplicated (two 3.6m wide gates) to provide for the 5 metre right of way carriageway.

- The existing site access across the neighbouring property is to be widened to 5m.
- The application includes the construction of a farm track within Right of Way I to gain access to existing pasture to the north and east of the island.
- Earthworks to complete the subdivision are anticipated to comprise excavation and filling to form the accessway and farm track, and disestablish the existing farm track on proposed Lot 4. Our preliminary estimate of earthworks quantities indicates the proposed earthworks are a restricted discretionary activity under the District Plan. A request is made to incorporate consent for 2,500 m^3 of earthworks (including placing aggregate) on Lot 1 DP 167657 into the subdivision consent.
- An Erosion and Sediment Control Plan is to be provided before earthworks commence.
- During heavy rainfall events, stormwater flows as a sheet flow across the development area and drops down to the tidal mudflats.
- Stormwater attenuation is not considered necessary as stormwater flows directly to a coastal wetland.
- The primary subdivision stormwater system consists of an armoured swale drain following the internal accessway.
- The existing interception drain will continue along the eastern boundary of proposed Lots 1, 2 and 4.
- For effluent disposal, Lots 1 and 2 have been classified as TP58 category 7 due to the presence of podsolized soils. A typical 3-bedroom house will require an effluent disposal field of 400 m^2 on category 7 soils. Space is available on Lots 1 and 2 for this area plus a 100% reserve area. We recommend effluent disposal fields on the category 7 soils be mounded and densely planted with species suitable for evapotranspiration systems. Alternatively the podsolized soils could be ripped and the field designed for category 6 soils.
- Lots 3 and 4 have been categorised as TP58 category 6. A typical 3-bedroom house will require an area of 270 m^2 on category 6 soils. Area is available on all lots for this area plus a 100% reserve area.

It would be prudent to note that no LIM report has been provided to supplement this assessment.

1 Introduction

Haigh Workman Ltd (Haigh Workman) was commissioned by Nags Head Horse Hotel Limited (the client) to undertake a site suitability assessment of Lot 1 DP 167657 at 405 Kerikeri Inlet Road, Kerikeri (the 'site') for subdivision engineering purposes. This report presents the factual information available during the appraisal, and interpretation of data obtained during fieldworks with site specific recommendations relevant to the defined objectives.

The site currently comprises a mixture of pasture, tidal mudflats, wetland and native bush with no existing structures.

It is understood that the client intends to subdivide the site for a residential end-use. The proposed subdivision comprises four lots generally ranging from 4.2 hectares to 5.1 hectares. Residential development is proposed within the area covered with pasture. Access will be provided by an existing easement at the south eastern corner of the site.

The proposed subdivision plan is shown on Williams and King drawing 'Proposed Subdivision of Lot 1 DP 167657, Ref 21916, dated 15 June 2018.

1.1 Objective and Scope

The objectives of this investigation were to:

- Establish the geological and environmental setting of the site;
- Visually assess the site and surrounding land;
- Investigate the near surface soil and groundwater conditions at the site, and;
- Provide engineering and site suitability recommendations for the proposed subdivision

To achieve this, the scope of works conducted by Haigh Workman included:

- Review of geotechnical databases, available geological and topographical mapping;
- Site mapping;
- Intrusive site investigation for evaluation of subsurface conditions, and;
- Preparation of this report with site specific geotechnical, environmental, civil and water management recommendations.

1.2 Applicability

This report has been prepared for the use of Nags Head Horse Hotel Ltd with respect to the particular brief outlined to us. This report is to be used by our Client and their Consultants and may be relied upon when considering site suitability advice. Furthermore this report may be utilised in the preparation of building and/or resource consent applications with local authorities. The information and opinions contained within this report shall not be used in other context for any other purpose without prior review and agreement by Haigh Workman Ltd.

2 Site Details and Description

2.1 Site Identification

Site Address: 405 Kerikeri Inlet Road, Kerikeri

Legal Description: Lot 1 DP 167657

Area: 17.7 hectares

2.2 Proposed Subdivision

It is understood the client intends to subdivide the property into four lots designated Lots 1 to 4, inclusive serviced by a ROW. Table 2.1 details the proposed subdivision.

Table 2.1 – Proposed Subdivision

Proposed Lot	Area (hectares)	Intended final land-use
1	5.1060	Low-rise residential
2	4.1280	Low-rise residential
3	4.2550	Low-rise residential
4	4.2669	Low-rise residential

2.3 Site Description

The site comprises a roughly rectangular shaped parcel of greenfield rural land situated approximately 5 km east of Kerikeri Town Centre. A site location plan is presented as Drawing No. 17 229/01 within Appendix A of this report.

The site measures approximately 500 m by 360 m with a tongue extending 200 m to the east. The long axis is aligned roughly north to south. The site is bound to the west by the Okura River and to the north and northeast by the Kerikeri Inlet. Properties on the southern and southeastern boundaries are rural in character.

The site currently comprises a mixture of pasture, tidal mudflats, wetland and bush with no existing structures.

The proposed development area is covered with pasture. This area covers approximately 1.9 hectares in the southeast corner of the site. The land across this area consists of two plateaus of similar area sloping gently to the northwest. The land between the two plateaus slopes moderately with a fall of 4-5 m.

The edge of the pasture slopes moderately to steeply with a fall of 4-5 m to the wetland that borders the tidal mudflats. The mudflats and surrounding wetlands cover an area of 7.0ha. The mudflats were at one stage protected from tidal inundation by a stopbank with floodgated culverts. The floodgates no longer function and the mudflats are again exposed to tidal inundation. An island of higher ground (up to 10m elevation) exists within the northern portion of proposed Lot 1.

Access is at the southeastern corner of the site by way of an easement over the southern neighbour's property. The road entrance fronts on to Kerikeri Inlet Road.

A topography and site features plan of relevant features is included within Appendix A of this report as Drawing No. 17 229/03.

3 Geology

3.1 Mapped Geology

Sources of Information:

- GNS Science Geological Memoir 2, 2009: "Geology of the Whangarei Area";
- GNS Sciences 1:250,000 scale map Sheet 2, 2009: "Whangarei" (Rocks);
- NZMS Sheet 290 P04/05, 1:100,000 scale map, Edition 1, 1980: "Whangaroa-Kaikohe" (Soils);

3.1.1 *Weathered Geology (Soils)*

The pastural area is shown to be directly underlain by 'Soils of the Rolling and Hill Land' comprising 'Hukerenui silt loam with yellow subsoil' (HKr+HKrH) according to NZMS mapping; see Figure 1. Weathered soils at the site comprising HKr and HkrH are typically described and categorised as *'imperfectly to very poorly drained'*. Weathered soil geology is derived from weathering processes such as groundwater acting upon underlying solid bedrock strata over the course of geological history.

The mudflats are shown to be underlain by 'Soils of the Estuarine Flats and Former Lake Beds' comprising 'Takahiwai clay' (TC) according to NZMS mapping; see Figure 1. Superficial soils at the site comprising TC are typically described and categorised as *'imperfectly to very poorly drained'*.

3.1.2 *Bedrock Geology*

Weathered HKr soils are indicated to be underlain by bedrock comprising mainly of sandstone (TJw) of the Waipapa Group of late Jurassic to late Permian age (c 150-250 million years). TJw are described by the GNS map as *'massive to thin bedded, lithic volcaniclastic metasandstone and argillite'*.

Similarly the NZMS rock map describes the rock beneath HKr as 'sandstone and mudstone (greywacke and argillite)' (SM6), described as *'medium to dark grey, fine to medium grained sandstone interbedded with grey to black mudstone and minor siliceous, igneous and calcareous rocks, thinly to thickly bedded with some massive units, closely fractured and veined; moderately hard to very hard. Weathered to yellow-brown soft sandy clay to depths of 30 m'*

Superficial TC soils are indicated to be underlain by alluvium (Q1ae) of the Tauranga Group Holocene age (less than 12 thousand years). Q1ae are described by the GNS map as *'unconsolidated to poorly consolidated mud, sand and peat of estuarine origin'*.

Similarly the NZMS rock map describes the strata beneath TC as 'alluvium' ($A1_2$), described as *'mud, sand and gravel with minor peat, forming river bed and floodplain deposits up to 10 m above stream or sea level; unconsolidated to very soft. Unweathered.'*

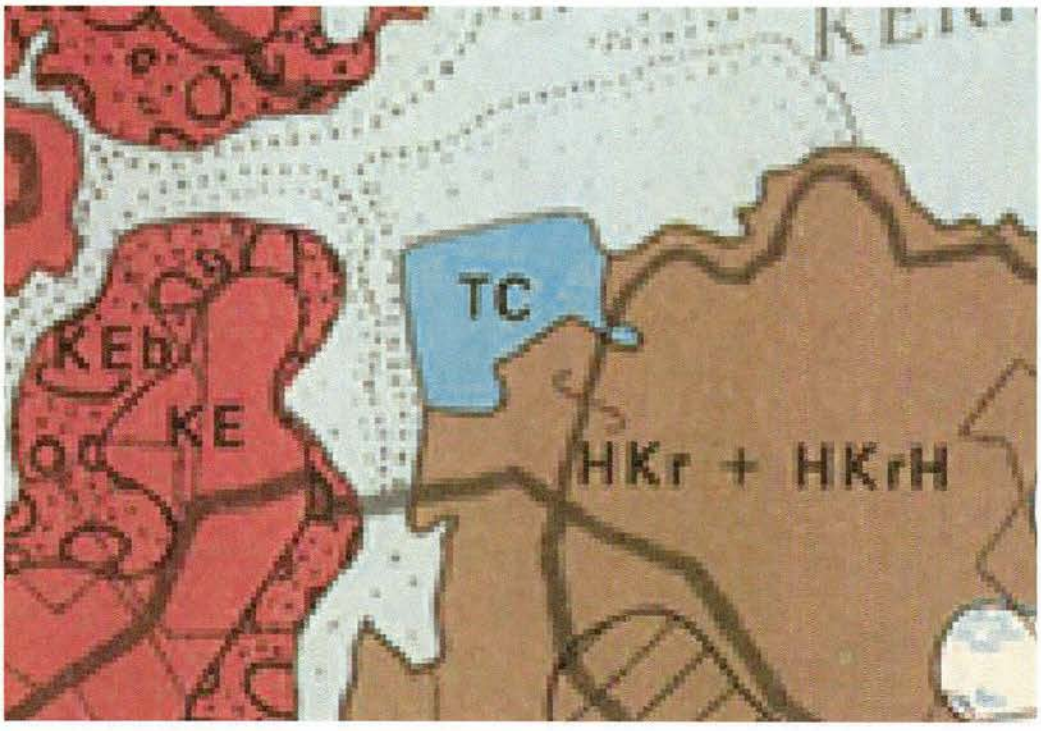

Figure 1: NZMS 290 Sheet P04/05 Soil Map

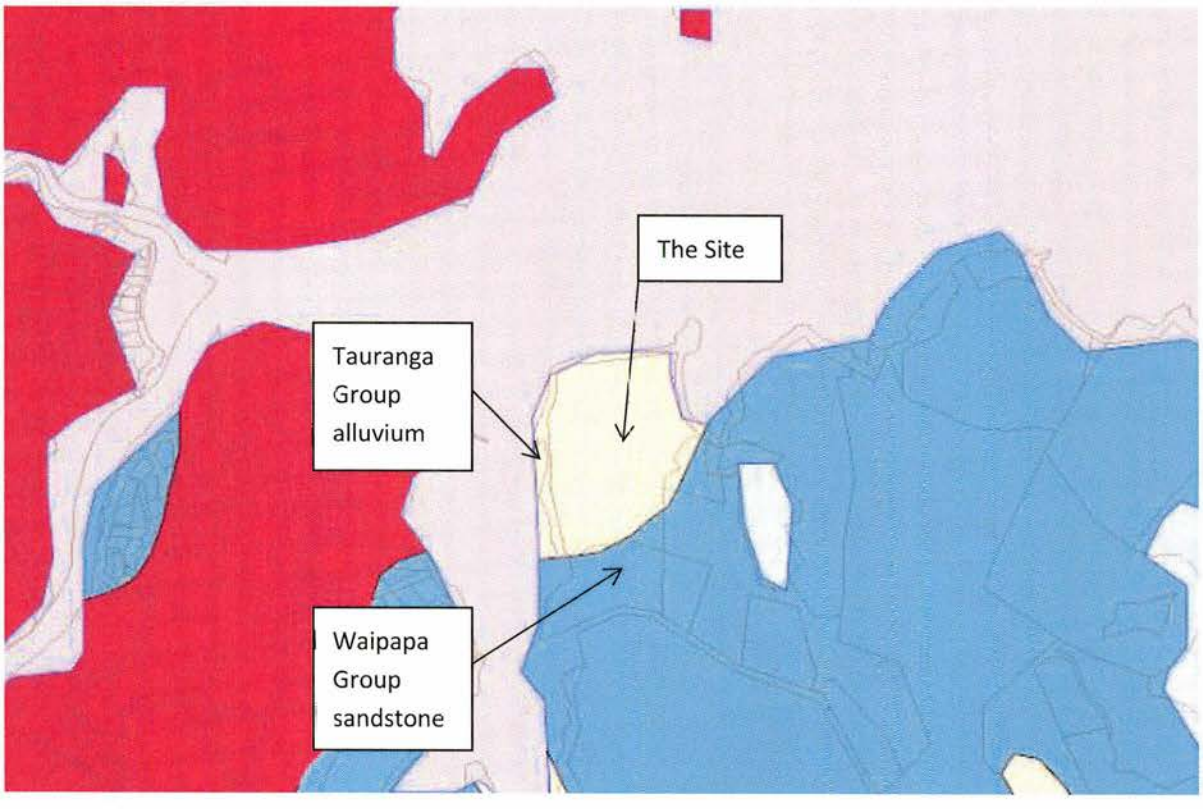

Figure 2: GNS Science, Geology of the Whangarei Area, Map 2

4 Environmental Setting

Published environmental data relating to the site has been reviewed. A summary of relevant information is provided below.

4.1 Hydrology and Flooding

A summary of available information pertaining to hydrology and hydrogeology is presented in Table 4.1. It should be noted that specific detailed flood hazard reporting is outside the scope of this investigation; an examination of Far North District Council (FNDC) and Northland Regional Council (NRC) online GIS databases is included below.

Table 4.1 - Surface Water Features & Flooding

	Presence/Location	Comments
Groundwater sources including springs/wells (within 500 m)	None recorded.	
Surface Water Features (Ponds, Lakes etc)	The mudflats are inundated by the tide. A lake with an area of c. 3.5 hectares exists to the east of the site	The lake is c 250 m to the east of the development area.
Watercourses (within 500 m)	The outlet of the lake exists approximately 10 m from the site boundary.	The outlet from the lake is c 250m to the east of the development area. The distance from the outlet to the coastal marine area is c. 60 m.
Flood Risk Status within residential development areas	Low	The proposed building sites are outside the mapped flood hazard area.
Flood Susceptibility within residential development areas	Negligible.	Proposed residential development areas are more than 3 m above the 100 year ARI coastal flood hazard level.

4.2 Contaminated Land (HAIL) Assessment

Based on a review of historical aerial photography and a site walkover it is considered the site is not subject to assessment under Hazardous Activities and Industries List (HAIL).

5 Fieldworks

5.1 Visual Inspection

A walkover was conducted by a Haigh Workman engineer in September 2017. Based upon a site walkover inspection conducted by Haigh Workman and information contained on geological plans, it is considered that the soils directly underlying the pasture typically comprise natural weathered soils formed by weathering processes acting upon underlying solid greywacke bedrock.

Soils are likely to include generally poor draining properties. When influenced with large volumes of water surface waters will flow across the surface as sheet flow due to the natural, moderate topography rather than being absorbed in large volumes.

Evidence of saturated soils was observed across the upper plateau. Isolated waterlogging of soils was observed on the lower plateau.

At the time of the walkover survey the land covered with pasture was noted to be generally stable. The development of all lots will require careful consideration for the moderately sloping site, in particular for earthworks and loading of the slope to adhere to recommendations set out in this report.

According to available aerial photography the quantity of made ground on site is considered to be negligible.

A Land Information Memorandum (LIM) report has not been included within the scope of works and is not subject to this review. It would be prudent to obtain for any further information about the area that may be recorded on the local authority GIS database which could otherwise cause restrictions or highlight land hazards that may be raised at the time of building development.

5.2 Subsurface Investigations

Fieldworks were undertaken by a Haigh Workman engineer on 7 September 2017 and comprised the drilling of four hand augured boreholes (BH1 to BH4, inclusive) to 1.20 m below ground level (bgl).

Site features and borehole locations are shown on Drawing Nos. 17 229/03, and 05, respectively; included within Appendix A. Relevant site photography is presented in Appendix C.

Detailed descriptions of strata and groundwater observations made during the intrusive investigation works are presented on the borehole logs included as Appendix B. Strata descriptions included on the borehole logs are compliant with New Zealand Geotechnical Society (NZGS) publication 'Field Description of Soil and Rock', 2005. The depths of strata and groundwater on the logs are recorded from ground levels at each location.

5.3 Ground conditions

A summary of ground conditions encountered during the intrusive investigation is included in Table 5.1.

Table 5.1 – Summary of Ground Conditions

Strata	Depth to Top of Strata (m bgl) (Thickness)	Details
Topsoil	Ground Level (0.10 to 0.15 m)	During fieldworks the site was noted to include a surface covering of maintained, roughly grassed topsoil. Topsoil at BH1 and BH2 was found to be saturated. Topsoil at BH3 and BH4 was found to be moist.
Podsolized soil (BH1 and BH2)	0.15 (0.35 to 0.75 m)	Topsoil on the upper plateau was found to be underlain by a poorly drained silt. This poorly drained stratum resulted in the saturation of topsoil at BH1 and BH2.
Natural Cohesive Soils (HKr)	0.10 to 0.9 (NE)	Soil beneath the podsolized soil and topsoil was found to be cohesive soils typical of weathered greywacke. The clay content of the soils decreased with depth. Natural cohesive soils were further described as generally moist to wet and of low to high plasticity.

NE - Not Encountered.

5.3.1 *Material Properties*

A total of eight in-situ hand shearvane tests were undertaken within natural cohesive soils up to 1.00 m bgl across all proposed lots. In-situ shear vane testing recorded shear vane strengths ranging from 127 kPa to >200 kPa or a consistent very stiff soil.

Shear vane strength results >100 kPa are indicative of 'good ground*' for bearing capacity for shallow foundations in accordance to the NZS 3604:2011.

5.3.2 *Groundwater*

The site was inspected at the wettest time of year.

Topsoil was saturated at BH1 and BH2.

The groundwater table was not encountered in any of the holes.

Soil moisture details are included on the exploratory hole records included within Appendix B.

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* Good Ground – Any soil or rock capable of permanently withstanding an ultimate bearing capacity of 300 kPa (i.e. an allowable bearing capacity of 100 kPa using a factor of safety of 3.0), but excludes:

a) Potentially compressible ground such as topsoil, soft soils such as a clay which can be moulded easily in the fingers, and un-compacted loose gravel which contains obvious voids;

b) Expansive soils being those that have a liquid limit of more than 50 % when tested in accordance with NZS 4402 Test 2.2, and a linear shrinkage of more than 15 % when tested from the liquid limit in accordance with NZS 4402 Test 2.6, and;

c) Any ground which could foreseeable experience movement of 25 mm or greater for any reason including one or a combination of land instability, ground creep, subsidence, seasonal swelling and shrinkage, frost heavy, changing groundwater level, erosion, dissolution of soil in water and effects of tree roots.

6 Geotechnical Recommendations

Geotechnical recommendations are based upon the findings of the intrusive ground investigation and site mapping undertaken during the Haigh Workman walkover survey.

6.1 Vertical and Lateral Movement Potential

6.1.1 *Settlement Analysis*

A preliminary settlement analysis has been undertaken for standard trench foundations being loaded with forces expected from a two-storey house. Foundations were analysed with a embedment of 0.5 m bgl. Foundation soils analysed were undisturbed, unpodsolized cohesive soils with strengths indicative of the recorded shear vane readings. Results of this analysis indicate differential settlements to be within the recommendations provided by Building Code compliance documentation.

6.1.2 *Shrink/Swell Potential*

Characteristic surface movement of the site due to the moisture profile needs to be considered for shallow foundation design. In reference to AS 2870:2011, Haigh Workman laboratory analysis in similar local soils and the results of the ground investigation, foundations should be designed to reactivity soil class **H** or highly reactive. Class H does not meet the requirement of good ground in accordance with NZS 3604:2011.

6.1.3 *Ground/Slope Stability*

Based upon the results of the intrusive ground investigation and site mapping it is considered the development platforms are stable with a **low** risk of ground instability in their present form. Provided all structures are sited within the proposed building envelopes it is considered the moderate slopes provide suitable development platforms for a low-rise residential development.

However, to construct standard foundation, it is considered that earthworks will be required to create a level development platform. Careful consideration must be given for any proposed cutting and subsequent filling of the existing hill slopes and underlying soils.

The requirement of ground support should be investigated based upon the final development plans, however at this stage it is considered that proposed cuts will require ground support in the form of a specifically designed timber pole retaining wall. Specific engineering design of retaining structures is required where a surcharge imposed by back sloping soil above a wall exists.

6.1.4 *Liquefaction Potential*

A detailed liquefaction potential assessment was outside the scope of this ground investigation.

Potentially liquefiable materials are identified by:

- Cohesive (fines) content – increasingly cohesive materials are less susceptible to liquefaction;
- Plasticity Index;
- Groundwater levels;
- Thickness of potentially liquefiable soils, and;

- Amplitude, frequency content and duration of shaking expected during seismic events.

The effect of liquefaction at the proposed building platform will be **low/negligible** during seismic events of up to 0.1 g Peak Ground Acceleration (PGA) as anticipated for Northland by NZS1170 and within tolerable settlement limits set by the NZBC.

A detailed liquefaction potential assessment was outside the scope of this ground investigation.

6.1.5 *Effects of Tree Roots*

Once final development locations are known it is recommended where any trees are identified within 5 m of proposed building footprints which could have the potential for soil consolidation due to the uptake of water from the tree roots or ground heave from tree root growth in accordance with NZS 3604:2011 that measures are taken to mitigate against the effects.

6.2 Foundations

Standard strip/trench fill foundations are considered suitable where a level development platform is created, or where masonry block walling is utilised to build up to finished floor levels.

For this option it is recommended that structural loads of a low-rise residential unit are taken down through topsoil and the podsolized soil to bear within the underlying natural, undisturbed cohesive soils of adequate strength/bearing resistance. Based upon the proven ground conditions this is anticipated to comprise very stiff silty clays.

We do not consider the podsolized soils meet the definition of 'good ground' under the NZBC as it is foreseeable they will experience movement of 25 mm or greater.

We consider it unlikely foundations will need to be extended more than 1 m below ground level to penetrate through the podsolized soil layer.

We recommend that due to the presence of podsolized soils specific engineering design be undertaken for the foundations of future houses on Lots 3 and 4.

7 Natural Hazards

7.1 Hazards

Hazards identified in Section 106 of the Resource Management Act are: erosion, falling debris, subsidence, slippage, or inundation from any source. Hazards listed in the Building Act include: erosion, falling debris, subsidence, inundation or slippage.

We assess the susceptibility of the nominated building sites to those potential effects as;

Erosion	Minor
Falling debris	No
Subsidence (vertical settlement)	No
Inundation	No. As discussed below, the proposed building sites are above flood hazard levels.
Slippage	No

The specific hazards listed as potentially applicable to this site are discussed further below. None of the conditions listed in Section 106 of the Resource Management Act are applicable to the site and the proposed building sites do not contain any natural hazards that would warrant action under Section 71(1) of the Building Act 2004.

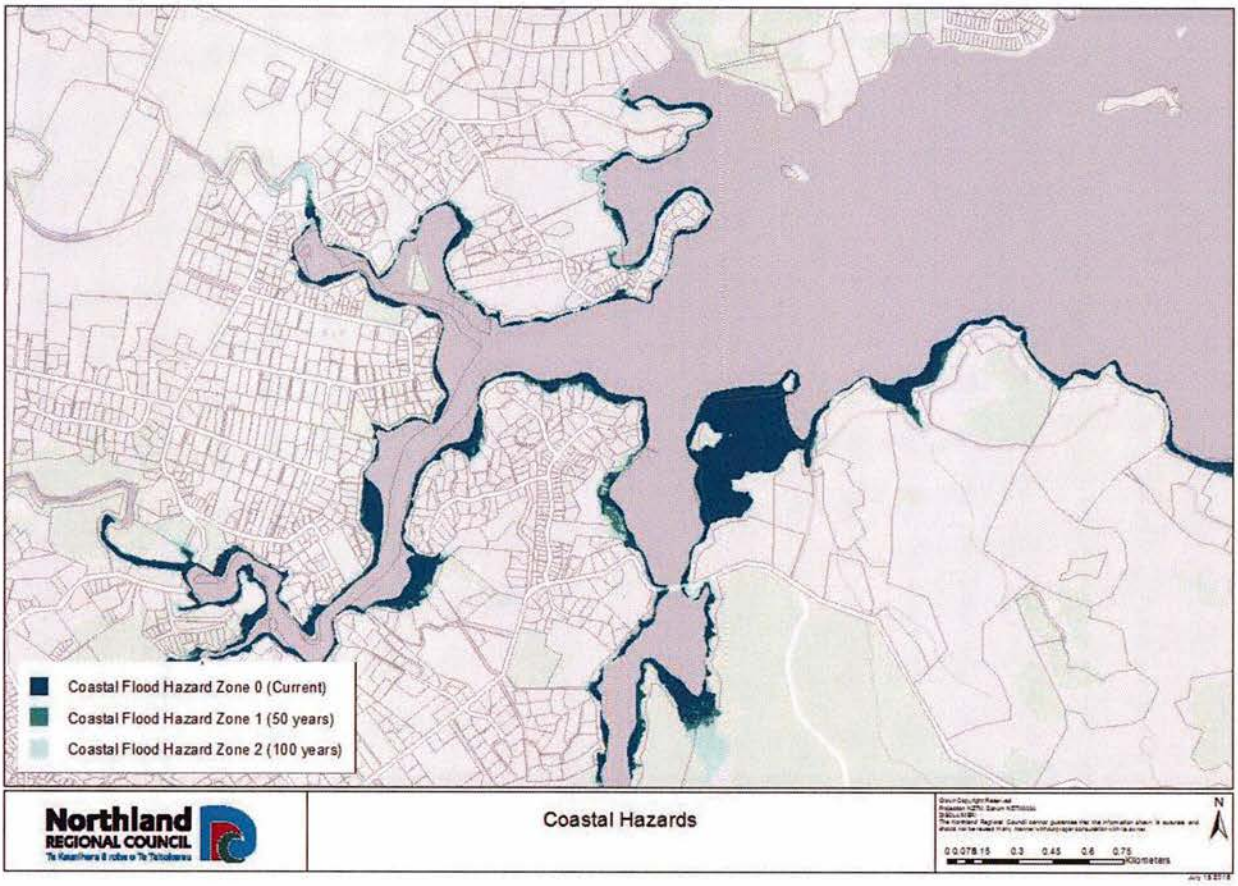
7.2 Flooding

The District Plan Hazard Map FL3, NRC and FNDC GIS databases do show the site as being subject to flooding from rivers or overland flow paths. Low lying areas of the site are shown on the Northland Regional Council GIS maps as being subject to coastal inundation.

A report prepared by Tonkin & Taylor for Northland Regional Council 'Coastal Flood Hazard Zones for Selected Northland Sites' May 2016 lists a 1% AEP storm tide level of 1.7 m OTP datum for Kerikeri Inlet in 2015. Section 2.3.5 of this report identifies current predictions for sea level rise. The values adopted in the report (and adopted by NRC) is 0.4m in 2065 and 1.0m in 2115. The 1% AEP storm tide level in 2115 is listed as 2.7 m OTP datum for Kerikeri Inlet.

The mudflat and wetland are subject to tidal inundation and surface flooding. However, the possible building sites are well elevated and are not subject to flooding.

Low lying areas of the site are shown on the Northland Regional Council GIS maps as being subject to coastal inundation as illustrated on the map below:



7.3 Northland Regional Policy Statement

The Operative Regional Policy Statement (RPS) for Northland section 7.1.7(5) specifies:

(5) The regional and district councils shall ensure that within the coastal environment:

(a) Any new habitable dwelling has a minimum floor level of 3.3m above One Tree Point datum on the east coast and 4.3m above One Tree Point Datum on the west coast. New non-habitable buildings will have a minimum floor level of 3.1m above One Tree Point datum on the east coast and 4.1m on the west coast; and

(b) An additional allowance for wave run-up shall be assessed over and above the requirements above for exposed east coast locations where ground elevation is less than 5m above One Tree Point datum, and for exposed west coast locations where ground elevation is less than 6m above One Tree Point datum.

(c) Clauses (a) and (b) do not apply to:

i) Non-habitable buildings not designed for habitation or commercial use and where the potential impact of the building being materially damaged or destroyed by a coastal hazard event (including the replacement cost) is minor (e.g. pump sheds, car ports, farm sheds and public toilets); and

ii) Non-habitable buildings that have a functional need to be located in the coastal marine area (e.g. boatsheds); and

iii) Network utility infrastructure.

Circumstances where (a) and (b) are not met will be subject to the resource consent process.

How minimum floor levels are derived in the RPS;

	East Coast	West Coast
Assessed 1% AEP sea level	1.8m OTP	2.8m OTP
Allowance for Sea Level Rise (to 2115)	1.0m	1.0m
Freeboard (habitable dwellings)	0.5m	0.5m
Freeboard (non-habitable buildings)	0.3m	0.3m

Any dwelling constructed in the identified house sites will comply with the Regional Policy Statement minimum floor level.

7.4 Farm Track

A farm track is proposed within Right of Way I to provide stock access to existing pasture to the north and east of the island. The route follows an old track around the headland and an existing fence on higher ground across the tidal wetland. Existing ground level along the route of the farm track typically varies from 0.3 to 0.6 m OTP datum, with a localised lower area (approximately -0.2 m OTP datum) in the centre of the wetland. It is proposed to place an average depth of 0.6 m of aggregate fill on the existing ground to raise the level of the track to a minimum of 0.9 m OTP datum similar to the existing metalled track formation within Right of Way J.

The NZ Nautical Almanac 2018-19 lists the following tidal levels (relative to chart datum):

Location	MHWS	MSL	MLWS
Doves Bay	2.4	1.5	0.6
Kerikeri	2.3	1.3	0.2
Opua	2.6	1.4	0.4

Chart datum = -1.68m OTP datum

Current MHWS at the site is around 2.35 m Chart Datum or 0.67 m OTP datum. A track at 0.9 m OTP datum would have 230mm freeboard above MHWS.

Once constructed, the is proposed track will settle as a result of consolidation of the mud beneath, and freeboard will reduce as a result of sea level rise. The track can be topped up as required to maintain reasonable freeboard for a farm track.

7.5 Conclusion

The proposed building sites are located at an elevation at least 6.0m OTP datum, at least 3.0m above any coastal flood level and are therefore not subject to natural hazards.

The proposed farm track will have adequate freeboard above current MHWS and can be topped up as required.

We have not assessed the natural hazard risk of any potential building site on the island. Should any building be proposed for this site, an assessment of coastal flood risk (including the effects of sea level rise, storm surge, wave run-up and tsunami) should be carried out prior to building consent stage.

8 Vehicle Access

8.1 Introduction

Access to the proposed subdivision is via an existing easement off Kerikeri Inlet Road that currently serves 2 lots – the subdivision site (Lot 1 DP 167657) and the land on which the easement is located (Lot 2 DP 210733). We understand that the adjoining property Lot 1 DP 210733 also has rights to this easement, although access to the property is currently via a vehicle crossing 140m further east along Kerikeri Inlet Road. On completion of the proposed subdivision, this right of way will serve 6 rural-residential lots.

The Traffic Intensity Factor (TIF) assessed in accordance with Appendix 3A of the Operative Far North District Plan[†] for 6 residential lots is 60 vpd. As only 5 lots are likely to use the crossing, actual traffic generation is likely to be closer to 50 vpd.

The location of the access is shown on Haigh Workman drawings 17 229/03 and 04.

8.2 Sight Distance Standards

Minimum sight distances from vehicle crossings are specified in the Far North District Council Engineering Standards and Guidelines 2009 drawing FNDC/ S /6.

Council's standards are based on Austroads safe stopping distances as calculated by the formula:

$$D = \frac{R_T \cdot V}{3.6} + \frac{V^2}{254\,(d + e)}$$

Where: R_T = driver reaction time (sec)

V = 85%ile vehicle speed (km/h)

d = rate of deceleration (g)

e = longitudinal gradient

The minimum sight distances specified on drawing FNDC/ S /6 are based on 3.0 seconds reaction time for speeds up to 60km/h, 2.5 seconds reaction time for speeds 70km/h and over, and the Austroads deceleration rate for sealed, level roads.

8.3 Vehicle Speeds

The legal speed limit on Kerikeri Inlet Road is 100 km/hr at this location. Vehicles approaching from the west (Kerikeri) are affected by a one lane bridge 700m from the entrance and a winding uphill climb. The 85%ile vehicle speed of vehicles on Kerikeri Inlet Road approaching the entrance from the west is assessed as 80km/h.

Vehicles approaching from the east (Inlet) are affected by a vertical curve at the Waitangi Forest entrance, 100m east of the site entrance. The 85%ile vehicle speed of vehicles on Kerikeri Inlet Road approaching the site entrance from the east is assessed as 80km/h.

[†] *Note: all Far North District Plan references are to the District Plan text as amended by Plan Change 20, Operative September 2017*

8.4 Minimum Sight Distances

Minimum sight distances specified on drawing FNDC/ S /6 for 85%ile speeds of 80km/h is 115m.

The FNDC standard does not provide an adjustment for gradient as specified in the Austroads standard. Vehicles approaching on a downhill gradient take longer to stop than on a level road, and vehicles approaching on an uphill gradient require a shorter distance.

The longitudinal gradient on Kerikeri Inlet Road is 6.8% to the west and 7.5% to the east of the entrance.

Minimum sight distances based on the 85%ile vehicle speeds have been calculated using the Austroads safe stopping distance methodology with 2.5 seconds reaction time and adjusted for gradient as follows:

Approach	V	d	e	Safe Stopping Distance	Sight Distance Achieved
From west	80 km/h	0.43	0.068	106 m	110 m
From east	80 km/h	0.43	-0.075	127 m	138 m

Based on the Austroads assessment there are sufficient sight distances for the existing entrance.

8.5 Vehicle Crossing

The existing vehicle crossing will be upgraded to comply with FNDC standards for the number of lots served. On completion of the proposed subdivision, the vehicle crossing will serve 5 lots (50 vehicles per day) with the right to serve 6 lots (60 vpd).

FNDC Engineering Standards and Guidelines 2009 clause 3.3.7.4 specifies that a rural access carrying less than 60 vehicles per day shall be Type 1 in accordance with drawing FNDC/S/6. Reference should also be made to drawing FNDC/S/6B.

The vehicle crossing should be formed as a double width crossing in accordance with drawing FNDC/S/6B. The crossing should be sealed to the watertable culvert, approximately 6 metres from the edge of Kerikeri Inlet Road.

Drawing FNDC/S/6B specifies that a gate shall be setback at least 10 metres from the road edge. The existing gate is set back 16 metres from the edge of Kerikeri Inlet Road and opens towards the road. We recommend that the gate be duplicated (two 3.6m wide gates) to provide for the 5 metre right of way carriageway. As such, there will be 12.4 metres between the open gates and the road edge.

8.6 Rights of Way

The existing right of way over Lot 2 DP 210733 will be upgraded and new rights of way A, B, C, F, G, H and I will be formed as part of the subdivision.

Rights of Way D and E provide for an existing right of access to Lot 1 DP 210733 that is not currently used. The right of way does not need upgrading as a result of the subdivision.

Rights of Way J to N provide additional access rights for Lot 1, but do not form part of the subdivision infrastructure.

The existing and proposed rights of way (ROWs) will be unsealed. ROWs will be constructed to FNDC standards.

The following table summarises District Plan Appendix 3B-1 minimum standards for the ROWs (refer Williams & King subdivision plan for ROW locations):

Table 8.1 –Right of Way Standards

ROW	Number of Lots Accessed off ROW	Minimum Legal Width	Minimum Carriageway Width
Lot 2 DP 210733 Easement	6	7.5 m	5.0 m
ROW A, B, C	5	7.5 m	5.0 m
ROW F, G	4	7.5 m	3.0 m + Passing Bays
ROW H	3	7.5 m	3.0 m + Passing Bays
ROW I	1	5.0 m	3.0 m

The access is to be widened to 5.0 m width up to the boundary of the site in accordance with the District Plan Appendix 3B-1 standards.

The existing ground slope at all ROWs except on a small portion of ROW I (where it leaves ROW G) complies with District Plan Appendix 3B-1 standards for gravel accessways. Gravel accesses require a maximum gradient of 1:5. ROW G has a section that is 1:4. Options are to either reduce the gradient to 1:5 or to concrete the section that is steeper than 1:5. The maximum slope permitted under the District Plan for concrete accesses is 1:4.

All rights of way require drainage channels.

In accordance with Rule 15.1.6C.1.3, passing bays will be provided at spacings not exceeding 100m and in all locations where the horizontal and vertical alignment of the private accessway restricts the visibility. 'Restricted visibility' is not defined in the District Plan. In traffic safety terms, restricted visibility is where two vehicles approaching each other have insufficient distance to stop before a collision. At an operating speed of 30km/h on an unsealed road, the stopping distance for each vehicle is calculated as follows:

$$D = \frac{R_T \cdot V}{3.6} + \frac{V^2}{254\,(d + e)}$$

Where: R_T = driver reaction time (sec) = 1.5 sec

V = 85%ile vehicle speed (km/h) = 30km/h

d = rate of deceleration (g) = 0.27

e = longitudinal gradient = 0

Stopping distance D = 26m.

We recommend that passing bays be provided where the visibility along the right of way is less than 60m, allowing two vehicles to stop with 8m spare.

8.7 Driveways

Driveways can be formed on acceptable gradients from the proposed ROWs to the building platforms shown on the drawings.

8.8 Parking and Manoeuvring

Parking in accordance with District Plan Rule 15.1.6B and associated manoeuvring can be accommodated within the proposed lots and rights of way.

8.9 District Plan Rule 15.1.6C.1

The proposed access has been assessed for compliance with the Far North District Plan Access Rule 15.1.6C.1 as follows:

Table 8.2 -Far North District Plan Rule 15.1.6.1.2 VEHICLE ACCESS

Rule	Applicability
15.1.6C.1.1 PRIVATE ACCESSWAY IN ALL ZONES (a) The construction of private accessway, in addition to the specifics also covered within this rule, is to be undertaken in accordance with Appendix 3B-1 in Part 4 of this Plan. (b) Minimum access widths and maximum centreline gradients, are set out in the Appendix 3B-1 table except that the grade shall be: All urban zones; excluding the Commercial and Industrial Zones — No steeper than 1:8 adjacent to the road boundary for at least 5m Commercial and Industrial Zones — No steeper than 1:20 adjacent to the road boundary for a length of at least 6m. (c) A private accessway may serve a maximum of 8 household equivalents. (d) Where a subdivision serves 9 or more sites, access shall be by public road. (e) Access shall not be permitted: (i) onto a State Highway or a Limited Access Road; (ii) onto an arterial or collector road within 90m of its intersection with an arterial road or a collector road; (iii) onto an arterial or collector road within 30m of its intersection with a local road; (iv) onto a local road within 30m of its intersection with an arterial or collector road; (v) onto Kerikeri Road (both sides of the road along the portion between Maraenui Drive and Cannon Drive). This rule does not apply to sites with lawfully established access points (as at 6 September 2001) onto Kerikeri Road. [Notes on Limited Access Roads omitted]	The right of way to the road will be formed to Appendix 3B-1 standards The right of way serves a maximum of 6 lots. Access is not proposed on to a state highway or within 90m of any side road
15.1.6C.1.2 PRIVATE ACCESSWAYS IN URBAN ZONES (a) Private accessways in all urban zones, excluding the Commercial and Industrial Zones, shall comply with the following: Where: (i) The private accessway serves no more than four residential units; and (ii) Visibility is not restricted; and (iii) The access is less than 60m long; or 60m long or longer and passing bays are provided at intervals not exceeding 60m. — The private accessway from the road boundary to any parking or loading space shall be: • not less than 3m wide; and • a minimum overhead clearance of 4m. Where any one of (i) through (iii) above are not complied with — The private accessway shall be 5m wide. Note 1: The entrance standards from the road shall comply with the entrance standards detailed in Rules 15.1.6C.1.4 and 15.1.6C.1.5, as applicable. (b) Private accessways in the Commercial and Industrial Zones shall comply with the following: (i) One-way operation, excluding service stations. Note: A one-way operation is a 3m wide private accessway that provides entry to the site at one point and exit from the site at a different point. — The private accessway from the road to any parking or loading space shall:	N/A The site is not within an urban zoning

	• not less than 3m or more than 4m in width; and • have a minimum overhead clearance of 4.2m	
(ii) Two-way operation, excluding service stations Note: A two-way operation is a 6m wide private accessway that provides entry and exit from the site at the same point	The private accessway from the road to any parking or loading space shall: • not be less than 6m or more than 7m in width; and • have a minimum overhead clearance of 4.2m	
(iii) Service stations	The private accessway from the road to any parking or loading space shall: • have a maximum width for one-way and two-way operations of 9m; and • have a minimum overhead clearance of 4.2m	
(c) All private accessways in all urban zones which serve two or more activities are to be sealed or concreted.		
15.1.6C.1.3 PASSING BAYS ON PRIVATE ACCESSWAYS IN ALL ZONES (a) Where required, passing bays on private accessways are to be at least 15m long and provide a minimum usable access width of 5.5m. (b) Passing bays are required: (i) in rural and coastal zones at spacings not exceeding 100m; (ii) on all blind corners in all zones at locations where the horizontal and vertical alignment of the private accessway restricts the visibility. (c) All accesses serving 2 or more sites shall provide passing bays and vehicle queuing space at the vehicle crossing to the legal road.		Passing bays will be provided at 100m maximum centres and wherever sight distance is restricted to less than 60m
15.1.6C.1.4 ACCESS OVER FOOTPATHS The following restrictions shall apply to vehicle access over footpaths: (a) no more than two crossings per site; and (b) the maximum width of a crossing shall be: All activities; except service stations: 6m Service stations or supermarkets: 9m Note: Consideration should be given to the location of crossings and the potential for signage to ensure pedestrian safety.		N/A
15.1.6C.1.5 VEHICLE CROSSING STANDARDS IN RURAL AND COASTAL ZONES (a) Private access off roads in the rural and coastal zones the vehicle crossing is to be constructed in accordance with Council's "Engineering Standards and Guidelines" (June 2004 – Revised 2009). (b) Where the access is off a sealed road, the vehicle crossing plus splays shall be surfaced with permanent impermeable surfacing for at least the first 5m from the road carriageway or up to the road boundary, whichever is the lesser. (c) Where the vehicle crossing serves two or more properties the private accessway is to be 6m wide and is to extend for a minimum distance of 6m from the edge of the carriageway. **Note 1**: Refer to Appendix 3G for a visual representation of what a vehicle crossing is and how it works in relation to a private access.		The vehicle crossing will be formed as a double width crossing in accordance with drawing FNDC/S/6B. The crossing will be sealed to the watertable culvert, approximately 6 metres from the edge of Kerikeri Inlet Road.
15.1.6C.1.6 VEHICLE CROSSING STANDARDS IN URBAN ZONES (a) Private access off streets in the urban zones the vehicle crossing is to be constructed in accordance with Council's "Engineering Standards and Guidelines" (June 2004 – Revised 2009).		N/A

(b) Where the vehicle crossing serves two or more properties the vehicle crossing is to be widened to provide a double width vehicle crossing. **Note 1**: Refer to Appendix 3G for a visual representation of what a vehicle crossing is and how it works in relation to a private access.	
15.1.6C.1.7 GENERAL ACCESS STANDARDS (a) Provision shall be made such that there is no need for vehicles to reverse off a site except where there are less than 4 parking spaces gaining access from a local road. (b) All bends and corners on the private accessway are to be constructed to allow for the passage of a Heavy Rigid Vehicle. (c) Any access where legal width exceeds formation requirements shall have surplus areas (where legal width is wider than the formation) grassed. (d) Runoff from impermeable surfaces shall, wherever practicable, be directed to grass swales and/or shall be managed in such a way as will reduce the volume and rate of stormwater runoff and contaminant loads.	Complies
15.1.6C.1.8 FRONTAGE TO EXISTING ROADS (a) Where any proposed subdivision has frontage to a road or roads that do not meet the legal road width standards specified by the Council in its "Engineering Standards and Guidelines" (June 2004 – Revised 2009), road widening shall be vested in the name of the Council. (b) Where any proposed subdivision has frontage to a road or roads that are not constructed to the standards specified by the Council in its "Engineering Standards and Guidelines" (June 2004 – Revised 2009), then the applicant shall complete the required improvements. (c) Where a site has more than one road frontage or frontage to a service lane or right-of-way (ROW) in addition to a road frontage, access to the site shall be in a place that: (i) facilitates passing traffic, entering and exiting traffic, pedestrian traffic and the intended use of the site; (ii) is from the road or service lane or ROW that carries the lesser volume of traffic. (d) Where any proposed subdivision has frontage to a road on which the carriageway encroaches, or is close to the subject lot or lots, the encroachment or land shall vest in Council such that either the minimum berm width between the kerb or road edge and the boundary is 2m or the boundary is at least 6m from the centreline of the road whichever is the greater.	N/A The subdivision site has no frontage on to Kerikeri Inlet Road
15.1.6C.1.9 NEW ROADS All new public roads shall be laid out, constructed and vested in accordance with the standards set out in the Council's Engineering Standards and Guidelines (June 2004 – Revised 2009). Note: Refer also to the Designation and Utility Services rules within Chapter 17.	N/A
15.1.6C.1.10 SERVICE LANES, CYCLE AND PEDESTRIAN ACCESSWAYS (a) Service lanes, cycle and pedestrian accessways shall be laid out and vested in accordance with the standards set out in the Council's "Engineering Standards and Guidelines" June (2004 – Revised 2009). (b) All access reserved for pedestrians only shall be a footpath, formed and concreted (or an alternative surface) to Councils satisfaction.	N/A
15.1.6C.1.11 ROAD DESIGNATIONS Where any frontage to an existing road is shown on the Zone Maps as being subject to designation for road acquisition and widening purposes, provision shall be made to enable the Requiring Authority to acquire such land, by separately defining the parcels of land. Where the Requiring Authority is not in a position to acquire such parcels immediately, they shall be held in conjunction with adjoining land, with consent notices registered in accordance with Rule 13.6.7.	N/A

9 Earthworks

9.1 Proposed Earthworks

At this stage earthworks are anticipated to comprise formation of the proposed rights of way (ROW) and disestablishment of part of the existing track on Lot 4. The maximum depth of cut or fill is not expected to exceed 1.0 m.

Earthworks is broken down as follows:

- Formation and widening of the ROWs
- Cutting and filling to reduce gradient of the proposed ROW I
- Construction of a farm track within Right of Way I and part of Right of Way J
- Placing aggregate
- Disestablishment of the existing farm track in the building area on Lot 4.

Preliminary earthworks quantities are presented below.

Table 9.1 –Subdivision Earthworks Quantities

Location	Length (m)	Area (m^2)	Cut (m^3)	Fill (m^3)	Aggregate (m^3)	Total (m^3)
Lot 2 DP 210733 ROW	181	450	135	135	100	370
Lot 2 ROW G - H	134	670	200	200	125	525
Lot 3 ROW I	240	1200	190	190	576	956
Lot 3 Causeway	152	760	80	80	365	525
Lot 1 Causeway	100	500	50	50	225	325
Lot 2 ROW J	45	225	25	25	109	159
Total	**852**	**3805**	**680**	**680**	**1500**	**2860**

9.2 Regulatory Conditions

The land is zoned South Kerikeri Inlet. This anticipated scale of earthworks on the site will exceed the permitted activity in the South Kerikeri Inlet zone of 300 m^3 per year per Lot on Lot 1 DP 167657, but not the 2,000 m^3 per year per Lot maximum for a Restricted Discretionary activity. The anticipated scale of earthworks on the neighbouring property Lot 2 DP 210733 will not exceed the permitted activity limit.

Pursuant to rule 13.6.8 of the Operative District Plan, it is requested that consent for 2,500 m^3 of earthworks (including placing aggregate) on Lot 1 DP 167657 be incorporated into the subdivision consent.

The total volume over the Site remains within the 5,000m^3 per year permitted under the Regional Water and Soil Plan for Northland rules and 5,000m^2 per year permitted under the Proposed Regional Plan.

A resource consent has been granted for construction of the causeway in ROW I (NRC resource consent AUT.040047). It is expected that construction of Right of Way I around the headland will comply with the Regional Water and Soil Plan Rule 34.1.3 and Proposed Regional Plan Rule C.8.3.1.

9.3 Earthworks Construction

Earthworks will be carried out in accordance with NZS 4404 and Council's Engineering Standards and Guidelines.

Where the placement of imported hard fill material is required, the material should be sorted, classified and compacted in a controlled manner in accordance to an approved earthworks specification, such as NZS 4404 Section 2.3.6 *'Compaction Standards for Fill Material'*. Where imported hard fill materials are placed in excess of 600 mm thickness and/or where hard fill is proposed to be utilised as a bearing strata or for roading it is recommended that compaction is confirmed by in-situ testing conducted by a suitably qualified and experienced engineer.

Erosion and sediment control for earthworks will be carried out in accordance with Council's Engineering Standards and Guidelines and Auckland Council GD05.

Final earthworks details will be confirmed on more detailed design. We suggest that, as a condition of consent, an Erosion and Sediment Control Plan be required to be submitted to and approved by Council prior to start of earthworks.

9.4 Assessment Criteria

The proposed earthworks has been assessed against the Assessment Criteria in Section 12.3.7 of the Far North District Plan as follows:

Table 9.2 -Far North District Plan Section 12.3.7 Assessment Criteria

Criterion	Assessment
(a) the degree to which the activity may cause or exacerbate erosion and/or other natural hazards on the site or in the vicinity of the site, particularly lakes, rivers, wetlands and the coastline;	With appropriate measures the proposed earthworks will not cause or exacerbate erosion.
(b) any effects on the life supporting capacity of the soil;	Soil beyond the roads and rights of way will be suitable for lawn and landscape planting
(c) any adverse effects on stormwater flow within the site, and stormwater flow to or from other properties in the vicinity of the site including public roads;	A culvert will be placed to convey stormwater under the driveway.
(d) any reduction in water quality;	Sediment control will be implemented during the earthworks operation using the Auckland Council GD05 guidelines. Once built on or grassed the proposed fill will have no adverse effect on water quality.
(e) any loss of visual amenity or loss of natural character of the coastal environment;	Refer Planner's report
(f) effects on Outstanding Landscape Features and Outstanding Natural Features (refer to ***Appendices 1A*** and ***1B*** in ***Part 4***, and ***Resource Maps***);	Refer Planner's report
(g) the extent to which the activity may adversely affect areas of significant indigenous vegetation or significant habitats of indigenous fauna;	N/A
(h) the extent to which the activity may adversely affect heritage resources, especially archaeological sites;	Refer Planner's report
(i) the extent to which the activity may adversely affect the cultural and spiritual values of Maori, especially Sites of Cultural Significance to Maori and waahi tapu (as listed in ***Appendix 1F*** in ***Part 4***, and shown on the ***Resource Maps***);	Refer Planner's report
(j) any cumulative adverse effects on the environment arising from the activity;	Refer Planner's report
(k) the effectiveness of any proposals to avoid, remedy or mitigate any adverse effects arising from the activity;	A sediment control plan will be designed to avoid or mitigate erosion and sediment runoff.
(l) the ability to monitor the activity and to take remedial action if necessary;	The sediment control plan is required to be monitored and action taken to avoid, remedy or mitigate risks.

10 Stormwater Management

10.1 Existing Site Drainage

At present stormwater flows across the pasture area to the tidal mudflats. An interception drain adjacent to the eastern boundary of the pasture directs stormwater to the north of the site. The interception drain disperses across a slope with no evidence of erosion. There are no concentrated flows across the pasture.

10.2 Stormwater Management Principles

On-site stormwater management is to be carried out in accordance with Clause E1 of the building code compliance documents. The performance requirements are as follows;

- That a primary system capable of disposal of surface water resulting from a storm having a 10 % (1 in 10 year) probability of occurring annually, shall be constructed.
- That all stormwater reticulation and disposal systems are constructed to convey surface water to an appropriate outfall using gravity flow, and in a manner which avoids the likelihood of blockages, leakage, penetration by roots, or the entry of groundwater where pipes or lined channels are used and avoids the likelihood of damage from superimposed loads or normal ground movements.
- That for piped systems, accessible inspection chambers are provided at all changes of grade, direction and pipe size.
- That self-cleansing velocities are maintained within reticulation systems.
- That the reticulation and disposal system is designed and constructed for a function design life of 50 years.
- That damage to the environment both during and after the development construction phase is minimised or avoided.
- That a system is provided which can be economically maintained.

The proposed developments are not considered to create a long-term impact on stormwater quality hence no special provisions for water quality treatment are proposed.

The intent of the applicant is to comply with NRC permitted activity rules. No stormwater detention is required as there are no properties downslope of the site.

10.3 District Plan Provisions

The proposed lots are zoned as South Kerikeri Inlet. The relevant stormwater management/ impermeable surface rules are as follows:

Permitted stormwater management activities;

> **10.10.5.1.6 Stormwater Management**
>
> *The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 10% or 600 m², whichever is the lesser.*

Impermeable surfaces are defined by FNDC as;

IMPERMEABLE SURFACE

In relation to any site means any building or surface on or over the land which creates a barrier to water penetration into the ground. This definition includes but is not restricted to:

(a) decks (including decks less than 1 m in height above the ground) excluding open slatted decks where there are gaps between the boards;

(b) pools, but does not include pools designed to operate as a detention pond;

(c) any surfaced area used for parking, maneuvering, access or loading of motor vehicles, including areas covered with aggregate;

(d) areas that are paved with concrete, asphalt, open jointed slabs, bricks, gobi or materials with similar properties to those listed;

(e) roof coverage area on plan;

But excludes:

i. Water storage tanks occupying up to a maximum cumulative area of 20 m^2; and

ii. Paths and paving less than 1 m wide, provided they are separated from other Impermeable Surfaces by a minimum of 1 m.

For the purpose of calculating impermeable surfaces, account shall not be taken of any additional areas that are overlapped by another form of impermeable surfaces.

In the case of jointly owned access lots that contain impermeable surfaces within their boundaries, the total area of these impermeable surfaces are to be divided equally and considered as parts of the various sites served by the access lot for the purpose of determining compliance with the relevant stormwater management rules.

Existing and proposed impermeable surfaces have been calculated in Appendix C as follows:

he impermeable area of the proposed ROW has been calculated to be 705 m^2. Calculations are presented below:

Table 10.1 –Impermeable surfaces to develop subdivision

Lot	Existing Impermeable Surfaces	Proposed Impermeable Surfaces	Lot Area	Proposed Coverage
Lot 2 DP 210733	2373 m^2	2735 m^2	201,695 m^2	1.35%
Lot 1 DP 167657	2016 m^2	3391 m^2	177,060m^2	1.92%

These area breach the 600m^2 permitted limit per lot, meaning a land use consent will be required.

The effects of the impermeable area can be mitigated with suitable design of culverts and overland flowpaths. Stormwater detention is not required as the site flows directly to a tidal wetland.

The proposed subdivision provides for, but does not include residential development. It is anticipated that houses when they are built will be of a similar scale to the existing residential development in other rural-residential land in the Kerikeri area. Typical developed areas are 300m^2 roof area and 200m^2 additional driveway/turning area per lot. Typical impermeable surfaces on each lot when they are developed are estimated as follows:

Table 10.2 –Impermeable Surfaces after subdivision and before residential development

Proposed Lot	Impermeable Surfaces	Lot Area (ha)	Coverage
Lot 1	400 m^2	51,060 m^2	0.78%
Lot 2	666 m^2	41,280 m^2	1.61%
Lot 3	1176 m^2	42,550 m^2	2.76%
Lot 4	1149 m^2	42,669 m^2	2.69%
Total	3391 m^2	177,060 m^2	1.91%

Table 10.3 –Impermeable Surfaces after residential development

Proposed Lot	Impermeable Surfaces	Lot Area (ha)	Coverage
Lot 1	900 m^2	51,060 m^2	1.76%
Lot 2	1166 m^2	41,280 m^2	2.82%
Lot 3	1676 m^2	42,550 m^2	3.94%
Lot 4	1649 m^2	42,669 m^2	3.86%
Total	5391 m^2	177,060 m^2	3.04%

The combination of impermeable surfaces associated with the accessways and residential development on all lots will breach the 600 m^2 permitted activity limit when developed. Land use consent for these lots will be applied for once development plans have been finalised.

10.4 Regional Plan Provisions

Long term stormwater management is to be in compliance with NRC Regional Water and Soil Plan permitted activity rules for stormwater discharges 29.1.2(a);

> *For new subdivision and development, the best practicable option for on-site stormwater disposal shall be identified and incorporated into the stormwater management design to avoid or minimise changes to stormwater flows after development for the 1 in 5 year return period storm event.*

> *To help achieve the best practicable option for on-site stormwater disposal in clause (a), the following measures should be considered:*
> - *Infiltration facilities in permeable soil types;*
> - *The retention of natural stream channels;*
> - *Minimise areas of impermeable surfaces;*
> - *Stormwater detention before dispersal into waterways.*

Auckland Council Technical Publication No. 10 (TP10) states the following regarding water quantity design objectives;

Auckland Council criteria for water quantity control depend on the receiving environment. If the receiving environment is a piped stormwater reticulation system with adequate capacity for the increased runoff or tidal (either estuarine or marine), then water quantity control is not an issue and a number of practices can be used to achieve water quality goals. If the receiving environment is a stream, then control of peak rates of runoff may be a requirement, and ponds become a primary option for controlling discharge rates.

The Northland Regional Council is reviewing its Regional Plans and a Proposed Regional Plan for Northland was notified in September 2017. It has statutory effect at this stage along side the operative Water and Soil Plan.

Proposed Rule C6.4.2 provides for the diversion and discharge of stormwater from outside a public stormwater network provided (amongst other conditions) *the discharge or diversion does not cause or increase nuisance or damage to other property.*

Proposed Rule C.6.4.1 for stormwater discharge from a public stormwater network is more specific, requiring:

2) the diversion and discharge does not cause or increase flooding of land outside the area serviced by the stormwater network up to the 10 percent annual exceedance probability or flooding of buildings outside the area serviced by the network up to the one percent annual exceedance probability, and …

Drainage from the site is via open drains to the coastal wetland. There are no properties downstream that would be affected by stormwater flows from the lots.

10.5 Proposed Stormwater System

The site is formed by moderately sloping rolling and hill land and site drainage is generally via surface runoff to the tidal mud flats.

A summary of the proposed stormwater system is as follows.

10.5.1 *Subdivision Stormwater System*

- The interception drain along the farm track on the eastern boundary is to remain
- A culvert will be required under the new accessway near the boundary of Lot 3 and Lot 2
- An armoured flowpath is to be used to convey water from the culvert to the base of the slope
- It is recommended that drainage easements be created to protect the interception drains on the eastern boundary and next to the proposed accessway
- We recommend specific engineering design of the stormwater system be required as a condition of consent.
- The subdivision stormwater system should be designed to accommodate stormwater from fully developed lots.

10.5.2 *Lot Development*

- Stormwater run-off from Lots 1 and 2 will be to the interception drain of the proposed accessway (RoW G);
- Stormwater run-off from Lot 3 will be either dispersed across the ground surface on the plateau or discharged to the tidal flats within Lot 3;
- Stormwater run-off from Lot 4 could either be discharged to the accessway to the south, dispersed across the ground surface or discharged to the tidal flats within Lot 4;
- Existing dispersed stormwater flows from the proposed building sites on Lots 1 and 3 will continue to flow into the Lot 2 wetland.

10.5.3 *Stormwater Attenuation*

An all cases, stormwater run-off is into a tidal wetland. Stormwater attenuation is not required to limit stormwater flows.

10.6 Assessment Criteria

The proposed stormwater management provides for the following matters listed in Section 13.7.3.4 of the Far North District Plan as follows:

Table 10.4 -Far North District Plan Rule 13.7.3.4 STORMWATER DISPOSAL

Criterion	Comment
(a) All allotments shall be provided, within their net area, with a means for the disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments.	Drainage easements are in place to allow disposal of collected stormwater to the tidal mudflats. Detailed design to prevent erosion is recommended as a condition of consent.
(b) Where the means of disposal of collected stormwater will be by way of piping to an approved outfall, each new allotment shall be provided with a piped connection to the outfall laid at least 600mm into the net area of the allotment. This includes land allocated on a cross lease or company lease.	The proposed subdivision stormwater system does not involve piped reticulation
(c) The provision of grass swales and other water retention devices such as ponds and depressions in the land surface may be required by the Council in order to achieve adequate mitigation of the effects of stormwater runoff.	Water retention devices are not considered necessary as there are no properties downstream of the site. Swales will be designed at the detailed stormwater design stage.
(d) The stormwater disposal system shall be designed in accordance with onsite volume control practices as contained in "Technical Publication 10, Stormwater Management Devices – Design Guidelines Manual" Auckland Regional Council (2003).	Flow rate control is not required to protect downstream properties or the receiving environment.

The proposed stormwater management has also been assessed against the Assessment Criteria in Section 13.10.4 of the Far North District Plan as follows:

Table 10.5 -Far North District Plan Section 13.10.4 Assessment Criteria

Criterion	Comment
(a) Whether the application complies with any regional rules relating to any water or discharge permits required under the Act, and with any resource consent issued to the District Council in relation to any urban drainage area stormwater management plan or similar plan.	The proposed stormwater concept complies with Regional Water and Soil Plan rules.
(b) Whether the application complies with the provisions of the Council's "Engineering Standards and Guidelines" (2004) - Revised March 2009 (to be used in conjunction with NZS 4404:2004).	The proposed stormwater management complies with Council's "Engineering Standards and Guidelines" (2004) - Revised March 2009
(c) Whether the application complies with the Far North District Council Strategic Plan - Drainage.	N/A
(d) The degree to which Low Impact Design principles have been used to reduce site impermeability and to retain natural permeable areas.	Natural watercourses will be retained
(e) The adequacy of the proposed means of disposing of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces.	Where required easements are provided for disposal of collected stormwater
(f) The adequacy of any proposed means for screening out litter, the capture of chemical spillages, the containment of contamination from roads and paved areas, and of siltation.	Stormwater will run across the wetland buffer adjacent to the tidal mudflats.
(g) The practicality of retaining open natural waterway systems for stormwater disposal in preference to piped or canal systems and adverse effects on existing waterways.	The existing drainage channels on site will be maintained.
(h) Whether there is sufficient capacity available in the Council's outfall stormwater system to cater for increased run-off from the proposed allotments.	The proposed stormwater attenuation will not impact Council's outfall stormwater system.
(i) Where an existing outfall is not capable of accepting increased run-off, the adequacy of proposals and solutions for disposing of run-off.	The proposed stormwater attenuation will not impact Council's outfall stormwater system.
(j) The necessity to provide on-site retention basins to contain surface run-off where the capacity of the outfall is incapable of accepting flows, and where the outfall has limited capacity, any need to restrict the rate of discharge	The proposed stormwater attenuation will not impact Council's outfall stormwater system.

from the subdivision to the same rate of discharge that existed on the land before the subdivision takes place.	
(k) Any adverse effects of the proposed subdivision on drainage to, or from, adjoining properties and mitigation measures proposed to control any adverse effects.	The proposed subdivision has no adverse effects on stormwater management for adjoining properties
(l) In accordance with sustainable management practices, the importance of disposing of stormwater by way of gravity pipe lines. However, where topography dictates that this is not possible, the adequacy of proposed pumping stations put forward as a satisfactory alternative.	No stormwater pumping is proposed.
(m) The extent to which it is proposed to fill contrary to the natural fall of the country to obtain gravity outfall; the practicality of obtaining easements through adjoining owners' land to other outfall systems; and whether filling or pumping may constitute a satisfactory alternative.	N/A
(n) For stormwater pipes and open waterway systems, the provision of appropriate easements in favour of either the registered user or in the case of the Council, easements in gross, to be shown on the survey plan for the subdivision, including private connections passing over other land protected by easements in favour of the user.	Appropriate easements will be provided
(o) Where an easement is defined as a line, being the centre line of a pipe already laid, the effect of any alteration of its size and the need to create a new easement.	N/A
(p) For any stormwater outfall pipeline through a reserve, the prior consent of the Council, and the need for an appropriate easement.	N/A
(q) The need for and extent of any financial contributions to achieve the above matters.	N/A
(r) The need for a local purpose reserve to be set aside and vested in the Council as a site for any public utility required to be provided.	N/A

11 On-site Effluent Disposal

11.1 Summary of Regulatory Issues

11.1.1 *Operative Regional Water and Soil Plan and Far North District Plan*

The discharge of sewage effluent on to land is controlled by the permitted activity rules 15.1 of the Regional Water and Soil Plan for Northland (RW&SP).

The effluent disposal systems will need to be sited to avoid surface runoff and natural seepage from adjacent land, or protected by using interception drains. The disposal areas may need to be mounded above the surrounding land to ensure that the lowest point in the field complies with the Regional Water and Soil Plan (RW&SP) and Far North District Plan (FNDP) rules:

- Not less than 1.2 m above the winter groundwater table for primary treated effluent (RW&SP Rule 15.1.3), and;
- Not less than 0.6 m above the winter groundwater table for secondary treated effluent (RW&SP Rule 15.1.4).

The disposal field also needs to have minimum separation distances from watercourses and boundaries as follows:

- Not less than 20 m from any surface water for primary treated effluent (RW&SP Rule 15.1.3);
- Not less than 15 m from any surface water for secondary treated effluent (RW&SP Rule 15.1.4);
- Not less than 30 m from any river, lake , wetland or CMA (FNDP Rule 12.7.6.1.4);
- Not less than 20 m from any existing groundwater bore located on any other property (RW&SP Rules 15.1.3 and 15.1.4);
- Not less than 1.5 m from a boundary, and;
- Not less than 3.0 m from a dwelling.

The Regional Water & Soil Plan defines "Surface Water" as: all water, flowing or not, above ground. It includes water in continually or intermittently flowing rivers, artificial watercourses, lakes and wetlands, and water impounded by structures such as dams or weirs but does not include water while in pipes, tanks, cisterns, nor water in the Coastal Marine Area.

Surface water, as defined in NZS1547:2012, refers to: any fresh water or geothermal water in a river, lake, stream, or wetland that may be permanently or intermittently flowing. Surface water also includes water in the coastal marine area and water in man-made drains, channels, and dams unless these are to specifically divert surface water away from the land application area. Surface water excludes any water in a pipe or tank.

Northland Regional Council (NRC) has concluded that, to be a permitted activity, secondary treated wastewater is to achieve a 15 m setback from the 20 year ARI flood event. This is derived from Auckland Council (AC) Technical Publication (TP) 58, where it is recommended that secondary treated effluent is disposed to ground outside of the 20 year ARI, with a further factor of safety applied being NRC's surface water setback requirement.

11.1.2 *Proposed Regional Plan*

Northland Regional Council notified a Proposed Regional Plan in September 2017. The Proposed Regional Plan has statutory effect at this stage along side the Operative Water and Soil Plan, and may be operative by the time the lots are developed.

The discharge of sewage effluent on to land should comply with the proposed permitted activity rule C6.1.3. The proposed rule is similar to the existing permitted activity rule except that:

- The volume of wastewater discharge is reduced from $3m^3$ per day to $2m^3$ per day
- The slope of the disposal area is not to exceed 25 degrees
- Special provisions apply to disposal area slopes greater than 10 degrees
- Setback distances to watercourses are reduced in some cases.

The following analysis ensures that future on-site wastewater disposal on each lot can comply with both the operative and proposed wastewater discharge rules.

11.2 Design Population and System Flow Volumes

11.2.1 *Design Occupancy Rating*

It has been assumed for the purpose of this site suitability report that each proposed subdivision will contain a three bedroom residential unit. In reference to TP58 Section 6.3.1, it is recommended that the design occupancy of five people is adopted for this report.

11.2.2 *Source of Water Supply*

Water supply is to be sourced from on-site roof water tank supply.

11.2.3 *Design Flow Volumes*

It is assumed that the proposed residential units will be designed to meet category 'C' according to TP58 Section 6.3.1, *'households with 11/5.5 or 6/3 Flush Toilet(s) and Standard Fixtures, low water use dishwasher and NO garbage grinder'*. A category C property accounts for up to 160 litres/person/day of wastewater generation for on-site roof water supply.

Total daily wastewater generation of the proposed development is calculated as follows;

$$Total\ daily\ wastewater\ generation = Daily\ occupancy\ number \times design\ flow\ allowances$$

$$= 5\ persons \times (160\ litres/person/day)$$

$$= \mathbf{800\ litres/day}$$

Design flows of 800 litres per day for a five bedroom household shall be adopted for the purpose of this report.

11.3 Design for Land Application System

11.3.1 *Trickle Irrigation*

The use of trickle irrigation disposal is sustainable for the very long term. It provides as easy and convenient system for distributing effluent;

- Over a much wider area;
- At an application rate low enough to be sustained by evapo-transpiration without reliance on soakage, and;
- Without unduly disturbing the visual effect of the proposed land disposal area and landscaped gardens.

11.3.2 *Land Disposal System Location*

Effluent disposal systems will need to be sited to avoid surface runoff and natural seepage from higher ground, or protected by using interception drains. In addition, siting restrictions listed in Section 10.1 of this report will need to be adhered to, to ensure a suitable setback from the identified overland flow paths, boundaries and buildings.

The maximum slope angle for drip irrigation land disposal systems according to TP58 guidelines and Proposed Regional Plan rule C.6.1.3 is 25°. TP58 Table 5.2 Note 3 also recommends increasing separation distances from watercourses proportionately by 2 to 10 metres where the slope is between 10°and 25°.

Proposed Regional Plan for Northland Rule C.6.1.3 contains a specific clause relating to steeper slopes:

6) for the discharge of wastewater onto the surface of slopes greater than 10 degrees:
   a) the wastewater, excluding greywater, has received at least secondary treatment, and
   b) the irrigation lines are firmly attached to the surface of the disposal area, and
   c) where there is an up-slope catchment that generates stormwater runoff, a diversion system must be installed and maintained to divert surface water runoff from the up-slope catchment away from the disposal area, and
   d) a minimum 10 metre buffer area down-slope of the lowest irrigation line is included as part of the disposal area, and
   e) the disposal area is located within existing established vegetation that has at least 80 percent canopy cover, or
   f) the irrigation lines are covered at all times by a minimum of 100 millimetres of topsoil, mulch, or bark, ...

It is considered suitable to locate the disposal systems across the entire site including the moderately sloping pasture of proposed lots 2 and 4. Indicative disposal field locations have been recorded on Drawing No. 17 229/05 within Appendix A of this report.

11.3.3 *Land Disposal System Sizing and Design – Lots 1 and 2*

The podsolized soils across the upper plateau (Lots 1 and 2) were found to be TP58 category 7 or AS/NZS1547 category 6. For these soils we consider the most suitable effluent disposal system be dripper lines spaced at 1 m centres across planted mounds. Dripper lines require secondary treated effluent to operate effectively. TP58 recommended a design irrigation rate for this soil of 1-2 mm/d and 1547 recommends 2 mm/d. Due to the well exposed site we choose a design irrigation rate of 2 mm/d.

The total length of the trickle irrigation system required (UniBioline or similar) is calculated as follows;

$$Total\ area\ of\ dripper\ irrigation\ field = \frac{Total\ daily\ wastewater\ generation}{Design\ irrigation\ rate}$$

$$= \frac{800}{2}$$

$$= \underline{400\ m^2}$$

Alternatively the podsolized soil could be ripped and the systems designed in accordance with the recommendations for Lots 3 and 4.

11.3.1 *Land Disposal System Sizing and Design – Lots 3 and 4*

The soils across the lower plateau (Lots 3 and 4) were found to be TP58 category 6 or AS/NZS1547 category 5. For these soils we consider that surface or subsurface dripper lines are suitable. Dripper lines require secondary treated effluent to operate effectively. TP58 recommended a design irrigation rate for this soil of 2-3 mm/d and 1547 recommends 3 mm/d. Due to the well exposed site we choose a design irrigation rate of 3 mm/d.

The total length of the trickle irrigation system required (UniBioline or similar) is calculated as follows;

$$Total\ area\ of\ dripper\ irrigation\ field = \frac{Total\ daily\ wastewater\ generation}{Design\ irrigation\ rate}$$

$$= \frac{800}{3}$$

$$= \underline{267\ m^2}$$

Surface trickle irrigation is for land intended to be densely planted up, and should be laid at 1 m centres (total of 270 m length tubing). The dripper lines may be covered with 200 mm of bark mulch and densely vegetated with suitable plants for evapo-transpiration systems.

Subsurface irrigation for land intended to be grassed or upon slopes > 10 °; tubing must be laid 100 – 250 mm into topsoil. It is recommended that tubing is laid at 0.5 m centres (total of 400 m length tubing) to ensure even watering of turf.

11.3.2 *Land Disposal System Reserve Area and Sizing*

In accordance with FNDC requirements, there is space available for a 100% reserve effluent disposal area. The reserve field is required to cope with wastewater in the event of a system failure, or from underestimation of daily wastewater production. Example locations for these are indicated on Drawing No. 17 229/05.

11.3.3 *Loading Method*

It is proposed that the pump chamber for treated effluent will, as is usual practise, be controlled by float switches which would operate the pumps on demand. No other means of control is necessary.

11.3.4 *Factors for Safety*

The major factor of safety is in treatment plant capacity. The standard treatment plants have at least 50 % spare capacity, in relation to the load from a normal 3-bedroom house. Safety factors exist for disposal by the presence of 100% reserve area.

11.4 Design for Treatment System

11.4.1 *Parameters affecting choice of Treatment*

- Certainty for long term sustainability;

- Minimal environmental effect.

11.4.2 *Treatment Plant Design Sizing*

The naming of a proprietary secondary treatment plant will be decided by the new owner at the building consent stage, when the position and scale of the building are known. Treatment plants must meet the requirements of AS/NZS 1546.3:2001.

The system is to meet the quality output of AS/NZS 1546.3:2003, producing effluent of less than 20 g/m^3 of 5-day biochemical oxygen demand (BOD_5) and no greater than 30 g/m^3 total suspended solids (TSS), capable of consistently treating 800 litres/day and a five-day peak of 1200 L/day.

11.4.3 *Siting Requirements*

Restrictions on siting of secondary treatment plants are:

- Invert level at inlet not less than 0.5 m below floor level;
- Greater than 1.5 m from any boundary;
- Easily accessible for routine maintenance.

11.4.4 *Summary of Design Issues*

Due to the nature of subdivision exact build size and positioning are to be confirmed, therefore site suitability has been established and locations for wastewater disposal have been suggested to maximise the system performance and minimise disruptions caused by moisture content of the top and subsurface soils.

In addition it is recommended that if required, additional topsoil should be sourced from site-won sources, more specifically from across the development platform during raising earthwork operations.

Hydrophilic plant species should be planted across the disposal field in order to maximise evapo-transpiration.

11.5 Construction Installation

11.5.1 *Installation Requirements*

Treatment plants must be installed by the plant provider to the manufacturers published specifications. The trickle irrigation tubing must be installed by the treatment plant installer.

11.5.2 *Commissioning Requirements*

The treatment and trickle irrigation must be tested and commissioned by the plant provider.

11.6 Management Procedures

11.6.1 *Operation Maintenance Requirements*

A maintenance agreement is to be entered into with the provider. Once commissioned the plant will operate automatically with alarms fitted to advise the house occupants in the event of emergency failure.

11.6.2 *Monitoring and Inspection*

As part of the maintenance agreement with the plant provider, there should be at least annual inspections with written reports provided to the owner.

11.7 FNDC On-site Effluent Disposal Policy 2008

11.7.1 *Likelihood of Failure/ Accidental Discharge*

The likelihood of a discharge from a household secondary (aeration) treatment plant is less than minor. The pipe work to and within the plant when correctly installed is robust with sealed connections and buried below ground reducing the risk of accidental damage. Only the puncture of a distribution pipe would allow treated effluent to escape in a concentrated manner.

11.7.2 *Consequence of Failure/ Accidental Discharge*

In the unlikely event of some form of failure/ accidental discharge, the material would have to travel in excess of 15 m over ground to reach any surface water (adopting the NRC minimum requirement of 15 m from surface water). Most, if not all, of the accidental discharge is likely to be lost to soakage over this distance and the failure should quickly become apparent.

11.7.3 *Multiple House Sites*

Proposed lots exhibit more than one location where a trickle irrigation field could be constructed, so the final appropriate location for installing the disposal system cannot be pre-determined.

11.7.4 *Vegetation Planting*

Trickle irrigation disposal systems rely on evapo-transpiration from sub-surface irrigated lawns or covered surface irrigated landscape planting. Where new planting is required, this must be in place prior for the evapo-transpiration process to begin functioning. A list of suitable plants is included within Appendix E.

11.8 Site Assessment Form

Enclosed within this report is a completed Wastewater Disposal Site Evaluation Checklist as guided by FNDC.

12 Water Supply

12.1 Potable Water Supply

Water supply will be from stored rainwater collected from building roofs. The system should be fitted with a first flush device or filtration to comply with drinking water standards.

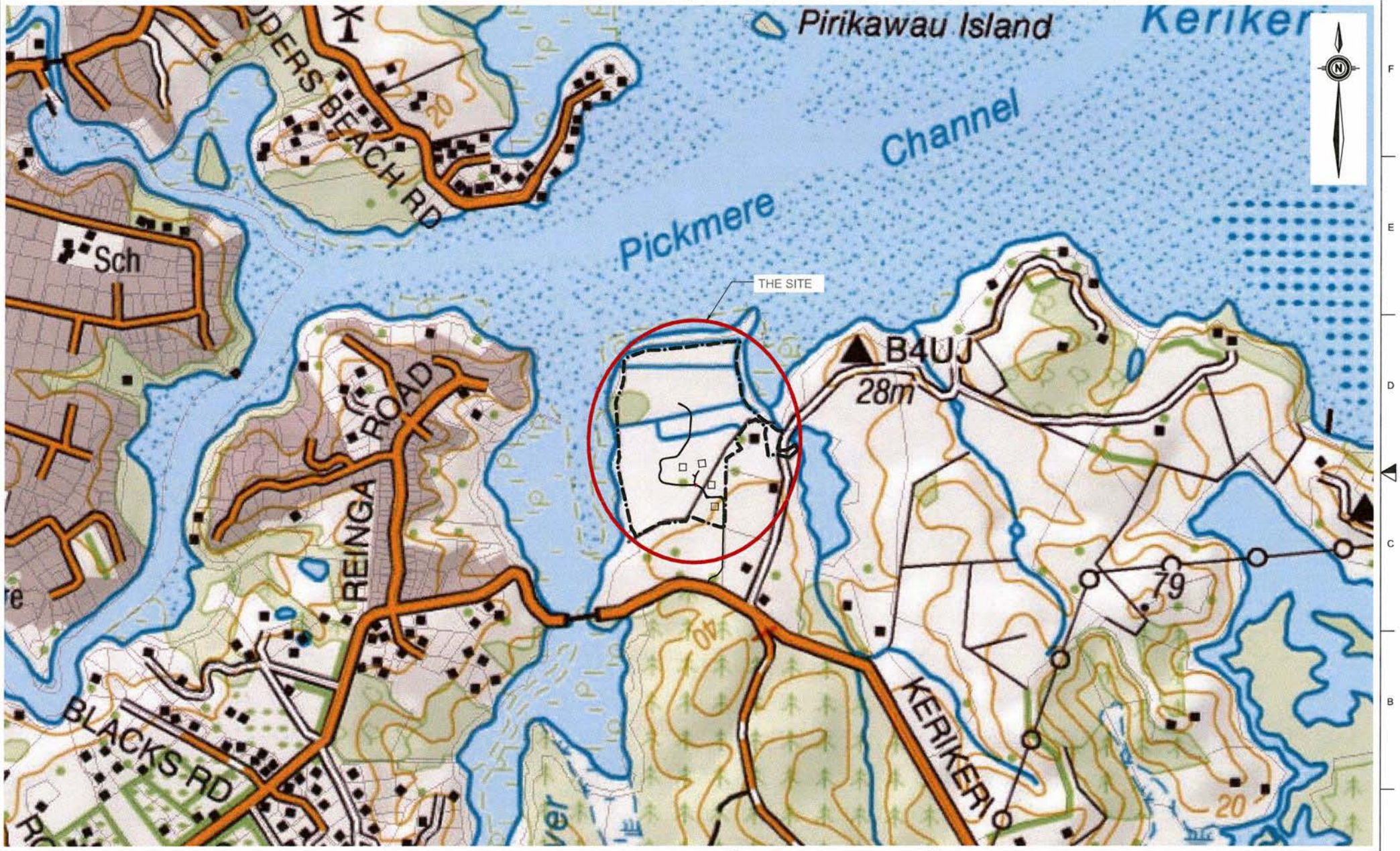
12.2 Fire Fighting

Council Engineering Standards require a water supply that is adequate for firefighting purposes. For a single family home without a sprinkler system in a non-reticulated supply area, the New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008 recommends for a fire fighting supply a minimum water storage capacity of 45 m^3 within 90 m of the dwelling, fitted with an adequate means for extracting the water from the tank.

A typical water supply is expected to comprise 2x 25,000 litre water tanks, to provide an adequate supply of water for drinking water and firefighting.

Appendix A – Drawings

Drawing No.	Title	Scale
17 229/01	Site Location Plan	1:10000
17 229/02	Site Features Plan – Subdivision	1:2000
17 229/03	Site Features Plan – Proposed Development Area	1:1000
17 229/04	Proposed Development Plan	1:1000
21916	Proposed Subdivision of Lot 1 DP 167657 Williams and King Land Surveyors Revised 18 September 2017	1:2000



Issue	Date	Revision
A	12/10/2017	FIRST ISSUE

DWG Site Location Plan

Scale 1:10000@A3 (100 50 0 100 200 300 m) Date 12/10/2017

Drawn RH Checked MW Approved JP

File Z:\17 JOBS\17 229 NAGS HEAD HORSE HOTEL LTD\DRAWINGS\17 229 - DRAWING SET - 180718.DWG

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Project Proposed Subdivision
405 Kerikeri Inlet Road, Kerikeri

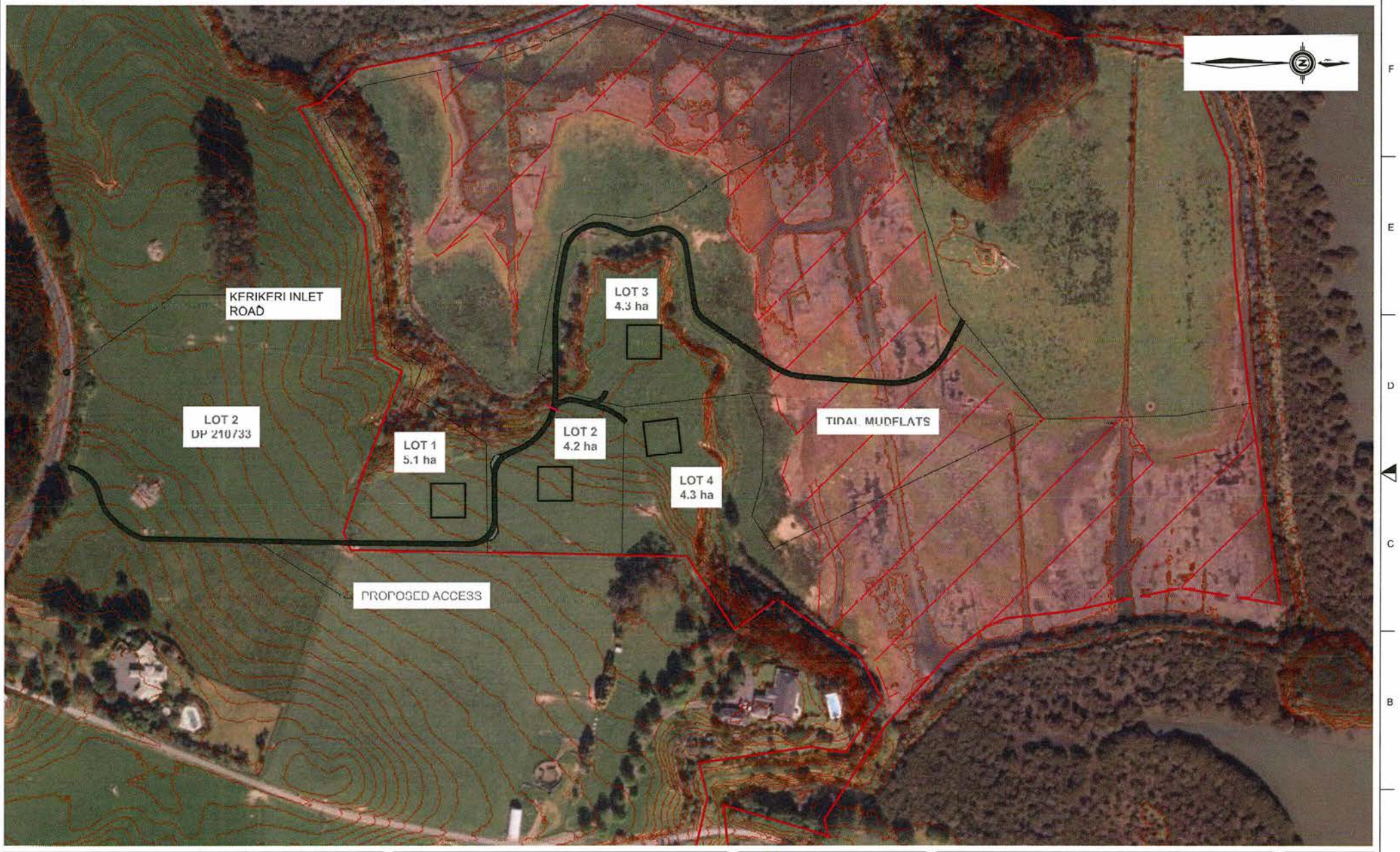
Client Nags Head Horse Hotel Ltd

Project No. 17 229 RC no.

DWG No. 01

Sheet No. 1 of 4

Plotted By Annie Pilapil at 18/07/2018 4:10:20 p.m.



Issue	Date	Revision
A	12/10/2017	FIRST ISSUE
B	18/07/2018	AMEND RIGHTS OF WAY

DWG Site Features Plan - Subdivision

Scale 1:2000 @A3 (20 10 0 20 40 60 m) Date 12/10/2017

Drawn RH | Checked MW | Approved JP

File Z:\17 JOBS\17 229 NAGS HEAD HORSE HOTEL LTD\DRAWINGS\17 229 - DRAWING SET - 180718.DWG

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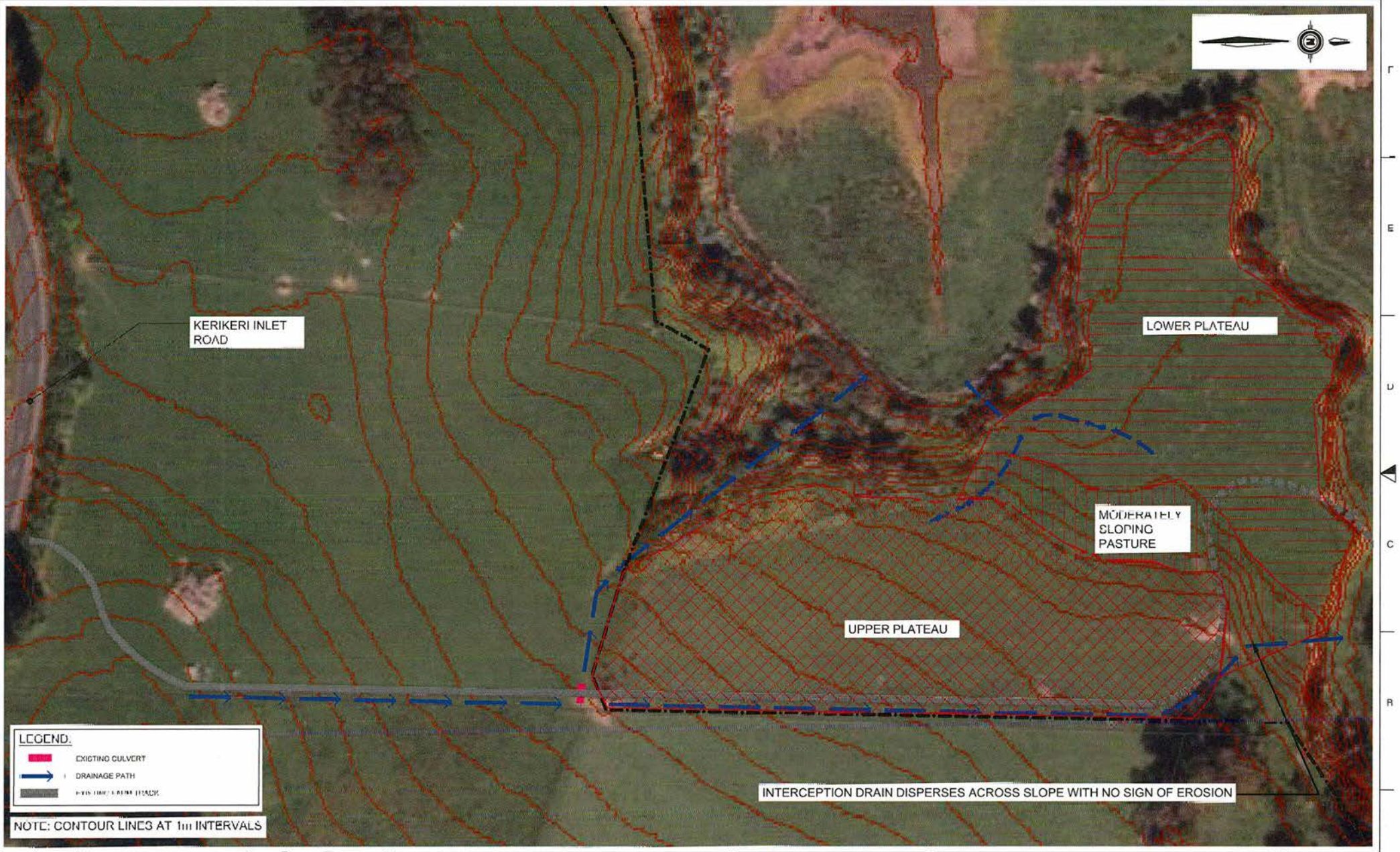
DWG No. 02

Sheet No. 2 of 4

Plotted By Annie Pilapil at 18/07/2018 4:10:23 p.m.



Issue	Date	Revision
A	12/10/2017	FIRST ISSUE
B	18/07/2018	AMEND RIGHTS OF WAY

DWG: Site Features Plan
Proposed Development Area

Scale 1:1000 @A3 (10 5 0 10 20 30 m) Date 12/10/2017
Drawn RH Checked MW Approved JP
File Z:\17 JOBS\17 229 NAGS HEAD HORSE HOTEL LTD\DRAWINGS\17 229 - DRAWING SET - 180718.DWG

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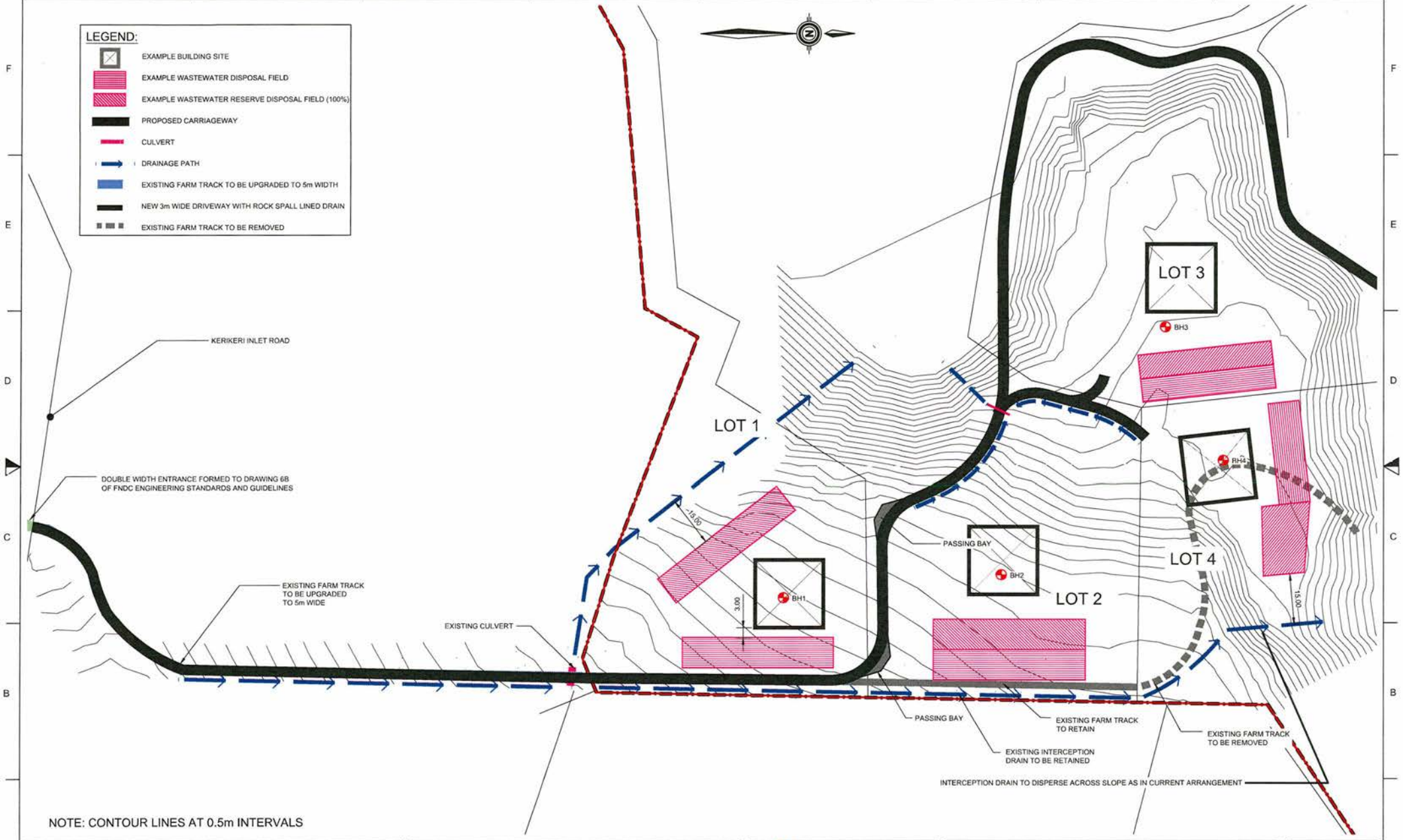
Project No. 17 229 RC no.

DWG No. 03

Sheet No. 3 of 4

Plotted By Annie Pilapil at 18/07/2018 4:10:28 p.m.



NOTE: CONTOUR LINES AT 0.5m INTERVALS

Issue	Date	Revision
A	12/10/2017	FIRST ISSUE
B	18/07/2018	AMEND RIGHTS OF WAY

DWG Proposed Development Plan

Scale 1:1000 @A3 (10 5 0 10 20 30 m) Date 12/10/2017

Drawn RH Checked MW Approved JP

File Z:\17 JOBS\17 229 NAGS HEAD HORSE HOTEL LTD\DRAWINGS\17 229 - DRAWING SET - 180716.DWG

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DWG No. 04

Sheet No. 4 of 4

Plotted By Annie Pilapil at 18/07/2018 4:10:32 p.m.

Appendix B – Exploratory Hole Records

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Borehole Log

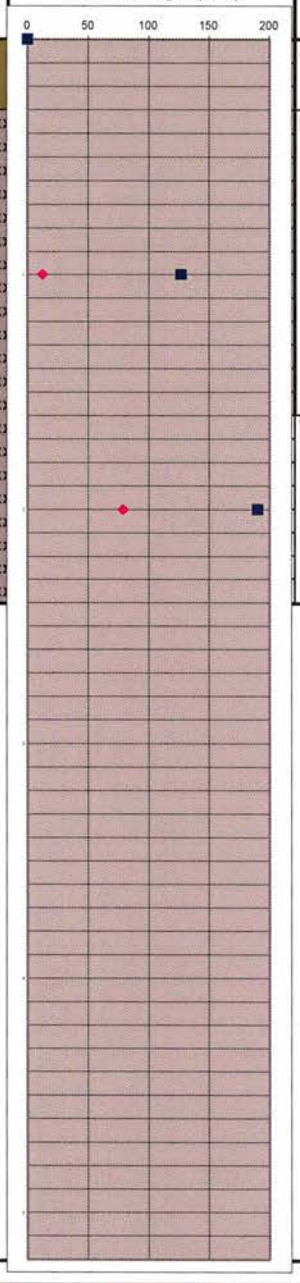
JOB No. 17 229

Borehole no. BH01

Client	Nags Head Horse Hotel Ltd	Date	7-Sep-17
Location	Proposed Lot 1		
Drilling Method:	Hand Auger	Diameter: 40mm	Logged: RH
Checked:			

Soil Description	Depth	Legend	Moisture	Sample, Other Tests, Remarks. Shear vane corrected
Topsoil, saturated	0.0		Saturated	
	0.1			
0.15 m: SILT, moist. Light grey. No plasticity	0.2		Moist	
	0.3			
	0.4			
0.45 m: low plasticity, orange mottles				
0.5 m: Sandy SILT with minor clay, orange. Very stiff, moist. Low plasticity	0.5			0.5 m: 127kPa/13 kPa
	0.6			
0.7 m: Clayey SILT, orange. Very stiff, moist. Low plasticity	0.7			
0.8 m: wet	0.8		Wet	
	0.9			
	1.0			1.0 m: 190 kPa/79kPa
	1.1			
1.2 m: End of borehole. Terminated at target depth	1.2			

Shear Strength (kPa)



Soils Legend

Topsoil		Fill		Clay		Silt	
Sand		Peat		Gravel		Rock	

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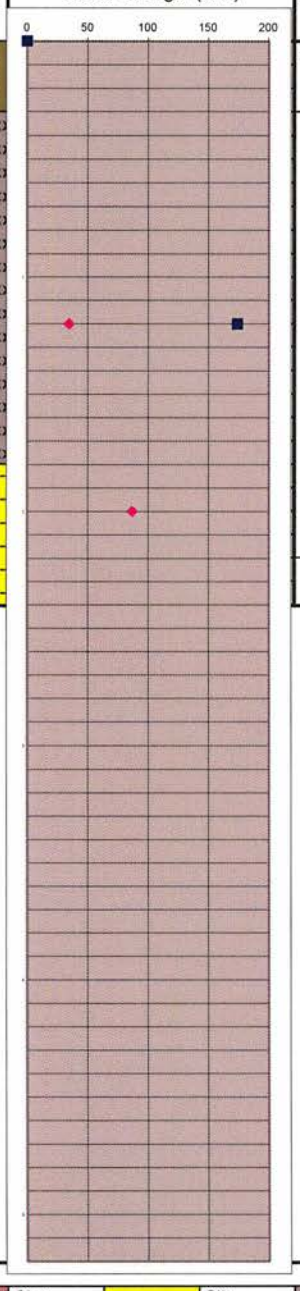
Borehole Log

JOB No. 17 229

Borehole no. BH02

Client	Nags Head Horse Hotel Ltd	Date	7-Sep-17
Location	Proposed Lot 2		
Drilling Method:	Hand Auger	Diameter: 40mm	Logged: RH
Checked:			

Soil Description	Depth	Legend	Shear Strength (kPa)	Moisture	Sample, Other Tests, Remarks. Shear vane corrected
TOPSOIL, saturated	0.0			Saturated	
	0.1				
0.15 m: SILT, light grey. Very stiff, moist Low plasticity.	0.2			Moist	
	0.3				
	0.4				
	0.5				0.5 m: VS=174 kPa/35kPa
	0.6				
	0.7				
	0.8				
0.9 m: Silty CLAY, light brown. Hard, moist Low plasticity.	0.9				1.0 m: VS=206kPa/55kPa
	1.0				
	1.1			Wet	
1.2 m: End of hole. Terminated at target depth	1.2				



Soils Legend

Topsoil		Fill		Clay		Silt	
Sand		Peat		Gravel		Rock	

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Borehole Log

JOB No. 17 229

Borehole no. BH03

Client	Nags Head Horse Hotel Ltd	Date	7-Sep-17
Location	Proposed Lot 3		
Drilling Method:	Hand Auger	Diameter: 40mm	Logged: RH
Checked:			

Soil Description	Depth	Legend	Shear Strength (kPa)	Moisture	Sample, Other Tests, Remarks. Shear vane corrected
Topsoil. Moist	0.0	wwwwww	0 50 100 150 200	Moist	
	0.1	wwwwww			
0.15 m: Silty CLAY, light brown. Hard, moist. High plasticity	0.2	----------			
	0.3	----------			
	0.4	----------			
0.5 m: Clayey SILT, light brown with orange mottles. Hard, wet. Low plasticity	0.5	xxxxxxxxx		Wet	0.5 m: VS>210 kPa
	0.6	xxxxxxxxx			
0.7 m: SILT with minor sand and clay, orange. Hard, wet.	0.7	xxxxxxxxx			
	0.8	xxxxxxxxx			
	0.9	xxxxxxxxx			
	1.0	xxxxxxxxx			1.0 m: UTP with shear vane
	1.1	xxxxxxxxx			
1.2 m: End of borehole. Terminated at target depth	1.2				

Soils Legend

Topsoil	wwwwww	Fill	////////////	Clay	----------	Silt	xxxxxxxxx
Sand	.o.o.o.o.o.o.o.	Peat	v.v.v.v.v.	Gravel	OOOOOOO	Rock	

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Borehole Log

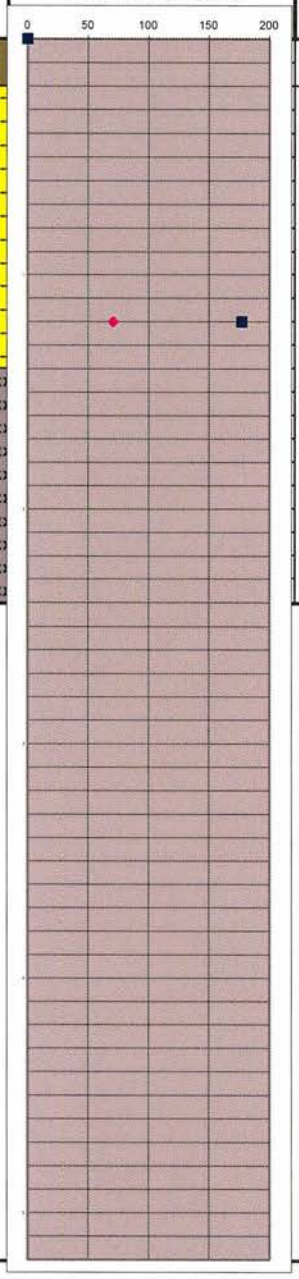
JOB No. 17 229

Borehole no. BH04

Client	Nags Head Horse Hotel Ltd	Date	7-Sep-17
Location	Proposed Lot 4		
Drilling Method:	Hand Auger	Diameter: 40mm	Logged: RH
Checked:			

Soil Description	Depth	Legend	Moisture	Sample, Other Tests, Remarks. Shear vane corrected
Topsoil, moist	0.0	Topsoil	Moist	
0.1 m: Silty CLAY, light brown. Very stiff, wet. High plasticity.	0.1	Clay	Wet	
	0.2	Clay		
	0.3	Clay		
	0.4	Clay		
	0.5	Clay		
	0.6	Clay		0.6 m: VS=178kPa/71kPa
0.7 m: Clayey SILT, light brown. Wet. Low plasticity	0.7	Silt		
	0.8	Silt		
	0.9	Silt		
1.0 m: SILT with minor clay, orange. Hard, wet. Low plasticity.	1.0	Silt		1.0 m: VS>210kPa
	1.1	Silt		
1.2 m: End of hole. Terminated at target depth	1.2			

Shear Strength (kPa)



Soils Legend

Topsoil	Fill	Clay	Silt
Sand	Peat	Gravel	Rock

Appendix C – Site Photography

Figure 3 – Looking southwest from northeast corner of Lot 1

Figure 4 – Looking west from northeast corner of Lot 1

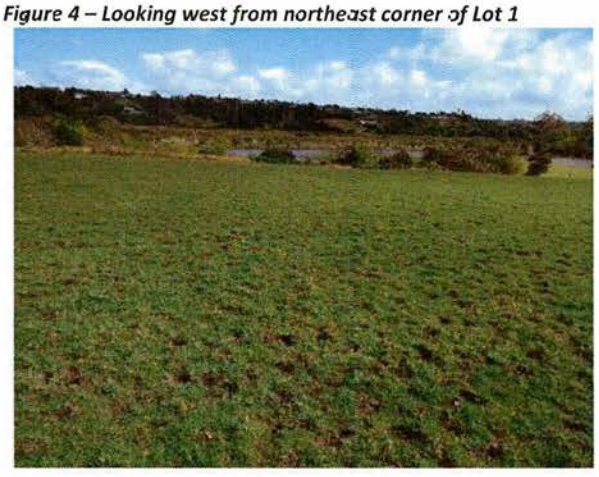


Figure 5 – Looking north from northeast corner of Lot 1

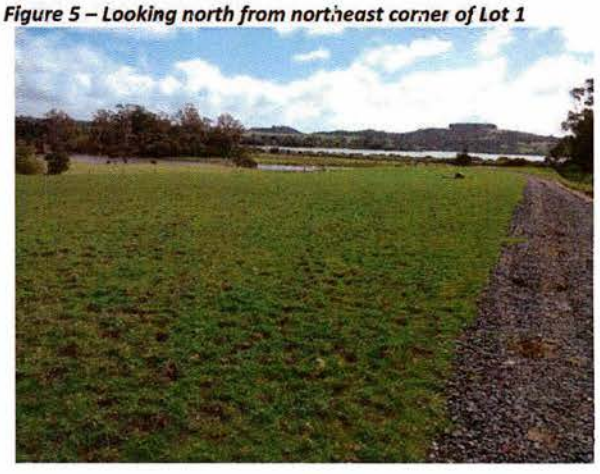


Figure 6 – Looking south from southwest corner of Lot 4

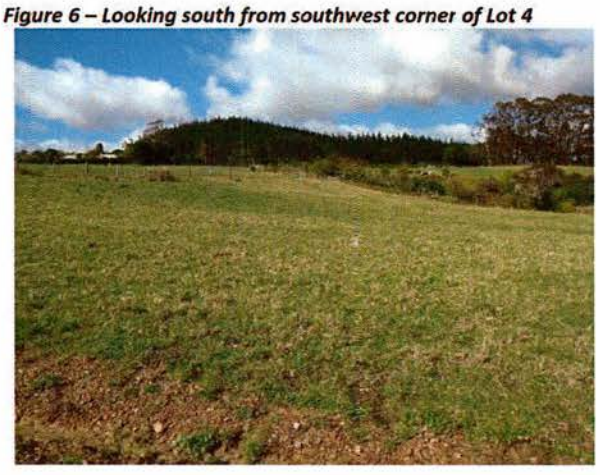


Figure 7 – Looking west from southeast corner of Lot 4

Figure 8 – Looking north from southeast corner of Lot 4

Appendix D – Impermeable Area Calculations

Nags Head Horse Hotel Subdivision		Quantities							
		Impermeable Surfac		Earthworks			Aggregate		
Access	**Length**	**Av Width**	**Area**	**Av Width**	**Av Depth**	**Vol**	**Av Width**	**Av Depth**	**Vol**
Existing									
lot 2 DP 210733									
Site access	181	3	543						
Main access	470	3	1410						
Sheds			420						
lot 2 DP 210733 Total			**2373**						
Lot 1 DP 167657									
Lot 1 ROW BCF	80	3	240						
Lot 2 ROW S-D	79	3	237						
Lot 4 Existing track	140	3	420						
Lot 4 ROW J to N	383	3	1149						
Lot 1 DP 167657 Total			**2046**						
Proposed after Subdivision									
lot 2 DP 210733									
Site access	181	**5**	905	2.5	0.3	136	2	0.25	91
Main access	470	3	1410						
Sheds			420						
lot 2 DP 210733 Total			**2735**			**136**			**91**
Lot 1 DP 167657									
Lot 1 ROW BCF	80	**5**	400						
Lot 2 ROW S-D	79	3	237						
Lot 4 Existing track	140	removed							
Lot 4 ROW J to N	383	3	1149						
Lot 2 ROW G-H	134	3.2	429	5	0.3	201	3.75	0.25	126
Lot 3 headland	240	3	720	4	0.3	288	3.5	0.25	210
Lot 3 causeway	152	3	456	5	0.1	76	4	0.6	365
Lot 1 DP 167657 Total			**3391**			565			700

Estimated Impermeable Surfaces after Subdivision, before Residential Development								Lot Area	% coverag
Lot 1 DP 167657									
Lot 1			400					51060	0.78%
Lot 2			666					41280	1.61%
Lot 3			1176					42550	2.76%
Lot 4			1149					42669	2.69%
Lot 1 DP 167657 Total			**3391**					177559	1.91%
Estimated Impermeable Surfaces after Residential Development allowing 500m2 per lot									
Lot 1 DP 167657									
Lot 1			900					51060	1.76%
Lot 2			1166					41280	2.82%
Lot 3			1676					42550	3.94%
Lot 4			1649					42669	3.86%
Lot 1 DP 167657 Total			**5391**					177559	3.04%

Appendix E – On-Site Wastewater (TP58) Checklist

Item	Enclosure	Checklist
01	Site Evaluation Checklist	✓
02	Assessment of Environmental Effects	✓
03	Producer Statement	
04	System Maintenance Schedule	✓
05	Suitable Plants for Evapo-Transpiration Systems	✓
06	Typical Irrigation Field Layout	✓

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FAR NORTH DISTRICT COUNCIL
Appendix E TP58
On-site Wastewater Disposal Site Evaluation
Investigation Checklist

Part A –Owners Details

1. Applicant Details:

Applicant Name	
Company Name	*Nags Head Horse Hotel Ltd*
Property Owner Name(s)	*Nags Head Horse Hotel Ltd*

Nature of Applicant*	*Owner*

*(*i.e. Owner, Leasee, Prospective Purchaser, Developer)*

2. Consultant / Site Evaluator Details:

Consultant/Agent Name	*Haigh Workman*			
Site Evaluator Name	*Rory Howell*			
Postal Address	*PO Box 89*			
	Kerikeri			
	0245			
Phone Number	Business	*407 8327*	Private	
	Mobile		Fax	*407 8378*
Name of Contact Person	*Rory Howell*			
E-mail Address	*rory@haighworkman.co.nz*			

3. Are there any previous existing discharge consents relating to this proposal or other waste discharge on this site?

Yes		No	✓	(Please tick)

If yes, give Reference Numbers and Description

4. List any other consent in relation to this proposal site and indicate whether or not they have been applied for or granted
If so, specify Application Details and Consent No.
(eg. LandUse, Water Take, Subdivision, Earthworks Stormwater Consent)

Currently undergoing resource consent for subdivision

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Part B- Property Details

1. Property for which this application relates:

Physical Address of Property	*405 Kerikeri Inlet Road, Kerikeri*
Territorial Local Authority	FAR NORTH DISTRICT COUNCIL
Regional Council	NORTHLAND REGIONAL COUNCIL
Legal Status of Activity	Permitted: ✓ Controlled: Discretionary:
	15.1.4
Relevant Regional Rule(s) (Note 1)	
Total Property Area (m²)	*177,050 m^2. Proposed lot areas range from 4.0 to 5.7 hectares*
Map Grid Reference of Property If Known	

2. Legal description of land (as shown on Certificate of Title)

Lot No.	*1*	DP No.	*167657*	CT No.	*NA101C/992*
Other (specify)					

Please ensure copy of Certificate of Title is attached

PART C: Site Assessment - Surface Evaluation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation and Sn 5.2.2(a) Site Surface Evaluation)
Note: Underlined terms defined in Table 1, attached

Has a relevant property history study been conducted?

Yes	✓	No		(Please tick one)

If yes, please specify the findings of the history study, and if not please specify why this was not considered necessary.

Refer to archaeological report

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1. Has a Slope Stability Assessment been carried out on the property?

Yes		No	✓	Please tick

If No, why not?

Site is considered stable.

If Yes, please give details of report (and if possible, please attach report):

Author	
Company/Agency	
Date of Report	
Brief Description of Report Findings:-	

2. Site Characteristics (See Table 1 attached):

Provide descriptive details below:
Performance of Adjacent Systems:
No problems known
Estimated Rainfall and Seasonal Variation:
1800 mm per year; 1100 mm winter, 700 mm summer.
Vegetation / Tree Cover:
Grassed pasture at site of proposed effluent disposal.
Slope Shape: (Please provide diagrams)
Gentle to moderate rolling
Slope Angle:
Slopes less than 15 degrees in location of effluent disposal
Surface Water Drainage Characteristics:
Soakage and sheet flow to tidal mudflats
Flooding Potential: YES/NO
No
If yes, specify relevant flood levels on appended site plan, I.e. one in 5 years and/or 20 year and/or 100 year return period flood level, relative to disposal area.
Surface Water Separation:
> 15 m
Site Characteristics: or any other limitation influencing factors
Well exposed to wind

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3. Site Geology **Check Rock Maps**

Underlying rock is predominantly sandstone (greywacke) with minor argillite, chert and basalt (TJw) of the Waipapa Group.
Soil is of the 'Rolling and Hill Land' formation comprising 'Hukerenui silt loam with yellow subsoil' (HKr+HKrH).

Geological Map Reference Number	*NZMS 290 rock and soils maps P04/05*

4. What Aspect(s) does the proposed disposal system face? (please tick)

North		**West**	
North-West	✓	**South-West**	
North-East		**South-East**	
East		**South**	

5. Site clearances,(Indicate on site plan where relevant)

Separation Distance from	Treatment Separation Distance (m)	Disposal Field Separation Distance (m)	FNDC minimum
Boundaries	*>1.5*	*>1.5*	1.5
Surface water, creeks, drains	*>5*	*>15*	15
Groundwater	*NA*	*>0.6*	0.6
Stands of Trees/Shrubs	*NA*	*NA*	NA
Wells, water bores	*>20*	*>20*	20 m
Embankments/retaining walls	*>3*	*>3*	3 m
Buildings	*>3*	*>3*	3 m
Rivers, Coastal Marine area	*>30*	*>30*	30 m

PART D: Site Assessment - Subsoil Investigation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation, and Sn 5.2.2(a) Site Surface Evaluation and Sn 5.3 Subsurface Investigations)

Note: Underlined terms defined in Table 2, attached

1. Please identify the soil profile determination method:

Test Pit		(Depth_____m	No of Test Pits	
Bore Hole	✓	(Depth_*1.2*___m	No of Bore Holes	*4*
Other (specify):				

Soil Report attached?

Yes	✓	No		Please tick

2. Was fill material intercepted during the subsoil investigation?

Yes		No	✓	Please tick

If yes, please specify the effect of the fill on wastewater disposal

3. percolation testing (mandatory and site specific for trenches in soil type 4 to 7)

Please specify the method					
Test Report Attached?	Yes		No	✓	Please tick

4. Are surface water interception/diversion drains required?

Yes	✓	No		Please tick

If yes, please show on site plan

To be determined at building design stage.

4a Are subsurface drains required

Yes		No	✓	Please tick

If yes, please provide details

5. Please state the depth of the seasonal water table:

Winter	*>1.0*	m	Measured		Estimated	✓
Summer	*>1.0*	m	Measured		Estimated	✓

6. Are there any potential storm water short circuit paths?

Yes		No	✓	Please tick
If the answer is yes, please explain how these have been addressed				

7. Based on results of subsoil investigation above, please indicate the disposal field soil category
(Refer TP58 Table 5.1)

Is Topsoil Present? ✓	If so, Topsoil Depth? *0.1-0.15* (m)

Soil Category	Description	Drainage	Tick One
1	Gravel, coarse sand	Rapid draining	
2	Coarse to medium sand	Free draining	
3	Medium-fine & loamy sand	Good drainage	
4	Sandy loam, loam & silt loam	Moderate drainage	
5	Sandy clay-loam, clay loam & silty clay-loam	Moderate to slow drainage	
6	Sandy clay, non-swelling clay & silty clay	Slow draining	✓(Lots 3 and 4)
7	Swelling clay, grey clay, hardpan	Poorly or non-draining	✓(Lots 1 and 2)

Reasons for placing in stated category

Soil map classification, soil colour and texture investigation

PART E: Discharge Details

1. Water supply source for the property (please tick):

Rainwater (roof collection)	✓
Bore/well	
Public supply	

2. Calculate the maximum daily volume of wastewater to be discharged, unless accurate water meter readings are available

(Refer TP58 Table 6.1 and 6.2)

Number of Bedrooms	3			
Design Occupancy	5			(Number of People)
Per capita Wastewater Production	145	160✓	180	(tick) (Litres per person per day)
Other - specify	200	220		
Total Daily Wastewater Production	800			(litres per day)

3. Do any special conditions apply regarding water saving devices

a) Full Water Conservation Devices?	Yes		No	✓	(Please tick)
b) Water Recycling - what %?	%			✓	(Please tick)

If you have answered yes, please state what conditions apply and include the estimated reduction in water usage

4. Is Daily Wastewater Discharge Volume more than 3000 litres:

Yes		(Please tick)
No	✓	(Please tick)

Note if answer to the above is yes, an N.R.C wastewater discharge permit may be required

5. Gross Lot Area to Discharge Ratio:

Minimum Lot Area	41,754	m^2
Total Daily Wastewater Production	800	(Litres per day)(from above)
Minimum Lot Area to Discharge Ratio	52	

7. Does this proposal comply with the Northland Regional Council Gross Lot Area to Discharge Ratio of greater than 3?

Yes	✓	No		Please tick

8. Is a Northland Regional Council Discharge Consent Required?

Yes		No	✓	(Please tick)

PART F: Primary Treatment *(Refer TP58 Section 7.2)*

1. Please indicate below the no. and capacity (litres) of all septic tanks including type (single/dual chamber grease traps) to be installed or currently existing: If not 4500 litre, duel chamber explain why not

Number of Tanks	Type of Tank	Capacity of Tank (Litres)
	Total Capacity	

2. Type of Septic Tank Outlet Filter to be installed?

PART G: Secondary and Tertiary Treatment

(Refer TP58 Section 7.3, 7.4, 7.5 and 7.6)

1. Please indicate the type of additional treatment, if any, proposed to be installed in the system: (please tick)

Secondary Treatment	✓		
Home aeration plant			
Commercial aeration plant			
Intermediate sand filter			
Recirculating sand filter			
Recirculating textile filter			
Clarification tank			
Tertiary Treatment			
Ultraviolet disinfection			
Chlorination			
Other		Specify	

PART H: Land Disposal Method

(Refer TP58 Section 8)

1. Please indicate the proposed loading method: (please tick)

Gravity	
Dosing Siphon	
Pump	✓

2.High water level alarm to be installed in pump chambers

Yes ✓	No

If not to be installed, explain why

3. If a pump is being used, please provide the following information:

Total Design Head		(m)
Pump Chamber Volume		(Litres)
Emergency Storage Volume		(Litres)

4. Please identify the type(s) of land disposal method proposed for this site: (please tick)
(Refer TP58 Sections 9 and 10)

Surface Dripper Irrigation	✓		
Sub-surface Dripper irrigation	✓		
Standard Trench			
Deep Trench			
Mound			
Evapo-transpiration Beds			
Other		Specify	

5. Please identify the loading rate you propose for the option selected in Part H, Section 4 above, stating the reasons for selecting this loading rate:

Proposed Lots 1 and 2

Loading Rate	*2*		(Litres/m2/day)
Disposal Area	Design	*400*	(m2)
	Reserve	*400*	(m2)

Proposed Lots 3 and 4

Loading Rate	*3*		(Litres/m2/day)
Disposal Area	Design	*267*	(m2)
	Reserve	*267*	(m2)

Explanation *(Refer TP58 Sections 9 and 10)*

Design loading rates at Lots 1 and 2 for soil category 7 (2 mm/day).
Wastewater disposal fields on Lots 1 and 2 should be mounded. If podsolized soils are ripped down to the base the field can be designed in accordance with the recommendations for Lots 3 and 4.
Design loading rates at Lots 3 and 4 for soil category 6 (3 mm/day).

6. What is the available reserve wastewater disposal area *(Refer TP58 Table 5.3)*

Reserve Disposal Area (m²)	*400*
Percentage of Primary Disposal Area (%)	*100%*

7. Please provide a detailed description of the design and dimensions of the disposal field and attach a detailed plan of the field relative to the property site:

Description and Dimensions of Disposal Field:

Irrigate specified area based on above loading rate.
Mounds to be planted densely with plants suitable for evaporation systems. Lines to be laid at 1 m centres
Suitable disposal on Lots 3 and 4 is surface or subsurface dripper lines. Lines to be laid at 1 m centres for surface irrigation, and covered with c. 200 mm bark mulch. Subsurface lines to be laid at 0.5 m centres.

Plan Attached?	*Yes*	✓	*No*		*(Please tick)*

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PART I: Maintenance & Management

(Refer TP58 Section 12.2)

1. Has a maintenance agreement been made with the treatment and disposal system suppliers?

Yes		No	✓	(Please tick)

Name of Suppliers

PART J: Assessment of Environmental Effects

1. Is an assessment of environmental effects (AEE) included with application?

(Refer TP58 section 5. Ensure all issues concerning potential effects addressed)

Yes	✓	No		(Please tick)

If Yes, list and explain possible effects

PART K: Is Your Application Complete?

1. In order to provide a complete application you have remembered to:

Fully Complete this Assessment Form	✓
Include a *Location Plan* and *Site Plan* (with Scale Bars)	✓
Attach an Assessment of Environmental Effects (AEE)	✓

1. Declaration

I hereby certify that, to the best of knowledge and belief, the information given in this application is true and complete.

Name	Signature	
Position	Date	

Note
Any alteration to the site plan or design after approval will result in non-compliance.

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ENVIRONMENTAL EFFECTS, MITIGATION MEASURES

A. Assessment of Environmental Effects

Impact on Surface Water (incl. flood times) *Very Minor*

Impact on Ground Water *Very Minor*

Impact on Soils *Minor*

Impact on Amenity Values *Minor*

B Public Health Issues:

Should access to the disposal area be discouraged? *No*

Will odour effects be greater than usual? *No*

Will noise effects be greater than usual? *No*

C. Mitigation Measures

Has conservative approach been taken in choosing system design capacity? *Yes*

Is system design robust (cope with fluctuations of load, climate)? *Yes*

Is level of treatment high? *Medium – final treatment within soil*

Protection against failure storage, alarms? *Alarms*

Is hydraulic loading rate conservative? *Yes*

Is distribution area protected from hydraulic overload (interception drains)? *Yes*

Will soil type enhance treatment? *Yes*

Are desired separation distances attainable? (to surface water, groundwater, bores) *Yes*

Is the reserve area adequate? *Yes*

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ON-SITE DOMESTIC WASTEWATER MANAGEMENT
Advice to Home Owner/Occupier

Home owner and occupiers are legally responsible to keep their on-site wastewater system in good working order. The following schedule gives advice on the use and maintenance of the system.

1. **Use of the System**

For the on-site wastewater system to work well there are some good habits to encourage and some bad habits to avoid:

1.1 In order to reduce sludge building up in the tank:

(i) Scrape all dishes to remove fats, grease etc, before washing.
(ii) Keep all possible solids out of system.
(iii) Don't use a garbage grinder unless the system has been specifically designed to carry the extra load.
(iv) Don't put sanitary napkins, other hygiene products or disposable nappies into the system.

1.2 In order to keep bacteria working in the tank and in the land-application area:

(i) Use biodegradable soaps.
(ii) Use a low-phosphorus detergent.
(iii) Use a low-sodium detergent in dispersive soil areas.
(iv) Use detergents in the recommended quantities.
(v) Don't use powerful bleaches, whiteners, nappy soakers, spot removers and disinfectants.
(vi) Don't put chemicals or paint down drain.

1.3 Conservation of water will reduce the volume of effluent disposed to the land-application area, make it last longer and improving its performance. Conservation measures could include:

(i) Installation of water-conservation fittings.
(ii) Taking showers instead of baths.
(iii) Only washing clothes when there is a full load.
(iv) Only using the dishwasher when there is a full load.

1.4 Avoid overloading the system by spacing out water use evenly. For example not doing all the washing on one day and by not running the washing machine and dishwasher at the same time.

2. Maintenance

2.1 The primary wastewater-treatment unit (septic tank) will need to:

(i) Be desludged regularly i.e. every 3 to 5 years, or when scrum and sludge occupy 2/3 of the volume of the tank (or first stage of a two-stage system).
(ii) Be protected from vehicles.
(iii) Have any grease trap cleaned out regularly.
(iv) Have the vent and/or access cover of the septic tank kept exposed.
(v) Have the outlet filter inspected and cleaned.

2.2 The land-application area needs protection as follows:-

(i) Where surface water diversion drains are required by the design, these need to be kept clear to reduce the risk of stormwater runoff entering the effluent soakage area.
(ii) No vehicles or stock should be allowed on trenches or beds.
(iii) Deep rooting trees or shrubs should not be grown over absorption trenches or pipes.
(iv) Irrigation areas are not play areas for children and access should be restricted.
(v) Any evapo-transpiration areas should be designed to deter pedestrian traffic.
(vi) The baffles or valves in the distribution system should be periodically (monthly or seasonally) changed to direct effluent into alternative trenches or beds, if required by the design.

2.3 Evapo-transpiration and irrigation areas should have their grass mowed and plants maintained to ensure that these areas take up nutrients with maximum efficiency.

2.4 For aeration treatment systems. Check equipment and:

(i) Follow the manufacturer's instructions for maintaining and cleaning pumps, siphons, and septic tank filters.
(ii) Clean disc filters or filters screens on irrigation-dosing equipment periodically by rinsing back into the primary wastewater-treatment unit.
(iii) Flush drip irrigation lines periodically to scour out any accumulated sediment.

SUITABLE PLANTS FOR EVAPO-TRANSPIRATION SYSTEMS

Native Shrubs and Trees

Coprosma	*Coprosma propinqua*
Hebe	*Hebe*
Manuka	*Leptospermum Scoparium*
Weeping Mapou	*Myrsine Divaricata*
Flax (fast)	*Phormium Tenax*
Pokaka (slow)	*Elaeocarpus Hookerianus*
Cabbage Tree (fast)	*Cordyline Australias*
Rangiora (fast)	*Brachyglottis Repanda*
Lacebark (fast)	*Hoheria Populnea*
Ribbonwood (fast)	*Plagianthus Regius*
Poataniwha	*Melicope Simplex*
Heketara	*Olearia Rani*
Poataniweta	*Carpodetus Serratus*
Kohuhu (fast)	*Pittosporum Tenufolium*

Grasses

Jointed Twig Sedge	*Baumea Articulata*
Longwood Tussock	*Carex Comans*
Pukio	*Carex Secta*
Toetoe (use native species- not invasive Pampas Grass)	*Cortaderia Fulvida*
Umbrella Sedge	*Cyperus Ustulatus*
Oioi	*Leptocarpus Similis*
Hooksedge	*Uncinia Unciniata*

Introduced Species

Canna Lilies, Taro, Aralia, Fuschia, Philodendrons, and Begonias

NORTHLAND REGIONAL COUNCIL

CARING FOR NORTHLAND AND ITS ENVIRONMENT

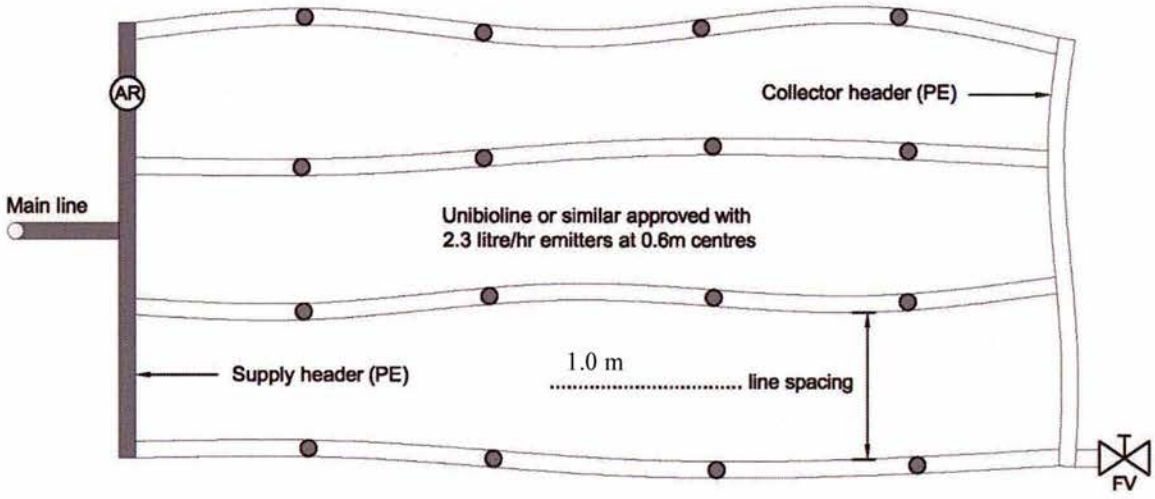
WHANGAREI: 36 Water Street, Pnvate Bag 9021, Whangarei; Phone 09 438 4639, Fax 09 438 0012.

OPUA: Unit 10, Industrial Marine Park, Opua; Phone 09 402 7516, Fax 09 402 7510.

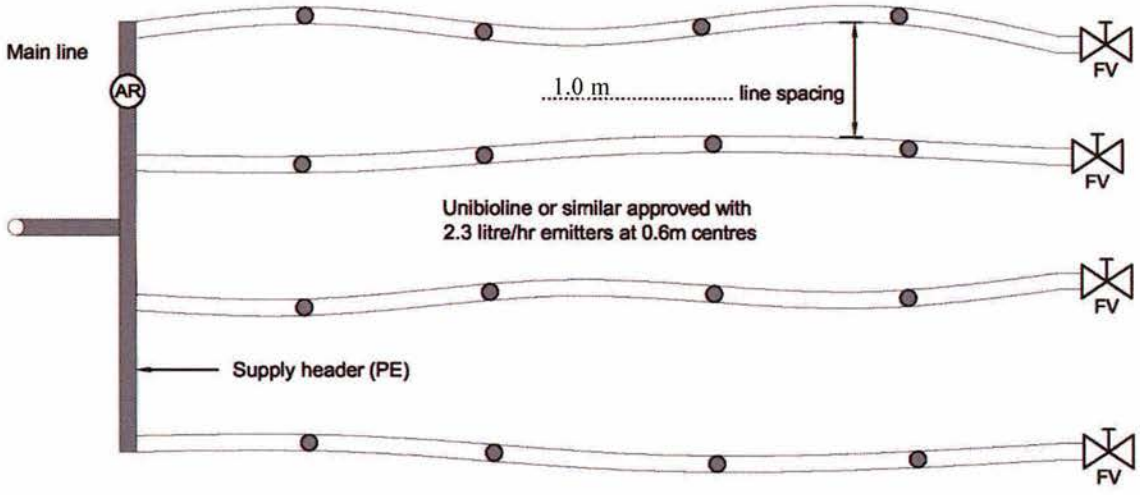
DARGAVILLE: 61B Victoria Street, Dargaville; Phone 09 439 3300, Fax 09 439 3301.

KAITAIA: 192 Commerce Street, Kaitaia; Phone 09 408 6600, Fax 09 408 6601.

Freephone: 0800 002 004 Environmental Hotline: 0800 504 639 Website: www.nrc.govt.nz



Basic Grid Layout



Field Layout Without A Collection Header Pipe

DWG: On-Site Effluent Disposal Typical Field Layouts. Trickle Irrigation			
DWG No.	Sheet No. of	Scale NTS	
Drawn PC	Checked	Approved	
File Z:\HW TECHNICAL FORMATS (LTR HEAD,FORMS,JOB REQUEST ETC)\HW_STD_DWG_2011\EFFLUENT_DISPOSAL\EFFLUENT DISPOSAL_2016.DWG		Date	

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Civil & Structural Engineers
6 Fairway Drive
Kerikeri, BOI
T: 09 407 8327
F: 09 407 8378
E: info@haighworkman.co.nz

Project	Subdivision at 405 Kerikeri Inlet Road
Client	Nags Head Horse Hotel Ltd
Project No. 17 229	RC no.

APPENDIX 5: **Initial application to Northland Regional Council to raise, via earthworks, existing farm access tracks within, or in the Riparian Management Zone of, an indigenous wetland -**

- ***'405 Kerikeri Inlet Road: Wetland Crossing – Assessment of Environmental Effects'*** **prepared by Mortimer Consulting, dated May 2018**
- **Northland Regional Council decision relating to wetland crossing**

Revised application to Northland Regional Council -

- ***'405 Kerikeri Inlet Road: Access Track Construction within a Wetland'*** **prepared by Mortimer Consulting, dated October 2018**

- **Northland Regional Council decision relating to wetland crossing**

405 Kerikeri Inlet Road: Access Track Construction within a Wetland

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Assessment of Environmental Effects

Prepared for: Nags Head Horse Hotel Limited

For submission to: Northland Regional Council

October 2018

MORTIMER
CONSULTING

Prepared by
Glenn Mortimer Mortimer Consulting PO Box 3255, Onerahi, Whangarei 0142 TEL +64 9 438 4616 027 255 5434

REVISION SCHEDULE

Rev No	Date	Description	Prepared By	Reviewed By	Approved By
1	4/10/2018	Draft	GM	Scope Env	GM
2	5/10/2018	Final	GM		GM

Access Track Construction within a Wetland

ASSESSMENT OF ENVIRONMENTAL EFFECTS

TABLE OF CONTENTS

ATTACHMENTS

1. Introduction

This application and assessment of environmental effects (AEE) is for resource consent from the Northland Regional Council to raise, via earthworks, existing farm access tracks within, or in the Riparian Management Zone of, an indigenous wetland.

Nags Head Horse Hotel Limited has applied to the Far North District Council for subdivision of Lot 1 DP 167657 (405 Kerikeri Inlet Road) into four lots (see **Attachment A**). The land in question was previously part of the coastal marine area but was bunded and partially reclaimed sometime between 1955 and 1964.

Much of the low-lying land area within the proposed subdivision is wet and boggy due to floodgates being broken and/or in poor repair. This means that tidal waters flow into and out of the bunded area. The Far North District Council, which is responsible for the stopbanks, has been approached but has declined to fix the floodgates. The Applicant has accordingly decided to allow the wetland area to revert.

Application was previously made to the Northland Regional Council to providing access, via a raised causeway, through Lot 3 to the outermost lot (Lot 1). The consent, AUT.040047.01.01, was granted on 29th June 2018. However, it has since become known that some of the surveyed rights of way (ROW), specifically ROW I within proposed Lot 3 and ROW J within proposed Lot 4, are also located either in the wetland area or in the riparian management zone (RMZ) adjacent to it. As part of the subdivision, it is proposed that the land within these surveyed areas be raised via earthworks to enable stock, farm utility vehicle and quad bike access. Consent for these additional works is therefore also required.

A completed Northland Regional Council Application for Resource Consent form is enclosed with this AEE in accordance with Section 88 of the Resource Management Act 1991 (RMA).

In support of the application and in compliance with Schedule 4 of the RMA, this AEE:

- briefly describes the subject property, including the wetland, and the proposed subdivision;
- describes the proposed farm access tracks;
- assesses the status of the proposed activity against relevant rules within the operative Regional Water and Soil Plan for Northland (RWSP) and the Proposed Regional Plan for Northland (PRP);
- assesses the environmental effects of the activity;
- briefly assesses the existing activity against relevant regional objectives and policies; and
- draws conclusions on the appropriateness of authorizing the earthworks based on the above considerations.

1.1 Consent Amalgamation

If this current application is granted, it is requested that for the sake of simplicity for both the Applicant and the council, this be amalgamated as sub-activities within the existing consent AUT.040047.01.01. The consented causeway will link directly to the formed tracks covered by this application and the earthworks activities and their effects are essentially the same.

1.2 Consent Term Sought

The same consent term (5 years) as the existing consent is sought for the track construction taking into account potential delays in finalising the subdivision and/or selling the resultant lots.

Given the raised tracks will overlie existing formed farm races and the environmentally benign nature of the works, no long-term effects will occur.

1.3 Notification

Non-notification of this application is sought as the activity is entirely within a property owned by the Applicant and no adverse effects will occur beyond the property boundary.

2. General Setting

The two rights of way are associated with the proposed subdivision of Lot 1 DP 167657 at 405 Kerikeri Inlet Road, Kerikeri. The scheme plan for the subdivision is shown in **Attachment A**.

The subject property is bordered by the Okura River estuary on the western side and the Kerikeri Inlet on the northern and eastern sides.

The property itself consists largely of flat to rolling pasture with some small remnant areas of indigenous vegetation. The flat pasture areas includes parts of the land previously reclaimed from the inlet. Regular (tidal) saltwater incursion through the broken floodgates has caused much of the pasture grass in the low-lying areas to rapidly die off except for small patches above MHWS. Above MHWS and surrounding the wetland, there is are narrow flats of rank grass and scattered rushes (*Juncus* sp.).

The underlying geology comprises Holocene estuary deposits consisting of unconsolidated mud, sand, peat and shell banks on the low (reclaimed) ground, with the higher and rolling ground behind underlain by greywacke of the Waipapa group sandstone and siltstone.

The low-lying land includes a system of lateral drains used to direct land runoff to the flood-gated culverts and out into the adjoining estuarine environment. This includes shallow drains immediately landward of the proposed ROWs (see next section).

The ROWs will provide dry stock, farm utility vehicle and quad bike access to the pasture areas on Lot 1. This will remove stock from the wetland areas. These areas will be allowed to naturally revert, which is likely to be a gradation from coastal to freshwater wetland vegetation depending on the extent of saline water influence into the property.

3. Proposed Access Tracks

The location and route of the proposed raised access tracks are shown as ROW I in Lot 3 and ROW J in Lot 4 on the subdivision plan (**Attachment A**). The accessway in the easternmost portion of ROW J is already formed. This application covers the remainder needed to link to ROW I and the consented causeway crossing.

At this stage, earthworks are anticipated to comprise formation of the proposed rights of way. The earthworks proposed can be broken down as follows:

(a) Formation and/or widening of the ROWs.

(b) Cutting and filling to reduce the gradient of proposed Right of Way I.

(c) Construction and/or raising of the farm tracks within Right of Way I and part of Right of Way J.

(d) Placing of a surface layer of aggregate.

The minimum legal width of the ROW (under the Far North District Plan) is 5m and the expected access/carriageway width is 3m. The maximum depth of cut or fill is not expected to exceed 1.0m.

Preliminary estimates of the earthwork areas and volumes involved for ROW I and ROW J are presented in **Table 1**. The estimated areas involved may be conservative in that they use the entire 5m ROW width. The volumes are based on an average 4m width.

Table 1 – ROW Earthworks Dimensions and Quantities

Location	Length (m)	Area (m^2)	Cut (m^3)	Fill (m^3)	Aggregate (m^3)	Total (m^3)
Lot 3 ROW I	240	1200	190	190	576	956
Lot 4 ROW J	45	225	25	25	109	159
Total	**285**	**1425**	**215**	**215**	**685**	**1115**

3.1 Right of Way I

Right of Way I covers a total distance of approximately 240m. 150m of this ROW encompasses an existing farm track that runs around the base of the elevated land at the southern end of Lot 3. The existing track is already fenced on both sides and begins at the southwestern corner of the elevated promontory and runs north then roughly northeast around its base (**Photos 1 – 7**). The exact width of the fenced area is not known but estimated to be 4-5m.

Between the track and the promontory is a shallow open drainage channel that is currently filled with short rushes. Some culverting at appropriate locations may be needed to improve drainage.

The drainage channel continues on the southern side of the promontory within ROW I. However, there is no existing formed track in this 90m section so the earthworks will be new (**Photo 8**). The $190m^3$ of cut to fill is largely in this area. Elsewhere the earthworks just involve removing surface soft mud and topsoil.

Existing ground levels along the route of the farm track typically vary from 0.3 to 0.6 m OTP datum. It is proposed to place an average depth of 0.6 m of aggregate fill on the existing ground to raise the level of the track to a minimum of 0.9 m OTP datum, similar to the existing metalled track formation within Right of Way J.

MHWS at the site is around 2.35 m Chart Datum or 0.67 m OTP datum so a track at 0.9 m OTP datum would have 0.23m freeboard above MHWS.

Once constructed, the proposed track will settle as a result of consolidation of the mud beneath, and freeboard will reduce as a result of sea level rise. The track may therefore need to be topped up at some stage to maintain reasonable freeboard for the access track.

3.2 Right of Way J

There is an existing formed vehicular accessway that runs through Lot 4 ROWs L, K and part of J. The proposed earthworks within ROW J will effectively join ROW I to this formed accessway over a distance of approximately 45m (**Photo 9**). However, the earthworks will be sufficient for a farm track only and not for general vehicular access other than farm utility vehicles, quad bikes, motor bikes and the like.

As with the proposed works within ROW I, it is proposed to place an average depth of 0.6 m of aggregate fill on the existing ground to raise the level of the track to a minimum of 0.9 m OTP datum. Approximately $25m^3$ of cut to fill is required with around $109m^3$ of aggregate required for the surface layer.

Photo 10 shows the existing vehicular accessway and provides an indication of the finished surface,

3.3 Earthworks construction

Earthworks will be carried out in accordance with NZS 4404 and the Far North District Council's Engineering Standards and Guidelines.

Where the placement of imported hard fill material is required, the material should be sorted, classified and compacted in a controlled manner in accordance to an approved earthworks specification, such as NZS 4404 Section 2.3.6 *'Compaction Standards for Fill Material'*. Where imported hard fill materials are placed in excess of 600 mm thickness and/or where hard fill is proposed to be utilised as a bearing strata or for roading it is recommended that compaction is confirmed by in-situ testing conducted by a suitably qualified and experienced engineer.

No specific erosion and sediment control measures are considered necessary given the flat nature of the ROWs and the limited values of the surrounding wetland area (see below).

4. Wetland Values

As part of the preparation of the subdivision proposal, the ecological values of the general site have been assessed by 4Sight Consulting including the tidal and wetland areas. A copy of the report can be provided on request.

The following subsection is a brief summary of the relevant facts and findings drawn from that report.

4.1 General Wetland Area

- The central tidal-influenced wetland area contains scattered juvenile mangroves (*Avicennia marina* subsp. *australasica*), mostly bordering the drainage channels. Crab holes are apparent in areas closest to the stopbanks.
- The wetland also contains large patches of beaded glasswort (*Sarcocornia quinqueflora*), rushes (*Juncus* sp.) and rank pastoral grasses, areas of which are in advanced stages of decay as a result regular (tidal) submersion under water.
- The area has previously had open access for stock with the associated effects of trampling on vegetation and muddy areas clearly evident.
- Bordering this tidal-influenced area on both north and south sides are relatively flat, slightly elevated areas which contain scattered rushes (*Juncus* sp.) and/or rank pastoral grasses. Stock have access to these areas and rushes are heavily grazed.

4.2 Access Track Footprint

The areas within ROW footprint contains only very limited vegetation due to past stock grazing and trampling. The vegetation that is present is largely confined to rank grass (kikuyu) and grazed tufts of rush (*Juncus sp*) (**Photos 1 – 9**).

5. Activity Status

5.1 Coastal or Freshwater Area?

Mr Heaps from NRC has previously advised that, by agreement with the Department of Conservation and the Far North District Council, such bunded wetland area is not considered to be part of the coastal marine area. The rules and related provisions of the Regional Water and Soil Plan for Northland (RWSPN) therefore apply. These rules are in the process of being superseded by those within the Proposed Regional Plan for Northland (PRPN) which was publicly notified in September 2017. The period for submissions has closed and formal hearings are current in progress.

Relevant to this application, the Northland Regional Council has utilised Section 86B of RMA to give all PRPN rules immediate legal effect from the date of public notification. Both the rules within the RWSPN

and the PRPN therefore need to be considered in establishing the status of the activities involved in this application.

5.2 Consents Required

The proposed earthworks (land disturbance) for the track formation and/or raising will occur within the wetland's riparian management zone as defined under the Regional Water and Soil Plan. As an ecologically depauperate area, the reverting wetland is considered neither an area of significant indigenous vegetation nor a significant habitat of indigenous fauna in accordance with the criteria set out in RWSP Appendix 13B.

The total estimated earthworks area and volume exceed the permitted levels in RWSP Rule 34.1.3. The activity therefore falls to be considered a **discretionary activity** under Rule 34.3.1.

The proposed culverting, if required, is considered to meet the **permitted activity** requirements for new land drainage in RWSP Rule 27.1.2.

In regard to the PRPN definitions and rules, the proposed earthworks are within 10m of a wetland and exceed the activity area and volume thresholds in Rules C.8.3.1 (permitted activity) and C.8.3.2 (controlled activity). The land disturbance/earthworks are therefore a **discretionary activity** under Rule C.8.3.3.

The proposed culverting, if required, is considered to meet the **permitted activity** requirements for new land drainage under PRP Rule C.4.1.

6. Environmental Effects Assessment

The environmental concerns regarding alteration or disturbance of indigenous wetlands are generally in relation to:

(a) the general desire to protect remaining wetlands given the historical 90% loss of these throughout New Zealand;

(b) effects on wetland vegetation and habitat values; and

(c) effects on water quantity and quality in adjacent water bodies.

There can also be Maori cultural dimensions to consider.

Each of these matters is addressed below. However, it is considered important to first emphasize the unique history and features of the subject wetland which are:

- the area has been mainly pastureland for over 50 years and consistently grazed by cattle for most of that period, including up to the present date;
- cattle grazing and trampling has limited the establishment of wetland vegetation both in the RMZ and the wetland proper; and
- rather than repairing the broken floodgate(s) and re-establishing the flooded area as pasture, the landowner is willing, through the ROW/accessway formation, to keep cattle out of the wider wetland area and so allow it to fully revert as part of the subdivision proposal.

6.1 General protection of wetlands

The subject wetland is not amongst NRC's top ranked Northland wetlands. Notwithstanding this, the new PRPN acknowledges the values of remaining wetlands purposely affords protection to both 'historical' wetland areas and also induced and reverting wetland areas.

Within this context, the intended landowner actions will allow the majority of the wetland to fully revert and so will eventually add to the sum of quality wetlands within the region and the Far North district. Presently, the compromised ecological values and the existing fenced (and grazed) accessway mean that there is little or no adverse effect from the proposed earthworks.

6.2 Wetland vegetation and habitat values

The ecological assessment (**Attachment B**) refers to these fringing boggy pasture areas that surround the tidal wetland as wetland. Because of the past grazing and trampling within them, the accessways will not traverse any significant areas of *Juncus* (rush), i.e. the affected areas have already been compromised (see **Photos 1 – 9**).

6.3 Effects on water quantity and quality

Fully mature wetlands can act as sponges for flood flows, capturing peak flows and then gradually releasing these into adjacent water bodies. This can help maintain river flows during dry periods and also prevent scouring of river beds during high rainfall events. However, this effect relies on the wetland in question having a good coverage of vegetation as it is the density of plants that slows the flow of water through the wetlands.

In slowing the flow of water through it, the wetland vegetation traps waterborne contaminants, including sediment, and can also take up any entrained nutrients as part of plant growth.

The subject wetland currently has insufficient coverage and/or density of wetland vegetation to perform either of these functions effectively. What retention ability there is within the area will therefore be largely due to the physical restriction of water flow out of the area due to the stopbank and culvert size(s).

No adverse effects on the wetland functions is expected as a result of the proposed accessway construction.

6.4 Cultural values

While there is a long history of Maori occupation in this area and is likely to have been some use of the area when this was part of the CMA, there are no known cultural values directly associated with the stop-banked and reverting wetland as it currently exists. However, it is important to note that a Cultural Impact Assessment commissioned by Nags Head Hotel Limited for the overall subdivision proposal states that:

> *Due to the cultural and ecological threats set forth in this report, it is the position of the Otahuao Burial Trust and the Kaire Edmonds Whānau Trust that any earthworks and other construction or development should be avoided in, on, or near the waterways.*
>
> *This recommendation is to maintain the mauri of the waterways, protecting the traditional breeding ground of fisheries and traditional sources of kai moana.*

As stated in the previous application, these comments are clearly based on the perception that the wetland is entirely natural, is a fish breeding ground, and a source of kaimoana. While the area was previously part of the CMA, there is no evidence to suggest that in is now a breeding ground for fisheries and contains kaimoana. In fact, ecological and visual evidence is to the contrary.

7. Policy and Plan Analysis

7.1 Section 104 of the RMA

In considering an application for resource consent, the Northland Regional Council is required, under section 104 the RMA, but subject to Part II of the RMA, to have regard to a range of matters as may be

relevant in the case of a particular application. The matters to have regard to under section 104(1) that are particularly relevant to this application, are:

(a) Any actual and potential effects on the environment of allowing the activities

(b) Any relevant provisions of –

(i) Regional Policy Statement for Northland 2016;

(ii) Regional Water and Soil Plan 2004 (RWSP);

(iii) Proposed Regional Plan for Northland 2017 (PRP).

The actual and potential effects on the environment of allowing the proposed activity are considered minor for the reasons set out in Section 6 of this AEE.

As noted in Section 5.1, the proposed activity is classified as discretionary activities under the provisions of both the RWSP and the PRP.

Under section 104B of the RMA, after considering an application for a resource consent for a discretionary activity, a consent authority may grant or refuse the consent, and (if granted) may impose conditions under section 108.

7.2 Regional Policy Statement for Northland

Section 104 of the RMA requires that, among other things, the relevant provisions of regional policy statements are had regard to. Given the limited nature of the present proposal, analysis below is restricted to objectives and policies within the following Regional Policy Statement (RPS) sections which are considered most directly relevant:

Part 3 Objectives

3.4 Indigenous ecosystems and biodiversity

Part 4 Policies and Methods

4.4.1 Maintaining and protecting significant ecological areas and habitats

Objective 3.4 reads:

Safeguard Northland's ecological integrity by:

(2) Protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna;

(3) Maintaining the extent and diversity of indigenous ecosystems and habitats in the region; and

(4) Where practicable, enhancing indigenous ecosystems and habitats, particularly where this contributes to the reduction in the overall threat status of regionally and nationally threatened species.

Clause (1) is not applicable as the reverting wetland is not an area of significant indigenous vegetation and/or a significant habitat of indigenous fauna.

Clause (2) is relevant as its focus is on maintaining existing ecosystems and habitats where these are present. Though it is a reverting wetland, the wetland has some, albeit limited, ecological value that may in future contribute to the ecological integrity of the adjacent Kerikeri Inlet and Okura River estuary. For example, the wetland, when allowed to mature, could become important for nesting or feeding of indigenous wetland bird species that also utilise the more natural mangrove and saltmarsh margins of the two estuarine water bodies.

Allowance of the earthworks will help ensure that cattle are excluded from the wetland. This will lead to a natural enhancement of the wetland ecosystem over time.

Policy 4.4.1 reads, in part:

> *(1) In the coastal environment, avoid adverse effects, and outside the coastal environment avoid, remedy or mitigate adverse effects of subdivision, use and development so they are no more than minor on:*
>
> *(a) Indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists;*
>
> *(b) Areas of indigenous vegetation and habitats of indigenous fauna, that are significant using the assessment criteria in Appendix 5;*
>
> *(c) Areas set aside for full or partial protection of indigenous biodiversity under other legislation.*
>
> *(2) In the coastal environment, avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of subdivision, use and development on:*
>
> *(a) Areas of predominantly indigenous vegetation;*
>
> *(b) Habitats of indigenous species that are important for recreational, commercial, traditional or cultural purposes;*
>
> *(c) Indigenous ecosystems and habitats that are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass, northern wet heathlands, coastal and headwater streams, floodplains, margins of the coastal marine area and freshwater bodies, spawning and nursery areas and saltmarsh.*

The affected wetland margin is within the coastal environment as delineated on the RPS maps. Clause (1) which emphasises total avoidance of effects does not apply as the affected areas do not support threatened or 'at risk' taxa, are not considered significant in accordance with RPS Appendix 5 and are not formally protected under legislation other than the RMA, i.e. by virtue of RMA s30(1)(c) and the associated PRPN rules.

Clause (2)(c) is relevant in that coastal wetlands are expressly listed amongst those ecosystems and values considered vulnerable to adverse effects of subdivision, use and development. In the present case, there will be no significant adverse effects and what other effects there are, e.g. potential influence on drain water flows, can be avoided or mitigated.

For the reasons set out above, the proposed earthworks will not be inconsistent with RPS Objective 3.4 or Policy 4.4.1.

7.3 Operative Regional Water and Soil Plan

The RWSP does not have express policy provisions for wetland management but rather encapsulates these under provisions for works within river and lake beds in Section 11.

Policy 11.5(1) requires, amongst other things, that use of a river or lake beds avoids adverse effects on significant indigenous wetlands, and remedies or mitigates adverse effects on other indigenous wetlands. As noted above, the wetland area in question is not considered significant and the level of effects on its values and functioning are likely to be less than minor. In fact, it can be argued that the effect of excluding stock on its long-term values is a positive effect.

The only other policy of relevance is Policy 11.5(7) which requires that the role that wetlands play in the management of floodwaters is recognised. This does not apply in the present situation as the bulk of the wetland is open water and flood-gated so does not act as a natural 'sponge' for detaining floodwaters.

Policy 11.5(11) does require that wetlands are managed in accordance with the RPS. These matters are covered in Section 7.2 above.

7.4 Proposed Regional Plan

The PRPN has only one over-arching objective. This is set out in Section F of the plan and reads:

> *Manage the use, development, and protection of Northland's natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while:*
>
> *1) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations, and*
>
> *2) safeguarding the life-supporting capacity of air, water, soil, and ecosystems, and*
>
> *3) avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Policies are set out in Section D of the PRPN include two specifically related to wetland management. These policies are:

D.4.27	Wetlands – requirements
D.4.28	Wetlands – values

These policies are subject to submissions which are currently being heard, so may change after Council deliberations and decisions. Notwithstanding this, NRC staff recommendations are for only minor wording changes to both policies.

Policy D.4.27 reads:

> *Activities affecting a wetland must:*
>
> *(1) maintain the following important functions and values of wetlands:*
> *(a) water purification, and*
> *(b) contribution to maintaining stream flows during dry periods, and*
> *(c) peak stream flow reduction, and*
> *(d) habitat for indigenous flora and fauna, and*
>
> *(2) avoid, remedy, or mitigate effects, or provide biodiversity offsetting or environmental biodiversity compensation, so that residual adverse effects are no more than minor.*

As discussed in Section 6, the wetland as it presently exists is unlikely to perform any meaningful function(s) in terms of water quantity or quality management for the adjoining Okura River estuary. It is a habitat for indigenous wetland flora and fauna though this is highly compromised by grazing and trampling by cattle.

In this context, the effects of the proposed access tracks are considered minor and relatively innocuous in nature. There will be no residual adverse effects of any consequence.

Policy D.4.28 more directly applies to the consent authority processing of applications for activities in wetland and reads:

> *When considering resource consents for activities in wetlands, recognise:*
>
> *(1) the benefits of wetland creation, restoration and enhancement of wetland functions, and*
>
> *(2) the values of induced wetland or reverted wetland are likely to relate to:*
>
> *(a) the length of time the wetland has been in existence (ecological values are generally lower in newly established wetlands), and*

(b) whether long-term viability of the wetland relies on maintenance works to maintain suitable hydrological conditions (wetlands that don't require maintenance are of greater value), and

(3) that the consent duration should be as long as the time it takes for the wetland to reach its expected end state.

In respect of (1), while the tracks will traverse a defined part of the wetland margin, a key benefit of the overall subdivision proposal, of which the ROWs are an integral part, will be that the wetland is allowed to fully revert. This is considered wetland enhancement and therefore should be recognised in any decision-making on this application.

Clause (2) relates directly to reverted (or reverting) wetlands of which the subject wetland is one. Based on satellite imagery of the area, the wetland in its present extent appears to have been in existence for around 5 – 7 years. As a result of this relatively short period and the effects of continued grazing and trampling on newly establishing wetland plants, the ecological values of the wetland are low. Accordingly, the access tracks will have far less of an effect than if the wetland was well established and more or less pristine. This is particularly so within the footprint of the proposed accessways which have been used as farm tracks.

The proposal is that the wetland be allowed to naturally revert so no maintenance is required. Weed and pest control may well be undertaken by future subdivision lot owner but this is a separate matter from the current proposal.

Consent duration in the present case should not be linked to the rate of reversion of the wetland. Rather it should be linked to the duration of the works required. The start for this may well be linked to sale and purchase agreements for the subdivision lots. Given the potential vagaries of the market, a conservative 5-year term is being sought.

The analysis of the PRPN objective and policies above show that the proposed activity is either consistent with, or not contrary to, those plan provisions.

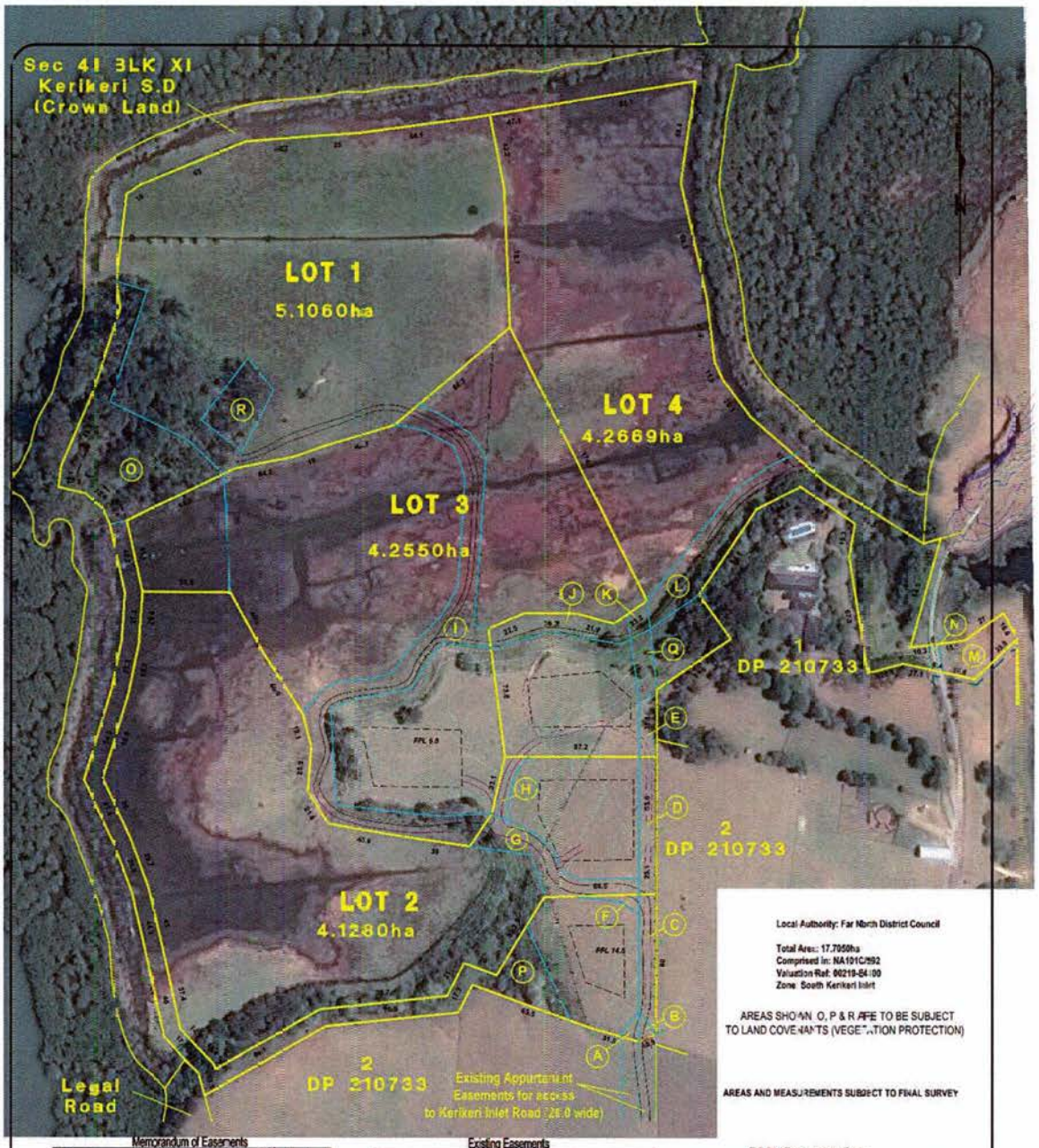
8. Conclusion

This assessment is in support the application by Nags Head Hotel Limited for a land use permit to create low impact accessways for stock movement and farm vehicle access. The ROWs are an integral part of a proposed subdivision of the affected property and, in the areas covered by this application, predominantly use an existing fenced but unmetalled race.

The actual and potential adverse effects of the construction of the accessways are considered minimal given the low ecological values of the wetland and the existing use of the affected areas. The proposal is also either consistent with, or does not conflict with, the applicable regional objectives and policies.

Accordingly, it is the opinion of Mortimer Consulting that the Northland Regional Council is able to grant the permits applied for, subject to appropriate consent conditions as may be determined. If granted, it is requested that the consent be amalgamated as sub-activities with existing Consent AUT.040047.01.01 for the sake of simplicity.

ATTACHMENT A Subdivision Scheme Plan



Photographs

Photo locations

Photograph 1 ROW I - Southern end of fenced stock track looking west

Photograph 2 ROW I - Southern end of fenced stock track looking north

Photograph 3 ROW I – fenced stock track on western edge of promontory.

Photograph 4 ROW I – fenced stock track on western side of promontory. Note: shallow drain on landward side.

Photograph 5 ROW I – fenced stock track at northwestern enc of promontory

Photograph 6 ROW I – fenced stock track at northern edge of promontory

Photograph 7 ROW I – fenced stock track at northern end of promontory looking east

Photograph 8 ROW I – unfenced section along southern edge of promontory looking east

Photograph 9 ROW J – from end of fenced stock track across to existing metalled accessway.

Photograph 10 ROW J – existing metalled accessway looking west.

Application Number: APP.040047.02.01

Application Type: Non-notified, New

Applicant Name: Nags Head Horse Hotel Limited

Note: *In this decision document, "application", "activity" and "consent" refer to all activities that are part of the consent application.*

REASONS FOR THE DECISION

This consent is granted pursuant to Section 104B of the Resource Management Act 1991 (the Act). In reaching this decision, the council has considered the matters outlined in Part 2 and Section 104 of the Act. It has been determined that:

(1) The adverse effects of the proposed activity on the environment will be no more than minor.

(2) The proposed activity is consistent with the relevant statutory planning documents and regulations.

(3) The granting of this resource consent achieves the purposes of the Act.

Summary of Activity

The proposal involves the construction of relatively minor portions of an access track within a wetland. Resource consent AUT.040047.01.02 was granted for this property in mid 2018 for a causeway crossing of the wetland on the property, and this application is an addition to that consent for additional areas of access track on the subdivision that was omitted from this previous consent.

Regional Plan Rule(s) Affected

The construction of an access track on the bed of an indigenous wetland is deemed a discretionary activity in accordance with Rule 31.3.1 of the Regional Water & Soil Plan for Northland (RWSP).

The site is defined as a significant wetland by the Proposed Regional Plan for Northland (PRP), therefore the proposed works are deemed to be a non-complying activity in accordance with Rule C.2.2.5 of the PRP.

Actual and Potential Effects (Section 104(1)(a) of the Act)

The adverse effects on the environment of this activity have been determined to be no more than minor for the following reasons:

The works are adjacent to an existing track on the property, being located either within the wetland or within the Riparian Management Zone. The total volume of earthworks is 215 m^3 of cut and fill plus an additional 685 m^3 of imported aggregate. Wetland vegetation consists predominantly of rushes and rank kikuyu grass, and is largely tidally influenced. Livestock

currently graze these areas so construction of the access tracks and fencing of the adjacent wetland, which is also proposed, will greatly enhance the ecological values of this area. The overall effects of this activity on the environment are considered to be no more than minor.

The site contains no known archaeological sites and no iwi group has raised concerns about the effects of this activity on sites of cultural or spiritual significance.

Relevant Statutory Provisions (Sections 104D and 104(1)(b) of the Act)

Section 104D

As a non-complying activity, the council can only grant a consent if it is satisfied that either the effects on the environment will be minor, or that the activity will not be contrary to the relevant objectives and policies in the RWSP and PRP. As demonstrated above, the effects on the environment resulting from access track construction are minor, and the activity is also consistent with the objectives and policies in the plans.

Section 104(1)(b)

The council has determined that the granting of this resource consent, is consistent with the objectives and policies contained in Chapters 6, 8, and 11 of the RWSP and policies D.1, D.2, and D.4 of the PRP.

Te Rūnanga o Ngāti Rehia has an iwi management plan relevant to the location of this activity. The granting of this consent is not contrary to the objectives and policies contained within this plan and there are no identified customary activities which would be put at risk by the implementation of the proposal.

The objectives and policies contained within the iwi management plan have been considered along with the objectives and policies of the relevant planning documents.

In all the circumstances, the activity is consistent with the purpose and principles of the Act, as stated in Part 2 of it.

Duration of the Consent

Existing Resource Consent AUT.040047.01.01 was granted for a period of five years and it is appropriate that a similar term is imposed for this consent, as requested by the Consent Holder.

I confirm that these are the true and correct reasons for the decision to grant resource consent application number APP.040047.02.01:

Name and Signature of Authorised Person:

Paul Maxwell
Coastal & Works Consents Manager

Date: **5 November 2018**

FILE: 40047
(02)
New

Resource Consent

Document Date: 05.11.2018

Pursuant to the Resource Management Act 1991, the Northland Regional Council (hereinafter called "the council") does hereby grant a Resource Consent to:

NAGS HEAD HORSE HOTEL LIMITED, 606 PEAK ROAD, RD 2, HELENSVILLE 0875

To undertake the following activity associated with access track construction within a wetland on Lot 1 DP 167657, 405 Kerikeri Inlet Road, Kerikeri, at about location co-ordinates 1689927E 6102838N and 1690225E 6102976N:

Note: All location co-ordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection.

AUT.040047.02.01 Widen an existing access track on the bed of an indigenous wetland.

Subject to the following conditions:

1 The Consent Holder shall notify the council's assigned monitoring officer in writing of the date that earthworks are intended to commence, at least two weeks beforehand. The Consent Holder shall arrange for a site meeting between the Consent Holder's contractor and the council's assigned monitoring officer, which shall be held on site prior to the commencement of construction activities. No work shall commence until this site meeting has been held.

Advice Note: *Notification of the commencement of works may be made by email to mailroom@nrc.govt.nz.*

2 The Consent Holder shall at least ten working days prior to the commencement of causeway construction activities, provide the following details to the council's Compliance Manager:

(a) Plans showing the final location and extent of track improvements;

(b) The materials to be utilised for construction, and the proposed timing of construction activities;

(c) Measures to prevent spillage of fuel, oil and similar contaminants;

(d) Contingency containment and cleanup provisions in the event of accidental spillage of hazardous substances.

3 Materials to be utilised for construction of the access track shall be substantially free of fine materials, or otherwise suitably contained to minimise the discharge of sediment into the wetland, beyond the footprint of the access track. The outside batters of the causeway shall be suitably armoured with rock or vegetation to prevent erosion of the structure during storm events.

Northland REGIONAL COUNCIL

4 Construction activities shall be undertaken outside of high tide events, and all machinery utilised for construction activities within the wetland, shall only be operated within the footprint of the proposed access track.

5 Following completion works, all stock shall be effectively excluded from entry into indigenous wetland areas on the property.

Advice Note: *It is intended that all areas of land affected by tidal inundation will be allowed to revert to become saline or freshwater wetlands.*

6 The exercise of this consent shall not cause in any of the following effects on water quality, as measured 20 metres downstream of construction activities:

(a) The production of any conspicuous oil or grease films, scums or foams, floatable or suspended materials, or emissions of objectionable odour;

(b) Suspended solids concentration greater than 100 grams per cubic metre;

7 The Consent Holder shall, for the purposes of adequately monitoring the consent as required under Section 35 of the Act, on becoming aware of any contaminant associated with the Consent Holder's operations escaping otherwise than in conformity with the consent:

(a) Immediately take such action, or execute such work as may be necessary, to stop and/or contain such escape; and

(b) Immediately notify the council by telephone of an escape of contaminant; and

(c) Take all reasonable steps to remedy or mitigate any adverse effects on the environment resulting from the escape; and

(d) Report to the council's Compliance Manager in writing within one week on the cause of the escape of the contaminant and the steps taken or being taken to effectively control or prevent such escape.

For telephone notification during the council's opening hours the council's assigned monitoring officer for the consent shall be contacted. If that person cannot be spoken to directly, or it is outside of the council's opening hours, then the Environmental Emergency Hotline shall be contacted.

Advice Note: *The Environmental Emergency Hotline is a 24 hour, seven day a week, service that is free to call on 0800 504 639.*

8 In the event of archaeological sites or kōiwi being uncovered, activities in the vicinity of the discovery shall cease and the Consent Holder shall contact Heritage New Zealand Pouhere Taonga. Work shall not recommence in the area of the discovery until the relevant Heritage New Zealand Pouhere Taonga approval has been obtained.

Advice Note: *The Heritage New Zealand Pouhere Taonga Act 2014 makes it unlawful for any person to destroy, damage or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga.*

9 The council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions annually during the month of June 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.

The Consent Holder shall meet all reasonable costs of any such review.

EXPIRY DATE: 30 JUNE 2023

This consent is granted this Fifth day of November 2018 under delegated authority from the council by:

Paul Maxwell
Coastal & Works Consents Manager

Chris Williams

From: Mike Farrow <mike@lla.co.nz>
Sent: Friday, 28 September 2018 3:05 PM
To: Liz Searle
Subject: Nags Head Horse Hotel application - Kerikeri Inlet Road

Dear Liz

You have recently provided me with a copy of the updated Haigh Workman report for the above proposal and asked that I comment upon any potential visual effect implications of the farm track as detailed in the new section 7.4 of that report.

From my reading of the document, I understand that the access track to the island will typically be in the range of 300mm to 600mm above existing ground (mud) level and you have advised that there would be a short segment of track that is slightly more elevated to 1.1m as it passes over a culvert in the causeway. As you know, my earlier reporting was prepared in the absence of detailed engineering reporting, so I speculated upon the finished height of the causeway and its related approaches. On p7 (describing the proposal) of my report a height of 600mm RL is offered, with further commentary about the intention to ramp growing media along the lower extent of the causeway flank in which to establish vegetation.

It is my expectation that the indigenous, maritime wetland/saltmarsh vegetation that is to be established alongside/on the causeway batters would have a height of approximately 750mm above the apex of its root structure, with some species such as salt-marsh ribbonwood reaching up to 2m in height. If the soil ramp placed alongside the causeway were to be up to the 500mm thickness that I anticipate, the vegetation would serve to contain all horizontal and low oblique views to the causeway itself, subject to appropriate vegetation and structure detailing. There may be a very brief break in the continuity of that vegetation at the point of the culvert, where a causeway toe obviously can't exist due to the presence of the culvert channel.

In summary, and to answer your question, I confirm that the vegetation anticipated by my assessment reporting would effectively screen the island causeway from horizontal and low oblique views. Accordingly the findings of my reporting remain relevant.

Kind regards,

Mike Farrow
Principal Registered Landscape Architect

PO Box 3064
ONERAHI 0142 NZ
www.lla.co.nz

PHONE: 027 299 5641

LITTORALIS
LANDSCAPE ARCHITECTURE

APPENDIX 6: *'Ecology report'* prepared by 4Sight Consulting, dated May 2017

4SIGHT CONSULTING

LAND. PEOPLE. WATER.

LOWNDES KERIKERI INLET ROAD

For Sarah Lowndes

Ecology Report

May 2017

REPORT INFORMATION AND QUALITY CONTROL

Prepared for:	Sarah Lowndes

Author:	Pamela Kane-Sanderson Ecology Consultant	
Reviewer:	Mark Poynter Principal Ecology Consultant	
Approved for Release:	Mark Poynter Principal Ecology Consultant	

Document Name	AA2566 Lowndes Kerikeri Inlet Road V1.0 FINAL 30052017

Version History:	V1.0	30 May 2017

CEMARS certified organisation

SITE SAFE MEMBER

TELARC REGISTERED Telarc Q-Base Code

CONTENTS

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List of Figures

1 INTRODUCTION

4Sight Consulting has been commissioned by Sarah Lowndes to provide an ecological report of a site proposed for subdivision at 405 Kerikeri Inlet Road, Kerikeri. The subdivision scheme plan has not been finalised at this point. This report provides a description of the site and local ecology. It briefly discusses ecological improvements to the site that might be used within an overall project design.

The site location is shown in Figure 1.

Figure 1: Site Location (yellow) at 405 Kerikeri Inlet Road, Kerikeri (Orange line delineates 'tidal' area. Blue line delineates wetland; green line delineates elevated grassed area; red line delineates native bush area.

2 SITE DESCRIPTION

The site was inspected on 23 May 2017 over a low tidal period.

2.1 Tidal Area

On entering the property through a newly gravelled road via a gate, the site boundary is on the left (south) and tidal area is on the right (north) of the road (Photo 1). The site is dominated by a tidally inundated low area around which there are wet margins, various small drainage paths and on any elevated ground, a mixture of kanuka (*Kunzea ericoides*), raupo (*Typha orientalis*) and some gorse (*Ulex europaeus*).

The tidal area (Photos 2-4) drain west to east, and then south to north along the eastern margin to the property. The wetland area contains juvenile mangrove (*Avicennia marina* subsp. *australasica*) and mangrove pneumatophores, mostly bordering the drainage channels (Photo 5). It also contains patches of glasswort (*Sarcocornia quinqueflora*), rushes (*Juncus* sp.) and rank pastoral grasses. The area had stock access and stock activity was obvious (Photo 6). The silty mud was black and anoxic just beneath the surface. The surface water contained an oily film (Photo 7).

Paradise shelducks (*Tadorna variegate*) were present throughout the tidal area and margins.

Photo 1: View from gate after entering property, boundary edge is on the left (south) of the road, and wetland/tidal area is on the right (north) of the road.

Photo 2: Wetland/tidal area.

Photo 3: Wetland/tidal area.

Photo 4: Wetland/tidal area.

Photo 5: Juvenile mangroves, bordering the drainage channels.

Photo 6: Stock damage.

Photo 7: Surface water contained an oily film.

2.2 Wetland Area

The wetland area is the lowland edges of the tidal area, shown by the blue lines in Figure 1.

To the south are rushes (*Juncus* sp.) and rank pastoral grasses (Photos 8-9). Stock also have access to these areas (Photo 9) and rushes are heavily grazed.

The north-western corner of the property is slightly elevated. The vegetation is mostly rank grasses. There is an area of eucalyptus/gum trees along with some native podocarps (Photo 10).

A stop bank borders the coastal fridge. Rank vegetation occurs on the stopbank. The outer edge (estuary side) of the stop bank is mangroves. Saltmarsh ribbonwood (*Plagianthus divaricatus*) occurs along the margin. Pukekos (*Porphyrio melanotus*) were also sighted within these areas.

The inner edge of the stop bank also adjoins mangroves and there is kanuka (*K. ericoides*), rushes (*Juncus* sp.), remuremu (*Selliera radicans*), flax (*Phormium tenax*), red matipo (*Myrsine australis*) and introduced species including pampas (*Cortaderia selloana*) and gorse (*U. europaeus*).

Crab holes are evident throughout the tidal margin.

Photo 8: South margin to the wetland area.

Photo 9: South margin to the wetland area, showing stock access route.

Photo 10: View towards the north-western elevated corner of the property.

Photo 11: View of stop bank. Tidal wetland is to the left, showing mangroves and rushes. The sea-ward side (right) shows larger mangroves along with saltmarsh ribbonwood (*Plagianthus divaricatus*).

2.3 Elevated Grassed Area

The south and south-east of the property is elevated (Photo 13). The elevated grassed area is shown by the green lines in Figure 1. Photo 9 shows the elevation of approximately 7 metres. The edges and banks of the elevatec grassed area have scattered kanuka (*K. ericoides*) and tawhero (*Weinmannia silvicola*).

2.4 Native Bush Area

The south of the property contains a native bush area (Photos 12-13) and is shown by the red lines in Figure 1.

The bush contains many introduced and invasive species including woolly night shade (*Solanum mauritianum*), gorse (*U. europaeus*), tree privet (*Ligustrum lucidum*) and Montbretia (*Crocosmia x crocosmiiflora*). Native species include scab fern (*Paesia scaberula*), whau (*Entelea arborescens*), karamu (*Caprosma robusta*), kanuka (*K. ericoides*), ponga (*Cyathea cunninghamii*), silver fern (*Cyathea dealbata*) and red matipo (*Myrsine australis*).

Photo 12: South of the property, with the native bush area to the left of the photo, wetland and tidal area below to the right.

Photo 13: View north, from southern end of property. Overlooking the native bush area and elevated grassed area.

3 SUBDIVISION ECOLOGICAL EFFECTS

No finalised scheme plan is available at the time of writing. However, several potential schemes have been sighted and all involve new lots on the higher ground.

The site currently has a very low ecological value. All habitats are either modified exotic (a small area of elevated farmland; rank margins of wet intermittently grazed land; eucalypt stand) or severely degraded estuarine area.

On this basis, the site in its current state has a low ecological sensitivity to development. A well-designed subdivision development could achieve the following ecological and water quality improvements:

i. De-stocking all or most of the site.

ii. Management of the tidally inundated area and its margins to encourage the return of saline wetland including saltmarsh.

iii. In the event of the establishment of a causeway to access the slightly elevated ground in the north-western corner of the site, the ensuing potential to manage an area above a causeway (which would need to be flood gated) as a freshwater habitat.

iv. The development of enhancement plantings associated with individual lots which would increase the botanical and general biodiversity on the site.

v. The control of weeds and exotic vegetation on the site.

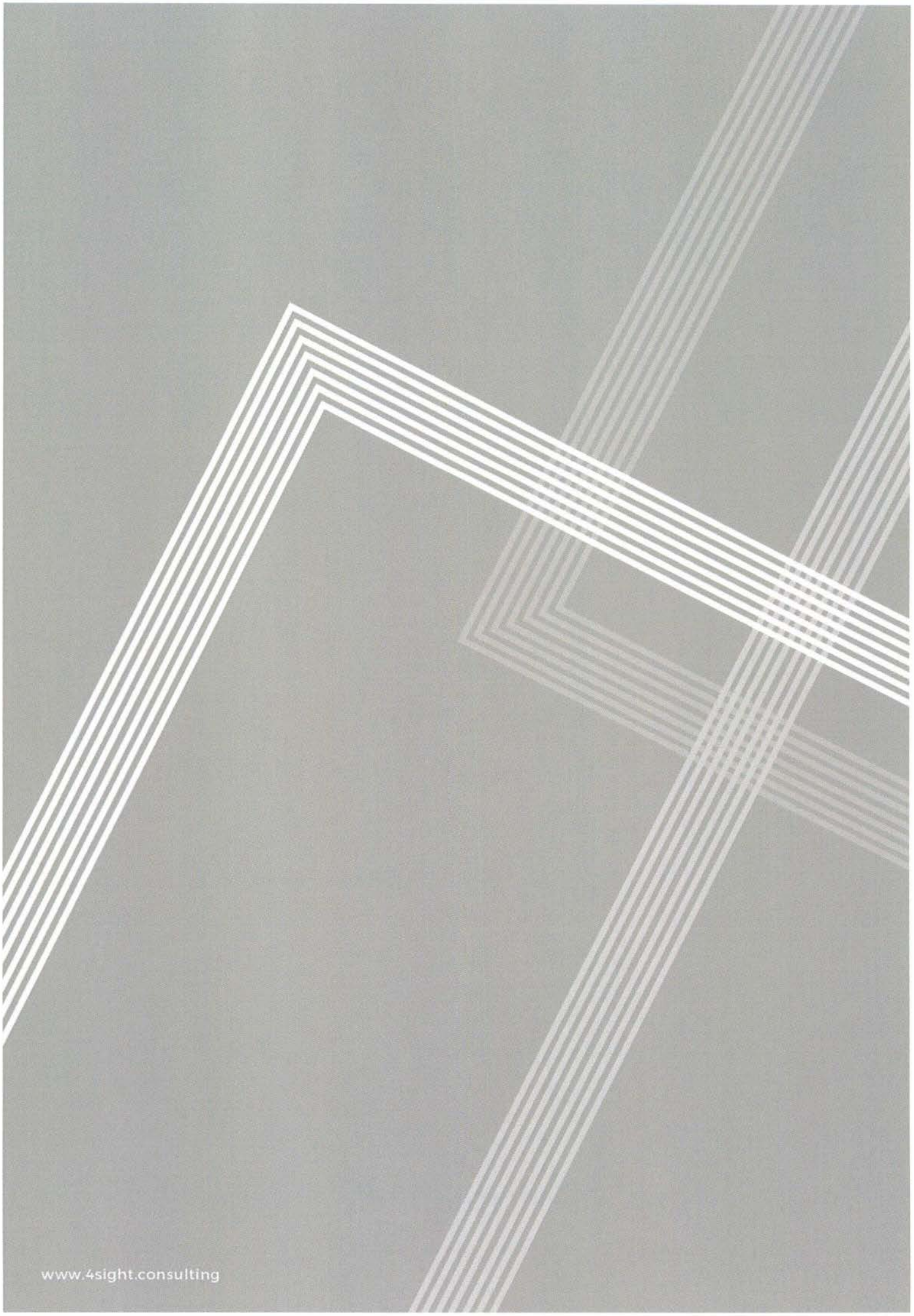
vi. The improvement of water quality leaving the site and entering the Kerikeri Inlet.

If we can be of further assistance, or would like to discuss this further please contact the undersigned on 022 3982965 or alternatively via e-mail pamelak@4sight.co.nz.

Kind Regards,

Pamela Kane-Sanderson
Ecology Consultant

4Sight Consulting Ltd


www.4sight.consulting

APPENDIX 7: *'Archaeological Assessment of the Proposed Subdivision of Lot 1 DP 167657 Kerikeri Inlet Road, Kerikeri'* prepared by Geometria Ltd, dated 11 August 2017

Archaeological Assessment of the Proposed Subdivision of

Lot 1 DP 167657

Kerikeri Inlet Road, Kerikeri

11 August 2017

Prepared for:

S. Lowndes

Prepared by:

Geometria Limited
PO Box 1972
Whangarei

Geometria

Quality Information

Document: Archaeological Assessment of the Proposed Subdivision of Lot 1 DP 167657. Kerikeri Inlet Road, Kerikeri.

Ref: 2017-102

Date: 11 August 2017

Prepared by: Jonathan Carpenter

Revision History

Revision	Revision Date	Details	Authorized Name
Client Draft	19 May 2017		J. Carpenter
Final	11 August 2017		J. Carpenter

File ref.:
C:\Users\Jono\Documents\2017\Lowndes\20170804_Lot_1_DP_167657_Kerikeri_Subdivision_Archaeological_Assessment.docx

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Table

Glossary

Classic	The later period of New Zealand settlement
Midden	The remains of food refuse usually consisting of shells, and bone, but can also contain artefacts
Pa	A site fortified with earthworks and palisade defences
Pit	Rectangular excavated pit used to store crops by Maori
Terrace	A platform cut into the hill slope used for habitation
Wahi tapu	Sites of spiritual significance to Maori

1.0 Introduction

L. Searle commissioned Geometria Ltd on behalf of her client S. Lowndes to undertake an archaeological assessment for the proposed subdivision and development of Lot 1 DP 167657 east of Kerikeri. Five archaeological sites were previously recorded in the vicinity of the property prior to the preparation of this report, and given the archaeologically sensitive location, an archaeological assessment was recommended at the early planning stage of the project.

Under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) all archaeological sites are protected from any modification, damage or destruction except by the authority of Heritage New Zealand Pouhere Taonga (HNZPT).

This assessment uses archaeological techniques to assess archaeological values and does not seek to locate or identify wāhi tapu or other places of cultural or spiritual significance to Maori. Such assessments may only be made by Tangata Whenua, who may be approached independently of this report for advice.

1.1 The Heritage New Zealand Pouhere Taonga Act 2014

Under the Heritage New Zealand Pouhere Taonga Act 2014 (previously the Historic Places Act 1993) all archaeological sites are protected from any modification, damage or destruction except by the authority of Heritage New Zealand Pouhere Taonga (previously the Historic Places Trust). Section 6 of the HNZPTA defines an archaeological site as:

" any place in New Zealand, including any building or structure (or part of a building or structure), that—

> *(i)* was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
>
> *(ii)* provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and

(b) includes a site for which a declaration is made under section 43(1)"

To be protected under the HNZPTA an archaeological site must have physical remains that pre-date 1900 and that can be investigated by scientific archaeological techniques. Sites from 1900 or post-1900 can be declared an archaeological site under section 43(1) of the Act.

If a development is likely to impact on an archaeological site, an authority to modify or destroy this site must be obtained from the local Heritage New Zealand Pouhere Taonga office under section 44 of the HNZPTA. Where damage or destruction of archaeological sites is to occur, Heritage New Zealand usually requires mitigation. Penalties for modifying a site without an authority include fines of up to $300,000 for destruction of a site.

Most archaeological evidence consists of sub-surface remains and is often not visible on the ground. Indications of an archaeological site are often very subtle and hard to distinguish on the ground surface. Sub-surface excavations on a suspected

archaeological site can only take place with an authority issued under section 56 of the HNZPTA issued by the Heritage New Zealand.

1.2 The Resource Management Act 1991

Archaeological sites and other historic heritage may also be considered under the Resource Management Act 1991 (RMA). The RMA establishes (under Part 2) in the RMA's purpose (section 5) the matters of national importance (Section 6), and other matters (section 7) and all decisions by a consent authority are subject to these provisions. Sections 6e and 6f identify historic heritage (which includes archaeological sites) and Maori heritage as matters of national importance.

Councils have a responsibility to recognise and provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga (Section 6e). Councils also have the statutory responsibility to recognise and provide for the protection of historic heritage from inappropriate subdivision, use and development within the context of sustainable management (Section 6f). Responsibilities for managing adverse effects on heritage arise as part of policy and plan preparation and the resource consent processes.

2.0 Location

Lot 1 DP 167657 (Figure 1) is located four kilometres north east of the Kerikeri township, between Kerikeri Inlet Road and the inlet to the north, and is bounded by the Okura River to the west, and a lake and wetland (of which Lot 1 has a share), and Lot 2 DP 167657 to the east (which is also owned by S. Lowndes). Lot 1 is 17.7050ha in size.

The property consists largely of flat to rolling pasture, flat pasture reclaimed from the inlet and river margins, areas of salt marsh where the reclamation has been breached, an island now tied to the mainland by the intervening reclaimed area and weir and stopbank arrangement, and pockets of remnant and regenerating native bush and trees, and exotics. Steeper ground and low cliffs are present on the edge of the former and existing coastline, with a freshwater lake lying between Lot 1 and the neighbouring properties to the east and south which have a share in the lake.

Existing development in the area includes features associated with the farming of the area and the prior subdivision and development of the land fronting Kerikeri Road.

The underlaying geology comprises Holocene estuary deposits consisting of unconsolidated mud, sand, peat and shell banks on the low ground of the reclamation, with the higher and rolling ground behind underlain by greywacke of the Waipapa group sandstone and siltstone.

3.0 Proposed Development

S. Lowndes propose subdividing Lot 1 DP 167657 into four lifestyle block parcels. Lot 1 of 5.106ha comprises the northwest corner of the existing property and includes the tied island. Lot 2 of 4.128ha comprises the south western and southern part of the property. Lot 3 is in the centre and is 4.255ha in size and Lot 4 is on the eastern and north-eastern side of the property and is 2.669ha in size.

Lots 2, 3 and 4 will be accessed via the existing network of farm roads and races upgraded to the appropriate standard, while Lot 1 will be accessed via a new causeway over the reclaimed land to the tied island. This causeway will also provide access to the pasture east of the island for stock, which are currently unable to use the area due to the failure of the weirs/flood control.

Building envelops have not been identified but dwellings on Lots 2, 3, and 4 will be on the high and level ground where the three lots adjoin each other, while on Lot 1 the causeway will allow access to a building site on the island, or to the east of the Right of Way on the southern side of the lot.

4.0 Methodology

The methods used to assess the presence and state of archaeological remains on the property included both a desktop review and field survey. The desktop survey involved an investigation of written records relating to the history of the property. These included regional archaeological publications and unpublished reports, New Zealand Archaeological Association Site Record Files or NZAA SRF (ArchSite - www.archsite.org.nz - is the online repository of the NZAA SRF), and land plans held at Land Information New Zealand.

The field survey included pedestrian surface survey, probing and spade testing.

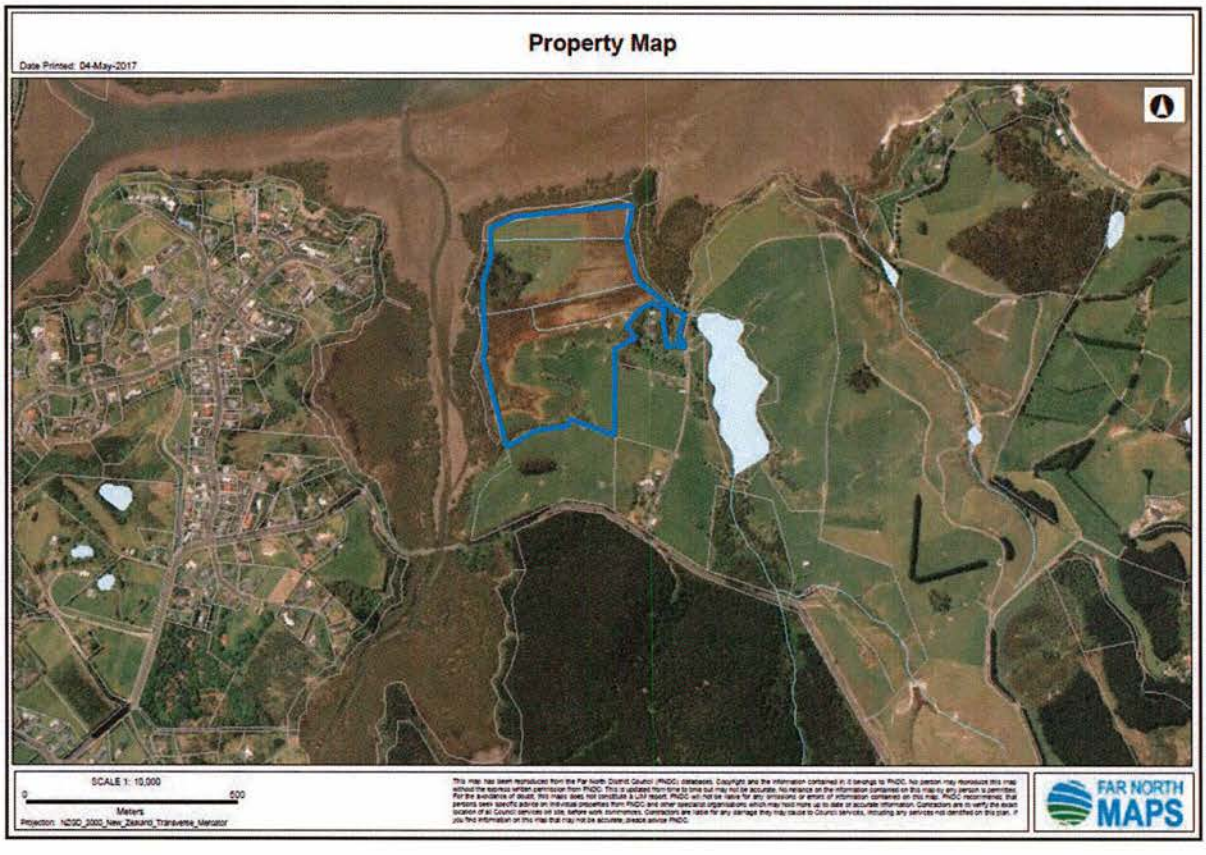
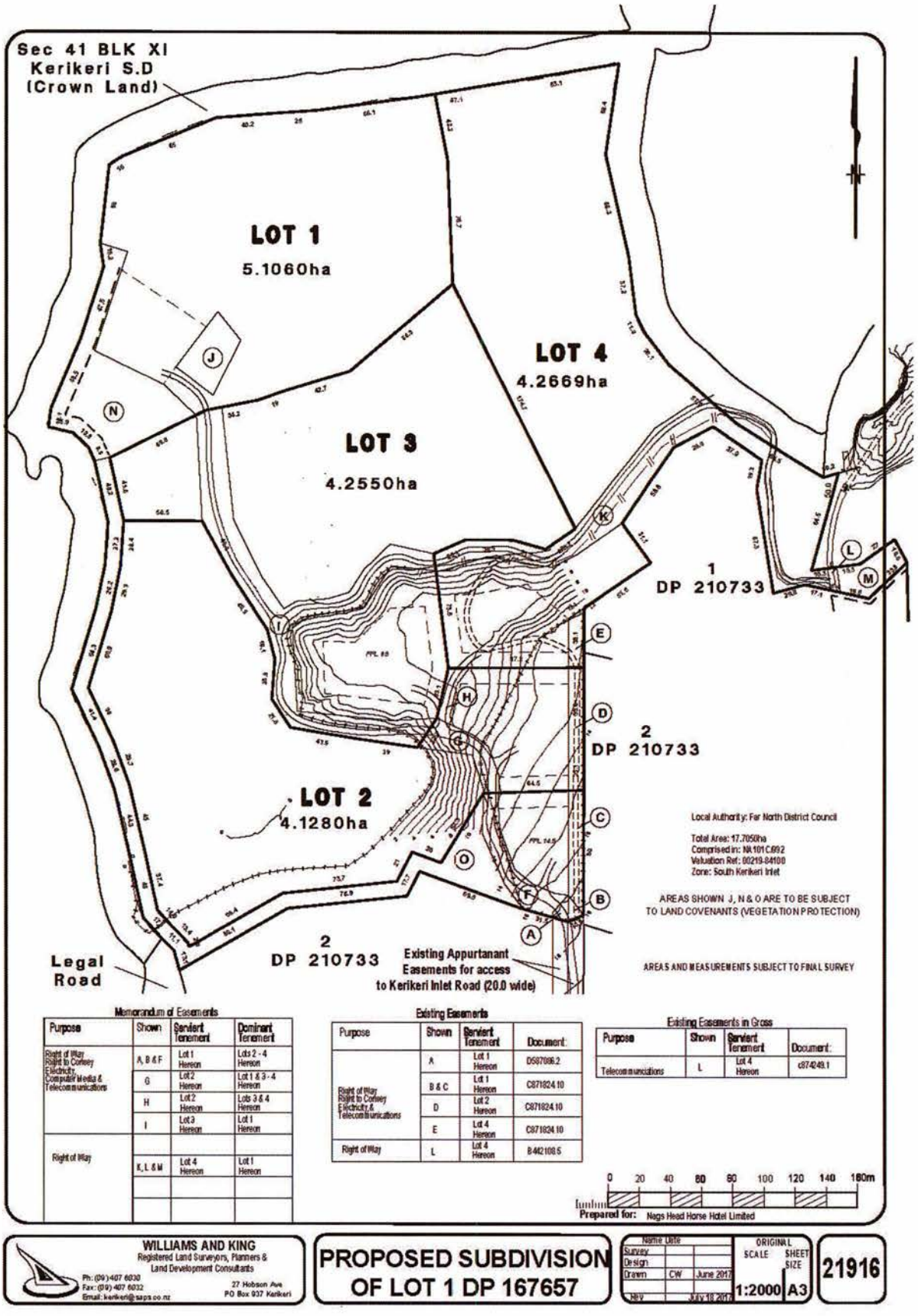


Figure 1: Location of Lot 1 DP 167657 (in blue, with Lot 2 in blue dash; FNDC GIS).



Purpose	Shown	Servient Tenement	Dominant Tenement
Right of Way, Right to Convey Electricity, Computer Media & Telecommunications	A, B & F	Lot 1 Hereon	Lots 2 - 4 Hereon
	G	Lot 2 Hereon	Lot 1 & 3 - 4 Hereon
	H	Lot 2 Hereon	Lots 3 & 4 Hereon
	I	Lot 3 Hereon	Lot 1 Hereon
Right of Way	K, L & M	Lot 4 Hereon	Lot 1 Hereon

Purpose	Shown	Servient Tenement	Document:
Right of Way, Right to Convey Electricity & Telecommunications	A	Lot 1 Hereon	D587086.2
	B & C	Lot 1 Hereon	C871824.10
	D	Lot 2 Hereon	C871824.10
	E	Lot 4 Hereon	C871824.10
Right of Way	L	Lot 4 Hereon	B442108.5

Purpose	Shown	Servient Tenement	Document:
Telecommunications	L	Lot 4 Hereon	c874249.1

Figure 2: Proposed subdivision of Lot 1 DP 167657.

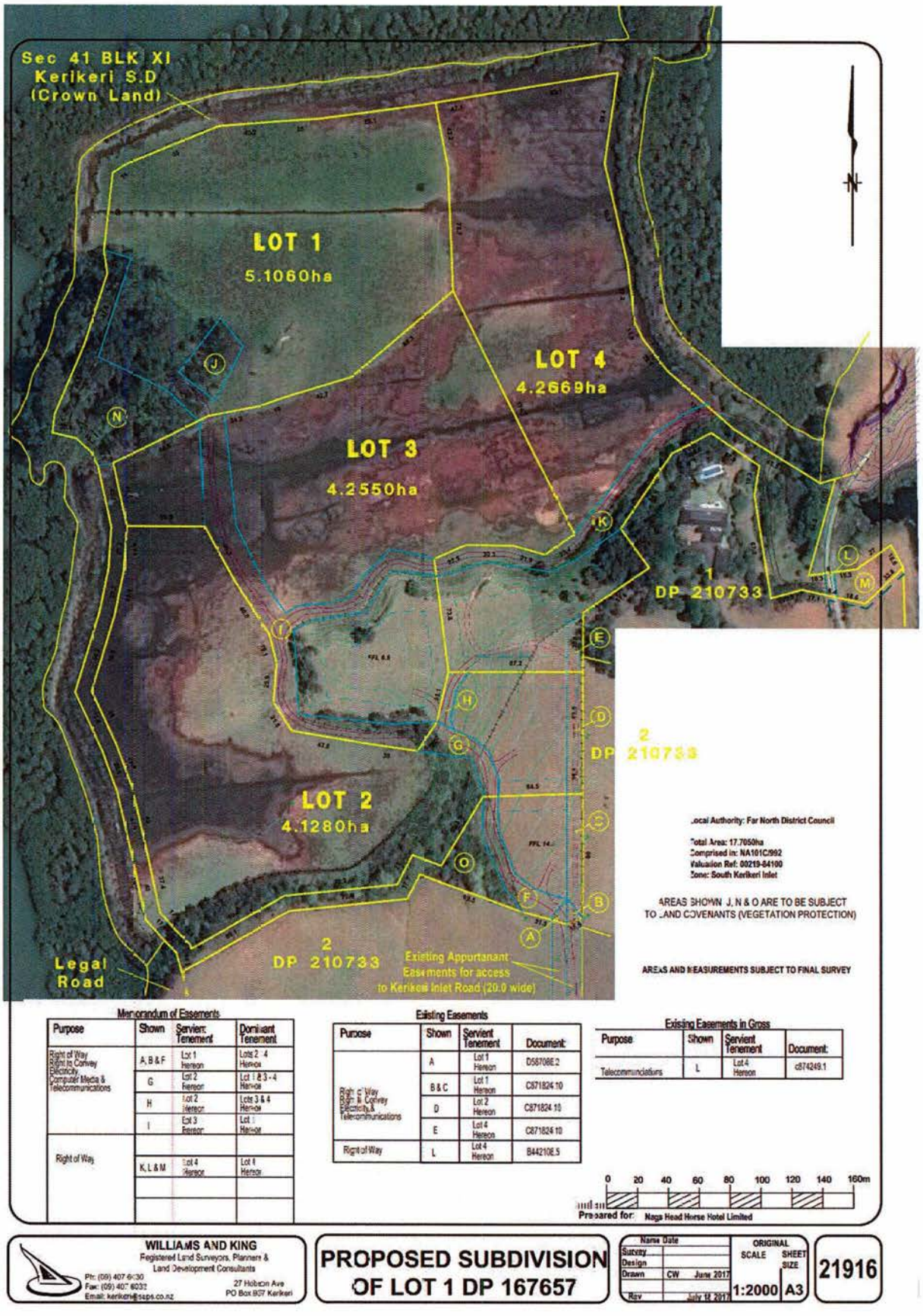


Figure 3: Proposed subdivision of Lot 1 DP 167657.

5.0 Background

5.1 Archaeological Sites and Context

Prehistoric archaeological sites tend to be located on the coast and along the tributaries of the Kerikeri Inlet, and on the ridges and minor descending spurs above them. Later historic period archaeological sites tend to be clustered around the Kerikeri Basin and associated with the mission station, or are homesteads and related features associated with the early land purchases and settlement in the area.

These sites have been recorded through several large-scale reconnaissance surveys and a larger number of survey and assessments arising out of resource consent applications and subsequent requirements to assess effects on archaeological sites.

The first formal site recording began in the early 1970s and in 1976, D. and J. Nugent undertook a four week archaeological survey for the Historic Places Trust, of the land between Wairoa Bay and Pihoe on the southern side of the Kerikeri Inlet. This area contained a very high density of archaeological sites, with 150 mostly prehistoric Maori sites being recorded, concentrated around the shoreline (very few sites were recorded inland or south of Day's Point).

A ranking from 1-5 was provided for each site based on a subjective assessment; 1 being outstanding archaeological, traditional and visual (i.e. landscape amenity) and 5 being sites of little importance due to small size, simplicity, lack of visual appeal or existing damage[1].

In the report, the Nugent's noted the increasing pressure on archaeological sites from farm and forestry-related land development, noting that while the large and obvious sites were generally recognised and avoided by landowners, less obvious sites such as midden and gardening sites were poorly understood and protected. They noted that large areas under scrub were not investigated and could contain unrecorded sites. They recommended that the entire inlet be surveyed but this never eventuated.

Sporadic site recording occurred throughout the 1980s with more than seventy sites around the Kerikeri Basin and on the northern and southern shores of the inlet to the east. Sites around the basin were recorded by Historic Places Trust and later DOC archaeologists as part of their management of historic properties in that area, and other sites were recorded on an ad-hoc basis by professional and amateur archaeologists as they were encountered.

A second major reconnaissance-level site survey occurred in 1984 when G. Nevin recorded sites on the coastal margins from Te Tii on the Purerua Peninsula on the northern side of the harbour, to Tapeka Point near Russell for the Northland Harbour Board. Nevin recorded almost 40 sites around the Inlet including five sites on or within 100m of the boundary of Lot 1 and 2 DP 167657. These sites are described in the next section.

[1] The Nugent's rightly had reservations about the rigour and usefulness of such an assessment, with little reference to Maori values or scientific potential.

In the late 1990s and into the 2000s, as the RMA and HPA bedded in to local planning processes, and in particular from 2003 with the RMA Amendment Act, archaeological survey and assessments for developments as part of the resource consent process increased and site recording did likewise.

B. Druskovich for Northland Archaeological Research undertook an archaeological assessment for the Lombard Lane subdivision between the subject property and Kerikeri Inlet Road in 2004 and re-recorded one of the sites originally recorded by G. Nevin 20 years earlier. He also noted the presence of a 20th century shell crushing operation on the property, which had lead to the presence of numerous re-deposited patches of shell as fertiliser and surfacing for farm tracks across the original property.

A number of other surveys have occurred in the Kerikeri Inlet Road area to the east and south of the subject property including subdivisions around Edmunds Road and Wharau Road on the volcanic country at the eastern end of the inlet, and for forestry operations in the Waitangi Forest and Endowment Forest (Bruce 2001, 2003, Carpenter 2009, 2010, 2012, Carpenter and Crown 2012, Hawkins 2003a and b, Johnson 2000, 2002, 2003). The results of these surveys suggest that except around the coast and the immediate vicinity of waterways and swamps with their abundant natural resources, the clay country in the vicinity of the subject property was relatively less appealing in contrast to the more fertile volcanic soils to the east and south derived from the flows from the Te Puna volcanic cones between the Kerikeri Inlet and Waitangi. These were highly suitable to prehistoric Maori horticultural practices and were intensively cultivated in this period and this is reflected in the higher site density on those soils. Druskovich notes that "Sites are more concentrated in areas of good volcanic soils and are more likely to be found inland in those areas. Areas of impoverished soils typically have few, if any, occupation sites away from navigable water" (2004: 3).

Table 1: Archaeological sites recorded in the vicinity of Lot 1 DP 167657.

Site Number (Metric)	Site Number (Imperial)	Easting (NZTM)	Northing (NZTM)	Type
P05/459	N11/532	1689824	6102541	Midden
P05/460	N11/533	1689652	6102990	Midden/Pit
P05/461	N11/534	1690352	6103192	Midden
P05/462	N11/535	1690352	6103192	Midden/obsidian
P05/463	N11/536	1690552	6103193	Midden/Terrace/Obsidian

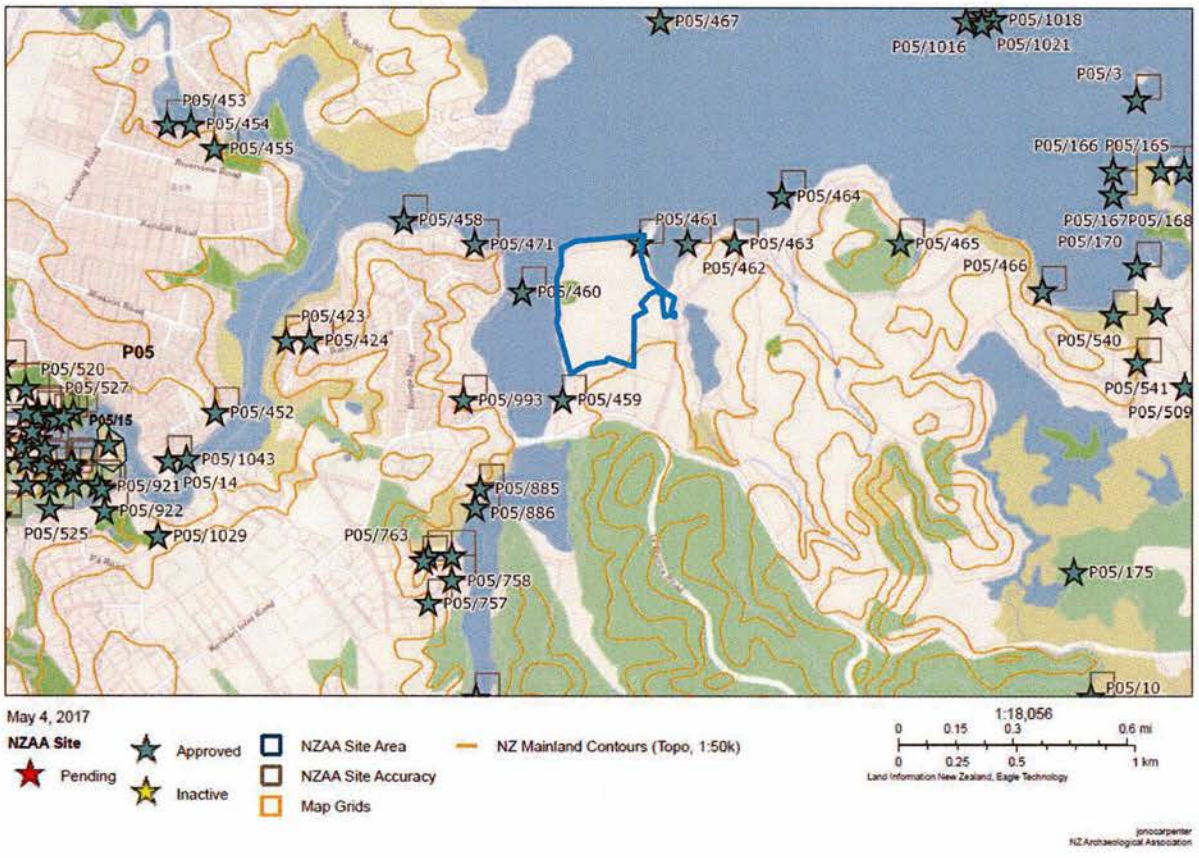


Figure 4: Recorded archaeological sites in the vicinity of Lot 1 and 2 DP 167657 (ArchSite) and Lot 1 and 2 DP 167657 (in blue).

5.2 Sites on or near Lot 1 DP 167657

There are five sites recorded on or near Lot 1 DP 167657. All the sites were recorded during the coastal reconnaissance survey undertaken by G. Nevin in 1984, and one was re-recorded by B. Druskovich.

P05/459 is located near the south west corner of Lot 1. It was recorded as a 15m long exposure on the shore line up to 18cm thick, overlaid by up to 60cm of soil. The layer consisted of dense cockle with a very thick layer of shell beneath. The site was re-recorded by B. Druskovich in 2004 in advance of the subdivision of lots adjacent to the north side of Kerikeri Inlet Road. He recorded the shell midden as being 20m across and within the esplanade reserve but he also recorded a 30m long terrace on the private property to the south, which he suggested was a natural slump used to process shellfish.

P05/460 is located on the tied island on the north west side of Lot 1. On the western, Okura River side of the island a 20m long, three centimetre deep layer of cockle shell was recorded on the north west side of the island. To the south, a fifteen metre long layer of shell was recorded up to 30cm deep. The shell was mostly cockle with a single visible whelk. Two more exposures of shell were observed extending towards what was described as the best canoe landing for the island. On the eastern side of the island just before it narrows to a point, a single shallow rectangular pit 4 x 1.5 m and 15 centimetres deep was recorded. The positions of the midden and pit are shown on the map accompanying a separate site record form,

P05/461 is located on a smaller island on the esplanade reserve at the north east corner of Lot 1, tied to the mainland by stopbanks. The site has not been revisited since it was first recorded. The island was described as being covered in gorse and scrub at the time the site was recorded. The site consisted of cockle over a 20 x 15m area on top of the island. A selection of shells measured 30-39mm but no other information was given.

P05/462 is located on the northern side of Lot 2 DP 167657, on a shell bank/mangrove island and adjacent mainland near an existing quarry. The site consisted of shell midden of cockle with fire cracked rock, charcoal, some burned shelll, and obsidian, several flakes of which were collected.

P05/463 is located on the northern side of Lot 2 DP 167657 on the coastal margin below the trig. Midden was observed over 200m of hillslope and coastline and included shell, fire cracked rock and obsidian. The midden was described as up to 1m thick and contained partially burned logs and dense cockle. The midden was observed below a large natural terrace 30 x 6m in size, with two peach trees on it.

The sites are all likely to relate to the classic or late prehistoric phase of Maori settlement, or possibly the early historic period. They are the result of food preparation and consumption, and associated living areas were likely to be adjacent to the where refuse was dumped.

5.3 Shell Crushing

B. Druskovich's survey also included a discussion of the extensive shell crushing operation on the original farm and dating to the 1950s, along with signed statements by former owners concerning the nature and extent of the operation. Both natural shell from the adjacent Okura River and Kerikeri Inlets, and shell midden from adjacent occupation sites appears to have been used as fertiliser and farm road surfacing on this and adjacent properties. While natural shell was reduced by mechanical crushing and spread on the farm, shell midden with its fire cracked rock was simply redeposited where required to avoid wear on the crusher. This operation began in the late 1950s or 1960s and is shown on aerial photography from the period. Shell was used on farm roads and around buildings up until the 1990s and Druskovich suggests that non-consolidated shell observed on the surface or near surface and around farm tracks on the property relates to this activity (Druskovich 2004: 7-10; Appendices).

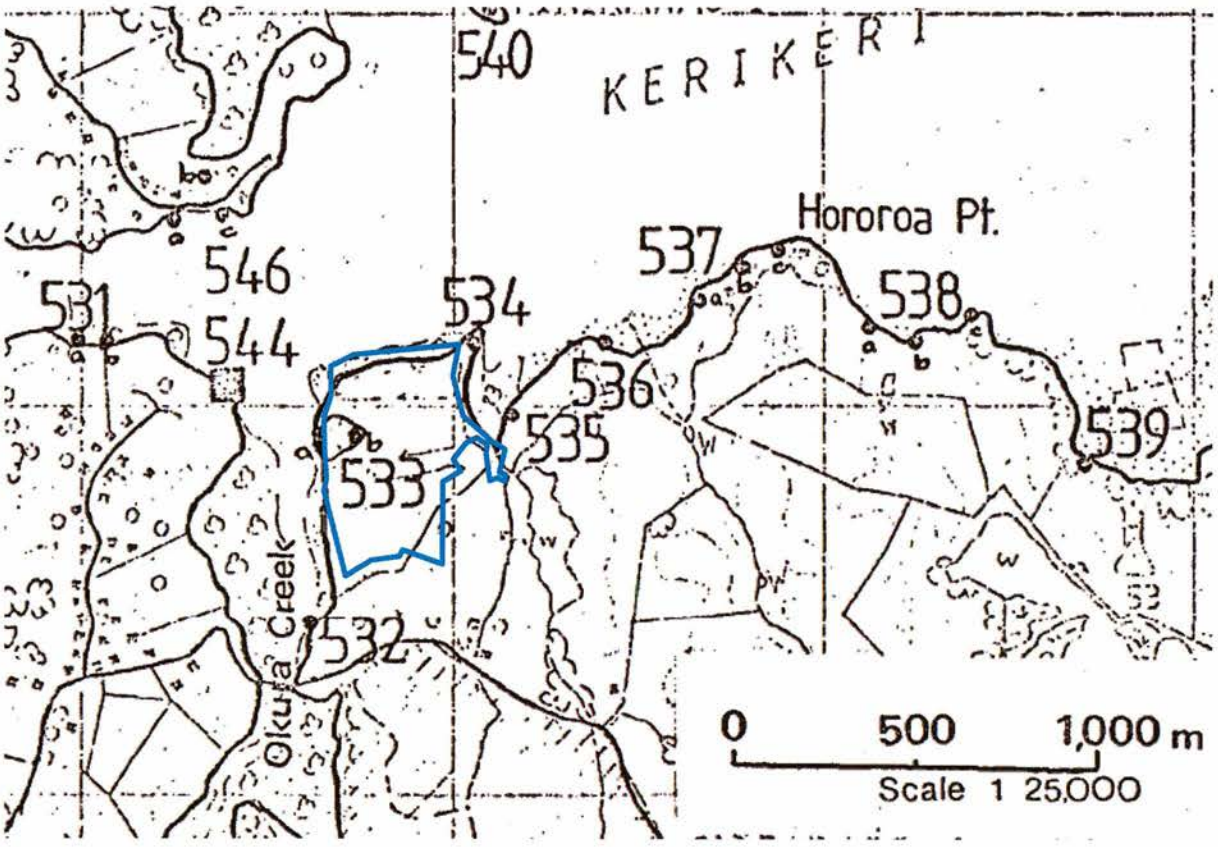


Figure 5: Original site location map of from Nevin (1984) and approximate location of Lot 1 and 2 DP 167657 (in blue; Lot 2 dashed).

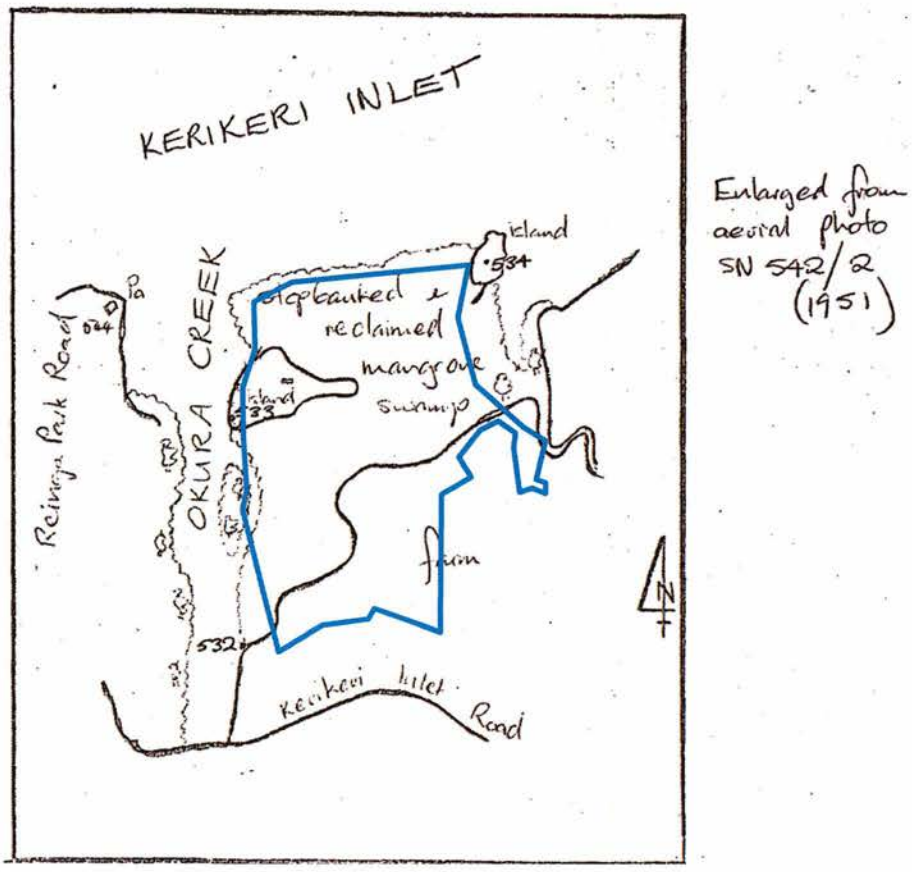


Figure 6: Locations of P05/459, 460 and 461 (N11/ 532, 533 and 534) from site records and approximate location of Lot 1 and 2 DP 167657 (in blue; Lot 2 dashed).

5.4 Other Heritage Sites and Listings

The Far North District Plan schedules of Sites of Significance to Maori and Heritage Buildings, Sites and Objects, and the Heritage New Zealand Pouhere Taonga List of Historic Places, Historic Areas, Wahi Tapu and Wahi Tapu areas were consulted to determine whether there were any scheduled or registered historic places on or in the vicinity of the project area.

There are no such places on or in the immediate vicinity of the subject property. The nearest such places are Kororipa Pa 4kms to the west, and the Edmonds Ruins two kilometres to the east.

5.5 Historic Background

5.5.1 Prehistoric settlement

Radiocarbon dating would suggest that the Bay of Islands was settled by the Polynesian ancestors of the Maori as early as anywhere else in New Zealand, around the middle of the 12th century (an early site on Moturua Island at Mangahawea Bay dates to the early 13th century). There have been few archaeological excavations in the Kerikeri-Waipapa area (mainly focussing around the Kerikeri Basin/Mission sites), and nothing from the earliest or "archaic" period. There is only a single radiocarbon date for the area, taken on a sample of midden from Rangitane Pa on the north side of the Kerikeri Inlet. This date suggests that site was intensively occupied by the early 17th century.

5.5.2 Traditional history

The first named inhabitants of the land around Kerikeri and Waipapa were Ngati Awa and Ngati Miru, whose lands extended from Te Waimate to the south to Rangitane to the north, and out to the coast, including Kerikeri itself. Around 1770 escalating competition over the rich lands of the Taiamai Plains and the fishing grounds of the northern Bay of Islands lead to attacks on Ngati Miru and their whanunga Nga Wahineiti, by hapu of Ngc Puhi. Little is known of Ngati Miru, largely due to the loss of their lands and subsequent dispersal, their whakapapa and mana being eclipsed by Nga Puhi. It is known that although they were related to Nga Puhi, Ngati Miru and Te Wahineiti did not trace their descent from Rahiri but from Tamakitera and the eponymous ancestor Wahineiti. They were displaced as a result of a series of battles at Kerikeri and Te Waimate, by Ngapuhi.

The traditional histories state that Ngati Miru and Te Wahinenui had four principal pa around Waimate, while Nga Puhi were concentrated southwest of Kaikohe around Pakinga Pa. Events came to a head when Whakarongo of Ngati Tautahi was killed by her Ngati Miru husband, Kaihu. Whakarongo was the sister of Auha and Whaakaria (the grand father and great uncle of Hongi Hika), and when asked by her husband to provide a less than respectful meal for her visiting whanau, she disobeyed. On learning of their sister's death, Auha and Whakaaria joined with their whanaunga Ngai Tawake, Te-Uri-o-Hua, Ngati Hineira and Ngati Kura and attacked Ngati Miru, who were routed and dispersed. Ngati Miru fled north, to Rangitane on the north side of the Kerikeri Inlet, to Te Ti Mangonui on the Purerua Peninsula. Auha built his pa Te Waha o Teriri, "the Mouth of War" at Kororipo, which was previously a Ngati Miru settlement.

Subsequent battles at Rangitane and Te Ti saw Ngati Miru crushed and the hapu of Nga Puhi extend their domain into the northern Bay of Islands while the scattered remnants of Ngati Miru fled further afield to Matauri Bay, Whangaroa, the Hokianga and Waimamaku.

5.2.3 The arrival of the Europeans and the Missionary Period

In the intervening years between the Nga Puhi conquest of the land around Kerikeri, and the arrival of the Anglican missionaries in 1819, Kororipo had become an important location, commanding the main route between the Bay of Islands and the interior, and in particular the large pa Okuratope near Waimate, which had also

been taken from Ngati Miru. Ngai Tawake under Hongi Hika and Rewa came to occupy Kororipo and another hapu Ngati Rehia occupied the northern side of the Kerikeri Inlet from Rangitane to Takou Bay. Hongi Hika's father Te Hotete lived at Kororipo in the 1790s, and his son would go on to build a European-style house on the summit in 1824 (although at the time the mission was established, the place was unfortified).

The other major settlements in the area were up the Wairoa Stream and Okura River, east of Kerikeri-Kororipo. The village of Okouto is recorded on several maps and plans at the time, being located approximately three kilometres up the Wairoa Stream. At Okura, Perehiko and Te Morenga of the Urikapana/Ngari Hauata hapu had their kainga. Rivals of Hongi, Rewa and Nga Tawake, they were jealous of the prestige acquired by having the mission settlement established at Kerikeri and this lead to a raid on Nga Tawake and the burning of their war canoes. Marsden settled the dispute by promising Urikapana their own mission, and installed the young James Shepherd at Perehiko's village. Te Morenga became a close friend of Marsden and latter accompanied him on his sojourns to Waitemata, the Bay of Plenty, Kaipara and Whangarei.

When Samuel Marsden arrived on-leave from Port Jackson with the aim of finding a more suitable location for New Zealand's second mission settlement, Kerikeri seemed perfect. Rangihoua, where he preached New Zealand's first sermon in 1814 was proving unsuitable to the purpose, being too exposed and away from Hongi's increasingly important powerbase.

Hongi made a grant of 13,000 acres to the missionaries in exchange for 48 axes, although a substantially smaller claim was later made by the CMS. The new arrivals that came over with Marsden included the Rev. John Butler, Francis Hall, and James Kemp. Work soon began on the development of the mission station.

Hongi Hika and his people left Kerikeri to live at Whangaroa at the end of 1826 and Hongi Hika, after being wounded in battle there in early 1827, died in 1828. In 1830, Rewa and his people also moved away from Kerikeri to live at Kororareka-Russell which was becoming the centre of Maori/European interaction, and Kororipo was deserted. Rewa sold seven acres including the pa to James Kemp in 1831 to be part of his farm and in 1838 the remaining six acres were sold by two sons of Hongi Hika, Hongi and Puru, also to James Kemp.

John Edmonds, the CMS mission's stone mason had arrived towards the end of the construction of the Stone Store in 1834 and found little work to engage him at Kerikeri. In 1838 he was paid off and he and his wife and their seven children found themselves in difficult circumstances. He purchased four blocks of land on the inlet, and Challis (1993) suggests that as a stone mason he was attracted to the easy availability of basalt in the area. The Edmonds family lived on the land for twenty years from 1840 although the eponymous stone house was possibly a later dwelling as in 1841 Edmunds wrote that he was living at a "Native fishing place" called Paetai.

The location of Paetai is recorded on early land plans as being west of the Edmonds house, on the Hauparapa Inlet in the vicinity of the subject property. The location of this settlement is shown on Fairburn's 1857 plan of the Crown Grant to Edmunds (OLC

211) and again in an 1871 plan where it is named Paengatai (OLC 213). A stone wall, causeway and orchards are shown on this plan.

These two areas along with 10 other allotments in the area occupied by the Edmunds family and covering 70 acres were retained by the family, following the Crown purchase of 3900 acres for the proposed Kerikeri settlement originally mooted in the late 1850s. SO 949E from 1860, showing the planned settlement, which never eventuated due to the intervention of the wars of the 1860s. The Edmonds family moved to Auckland following the sale but returned several years later, with John dying in 1865.

Lot 1 and 2 DP 167657 lay between the Edmonds purchases and the CMS and Kemp purchases. Two surveys of Maori land from the 1860s show the subject property in the course of the area being sold to the Crown. ML 586 (1867) shows the Te Papa Block, of which the northern part includes the subject property, while ML 587 (1867) shows Te Korau, the island now at the north west corner of the subject property. Both plans state that the land shown was included in Henry Tacey Kemp's Puketutu Block purchase on behalf of the Crown.

The Puketutu transaction was undertaken in 1863 but the conveyance was not completed. A signed receipt for the purchase dated 25 February 1863 states (Turton 1877: 716):

> *I HAVE this day received thro' the hands of H.T. Kemp, L.P. Commissioner the Sum of One Hundred & twenty pounds sterg., being the payment for the piece of Land situated on the Keri Keri River and known by the name of "Puketutu" which has been surveyed by Mr. Fairburn & us together; It is also known by the name of "Hororoa," and when the map is finished and the Reserve marked off for the Natives, we undertake fully to attach our names to the Deed of Conveyance.*

The document was signed by Hare Wirikake, Te Wera, Mi Haka, Piripi Korongohi, and Wi Kaire, and witnessed by Marsden Clark and William P. Kemp as interpreters and clerks, with H. T. Kemp signing for the Crown as Land Purchase Commissioner. It appears that the boundaries of the land were not described and no survey was undertaken at the time, and no land reserved for the Maori vendors.

The conveyance was completed in the early 1870s when the Te Korau and Te Papa Blocks, originally included in the Puketutu purchase as noted in the plans referred to above, but never surveyed and over which there must have been some dissent, were conveyed to the Crown by a different party, Tango Hikowai, for £60.10. The translated deed of conveyance for Te Papa and Te Korau (Turton 1877: 84) states:

> *"This Deed written on this tenth 10th day of November in the Year of our Lord 1873 is a full and final sale conveyance and surrender by me Tango Hikuwai whose name is hereunto subscribed And Witnesseth that on behalf of ourselves our relatives and descendants we have by signing this Deed under the shining sun of this day parted with and for ever transferred unto Victoria Queen of England Her Heirs the Kings and Queens who may succeed Her and Her and their Assigns for ever in consideration of the sum of Sixty pounds, ten shillings to us paid by Henry Tacy Kemp on behalf of*

the Queen Victoria (and we hereby acknowledge the receipt of the said monies) all that piece of our Land situated at Te Keri Keri and named Te Papa the boundaries whereof are set forth at the foot of this Deed and a plan of which Land is annexed thereto with its trees, minerals, waters, rivers, lakes, streams, and all appertaining to the said Land or beneath the surface of the said Land and all our right title claim and interest whatsoever thereon To hold to Queen Victoria Her Heirs and Assigns as a lasting possession absolutely for ever and ever. And in testimony of our consent to all the conditions of this Deed we have hereunto subscribed our names and marks. And in testimony of the consent of the Queen of England on her part to all the conditions of this Deed the name of H. T. Kemp Civil Commissioner is hereunto subscribed. These are the boundaries of the Land commencing at the Boundary line of the Government Block known as Pukututu, it then follows the Okura Creek until it empties itself into the Keri Keri River—it follows that River until it joins the Mangatawai proper—from thence until it meets at the commencing point at the Pukututu Boundary. The Small Island at the entrance of the River (Te Korau) is included in this purchase by theGovernment. But the Plan will accurately shew the Boundaries."

The deed was signed by Tango Hikowai and H. T. Kemp for the Crown, and witnessed by J. Kemp and R. A. Fairburn.

In February and March 1889, lands including the subject property were advertised as part of Crown Land designated Run No. 46 of the Kerikeri and Kawakawa Survey District, and was available as a yearly depasturing lease with an upset price of £10.0.0 per annum (New Zealand Herald, 26 March 1889). Run 46 included parts of Blocks 2, 3, 11, 12, 13 Kerikeri District. Survey plan SO 949 shows the land occupied by Kidd and Welby that year and the lease of the run of 9000 acres was given to Messrs Kidd and Welby for £16 per annum the next day according to the New Zealand Herald of 27 March 1889.

In 1892 the northern part of Block 11 Kerikeri District which included the land which would become the subject property was subdivided and free-holded, creating Section 26 of the Block 11 Kerikeri Survey District with a public road reserve surveyed along the coastal margin, as shown on plan SO 6395. At that time the block is shown as covered in tea tree and was surveyed for the Holtl brothers (no other historic information is shown apart from the surrounding land still belonging to the Crown).

The 1922 geological survey shows the name O'Neil and a house in the area. A John O'Neil is described as a fisherman living at Kerikeri in the 1917 ballot of North Auckland First Division reservists called up as reinforcements (Northern Advocate, 17 April 1917). R. O'Neil and S. E. O'Neil are listed as having been elected on to the Kerikeri Inlet School committee (New Zealand Herald, 4 May 1926).

In 1930, Te Korau Island/Block and the other island were surveyed as Sections 35 and 36 Block 11 Kerikeri Survey District, and the land to the east of Section 26 is Section 44 of Block 12 Kerikeri Survey District on plan SO 28267. R. O. Neil is shown on this plan as owning Section 26.

By 1955, Section 26 is owned or occupied by H. Allen Mills Ltd while the land to the south and east is including what would become Lot 2 DP 167657 is still Crown Land, Section 14 and 15 (formerly pt Section 44) of Block 12 Kerikeri Survey District. Aerial photography from the 1950s shows the land still under scrub and the reclamation yet to commence. The 1947 aerial doesn't show much detail apart from scrub covering most of the subject property although Te Korau Island appears to be partly cleared. The 1955 aerial shows a house and two tracks extending north and east from Kerikeri Inlet Road but otherwise no development.

By 1964 the mudflats had been reclaimed, the 1892 coastal road reserve was closed and the adjacent Crown land with no registration including Te Korau Island/Block was part of Section 42 Block 11 Kerikeri Survey District and owned by A. T. Edgar.

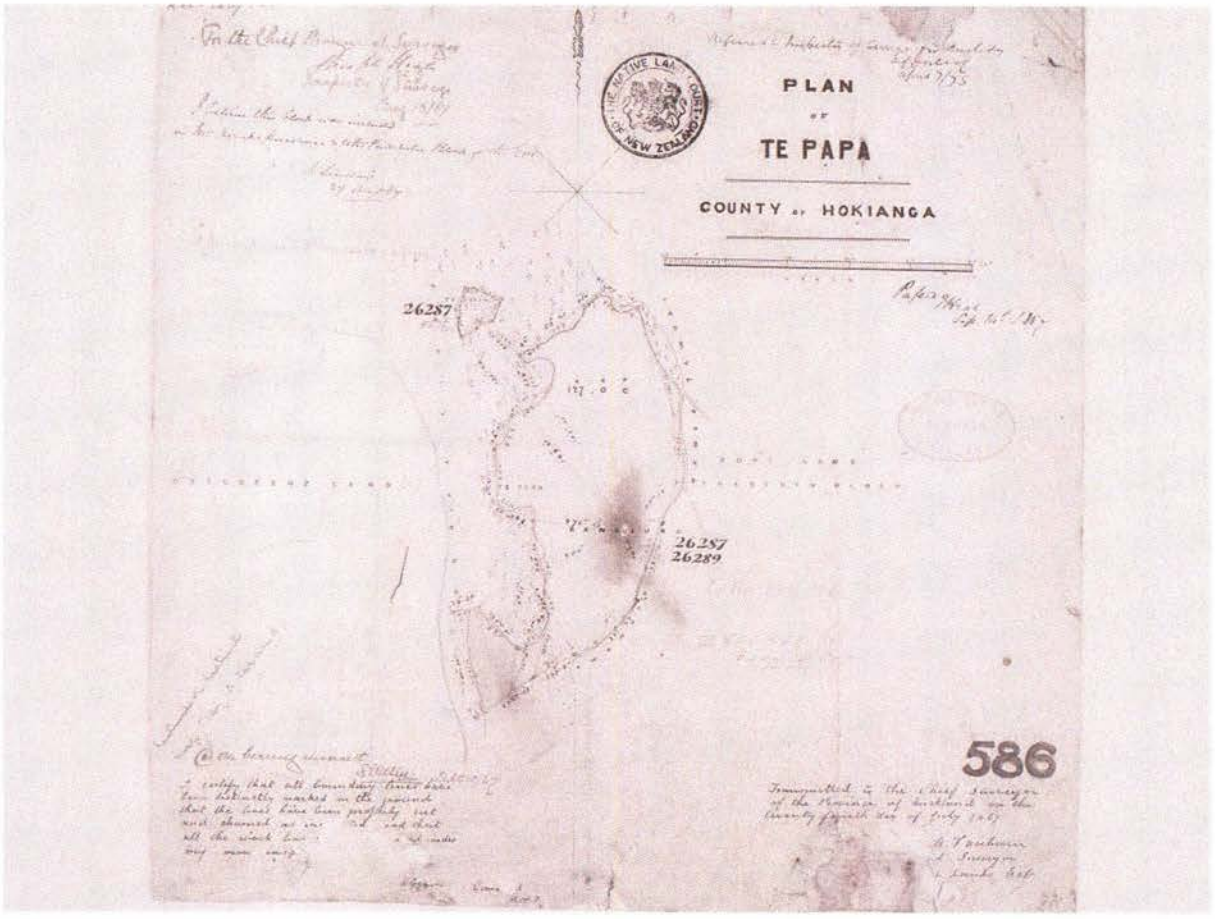


Figure 7: ML 586 Survey of the Te Papa Block.

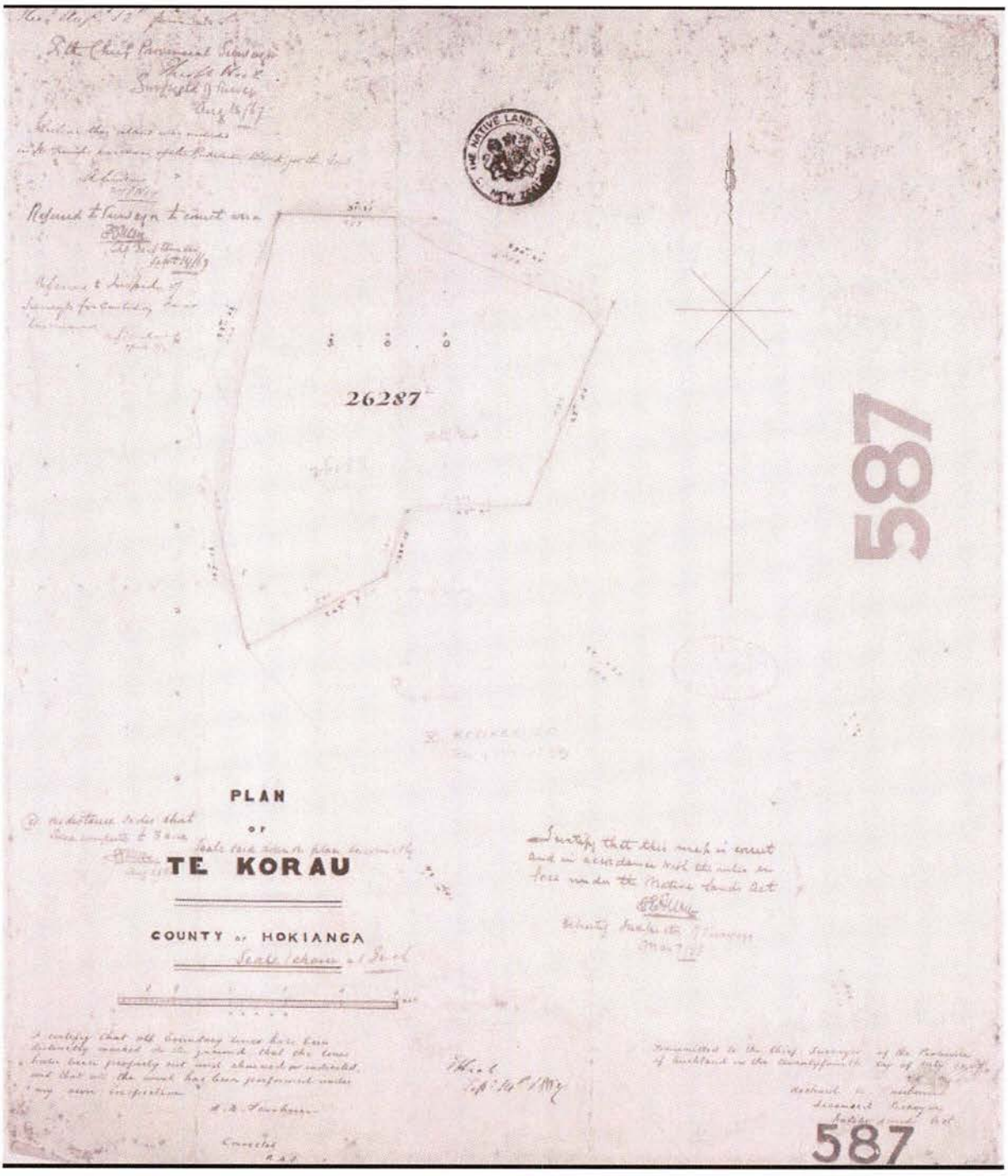


Figure 8: ML 587 Survey of the Te Korau Block.

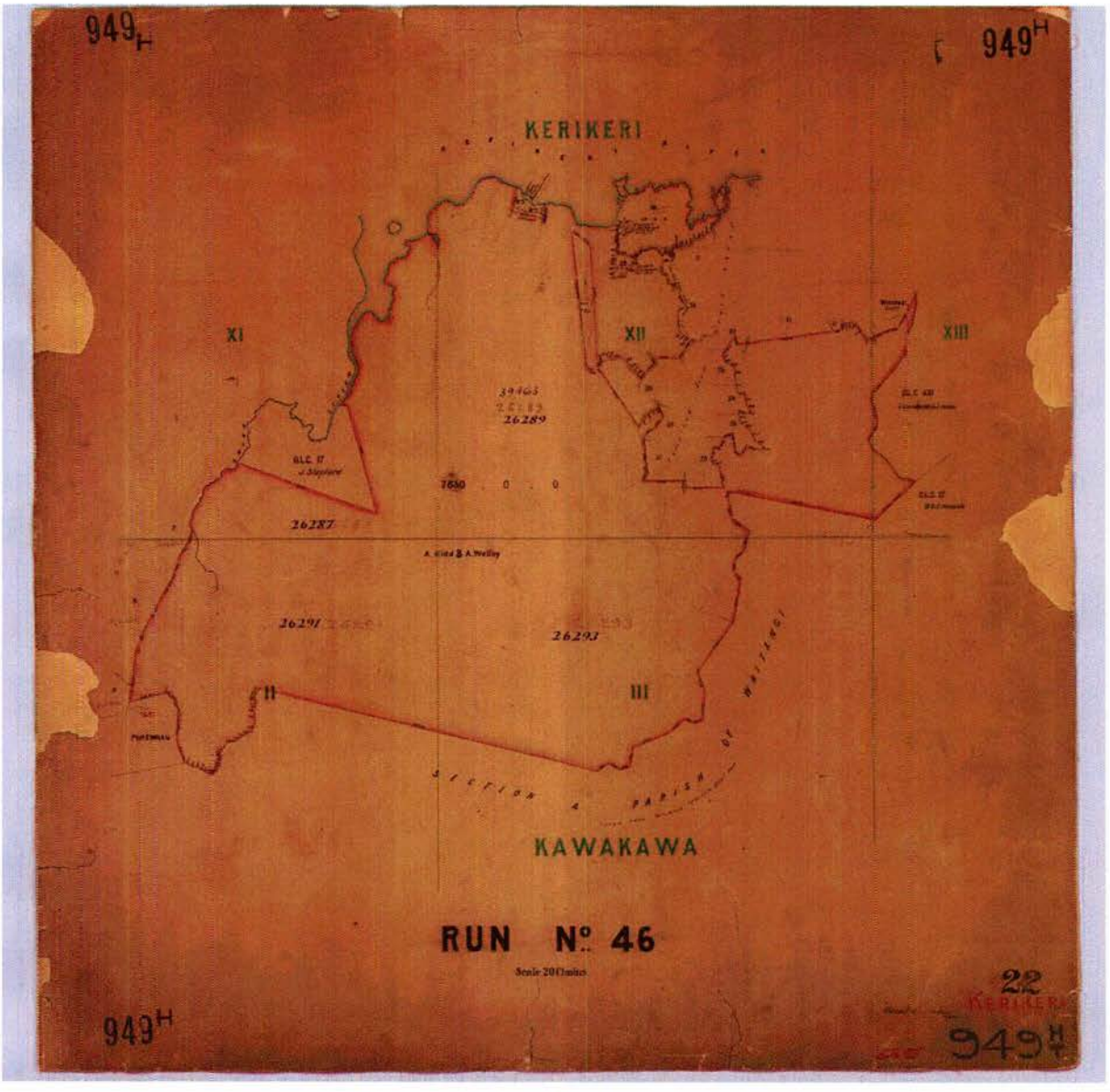


Figure 9: SO 949 showing Run 46 depasturing lease.

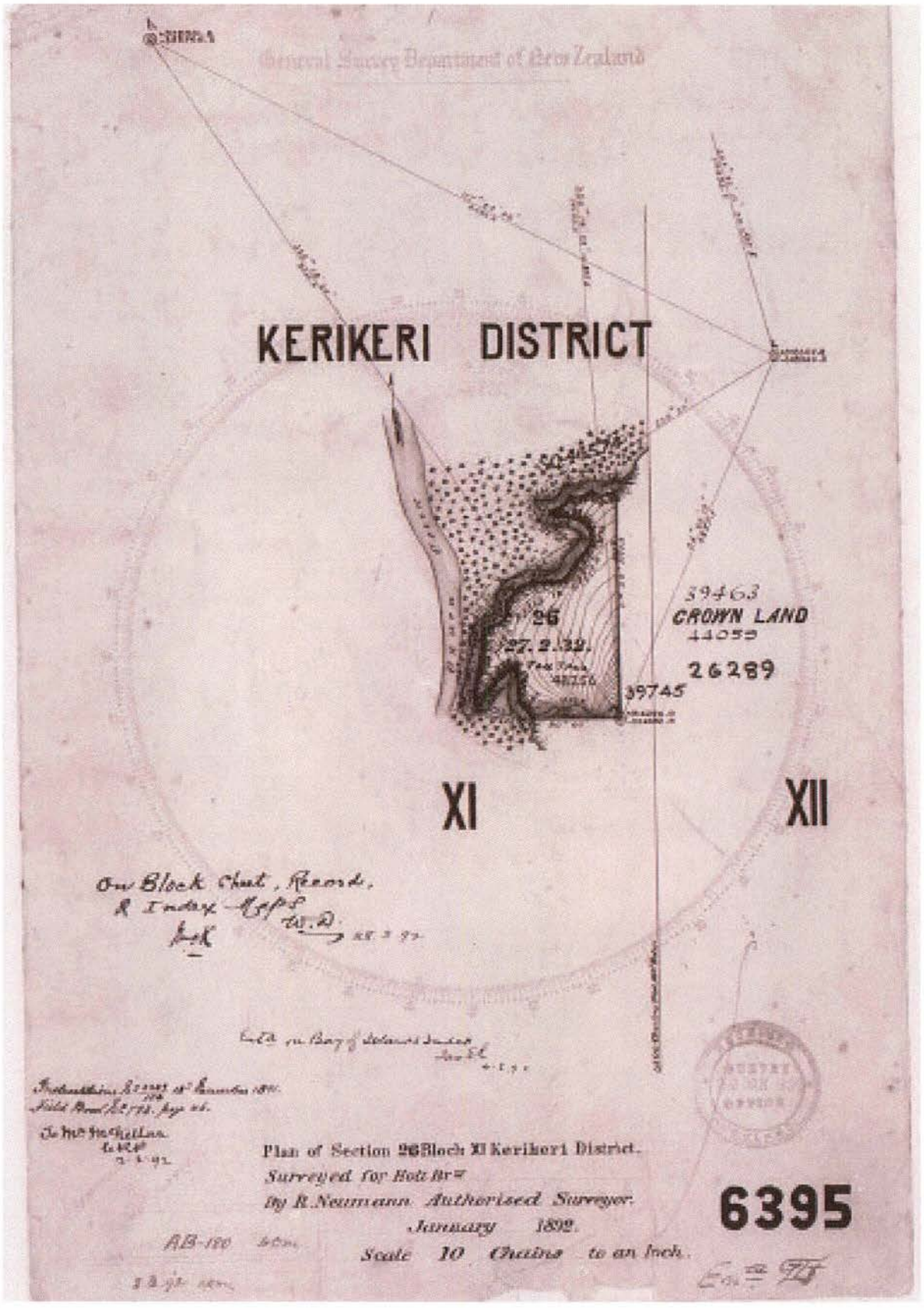


Figure 10: SO 6395 showing Section 26 of Block 11 Kerikeri Survey District.

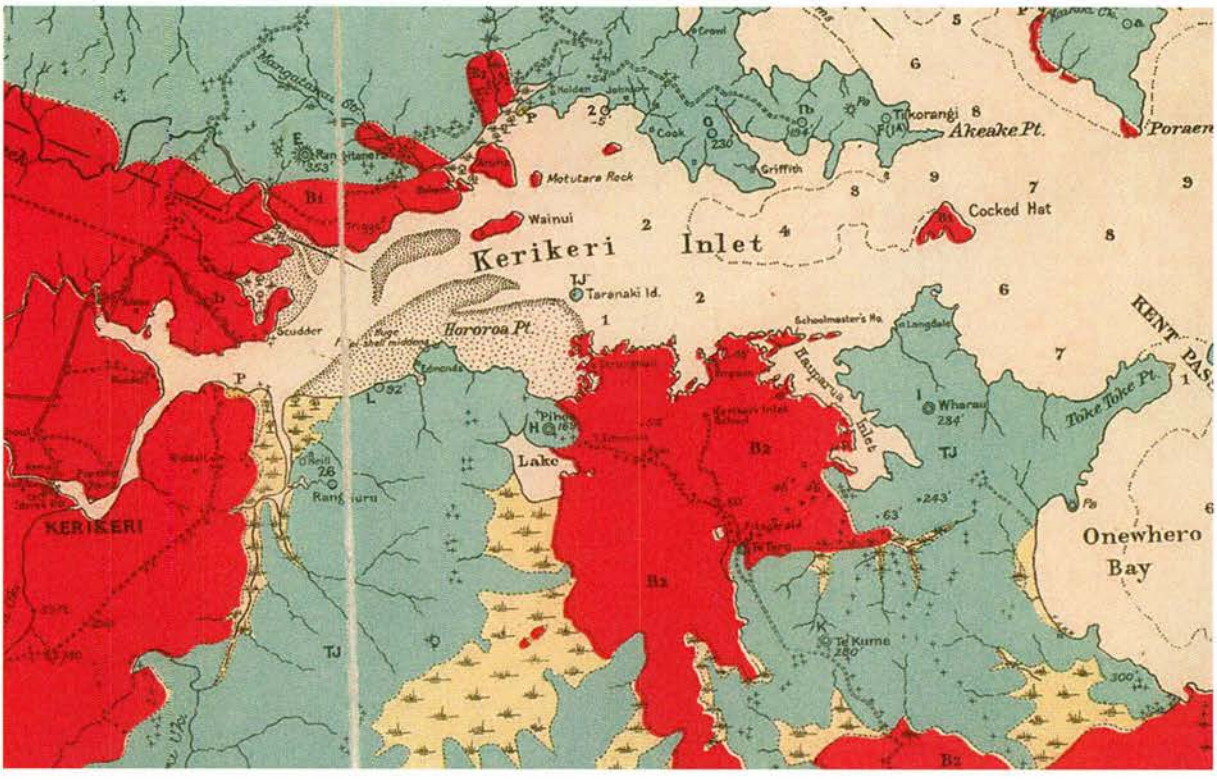


Figure 11: Geological Map of Whakarara and Kerikeri (Ferrar 1922).

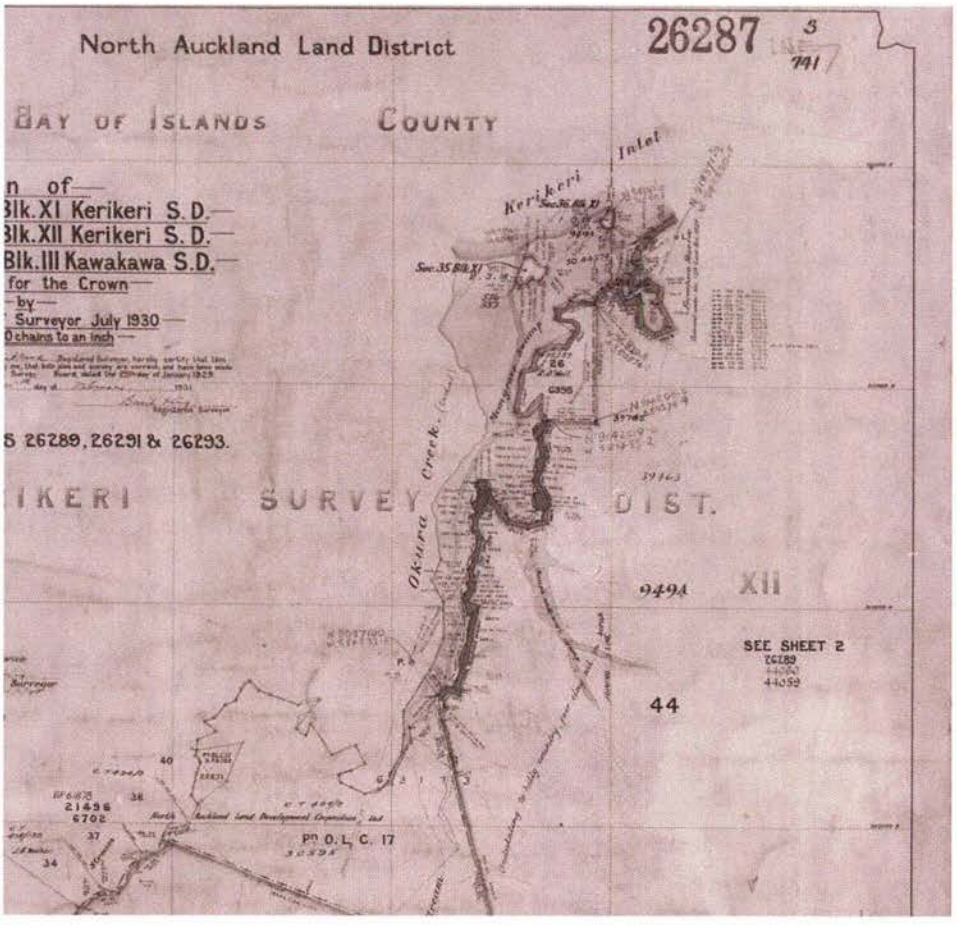


Figure 12: SO 26287.

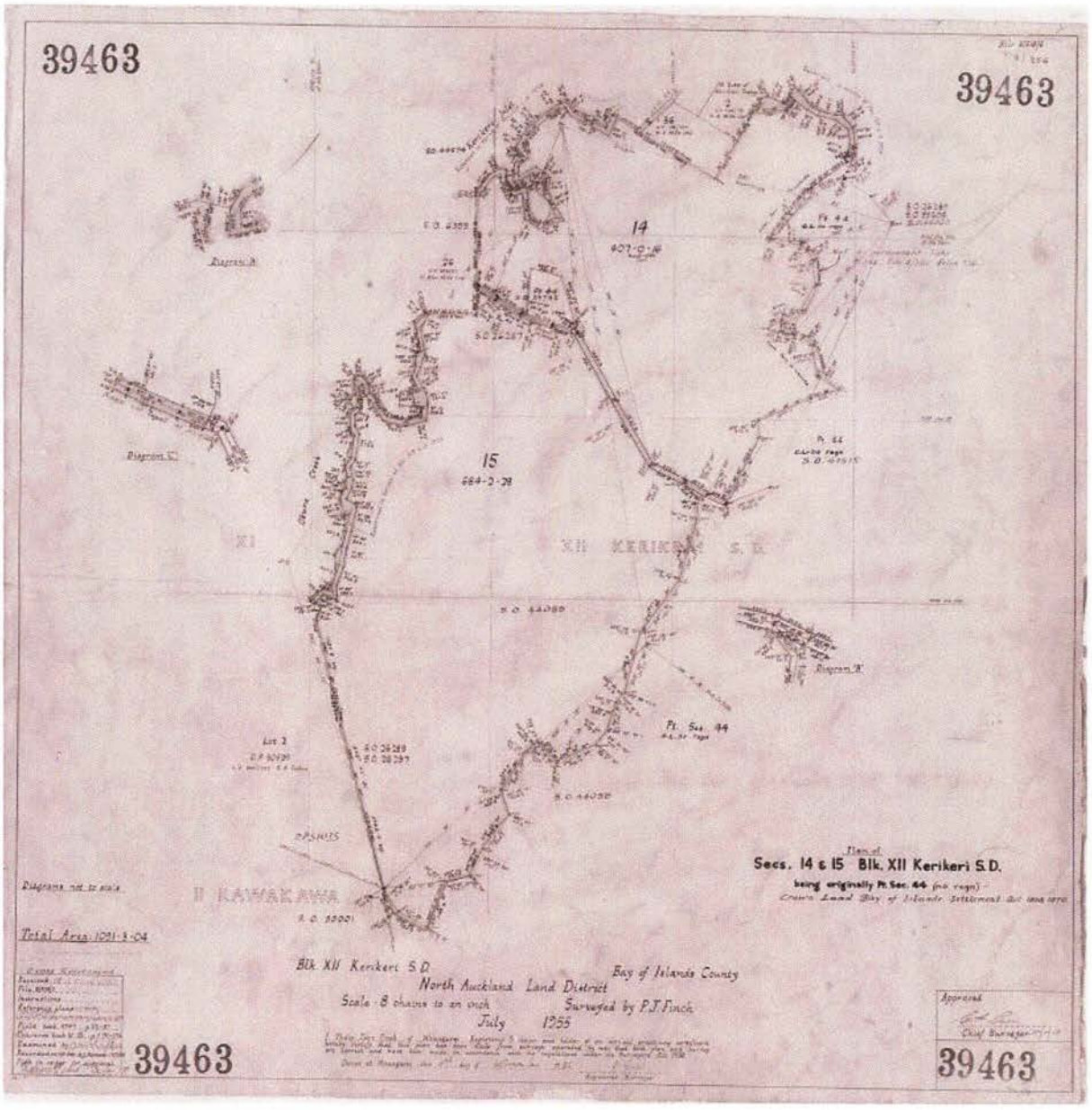


Figure 13: SO 39463.

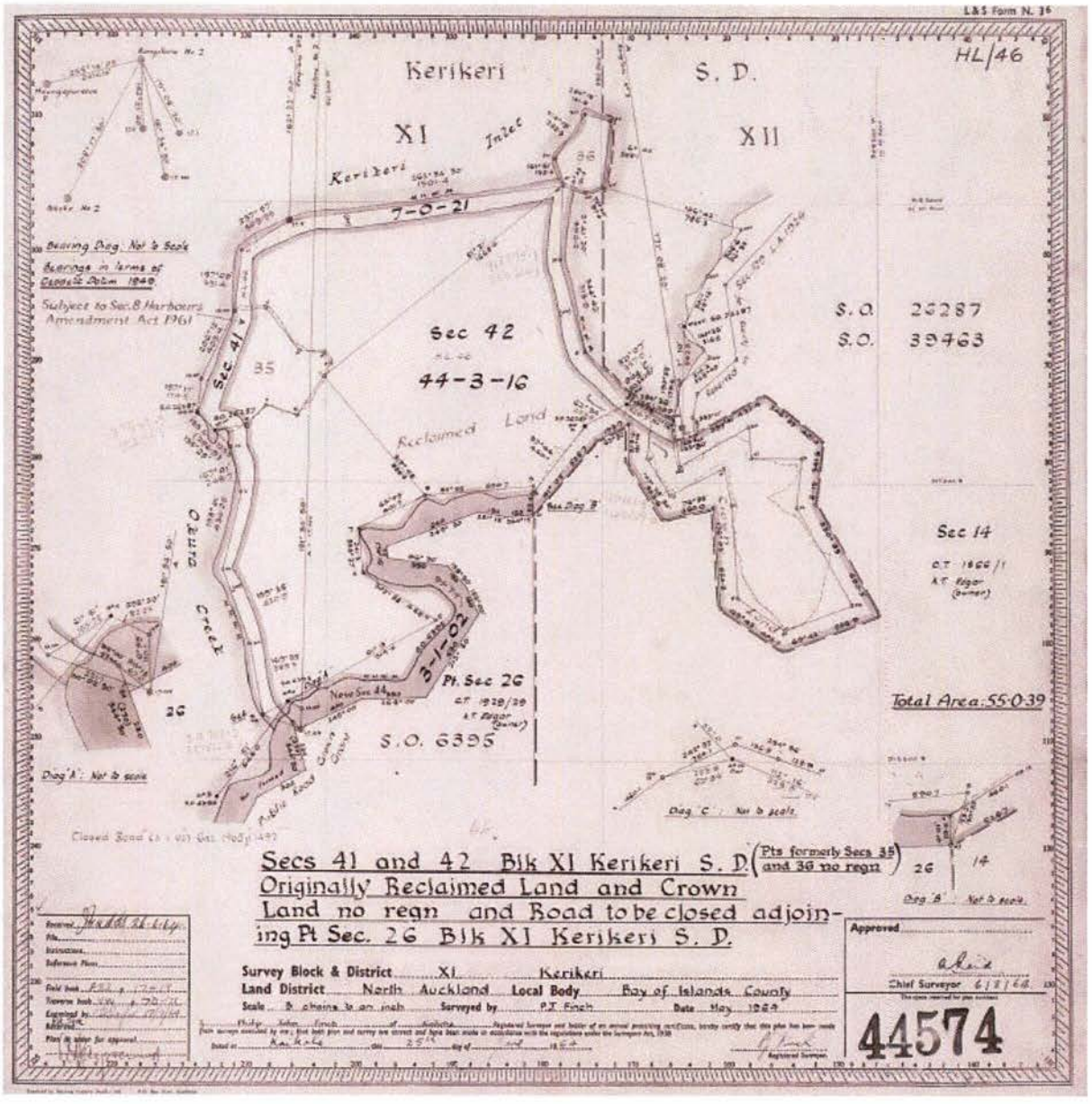


Figure 14: SO 44574.

Figure 15: Detail from oblique aerial photograph from Whites Aviation showing subject property. ATL WA-04567-F (1947).

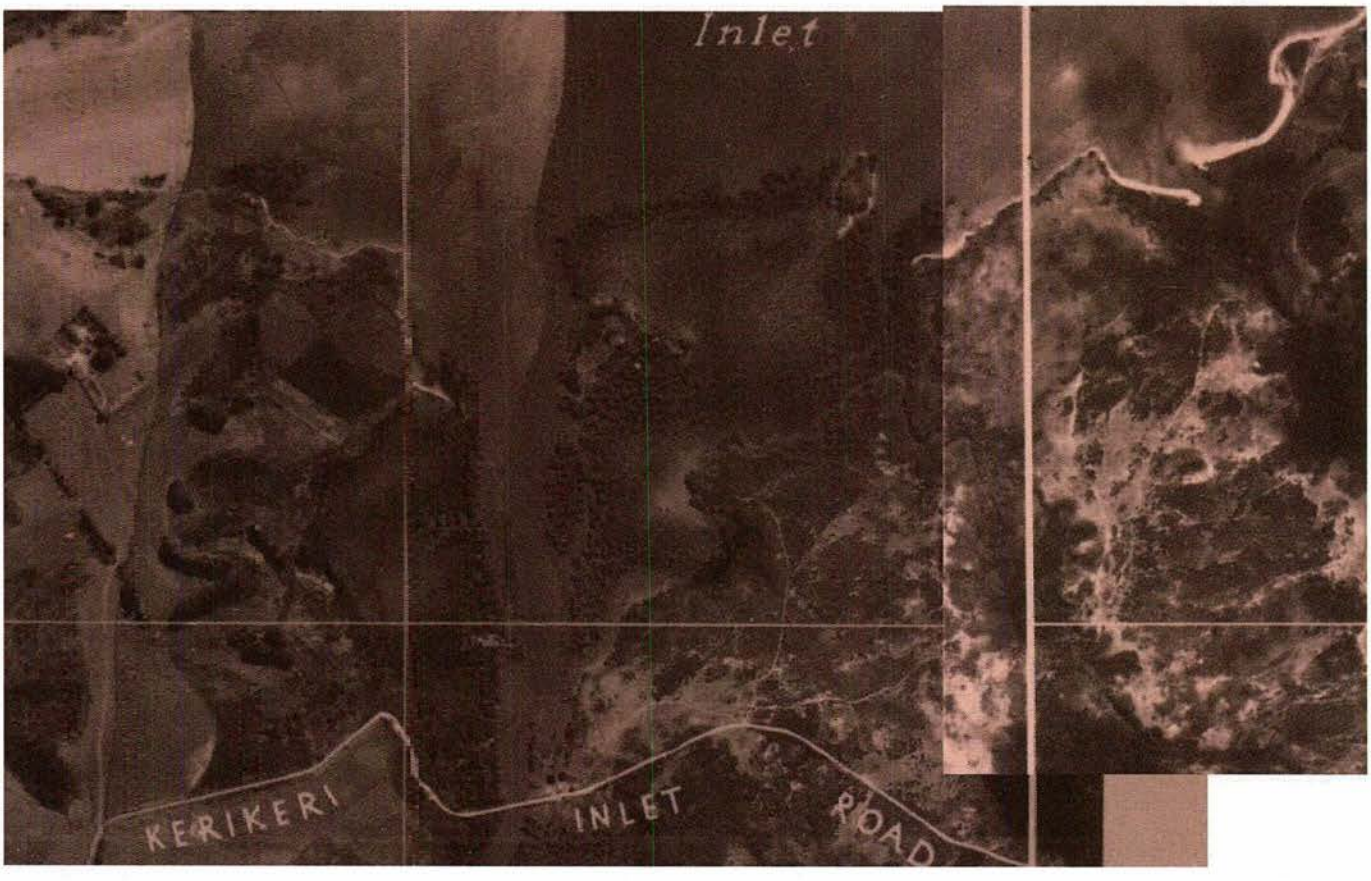


Figure 16: Aerial Mosaic N11-8 and N11-9 showing subject property (1955).

6.0 Results

The archaeological assessment of Lot 1 DP 167657 was undertaken over the course of two hours on 27 April 2017 by J. Carpenter and R. Gibb of Geometria Ltd. Conditions for the survey were generally good, with most of the property being in short, recently grazed grass with good surface visibility. The exception was Te Korau Island and the bush-clad slopes above the reclamation on the north-western corner of Lot 1.

The survey began on the reclaimed coastal flat and Te Korau Island at the northern end of Lot 1, and then across the higher and gently sloping to level ground at the southern end of the lot. Probing and test pitting was undertaken across the property in areas of interest.

6.1 Lot 1 DP 167657, South

This is area of the property comprises a flat to gently sloping plateau under short pasture. Soil stratigrahy as evidenced in the recent farm road cutting consisted of 5-10cm of grey brown topsoil over white-yellow clay.

Probing and a number of test pits were excavated across the flat ground between the farm road and the regenerating bush on the old coastal cliffs to the west. No archaeological sites or features were observed on the surface or in the test pits and there was no indication of subsurface archaeological deposits by probing.

Figure 17: Looking north across the southern area of Lot 1 DP 167657.

Figure 18: Soil stratigraphy in recent farm road cutting.

Figure 19: Looking west from farm road across flats, with test pits.

Figure 20: Typical test pit stratigraphy.

6.2 Lot 1 DP 167657, Central

This is area of the property is an extension of the flats described in the previous section which descends gently to the north, before dropping away over the old 3-4m high coastal cliffs above the reclamation. This area is under short pasture.

No archaeological sites or features were observed on the surface of the high ground behind the cliff, which is a flat plateau, but shell was noted in the track and partway up the bank between the base of the cliff below the plateau, and the reclamation. This deposit appeared to be relatively thick and consisted of dense fragmented cockle and black charcoal stained soil.

Probing and test pitting was undertaken on the level ground on the plateau immediately above the track but neither the test pits or probing indicated the presence of subsurface archaeological deposits. Soil stratigrahy consisted of 5-10cm of grey brown topsoil grading into orange clay. On the basis of the lack of archaeological material in the test pits above, the shell on the track is probably from the shell crushing operation and used for surfacing the track, however the deposit is very thick and extends up the bank and requires further investigation.

Figure 21: Looking north over test pits and old coastal cliff to reclaimed land and Te Korau Island.

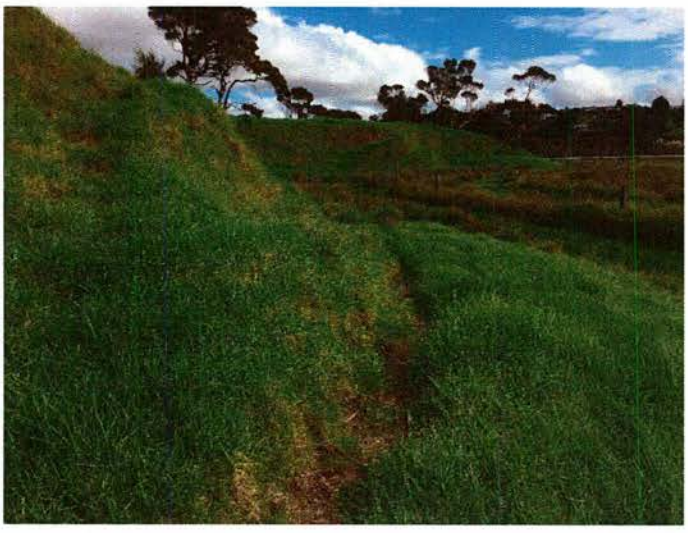


Figure 22: Farm rack between old coastal cliff and reclamation.

Figure 23: Shell in trcck with probe indicating upper extent of shell.

Figure 24: Test pit stratigraphy on coastal cliff.

6.3 Lot 1 DP 167657, north

No attention was paid to the reclaimed mudflats as the archaeological potential of this landform is low. The slightly higher ground to the west of Te Korau Island was walked over but the grass was knee-to-waist high and the ground surface visibility was poor.

Te Korau Island itself was walked over and found to have dense scrubby bush consisting of exotic weeds and trees and re-generating native bush on the steep sides of the island, and somewhat more open on the relatively level top of the island. There was no sign of the pit or midden recorded in the site record for P05/460 and several attempts to dig test pits were abandoned due to the dense root mass beneath the leaf litter on top of the island; probing was also unsuccessful for the same reason. However given the form, location of the island at the head of the Okura River and adjacent to the Kerikeri Inlet, the recorded features, the lack of obvious historic or modern development on the island, archaeological features are likely to be present and potentially significant.

Figure 25: Looking south over reclaimed land towards old coastal cliff (edge of Te Korau Island to **the west/right of frame).**

Figure 26: Top of Te Korau Island under dense gum trees and regenerating native bush.

7.0 Assessment of Effects

An initial assessment of effects for the proposed subdivision is provided, albeit in the absence of detailed plans for building envelopes, access and services. With regard to the recorded archaeological sites on or in the immediate vicinity of the property:

- P05/459 midden and terrace will not be affected, as the site is located on an adjacent property and the esplanade reserve, to the south west of the subject property.
- P05/460 on Te Korau Island is likely to be directly affected by the development of proposed Lot 1, by earthworks for the road access onto and over island from the causeway, and by residential development on the island. Landscaping/vegetation management and weed control on the island may also have effects on this site.
- P05/461 on the other, smaller tied island on the esplanade reserve adjacent to the north-east corner of Lot 1 DP 167657 will not be directly affected by the subdivision.
- P05/462 could not be relocated but given its location under mangroves beyond the esplanade reserve adjacent to Lot 2 DP 167657, mean it will not be affected.
- P05/463 is on the Lot 2 DP 167657 and has been modified by land slips, track formation, quarrying and stock trampling and the full extent of the site is unknown. It will not be affected by the subdivision of Lot 1 DP 167657.

Other subsurface pre- or protohistoric Maori features may be present across Lot 1 DP 167657 and may be affected depending on the final form of the development but these are not amenable to prior identification and are more likely to be accidentally encountered during the earthworks for access, services, and building sites. In general and away from the recorded sites described in the results above, the potential for other/significant archaeological features being present is considered low.

Overall and with the exception of works on and around Te Korau Island and P05/459, the archaeological effects of the proposed subdivision are low to none.

8.0 Assessment of Significance

The archaeological significance of sites and features on the subject property are assessed using criteria derived from guidance issued by Heritage New Zealand (New Zealand Historic Places Trust 2016).

The first set of criteria assess the potential of the site to provide a better understanding of New Zealand's past using scientific archaeological methods. These categories are focussed on the intra-site level.

- *How complete is the site? Are parts of it already damaged or destroyed?*

  A complete, undisturbed site has a high value in this section, a partly destroyed or damaged site has moderate value and a site of which all parts are damaged is of low value.

- *How diverse are the features to be expected during an archaeological excavation on the site?*

A site with only one or two known or expected feature types is of low value. A site with some variety in the known or expected features is of moderate value and a site like a pa or kainga which can be expected to contain a complete feature set for a given historic/prehistoric period is of high value in this category.

- *How rare is the site?*

  Rarity can be described in a local, regional and national context. If the site is not rare at all, it has no significance in this category. If the site is rare in a local context only it is of low significance, if the site is rare in a regional context, it has moderate significance and it is of high significance it the site is rare nationwide.

The second set of criteria puts the site into its broader context: inter-site, archaeological landscape and historic/oral traditions and community association.

- *What is the context of the site within the surrounding archaeological sites?*

  The question here is the part the site plays within the surrounding known archaeological sites. A site which sits amongst similar surrounding sites without any specific features is of low value. A site which occupies a central position within the surrounding sites is of high value.

- *What is the context of the site within the landscape?*

  This question is linked to the one above, but focuses onto the position of the site in the landscape. If it is a dominant site with many features still visible it has high value, but if the position in the landscape is ephemeral with little or no features visible it has a low value. This question is also concerned with the amenity value of a site and its potential for on-site education.

- *What is the context of the site within known historic events or people, or existing communities?*

  This is the question of known cultural association either by tangata whenua or other descendant groups. The closer the site is linked with important historic events or people the higher the significance of the site. This question is also concerned with possible commemorative values of the site.

An overall significance value derives from weighing up the different significance values of each of the six categories. In most cases the significance values across the different categories are similar.

8.2 Significance Assessment of Observed Archaeological Sites and Features on Lot 1 DP 167657

Based on the criteria noted above and observations from the first site visit, P05/460 is tentatively assessed as being of moderate to potentially high significance.

Table 2: Significance assessment of P05/460.

Significance Category	Value	Comment
Integrity, Condition and Information Potential	Moderate?	The archaeological features remaining on Te Korau island are likely to be well preserved and of considerable information potential and the strategic location of the site suggests it may have been a permanent settlement
Diversity	Moderate	The presence of substantial midden and a pit, the possibility of it once being a permanent settlement suggest that other subsurface features are likely to be present.
Rarity and Uniqueness	Low	While fewer sites are recorded in this area of the Kerikeri Inlet adjacent coastal areas contain ubiquitous midden.
Archaeological Context	Low	The site is probably associated with the permanent use and occupation of the island by Maori in the late prehistoric or 'classic' period. It may be the remains of a kainga or open settlement, or potentially a pa.
Landscape, Visual and Other Amenity Values	High	The island is highly visible in the landscape, from the Okura River Bridge and Kerikeri Inlet Road on the high ground to the west, by water on the Kerikeri inlet and Okura River, and from Skudders Beach Road on the opposite shore. It is technically accessible via the river and the esplanade reserve (albeit with some difficulty) thus has some potential recreational amenity. The site itself has little educational value owing the lack of obvious surface features or specific histories to interpret
Historical, Community and Cultural Association	Low-medium	The site is not associated with any known historical personality or event but was obviously important enough to warrant naming by Maori. With the exception of the Tangata Whenua, the local community does not have a strong association with the many Maori occupation sites in the Kerikeri area beyond the Kerikeri Basin historic area but the site is likely to be of significant value to Tangata Whenua.

9.0 Recommendations

There are no major archaeological constraints on the subdivision of Lot 1 DP 167657 and the proposed new Lots 2, 3 and 4 based on current information. However Te Korau Island on proposed Lot 1 is archaeologically sensitive and further assessment of any development on Te Korau will be required.

P05/460 is recorded on the island and any ground disturbing activity such as the creation of vehicle access, building platforms and associated services and landscaping, are likely to have archaeological effects. These will require further assessment as plans for that area are progressed. S. Lowndes should consider identifying an alternative building site/access on proposed Lot 1 which avoids Te Korau, should this prove necessary.

Possible shell midden material is recorded on the farm track immediately below the cliff and plateau on the southern side of the subject property, and it is likely that this material is redeposited from farming development. However the high ground adjacent to the cliff on proposed Lots 2, 3 and 4 with its elevated outlook, level ground and access to the Okura River and Kerikeri Inlet prior to the reclamation below make it an ideal area for settlement and the possibility of subsurface finds in this area cannot be discounted.

On this basis S. Lowndes should apply for an archaeological authority in order to manage any accidental discoveries in the course of subdividing and developing Lot 1 DP 167657. If development is ultimately proposed for Te Korau Island and P05/460 then this will need to be specifically included in the authority application. The authority application will require consultation with Tangata Whenua and engagement with Heritage NZ should be undertaken prior to submission.

As further planning is undertaken for the subdivision, S. Lowndes might consider using names associated with the history of the property, for the development, roads, etc

If archaeological remains or buried cultural deposits (layers of shell midden, oven stones, artefacts etc.) are encountered on the property in the course of other day to day activities, S. Lowndes or her agents should cease work in the immediate vicinity and contact Heritage New Zealand and Geometria Ltd for advice on how to proceed.

10.0 Conclusions

Geometria Ltd was commissioned by L. Searle on behalf of S. Lowndes to undertake an archaeological survey and assessment of the proposed subdivision of Lot 1 DP 167657 at Kerikeri Inlet Road.

In general, the archaeological effects of the proposed subdivision are low to none, with the exception of any development proposed for Te Korau Island and site P05/460.

Regardless of the plans for proposed Lot 1, S. Lowndes should apply for an archaeological authority in order to manage any potential accidental discoveries during the course of the subdivision and development, in order to avoid any delays if such discoveries occur. If plans for Lot 1 ultimately include ground disturbing activity on Te Korau Island and site P05/460 they will need to be specifically addressed in the authority application.

11.0 References

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Nugent., D and J. Nugent, 1976. Report on Site Survey. Kerikeri, Bay of Islands. Unpublished report for the Historic Places Trust.

Sissons, Jeffrey, Wi Hongi, Wiremu, Hohepa, Pat, 2001. Nga Puriri o Taiamai; A Political History of Nga Puhi in the inland Bay of Islands. Reed Books, Auckland.

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Appendix A – Site Record Forms

ARCHSITE
archaeological site recording scheme

Site Record Form

NZAA SITE NUMBER: P05/1079

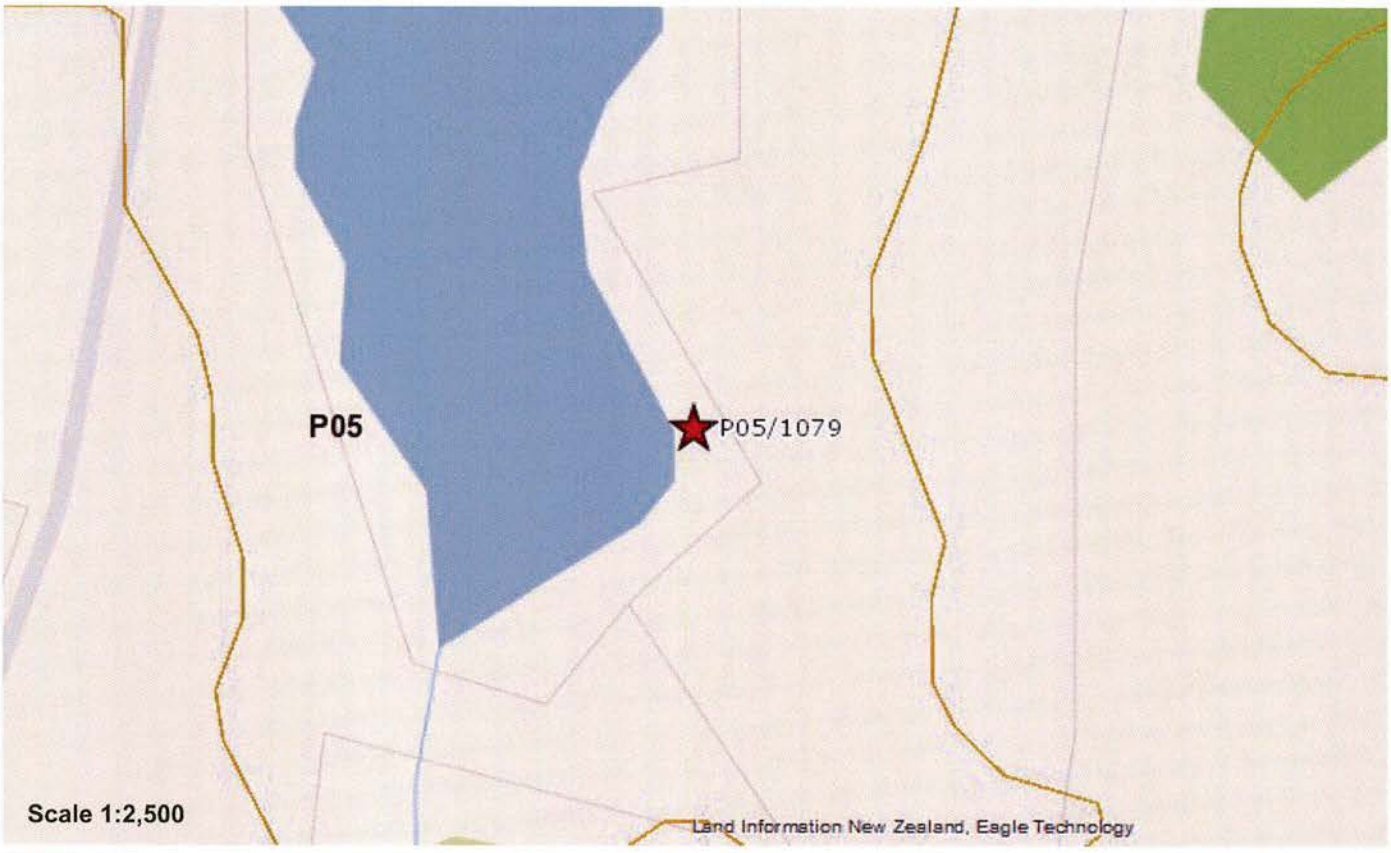
SITE TYPE: Midden/Oven

SITE NAME(s):

DATE RECORDED:

SITE COORDINATES (NZTM) Easting: 1690504 **Northing:** 6102634 **Source:** On Screen

IMPERIAL SITE NUMBER: **METRIC SITE NUMBER:** P05/1079



Finding aids to the location of the site

South east corner of the lake, inside the lake lot. On natural terrace above the water.

Brief description

Recorded features

Midden

Other sites associated with this site

SITE RECORD HISTORY	NZAA SITE NUMBER: P05/1079

Site description

Updated 05/03/2018 (Field visit), submitted by jonocarpenter , visited 05/03/2018 by Carpenter, Jonathan
Grid reference (E1690504 / N6102634)

A single, small subsurface probable shell midden deposit was noted above the south-eastern corner of the lake, within the shared lake lot. The deposit consisted of an approximately 6 x 6m area of fragmentary cockle shell and charcoal in brown black charcoal stained soil, 5-10cm below the ground surface on a natural terrace above the lake. The area has been trampled by stock and subject to sheet wash erosion from the higher ground and did not appear to be related to any larger occupation area.

Condition of the site

Statement of condition

Current land use:

Threats:

SITE RECORD INVENTORY	NZAA SITE NUMBER: P05/1079

Supporting documentation held in ArchSite

Site location adjacent to lake

Detail cf midden contents/state

ARCHSITE
archaeological site recording scheme

Site Record Form

NZAA SITE NUMBER: P05/463

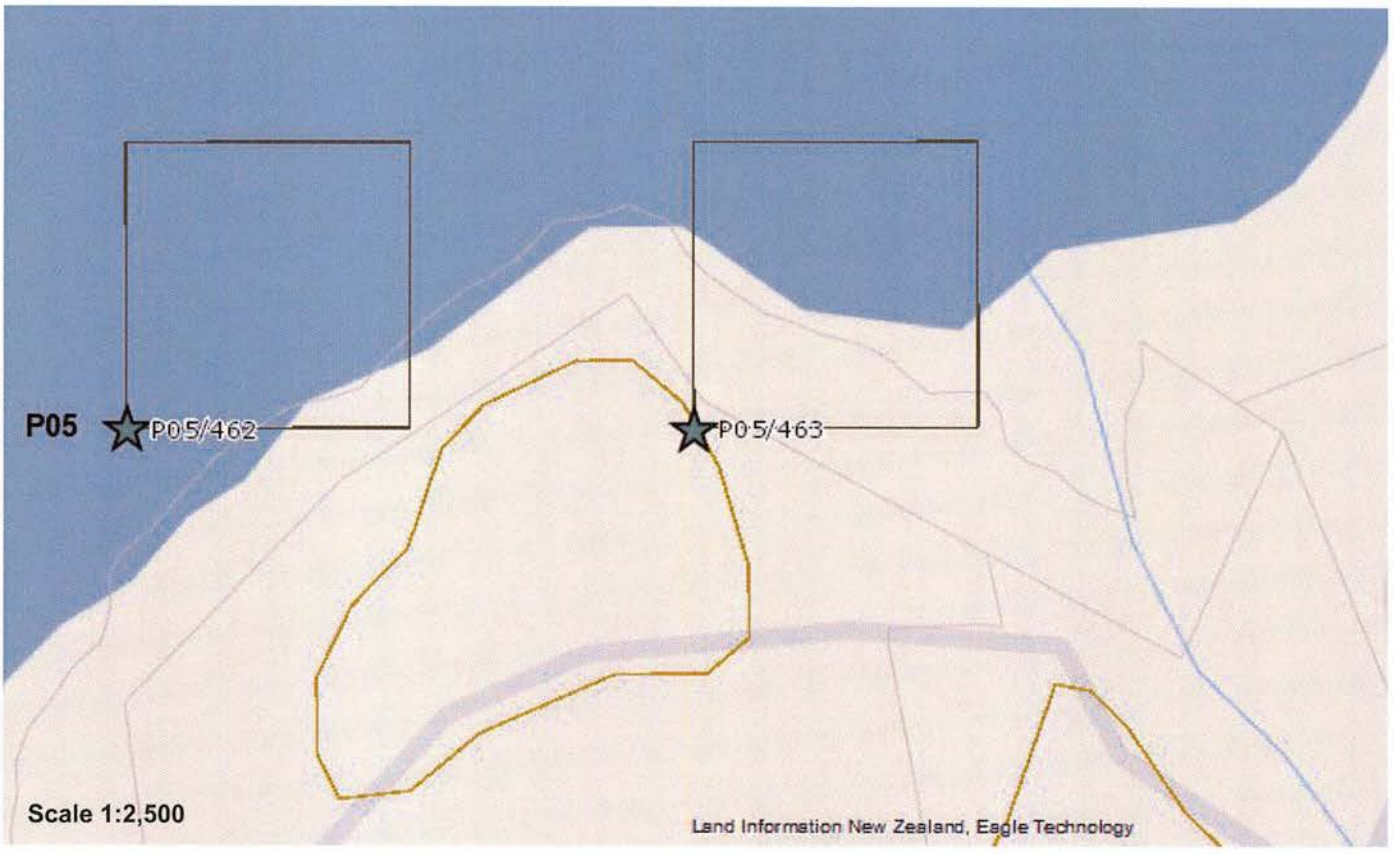
SITE TYPE: Pit/Terrace

SITE NAME(s):

DATE RECORDED:

SITE COORDINATES (NZTM) Easting: 1690552 **Northing:** 6103193 **Source:** CINZAS

IMPERIAL SITE NUMBER: N11/536 **METRIC SITE NUMBER:** P05/463



Finding aids to the location of the site

Brief description

MIDDEN/TERRACES

Recorded features

Terrace, Midden

Other sites associated with this site

SITE RECORD HISTORY	NZAA SITE NUMBER: P05/463

Site description

Condition of the site

Statement of condition

Current land use:

Threats:

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD FORM (NZMS1)

NZMS 1 map number N11
NZMS 1 map name Kerikeri
NZMS 1 map edition 3rd ed. 1969

NZAA NZMS 1 SITE NUMBER N11/536
DATE VISITED 17/9/84
SITE TYPE Midden/terrace/ obsidians
SITE NAME: MAORI
OTHER

Grid Reference Easting 1 5 0 1 0 0 Northing 8 5 8 7 0 0

1. Aids to relocation of site *(attach a sketch map)*
Southern side of Upper Kerikeri Inlet, opposite Pirikawau Island. West of Hororoa Point. See location map with N11/531.

2. State of site and possible future damage
Good

3. Description of site *(Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here)*
Midden seen in hillslope and stretching 200 m around the beachfront. A lot of firecracked stones have eroded on to the beach - where the 3 obsidian flakes were collected. The midden is up to 1 m high containing a lot of charcoal (partial logs) firecracked stones in profile and a lot of very densely packed cockle shells Chione stutchburyi (34-50 mm long). The natural terrace, that has been lived on is approximately 30 x 6 m, with 2 peach trees.

4. Owner Address Esplanade Reserve, Bay of Islands County Council, P.O. Box 11, Kawakawa
Tenant/Manager Address A.T. Edgar, Inlet Road, Kerikeri

5. Nature of information *(hearsay, brief or extended visit, etc.)* brief visit by boat
Photographs *(reference numbers, and where they are held)* no
Aerial photographs *(reference numbers, and clarity of site)* SN542/3 (1951) no

6. Reported by G.E. Nevin
Address Northland Harbour Board PEP 1984
Filekeeper
Date 29/11/85

7. Key words
Midden (cockles) 200 m, 3 obsidian/terrace - Upper Kerikeri Inlet

8. New Zealand Register of Archaeological Sites *(for office use)*
NZHPT Site Field Code

E	K	Type of site	
-	-	Local environment today	
A	L	Land classification	
B	D	Present condition and future danger of destruction	
		Security code	
A	L	Local body	

NOTIFICATION OF FINDING OF ARTIFACT

(Section 11 of the Antiquities Act 1975)

For artifacts found after 1 April 1976.

This copy – to be given to or retained by finder

Note: Your local public museum will be happy to help you complete this form.

Your Record No. N11/536

1. Type of artifact Obsidian flakes (3)

2. Where and when found Beach below Okura Creek & Hororoa Pt, Sth Kerikeri Inlet. 17th Sept 1984

3.

Maximum length	Maximum depth	Maximum width	Weight

4. Description of artifact, including material Obsidian flakes (3)

5. Has a photograph/sketch been taken of the artifact? ~~YES~~/NO
If so, please attach a copy if possible for the National Register, or state where it is held:

6. Give details of the circumstances of finding, including the precise location, how the artifact came to be found, and any association with other identifiable signs of human occupation. Please enclose a sketch map of the site and where the artifact was found and if possible, give the grid reference for the site.
Archaeological survey for Northland Harbour Board
attached NZAA SRF N11/536

7. Name and address of:

(a) Finder
G.E. Nevin
17 Wakelin St,
Whangarei

and (b) Present holder of artifact
Northland Regional Museum,
Maunu, Whangarei

8. Form completed by:

Name: G.E. Nevin

Address: 17 Wakelin St, Whangarei

Date: 28 Sept 1984

95104C—50pads/2/83MK

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

ARCHSITE
archaeological site recording scheme

Site Record Form

NZAA SITE NUMBER: P05/462

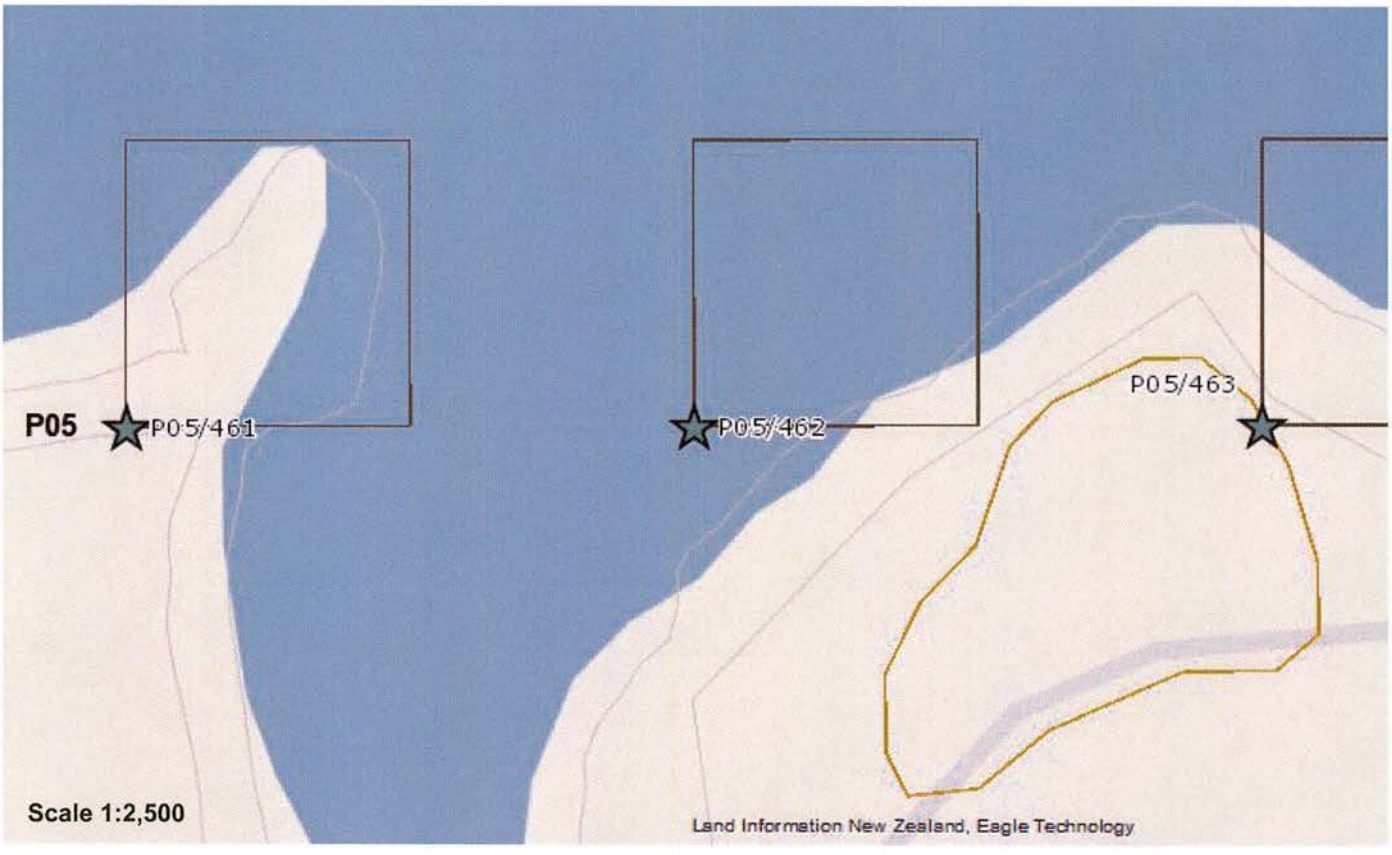
SITE TYPE: Midden/Oven

SITE NAME(s):

DATE RECORDED:

SITE COORDINATES (NZTM) Easting: 1690352 **Northing:** 6103192 **Source:** CINZAS

IMPERIAL SITE NUMBER: N11/535 **METRIC SITE NUMBER:** P05/462



Finding aids to the location of the site

Brief description

MIDDEN/OBSIDIAN

Recorded features

Midden, Artefact - obsidian

Other sites associated with this site

SITE RECORD HISTORY	NZAA SITE NUMBER: P05/462
Site description	
Condition of the site	
Statement of condition	
Current land use:	
Threats:	

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD FORM (NZMS1)

NZMS 1 map number N11
NZMS 1 map name Kerikeri
NZMS 1 map edition 3rd ed. 1969

NZAA NZMS 1 SITE NUMBER N11/535
DATE VISITED 17/9/84
SITE TYPE Midden/obsidian
SITE NAME: MAORI -
OTHER

Grid Reference Easting 1 4 9 9 0.0 Northing 8 5 8 6 .3 0

1. Aids to relocation of site *(attach a sketch map)*
Shelly island at end of sandspit, behind mangroves on eastern side of reclaimed swamp, east of Okura River - upper Kerikeri Inlet. See location map with N11/531.

2. State of site and possible future damage
Average - tidal erosion.

3. Description of site *(Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here)*
Midden on shelly sandspit island. All cockles - Chione stutchburyi (30-40 mm), some charcoal, burnt shells and firecracked stones. 2 flakes of obsidian were collected.

4. Owner Address Esplanade Reserve, Bay of Islands County Council P.O. Box 11, Kawakawa
Tenant/Manager Address A.T. Edgar, Inlet Road, Kerikeri

5. Nature of information *(hearsay, brief or extended visit, etc.)* brief visit by boat
Photographs *(reference numbers, and where they are held)* no
Aerial photographs *(reference numbers, and clarity of site)* SN542/3 (1951) no

6. Reported by G.E. Nevin
Address Northland Harbour Board PEP 1984
Filekeeper
Date 29/4/86

7. Key words Midden (cockles) 2 obsidian, shell spit - east Okura River

8. New Zealand Register of Archaeological Sites *(for office use)*
NZHPT Site Field Code

A A	Type of site	B D Present condition and future danger of destruction
- -	Local environment today	Security code
N L	Land classification	A L Local body

NOTIFICATION OF FINDING OF ARTIFACT

(Section 11 of the Antiquities Act 1975)

For artifacts found after 1 April 1976.

This copy – to be given to or retained by finder

Note: Your local public museum will be happy to help you complete this form.

Your Record No. N11/535

1. Type of artifact Obsidian flakes (2)

2. Where and when found Bay east of Okura Creek, Kerikeri Inlet – 17 Sept 1984

3.

Maximum length	Maximum depth	Maximum width	Weight

4. Description of artifact, including material 2 obsidian flakes

5. Has a photograph/sketch been taken of the artifact? ~~YES~~/NO
If so, please attach a copy if possible for the National Register, or state where it is held:

6. Give details of the circumstances of finding, including the precise location, how the artifact came to be found, and any association with other identifiable signs of human occupation. Please enclose a sketch map of the site and where the artifact was found and if possible, give the grid reference for the site.
Archaeological survey for Northland Harbour Board
attached NZAA SRF N11/535

7. Name and address of:

(a) Finder
G.E. Mewin,
17 Wakelin Street,
Whangarei

and (b) Present holder of artifact
Northland Regional Museum,
Mauna, Whangarei

8. Form completed by:

Name: G.E. Mewin
Address: 17 Wakelin Street,
Date: 28th Sept. 1984

95104C–50pads/2/83MK

ARCHSITE
archaeological site recording scheme

Site Record Form

NZAA SITE NUMBER: P05/461

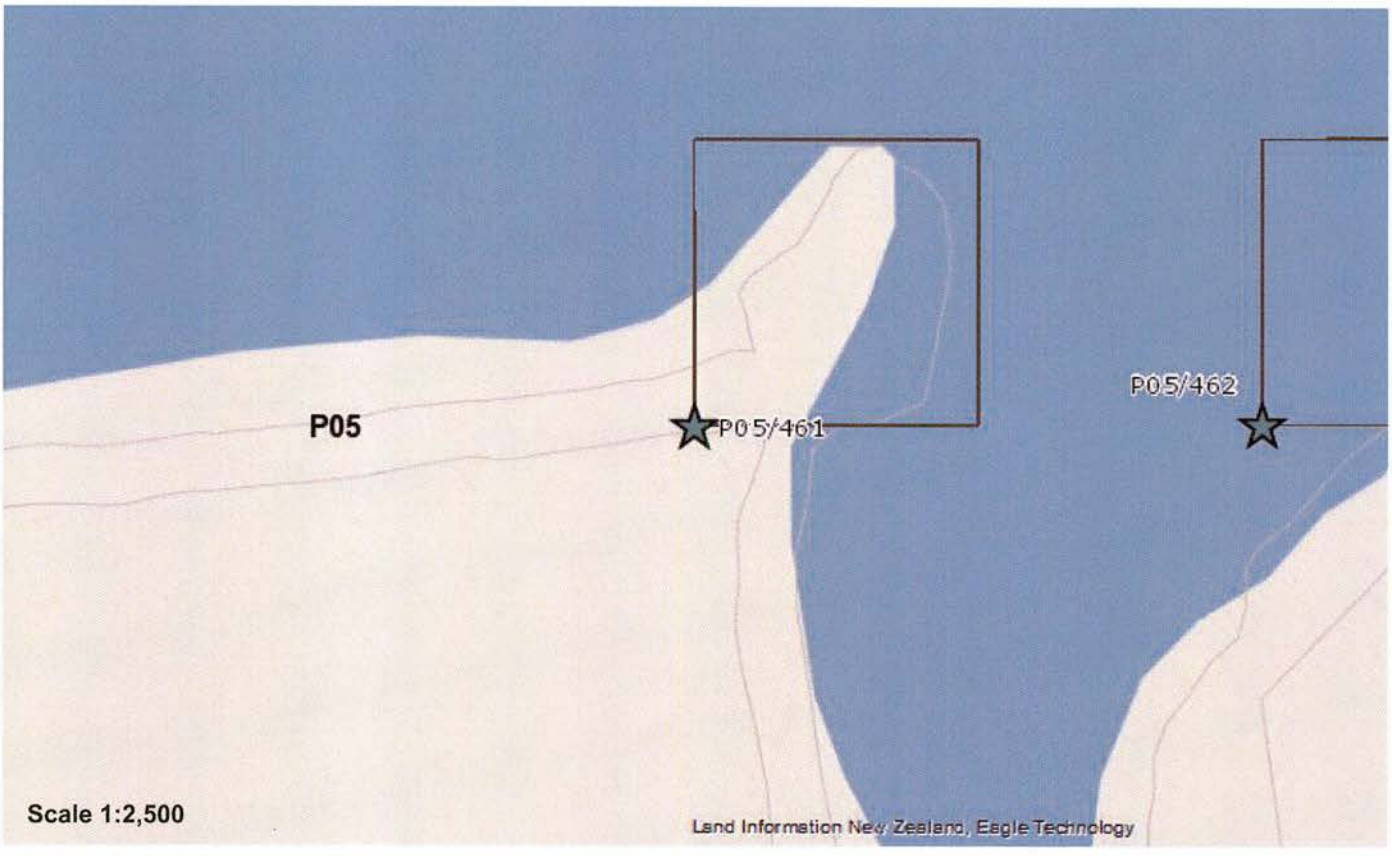
SITE TYPE: Midden/Oven

SITE NAME(s):

DATE RECORDED:

SITE COORDINATES (NZTM) Easting: 1690152 **Northing:** 6103191 **Source:** CINZAS

IMPERIAL SITE NUMBER: N11/534 **METRIC SITE NUMBER:** P05/461



Finding aids to the location of the site

Brief description

MIDDEN

Recorded features

Midden

Other sites associated with this site

SITE RECORD HISTORY	NZAA SITE NUMBER: P05/461

Site description

Condition of the site

Statement of condition

Current land use:

Threats:

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD FORM (NZMS1)

NZMS 1 map number N11
NZMS 1 map name Kerikeri
NZMS 1 map edition 3rd ed. 1969

NZAA NZMS 1 SITE NUMBER N11/534
DATE VISITED 17/9/84
SITE TYPE Midden
SITE NAME: MAORI -
OTHER

Grid Reference Easting 1 4 9 7 .3 0 Northing 8 5 8 7 0 0

1. Aids to relocation of site *(attach a sketch map)*

Old island 800 m east of Okura River outlet into Kerikeri Inlet. See location map with N11/531. and (N11/533)

2. State of site and possible future damage

Island in gorse and scrub. Area adjacent stopbanked, in pasture.

3. Description of site *(Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here)*

On top of old island - broken cockles - Chione stutchburyi (30-39 mm) cover 15 x 20 m.

4. Owner Esplanade Reserve Bay of Islands County Council P.O Box 11, Kawakawa
Address
Tenant/Manager Edgar, A.T.
Address Inlet Road, Kawakawa

5. Nature of information *(hearsay, brief or extended visit, etc.)* brief visit by boat

Photographs *(reference numbers, and where they are held)* no

Aerial photographs *(reference numbers, and clarity of site)* SN542/3 (1951) no

6. Reported by G.E. Nevin
Address Northland Harbour Board PEP 1984
Filekeeper
Date 29/4/86

7. Key words Midden (cockle) old island - Okura River east

8. New Zealand Register of Archaeological Sites *(for office use)*
NZHPT Site Field Code

A A	Type of site
- -	Local environment today
A L	Land classification
- -	Present condition and future danger of destruction
	Security code
A L	Local body

APPENDIX 8: ***'Cultural Impact Assessment Prepared for Nags Head Horse Hotel Ltd - Proposal for development of subdivision on Lot 1 DP167657, Kerikeri Inlet Road, Kerikeri'*** **prepared by Kaire Edmonds Whānau Trust and Otahuao Burial Trust, dated April 2018**

Kaire Edmonds Whānau Trust

Otahuao Burial Trust

Cultural Impact Assessment

Prepared for Nags Head Horse Hotel Ltd.

Proposal for development of subdivision on Lot 1 DP167657

Kerikeri Inlet Road, Kerikeri

April 2018

Kaire Edmonds Whānau Trust

Otahuao Burial Trust

Whakataukī

He iti ra, he iti mapihi pounamu.

It is small, but precious.

Whakapapa

Ko Hauangiangi te tupuna, tana ukaipo ko Pihoi Pa. Ko Te Uri Taniwha te hapū.

Hauangiangi ka moe i a Kareariki. Ka puta ko Pehiriri.

Pehiriri ka moe i a Kuke. Ka puta ko Erana Karearikí

Erana Karearikí ka moe i a Arthur Edmonds

Ka puta ko Matilda Edmonds.

Matilda Edmonds ka moe i a Davis Strongman.

Enei nga tupuna o nga uri Edmonds me nga uri Strongman, nga whanau ahikaaroa o te Kerikeri taha moana, whanau o Te Uri Taniwha hapū.

Tiheiwa Mauri ora

Hauangiangi is the ancestor. He was born and raised at Pihoi Pa, Edmonds Rd, Kerikeri Inlet. Te Uri Taniwha is his principal hapū.

Hauangiangi married Karearikí. From this union came Pehiriri.

Pehiriri married Kuke, from this union came Erana Karearikí.

Erana Karearikí married Arthur Edmonds. From this union came Matilda Edmonds.

Matilda Edmonds married Davis Strongman.

These are the ancestors of the Edmonds and Strongman families at the Kerikeri Inlet.

These families and their off-shoots are the families which still reside at Kerikeri Inlet, families of Te Uri Taniwha hapū.

Figure 1: *Cover photo: Taken from Lot 1 D167657 overlooking Te Korau Island to the north and west.*

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Whakataukī and Whakapapa

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1. Activity Details

Applicant:	Nags Head Horse Hotel Ltd.
Address for Correspondence and Billing:	Nags Head Horse Hotel Ltd. 606 Peak Road, RD2, Helensville 0875
Proposed Activity:	Proposal to establish new residential subdivision
Site Location:	Lot 1 DP 167657, Kerikeri Inlet Road, Kerikeri
Archaeological Sites:	P05/459-Midden P05/460-Midden/Pit P05/461-Midden P05/462-Midden/Obsidian P05/463-Midden/Terrace/Obsidian
Otahuao Burial Trust Statutory Legislation:	Te Ture Whenua Māori Act 1993, Section 338
Report Author:	Stacey Wadkins, Consultant p: 09-4019 333 e: staceywadkins@yahoo.com
Report Reviewers and Approvers for Issue:	Ian Mitchell, Trustee, Kaire Edmonds Whānau Trust p:09-4052 400 e: tekauri1@xtra.co.nz Esther Horton, Kaumātua of Te Uri Taniwha Kaumātua of Otahuao Burial Trust Member, Kaire Edmonds Whānau Trust p: 09-4078 847 e: clarrieh@xtra.co.nz

1. Introduction

Nags Head Horse Hotel Ltd. ("The Applicant") seeks to subdivide Lot 1 DP 167657 into four lifestyle block parcels. A new causeway providing access for people and stock to proposed Lot 1 over reclaimed land to the tied island is also proposed.

Lot 1 DP 167657 is situated four kilometres north east of Kerikeri Township between Kerikeri Inlet Road to the south and Kerikeri Inlet to the north. It is bounded by the Okura River to the west, and a lake and wetland (of which Lot 1 has a share) and Lot 2 DP 167657 to the east. Lot 1 is 17.7050ha in size.

The applicant has commissioned the Kaire Edmonds Whānau Trust and Otahuao Burial Trust to undertake a cultural values-based assessment for the proposal.

The Kaire Edmonds Whānau Trust and Otahuao Burial Trust are charged with the responsibility of processing consent applications for subdivision, use and development activities planned and undertaken within the Kaire Edmonds Whānau Trust's and Otahuao Burial Trust's statutory areas of interest.

1.1 Purpose

The primary purpose of this Cultural Impact Assessment ("CIA") is to determine any adverse effects of the proposed development on the Kaire Edmonds Whānau Trust's and Otahuao Burial Trust's cultural, spiritual, traditional, and heritage values and interests. A second purpose of this CIA is to provide appropriate recommendations to avoid, remedy or mitigate effects on the values and interests expressed in this report. The Kaire Edmonds Whānau Trust's and Otahuao Burial Trust's world view and philosophy encompass a wider/broader range of values than those associated with archaeological sites.

1.2 Methodology

Information sources immediately relevant to the preparation of this CIA include:

a) Archaeological Assessment Report by Geometria Limited (2017)
b) New Zealand Archaeological Association (NZAA) Website (2017)
c) Hui and interviews with Mana Whenua and Hau Kainga of Te Uri Taniwha Hapū (2017-2018)
d) Texts as indicated in the References section of this report

1.3 Field Investigation

On 3rd November 2017, Kaire Edmonds Whānau Trust Trustee and member of Otahuao Burial Trust Ian Mitchell carried out a field investigation, attended by the following:

Figure 2: *Photo of Field Investigation Team (Ian Mitchell not pictured):*

Hori Parata, Kaumātua for Ngāti Wai, Resource Management Consultant, Cultural Impact. Ph: 021 436 837

Senior Planner, Scope Environmental Planning. PO Box 511, Kerikeri, Ph: 09 4077195, 021 433 347

Representative, Nags Head Horse Hotel Ltd., The Applicant for Property Development. 606 Peak Road, RD2, Helensville 0875

Esther Horton, Kaumātua of Te Uri Taniwha, Ahi Kā Kerikeri Moana, long term resident of Kerikeri Inlet, Member Kaire Edmonds Whānau Trust, Kaumātua for Otahuao Burial Trust. 797 Kerikeri Inlet Rd, Kerikeri. Ph 09 4078847

Jonathon Carpenter, Archaeologist. Geometria Limited, P.O. Box 1972, Whangarei

Photo provided by Ian Mitchell

The field investigation consisted of a site walk specifically so that the tangata whenua could identify and understand the applicant's plans for the land and be able to give some feedback on cultural impacts of the development.

The archaeologist identified archaeological sites that were referenced in his report during this visit.

The importance of this site visit was to be able to identify exactly which land was within the development area and what the plans for development specifically were.

During the field investigation, it was noted that livestock were present at the time throughout Lot 1. Cows clearly moved within the mudflat, estuarine, and foreshore areas as well as the higher areas of land.

The following areas were assessed:

a) The proposed boundaries for house site locations (proposed lots 1-4)
b) Archaeological features (middens, terraces, pits, obsidian)
c) Cultural landscape analysis

Figure 3: *Exposed midden at south eastern corner of Te Korau Island at low tide, showing just above tide level. Shell middens are approximately 500mm deep and fairly continuous around the base of the island, appearing above low tide level.*

The applicant seeks to create a subdivision of four residential lots, including construction of a causeway to link Te Korau Island to the mainland for transport. The property, legally described as Lot 1 DP 167657, is situated directly to the east of the Okura River on the southern banks and foreshore of Kerikeri Inlet.

"The property consists largely of flat to rolling pasture, flat pasture reclaimed from the inlet and river margins, areas of salt marsh where the reclamation has been breached, an island now tied to the mainland by the intervening reclaimed area and weir and stopbank arrangement, and pockets of remnants and regenerative native bush and trees, and exotics. Steeper ground and low cliffs are present on the edge of the former and existing coastline, with a freshwater lake lying between Lot 1 and the neighbouring properties to the east and south which have a share in the lake."

(Jonathan Carpenter, 2017: 7)

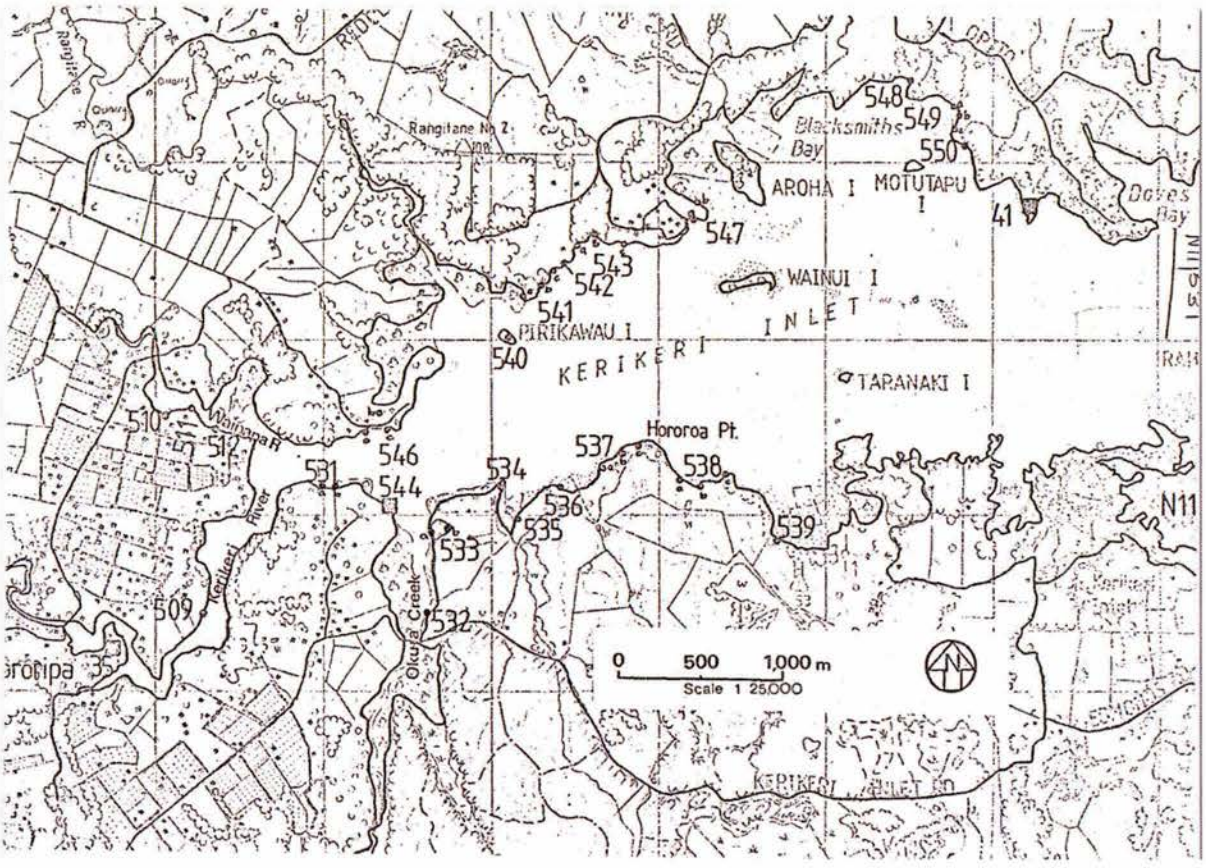


Figure 4: *Lot 1 DP 167657, Identified in 1984 as Archaeological Site 533 (Note that mudflats at that time had been reclaimed) New Zealand Archaeological Association Site Record Form (NZMS1) 17-9-84*

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION
SITE DESCRIPTION FORM

Map Number	N11
Map Name	Kerikeri
Map Edition	3rd ed. 1969
Grid Reference	492 584

SITE NUMBER	N11/533
SITE NAME: MAORI / OTHER	-
SITE TYPE	Middens/pit

(This form may be used for recording any descriptive information or other supplementary information on the site, or for maps and drawings.)

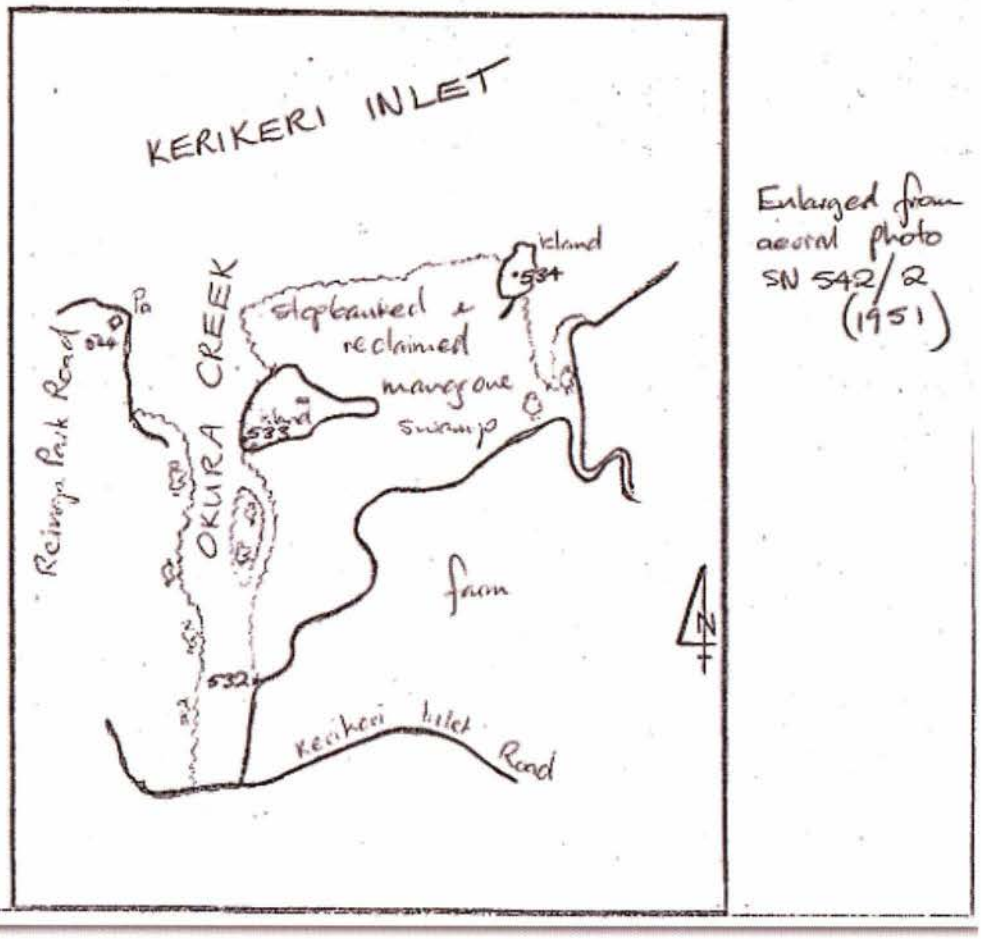


Figure 5: *Archaeological sketch of Lot 1 DP 167657 drawn in 1969 (using a 1951 map) to enlarge details. Te Korau Island (533) and a second island (534) tied with reclaimed land are indicated.*

3. Kaire Edmonds Whānau Trust

The Inaugural meeting of Kaire Edmonds Whānau Trust was held at St James Church Hall, Stone Store Basin, Kerikeri on 6 Oct 2007.

The purpose of the Trust is to represent descendants of Erana Karearíki and Arthur Edmonds (the ahi kā of Kerikeri Inlet) in matters regarding Maori cultural heritage at the inlet.

The Trust has continued to meet regularly to discuss cultural impacts of developments in the area. The Trust has made written submissions to all Resource Management Consents, and NZ Historic Places Trust (now Heritage NZ) consents and authorities. This has continued to this day (2018) and the Trust has now submitted on hundreds of Far North District and Northland Regional Consents under the Resource Management Act 1991.

The Trust is a private family trust. It is not constituted as a charitable trust under the Charities Commission.

4. Otahuao Burial Trust

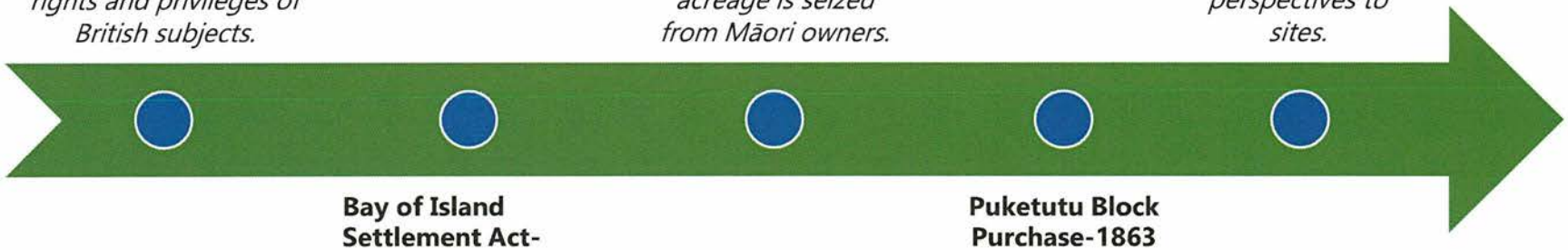
The Otahuao Burial Trust was officially gazetted as Māori land to separate block XIII, Kerikeri Survey District, Section 33, Lot 7 DP194153 from the Kerikeri Sewage Scheme. It was gazetted as a Māori Burial Reserve on 9 June 1955. It is subject to trust regulations of Te Ture Whenua Māori Act, 1993 including Section 338.

Section 338: Maori reservations for communal purposes:

"The chief executive may, by notice in the Gazette issued on the recommendation of the court, set apart as Māori reservation any Māori freehold land or any General land— for the purposes of a village site, marae, meeting place, recreation ground, sports ground, bathing place, church site, building site, burial ground, landing place, fishing ground, spring, well, timber reserve, catchment area or other source of water supply, or place of cultural, historical, or scenic interest, or for any other specified purpose; or that is a wahi tapu, being a place of special significance according to tikanga Māori."

Specific ahi kā families (long term residents of the Inlet) were represented on the Trust, their ancestors are buried in the urupa and pre-European ancestors lived on Pihoi Pa directly above the burial ground. The original Trustees are: Kenneth Strongman, Reginald Strongman, Oliver Strongman, William Cook, Alfonso Cook, and Urutawa Edmonds.

The Trust is formed for the purpose of maintaining the urupa in perpetuity. The Trust Deed is subject to all the rules and regulations of the Te Ture Whenua Māori Act 1993.



Tiriti o Waitangi (Treaty of Waitangi)-1840

The Crown guarantees that the Māori tribes of New Zealand and their families will maintain "full exclusive and undisturbed possession of their Lands and Estates Forests Fisheries and other properties" they possess, with full rights and privileges of British subjects.

Māori Deeds of Old Private Land Purchases settlement with John Edmonds-1862

The Crown grants John Edmonds 70 acres within the boundaries of the 250,000 acres of assumed title and 50 acres for each of his 11 children. The remaining acreage is seized from Māori owners.

Heritage New Zealand Pouhere Taonga Act-2014

Expands the organisations' responsibilities in recognising, relating to, consulting with and respecting Māori cultural perspectives to sites.

Bay of Island Settlement Act-1858

The Crown seizes and assumes title of 250,000 acres of customary Māori land (formally designated as 'wasteland') south of Kerikeri Inlet and east of the Okura River, including "Puketutu".

Puketutu Block Purchase-1863

Henry Tacey Kemp purchases lands south of Kerikeri Inlet and east of the Okura River ("Puketutu") on behalf of The Crown for settlement. No land is reserved for Māori vendors.

Figure 6: Legislative Framework

5. Mātauranga Māori – Te Ao Māori World View

Mā te whakātu, ka mōhio

Mā te mōhio, ka mārama

Mā te mārama, ka mātou

Mā te mātou, ka ora

By discussion comes understanding

By understanding comes enlightenment

By enlightenment comes wisdom

By wisdom comes everlasting life

Mātauranga Māori is ancestral knowledge steeped in one's whakapapa and history, including the world view of ngā tupuna as well as their cultural and other perspectives. It is firmly rooted in Tikanga Māori (the customary beliefs and habits of Māori), and is the essence of Māori philosophy and action.

As Ahi Kā and Kaitiaki of the flora, fauna, land and waterways in the rohe of Te Uri Taniwha, the Kaire Edmonds Whānau Trust and Otahuao Burial Trust members intend to play a central role in the protection and use of these resources.

Core values in the Māori viewpoint are far-reaching. For the purposes of this report, the focus will be upon the following:

5.1 Spiritual, Natural and Cultural Connectedness

Tangata whenua are connected to the spiritual dimension as descendants of Papatuanuku (Earth Mother) and Ranginui (Sky Father). From the spirit world comes mauri (life-essence/spark of life), which all taonga possess.

The concept of mauri (spark of life) is essential to build an understanding of the Māori world view. When Māori interact with the taonga of the world, that interaction will create a reaction to the mauri of the taonga. Likewise, when the mauri of the natural world is impacted, so also is the mauri of the tangata whenua.

At the heart of Māori values is connectedness. Māori are connected not only to the mauri passed down from spiritual connections, but are also inextricably linked to the natural world. This connection demands that, as Māori, the natural world is respected at every level.

As Tangata Whenua of the rohe that lies within the tribal area of Te Uri Taniwha, the Kaire Edmonds Whānau Trust and Otahuao Burial Trust members are imbued with a unique relationship with the natural world of the area. They are also charged with an inherent responsibility to that rohe.

Māori cultural values permeate every aspect of Māori perspectives and customary behaviours. There is a firm connection between the mātauranga Māori passed from the ancestors to those currently living, and this knowledge will be passed on to future generations. This connectedness forms the basis for a holistic system of management in which it is acknowledged that no part of a system, rohe, or community stands alone.

5.2 Tikanga: Cultural Practice

Tikanga Māori (best cultural practice) is a taonga tuku iho (treasure handed down from the ancestors). It is born of tradition, vibrant and evolving, and it is the basis upon which actions are deemed to be appropriate or harmful to people, places, and things.

5.3 Taonga: Valued Treasures

Taonga are those things considered of great cultural value to Te Uri Taniwha, and can be physical or conceptual. Taonga are another example of the Māori view that all living and non-living things carry a life force (mauri). The Treaty of Waitangi (Article 2) confirms that taonga include lands, estates, forests, fisheries, and other properties.

5.4 Kaitiakitanga: Guardianship

As Kaitiaki of the rohe of Te Uri Taniwha, it is acknowledged that a primary function is to provide guardianship over all living things, natural resources, the culture and people. This relates not only to protecting these taonga for the present time, but also to secure protection of the socio-economic prospects, education and health of Māori in future generations.

5.5 Mana Whenua and Mana Moana: Rights and Responsibilities to the Land and Waters

The connection of Māori to the land is undeniable. It is customary, on the birth of a child, to bury the "whenua" (afterbirth) into the soil. The word for 'earth' in Te Reo Māori is also "whenua", reinforcing the strong connection of Māori to the earth from birth onwards. "This fact of life is a metaphor for whenua, as land, and is the basis for the high value placed on land." (Hirini Moko Mead: 269) At death, the koiwi (skeletal remains) is returned to the earth through burial in caves or in the ground, thus continuing the cycle of connectedness.

"The land is a source of identity for Māori. Being direct descendants of Papatūanuku, Māori see themselves as not only 'of the land', but 'as the land'." (Ministry of Justice, 2001: 44)

Te Uri Taniwha places great value on ancestral lands, and as mana whenua they are responsible for protecting and managing systems on customary land. Their uri will also benefit from this guardianship, as "the land holds the link to their parents, grandparents, and tīpuna, and the land is the link to future generations". (Ministry of Justice, 2001: 44)

Te Uri Taniwha possesses mana moana over their customary fishing areas. Ancestors, including chiefs, passed on prudent management strategies to ensure the protection and longevity of these fishing grounds and the kai moana thereof through traditional methods. Using these techniques, the tangata whenua can preserve access to healthy kai moana for their children, and for future generations.

5.6 Tapu and Noa

Tapu was used as a way to direct how people behaved towards each other and the environment, placing restrictions upon society to ensure that society flourished. Members of a community would not violate the tapu for fear of sickness or catastrophe as a result of the anger of the atua.

A person is imbued with mana and tapu by reason of his or her birth. People are tapu, and it is each person's responsibility to preserve their own tapu and respect the tapu of others as well as places designated as tapu.

Under certain situations people become more tapu, including women giving birth, warriors travelling to battle, men engaged in carving (and their materials) and people when they die. In the same way, places can become more tapu, such as land during the process of the construction of a marae, or when land is prepared to store seed.

Because resources from the environment originate from one of the atua, they need to be appeased with karakia before and after harvesting. When tapu is removed, things become noa. This process is called whakanoa.

6. Features of Lot 1 DP 167657 and Cultural Impact

Archaeological studies and the field investigation carried out on the property for the proposed development have identified middens, mudflats/salt marshes and Te Korau island as features of the property. The Kaire Edmonds Whānau Trust and The Otahuao Burial Trust, as Te Uri Taniwha kaitiaki of the land and fisheries, is committed to building a shared understanding of the cultural value of these areas with all parties invested in the proposed development. This is important in communicating the cultural impact of development in the rohe.

6.1 Middens

Every area of the proposed development site is, at least in part, archaeologically classified as "middens". These have been defined in archaeology:"'Midden' is an old English word for a household rubbish dump and this is the meaning used by archaeologists. Middens are places where food remains, such as shellfish and animal bones, ash and charcoal from fires, and broken or worn-out tools were thrown away, dumped or buried." (Heritage New Zealand Pouhere Taonga, 2016)

The members of the Otahuao Burial Trust and the Kaire Edmonds Whānau Trust, and the tūpuna before them, have a much broader understanding of these areas. "Middens" (a form of poka) were, indeed, a receiving area for the discarded shells and bones of kai consumed from the rohe. However, due to the fact that every shell and the majority of items found in the middens were likely to have been handled by, eaten from, or used in other ways to sustain the lives of ngā tūpuna, it is a special area. It connects the lives of those who have passed on to those living, and ultimately to the lives of those yet to be born.

Middens are sites of cultural and historical significance to Māori. It is in them we find the footsteps of our tūpuna. Agricultural practices were carried out and taught to ngā tamariki in these areas. The coastal area of the middens were a wāhi wānanga where the knowledge of the ancestors regarding tidal patterns, behaviour of kai moana and birds, as well as fishing practices were taught.

Middens were not merely rubbish dumps where unwanted items were cast away and never returned to. Instead, they were ever-changing and dynamic places where the tūpuna interacted with the land and one another for the preservation of the mauri of the tangata whenua.

To the bare eye, a midden may appear to be merely the remnants of items no longer wanted by the inhabitants of the land. But to the members of the Otahuao Burial Trust and the Kaire Edmonds Whānau Trust, middens contain the Tūranga Waewae o ngā Tūpuna (The footsteps of the ancestors). Māori collected, prepared, and re-used resources in the rohe of the middens beside the sea, once again indicating the eternal connectedness with the natural and spiritual world. As Māori moved within the midden areas, tools and implements as well as taonga made of greenstone or carved bone would become lost. Artefacts are likely be found within the middens.

Ngā poka (the closest Māori word approximating "middens") were initially created as areas to cast out shells and remnants of food. Later, some of those mounds of shells would have soil, charcoal and other substances added, and upon these mounds kūmara and taro were cultivated. Shells from the area were placed upside down around the mounds to form cups that captured and dripped water collected from rainfall to irrigate the soil. There were many rituals associated with the planting, harvesting and storage of seed, steeped in karakia (prayers) to ensure the survival of the people. A kūmara garden "...is held to be tapu from the commencement of work to the harvesting of crops." (Hirini Moko Mead:69) These methods of agriculture, beliefs and rituals were taught to the tamariki so that they would not be

forgotten. This cycle continued over many generations. In this sense, the middens were a wāhi wānanga (learning place) and sustained cultural and spiritual life for Māori.

The coastal areas of the middens were important wāhi wānanga in which the mātauranga (ancestral wisdom shared and passed on through generations) was shared regarding essential knowledge including tidal activity, behaviours of fish and fowl, fishing techniques, movement of people, and countless other aspects of life. A range of ancestral rituals, including thanking of Tangaroa after collecting kai moana, were taught and learnt in these spaces.

In short, the middens are not simply receptacles for items that were cast away. Instead, they served as rich repositories of items belonging to the ancestors, active locations for cultivation of kai, at times as tapu sites, and special places of learning for tamariki. The middens connect the tūpuna to those living, and to ngā uri whakatupu (descendants in the future). (Emma Gibbs-Smith, personal communication, February 2018)

Cultural Impact of Development on Middens

The members of the Otahuao Burial Trust and the Kaire Edmonds Whānau Trust believe that development over the middens of the proposed development site disturbs yet another of the final physical remnants of the presence of ngā tūpuna o Te Uri Taniwha. It is our view that there remains much to learn from these middens, and as such, each one has the potential to contain special information or artefacts that can have value not only to ngā uri, but also to Aotearoa and the wider world.

6.2 Mudflats and Salt Marshes

Intertidal mudflats and salt marshes are present on proposed Lot 1 situated on the Okura River side of the property, and extend beyond the boundary of the property to the north and east. These mudflats extend over the previously reclaimed land (reclaimed from the late 1950's-1964) between the mainland of the property and Te Korau Island. This has returned Te Korau to its original form as a distinct island.

This area is of significance to us from a cultural perspective as the mudflats are important nursery areas for fish and other kai moana (evidenced by the extensive middens in the area), as freshwater gathering areas (springs often bubble up at the seaside), and comprise the waterway ecology as a whole.

In addition to this importance, wai (water) has a mauri of its own; a life force that is carried within itself, and that is a vital part of the life force of all Māori.

A traditional whakataukī expresses the innate connectedness of Māori to the waters:

"Ko ahau te awa, te awa ko ahau."

"I am the river; the river is me."

This highlights once again the connectedness inherent in the Māori world; that the health of the waterways is reflected in the health of the people—the tūpuna, those currently living, and those who shall be born in future generations.)

Māori gather vitality, health, and security from the waters, and as kaitiaki of this coastal area it is the role and responsibility of Te Uri Taniwha to protect the health of the waterways in the customary rohe.

The intertidal mudflats are important to resident (non-human) animal life, as well as to migratory animals. Birds, fish, and other animals breed and begin their lives there. Migratory birds that visit the mudflats depend upon the area in order to build up their fat reserves before moving onto areas where food sources may be more uncertain.

Figure 7: Animal Life in The Mudflats

Producers	macroscopic and microscopic algae living on the surface, sulphur bacteria, detritus food chain
Grazers	snails
Suspension feeders	clams, worms, crustaceans
Detritus feeders	clams, worms
Carnivores	rays, flatfish and birds

Table Source: http://www.coastsandreefs.net/bio/mudflats.php .

As the mana whenua and kaitiaki of the mudflats/salt marshes area between Te Korau Island and Lot 1, The Kaire Edmonds Whānau Trust and the Otahuao Burial Trust have identified a number of threats regarding development in or near the mudflats. These include:

Cultural Impact of Development in, over, or near the Mudflats:

A. Redirecting, limiting, or changing the flow of the waters of the mudflats or salt marshes from their natural paths would adversely impact the gathering of kai moana from traditional fishing grounds in both the short and long term. This is due to a possible disruption of the usability of the area by animals as a nursery area. Protecting the nursery area of the mudflats allows younger animals to mature to levels at which they can safely move out to sea and reproduce.

   Casting portions of the mudflats into darkness by covering them with a causeway would further exacerbate this effect by limiting growth of macroscopic and microscopic algae and other producers necessary to sustain the lives of animals utilising the area for breeding.

B. Development in and around the mudflats or salt marshes would disrupt the area, and possibly the natural tidal flow over the area, compromising the integrity of the fresh water resources of the area and the surrounding coastal waterways.

C. An excess of nitrogen and phosphorus from animal excrement, sewage outflow, and any fertilizers used on the foreshore can create runoff. This can cause 'algal bloom' followed by depleted oxygen. The reduced level of oxygen in the waters will lead to the death of animals living in or on the bottom of the mudflats. This would affect the integrity of the ecology of the area as a whole, and the ability to collect mahinga kai (customary food) originating at the mudflats in general.

D. Any stock allowed access to browse or pug in the mudflats or foreshore areas causes environmental damage and pollutes the waterways, including:

- Damage to native plants, saltmarsh and other estuarine and harbour edge vegetation;
- Crushing of crabs and shellfish and disturbs whitebait breeding grounds;
- Damage to eel grass beds, which are habitat and breeding grounds for native fish;
- Spreading of weeds; and
- Adding sediment and phosphorus from pugging and bank erosion, which reduces water clarity and increases algal blooms.

6.3 Te Korau Island ('Konaia'/'Onaia')

Te Korau Island is situated at a strategic point at the head of the Okura River and adjacent to the Kerikeri Inlet. The island is in the northeast area of Lot 1. It is separated from the mainland by intertidal mudflats. Whilst recorded on maps as "Te Korau", it was known in the 1940s to the kaumatua and other local Māori as "Konaia" or shortened to the place name of "Onaia". (E. Horton, personal communication relaying information provided in the past by her grandfather Alfonso Cook, February 2018.)

Figure 8: *Lot 1 DP 167657 aerial view with Te Korau Island shown to the east of the Okura River, northwest corner, 2016.*

The island holds a place of importance in the history of the hapū of Te Uri Taniwha and the ahi kā of the rohe for many reasons.

Like the middens, the land of Te Korau/Konaia Island was a multiple-purpose area. It was utilised by the tūpuna at various points in time as a sentry point, a communications centre, and as a dwelling place, with portions of the island being set asice for use as a hahunga site.

Because of its unique location, distinct from the main and and where the Okura River meets the Kerikeri Inlet, Te Korau Island has traditionally been used as a sentry point by tūpuna who would have had an unobstructed view of oncoming arrivals (friends or foes) to the area from the north. Lookouts stationed on the island could easily identify movements of seafaring vessels on the open waters of the inlet, and then warn others in the area before the landfall of such vessels.

Te Korau Island was not only an ideal sentry point, but it also served as a communications centre. The history of the tūpuna of Te Uri Taniwha includes stories of the hapū using controlled fire on the island to create smoke which would be used to send messages to whānau at a distance. This ancient form of signalling utilising smoke has been used by indigenous cultures for thousands of years. These signals could be sent to communicate a range of messages; from arrival of seafaring vessels heading toward the Okura River, to more common events. In the early 20th Century, Māori inhabiting the area continued to use smoke signalling to indicate fishing conditions to whānau in other locales in the rohe of Te Uri Taniwha, including Mount Pouerua, Mount Pokaka, Te Whārau, and Mataka.

Te Korau Island was inhabited both seasonally and year-round by various occupants throughout history. In addition, it was visited throughout the 1950s by locals who travelled there for a variety of purposes. Healthy men carried out various working tasks on Te Korau Island. At that time, a single pākeha resident lived on the land.

(E. Horton, personal communication, February 2018.)

Most significantly, Te Korau Island had been used before European occupation as a traditional hahunga site. The hahunga is a stage of the old traditional Māori burial process in which the deceased person is prepared for final interment by a cleaning of the bones using differing methods. At the end of the hahunga, the kōiwi (skeletal remains) would be buried, sometimes in hidden caves and other secret locations. "Sites where traditionally bones were scraped as a part of the old hahunga ceremony were also tapu." (Hirini Moko Mead:68) As such, Te Korou Island is a wāhi tapu site that must be protected.

(J. Clyde [Ngāti Hou], personal communication, 2017)

Cultural Impact of Development on Te Korau Island

Te Korau Island, due to its importance to the hapū, is a culturally sensitive area. Clearing land, disrupting soil, building upon or otherwise altering Te Korau Island would be considered a breach of the sacred nature of this wāhi tapu in the history and culture of the Otahuao Burial Trust and the Kaire Edmonds Family Trust, as well as to the descendants of Te Uri Taniwha and Ngāti Hou.

7. Recommendations

Where applicable, Te Uri Taniwha's cultural values-based assessment determines adverse effects from subdivision, use, and development. These assessments have directed recommendations to avoid, remedy, or mitigate potential effects on the values expressed in this report.

All archaeological sites in Aotearoa are protected under the provisions of the Heritage New Zealand Pouhere Taonga Act of 2014. It is an offence to modify or destroy an archaeological site regardless of if it is recorded or not. Section 42, Subsections 1-2 mandate that any person carrying out work that may modify or destroy an archaeological site must obtain an

archaeological authority to undertake such work before the commencement of work unless they have prior authority granted by Heritage New Zealand.

7.1 Higher Elevations of the Mainland

Due to ecological and cultural values set forth in this report, the Otahuao Burial Trust and the Kaire Edmonds Whānau Trust find that development on the higher elevation of Lot 1 DP 167657 is not expected to significantly impact cultural values or interests. This finding informs the recommendation that the higher elevations of land away from the foreshore are best suited for development.

We recommend that any earthworks or development be restricted to higher ground that is away from the waterways.

The Geometria Archaeological Assessment of the Proposed Subdivision acknowledges that "The possibility of subsurface finds in this area cannot be discounted" (Jonathan Carpenter, 2017: 7), and we concur.

In the event that unplanned discovery of artefacts or any archaeological remains occurs in the course of the development of the property, we require that all work shall stop immediately and that the Otahuao Burial Trust and the Kaire Edmonds Whānau Trust, as well as Heritage New Zealand Pouhere Taonga, must be informed within 12 hours.

In the event that kōiwi (human skeletal remains) are discovered during any stage of the development of the property, we require that all work shall stop immediately and that the New Zealand Police, Otahuao Burial Trust and the Kaire Edmonds Whānau Trust, and Heritage New Zealand Pouhere Taonga must be informed within 12 hours.

7.2 Mudflats and Salt Marshes

Due to the cultural and ecological threats set forth in this report, it is the position of the Otahuao Burial Trust and the Kaire Edmonds Whānau Trust that any earthworks and other construction or development should be avoided in, on, or near the waterways. This recommendation includes the proposed causeway.

This recommendation is to maintain the mauri of the waterways, protecting the traditional breeding ground of fisheries and traditional sources of kai moana.

It is important to note that, in compliance with the Northland Regional Council Rules, any livestock must be kept out of the coastal marine areas.

7.3 Te Korau Island

The Archaeological Assessment for the Proposed Subdivision of Lot 1 DP 167657 concludes that "Te Korau Island on proposed Lot 1 is archaeologically sensitive" (Jonathan Carpenter, 2017: 37), and we agree.

In addition to being archaeologically sensitive, Te Korau Island is also extremely culturally sensitive and must be protected.

We recommend that no development, earthworks, or other construction takes place on Te Korau Island.

7.4 Monitoring and Controlling Earthworks

The Otahuao Burial Trust and the Kaire Edmonds Whānau Trust recommend that all development and earthworks should be monitored by the mana whenua.

The Otahuao Burial Trust and the Kaire Edmonds Whānau Trust requires that they be notified at least 14 days in advance of any earthworks activity on Lot 1 DP 167657.

The mana whenua also recommend that appropriate erosion and sediment control measures are put in place prior to, and during, all earthworks and construction.

This will protect the water quality and the health of kai moana in the waterways.

7.5 Encounters with Archaeological Artefacts/Cultural Remains in The Future

The Archaeological Assessment for the Proposed Subdivision of Lot 1 DP 167657 recommends that "If archaeological remains or buried cultural deposits (layers of shell midden, oven stones, artefacts etc.) are encountered on the property in the course of other day to day activities, S. Lowndes or her agents should cease work" (Jonathan Carpenter, 2017: 38), and we support this recommendation.

In addition, we recommend that if such an event occurs, The Otahuao Burial Trust and the Kaire Edmonds Whānau Trust as well as Heritage New Zealand Pouhere Taonga should be notified within 12 hours of the event.

8. Conclusion

The Kaire Edmonds Whānau Trust and the Otahuao Burial Trust has worked closely with kaumātua, archaeologists, and others to ensure that as many cultural sites as possible on Lot 1 DP 167657 are protected through all stages of development, from subdivision to development and use.

The Kaire Edmonds Whānau Trust and the Otahuao Burial Trust acknowledge the owner's willingness to actively engage with them. The Kaire Edmonds Whānau Trust and the Otahuao Burial Trust anticipate working with the applicant and Heritage New Zealand Pouhere Taonga for this proposal.

APPENDICES

Appendix 1: Glossary

Ahi Kā/Take Tūpuna	"The Fires of Occupation". Ancestral right claimed by reciting whakapapa and sustained through continuous occupation and use
Atua/Ngā Atua	God or Gods, Ancestor(s) with continuing influence
Awa	River
Hapū	Sub-tribe
Hahunga	Ceremony for uplifting bones - includes the actual disinterment, the scraping of the bones and ritual practices before moving them to a final resting place
Hauangiangi	Ancestor of Otahuao Burial Trust
Haū Kainga/Ahikā	Living descendants of a hapu, still residing on traditional lands
Iwi	Tribe
Kaitiaki	Guardian
Kai Moana	Food from the sea/water
Karakia	Prayers
Keripoka	A receptacle dug into the ground
Kōiwi	Human skeletal remains
Mahinga Kai	Customary food and/or resources
Mana	Authority
Mana Whenua	Those with cultural authority over a specific body of water
Mana Whenua	Those with cultural authority over a specific area
Mātauranga	Traditional knowledge shared and passed on through generations
Mauri	Life force from a vital essence, special nature, spark of life
Moana	Ocean/Sea/Salt water
Pā	Fortified village site
Papatūānuku	Earth Mother
Poka	Receiving area
Ranginui	Sky Father

Rohe	Region of interest
Tae Moana	Foreshore, Seaside
Ngā Tamariki	Children
Tangata Whenua	Indigenous people of the land
Tangaroa	Guardian of the sea
Taonga tuku iho	Treasure handed down from the ancestors
Tapu	Restriction or Prohibition; A person, place or thing is dedicated as tapu and is thus removed from the sphere of the profane and put into the sphere of the sacred, no longer to be put to common use
Ngā Taonga	Things that are highly treasured by Māori
Te Ao Māori	The Māori world and perspective
Tino Rangatiratanga	Sovereignty, Chieftainship, Right to exercise authority over, Chief autonomy, Ownership
Te Reo Māori	Māori language
Te Taiao	The natural world, environment/nature
Tūpāpaku	Recently deceased person
Ngā Tūpuna/ Ngā Tīpuna	Ancestors
Tūranga Waewae o ngā Tūpuna	The footsteps of the ancestors
Ngā Uri	Descendants
Ngā Uri Whakatupu	Descendants who are yet to be born
Wai	Water
Wāhi Tapu	Sacred place
Wāhi Wānanga	Place of learning/education place
Whakatauki	Proverb

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Appendix 3: Approvals for Release of CIA to The Applicant

Ian Mitchell

From: Esther Horton <clarrieh@xtra.co.nz>
Sent: Friday, 6 April 2018 10:21 a.m.
To: Ian Mitchell
Subject: Approval of CIA report.

I Esther Horton have read and approve of the CIA report. I also approve that you Ian Mitchell send the CIA report on to the applicant [redacted].

Ian Mitchell

From: Ian Mitchell <tekauri1@xtra.co.nz>
Sent: Friday, 6 April 2018 10:58 a.m.
To: staceywadkins@yahoo.com
Subject: approval of CIA report

Hi Stacey,

I have read and approve of the CIA report. I approve that this document is ready to be sent to the applicant [redacted].

Ian Mitchell

Chair, Kaire Edmonds Whanau Trust

Chair, Otahuao Burial Trust

APPENDIX 9: *District Plan map 84 and Far North Potential Flooding Map FL3*

Lot 1 DP 167657

Date Printed: 11-November-2018

SCALE 1: 5,000

0 250

Meters

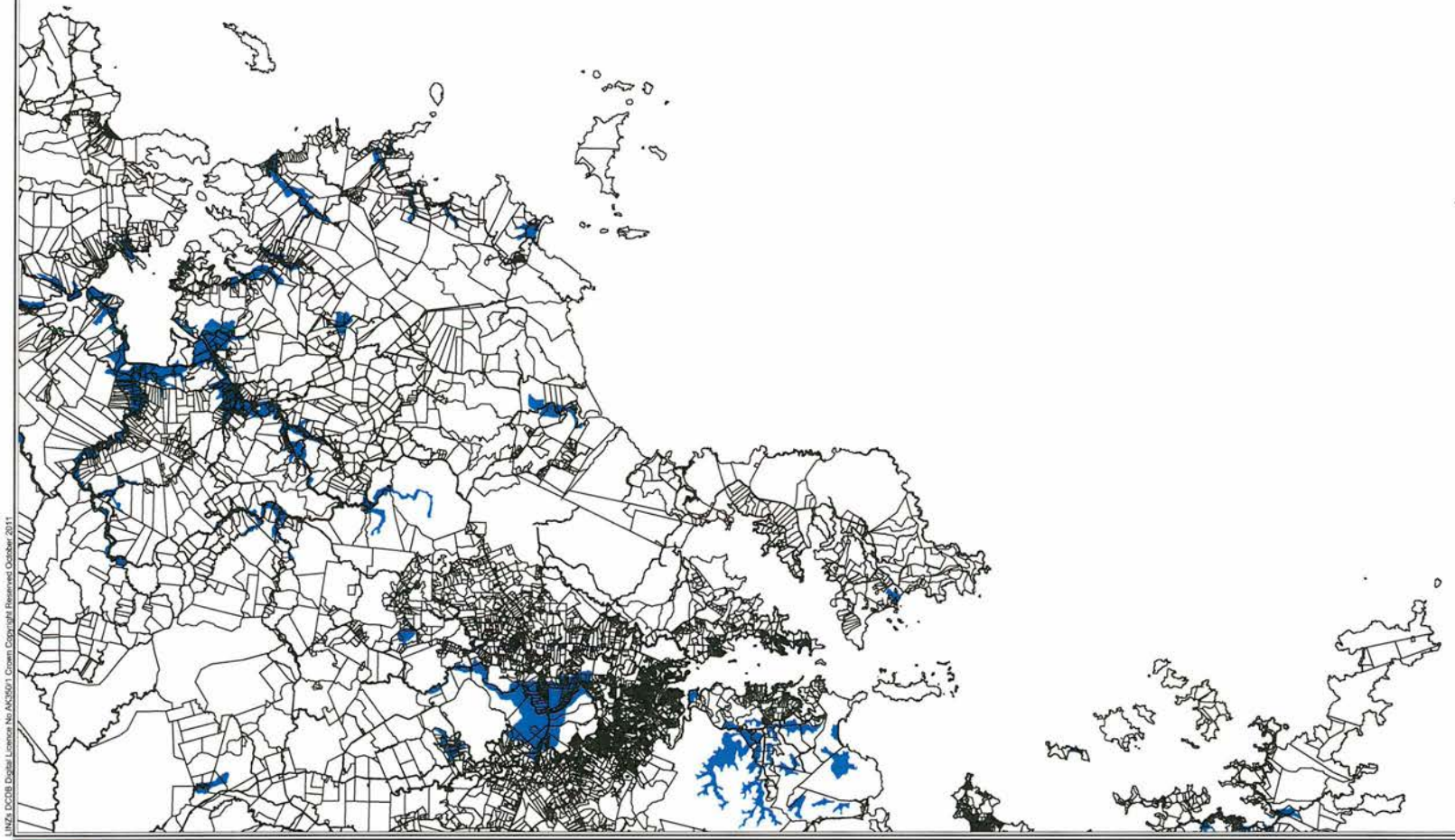
Projection: NZGD_2000_New_Zealand_Transverse_Mercator

FAR NORTH MAPS

Notes:

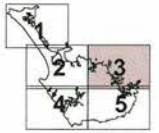
The data from which these maps have been derived has been surveyed and recorded at a scale of 1:50,000. The maps should not be enlarged or used at a more detailed scale.

This map is **indicative** only. This map shows areas that are considered to be susceptible to flooding. Please check the Far North District Council Hazard Register (or contact the Northland Regional Council) for more accurate information.



Flooding

Areas Susceptible to Flooding



Map Index

Map FL3

Far North District Plan - NRC Potential Flooding Maps

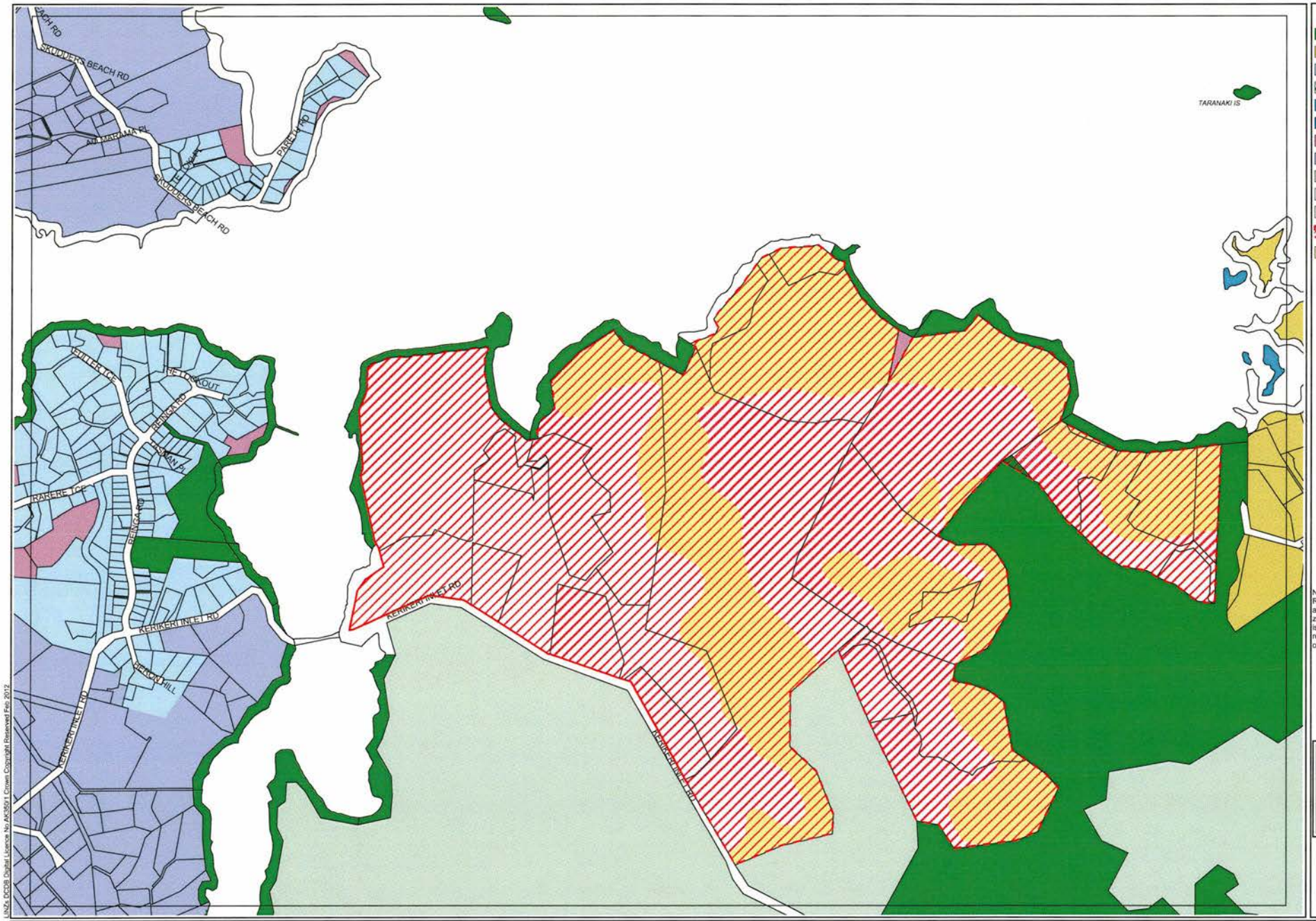
N

0 4 8 12 Km

Scale 1:200,000

DISCLAIMER

Considerable care has been taken to avoid errors and omissions, and the latest information has been included in these District Plan maps. However, even with the greatest care inaccuracies may occur and therefore the Far North District Council cannot accept any responsibility for such errors and omissions.



Zone

- Conservation
- Coastal Living
- Coastal Residential
- Esplanade Priority
- General Coastal
- Lakes and Rivers
- Recreational Activities
- Rural Living
- Rural Production
- Road
- Coastal Marine
- South Kerikeri Inlet Zone
- Sensitive Area

Note :-
Roads carry the same zoning as the adjoining land. If a boundary between zones follows a road, the zone boundary is located on the centreline of the formed road, or where unformed, the centreline of the legal road

79	80	81
83	84	85
87	28	29

Map Index

Map 84

REINGA

Far North District Plan - Zone Maps

N

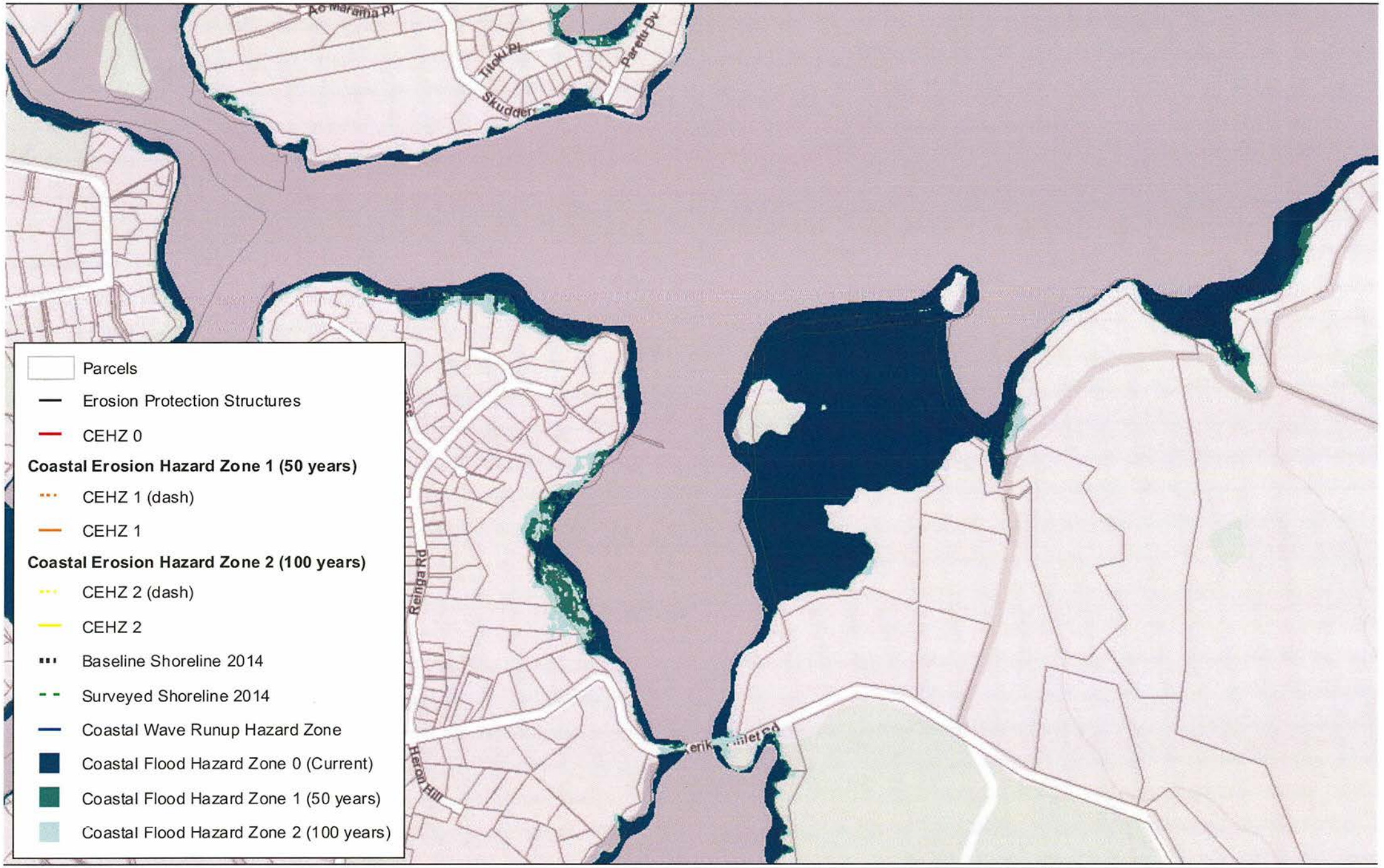
0 200 400 600 m

Scale 1:10,000

DISCLAIMER

Considerable care has been taken to avoid errors and omissions, and the latest information has been included in these District Plan maps. However, even with the greatest care inaccuracies may occur and therefore the Far North District Council cannot accept any responsibility for such errors and omissions.

APPENDIX 10: Northland Regional Council maps



Northland REGIONAL COUNCIL
Te Kaunihera ā rohe o Te Taitokerau

Natural Hazards

Projection NZTM. Datum NZTM2000.
DISCLAIMER:
The Northland Regional Council cannot guarantee that the information shown is accurate and should not be reused in any manner without proper consultation with its owner.

N

0 0.045 0.09 0.18 0.27 0.36 0.45 Kilometers

Historic Heritage Areas

- Historic Heritage Area
- Rivers
- Lakes

Lake catchments

- Lake catchments

Groundwater Management Units

- Aupouri Aquifer
- Coastal Aquifers
- Other Aquifers
- Priority Catchments
- High Sediment Yield Land
- Popular Swimming Sites
- Upstream Catchments
- Forestry Restriction Areas
- Lakes

Floodgates

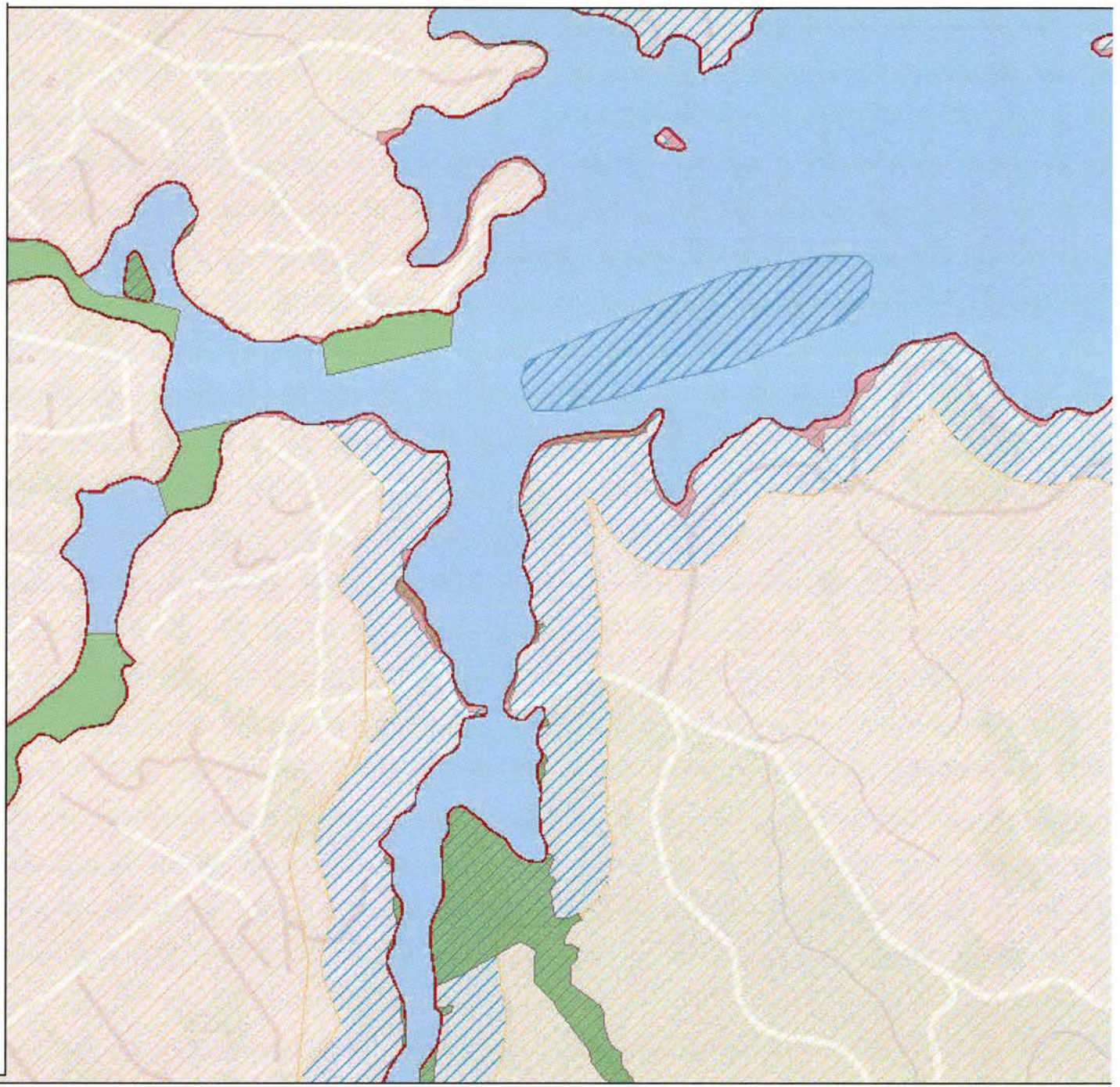
- Floodgate

Flood Control

- Stopbank

Flood Control Areas

- Spillway
- Deflection Bank
- Stopbank
- Detention dam
- Drainage Districts



Northland REGIONAL COUNCIL
Te Kaunihera ā rohe o Te Taitokerau

Proposed Regional Plan

Projection NZTM, Datum NZTM 2000.
DISCLAIMER:
The Northland Regional Council cannot guarantee that the information shown is accurate and should not be reused in any manner without proper consultation with its owner.

N

0 0.075 0.15 0.3 0.45 0.6 0.75
Kilometers

Northland
REGIONAL COUNCIL
Te Kaunihera ā rohe o Te Taitokerau

Proposed Regional Plan

Projection NZTM. Datum NZTM 2000.
DISCLAIMER:
The Northland Regional Council cannot guarantee that the information shown is accurate and should not be reused in any manner without proper consultation with its owner.

N

0 0.075 0.15 0.3 0.45 0.6 0.75
Kilometers

Northland REGIONAL COUNCIL
Te Kaunihera ā rohe o Te Taitokerau

LocalMaps Print

N

0 0.0425 0.085 0.17 0.255
Kilometers

June 27 2018

APPENDIX 11: District Plan objectives and policies

10.10 SOUTH KERIKERI INLET ZONE

CONTEXT

The South Kerikeri Inlet Zone is located along the southern edge of the Kerikeri Inlet and as such forms a part of the maritime gateway to the historic settlement of Kerikeri. Whilst predominantly rolling pastoral country, the landform also includes low-lying backshore flats, coastal flanks and areas of very steep and unstable terrain.

While much of the coastal margin of the inner Kerikeri inlet has been urbanised, the coastal margins of this area retain their natural qualities being relatively free of built structures. The open spaces and rural nature of the area provide visual relief from the other more modified areas of the coast. Its visual importance is increased given its proximity to the more urbanised area of adjacent Kerikeri Township. It is an area of "contrast" between the more urbanised areas to the west and the lower lying area to the east. The Okura River to the west and the Waitangi Wetland to the east form natural boundaries that set this area apart.

Because of its undulating nature, the entire area is not visible from any one location. The more elevated portions of the land which are visible from a wide area and those slopes facing the Inlet are particularly sensitive. Other areas are more introspective and contained. The natural character, open space and rural nature of the area are important to the visual context of the wider area.

10.10.1 ISSUES

These issues supplement those set out in ***Section 10.1.***

10.10.1.1 The natural, open, rural and coastal character of the South Kerikeri Inlet Zone can come under pressure by development that is not sympathetic to that character.

10.10.1.2 Because of the generally smaller lot sizes, rural residential development in the coastal environment can have adverse visual effects and consequently can affect the amenity of the area for adjoining land owners and the public.

10.10.2 ENVIRONMENTAL OUTCOMES EXPECTED

These outcomes supplement those set out in ***Section 10.2.***

10.10.2.1 A South Kerikeri Inlet Zone in which rural residential development occurs in appropriate locations that have the capacity to absorb such development.

10.10.2.2 A South Kerikeri Inlet Zone in which development does not detract from the open, rural and coastal nature of its natural character, and does not cause adverse effects to natural and physical resources in the coastal environment.

10.10.3 OBJECTIVES

These objectives supplement those set out in ***Section 10.3.***

10.10.3.1 To maintain the combination of open, rural, coastal and natural characteristics of the Zone.

10.10.3.2 To provide for the wellbeing of people by enabling low-density residential development at appropriate locations taking into account the potential adverse effects on the coastal environment.

10.10.3.3 To ensure that while enabling low-density development the adverse effects on the environment of such development are avoided, remedied or mitigated particularly in areas of high visual sensitivity.

10.10.4 POLICIES

These policies supplement those set out in ***Section 10.4.***

10.10.4.1 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the coastal-rural character of the zone in regards to Section 6 matters, and shall avoid adverse effects as far as practicable by using techniques including:

(a) clustering and grouping development (including new buildings) within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns and on open space and rural amenity values, including by clustering and grouping development (including new

buildings) outside the visually sensitive areas of the South Kerikeri Inlet Zone as defined on ***Map 84***;

(b) appropriately integrating design and land use within the visually sensitive areas of the South Kerikeri Inlet Zone to maintain and enhance natural and rural amenity values associated with a broad-scale and coherent visual pattern of simple and uncluttered open spaces;

(c) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;

(d) providing for, legal public right of access to and use of the foreshore and any esplanade areas through the siting of buildings and development and design of subdivisions;

(e) through siting of buildings and development, design of subdivisions, and provision of access that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the district (refer Chapter 2, and in particular section 2.5, and Council's "Tangata Whenua Values and Perspectives (2004)");

(f) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests;

(g) protecting historic heritage, and in particular of the Kerikeri Basin Heritage Precinct, through the careful siting of buildings and development and design of subdivisions in areas less visually sensitive;

(h) ensuring development reflects the role of the area as a maritime entrance to Kerikeri and that activities are of a scale and size that is consistent with the natural character of the zone.

10.10.4.2 That standards are set to ensure that subdivision, use or development provides adequate infrastructure and services and that open space and rural amenity values and the quality of the environment are maintained and enhanced.

10.10.4.3 That a wide range of activities be permitted in the South Kerikeri Inlet Zone, where their effects are compatible with the preservation of the natural character of the coastal and rural environment.

10.10.4.4 That the visual and landscape qualities of the coastal and rural environment are protected from inappropriate subdivision, use and development.

COMMENTARY

The objectives and policies of the South Kerikeri Inlet Zone are a subset of those for the coastal and rural environment. As such they are aimed at a particular area within the coastal-rural environment and the particular constraints and opportunities inherent in the environment of this area. They are intended to be as flexible, permissive and enabling as possible given the statutory requirement to preserve the natural character of the coastal environment and the sensitivity that parts of that landscape have for the wider area.

*The objectives and policies recognise that the rural-coastal character of the South Kerikeri Inlet Zone is particularly at risk from inappropriate urban intensification as the Kerikeri urban area expands, partly because of the proximity of the Waitangi Wetland, but also because of the existing residential areas to the west and east. However, because of the topography, there is potential for integrating discrete areas of built development with not more than minor effects. The landscape features of this area suggest that accommodating increased levels of development would be better absorbed by clustering development in appropriate places and maximising the visible areas of pastoral open space that is "uncompromised" or uncluttered by built development rather than spreading such development throughout the whole area. To assist development and subdivision in managing potential visual impacts, land within the zone has been identified in terms of its visual sensitivity (see **Map 84**). Subdivision is enabled as a restricted-discretionary activity where land is not of high sensitivity (**Rule 13.7.2.1 Table 7**). Otherwise subdivision is by way of a management plan only (**Rule 13.9.2**).*

12.7 LAKES, RIVERS, WETLANDS AND THE COASTLINE

Wai

Ma te wai, ka ora ai nga mea katoa. Kia tupato te whakahaere mahi o tena, kia u tonu ki te mauri.

Water

Water has a vital quality that nourishes all living things. Let us ensure its purity to retain that essential life force - the mauri of the water.

CONTEXT

Note: For the purposes of this chapter "lakes" include the Waingaro and Manuwai Reservoirs.

The Far North District has an extensive coastline, eight harbours, estuaries, many rivers and streams, lakes and wetlands. The health of these water bodies is vital to sustaining all kinds of life. Human activity, however, can lead to contamination of the water, reduced water quantity and consequential loss of habitats. For example, Lake Omapere and a number of small west coast dune lakes have been contaminated by nutrients and other material in rural run-off to the extent that they are no longer suitable for their indigenous aquatic ecosystems, contact recreation or water supplies, and have degraded aesthetic values. Also, there are several inner harbours and estuaries which, due to contamination from rivers, do not meet the very high standards for shellfish gathering, cultivation, or human consumption e.g. Kawakawa estuary, some areas of the inner Bay of Islands and inner Whangaroa harbour (refer to s17/4 of the Regional Policy Statement for Northland). Maintaining water quality and quantity is therefore fundamental if sustainable management of natural and physical resources is to be achieved.

The District has a surprising scarcity of high quality water resources, despite its large land area. Most of the rivers and streams are relatively short with small catchments which means that sources of potable water are limited. Conserving water quantity is therefore very important, particularly in catchments near to settlements that have the capacity to be utilised as potable water supplies.

Pollution by rural and urban run-off contaminated from non-point source discharges and stormwater is a major cause of deteriorating water quality. Degradation of water quality can have an adverse impact on visual and amenity values. The Northland Regional Council and Far North District Council jointly share responsibility for ensuring that pollution from this, and all other sources, is minimised. While the Northland Regional Council is responsible for the control of discharges of contaminants to air, land and water, and for the use of land and water for the maintenance and enhancement of water quality, Far North District Council has primary responsibility for the subdivision, use and development of land, and for the control of activities on the surface of water. Thus, Far North District Council can manage the location of buildings, impervious surfaces and effluent disposal in relation to riparian margins as one method of addressing the effects of activities on water quality. The Council can also, through its own Strategic and Annual Plans, set priorities for the public provision of stormwater systems and adopt best management practices when implementing its works programme. Accordingly, the Plan provisions are designed to complement those of the Regional Policy Statement and Regional Water and Soil Plan.

Public access to the margins of rivers, lakes and the coastline is highly sought after. In particular, tangata whenua have an interest in gaining access, via traditional paths, to food-gathering areas. Also, there is considerable demand for residential properties with beach frontage and/or sea views, especially along the eastern coastline. As a result, subdivision offers many opportunities to acquire riparian margins and to secure public access where appropriate. This includes the opportunity to have unformed legal road vested as esplanade reserve. However, it will not always be wise to facilitate public access because of conservation, amenity, landscape, heritage, cultural and spiritual values, or topography or safety reasons. In such cases, public acquisition of the riparian margins may be justified in order to protect and preserve those special values.

Historically, some settlements have developed close to, or over, the coast e.g. Mangonui and Rawene. These are recognised as having a special character and are therefore identified as heritage precincts. Some activities also have a need to be located close to, or over, the boundary of the coastal marine area. Where there is a functional need of this kind, the Plan recognises and provides for the circumstances in which development can occur.

Where development occurs within the coastal marine area (under the jurisdiction of the Northland Regional Coastal Plan) there may be adverse effects that occur on the land i.e. within the District. For example, parking associated with marinas can cause traffic problems and loss of amenity in coastal settlements. Co-operation between the two Councils is essential to ensure that all of the adverse effects of an activity located in the coastal marine area are adequately addressed when resource consents are considered. This is one of several cross-boundary issues which need to be resolved.

12.7.1 ISSUES

12.7.1.1 Land use and subdivision activities adjoining or on lakes, rivers, wetlands or the coastline can reduce their amenity and natural values, including the quality and quantity of water. However, there is significant opportunity to restore, rehabilitate and revegetate these areas through the application of methods set out in this Plan.

12.7.1.2 Wetlands can be adversely affected by land drainage, modification of the natural water levels, vegetation clearances, filling, polluted run-off and stock, reducing the effectiveness of their natural functions of buffering water flows and providing habitat.

12.7.1.3 Some activities depend on being located right next to the water, such as port facilities, shore-based facilities for marine farming, jetties and boatyards, and there is a need to provide for these activities in a way which minimises adverse effects on the natural character of lakes, rivers and the coastline.

12.7.1.4 Recognising and providing for the historic pattern of settlement in some towns whereby buildings are located very close to, or even over, the water.

12.7.1.5 Access to lakes, rivers and the coastline is generally inadequate compared to demand from tangata whenua, residents and visitors. An important way this can be addressed at the time of subdivision as for example in a management plan but, at the same time, there are some places which are inappropriate for public access because of conservation, cultural, heritage, and spiritual values, or topography or safety reasons.

12.7.1.6 Impervious surfaces increase run-off to natural water bodies which can alter their habitat values and physical form through scour and sediment deposition, adversely affect water quality and reduce water quantity in ground and surface water bodies.

12.7.1.7 The degradation of the mauri and wairua of water bodies and adverse effects on kaimoana due to pollution.

12.7.1.8 Human activities can create and exacerbate the risk of erosion and other natural hazards in riparian areas.

12.7.1.9 Vehicles on beaches can have adverse effects, impacting on dune stability, and dune and coastal flora and fauna. Domestic pets, particularly dogs, can have adverse effects on species dependent on riparian areas and the coastal margin. Stock grazing in riparian margins can have adverse effects on habitat values, natural hazards and on water quality.

12.7.2 ENVIRONMENTAL OUTCOMES EXPECTED

12.7.2.1 Use of lakes and rivers which is appropriate in terms of the preservation of the natural character and values of these areas.

12.7.2.2 Riparian margins are enhanced.

12.7.2.3 Activities on, or adjoining, the surface of water bodies are carried out in a way which avoids, remedies or mitigates adverse effects on the environment.

12.7.2.4 Buildings and other impervious surfaces generally set back far enough from riparian margins including from the coastal marine area, so that esplanade reserves, strips or other forms of protection can be achieved in the future if required, except in locations where the types of activity or historic patterns demand otherwise.

12.7.2.5 Enhanced public access to and along lakes, rivers and the coastal marine area.

12.7.2.6 A reduction in the rate of loss or adverse modification of indigenous wetlands.

12.7.3 OBJECTIVES

12.7.3.1 To avoid, remedy or mitigate the adverse effects of subdivision, use and development on riparian margins.

12.7.3.2 To protect the natural, cultural, heritage and landscape values and to promote the protection of the amenity and spiritual values associated with the margins of lakes, rivers and indigenous wetlands and the coastal environment, from the adverse effects of land use activities, through proactive restoration/rehabilitation/revegetation.

12.7.3.3 To secure public access (including access by Maori to places of special value such as waahi tapu, tauranga waka, mahinga kai, mahinga mataitai, mahinga waimoana and taonga raranga) to

and along the coastal marine area, lakes and rivers, consistent with ***Chapter 14 - Financial Contributions***, to the extent that this is compatible with:

(a) the maintenance of the life-supporting capacity of the waterbody, water quality, aquatic habitats, and

(b) the protection of natural character, amenity, cultural heritage, landscape and spiritual values; and

(c) the protection of public health and safety; and

(d) the maintenance and security of authorised activities (but acknowledging that loss of privacy or fear of trespass are not valid reasons for precluding access).

In some circumstances public acquisition of riparian margins may be required and managed for purposes other than public access, for example to protect significant habitats, waahi tapu or historic sites, or for public recreation purposes.

12.7.3.4 To provide for the use of the surface of lakes and rivers to the extent that this is compatible with the maintenance of the life supporting capacity of the water body, water quality, aquatic habitats, and the protection of natural character, amenity, cultural heritage, landscape and spiritual values.

12.7.3.5 To avoid the adverse effects from inappropriate use and development of the margins of lakes, rivers, indigenous wetlands and the coastline.

12.7.3.6 To protect areas of indigenous riparian vegetation:

(a) physically, by fencing, planting and pest and weed control; and

(b) legally, as esplanade reserves/strips.

12.7.3.7 To create, enhance and restore riparian margins.

12.7.4 POLICIES

12.7.4.1 That the effects of activities which will be generated by new structures on or adjacent to the surface of lakes, rivers and coastal margins be taken into account when assessing applications.

12.7.4.2 That land use activities improve or enhance water quality, for example by separating land use activities from lakes, rivers, indigenous wetlands and the coastline, and retaining riparian vegetation as buffer strips.

12.7.4.3 That adverse effects of land use activities on the natural character and functioning of riparian margins and indigenous wetlands be avoided.

12.7.4.4 That adverse effects of activities on the surface of lakes and rivers in respect of noise, visual amenity of the water body, life supporting capacity of aquatic habitats, on-shore activities, the natural character of the water body or surrounding area, water quality and Maori cultural values, are avoided, remedied or mitigated.

12.7.4.5 That activities which have a functional relationship with waterbodies or the coastal marine area be provided for.

12.7.4.6 That public access to and along lakes, rivers and the coastline be provided as a consequence of development or as a result of Council (see ***Method 10.5.19***) or pubic initiatives except where it is necessary to restrict access or to place limits on the type of access, so as to:

(a) protect areas of significant indigenous vegetation and/or significant habitats of indigenous fauna or

(b) protect cultural values, including Maori culture and traditions; or

(c) protect public health and safety;

to the extent that is consistent with policies in ***Chapter 14***.

12.7.4.7 That any adverse effects on the quality of public drinking water supplies from land use activities, be avoided, remedied or mitigated. (Refer to ***Commentary*** and ***Methods 12.7.5.6*** and ***12.7.5.7***.)

12.7.4.8 That the Council acquire esplanade reserves, esplanade strips and access strips in accordance with ***Chapter 14 - Financial Contributions*** and ***Method 10.5.10*** of the Plan.

12.7.4.9 That riparian areas in Council ownership be managed so as to protect and enhance the water quality of surface waters.

12.7.4.10 That historic buildings erected close to, or over, water bodies be protected and provision be made for new buildings where this form of development is in keeping with the historic pattern of settlement.

12.7.4.11 That the extent of impervious surfaces be limited so as to restore, enhance and protect the natural character, and water quantity and quality of lakes, rivers, wetlands and the coastline.

12.7.4.12 That provision be made to exempt activities on commercial or industrial sites from the need to be set back from the coastal marine area, and from the need to provide esplanade reserves on subdivision or development, where the location of the commercial or industrial site is such as to be particularly suited to activities that cross the land-water interface, or have a close relationship to activities conducted in the coastal marine area. Refer also to ***Rule 14.6.3***.

12.7.4.13 That provision be made to exempt activities on particular sites as identified in the ***District Plan Maps*** as adjacent to an MEA from the need to be set back from the coastal marine area where those activities on that site have a functional relationship with marine activities and cross the line of Mean High Water Springs (MHWS).

12.7.4.14 That the efficient use of water and water conservation be encouraged.

12.7.4.15 To encourage the integrated protection and enhancement of riparian and coastal margins through:

(a) planting and/or regeneration of indigenous vegetation;

(b) pest and weed control;

(c) control (including, where appropriate, exclusion) of vehicles, pets and stock.

Note: The Regional Coastal Plan for Northland and Regional Water and Soil Plan for Northland contain policies, rules and other methods to protect and enhance wetlands, lakes, rivers and the coastal marine area. Vehicle, pet and stock control is particularly important in areas and at times when birds are nesting.

12.7.5 METHODS OF IMPLEMENTATION

DISTRICT PLAN METHODS

12.7.5.1 Objectives and policies will be implemented through rules in this Section and through minimum site sizes and other provisions specified in ***Chapter 13 Subdivision*** and ***Chapter 14 Financial Contributions***.

12.7.5.2 Through provisions in this section, and elsewhere in ***Chapter 12***, encourage the planting of vegetation and particularly indigenous vegetation on the margins of lakes, rivers, wetlands and the coastal marine area.

12.7.5.3 Identify areas in the Plan where development up to the land-water interface will be provided for. The types of development anticipated to be provided for in this manner include:

(a) river crossings and activities associated with their construction;

(b) pump houses;

(c) legally formed and maintained roads;

(d) buildings and impermeable surfaces associated with utility services;

(e) activities associated with maintenance, replacement and upgrading of network utilities;

(f) other activities (including structures) which cross the land/water interface; and

(g) activities (including structures) which have a close relationship to activities conducted within the coastal marine area.

The areas identified as Maritime Exemption Areas are generally those that are zoned Commercial and/or Industrial in the District Plan and where the adjoining coastal marine area is zoned in the Regional Coastal Plan for Northland as Marine 6 (Wharves) Management Area.

OTHER METHODS

12.7.5.4 Improve physical access to, and along existing esplanade reserves and strips, and marginal strips where appropriate. This will be achieved through the Council setting priorities for expenditure from reserves accounts in its Annual and Strategic Plans.

12.7.5.5 The Council may require (under s77 and s229 of the Act and/or fund the purchase of (under s237F of the Act) esplanade reserves and/or access strips where new sites are created adjacent to lakes, rivers, indigenous wetlands and the coastal marine area. To this end, Council has identified some riparian areas in the Kerikeri area that, because of their high recreational or conservation value, will be given priority when determining requirements for esplanade reserves or strips (shown as ***Esplanade Priority Areas*** on the ***Zone Maps***). Refer also to ***Method 10.5.19***.

12.7.5.6 Water catchments utilised for public potable water supply purposes will be identified (these catchment areas are not identified in this Plan, but are contained in separate documentation outside the Plan, and have also been provided to the Northland Regional Council).

12.7.5.7 The Council will monitor and, if necessary, make submissions on Water and Discharge permit applications to the Northland Regional Council, particularly where such applications are for activities which may affect public drinking water supplies.

12.7.5.8 Bylaws will be adopted to control vehicular and animal access to the coastal environment where necessary to protect the natural character, amenity, cultural heritage, landscape, habitat and spiritual values.

COMMENTARY

Section 6 states that, in achieving the purpose of the Act, the following matters of national importance shall be recognised and provided for:

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision use and development;

(b) the maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers;

(c) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

In addition s7 requires that particular regard be had to, among other things, kaitiakitanga, the maintenance and enhancement of amenity values, intrinsic values of ecosystems and the maintenance and enhancement of natural and physical resources.

The direction provided by these matters of national importance strongly influences the objectives, policies and methods adopted in this Plan. These values have also influenced the New Zealand Coastal Policy Statement, Northland Regional Policy Statement, the Regional Water and Soil Plan and the Regional Coastal Plan. As the District Plan must not be inconsistent with these documents, the national mandate for environmental policy concerning the coastline and riparian margins is carried right through the hierarchy of policy documents and plans.

Given the primary role of the Regional Council in both water and coastal management, this section of the Plan contains complementary objectives, policies and methods regarding those matters which are within the Council's jurisdiction, namely the control of land uses in close proximity to water bodies (including wetlands), activities on the surface of water and riparian margins.

Existing and possible future water catchments need to be protected from land use activities which may have adverse effects on the quantity and quality of water available for potable supply. Point sources of abstraction and discharge will require resource consents from the Northland Regional Council and therefore it is a policy to assess such applications in terms of the risk they pose to water quantity and quality with a view to lodging submissions, if necessary. Non-point sources of contaminants are more difficult to control under a district plan. Therefore the Council is relying, in the first instance, on the best practice, educational and training methods promoted by the Regional Council to address problems such as those which occur in regard to the application of agrichemicals. These are complemented by the objectives, policies and methods that result in setback rules separating potentially incompatible activities from water bodies (refer to ***Objectives 12.7.3.1*** and ***12.7.3.2***; ***Policy 12.7.4.7*** and ***Methods 12.7.5.6*** and ***12.7.5.7***).

As pollution due to rural and urban run-off is a major cause of water quality degradation, controlling the subdivision, use and development of land adjoining these water bodies is important. In particular, setbacks reduce the likelihood of erosion, allow for planting to act as a filter and/or buffer, and ensure that development does not pre-empt opportunities for public acquisition at a later date. Setbacks also help to retain natural character (refer to ***Objectives 12.7.3.1***, ***12.7.3.2*** and ***12.7.3.5***; ***Policies 12.7.4.1***, ***12.7.4.2*** ***12.7.4.3*** and ***12.7.4.11*** and ***Method 12.7.5.1***). *The Council will manage riparian margins in its ownership so as to protect water quality* (***Policy 12.7.4.9***).

Activities occurring near indigenous wetlands are subject to more stringent control because such wetlands are especially vulnerable to adverse effects arising from, for example, changes in natural water levels. They also serve a vital function in moderating water flows and as habitats (***Policy 12.7.4.3***).

Activities on the surface of water may have adverse environmental effects on water quality and quantity, habitats, amenity, heritage, landscape, cultural and spiritual values. Accordingly, the Plan contains objectives, policies and methods which provide the framework for managing these activities (***Objective 12.7.3.4***; ***Policy 12.7.4.4*** and ***Method 12.7.5.1***).

Securing public access to lakes, rivers and the coastline requires a long term strategy, as the acquisition of esplanade reserves takes place over an extended period of time. Further, the purchase of land in order to

complete a link or to secure public access to key locations is limited by available finance. Therefore the Council will use a variety of means in order to provide public access whenever such opportunities occur during subdivision and development of land near lakes, rivers and the coastline. However, there will be circumstances where public access is not desirable and, in these cases, the Council will consider conservation measures to be a priority (refer to ***Objective 12.7.3.3***; ***Policies 12.7.4.6*** and ***12.7.4.8*** and ***Methods 12.7.5.2***, ***12.7.5.4***, ***12.7.5.5*** and ***12.7.5.8***).

To enable development that is functionally related to the water, the Plan identifies Maritime Exemption Areas in parts of the coast where riparian margins are not required (***Objective 12.7.3.5***; ***Policy 12.7.4.5*** and ***Method 12.7.5.3***). *In conjunction with Heritage Precincts* (refer to ***Section 12.5***), *this same approach is used to recognise historic patterns of development.*

Activities such as earthworks and land clearance close to water bodies can adversely affect the stability of their margins, water quality and ecosystem viability. Rules in ***Section 12.3*** *together with the provisions of the Regional Water and Soil Plan control excavation and filling. These controls are complemented by rules which limit building and impervious surfaces near riparian margins and by assessment criteria. The restoration and enhancement of riparian areas by stock exclusion and planting can reduce the risk of natural hazards and improve natural character. Proposals to undertake restoration and enhancement initiatives will be taken into account when assessing applications to reduce the required setbacks.*

12.7.6 RULES

Activities affected by this section of the Plan must comply not only with the rules in this section, but also with the relevant standards applying to the zone in which the activity is located (refer to ***Part 2 Environment Provisions***), and with other relevant standards in ***Part 3 – District Wide Provisions***.

Particular attention is drawn to:

(a) ***Chapters 7-10*** in ***Part 2***;

(b) Other sections within ***Chapter 12 Natural and Physical Resources*** (and the ***District Plan Maps***);

(c) ***Chapter 13 Subdivision***;

(d) ***Chapter 14 Financial Contributions***;

(e) ***Section 15.1 Traffic, Parking and Access***;

(f) ***Chapter 17 Designations and Utility Services*** (and the ***Zone Maps***).

Where relevant, refer to other sections of the plan such as Part 2 – Environmental Provisions and other parts of Part 3 – District Wide Provisions as there may be other provisions that need to be considered.

12.7.6.1 PERMITTED ACTIVITIES

An activity is a permitted activity if:

(a) it complies with the standards for permitted activities set out in ***Rules 12.7.6.1.1*** to ***12.7.6.1.6*** below; and

(b) it complies with the relevant standards for permitted activities in the zone in which it is located, set out in ***Part 2 of the Plan - Environment Provisions***; and

(c) it complies with the other relevant standards for permitted activities set out in ***Part 3 of the Plan - District Wide Provisions***.

12.7.6.1.1 SETBACK FROM LAKES, RIVERS AND THE COASTAL MARINE AREA

For the purposes of this rule, lakes include the Manuwai and Waingaro Reservoirs.

Any building and any impermeable surface must be set back from the boundary of any lake (where a lake bed has an area of 8ha or more), river (where the average width of the riverbed is 3m or more) or the boundary of the coastal marine area, except that this rule does not apply to man-made private water bodies other than the Manuwai and Waingaro Reservoirs.

The setback shall be:

(a) a minimum of 30m in the Rural Production, Waimate North, Rural Living, Minerals, Recreational Activities, Conservation, General Coastal, South Kerikeri Inlet and Coastal Living Zones;

(b) a minimum of 26m in the Residential, Coastal Residential and Russell Township Zones;

(c) a minimum of 20m in the Commercial and Industrial Zones.

Provided that these setbacks do not apply:

(i) to activities in a Maritime Exemption Area; or

13 SUBDIVISION

CONTEXT

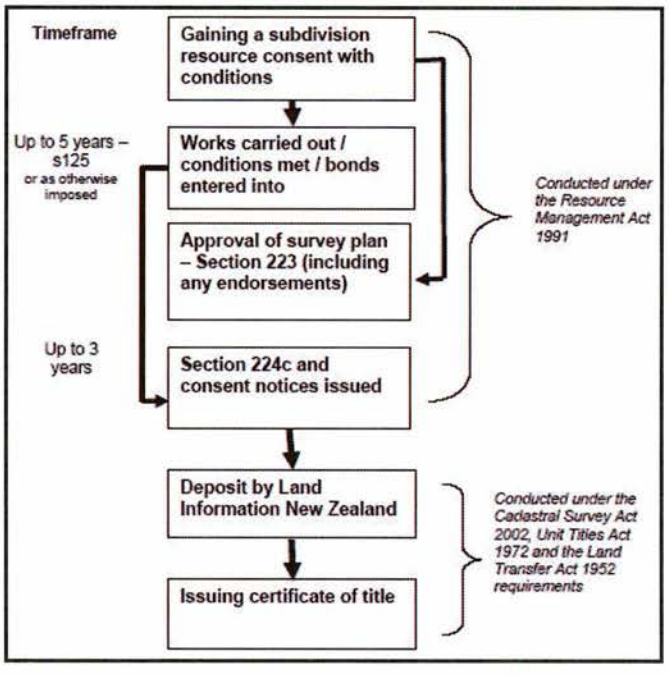
The Far North District Council is responsible for issuing two types of resource consents – land use consents and subdivision consents. In many cases both types of consents must be obtained before a development can proceed. Consents may also be needed from the Northland Regional Council. This chapter deals with subdivision.

Subdivision is essentially a process of dividing a parcel of land or a building into one or more further parcels, or changing an existing boundary location. Land subdivision creates separate and saleable certificates of title, which can define an existing interest in land (including buildings) and impose limitations on landowners or occupiers for how the land can be used or developed, through conditions and consent notices imposed under sections 108, 220 and 221 of the Resource Management Act 1991. Subdivision also provides the opportunity for Council to require land to be vested, and reserve and other financial contributions to be taken to provide necessary infrastructure.

Figure 1 below shows the subdivision process. [Ministry for the Environment Quality Planning website]

Note that Council does not have control of the whole process.

FIGURE 1: PROCESS OF SUBDIVISION



Land subdivision under the RMA includes:

- the creation of separate fee-simple allotments with new certificates of title (freehold);
- the lease of land or buildings or both for 35 years or longer (leasehold);
- the creation of a unit title, company lease, or cross-lease.

Freehold subdivisions occur where new allotments (usually referred to as lots) are created under the Land Transfer Act and ownership is held in an estate in fee simple. Fee simple means that the ownership of the land and the buildings on it is held solely by those persons listed on the certificate of title. Freehold is the most common form of subdivision. The boundaries are pegged by licensed cadastral surveyors and a 'guaranteed ' title is issued.

Leasehold subdivisions: land or buildings or both that are leased for a period exceeding 35 years is defined in the RMA as a subdivision. A leasehold estate is most commonly defined as an estate or interest in land held for a fixed term of years. **Cross-lease subdivisions** (occasionally called composite leasehold and share titles) occur where buildings or dwellings are leased. The cross-lease plan shows the dwellings as 'flats ' and is often called a 'flats-plan '. The term 'cross-lease ' is used to describe the method whereby the purchaser of a dwelling / flat obtains a lease of that dwelling, generally for a term of 999 years, together with an undivided share in the underlying fee-simple estate. Cross-lease titles usually involve common-use areas (eg, shared driveways) and exclusive or restrictive covenant areas (eg, backyards). The owners agree to use certain areas for their own use without infringing on the areas of the other owners. For any changes to be made to a cross-lease site or building the leaseholder must have regard to the cross-lease documents that may require the consent of all other cross-leasing owners (eg, to erect a garage or add a new room)

Unit title subdivisions (or strata titles) generally occur where more than one dwelling or building is built on a single title and separate ownership is required. This includes multi-storey developments and the unit title allows for ownership to be defined in three dimensions. A unit title provides single ownership of a 'principal unit ' (the dwelling) and one or more 'accessory units ' (eg, garages or outdoor spaces). Each principal and each accessory unit will usually be defined spatially, so that the dwelling and any other buildings or outdoor spaces are contained in compartments of space, which are owned rather than leased. There are usually common areas that provide access for all unit title owners (eg, driveways, lifts and stairwells).

A unit title is made up of two components:

(a) ownership in the particular unit

(b) an undivided share in the ownership of the common property.

[quoted from Ministry for the Environment Quality Planning website]

All subdivision requires resource consent except for:

(a) lots for utility services under the Public Works Act;

(b) those other situations set out in Section 11 of the Act. The exemptions in s11 anticipate (among other things) the creation of separate titles for natural and historic conservation purposes.

Boundary adjustments are a controlled activity throughout the District, subject to meeting specific criteria. Section 13.7.2, which includes Table 13.7.2.1, sets out the activity status, allotment sizes and dimensions for all other subdivisions throughout the District. The matters, or topics, which the Council will consider in any application for a resource consent for subdivision, and the rules that apply to any such application are set out in section 13.7.3 of this chapter. The rules will ensure that appropriate consideration is given to the relevant elements of subdivision, and that conditions of consent are directed towards those elements.

Attention is drawn to the fact that rules in parts of the Plan other than this chapter may have a bearing on subdivision applications. For example, a subdivision may result in an existing land use activity failing to comply with the relevant zone rules or District-wide rules. The provisions of the relevant zone rules and District-wide rules will be relevant for land use activities, which may be associated with subdivisions and which would allow the subdivision to proceed.

Chapter 2 of this Plan describes in general terms the role of the Maori Land Court in regulating the partition, amalgamation, aggregation and exchange of Maori land. Subdivision of ancestral land does not occur in the ordinary course of events and so there is no special provision in this Plan for it. However, the Council recognises the need to provide for the development of ancestral land and this is included in ***Part 2 of the Plan - Environment Provisions***.

For the context of the management plan rule refer to ***Rule 13.9.2***.

13.1 ISSUES

13.1.1 Because the type and scale of activities that can occur in the District are often linked to the size of a lot, the effect of subdividing land is reflected in the subsequent development of that land.

13.1.2 While subdivision is essentially a mechanistic process, integrated management of resources can be assisted by the imposition of appropriate controls on the way in which subdivision is carried out.

13.1.3 The subdivision of land can result in development that has significant effects on natural character.

13.1.4 Subdivision of properties containing scheduled heritage resources (as listed in ***Appendices 1D***, ***1E***, ***1F*** and ***1G***) can result in the alienation of a heritage resource from land closely associated with it and the consequent loss/degradation/diminution of its heritage values.

13.1.5 Subdivisions may lead to an increased demand for water in a District where there are summer shortfalls.

13.1.6 Subdivision may lead to an increased demand for energy in the District where there is a limited reticulated supply and a reliance on electricity generated outside the District. The adoption of energy efficiency and renewable energy initiatives and technologies will need to be considered in all new subdivisions and related development.

13.1.7 The subdivision of land can result in development that has an adverse effect on the sustainable functioning of infrastructure, particularly roads.

13.1.8 Inappropriate subdivision, use and development can cause reverse sensitivity effects on the National Grid, compromising its safe and efficient operation, development, maintenance and upgrading.

Note: Attention is also drawn to the provisions of ***Section 12.9***. This section includes an Issue, Objective and Policy with respect to potential reverse sensitivity effects arising from subdivision, use and development adjacent to consented or existing lawfully established renewable energy projects, including associated transmission activities.

13.2 ENVIRONMENTAL OUTCOMES EXPECTED

13.2.1 A subdivision pattern that is consistent with:

(a) existing land uses;

(b) the preservation of the natural character of the coastal environment and the restoration or enhancement of areas which may have been compromised by past land management practices;

(c) the protection, restoration and/or enhancement of outstanding natural features and landscapes;

(d) the protection, restoration and/or enhancement of areas of significant indigenous vegetation and significant habitats of indigenous fauna;

(e) the maintenance and enhancement of public access to and along the coast and lakes and rivers;

(f) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga;

(g) the type of management of natural and physical resources that is provided for in the ***Environmental Provisions*** (refer to ***Part 2***) and elsewhere in the ***District Wide Provisions*** (refer to ***Part 3***) of this Plan;

(h) the retention of heritage values of heritage resources (as listed in ***Appendices 1D***, ***1E***, ***1F*** and ***1G***) through conservation of its immediate context.

13.2.2 Sufficient water storage is provided to meet the present and likely future needs of the Community.

13.2.3 Subdivisions, land use and development which respond in a sustainable way to the site specific environmental conditions, values and enhancement opportunities, through the use of management plans.

13.2.4 A sufficient and secure energy supply is available to meet the present and likely future needs of the District.

13.2.5 13.2.5 Where the safe and efficient operation, maintenance, development and upgrading of the existing National Grid operations are protected from the reverse sensitivity effects of other activities.

13.3 OBJECTIVES

13.3.1 To provide for the subdivision of land in such a way as will be consistent with the purpose of the various zones in the Plan, and will promote the sustainable management of the natural and physical resources of the District, including airports and roads and the social, economic and cultural well being of people and communities.

13.3.2 To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly from subdivision, including reverse sensitivity effects and the creation or acceleration of natural hazards, are avoided, remedied or mitigated.

13.3.3 To ensure that the subdivision of land does not jeopardise the protection of outstanding landscapes or natural features in the coastal environment.

13.3.4 To ensure that subdivision does not adversely affect scheduled heritage resources through alienation of the resource from its immediate setting/context.

13.3.5 To ensure that all new subdivisions provide a reticulated water supply and/or on-site water storage and include storm water management sufficient to meet the needs of the activities that will establish all year round.

13.3.6 To encourage innovative development and integrated management of effects between subdivision and land use which results in superior outcomes to more traditional forms of subdivision, use and development, for example the protection, enhancement and restoration of areas and features which have particular value or may have been compromised by past land management practices.

13.3.7 To ensure the relationship between Maori and their ancestral lands, water, sites, wahi tapu and other taonga is recognised and provided for.

13.3.8 To ensure that all new subdivision provides an electricity supply sufficient to meet the needs of the activities that will establish on the new lots created.

13.3.9 To ensure, to the greatest extent possible, that all new subdivision supports energy efficient design through appropriate site layout and orientation in order to maximise the ability to provide light, heating, ventilation and cooling through passive design strategies for any buildings developed on the site(s).

13.3.10 To ensure that the design of all new subdivision promotes efficient provision of infrastructure, including access to alternative transport options, communications and local services.

13.3.11 To ensure that the operation, maintenance, development and upgrading of the existing National Grid is not compromised by incompatible subdivision and land use activities

13.4 POLICIES

13.4.1 That the sizes, dimensions and distribution of allotments created through the subdivision process be determined with regard to the potential effects including cumulative effects, of the use of those allotments on:

(a) natural character, particularly of the coastal environment;

(b) ecological values;

(c) landscape values;

(d) amenity values;

(e) cultural values;

(f) heritage values; and

(g) existing land uses.

13.4.2 That standards be imposed upon the subdivision of land to require safe and effective vehicular and pedestrian access to new properties.

13.4.3 That natural and other hazards be taken into account in the design and location of any subdivision.

13.4.4 That in any subdivision where provision is made for connection to utility services, the potential adverse visual impacts of these services are avoided.

13.4.5 That access to, and servicing of, the new allotments be provided for in such a way as will avoid, remedy or mitigate any adverse effects on neighbouring property, public roads (including State Highways), and the natural and physical resources of the site caused by silt runoff, traffic, excavation and filling and removal of vegetation.

13.4.6 That any subdivision proposal provides for the protection, restoration and enhancement of heritage resources, areas of significant indigenous vegetation and significant habitats of indigenous fauna, threatened species, the natural character of the coastal environment and riparian margins, and outstanding landscapes and natural features where appropriate.

13.4.7 That the need for a financial contribution be considered only where the subdivision would:

(a) result in increased demands on car parking associated with non-residential activities; or

(b) result in increased demand for esplanade areas; or

(c) involve adverse effects on riparian areas; or

(d) depend on the assimilative capacity of the environment external to the site.

13.4.8 That the provision of water storage be taken into account in the design of any subdivision.

13.4.9 That bonus development donor and recipient areas be provided for so as to minimise the adverse effects of subdivision on Outstanding Landscapes and areas of significant indigenous flora and significant habitats of fauna.

13.4.10 The Council will recognise that subdivision within the Conservation Zone that results in a net conservation gain is generally appropriate.

13.4.11 That subdivision recognises and provides for the relationship of Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and shall take into account the principles of the Treaty of Waitangi.

13.4.12 That more intensive, innovative development and subdivision which recognises specific site characteristics is provided for through the management plan rule where this will result in superior environmental outcomes.

13.4.13 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the applicable zone in regards to s6 matters. In addition subdivision, use and development shall avoid adverse effects as far as practicable by using techniques including:

(a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns;

(b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;

(c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas;

(d) through siting of buildings and development, design of subdivisions, and provision of access that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the District (refer ***Chapter 2*** and in particular ***Section 2.5*** and Council's *"Tangata Whenua Values and Perspectives" (2004)*;

(e) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests;

(f) protecting historic heritage through the siting of buildings and development and design of subdivisions.

(g) achieving hydraulic neutrality and ensuring that natural hazards will not be exacerbated or induced through the siting and design of buildings and development.

13.4.14 That the objectives and policies of the applicable environment and zone and relevant parts of ***Part 3*** of the Plan will be taken into account when considering the intensity, design and layout of any subdivision.

13.4.15 That conditions be imposed upon the design of subdivision of land to require that the layout and orientation of all new lots and building platforms created include, as appropriate, provisions for achieving the following:

(a) development of energy efficient buildings and structures;

(b) reduced travel distances and private car usage;

(c) encouragement of pedestrian and cycle use;

(d) access to alternative transport facilities;

(e) domestic or community renewable electricity generation and renewable energy use.

13.4.16 When considering proposals for subdivision and development within an existing National Grid Corridor the following will be taken into account:

(a) the extent to which the proposal may restrict or inhibit the operation, access, maintenance, upgrading of transmission lines or support structures;

(b) any potential cumulative effects that may restrict the operation, access, maintenance, upgrade of transmission lines or support structures; and

(c) whether the proposal involves the establishment or intensification of a sensitive activity in the vicinity of an existing National Grid line.

Note 1: Structures and activities located near transmission lines must comply with the safe distance requirements in the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP34:2001). Compliance with this plan does not ensure compliance with NZECP34:2001.

Note 2: Vegetation to be planted within, or adjacent to, the National Grid Corridor should be selected and/or managed to ensure that it will not result in that vegetation breaching the Electricity (Hazards from Trees) Regulations 2003.

13.5 METHODS

DISTRICT PLAN METHODS

13.5.1 Rules in ***Chapter 13*** of the Plan impose controls on most forms of subdivision activity.

13.5.2 ***Chapter 13*** provides an alternative to the standard rules, through the implementation of a management plan for subdivision in the Rural Production, General Coastal, Coastal Living, South Kerikeri Inlet and Waimate North Zones.

13.5.3 Financial contributions in respect of subdivision are set out in ***Chapter 14***.

13.5.4 Matters of National Importance specified in s6 of the Act are addressed in various sections of the District Plan, including the following sections in particular:

(a) preservation of the natural character of the coastal environment, wetlands, and lakes and rivers and their margins is provided for in ***Chapter 10*** and in ***Section 12.7***;

(b) protection and enhancement of outstanding natural features and landscapes is provided for in ***Section 12.1*** and by the restriction on subdivision in the Recreational Activities and Conservation Zones;

(c) the protection of significant indigenous vegetation and significant habitats of indigenous fauna is addressed in ***Section 12.2***;

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers is provided for in ***Chapter 10***, ***Section 12.7*** and ***Chapter 14***;

(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga are provided for throughout the District Plan but attention is drawn in particular to ***Chapter 2***; and

(f) the protection of historic heritage is addressed in ***Chapter 12.5***.

The objectives and policies relating to each of the above (where relevant) and those of the applicable zone will be taken into account in assessing applications for subdivision, including applications made under ***Rule 13.9.2***.

13.5.5 Structure Plans are included as an alternative means of providing for subdivision on a comprehensive basis (***Section 13.12***).

13.5.6 Where a subdivision (which includes a boundary adjustment) is proposed on land where a hazardous activity of industry has been, or is more likely than not to have been, or is currently operating, then the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 apply.

13.5.7 Where an application is made for an activity, breaching ***Rule 13.8.1*** Transpower New Zealand Limited shall be considered an affected party, due to the national significance of the National Grid.

OTHER METHODS

13.5.8 Non-regulatory methods, including brochures and informal contact with applicants will help to promote subdivision activities that are sensitive to the physical environment. In this respect, the Council encourages early consultation with parties who may be affected by a subdivision proposal such as neighbouring landowners, Heritage New Zealand Pouhere Taonga and tangata whenua.

13.5.9 The Council encourages applicants to take into account any provisions of any relevant planning documents prepared for the area and recognised by iwi authorities, pursuant to Sections 6(e), 6(g), 7(a) and 7(aa) of the Resource Management Act 1991

COMMENTARY

Subdivision of land can have adverse effects on the environment if the design of the subdivision is such that subsequent use and development on the subdivided land is environmentally inappropriate. While it is the

use of land, and not the subdivision pattern itself, that has the effects, the subdivision pattern enables the use. Consequently, the control of subdivision is justified because it enables the Council to minimise the risk of activities being established on lots that are too small, too steep, hazard prone, incapable of being serviced, and so on.

To this extent the control of subdivision is complementary to the control of land use activities.

The Council's approach has therefore been to ensure that the conditions of consent for subdivisions enable appropriate subsequent use and development, and the objectives and policies in this chapter reflect this approach.

The Council also recognises the desirability of responding positively to innovative subdivision proposals that, although they may not comply with the rules, offer a good resource management outcome for the development of a property. This chapter provides for such innovation.

Applicants can choose whether to apply first for a land use or a subdivision consent, or apply for both together.

13.6 GENERAL RULES

The following rules shall apply, unless specifically stated otherwise, to all applications for subdivision of land.

When preparing subdivision applications, applicants should be mindful of the relevant zoning (refer to ***Part 2 - Environment Provisions***), as well as to the provisions elsewhere in ***Part 3 - District Wide Provisions***, particularly:

(a) ***Chapter 12 Natural and Physical Resources***;

(b) ***Chapter 14 Financial Contributions***;

(c) ***Chapter 15 Transportation***;

(d) ***Chapter 18 Special Areas***.

13.6.1 DEFINITION OF SUBDIVISION OF LAND

The definition of the subdivision of land is set out in s218 of the Act, and this definition is included in a Glossary of Definitions from the Act.

13.6.2 RELEVANT SECTIONS OF ACT

All applications are subject to the requirements set out in the Act, with particular reference to s106, s219, s220, and s230 - s237G. S104 and s105 are also relevant, in respect of the assessment of applications, as is the Government Roading Powers Act 1989

13.6.3 RELEVANT SECTIONS OF THE DISTRICT PLAN

All applications will be assessed against the objectives and policies of the applicable zone(s) and those contained in ***Chapters 12***, ***14***, ***15*** and ***18*** where relevant.

13.6.4 OTHER LEGISLATION

All applications shall comply with the relevant requirements contained in other Acts and codes, with particular reference to the Building Act 2004, the Local Government Act 2002, the Local Government Act 1974, the Resource Management (National Environmental Standard for Air Quality) Regulations 2004, the Resource Management (National Environmental Standard for sources of Human Drinking water) Regulations 2007, the Resource Management (National Environmental Standard for Telecommunication Facilities) Regulations 2008, the Resource Management (National Environmental Standard for Electricity Transmission) Regulations 2010, the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 and any relevant Regional Plan for Northland.

13.6.5 LEGAL ROAD FRONTAGE

All new allotments shall be provided with frontage to a legal road, or to a road to be vested on the application, except where access by a private road or right of way is included, and approved, within the subdivision consent application or where prior consent pursuant to s348 of the Local Government Act 1974 has been obtained

13.6.6 BONDS