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

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

(Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA)) (If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of Schedule 4). Prior to, and during, completion of this application form, please refer to Resource Consent Guidance Notes and Schedule of Fees and Charges — both available on the Council's web page.

1. Pre-Lodgement Meeting

Have you met with a council Resource Consent representative to discuss this application prior to lodgement? ◯ **Yes** ☑ **No**

2. Type of Consent being applied for

(more than one circle can be ticked):

☑ **Land Use**
◯ **Fast Track Land Use***
◯ **Subdivision**
◯ **Consent under National Environmental Standard**
(e.g. Assessing and Managing Contaminants in Soil)
◯ **Other (please specify)** _____

◯ **Discharge**
◯ **Change of Consent Notice (s.221(3))**
◯ **Extension of time (s.125)**

** The fast track is for simple land use consents and is restricted to consents with a controlled activity status.*

3. Would you like to opt out of the Fast Track Process?

◯ **Yes** ◯ **No**

4. Consultation

Have you consulted with Iwi/Hapū? ◯ **Yes** ☑ **No**

If yes, which groups have you consulted with?

Who else have you consulted with?

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

5. Applicant Details

Name/s: HENRY + HANNAH LEVENTIS

Email: [redacted]

Phone number:

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

6. Address for Correspondence

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

Name/s: PAUL SPOONER - SPOONER ARCHITECTURAL SOLUTIONS

Email: [redacted]

Phone number:

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

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

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

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

Name/s: HENRY + HANNAH LEVENTIS

Property Address/ Location: 80A PA ROAD KERIKERI

Postcode 0230

8. Application Site Details

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

Name/s:

Site Address/ Location: 40A PA ROAD KERIKERI

Postcode 0230

Legal Description: LOT 1 DP 168091 **Val Number:** 00219-07000

Certificate of title: NA 102B/170

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

Site visit requirements:

Is there a locked gate or security system restricting access by Council staff? ☑ Yes ○ No

Is there a dog on the property? ○ Yes ☑ No

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

9. Description of the Proposal:

Please enter a brief description of the proposal here. Please refer to Chapter 4 of the District Plan, and Guidance Notes, for further details of information requirements.

ADDITIONS + ALTERATIONS TO EXISTING HOUSE + POOL INFRINGING PERMITTED STANDARDS FOR IMPERMEABLE + BUILDING COVERAGE IN RURAL LIVING ZONE AND WITHIN KERIKERI VISUAL BUFFER

If this is an application for a Change or Cancellation of Consent Notice conditions (s.221(3)), please quote relevant existing Resource Consents and Consent Notice identifiers and provide details of the change(s), with reasons for requesting them.

10. Would you like to request Public Notification?

○ Yes ☑ No

11. Other Consent required/being applied for under different legislation

(more than one circle can be ticked):

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

12. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health:

The site and proposal may be subject to the above NES. In order to determine whether regard needs to be had to the NES please answer the following:

Is the piece of land currently being used or has it historically ever been used for an activity or industry on the Hazardous Industries and Activities List (HAIL) ( ) **Yes** (✓) **No** ( ) **Don't know**

Is the proposed activity an activity covered by the NES? Please tick if any of the following apply to your proposal, as the NESCS may apply as a result. ( ) **Yes** (✓) **No** ( ) **Don't know**

- ( ) **Subdividing land**
- ( ) **Changing the use of a piece of land**
- ( ) **Disturbing, removing or sampling soil**
- ( ) **Removing or replacing a fuel storage system**

13. Assessment of Environmental Effects:

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

Your AEE is attached to this application (✓) **Yes**

13. Draft Conditions:

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

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

14. Billing Details:

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

Name/s: (please write in full) Hannah Sonia Leventis

Email: [redacted]

Phone number:

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

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

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

Name: (please write in full) Hannah Sonia Leventis

Signature: [redacted]
(signature of bill payer)

Date 12/5/25

MANDATORY

15. Important Information:

Note to applicant
You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.
You may apply for 2 or more resource consents that are needed for the same activity on the same form.
You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application
Under the fast-track resource consent process, notice of the decision must be given within 10 working days after the date the application was first lodged with the authority, unless the applicant opts out of that process at the time of lodgement.
A fast-track application may cease to be a fast-track application under section 87AAC(2) of the RMA.

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

15. Important information continued...

Declaration

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

Name: (please write in full) Hannah Sonia Leventis

Signature: [redacted] Date 12/5/25

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

Checklist (please tick if information is provided)

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

Please refer to Chapter 4 of the District Plan for details of the information that must be provided with an application. Please also refer to the RC Checklist available on the Council's website. This contains more helpful hints as to what information needs to be shown on plans.

RESOURCE CONSENT APPLICATION

FOR PROPOSED ADDITIONS TO EXISTING HOUSE & SWIMMING POOL AT 80A PA ROAD KERIKERI.

ASSESSMENT OF ENVIRONMENTAL EFFECTS REPORT

REVISION: A
DATE: 21 MAY 2025

www.spoonersolutions.co.nz PO Box 10, Kerikeri 0245 e. paul@spoonersolutions.co.nz t. 09 407 3107 m. 027 289 1221

APPLICANT & PROPERTY DETAILS

SITE ADDRESS:	80a Pa Road, Kerikeri.
APPLICANTS NAME:	Henry Leventis & Hannah Leventis
ADDRESS FOR SERVICE:	Paul Spooner Spooner Architectural Services Ltd. PO Box 10 Kerikeri 0245
LEGAL DESCRIPTION:	LOT 1 DP 168091
SITE AREA:	4,003 square metres
OPERATIVE DISTRICT PLAN:	Far North District Council District Plan
ZONE:	Rural Living
DESIGNATION / LIMITATIONS:	Kerikeri Basin Heritage Visual Buffer

Introduction

The owners are applying for Resource Consent for Land Use aspects under the Far North District Plan in relation to a proposed additions to an existing dwelling and alterations to an existing swimming pool.

ASPECTS REQUIRING RESOURCE CONSENT:

- Stormwater Management
- Building Coverage
- Alterations and/or new buildings within the Kerikeri Basin Heritage Visual Buffer

STATUS OF APPLICATION:	Discretionary Activity in terms of Stormwater Management Restricted Discretionary Activity in terms of Building Coverage and Visual Buffer.
NOTIFICATION STATUS:	The applicant requests the application be non-notified.

Site Description

The site is located on the east side of Pa Road in Kerikeri in a subdivision that was developed in the 1990's known today as Fern Lake Park. The subject site has a legal title area of 4,003 square metres.
Pa Road is a cul-de sac off Kerikeri inlet Road. The site is near the end of the road and is accessed via a vehicle crossing from Pa Road which serves two adjoining lots.
Topography within the site is gentle in nature, with a slight fall to north.
An existing dwelling constructed in 2006 is located fairly central on site. The dwelling has architecturally designed and is a high quality single dwelling family home.
A swimming pool exists adjacent to the house on the north side.
The site is landscaped to a very high professional standard with mature tropical gardens, lawns and paving that surrounds the dwelling.
The dwelling is not visible in the streetscape due to the maturity of the landscaping.

Proposal Summary

The applicants propose to construct external additions to the existing dwelling to achieve a new internal layout with improved amenity for family living. The additions have been designed as a continuation of the existing architectural style by extending one of the existing lower roof forms. The additions are in an area that is currently mostly concrete paved.
The gross floor area of the dwelling increases by 32 square metres.
Two small ancillary structures are proposed to service the existing swimming pool and the pool itself is to be extended.
Impermeable area on site changes from 1,057 square metres (26.4% of site area) to 1,052 square metres (26.2% of site area).
Building Coverage increases from 446.2 square metres (11.1% of site area) to 538 square metres (13.4% of site area).

All buildings and additions are set well back from boundaries

No bulk earthworks are required to construct the proposed additions. The scope of ground disturbance is limited to that required for strip footings and granular base for slab floor, so is exempt from requiring an earthworks permit. The pool is above ground so the proposed extension for the pool requires no bulk earthworks.

Compliance

The site is subject to the provisions of the Far North District Plan (Operative 2009).
The site is zoned within a Rural Living area.

The proposal presents no new infringement of standards about:

- Residential Intensity
- Scale of Activities
- Building Height
- Sunlight
- Setback from boundaries
- Screening from neighbours for non-residential activities (no activities proposed)
- Traffic Intensity
- Keeping of Animals
- Noise (no excess expected from residential activity)
- Helicopter Landing Area (none proposed)
- Excavation / Filling
- NRC Water & Soil Plan

The Far North District Plan identifies the following aspects for consideration under this Resource Consent Application:

8.7.5.2.2 Stormwater Management:
The total proposed impermeable area is 26.2% of site area.
Impermeable surface area greater than 20% is a *Discretionary Activity.*

8.7.5.3.4 Building Coverage:
Total proposed building coverage is 13.4% of site area.
Building Coverage greater than 10% is a *Restricted Discretionary Activity.*

12.5A.6.3.3 Alterations and/or new buildings within the Kerikeri Basin Heritage Precinct Visual Buffer:
Alterations and/or new buildings within the Kerikeri Basin Heritage Precinct Visual Buffer are a restricted discretionary activity.

Overall the application status is Discretionary, being the more stringent activity infringed.

Proposed District Plan
The site is subject to those parts of the Proposed Far North District Plan that have legal effect at time of writing.

The site is zoned within a Rural Residential area with Heritage area overlay (Kerikeri Heritage Area Part B).

Relevant to this site are EW-R12 & EW-R13 for earthworks.
No bulk earthworks are required and it is the applicants intent to provide any necessary erosion & sediment control measures.

In terms of Heritage, the proposal complies with the Permitted standard HA-R2 whereby the altered building is not a scheduled heritage resource and the colour scheme of the alterations is to match the existing building.

National Environmental Standards

The site subject to this application has no recorded history or any activities described in the Hazardous Activities and Industries List.

In terms of NESFW, the proposal requires no assessment as it is not within 100 metres of a natural wetland.

Assessment of Environmental Effects

Effects on the environment arising from this proposal are assessed in accordance with the criteria outlined in Far North District Plan as follows:

Stormwater management:
The applicant has engaged Haigh Workman Engineers to prepare a report covering assessment of stormwater management and wastewater management for the site, which is included with this application.

11.3 Stormwater Management Assessment Criteria are addressed as follows:

In assessing an application under this provision the Council will restrict the exercise of its discretion to:

(a) *the extent to which building site coverage and Impermeable Surfaces contribute to total catchment impermeability and the provisions of any catchment or drainage plan for that catchment;*

Assessment: The site is located adjacent the Kerikeri Inlet so the increase in impermeable surfaces will have negligible effect on the overall catchment impermeability.

(b) the extent to which Low Impact Design principles have been used to reduce site impermeability;

Assessment: The development already has tanks to capture roof water for domestic supply, this will provide a some retention. All runoff including the tank overflow will be discharged into the roadside swale drain.

(c) any cumulative effects on total catchment impermeability;

Assessment: The site is located adjacent the Kerikeri Inlet so there will be no cumulative effects on total catchment impermeability.

(d) 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;

Assessment: Drainage patterns or absorption properties of the soil will not be altered by the new development.

(e) the physical qualities of the soil type;

Assessment: The underlaying soil are described as well to moderately well drained Kerikeri friable clay and Kerikeri friable clay with large boulders.

(f) 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;

Assessment: There will be a small increase in impermeable surfaces due to development but no adverse effects on the life supporting capacity of soils in the remaining undeveloped parts of the site.

(g) the extent to which paved, Impermeable Surfaces are necessary for the proposed activity;

Assessment: The location of the wastewater disposal dripper lines is known. Stormwater runoff will be discharged well away from the disposal field.

(h) the extent to which landscaping and vegetation may reduce adverse effects of run-off;

Assessment: Impermeable surfaces are required for the proposed development.

(i) the means and effectiveness of mitigating stormwater runoff to that expected by permitted activity threshold.

Assessment: The stormwater system has been designed using runoff coefficients based on grass cover for undeveloped areas of the site with some of these areas being covered in plantings and landscaping resulting in lower runoff.

(j) Any recognised standards promulgated by industry groups.

Assessment: Stormwater design is to recognised engineering standards.

(k) The means and effectiveness of mitigating stormwater run-off to that expected by the permitted activity threshold.

Assessment: Stormwater runoff is able to exceed that expected by the permitted activity due the sites location adjacent to the Kerikeri Inlet, meaning there are no downstream properties that are affected.

(l) The extent to which the proposal has considered and provided for climate change.

Assessment: We have adopted HIRDS V4 historical rainfall estimates, not climate adjusted, as per Council Engineering Standards Table 4.1

(m) The extent to which stormwater detention ponds and other engineering solutions are used to mitigate any adverse effects.

Assessment: Stormwater ponds are not proposed as they are not required for this site.

Building Coverage:

Effects on the environment are assessed following the guidelines listed under Far North District Plan clause 8.7.5.3.4 as follows:

(a) the ability to provide adequate landscaping for all activities associated with the site;

Assessment: More than adequate areas remain for landscaping on site. Existing landscape features such as mature plantings are retained with the only areas displaced by building additions being concrete paved area and a small portion of lawn.

(b) the extent to which building(s) are consistent with the character and scale of the existing buildings in the surrounding environment;

Assessment: The proposal is consistent with the character and scale of existing buildings in the surrounding environment. The proposed building addition has been designed as a continuation of an existing lower roofline. The proposed pool extension and ancillary buildings are low profile structures that will not dominate and will not be visible in the streetscape.

(c) the scale and bulk of the building in relation to the site;

Assessment: The proposed additions are low profile structures in the context of the existing overall house that will not dominate, will not be visible in the streetscape and are very small in proportion to the existing built environment.

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

Assessment: Private open spaces remain for future uses.

(e) the extent to which the cumulative visual effects of all the buildings impact on landscapes, adjacent sites and the surrounding environment;

Assessment: Cumulative visual effects of the overall resultant development are compatible with the existing surrounding built environment. New structures are compatible with the existing mature landscaping within the site and are located away from yard setback lines and well below the maximum height allowable.

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

Assessment: The siting and setbacks are compliant with District Plan rules and are similar to the existing built environment. Visual dominance is avoided.

(g) the extent to which landscaping and other visual mitigation measures may reduce adverse effects;

Assessment: It is submitted that the proposed building coverage does not present adverse effects. Existing high quality mature landscaping and areas of lawn remain in this proposal which themselves provide visual mitigation.

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

Assessment: The proposal presents either no effect or less than minor effects on privacy, outlook and enjoyment of private open spaces on adjacent sites as the spaces subject to this application do not overlook private open spaces on adjacent sites and are set back from boundaries.

Kerikeri Basin Heritage Precinct Visual Buffer:

The Council will restrict the exercise of its discretion to:

(a) the form of the building and colour of all exterior surfaces, so as to ensure the appropriate use of colour and to avoid visual dominance in relation to the Kerikeri Mission Station buildings (the Stone Store and Kerikeri Mission House) and Kororipo Pa; and

(b) the location of the buildings in respect of the Kerikeri Mission Station, Kororipo Pa and other archaeological sites.

Effects on the environment are assessed in accordance with the criteria outlined in Far North District Plan Section 12.5A.7 (where relevant) as follows:

(a) the extent to which any work adversely affects the existing character of the various Heritage Precincts as a whole;

Assessment: It is submitted that the proposal does not present adverse effects for the following reasons:

- New or altered structures are low in profile and well below the height of the existing house
- New or altered structures are below the height of existing vegetation behind or beside the existing house such that when viewed from the Heritage Precinct the structures will not break the skyline, nor present any new dominance.
- Natural and non-reflective materials have been specified. The colour of all exterior materials is to match the adjacent or adjoining overall building.
- The proposed new or altered structures are very small in scale relative to the existing house and are more or less wholely located within the mass of the existing house when viewed from the Heritage Precinct.

(b) the extent to which any proposed work uses similar materials and is of similar design to the existing building or buildings on the same site;

Assessment: Similar materials and design have been applied to that present on the existing house.

(c) the extent to which any demolition or removal of a major building on a site adversely affects the existing streetscape or destroys a building of historical or architectural significance;

Assessment: Not applicable.

(d) the extent to which landscaping is appropriate to the character of the buildings on site;

Assessment: New landscaping does not form part of this proposal. Existing landscaping is cohesive with the existing and proposed built environment.

(e) *the extent to which work or an activity adversely affects or destroys any archaeological site;*

Assessment: The site is not located within the Heritage Precinct. The site contains no known archaeological site. The area of land disturbance required for the works is an area that has been previously highly modified during construction of the house and subsequent landscaping. On the basis of these observations it is submitted that in this instance it is appropriate to apply accidental discovery protocols as a condition of consent and that no prior investigation is required.

(f) *effects on landforms, including effects on stone walls and archaeological sites;*

Assessment: Not applicable.

(g) *in the case of The Strand Heritage Precinct, the extent to which Heritage colours are used for all external surfaces;*

Assessment: Not applicable.

(h) *in the case The Strand Heritage Precinct, the effects of any use or development on pedestrian access to and along The Strand;*

Assessment: Not applicable.

(i) *in the case of the Kerikeri Basin Heritage Precinct, the extent to which the planting of trees affects the heritage values of sites, either visually or because of disturbance of archaeological sites.*

Assessment: Not applicable. The site is not located in the Precinct and planting of trees is not proposed.

<u>Assessment against Objectives and Policies.</u>

It is submitted that the Objectives and Policies are upheld by this application as the proposal is compatible for the following reasons:

- The proposal is consistent and compatible with the existing built environment
- The proposal presents no change in density
- Sufficient land is retained for outdoor activities and self-sufficiency in services
- The scale of the works will be compatible with the surrounding built environment and is not beyond that which would be expected of a single residential unit
- Privacy, outlook and sunlight amenity of adjacent sites is unchanged
- The proposal presents less than minor changes to the existing overall character and context within the visual buffer area.

Assessment against Part 2 of the Resource Management Act

The minor infringements presented in this application are assessed against Part 2 of the Act. It is assessed that the life supporting capacity of air, water, soil and ecosystems are unaffected as the proposal presents no new impacts upon these elements, given in relation to water, soil and ecosystems the proposal does not breach NES regulations.

Notification

There are no persons or parties considered to be potentially affected by this application. On this basis it is submitted that the application should proceed on a non-notified basis.

Conclusion

It is concluded that on balance, this application presents an overall positive effect on the environment, as the proposed works represent the intended use of the land that is residential in nature, while upholding the values contained within the District Plan.

We trust that the information provided is sufficient to enable processing of this application. Please do not hesitate to contact us if we can be of further assistance.

Prepared by:

Paul Spooner.
Spooner Architectural Services ltd.

Enclosed:

- Drawings numbered RC01 – RC12
- Haigh Workman Stormwater report
- Haigh Workman Wastewater report
- Certificate of Title

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**NA102B/170**
Land Registration District	**North Auckland**
Date Issued	19 February 1996

Prior References
NA672/287

Estate	Fee Simple
Area	4003 square metres more or less
Legal Description	Lot 1 Deposited Plan 168091
Registered Owners	

Henry Christodoulos Leventis and Hannah Sonia Leventis

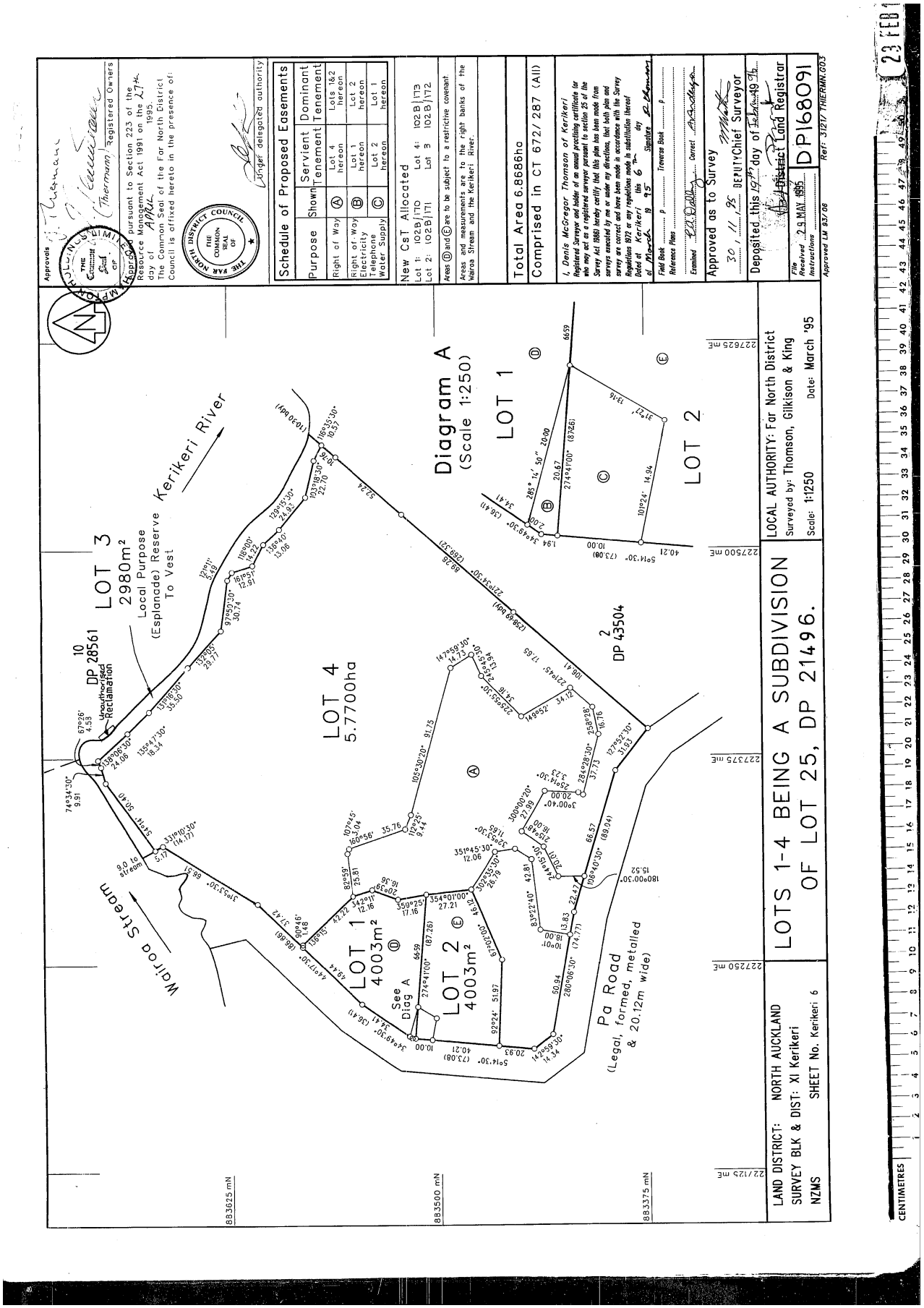
Interests

Appurtenant hereto is a right of way and electricity, telephone & water supply rights specified in Easement Certificate C956170.4 - 19.2.1996 at 2.42 pm

Subject to a right of way and to electricity, telephone & water supply rights over part marked B on DP 168091 specified in Easement Certificate C956170.4 - 19.2.1996 at 2.42 pm

Land Covenant in Transfer 5903188.1 - 18.2.2004 at 9:00 am

Fencing Covenant in Transfer 5903188.1 - 18.2.2004 at 9:00 am


Approved
Approved pursuant to Section 223 of the Resource Management Act 1991 on the 27th day of April 1995.
The Common Seal of the Far North District Council is affixed hereto in the presence of:
THE FAR NORTH DISTRICT COUNCIL THE COMMON SEAL OF
Registered Owners
Under delegated authority
Schedule of Proposed Easements
Purpose | Shown | Servient Tenement | Dominant Tenement
Right of Way | A | Lot 4 hereon | Lots 1&2 hereon
Right of Way | B | Lot 1 hereon | Lot 2 hereon
Electricity | C | Lot 2 hereon | Lot 1 hereon
Telephone
Water Supply
New CsT Allocated
Lot 1: 102B/170 Lot 4: 102B/173
Lot 2: 102B/171 Lot 3 102B/172
Areas (D) and (E) are to be subject to a restrictive covenant
Areas and measurements are to the right banks of the Waroa Stream and the Kerikeri River.
Total Area 6.8686ha
Comprised in CT 672/287 (All)
I, Denis McGregor Thomson of Kerikeri
Registered Surveyor and holder of an annual practising certificate (or who may act as a registered surveyor pursuant to section 25 of the Survey Act 1986) hereby certify that this plan has been made from surveys executed by me or under my directions, that both plan and survey are correct and have been made in accordance with the Survey Regulations 1972 or any regulations made in substitution thereof
Dated at Kerikeri this 6th day of March 19 95 Signature D Thomson
Field Book ... p ... Traverse Book ... p ...
Reference Plans ...
Examined ... Correct ...
Approved as to Survey
30 / 11 / 95 DEPUTY Chief Surveyor
Deposited, this 19th day of Jan 1996
Assistant District Land Registrar
File
Received 29 MAY 1995
Instructions
DP 168091
Approved LW 93/06
Ref: 3121/THERMN.003
Diagram A
(Scale 1:250)
LOT 1
LOT 2
LOT 3
2980m²
Local Purpose
(Esplanade) Reserve
To Vest
LOT 4
5.7700ha
LOT 1
4003m²
See Diag A
LOT 2
4003m²
Pa Road
(Legal, formed, metalled & 20.12m wide)
Kerikeri River
Wiroa Stream
Unauthorised Reclamation
10 DP 28561
2 DP 43504
LOCAL AUTHORITY: Far North District
Surveyed by: Thomson, Gilkison & King
Scale: 1:1250 Date: March '95
LOTS 1-4 BEING A SUBDIVISION OF LOT 25, DP 21496.
LAND DISTRICT: NORTH AUCKLAND
SURVEY BLK & DIST: XI Kerikeri
NZMS SHEET No. Kerikeri: 6
883625 mN
883500 mN
883375 mN
227625 mE
227500 mE
227375 mE
227250 mE
227125 mE
CENTIMETRES

Approved by Registrar-General of Land under No. 2002/1026

Transfer instrument

Section 90, Land Transfer Act 1952

Registrar-General of Land Approval 02/1026EF A.D.L.S.

T 5903188.1 Transfer
Cpy – 01/01, Pgs – 005, 18/02/04, 07:08
DocID: 311283719

Land registration district

NORTH AUCKLAND

Unique identifier(s) or C/T(s)	All/part	Area/description of part or stratum
NA102B/170	All	

Transferor *Surname(s) must be underlined or in CAPITALS.*

HAMPTON HOLDINGS LIMITED

Transferee *Surname(s) must be underlined or in CAPITALS.*

Jonathon David HISCOCK and Vanessa McKenzie HISCOCK

Estate or interest to be transferred, or easement(s) or *profit(s) à prendre* to be created *
State if fencing covenant imposed.

Fee simple and the transferee shall be bound by a fencing covenant as defined in section 2 of the Fencing Act 1978 in favour of the transferor (continued on pages 1 to 4 annexure schedules)

Operative clause

The Transferor transfers to the Transferee the above estate or interest in the land in the above certificate(s) of title or computer register(s) and, if an easement or *profit à prendre* is described above, that easement or *profit à prendre* is granted or created.

Dated this 12 day of February 2004

Attestation *(If the transferee or grantee is to execute this transfer, include the attestation in an Annexure Schedule).*

Walter Thiermann Jutta Thiermann **executed by Hampton Holdings Ltd by its director(s)**	**Signed in my presence by the Transferor** *Signature of witness* *Witness to complete in BLOCK letters (unless legibly printed)* **Witness name** **Occupation** **Address**
Signature [common seal] of Transferor	

Certified correct for the purposes of the Land Transfer Act 1952.

[Solicitor for] the Transferee

REF: 7002 – AUCKLAND DISTRICT LAW SOCIETY

Approved by Registrar-General of Land under No. 1995/5004

Annexure Schedule

Insert below:-
"Mortgage", "Transfer", "Lease" etc

	dated		page		of		pages

SCHEDULE RESTRICTIVE STIPULATIONS

1. Residential Use: No building other than a single residential dwelling for private use shall be erected on the Land. The Transferee acknowledges this excludes multiple units, townhouses or any other such development PROVIDED THAT Lot 2 shall be entitled to provide provision for caretaker accommodation with the residential building.

2. Time to build: The Transferor agrees to comply with the building time limits imposed in the agreement for sale and purchase.

3. Approval of Plans: No improvements shall be commenced on the subject land unless and until plans and specifications including schedules of exterior finishes have been first approved in writing by the Transferor the Transferors decision on design approval shall be final. It is **advisable to confirm** house construction and style with Transferor **before purchase** of land.

4. Floor Area: No main building shall have a floor area of less than 250 square metres, including any attached double garage (excluding any balconies, decks or terraces).

5. Decking and house base must be screened with suitable materials which fit in the surrounding, so that area no openings underneath decking or house are visible from any site including the park area.

6. Building Materials: No main Building or any attached or detached garage or any other improvement shall be erected or permitted to be erected on the land of external materials other than concrete block plastered and textured with coating materials or other materials as may be approved by the Transferor. It is accepted that the decision on what is suitable, shall be made by the Transferor.

7. Roof Materials: The roof can only be constructed from color steel, clay, terracotta or concrete tiles (such tiles to be uniform in colour and finish) and cedar shingles provided that any building on Lot 6 shall not use colour steel. The color of the roof must be approved by the Seller prior to construction commencing.

8. Minimum house setback: House construction, garages or carports including decks and all other construction including pools shall not be constructed any closer than 3 metres to any property boundary. The set back from the boundary of Lot 7 (the common park area) must be 13 metres, or such distance approved by the Transferor. All Lots agree to consent to any Resource Consent application to allow the limits approved by the Transferor to apply.

9. Painting. Any improvement or building, which will normally require painting, must be painted immediately after completion, the color must be approved by the Transferor, as part of the approval of plans.

10. Previously Erected Buildings: No improvements previously erected or existing on or attached to other land shall be shifted, erected or placed upon the land.

11. No second Hand Materials: No sub/standard or second hand building materials shall be used in the construction of any improvements on the land.

12. Outbuilding: No outbuildings shall be erected on the Land except after or concurrently with and as part of the erection of main building and must be approved by the Transferor in the terms of this covenant.

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.

13. Temporary Structures: There shall not at any time be erected or placed or suffered to be or remain on the Land any temporary improvements or anything of a like nature except sheds workshops used for the purpose of the building of permanent improvements upon the land.

14. Water tanks: Water tanks need to be built underground or screened. Such construction will need the approval of the Transferor, in the terms of this covenant.

15. Incomplete Buildings: No improvement in the course of construction upon the Land shall be left for longer than three months without substantial work being carried out and total construction time for construction of a main building and garage shall not exceed 18 months;

16. Occupation: The land shall not be used for residential purposes until the construction of the main building has been completed.

17. Gate / Entrance area:

    (a) The entrance to the property together with the letterbox will be erected by the Transferor. The entrance and letterbox shall not be changed and if it requires replacement or repair as a result of damage or destruction, will only be replaced or repaired with identical construction and colour unless approved by Transferor.

    (b) The gate entrance to each Lot shall be restricted to the existing entrance.

    (c) All gates to be kept closed unless in use for transit. Provided that the owners of Lots 1 and 2 may reach agreement to have the gate open during daylight hours.

    (d) Lots 1 and 2 shall share a gate.

    (e) Lots 3, 4 and 8 or any part thereof shall share a gate.

    (f) The entrances to the properties shall be restricted to existing gateways.

    (g) The Transferees will share in the costs of maintenance and repairs in relation to the gateway and electronics on the right of way and that the transferees will have the right to connect to the existing equipment at the Transferee's own cost. The transferees shall maintain the gateway in its original condition.

18. Animals. With the exception of house pets as defined in this covenant, no animal or poultry or other livestock shall be kept or maintained on the land.

19. Dogs and Cats:

    (a) The land owner is permitted to keep one **dog** only to following conditions:

        (i) The land must be securely fenced with an appropriate dog proof fence prior to acquiring the dog.

        (ii) No dog is allowed to roam or enter the "Fern Lake Park" area, known as Lot 7.

(iii) The dog owner must ensure that no unnecessary noise molestation is caused by the dog.

(b) To protect and minimize damage to bird life in the "Fern Lake Park" (Lot 7) area and adjoining properties, the landowner will not have more than one **Cat** and each cat shall at all times wear a veterinary approved bird warning device (i.e collar and bell).

(c) No mustelids are to be kept on the property.

20. Caravans: No caravan, mobile home, motor home, tent or accommodation vehicle of any sort shall be used on or about the land for permanent residential purposes whether with or without the existence of a main building upon the Land.

21. Retaining walls: To maintain the common theme in the "Fern Lake Park" all retaining walls are not to be higher than one metre and to be constructed out of material similar to those utilised in Lot 7, being natural rock.

22. Fencing:

To keep the nature and uniqueness of the development and park area of "Fern Lake Park", the Transferor encourages future Land owners to avoid fencing. In the event fences are required they must be constructed of steel fence panels in between steel columns painted to fit the natural ambiance of the park. All fences including colour are to be approved in writing by the Transferor before construction commences.

(a) Fences to boundary of the Pa Road site are already closed in with a Farm fence. It is conditional that land owners keep the fencing to the Pa Road boundary in good order. The landowner may replace the existing farm fence at his own expense with steel fence panels in between steel posts 1.8 metres in height as defined in this provision.

(b) In the event a fence needs to be built along the boundary adjoining the "Fern Lake Park" area Lot 7, it may be built up to 1.2 meter in height above natural ground level and must have a set back from 5 metres from the boundary of Lot 7.

(c) All other fences shall be no higher than 1.8 metres.

23. Rubbish disposal: No rubbish shall be allowed to accumulate or be placed upon the land.

24. Clotheslines: Clotheslines shall not be visible from either the street or the park area.

25. Caravans, Trailers, Boats: Any caravan, Trailer or Boat on the Land (if not housed in a garage or outbuilding) shall be stored or parked so that it is not visible from the "Fern Lake Park" area or from the Kerikeri River.

26. All motor vehicles must be currently registered and warranted unless housed in a garage and outbuilding including all vehicle parts.

27. Maintenance: Any vacant allotment must be maintained in the general appearance of the park.

Annexure Schedule

Insert below:-
"Mortgage", "Transfer", "Lease" etc

	dated		page		of		pages

28. Lawn mowing: Lawn mowing must not be done on Sunday, public holidays and on working days between 7pm and 7am the next day.

29. Burning of rubbish: Strictly no household rubbish is to be burnt. Garden rubbish may be burnt but not on Sundays, public holidays and working days, between 4pm and 7am the next day. Open fires need to comply with the regulations of the Far North District Council or any other statutory authority.

30. Noxious weeds: The land owner shall keep the land free from noxious weeds as listed by the Department of Conservation, Far North District Council or any other statutory authority.

31. Irrigation water: No land owner shall take water out of the ponds or from the spring in the Park area (Lot 7) without a written permission from the owner of that Park area. The Transferor shall have the sole right to pond and spring water and to convey this water over Lot 7.

32. Signs and Hoardings: No advertisement or any signs shall be erected on the property unless approved by the Seller.

33. Re-subdivision: The land shall not be re-subdivided in any form, this shall include the granting of any rights that could be deemed to be a subdivision.

34. Commercial Use Prohibited: No business or industry or commercial undertaking of any kind shall be conducted on the land without the written consent of the Transferor.

35. Noise Levels. It is agreed that the noise levels admitted at the boundary of the property shall not exceed 45db. The landowner agrees to avoid any unnecessary noise molestation.

36. Alterations to Development Rules: The Transferor may vary or not enforce the provisions of this covenant at any time in respect of any other Land and in that event the Transferee shall have no claim whatsoever against the Transferor.

37. Storm water Drains and Culverts: The landowner must maintain existing storm water drains and culverts. If for any reason the landowner needs to divert the storm water flow, it must be diverted in a way that no damage on adjoining land is caused.

38. For the purposes of this covenant the Transferor shall mean **WALTER THIERMANN** and **JUTTA THIERMANN** or Hampton Holdings Limited.

executed by the transferee
in the presence of:

ANNE LOUISE TICEHURST
LEGAL EXECUTIVE
KERIKERI

(J D HISCOCK)

(J M HISCOCK)

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.

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 C956170·4 EC

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

~~I/We~~ HAMPTON HOLDINGS LIMITED at Paihia

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 1996 under No. 168091
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. 168091

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 Electricity Telephone Water Supply	B C	LOT 1 hereon LOT 2 hereon	LOT 2 hereon LOT 1 hereon	102B/170 102B/171 102B/171 102B/170

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: See attached

RIGHTS AND POWERS

That in respect of the Telecommunications and Electricity Easements referred to in the Schedule hereto, the rights and powers applicable thereto are:

(a) The full free uninterrupted and unrestricted right liberty and privilege for the occupier and registered proprietor for the time being of the dominant tenement from time to time and at all times to take convey and lead electrical current or any other mode of transmitting telecommunications in a free and unimpeded flow (except where the flow is halted for any reasonable period necessary for essential repairs) for the purposes of telecommunications across the land over which the Easement is created and to lay and maintain cables for such purpose.

(b) The full free uninterrupted and unrestricted right liberty and privilege for the occupier and registered proprietor for the time being of the dominant tenement from time to time and at all times to take convey and lead electricity in a free and unimpeded flow (except where the flow is halted for any reasonable period necessary for essential repairs) across the land over which the Easement is created and to lay and maintain cables for such purpose.

TERMS CONDITIONS COVENANTS OR RESTRICTIONS IN RESPECT OF ABOVE EASEMENTS:

That in respect of the Electricity and Telecommunications Easements (hereinafter called "the Easements") referred to in the Schedule hereto the terms conditions covenants or restrictions applicable thereto are as follows:-

(a) All cables placed within or such poles and cable erected upon the servient tenements shall be maintained and as required repaired to a good and serviceable condition by the registered proprietors for the time being of the dominant tenements.

(b) All the costs and expenses of and incidental to the repairing and maintaining of the Easements herein specified shall be borne by the registered proprietor for the time being of the dominant tenements.

(c) Any person wishing to carry out any work whatsoever on the Easements herein specified shall first give to the registered proprietor of the servient tenement thereof notice of such intention and of the nature and expense of the said work at least fourteen (14) days prior to any such work being commenced and shall obtain the prior consent in writing of the registered proprietor of the servient tenement provided that such consent shall not be unreasonably nor arbitrarily withheld.

(d) Any person carrying out any work whatsoever on the Easements herein specified shall take all reasonable and proper action and care to interfere as little as possible with the comfort and convenience of the occupier or occupiers for the time being of the dominant and servient tenements and shall carry out such work or cause the same to be carried out with the utmost expedition and in a prudent manner and in particular shall during the course of such work:

(i) Shore up or cause to be shored up in a proper safe and workmanlike manner any part of the dominant or servient tenement affected thereby.

(ii) Take all reasonable and proper steps to preserve the said tenements and all parts thereof and all property and goods thereon from damage.

(e) Subject to the other terms and conditions covenants and restrictions contained in these presents any person carrying out any work as aforesaid shall have the right to enter and to bring machinery and workmen on to any part of the dominant or servient tenement as shall be necessary for the purposes of carrying out maintenance on the Easements referred to herein and shall have the right to remove all soil roading paving metalling fencing and all other things as shall be reasonably necessary to give unimpeded access to the said Easement PROVIDED HOWEVER that such soil roading paving metalling and fencing which is so removed shall be restored as nearly as possible to its original condition and that

any other damage done by reason of the said maintenance is repaired and that as little disturbance as possible is caused to the surface of the land and to the enjoyment of the said tenements by the registered proprietors or occupiers.

(f) Where the maintenance work which is required to be carried out in terms of these presents involves the total or partial replacement of any cables this work shall be deemed to be maintenance work which may be carried out in accordance with these presents.

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

Dated this 15th day of February 19 96

Signed by the above-named
HAMPTON HOLDINGS LIMITED

J. Riemann / director

in the presence of

Witness .....

Occupation .....

Address .....

D. [illegible] Director

REGISTERED IN DUPLICATE

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

242 19FEB96 C 956170 (4)

PARTICULARS ENTERED IN REGISTER
LAND REGISTRY NORTH AUCKLAND
ASST. LAND REGISTRAR

EC 23 825
45

LAW NORTH PARTNERS
SOLICITORS
KERIKERI

GENERAL NOTES

1. Coordinates in terms of:
   Mount Eden Circuit 2000

2. Levels in terms of NZ Vertical Datum 2016
   Surveyors Ref: GSKK (Smartfix)
   RL=80.01m (MSL)

	Name	Date
Surveyed	WF	April 25
Drawn	WF	April 25
Appended		

Address 80A Pa Road, Kerikeri
Title NA102B/170 Area 0.4003 ha.

JOB/CLIENT:
Leventis

KERIKERI

SHEET TITLE:
TOPOGRAPHICAL SURVEY of LOT 1 DP 168091

Williams & King
Registered Land Surveyors, Planners & Land Development Consultants
27 Hobson Ave
PO Box 937, Kerikeri
Tel: 09-407 6030
Email: kerikeri@surveyandplanning.co.nz

Job No: 24574
File: Leventis Pa Road

SCALE @ A3 1:300

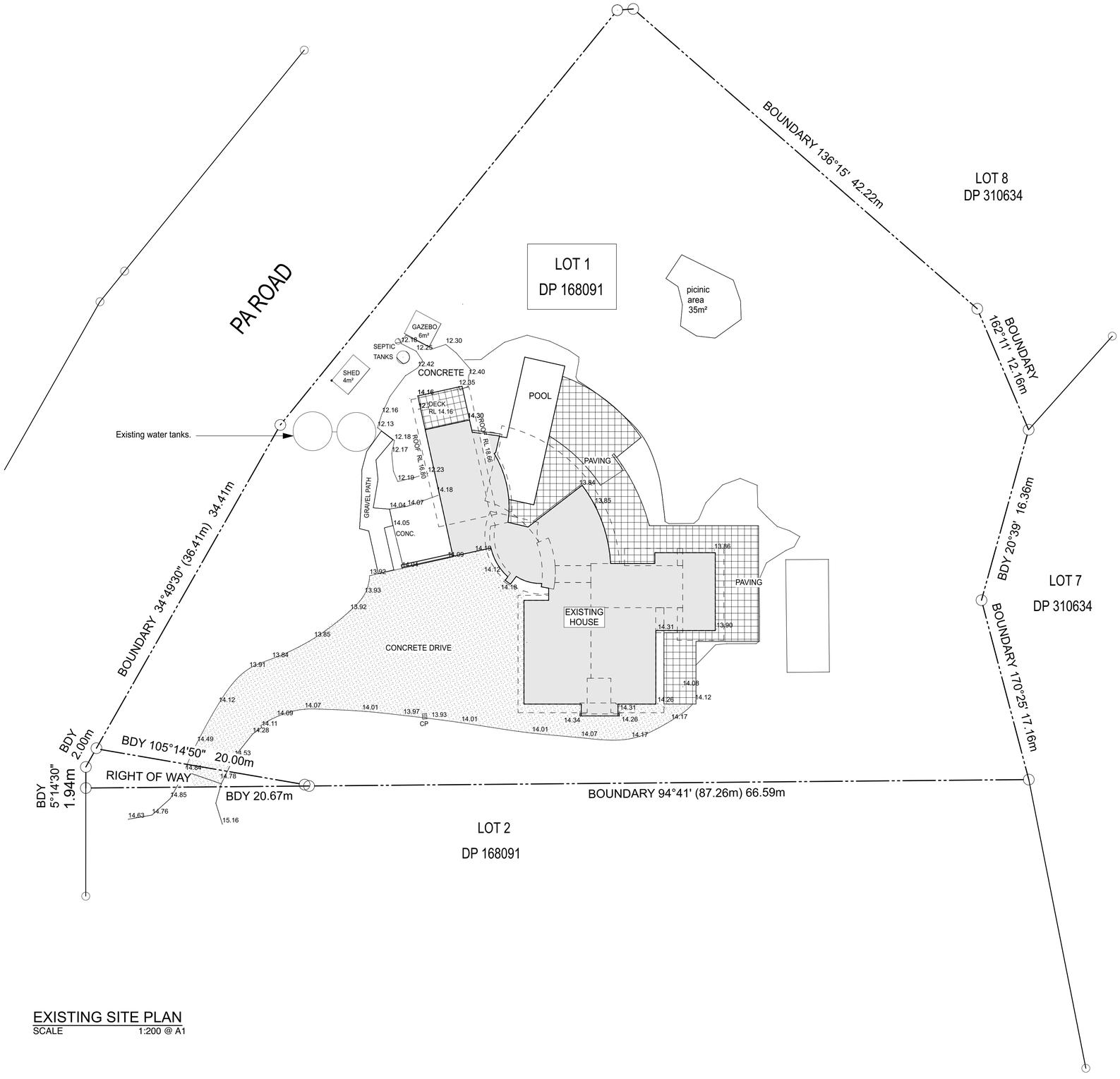
SHEET No 1/1

Do not scale from drawings.
The Contractor must check and verify all dimensions on site prior to commencing any work.

All work to be in accordance with
The Building Act 2004,
The New Zealand Building Code, NZS 3604 and
Any additional Territorial Authority requirements.
Refer Specification for references to other
New Zealand / Australian Standards to be complied with as they apply to this project.

WIND ZONE: HIGH
EXPOSURE ZONE: D

N



EXISTING SITE PLAN
SCALE 1:200 @ A1

LOCALITY PLAN
SCALE NTS @ A1

A RESOURCE CONSENT 22-05-25

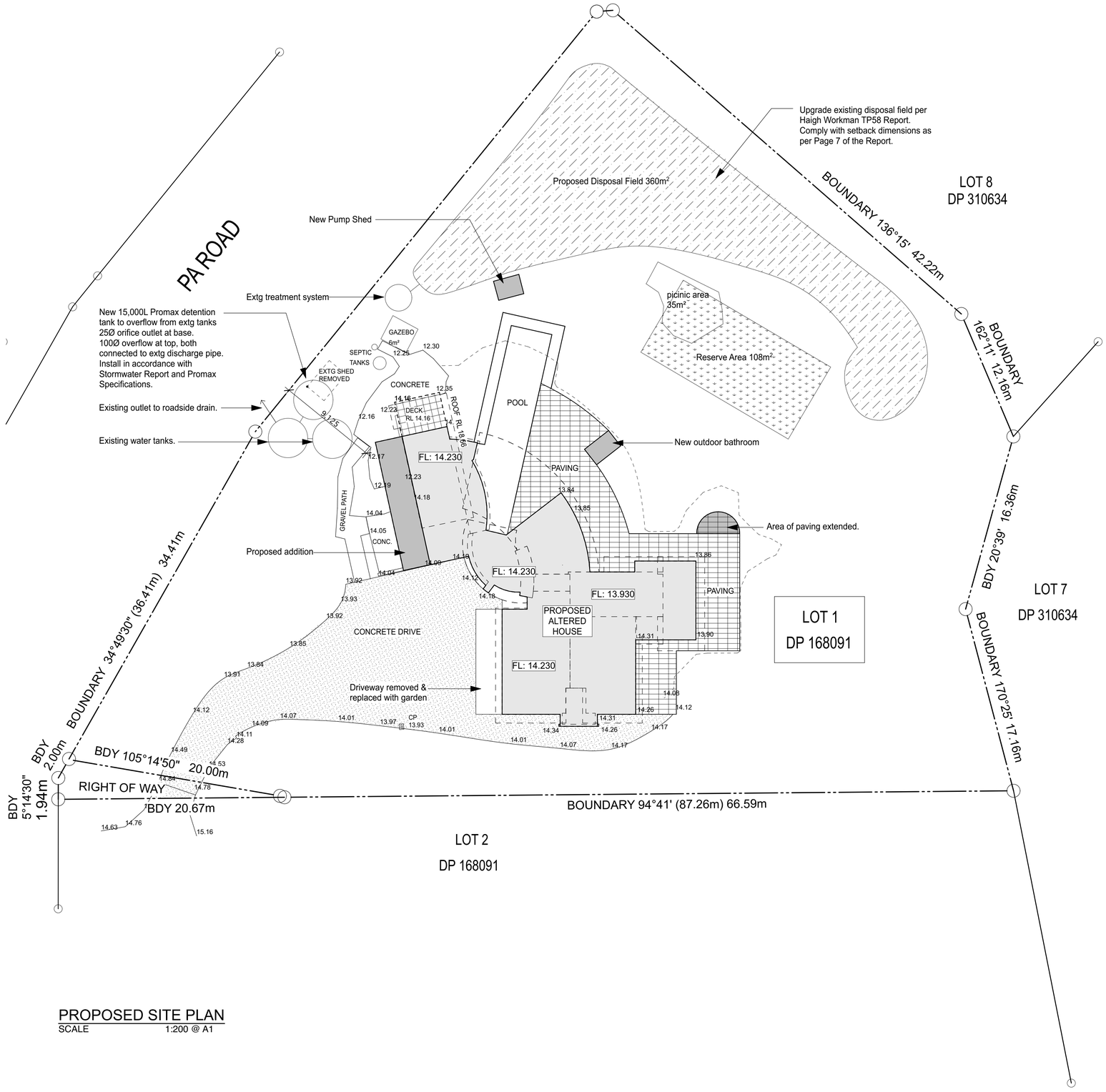
REVISIONS

DRAWING
EXISTING SITE PLAN

JOB
80A PA ROAD
KERIKERI

Spooner
architectural solutions
PO Box 10 KERIKERI 0245
e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
1:200 @ A1	RC01



PROPOSED SITE PLAN
SCALE 1:200 @ A1

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WIND ZONE: HIGH
EXPOSURE ZONE: D

N

LEGAL DESCRIPTION:

80a Pa Road, Kerikeri

Lot 1 DP 168091

Identifier: NA102B/170

Area: 0.4003 ha.

ZONE:

Residential - Rural Living Zone

Kerikeri Visual Buffer

IMPERMEABLE AREA CALCULATIONS

Site Area = 4,003 sqm.
12.5% maximum impermeable allowable as Permitted Activity.
4,003 x 0.125 = 500.375 sqm maximum.

EXISTING IMPERMEABLE COVERAGE:

Existing Roof (including accessory buildings)	450 m²
Existing driveway	344 m²
Existing paved area	210 m²
Existing pool (beyond roof)	53 m²
Existing Total:	1057 m²

PROPOSED IMPERMEABLE COVERAGE:

Altered Roof area (including accessory buildings)	485 m²
Altered Driveway	327 m²
Altered Paved area (reduced by bldg additions constructed over existing paved areas).	174 m²
Altered Pool	66 m²
Proposed Total:	1,052 m²

BUILDING COVERAGE CALCULATIONS

Site Area = 4,003 sqm.
10% maximum building coverage allowable as Permitted Activity.
4,003 x 0.10 = 400.3 sqm maximum.

EXISTING BUILDING COVERAGE:

Existing House (including eaves > 600mm)	381 m²
Existing Ancillary Buildings	12.5 m²
Existing Pool	52.7 m²
Existing Total:	446.2 m²

PROPOSED BUILDING COVERAGE:

Altered House (including eaves > 600mm)	413 m²
Proposed Ancillary Buildings	16 m²
Altered Pool	66 m²
Proposed Patio > 1m above ground	43 m²
Proposed Total:	538 m²

A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
PROPOSED SITE PLAN

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KERIKERI

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e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE 1:200 @ A1
SHEET No. RC02

Do not scale from drawings.
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WIND ZONE: HIGH
EXPOSURE ZONE: D

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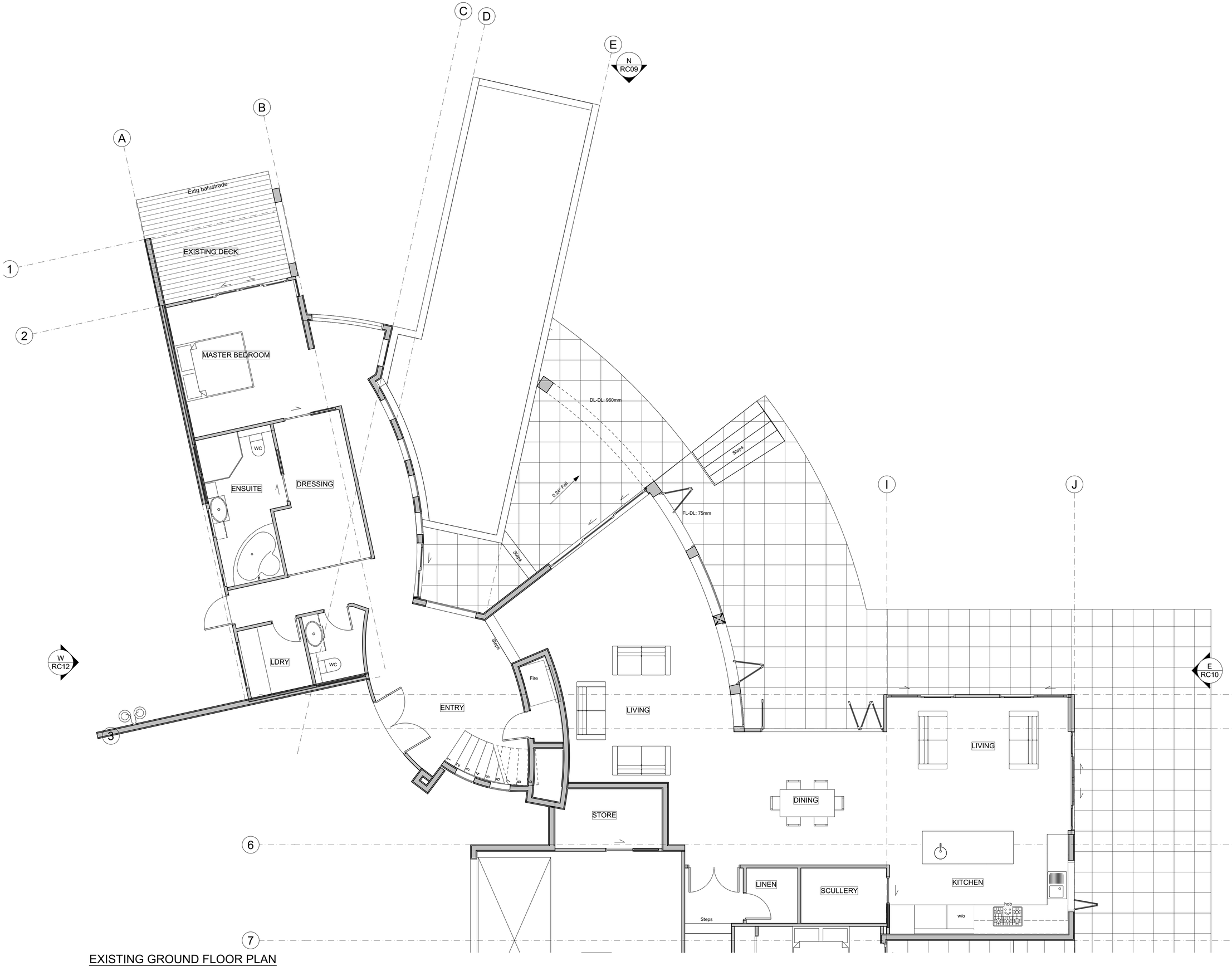

EXISTING GROUND FLOOR PLAN
SCALE 1:50 @ A1

A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
EXISTING GROUND FLOOR PLAN

JOB
80A PA ROAD
KERIKERI

Spooner architectural solutions
PO Box 10 KERIKERI 0245
e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
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Do not scale from drawings.
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WIND ZONE: HIGH
EXPOSURE ZONE: D

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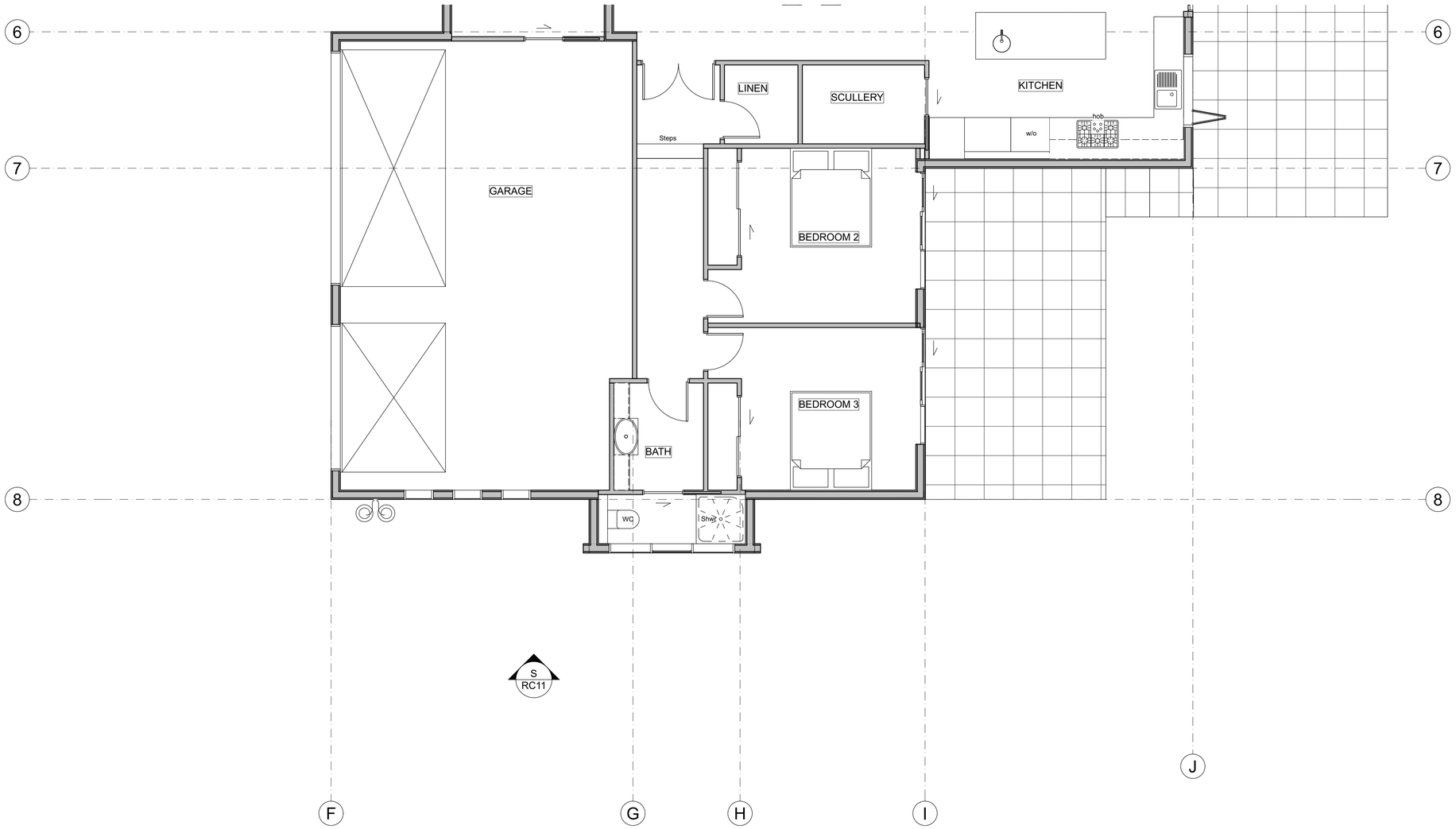

EXISTING GROUND FLOOR PLAN
SCALE 1:50 @ A1

A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
EXISTING GROUND
FLOOR PLAN

JOB
80A PA ROAD
KERIKERI

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architectural solutions
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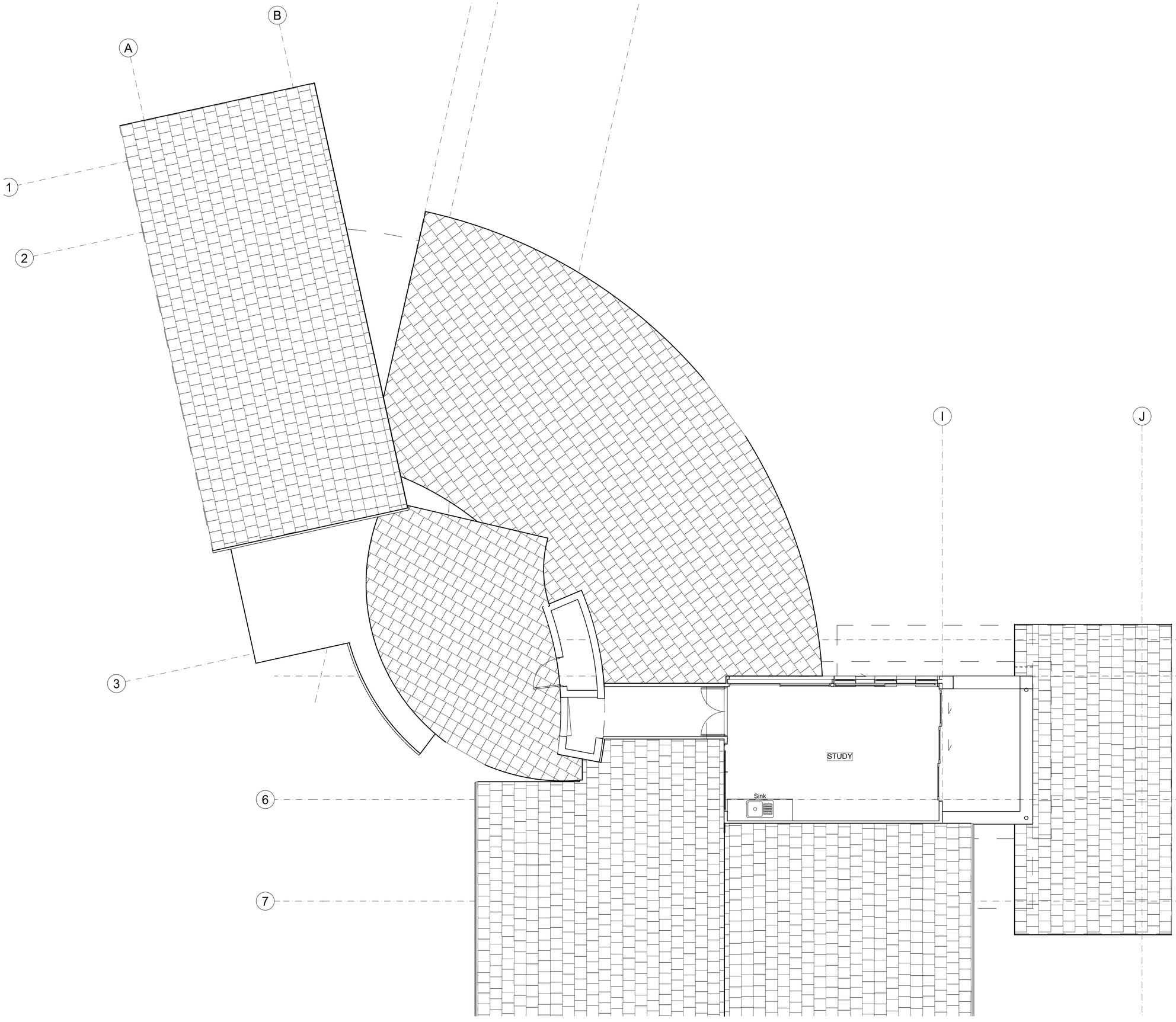

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WIND ZONE: HIGH
EXPOSURE ZONE: D

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A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
EXISTING UPPER FLOOR PLAN

JOB
80A PA ROAD
KERIKERI

EXISTING UPPER FLOOR PLAN
SCALE 1:50 @ A1

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e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
1:50 @ A1	RC05

Do not scale from drawings.
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New Zealand / Australian Standards to be complied with as they apply to this project.

WIND ZONE: HIGH
EXPOSURE ZONE: D

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PROPOSED GROUND FLOOR PLAN

SCALE 1:50 @ A1

A	RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
PROPOSED GROUND FLOOR PLAN

JOB
80A PA ROAD
KERIKERI

Spooner architectural solutions
PO Box 10 KERIKERI 0245
e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
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Do not scale from drawings.
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Refer Specification for references to other
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WIND ZONE: HIGH
EXPOSURE ZONE: D

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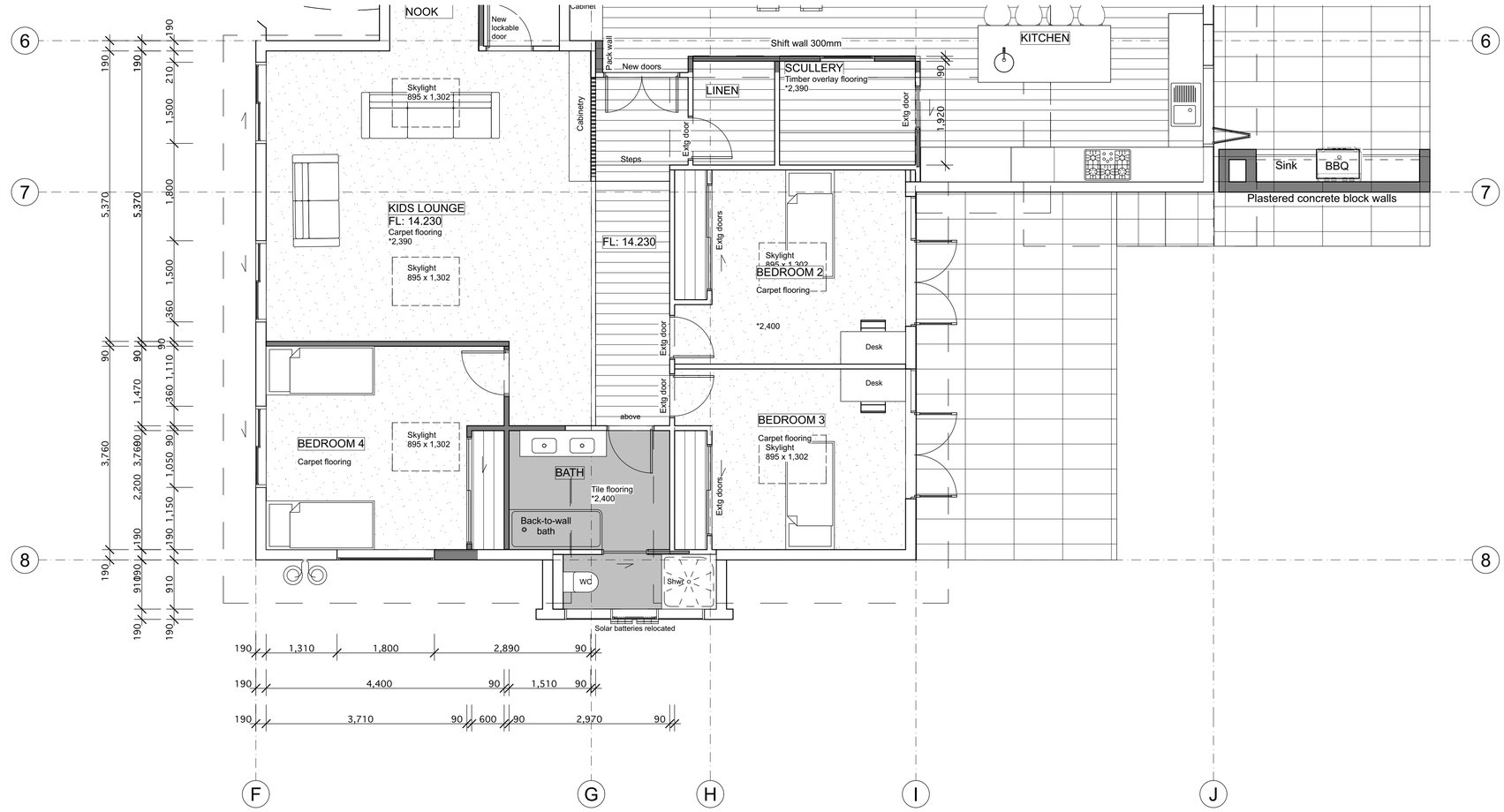

PROPOSED GROUND FLOOR PLAN
SCALE 1:50 @ A1

A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
PROPOSED GROUND FLOOR PLAN

JOB
80A PA ROAD
KERIKERI

Spooner architectural solutions
PO Box 10 KERIKERI 0245
e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE 1:50 @ A1
SHEET No. RC07

Do not scale from drawings.
The Contractor must check and verify all dimensions on site prior to commencing any work.

All work to be in accordance with
The Building Act 2004,
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Any additional Territorial Authority requirements.
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WIND ZONE: HIGH
EXPOSURE ZONE: D

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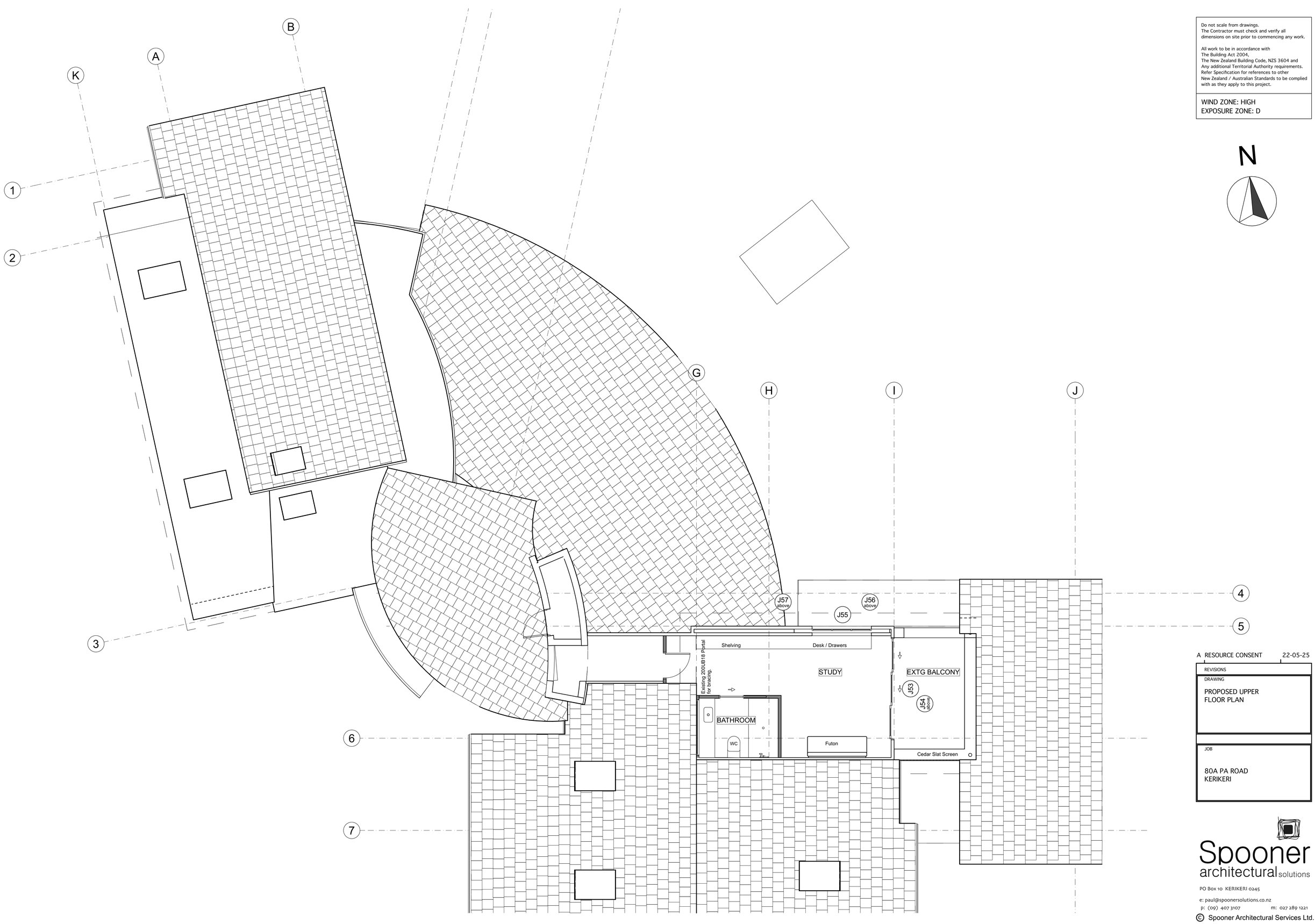

PROPOSED UPPER FLOOR PLAN
SCALE 1:50 @ A1

A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
PROPOSED UPPER FLOOR PLAN

JOB
80A PA ROAD
KERIKERI

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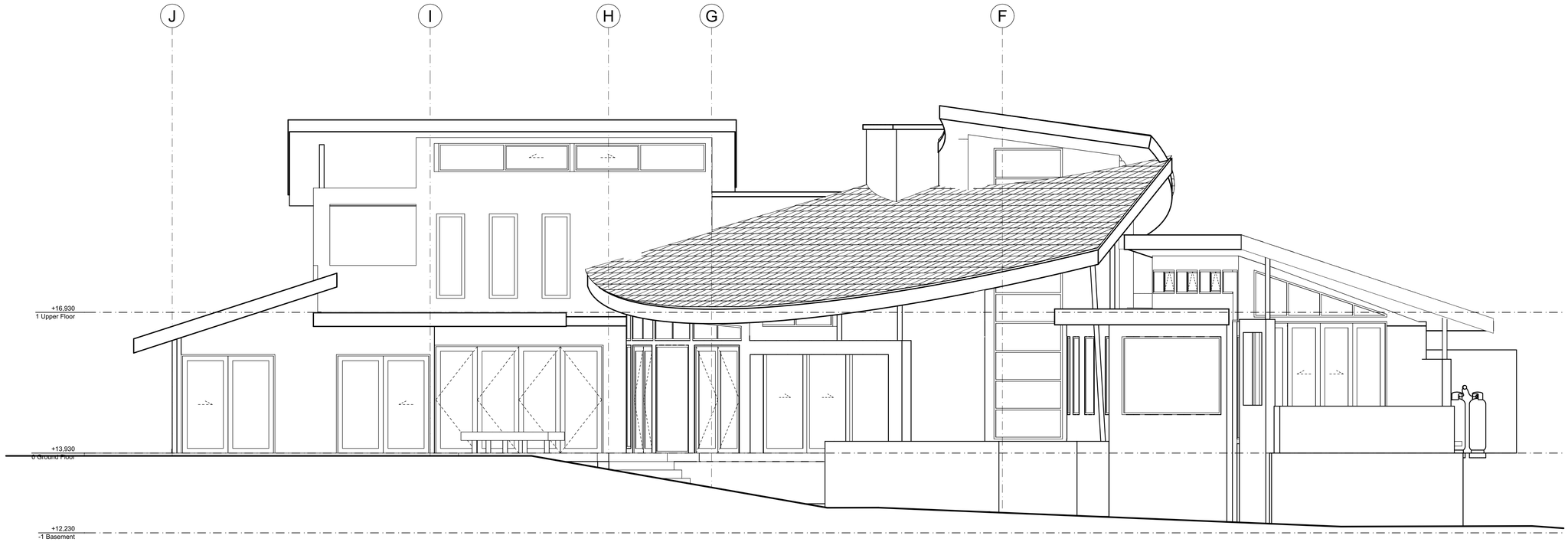
e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
1:50 @ A1	RC08

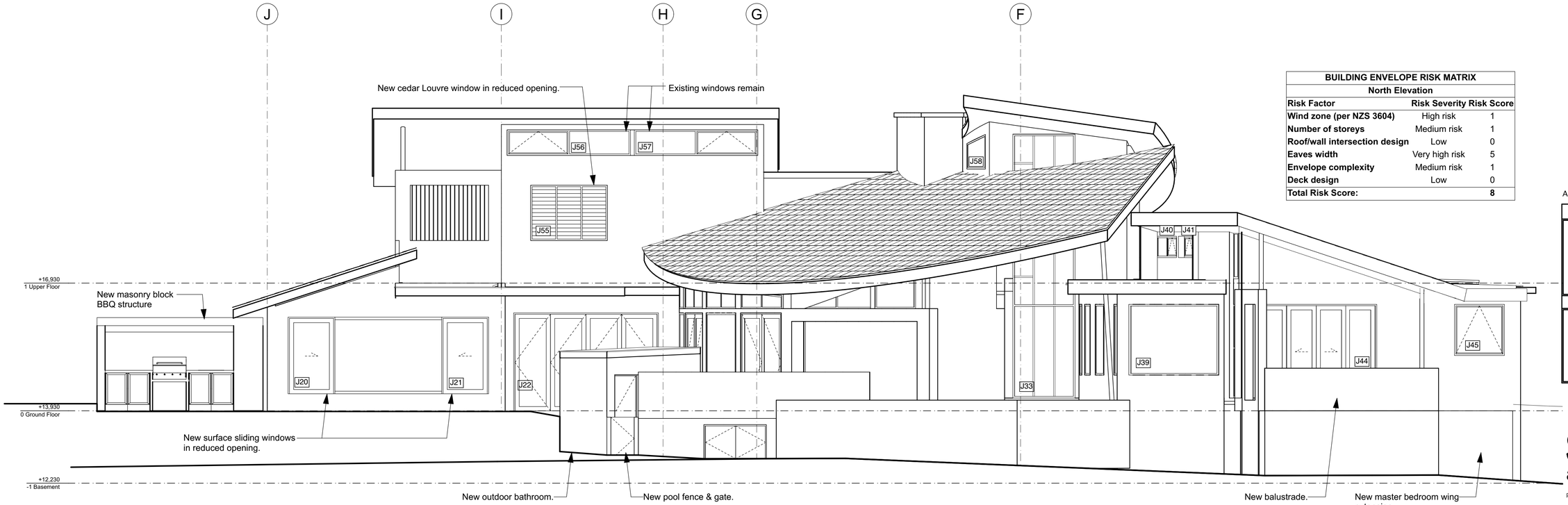
Do not scale from drawings.
The Contractor must check and verify all dimensions on site prior to commencing any work.

All work to be in accordance with
The Building Act 2004,
The New Zealand Building Code, NZS 3604 and
Any additional Territorial Authority requirements.
Refer Specification for references to other
New Zealand / Australian Standards to be complied with as they apply to this project.

WIND ZONE: HIGH
EXPOSURE ZONE: D



EXISTING NORTH ELEVATION
SCALE 1:50 @ A1



BUILDING ENVELOPE RISK MATRIX		
North Elevation		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Medium risk	1
Roof/wall intersection design	Low	0
Eaves width	Very high risk	5
Envelope complexity	Medium risk	1
Deck design	Low	0
Total Risk Score:		**8**

PROPOSED NORTH ELEVATION
SCALE 1:50 @ A1

A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
NORTH ELEVATIONS

JOB
80A PA ROAD
KERIKERI

Spooner architectural solutions
PO Box 10 KERIKERI 0245
e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
1:50 @ A1	RC09

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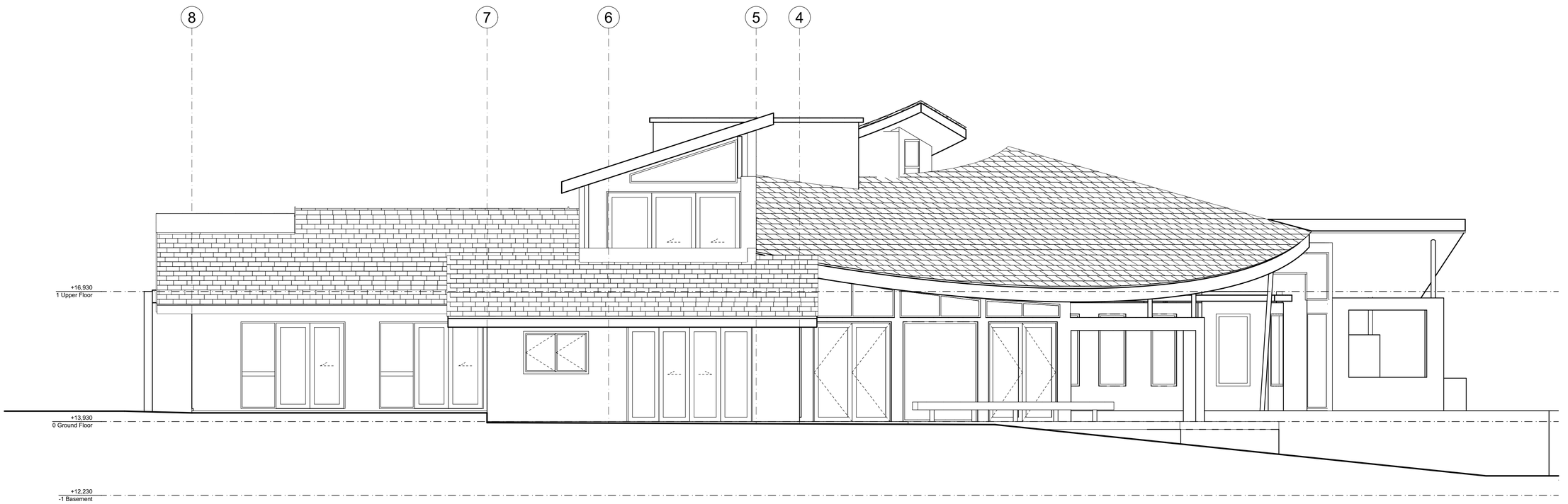
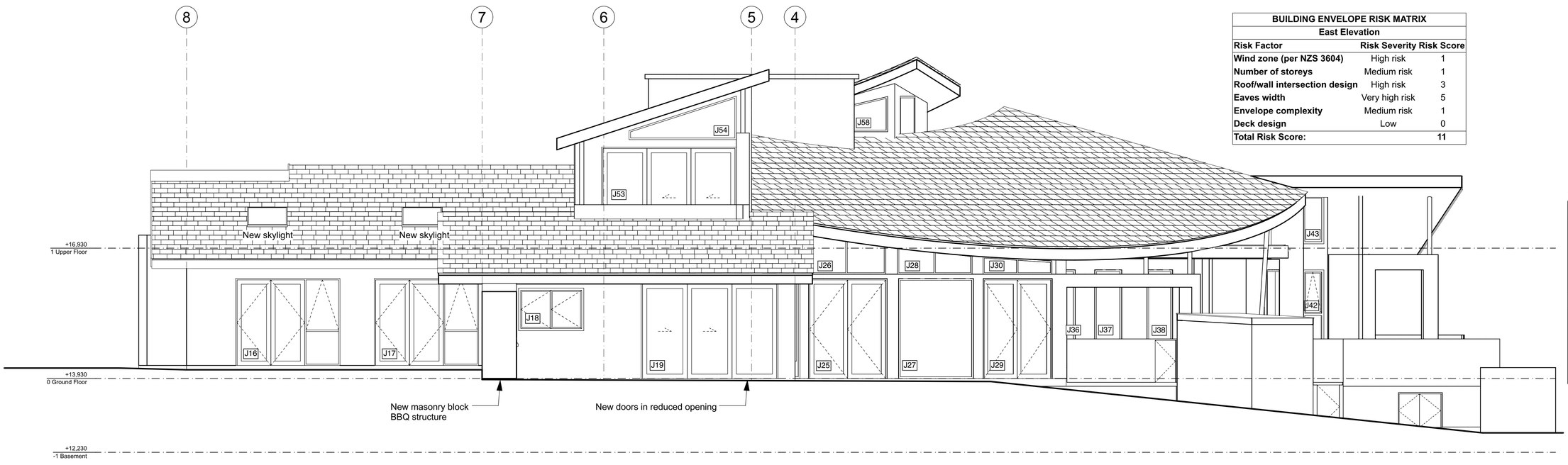
All work to be in accordance with
The Building Act 2004,
The New Zealand Building Code, NZS 3604 and
Any additional Territorial Authority requirements.
Refer Specification for references to other
New Zealand / Australian Standards to be complied with as they apply to this project.

WIND ZONE: HIGH
EXPOSURE ZONE: D



EXISTING EAST ELEVATION
SCALE 1:50 @ A1



BUILDING ENVELOPE RISK MATRIX		
East Elevation		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Medium risk	1
Roof/wall intersection design	High risk	3
Eaves width	Very high risk	5
Envelope complexity	Medium risk	1
Deck design	Low	0
Total Risk Score:		**11**

PROPOSED EAST ELEVATION
SCALE 1:50 @ A1

A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
EAST ELEVATIONS

JOB
80A PA ROAD
KERIKERI

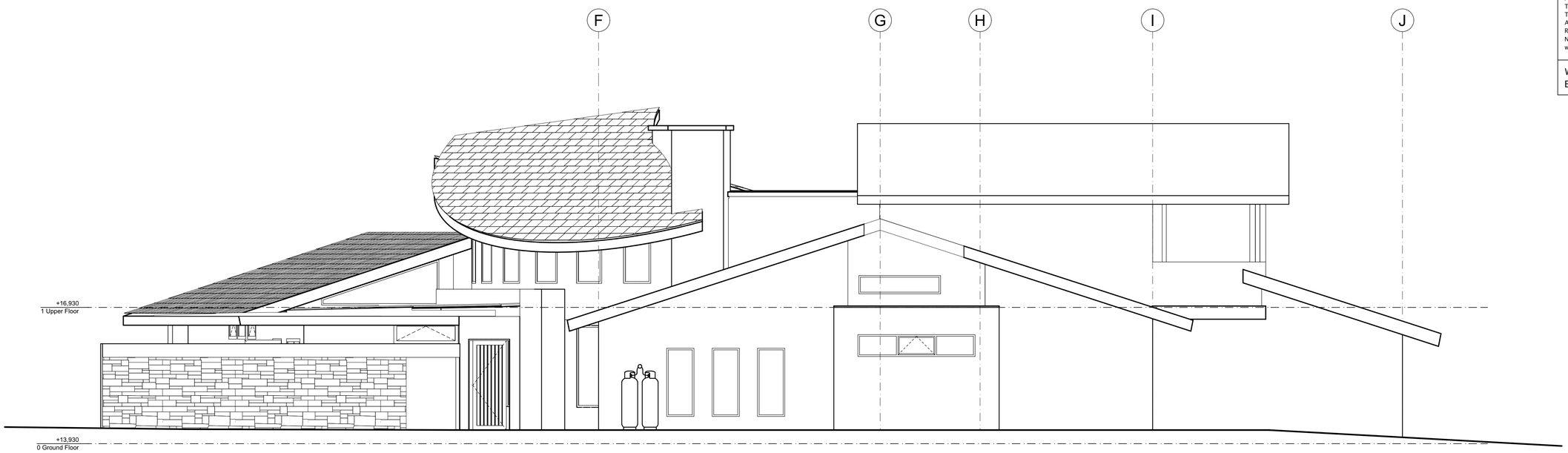
Spooner
architectural solutions
PO Box 10 KERIKERI 0245
e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
1:50 @ A1	RC10

Do not scale from drawings.
The Contractor must check and verify all dimensions on site prior to commencing any work.

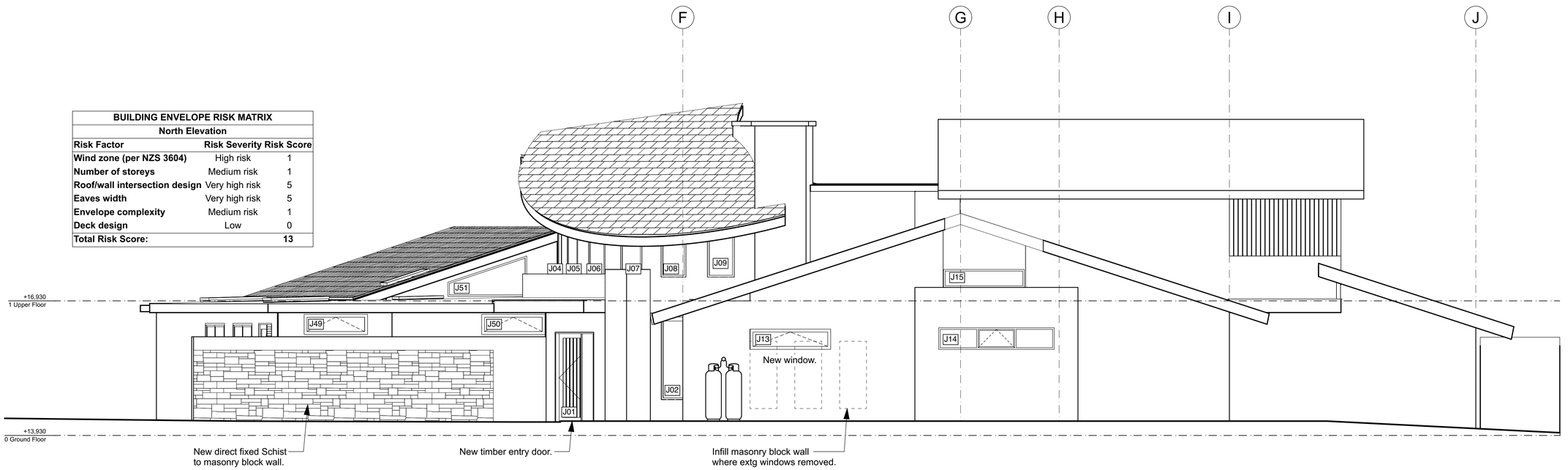
All work to be in accordance with
The Building Act 2004,
The New Zealand Building Code, NZS 3604 and
Any additional Territorial Authority requirements.
Refer Specification for references to other
New Zealand / Australian Standards to be complied with as they apply to this project.

WIND ZONE: HIGH
EXPOSURE ZONE: D



EXISTING SOUTH ELEVATION
SCALE 1:50 @ A1

BUILDING ENVELOPE RISK MATRIX		
North Elevation		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Medium risk	1
Roof/wall intersection design	Very high risk	5
Eaves width	Very high risk	5
Envelope complexity	Medium risk	1
Deck design	Low	0
Total Risk Score:		**13**



PROPOSED SOUTH ELEVATION
SCALE 1:50 @ A1

A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING
SOUTH ELEVATIONS

JOB
80A PA ROAD
KERIKERI

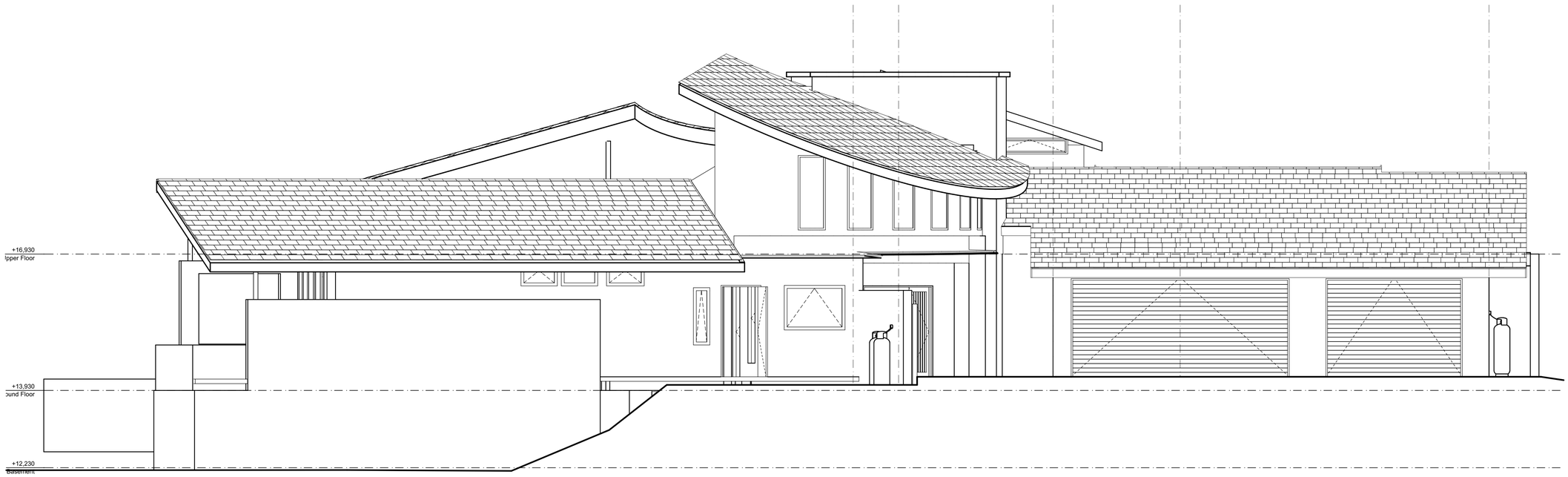
Spooner
architectural solutions
PO Box 10 KERIKERI 0245
e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
1:50 @ A1	RC11

Do not scale from drawings.
The Contractor must check and verify all dimensions on site prior to commencing any work.

All work to be in accordance with
The Building Act 2004,
The New Zealand Building Code, NZS 3604 and
Any additional Territorial Authority requirements.
Refer Specification for references to other
New Zealand / Australian Standards to be complied with as they apply to this project.

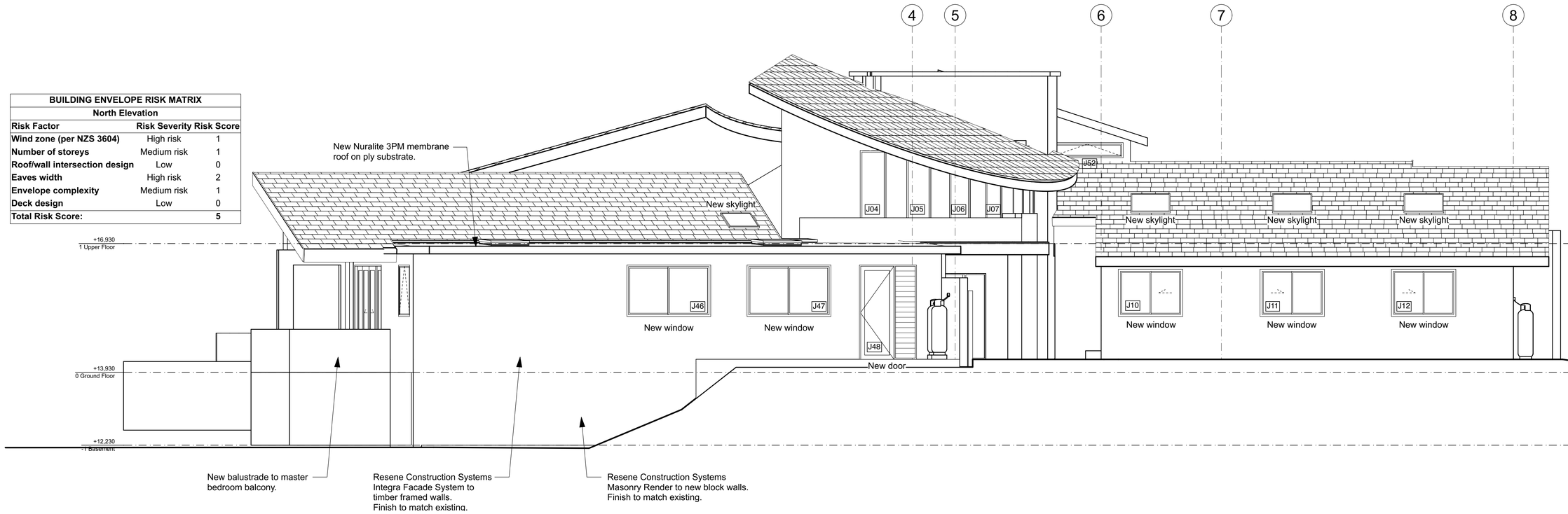
WIND ZONE: HIGH
EXPOSURE ZONE: D



EXISTING WEST ELEVATION

SCALE 1:50 @ A1

BUILDING ENVELOPE RISK MATRIX		
North Elevation		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Medium risk	1
Roof/wall intersection design	Low	0
Eaves width	High risk	2
Envelope complexity	Medium risk	1
Deck design	Low	0
Total Risk Score:		**5**



PROPOSED WEST ELEVATION

SCALE 1:50 @ A1

A RESOURCE CONSENT 22-05-25

REVISIONS

DRAWING

WEST ELEVATIONS

JOB

80A PA ROAD
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PO Box 10 KERIKERI 0245

e: paul@spoonersolutions.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
1:50 @ A1	RC12

25 060

8th May 2025

Hannah and Henry Leventis
80a Pa Road,
Kerikeri

Attention: Paul Spooner

Dear Paul,

80A PA ROAD, KERIKERI
ONSITE WASTEWATER DESIGN REPORT FOR PROPOSED ADDITIONS TO EXISTING DWELLING
Haigh Workman Limited has been engaged to design an on-site wastewater system to service an existing dwelling at the above-mentioned address. This design has been carried out in general accordance with AS/NZS1547:2012.

SITE DESCRIPTION
The site is legally described as Lot 1 DP 168091, located at 80A Pa Road, Kerikeri. The site is somewhat triangular in shape and covers an area of 4,003m^2. The site is generally moderately sloping towards the north / northeast and becomes steeper towards the northern boundary. The existing dwelling is located on a flat cut & fill platform with gardens comprising lawns and landscape planting. The site contains an existing 3-bedroom dwelling with study and associative driveway and parking area. The site has an existing aerated secondary wastewater treatment system installed to the north of the northern wing of the dwelling, with disposal to dripper lines in the garden areas along the northern edges of the property. The water supply for the property is sourced from roof water, which is collected into two large tanks located to the west of the dwelling.

It is proposed to extend the building to include a second study and to convert the garage into a fourth bedroom and children's lounge.

SITE INVESTIGATIONS
Two representatives of Haigh Workman visited the site on the 18th of March 2025 to investigate features and ground conditions. New Zealand land inventory maps (NZMS 290 Sheet O04/05 (Soil map of the Whangaroa – Kaikohe area) indicate the site is underlain by 'soils of the rolling and hilly land; well to moderately well drained Kerikeri friable clay (KE)' and/or Kerikeri friable clay with large boulders (Keb), weathered to 'soft red brown or dark grey-brown clay to depths of 20m with many rounded corestones'.

A total of three boreholes were drilled to depths of 1.0 m in favourable areas of the site for additional effluent disposal. The topsoil, consisting of brown silty clay, depth across the site was 100mm thick, overlying pale orange silty clay with some minor gravels. The topsoil and clay were identified as fill material. At BH1 the fill material was easily identified by the presence of the existing topsoil layer at 0.6m depth. The fill material in all boreholes was relatively stiff and had been in place for a number of years. The material was dry given the 2024/25 summer drought conditions with no evidence of winter groundwater levels being observed at the investigation locations. The soil had not been heavily compacted giving it better drainage structure properties than the natural undisturbed material below. For this reason, we are comfortable to irrigate effluent over the fill areas.

.

Based on our site investigations the natural soils and fill in the sampled areas were categorised as AS/NZS1547:2012 Category 4 Clay Loams.

EXISTING TREATMENT SYSTEM & DISPOSAL FIELD

The existing treatment system was inspected and appeared in a well-maintained condition. Similarly, our inspection of the effluent disposal field revealed no concerns such as saturation or breakout. Refer sample photographs below.

Figure 1 – Treatment plant

Figure 2 – Dripper tubes in bush setting

WASTEWATER GENERATION

Water supply is from roof water tanks. Design wastewater flows can be calculated using TP58 Section 6 guidelines. The proposed development is for a 4-bedroom dwelling with 2 studies for which we adopt a design occupancy of 7-persons based on TP58, the upstairs study with bathroom toilet and shower has been included with an occupancy of 1-person should this be converted to a bedroom in the future. AS/NZS1547:2012 Table H3 indicates daily wastewater flows of 180 litres/person/day for households with standard reduction fixtures. The average daily loading rate is therefore estimated to be 7 x 180 = 1,260 litres/day.

TREATMENT SYSTEM

The property file includes design details and inspection records for the existing treatment system. This was confirmed by our site visit to be a Cleanstream Aerated Treatment System, this has a rated design capacity of 8 person with a rate of 180 litres/person/day, there for 8 x 180 = 1,440 litres/day. Assuming the plant is kept in functioning good order and regularly maintained, then it can be expected to consistently treat a daily flow of 1,260 litres/day.

MAINTENANCE RECORDS

The existing treatment system has been regularly maintained, the records for the last 12 months were made available and note the system to be in excellent condition. Refer records appended.

DISPOSAL SYSTEM

In accordance with AS/NZS1547:2012 Table M1, a design irrigation rate (DIR) of 3.5 mm/day for category 4 soils has been adopted for design. The required land application area is therefore 1,260/3.5 = 360 m^2. A minimum 30 % reserve area of 108 m^2 is also available as indicated on the wastewater disposal plan attached.

The property file includes design details and inspection records for the existing treatment and disposal system, see Figure 3 below and BC 2006 – 955 records attached. The design recommended 200 lineal metres of RAMM irrigation tubing with an irrigation rate of 5 mm/day. The site walkover and measure up confirmed the presence of this quantity of tubing.

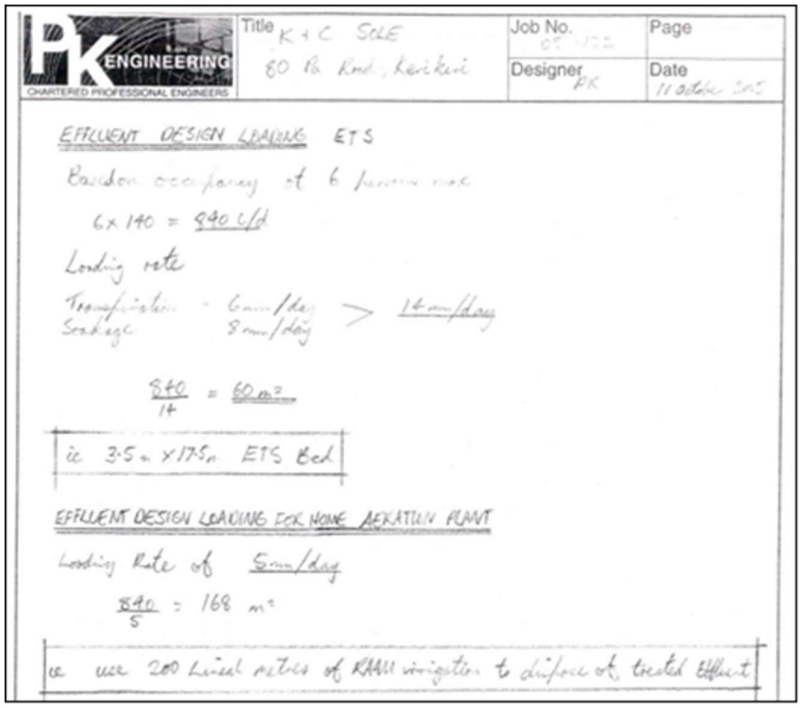

Figure 3 – Property File Wastewater Disposal Field Design Options

The existing disposal field gave no indications of malfunction, such as saturation or breakout and is well outside the nearest mapped flood extents up to and including the 1% AEP flooding zone (i.e. 100-year).

There is sufficient suitable area to extend the existing field to achieve 360 m2. The field shall comprise 360 lineal metres of pressure-compensating drip lines laid at 1m spacing across an area of 360 m^2. Refer wastewater disposal plan shown attached. The ground slope ranges 10 to 20 degrees so the dripper tubes will need to be buried 100mm deep within the topsoil layer. Setbacks of 5m shall be provided for the two surface water drains running along the northwestern and northeastern boundaries and 15m for the pond to the east.

Due to the age of the existing drippers the pipes shall be replaced and not to be reused. In any areas where it is not possible to bury the drippers due to tree roots then the tubing may be laid on the ground surface, firmly pinned and covered, including a 0.5m width either side, with a minimum 100mm of quality topsoil.

One flush valve is required per lateral for maintenance flushing of the field. Dripline Non-Leakage valves (DNL) are to be installed at the start of laterals to prevent effluent flowing to the lowest drip line. Refer standard layout attached. We further recommend 1.6L/hr. emitters spaced at 0.5m to ensure even distribution.

The property owner is responsible for confirming the legal property boundary indicated on the effluent disposal plan.

Stormwater is managed on the neighbouring upslope property, so a stormwater interception drain is not required.

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Civil & Structural Engineers

DESIGN SUMMARY

ITEM	DESCRIPTION
Design Occupancy	*7 persons*
Water fixtures	*Standard water reduction fixtures*
Wastewater generation	*1,260 L/d*
Treatment system	*Secondary treatment plant (Cleanstream)*
Location of effluent disposal	*As per drawings*
Effluent disposal system	*Dripper lines spaced at 1.0m with 1.6L/hr. emitters at 0.5m centres, buried 100mm deep within topsoil layer*
Maximum length of dripper line lateral	*75 m*
Irrigation pump	*Davey 42A/B or equivalent as specified by the plant manufacturer*
Soil type	*AS/NZS1547 Cat. 4. (Add topsoil to achieve 150–250mm depth)*
Application rate	*3.5 mm/day*
Land application area	*360 m^2*
Reserve area (30%)	*108 m^2*
Total area required	*468 m^2*
Slope of land application area	*<25°*

DISCLAIMER

This report has been prepared for the sole use of our Client, Hannah and Henry Leventis, with respect to the particular brief outlined to us. It may not be used or relied on (in whole or part) by anyone else, or for any other purpose or in any other contexts, without our prior written agreement. This report may not be read or reproduced except in its entirety.

Prepared by:	Reviewed by:	Approved by:
Matthew Payton	**Tom Adcock**	**John Papesch**
Civil Engineer	Senior Engineer	Director / Senior Civil Engineer
NZDE Civil	BEng Civil, MEngNZ	BE (Civil), CPEng, CMEngNZ

APPENDICES:

A – Drawings - Site Plan and Typical Disposal Area Layout
B – Onsite Wastewater Disposal Investigation (FNDC Engineering Standards 2023)
C – Summary of Regulatory Requirements
D – Soil Type and Drainage Northland Regional Council Maps
E – Location of Northland Aquifers
F – Suitable plants for Evapo-transpiration Systems
G – Operation and Maintenance Guidelines
H – Borehole Logs
I – Producer Statement – Design (PS1)
J – Property File BC 2006 – 955
K – On-site Wastewater System Maintenance Certificate

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Appendix A: Drawings

Drawing No.	Title
W01	Wastewater Plan
W02	Typical Disposal Area Layout

MINIMUM SECONDARY TREATMENT PLANT SETBACKS:
- INVERT LEVEL AT INLET - NOT LESS THAN 0.5m BELOW FLOOR LEVEL
- BUILDINGS - 3 m
- BOUNDARIES - 1.5 m
- EASILY ACCESSIBLE FOR MAINTANACE.
CHECK ALL DIMENSIONS ON SITE.

MINIMUM EFFLUENT DISPOSAL SETBACKS:
- BOUNDARIES - 1.5 m
- BUILDINGS AND RETAINING WALLS - 3 m
- SURFACE WATER - 5 m (SECONDARY)
- COAST, RIVERS (>3m), LAKES - 30m
- STREAMS, RIVERS (<3m), PONDS, DAMS, NATURAL WETLANDS - 15m
CHECK ALL DIMENSIONS ON SITE.

Rev	Date	Description	By	Checked
A	02/05/2025	FIRST ISSUE	AS	JP

DWG Wastewater Plan

A3 Scale 1: 500 (0 10 25)

Date 02/05/2025

Drawn AS | Checked MP | Approved JP

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HAIGH WORKMAN Ltd
Civil & Structural Engineers
6 Fairway Drive
Kerikeri, BOI
T: 09 407 8327
F: 09 407 8378
E: info@haighworkman.co.nz

Project 80a Pa Road
Kerikeri

Client Hannah and Henry Leventis

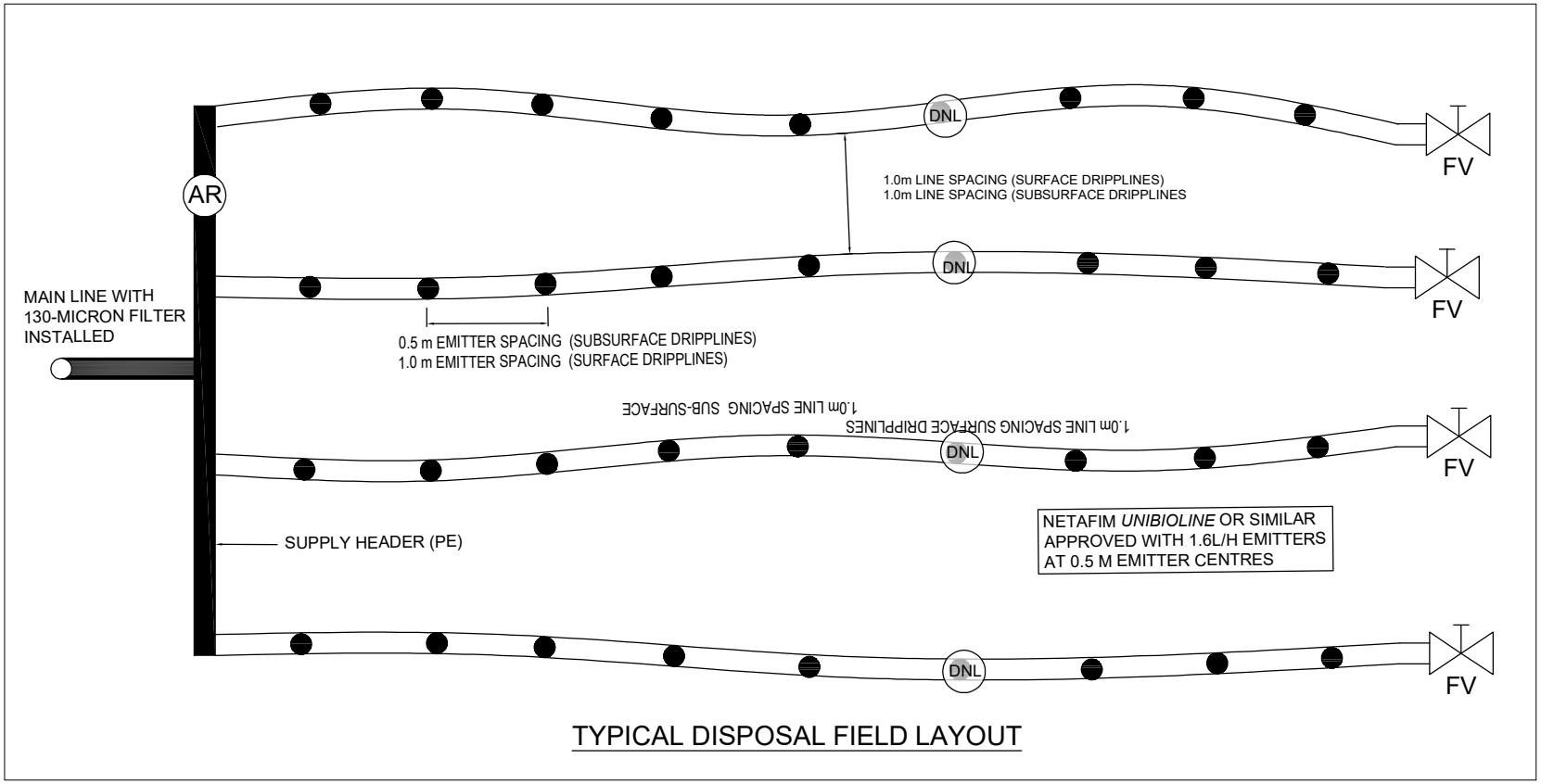
Project No. 25 060

RC no.

Stage

Dwg No. P01

Sheet No. 1 of 2



TYPICAL DISPOSAL FIELD LAYOUT

LEGEND:

- AR — AIR / VACUUM RELEASE VALVE
- FV — FLUSHING VALVE
- DNL — DNL NON-LEAKAGE VALVE

NOTES:

1. THE DRIPPER FIELD HAS A GENTLE LONGITUDINAL FALL, DRIPLINE NON-LEAKAGE VALVES(DNL) SHALL BE FITTED ALONG EACH LATERAL AT SPACINGS NOT GREATER THAN 8m.
2. SURFACE DRIPPERLINES ARE TO HAVE LINE AND EMITTER SPACING AS PER THE DETAILING ABOVE, SECURELY PINNED TO THE GROUND SURFACE AND COVERED IN A MINIMUM OF 100mm OF LEAF LITTER OR MULCH (WHERE APPLICABLE).
3. SUBSURFACE DRIPPERLINES ARE TO BE BURIED A MINIMUM 100mm INTO THE TOPSOIL, AND:
   - 3.1. HAVE 1.0m LINE SPACING AND 0.5m EMITTER SPACING, AND PLANTED IN LAWN, OR:
   - 3.2. HAVE LINE AND EMITTER SPACING AS PER THE DETAILING ABOVE AND PLANTED WITH SUITABLE EVAPOTRANSPIRATION PLANTS.

Issue	Date	Revision
A	2/05/2025	FIRST ISSUE

DWG: TYPICAL DISPOSAL AREA LAYOUT

Scale 1:100 @A3 | Date MAY 2025 | Drawn MP | Checked TA | Approved JP

File: T:\CLIENTS\HANNAH AND HENRY LEVENTIS\25 060 80a PA ROAD, KERIKERI\ENGINEERING\DRAWINGS\25 060 DWGS - CO

Z:\HW Files\Haigh Workman Logo1.jpg

6 Fairway Drive
Kerikeri, BOI
T: 09 407 8327
E: info@haighworkman.co.nz

Project: WASTEWATER SYSTEM DESIGN
80A Pa Road, Kerikeri

Client: HANNAH AND HENRY LEVENTIS

Project No. 25 060 | RC no. N/A

DWG No. **W02**

Sheet No. **2** of **2**

Plotted By Matthew Payton at 29/04/2025 5:11:02 pm

Appendix B: Onsite Wastewater Disposal Investigation (FNDC Engineering Standards 2023)

This form is to be read in conjunction with AS/NZS 1547:2012 (or any amendments as applicable), and, in particular with Part 4: Means of Compliance

Part A – Contact Details

1 - Applicant

Name: *Hannah and Henry Leventis*

Property Address: *80a Pa Road, Kerikeri*

Lot/DP Number: *Lot 1 DP 168091*

2 – Consultant / Site Evaluator

Site Evaluator Name: *Matt Payton*

Company Name: *Haigh Workman Ltd*

Postal Address: *PO Box 89, Kerikeri*

Business Phone: *09 407 8327* Mobile:

Email: *info@haighworkman.co.nz*

SQEP Registered[1]: ☑ Yes ☐ No If no, details of suitably registered SQEP who will countersign the report are to be supplied below.

Name of SQEP: *John Papesch*

Company Name: *Haigh Workman Ltd*

Postal Address: *PO Box 89, Kerikeri*

Business Phone: *09 407 8327* Mobile:

[1] It is a requirement that the Evaluator be SQEP registered to carry out on-site effluent investigations/designs. If not, then evaluation/design will need to be counter-signed by a suitably registered SQEP

HAIGH WORKMAN LTD
Civil & Structural Engineers

Email: johnp@haighworkman.co.nz

Part B - Site and Soil Evaluation

1: Desk Study

Requirements (✓ appropriate box) Please complete **all** options. (*If more than one option applies to land under consideration, please clarify with supporting information)*

☐	***FNDC REQUIREMENT***	***APPLIES TO LOT(S)***	***COMMENTS***
1	**Hazard maps/GIS Hazard layer - stability**		
✓	Low instability risk		*Gentle / Moderately Sloping*
	Medium instability risk		
	High instability risk		
2	**GIS Hazard layer - effluent on slope stability**		
✓	Low disposal potential		*Gentle / Moderately Sloping*
	Moderate disposal potential		
	High disposal potential		
3	**GIS Hazard Layer - effluent suitability**		
	Medium unsuitability		
	High unsuitability		
4	**GIS Hazard Layer - Flood susceptibility**		
	Is flood susceptible		
	Is partially flood susceptible		
✓	Is not flood susceptible		*No NRC mapped Flood risk on the site.*
5	**GIS land resources layer - Streams**		
Are there streams on or adjacent to land under investigation?	☐ Yes		
	✓ No		

6	**GIS land resources layer – aquifers at risk**				
Is land situated over or adjacent to aquifer?		✓	Yes		*Land is situated over an aquifer; exact location of aquifer can be seen in Appendix E*
			No		
7	**Annual Rainfall (HIRDS)**			*1500 mm*	

Note: It is to be noted that all information obtained from FNDC GIS/Hazard Maps is to be taken as a guide only.

Note: All information obtained from the above sites is to be confirmed by a specific site investigation as localised conditions could vary substantially. However, should the above data checks indicate the potential for a hazard/non-complying activity etc., this must be further investigated to confirm/deny the indicated situation.

2: On-Site Evaluation

a. Determination of Soil Category *(refer table 4.1.1* AS/NZS 1547:2012*)* (✓ appropriate box)

Soil Category	Structure		Applies to lot(s)	Comments
1 Gravels & Sands		Structureless (massive)		
2 Sandy loams		Weakly Structured		
		Massive		
3 Loams		High/Moderate structured		
		Weakly structured or Massive		
4 Clay loams	✓	High/moderate structured		*In accordance with Appendix C & based on site observations*
		Weakly structured		
		Massive		
5 Light clays		Strongly structured		
		Moderately structured		
		Weakly structured or massive		
6 Medium to heavy clays		Strongly structured		
		Moderately structured		
		Weakly structured or massive		

Note: Refer 4.1 A4 – Soil Assessment AS/NZS 1547:2012 for assessment criteria.

Note: Details of the method used to determine soil type etc. are to be clearly stated, along with positions of boreholes/test pits etc. clearly marked on a site plan. Bore logs are to be provided. Photos should be included.

Note: The site plan should also clearly show the intended area for effluent disposal, along with any site features such as drains, water bores, overland flows etc., along with separation distance achieved.

HAIGH WORKMAN LTD
Civil & Structural Engineers

On-Site Evaluation Continued

b. Site Characteristics for Proposed Disposal Area: (if there is a marked difference between sites, please fill in a separate form for each site and clearly note which site the assessment applies to) (ü appropriate box)

□	***DETAILS***	***APPLIES TO SITE(S)***
1	**Flooding potential to proposed field and reserve field (refer note 1 below)**	
✓	Fields will not flood, or	*Fields have been located outside of any mapped flood extent and outside of any depressions where previous ponding has been observed.*
	Fields will flood in	
	20% AEP event	
	5% AEP event	
	1% AEP event	
2	**Surface water separation to proposed field and reserve field (refer note 2 below)**	
✓	*Main/reserve disposal field comply with NRC rules*	
	Main/reserve disposal field do not comply with NRC rules	
3	**Surface water separation to proposed field and reserve field (refer note 2 below)**	
✓	*Main/reserve disposal field comply with NRC rules*	*As above*
	Main/reserve disposal field do not comply with NRC rules	
4	**Winter ground water separation to proposed field and reserve field (refer note 3 below)**	
✓	*Main and reserve disposal field comply with NRC rules*	
	Main and reserve disposal field do NOT comply with NRC rules	
5	**Slope of ground of proposed field and reserve field (refer note 4)**	
Description	*Gentle to moderately sloping, average slopes between 0 and 20 degrees*	

6	Shape of ground of proposed field and reserve field (Refer note 5 below)				
	Waxing divergent	✓	*Linear divergent*		*Waning divergent*
	Waxing planar		*Linear planar*		*Waning planar*
	Waxing convergent		*Linear convergent*		*Waning convergent*
Comments	*Gentle longitudinal fall. Dripper laterals to be fitted with DNL valves at 8m intervals*				

☐	DETAILS	APPLIES TO SITE(S)
7	Intended water supply source	
☐	Public supply	
✓	Rainwater	
☐	Bore	
8	Proposed method of disposal and recommended Daily Loading rate (DLR) (refer note 6 below)	
Description		
Ssubsurface dripper lines. DIR 3.5 mm/day		
Peak loading factored in (refer note 6 below)	☐ Yes	✓ No
Comments	Standard residential dwelling	

9	Site exposure (refer note 7 below)	Description	Applies to Site(s)
Site(s) aspect		Open	
Pre-dominant wind direction		South-west	
Presence of shelter belts		No	
Presence of topographical features or structures		Topography is planar with trees dotted around site	

10	Proximity of water bores (include adjacent to properties) (refer note 9 below)
Nil	

11	Visible evidence of slips / instability (refer note 8 below)
Nil	

12	Total suitable area available for type of effluent disposal proposed (including reserve area)
360 m^2 for disposal area and 108 m^2 (30%) for reserve area	

13	**Setback areas proposed (if any) (refer note 10 below)**
Exclusion areas and setback distances are provided in Table 9 of the Regional Plan and presented herein	

Notes

1. *If the FNDC hazard maps/GIS indicate a flooding susceptibility on the site being evaluated, an on -site evaluation is to be carried out to determine the effects from 20%, 5% and 1% AEP storm events. This evaluation is to include all calculations to substantiate conclusions drawn. If necessary, include a detailed contour plan and photos.*
2. *NRC Water & Soil plan defines surface water as 'All water, flowing or not, above the 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 within the Coastal Marine Area'. By this definition, separation (complying with NRC rules) is to be maintained by both the proposed disposal and reserve areas from any overland flowpaths and/or swale drains etc. or R/C will be required from NRC. Surface water is to be clearly marked on each site plan, showing the extent of a 1% AEP storm event, and detailing separation distances to main/reserve disposal areas.*
3. *Positions of test borehole/s to be shown and bore logs to be provided. Separation (complying with NRC rules) is to be maintained by both the proposed disposal and reserve areas from winter ground water level or R/C will be required from NRC. If the investigation is done outside of the winter period, allowance is to be made in determining the likely winter level.*
4. *Slopes of ground are to be compared with those recommended maximums for type of system proposed (refer Appendix 4.2B AS/NZS 1547:2012). Designs exceeding those maximums will require specific design to justify the proposal and may also need Resource Consent from NRC.*
5. *Shape of ground is important as it will determine whether there is potential for concentrated overland flows from the upper slopes and also if effluent might be concentrated at base of slope if leeching occurs. Refer Figure 4.1B2 AS/NZS 1547:2012.*
6. *The proposed system (for residential developments) should be sized to accommodate an average 3 bedroom house with 5 people. Sites in holiday areas need to take peak loading into effect in determining daily volumes. The design must state what DLR was used to determine area necessary (including reserve area). If ground conditions are marginal for type of disposal proposed, then a soil permeability test utilising the constant head method is to be carried out across the proposed disposal area. Refer Appendix 4.1F AS/NZS 1547:2012.*
7. *The site aspect is important as a north-facing site that is not sheltered from wind and sun by shelterbelts or other topographical features or structures will perform far better than a south-facing site on the lee of a hill that is shaded from wind and sun etc.*
8. *If any effluent disposal area (including any reserve area) proposed has or is adjacent to areas that show signs of instability, then a full report from a CPEng (Geotech) will be required to justify the viability of the area for effluent disposal.*
9. *If there are any water bores on the subject property or adjacent properties then a site plan will be required showing bore positions in relation to any proposed effluent field(s).*
10. *If setback areas are proposed to mitigate effects, the extent and position/s need to be shown on a site plan.*

Appendix C: Summary of Regulatory Requirements

Proposed Regional Plan

C.6.1.3 Other on-site treated domestic wastewater discharge – permitted activity

The discharge of domestic type wastewater into or onto land from an on-site system and the associated discharge of odour into air from the on-site system are permitted activities, provided:

Criterion	Comment
1) The on-site system is designed and constructed in accordance with the Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012), and	We have designed in general accordance with this standard.
2) The volume of wastewater discharged does not exceed two cubic metres per day, and	Complies
3) The discharge is not via a spray irrigation system or deep soakage system, and	Complies (drip irrigation proposed)
4) The slope of the disposal area is not greater than 25 degrees, and	Complies
5) For wastewater that has received secondary treatment or tertiary treatment, it is discharged via: a) a trench or bed system in soil categories 3 to 5 that is designed in accordance with Appendix L of Australian/New Zealand Standard On-Site Domestic Wastewater Management (AS/NZS 1547:2012); or b) an irrigation line system that is dose loaded and covered by a minimum of 50 millimetres of topsoil, mulch, or bark, and	Complies. The irrigation system will be dose limited. The dripper lines will be on the surface.

6) for the discharge of wastewater **<u>onto the surface of slopes greater than 10 degrees:</u>** a) the wastewater, excluding greywater, has received at least secondary treatment, and b) the irrigation lines are firmly attached to the disposal area, and c) where there is an up-slope catchment that generates stormwater runoff, a diversion system is 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 by a minimum of 100 millimetres of topsoil, mulch, or bark, and	Slopes are not greater than 10 degrees and wastewater will be subject to secondary treatment. Dripper lines to be buried minim 100mm deep in topsoil layer.
7) the disposal area and reserve disposal area are situated outside the relevant exclusion areas and setbacks in Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems, and	Surface water setbacks are complied with.
8) for septic tank treatment systems, a filter that retains solids greater than 3.5 millimetres in size is fitted on the outlet, and	NA
9) the following reserve disposal areas are available at all times: a) one hundred percent of the existing effluent disposal area where the wastewater has received primary treatment or is only comprised of greywater, or b) thirty percent of the existing effluent disposal area where the wastewater has received secondary treatment or tertiary treatment.	30% reserve area provided
10) the on-site system is maintained so that it operates effectively at all times and maintenance is undertaken in accordance with the manufacturer's specifications, and	Proposed per maintenance recommendations
11) the discharge does not contaminate any groundwater water supply or surface water, and	Will comply given provided design parameters
12) there is no surface runoff or ponding of wastewater, and	Will comply given provided design parameters
13) there is no offensive or objectionable odour beyond the property boundary.	Will comply given provided design parameters

Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems

Feature	Primary treated domestic type wastewater	Secondary and tertiary treated domestic type wastewater	Greywater
Exclusion areas			
Floodplain	5% annual exceedance probability	5% annual exceedance probability	5% annual exceedance probability
Horizontal setback distances			
Identified stormwater flow path (including a formed road with kerb and channel, and water-table drain) that is down-slope of the disposal area	5 metres	5 metres	5 metres
River, lake, stream, pond, dam or natural wetland	20 metres	15 metres	15 metres
Coastal marine area	20 metres	15 metres	15 metres
Existing water supply bore	20 metres	20 metres	20 metres
Property boundary	1.5 metres	1.5 metres	1.5 metres
Vertical setback distances			
Winter groundwater table	1.2 metres	0.6 metres	0.6 metres

Far North District Plan

12.7.6.1.4 Land Use Activities Involving Discharges of Human Sewage Effluent

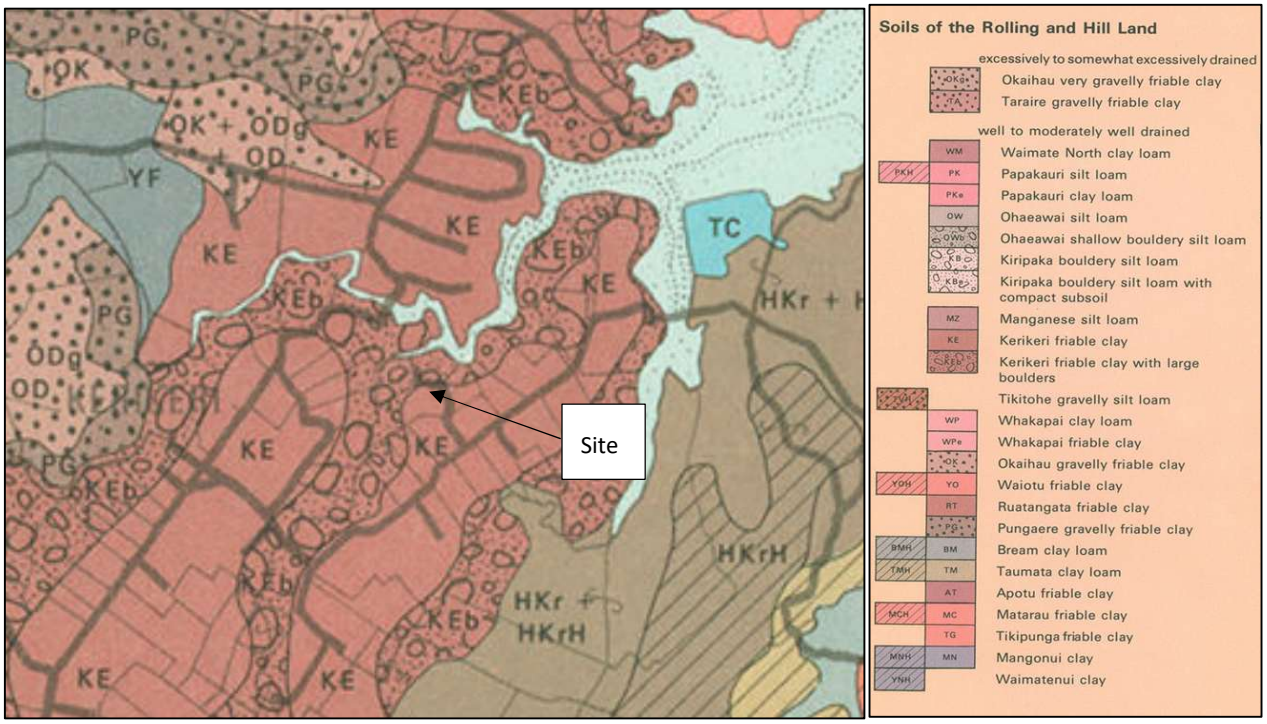
Land use activities which produce human sewage effluent (including grey water) are permitted provided that:

Criterion	Comment
The effluent discharges to a lawfully established reticulated sewerage system; or	
The effluent is treated and disposed of on-site such that each site has its own treatment and disposal system no part of which shall be located closer than **30m** from the boundary of any river, lake, wetland or the boundary of the coastal marine area.	Complies

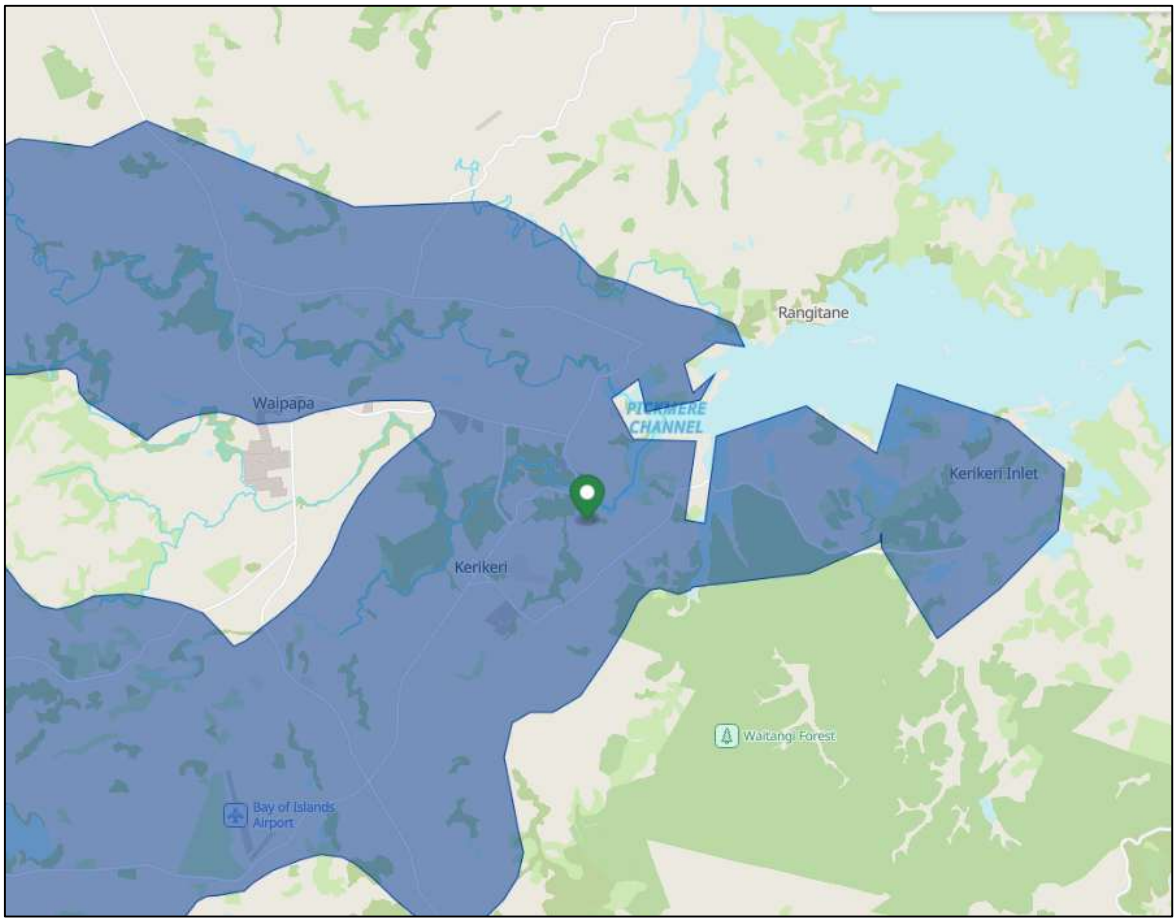
Note: The discharge may also require consent under the Regional Water and Soil Plan.

Appendix D: Soils Map

NZMS 290 Sheet O04/05 (Soil map of the Whangaroa – Kaikohe area)



Appendix E: Location of Northland Aquifers



Appendix F: Suitable Plants for Evapo-transpiration Systems

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, Private 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

Appendix G: Operation and Maintenance Guidelines

ON-SITE WASTEWATER SYSTEMS

Maintenance Guidelines For Homeowners

PROTECTING YOUR HEALTH, YOUR ENVIRONMENT, YOUR INVESTMENT

PRODUCED BY: SWANS-SIG

The Small Wastewater And Natural Systems Special Interest Group of Water New Zealand

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Contact Details:

SWANS-SIG
Water NZ PO Box 1316
WELLINGTON 6140

Telephone: 64-4-472 8925
Fax: 64-4-472 8926

Web-site: www.waternz.org.nz/swans.html

WHY MAINTENANCE OF YOUR ON-SITE WASTEWATER SYSTEM IS IMPORTANT

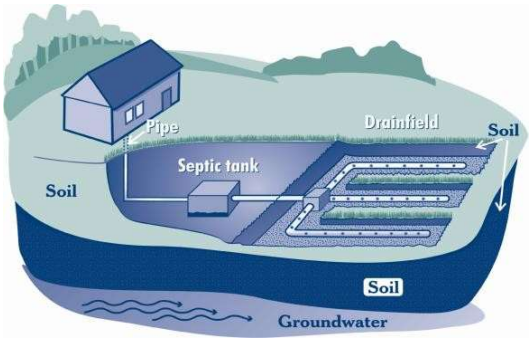
Whether you have a new “high-tech” treatment unit and drip irrigation system or an older “low-tech” septic tank and soakage trench system, regular attention to system inspection and maintenance is important. Effective regular maintenance of the wastewater servicing system on your property is essential for:

(a) protecting family health by ensuring a high level of sanitary performance;
(b) maintaining environmental values both within and beyond your property
(c) protecting the investment in your wastewater system; and
(d) enhancing amenity values in your neighbourhood through contributing to a high level of environmental performance for local on-site wastewater systems.

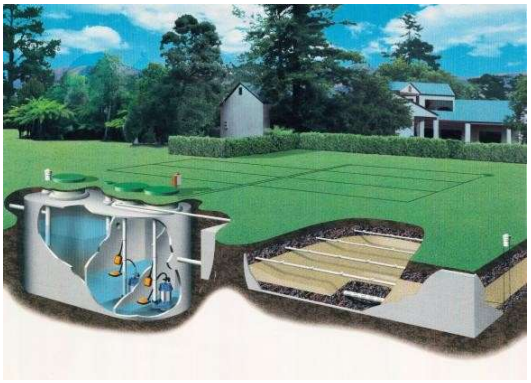
WHAT TYPE OF SYSTEM IS INSTALLED ON YOUR PROPERTY?

You are likely to have one of four types of system on your property:

- an old unknown system about which you have no information;
- an older style septic tank and soakage trench or soak hole system;
- a new modern septic tank and land application system (such as dosed trenches, or shallow planted evapo-transpiration beds, or a mound, or a low pressure dosed irrigation area);
- a new advanced treatment unit (such as an aerobic treatment plant, sand filter, or packed bed reactor) plus drip irrigation land application system.



Older style septic tank and soakage trench system



Modern septic tank, sand filter and drip irrigation field

Before you can attend to the maintenance requirements for your system you will have to establish the system type and capacity. This will require a detailed site inspection and/or a check of building records held by council. You may be able to do some of this yourself, but if a site investigation is needed, it is best to engage a drainage contractor or on-site wastewater servicing professional to investigate as follows:

(a) For an older unknown system

- Carry out a field inspection to locate and identify the treatment unit and soakage field area.
- Excavate or probe as appropriate to identify system components, their size and condition.
- Prepare a loading certificate based on an assessment of system capacity and its performance potential.

	• Identify a suitable reserve area for extending the system if need be.
(b) For an older style septic tank and soakage trench or soak hole system	• If necessary, carry out a field inspection to locate the septic tank and soakage field area. • Check the maintenance record for the tank, and/or pumpout and inspect tank condition. • Evaluate the capacity and current performance of the soakage system. • Prepare a loading certificate based on an assessment of system capacity and its performance potential. • Identify a suitable reserve area for extending the system if need be.
(c) For a new modern septic tank and land application system	• Check council building consent records. • Check designer/installer reports and as-built records. • Obtain the designer's loading certificate (see box below). • Check availability of operation and maintenance instructions as provided by the designer. • Confirm the availability of a suitable reserve area for extending the system if need be.
(d) For a new advanced treatment unit and land application system	• Check council building consent records. • Check designer/installer reports and as-built records. • Obtain the designer's loading certificate. • Check availability of operation and maintenance instructions as provided by the designer. • Check if a maintenance contract is in place, and if not investigate options for and commission such a contract. • Ensure the maintenance contract is renewed

Checking scum and sludge levels in a septic tank

Servicing an advanced wastewater treatment unit

Whatever system is installed on your property, it is important that you understand the capabilities of the system. These are best identified and summarised in the preparation of a loading certificate. The loading certificate will enable you to understand the limitations or constraints of your system; however, the most important thing is to know your system type so that the right sort and frequency of maintenance can be carried out. This can simply be done through an inspection by a wastewater servicing specialist who will prepare the loading certificate.

LOADING CERTIFICATE

This should set out the following information:

(a) System type (obtained from the as-built details provided by the designer/installer};

(b) System capacity (number of persons and daily flow volume);

(c) Summary of design criteria;

(d) The location of and use of the 'reserve area';

It is also essential that if you have an advanced treatment and land application system subject to a maintenance contract, this contract is renewed annually.

DO YOU HAVE A SET OF USER GUIDELINES?

Your Regional, City or District Council is likely to have available a set of user guidelines for owner/occupiers of dwellings serviced by on-site wastewater systems. Such guidelines may be based on the provisions of the joint Australia New Zealand Standard AS/NZS 1547:2012 "On-site Domestic Wastewater Management", and will typically set out 'dos' and 'don'ts' related to household activities which generate wastewater flows (see box below).

USER ADVICE for a PROPERTY OWNER/OCCUPIER (from AS/NZS 1547:2012)

For the on-site system to work well, there are some good habits to encourage and some bad habits to avoid:

(a) To reduce sludge building up in the tank:

(i) Scrape all dishes to remove fats, grease, and so on before washing

(ii) Keep all possible solids out of the system
(iii) Don't use a food waste disposal unit unless the wastewater system has been specifically designed to carry the extra load, and
(iv) Don't put sanitary napkins and other hygiene products into the system;

(b) To keep the bacteria working in the tank and to maintain soil condition in the land application area:

(i) Use biodegradable soaps
(ii) Use a low-phosphorus detergent (less than 1 gram per wash – very good; "no phosphorus" labelled product – best)
(iii) Use a low-sodium detergent in erosive or clayey soil areas (less than 20 grams per wash – OK; less than 10 grams per wash – best)

(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 the drain, and

(vii) Check potential for effects from antibiotic and other medication use.

(c) Conservation of water will reduce the volume of effluent requiring disposal to the land application area, make it last longer and improve its performance. Conservation measures include:

(i) Installation of water conservation fittings

(ii) Taking showers instead of baths
(iii) Washing clothes only when there is a full load, and

(iv) Using the dishwasher only when there is a full load;

(d) Avoid overloading the system by spacing out water use as evenly as possible. For example:

(i) Do not do all the washing on one day, and

(ii) Do not run the washing machine and dishwasher at the same time.

MAINTENANCE INSPECTION REQUIREMENTS

Once you know the details and operating capacity of your on-site wastewater system then you can check out the maintenance inspection and servicing requirements from the table below. Note that your system will include a distribution device to convey the treated effluent to each element of your land application system so as to provide uniform use of the soil in further treating the wastewater flow.

Treatment System Type	Inspection and Maintenance Requirements
Older style septic tank	• Pumpout at 3-year intervals • Alternatively, check scum and sludge levels and pumpout on demand (around half full of scum and sludge)
Modern septic tank with effluent outlet filter	• Check scum and sludge levels (2-yearly) and pumpout on demand (around 6 to 8 years) • Check and hose down effluent outlet filter during pumpout
Aerobic treatment unit (aerated system)	• Periodic effluent quality "sniff and look" inspection (6-months) • Check power consumption (3-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)
Septic tank/sand filter system	• Periodic effluent quality "sniff and look" inspection (6-months) • Confirm sand is draining satisfactorily and not clogging (12-months) • Replace upper sand layer if draining slowly (as required) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)
Packed bed reactor unit	• Periodic effluent quality "sniff and look" inspection (6-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)

Distribution System	Inspection and Maintenance Requirements
Gravity distribution box	• Check distribution evenly balanced to all outlets (12-months) • Remove any accumulated solids in base of box (12-months)
Flood load gravity dosing system	• Check distribution is evenly balanced to all outlets (12-months) • Remove any accumulated solids in base of dose chamber (12-months)
Siphon dosing system	• Check siphon operation (ensure system not dribbling following 'shut-off') (6-months) • Remove any accumulated solids in base of siphon chamber (6-

	months)
Pump chamber and manifold distribution to dosing lines	• Check pump start and stop level controllers (clean off grease and solids) (6-months) • Check pump power use (6-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)
Pump chamber and automatic sequencing valve distribution to dosing lines	• Check pump start and stop level controllers (clean off grease and solids) (6-months) • Check pump power use (6-months) • Check sequencing valve operation (6-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)

Land Application System Type	Inspection and Maintenance Requirements
Soakage trenches (or beds)	• Inspect soakage field area for signs of wetness, surface seepage and/or excess grass growth (6-months) • Check level of standing effluent in trenches using vent pipes for liquid depth observation (6-months) • Add extra trenches in reserve area if overload (wetness or flooded system) becomes apparent
ETS (evapo-transpiration seepage) beds (or trenches)	• Inspect space between ETS beds/trenches for signs of wetness, surface seepage and/or excess grass growth (12-months) • Trim grass and/or ET plantings to avoid rank overgrowth • Check level of standing effluent in beds/trenches using vent pipes for liquid depth observation (12-months) • Add extra beds/trenches in reserve area if overload (wetness or flooded system) becomes apparent
Mounds (for septic tank effluent)	• Inspect edges (toe) of mound for signs of wetness, surface seepage and/or excess grass growth (6-months) • Install and plant a 1 metre wide by 400mm deep topsoil layer around mound perimeter if toe seepage becomes apparent • Install extra mound in reserve area if toe seepage not managed by supplementary soil and ET plantings.
LPED (low pressure effluent distribution) irrigation field	• Inspect soakage field area for signs of wetness, surface seepage and/or excess grass growth (6-months) • Trim grass and/or ET plantings to avoid rank overgrowth • Check level of standing effluent in LPED trenches using vent pipes (6-months) • Add extra LPED trenches in reserve area if overload (wetness or flooded system) becomes apparent
Drip irrigation field	• Inspect irrigation field area for signs of wetness, surface seepage and/or excess grass growth (6-months) • Trim grass and/or ET plantings to avoid rank overgrowth • Check air release valves are operating effectively (6-months) • Operate irrigation line flush valves (6-months) • Add extra drip lines in reserve area if overload (wetness or flooded system) becomes apparent • Carryout service check at 6-months (as specified in the

	supplier/installer maintenance contract)
NOTE: Where your wastewater system is subject to a resource consent from your Regional Council, you should note and follow the maintenance conditions imposed by the consent.	

DIY MAINTENANCE TASKS

As homeowner (or occupier) there are several inspection and maintenance tasks which you can carry out yourself. However, your must remember at all times that you are dealing with unsanitary waste material which may potentially be infectious, and hence in handling equipment and effluent samples you must take adequate precautions to prevent contamination of yourself and your equipment.

The following simple tasks involve a commonsense approach to on-site wastewater system homeowner/occupier DIY inspection and maintenance requirements (see tables above).

- Check septic tank scum and sludge levels (organise pumpout if required).
- Check drainage lines for evidence of 'backup' (slow draining).
- If backup due to outlet filter blockage, lift and hose down filter into septic tank.
- Check distribution box for even distribution of flow to trenches.
- Inspect land application system (trenches, beds, mounds, LPED and drip irrigation fields) for signs of wetness, seepage, excess grass growth.
- Carry out "sniff and look" assessment of advanced treatment plant effluent quality (if a glass container full of effluent does not appear cloudy, and smells only slightly musty and not offensive, effluent quality is good).
- Check treatment unit and pumping system power consumption (if increases over time, need system check by servicing personnel).
- Check operation of irrigation line flush valves.
- If need be, call in drainage contractor, servicing specialist or maintenance contract service provider to undertake servicing and/or remedial works.

Healthy worm activity in septic tank scum layer

Septic tank pumpout

Backup to gully trap from clogged tank

Lifting and hosing down effluent outlet filter

Distribution box

Automatic sequencing valve

SERVICING AGENT MAINTENANCE TASKS

If you as owner/occupier wish to have no role in maintaining your system, this is fine, but you will need to engage a drainage contractor, servicing specialist or maintenance contract service provider to undertake servicing and/or remedial works.

Even if you do carry out DIY maintenance tasks as outlined above engaging servicing personnel will be essential to carrying out mechanical and electrical servicing as well as specialist servicing tasks such as effluent quality sampling and testing. In addition, servicing specialists are best fitted to undertake tasks such as:

- Checking scum and sludge levels in tanks.
- Lifting and hosing down effluent outlet filters.
- Checking distribution effectiveness from distribution boxes and automatic sequencing valves.
- Checking power consumption and adjusting treatment plant controls and pumping cycles to achieve better efficiency.
- Checking distribution effectiveness and flushing drip irrigation lines.
- Undertaking remedial works and system extensions.

MAINTENANCE CERTIFICATE

Where a specialist servicing check is undertaken, including servicing under a maintenance contract, you should be provided with a maintenance certificate (see box below). This certificate should be filed away and provided as required to your District or Regional Council as proof of maintenance. This requirement may be a consent condition.

A maintenance certificate shall include (from AS/NZS 1547:2012)

(a) Certification by a qualified and experienced person that the on-site system is operating and performing effectively;

(b) A note of any specific operation and maintenance attention which is due;

(c) Identification of any operation and maintenance problems, their likely cause and recommended remedial action;

(d) Any evidence of system capacity being exceeded or likely to be exceeded (for example, by extra residents, or by holiday period occupiers);

CONTACT DETAILS FOR ADVICE AND SERVICE

To find a wastewater servicing specialist, contact your local council, septic tank pumpout contractor, treatment plant supplier or plumbing/drainlaying company. Enter contact details/phone numbers in the boxes below of those persons whom you may need to call on at some stage to gain advice on issues related to operation, inspection and maintenance of your on-site wastewater system

System Designer

Council On-site Wastewater Officer

Maintenance Contract Servicing Agent

Local Drainage Contractor

Acknowledgements – Illustrations:

- Marlborough District Council
- US EPA Educational Materials
- Reflection Treatment Systems Ltd
- Ministry for the Environment
- Super-Treat NZ Ltd
- On-Site NewZ
- North Dakota State University
- Inspect*A*Pedia
- Southeast Septic, USA
- Dola Transport, USA

HAIGH WORKMAN Ltd
Civil & Structural Engineers

Appendix H: Borehole Logs

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Borehole Log - BH01

Hole Location: Refer to Site Plan

JOB No. 25 060

CLIENT:	Hannah and Henry Leventis	**SITE:**	80a Pa Road, Kerikeri		
Date Started:	18/03/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	TA
Date Completed:	18/03/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	JP

Soil Description

Based on NZGS Logging Guidelines 2005

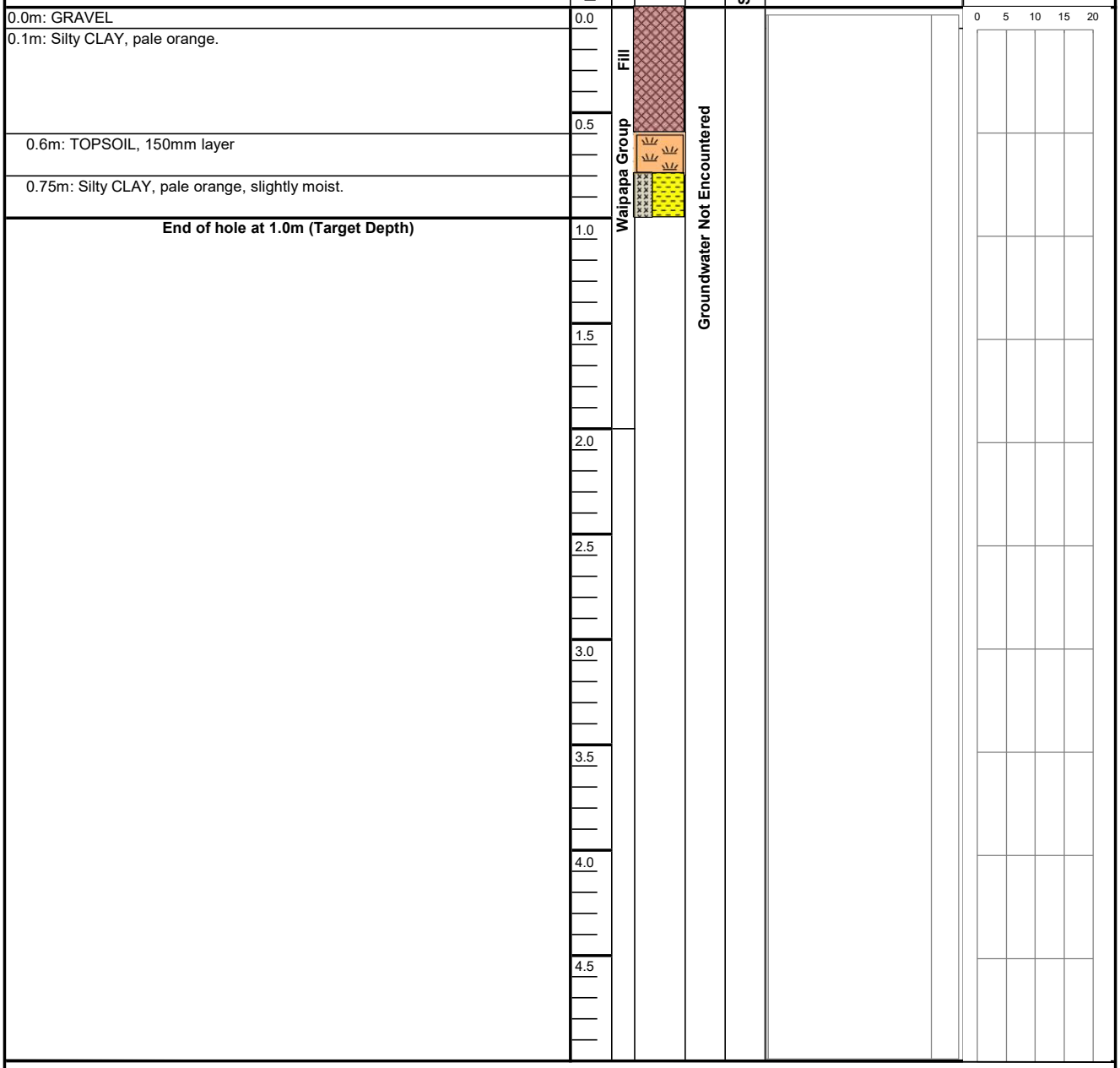
0.0m: GRAVEL

0.1m: Silty CLAY, pale orange.

0.6m: TOPSOIL, 150mm layer

0.75m: Silty CLAY, pale orange, slightly moist.

End of hole at 1.0m (Target Depth)



LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Note: Hand Held Shear Vane testing not undertaken
Scala penetrometer testing not undertaken

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Borehole Log - BH02

Hole Location: Refer to Site Plan

JOB No. 25 060

CLIENT:	Hannah and Henry Leventi	**SITE:**	80a Pa Road, Kerikeri		
Date Started:	18/03/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	TA
Date Completed:	18/03/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	JP

Soil Description

Based on NZGS Logging Guidelines 2005

0.0m: TOPSOIL, dry.

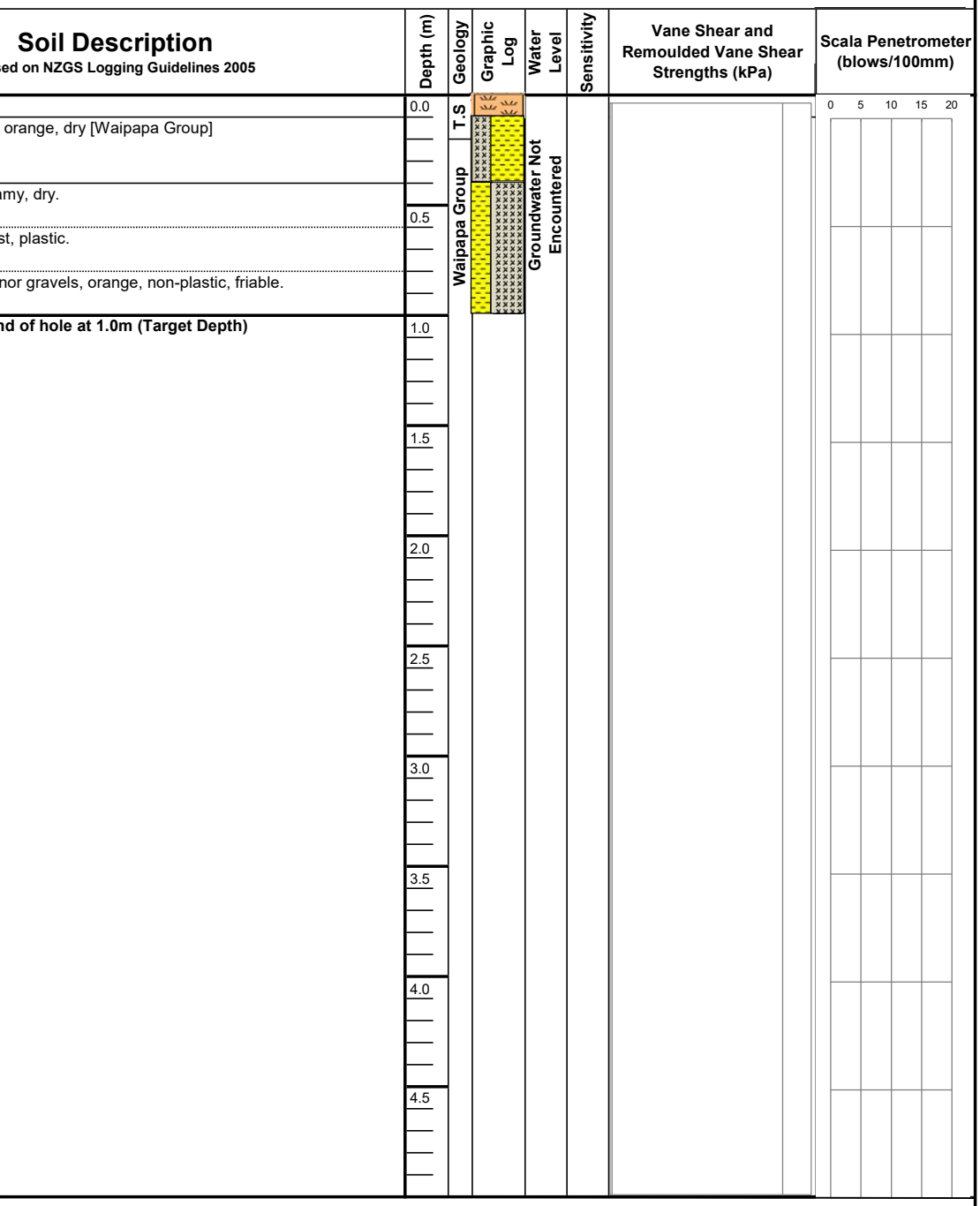
0.05m: Silty CLAY, pale orange, dry [Waipapa Group]

0.4m: Clayey DILT, creamy, dry.

From 0.6m: slightly moist, plastic.

From 0.8m: some minor gravels, orange, non-plastic, friable.

End of hole at 1.0m (Target Depth)



LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Note: Hand Held Shear Vane testing not undertaken
Scala penetrometer testing not undertaken

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Borehole Log - BH03

Hole Location: Refer to Site Plan

JOB No. 25 060

CLIENT:	Hannah and Henry Leventi	**SITE:**	80a Pa Road, Kerikeri		
Date Started:	18/03/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	TA
Date Completed:	18/03/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	JP

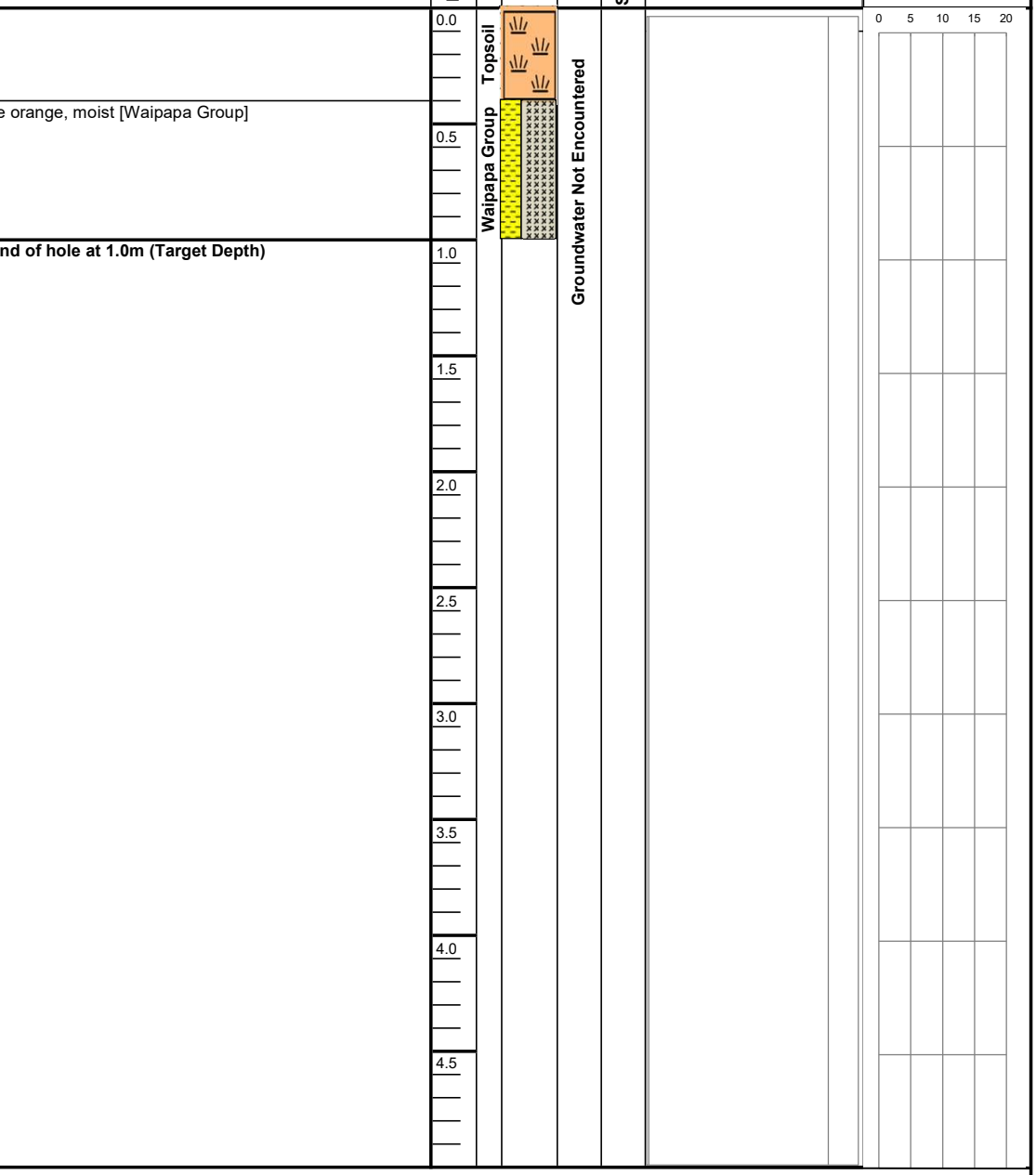
Soil Description

Based on NZGS Logging Guidelines 2005

0.0m: TOPSOIL, dry

0.7m: Clayey SILT, pale orange, moist [Waipapa Group]

End of hole at 1.0m (Target Depth)



LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Note: Hand Held Shear Vane testing not undertaken
Scala penetrometer testing not undertaken

Appendix I: Producer Statement PS1

PRODUCER STATEMENT – PS1
DESIGN

Building Code Clause(s):	G13	Job number: 25 060
ISSUED BY: *(Engineering Design Firm)*	Haigh Workman Limited	
TO: *(Client)*	Spooner Architectural Solutions	
TO BE SUPPLIED TO: *(Building Consent Authority)*	Far North District Council	
IN RESPECT OF: *(Description of building work))*	Onsite Wastewater System	
AT: *(Address)*	80A Pa Road, Kerikeri 0230	
LEGAL DESCRIPTION	Lot 1 DP 168091	

We have been engaged by Spooner Architectural Solutions to provide:

the design of an on-site wastewater disposal system

in respect of the requirements of the Clause(s) of the Building Code specified above for all of the proposed building work.

The design carried out by Haigh Workman Limited has been prepared in accordance with:

✓ compliance documents issued by the Ministry of Business, Innovation & Employment (Verification method /acceptable solution): AS/NZS 1547:2012

The proposed building work covered by this producer statement is described in the drawings specified in the attached Schedule, together with the specification, and other documents set out in the attached Schedule.

On behalf of Haigh Workman Limited, and subject to:

- all proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that:

- the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached Schedule, will comply with the relevant provisions of the Building Code specified above; and that
- the persons who have undertaken the design have the necessary competence to do so.

I recommend the CM1 level of construction monitoring.

I, John Papesch, am:

- CPEng number 224301
- and hold the following qualifications: B.E., CMEngNZ, IntPE(NZ)

Haigh Workman Limited holds a current policy of Professional Indemnity Insurance no less than $200,000.

✓ Haigh Workman Limited is a member of ACE New Zealand.

SIGNED BY: John Papesch

(Signature):  Date: 8/5/2025

ON BEHALF OF: Haigh Workman Limited

Note: This statement has been prepared solely for Far North District Council and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to Haigh Workman Limited only. As a condition of reliance on this statement, Far North District Council accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to Far North District Council in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

SCHEDULE TO PS1

Please include an itemised list of all referenced documents, drawings, or other supporting materials in relation to this producer statement below:

- Onsite Wastewater Assessment Report (Haigh Workman), April 2025, Ref. 25 060

GUIDANCE ON USE OF PRODUCER STATEMENTS

Information on the use of Producer Statements and Construction Monitoring Guidelines can be found on either the **ACE New Zealand** or **Engineering New Zealand** websites.

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects (NZIA), Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting and Engineering New Zealand (ACE NZ) in consultation with the Building Officials Institute of New Zealand (BOINZ). The original suite of producer statements has been revised at the date of this form to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with part of the reasonable grounds necessary for the issue of a Building Consent or a Code Compliance Certificate, without necessarily having to duplicate review of design or construction monitoring undertaken by others.

PS1 DESIGN: Intended for use by a suitably qualified independent engineering design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;
PS2 DESIGN REVIEW: Intended for use by a suitably qualified independent engineering design review professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;
PS3 CONSTRUCTION: Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 20112
PS4 CONSTRUCTION REVIEW: Intended for use by a suitably qualified independent engineering construction monitoring professional who either undertakes or supervises construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.
This must be accompanied by a statement of completion of building work (Schedule 6).
The following guidelines are provided by ACE New Zealand and Engineering New Zealand to interpret the Producer Statement.

Competence of Engineering Professional

This statement is made by an engineering firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its personnel.
The person signing the Producer Statement on behalf of the engineering firm will have a professional qualification and proven current competence through registration on a national competence-based register such as a Chartered Professional Engineer (CPEng).
Membership of a professional body, such as Engineering New Zealand provides additional assurance of the designer's standing within the profession. If the engineering firm is a member of ACE New Zealand, this provides additional assurance about the standing of the firm.
Persons or firms meeting these criteria satisfy the term "suitably qualified independent engineering professional".

Professional Indemnity Insurance

As part of membership requirements, ACE New Zealand requires all member firms to hold Professional Indemnity Insurance to a minimum level.
The PI Insurance minimum stated on the front of this form reflects standard practice for the relationship between the BCA and the engineering firm.

Professional Services during Construction Phase

There are several levels of service that an engineering firm may provide during the construction phase of a project (CM1-CM5 for engineers3).
The BCA is encouraged to require that the service to be provided by the engineering firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4

BCAs should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued. No design professional should be expected to provide a producer statement unless such a requirement forms part of Haigh Workman Limited's engagement.

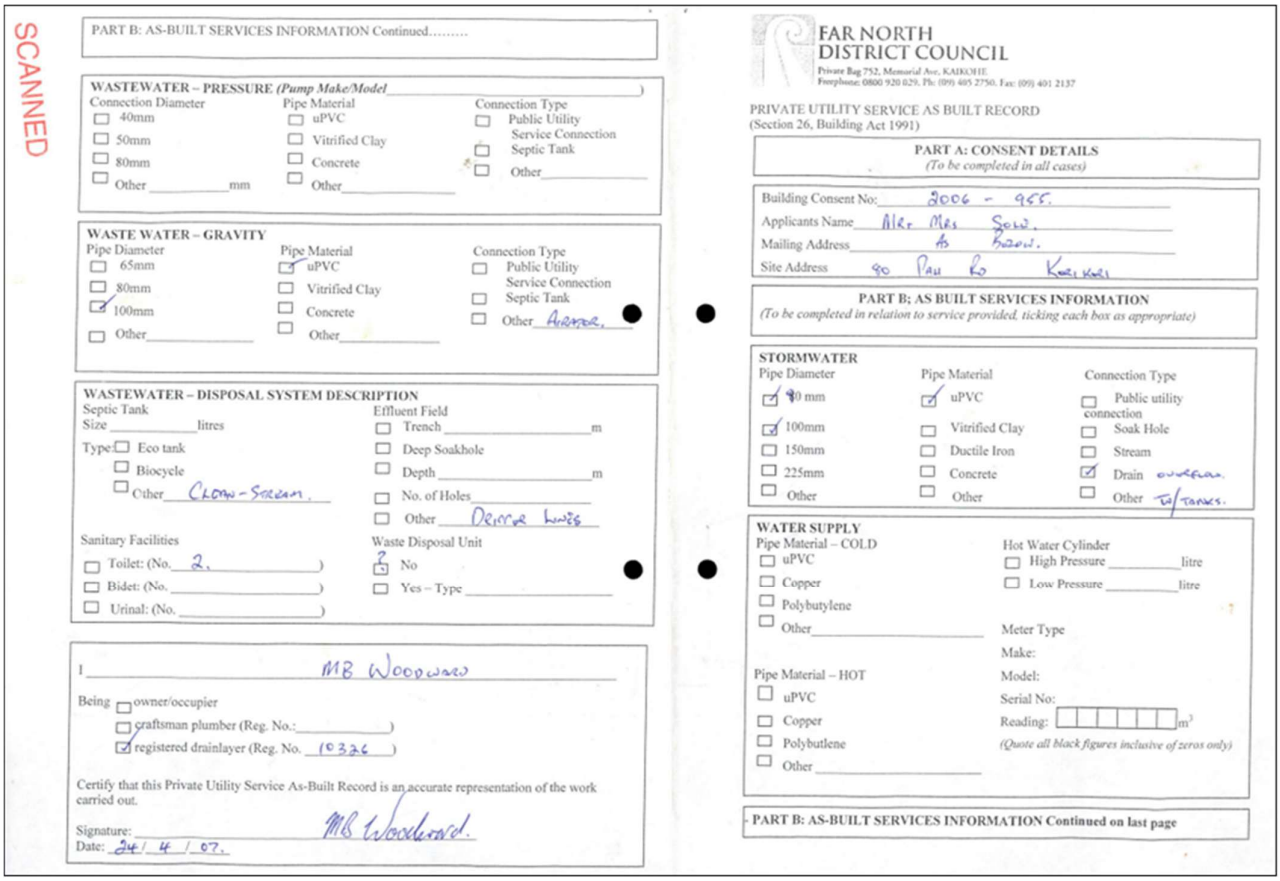
Refer Also:

1 Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013
2 NZIA Standard Conditions of Contract SCC 2011
3 Guideline on the Briefing & Engagement for Consulting Engineering Services (ACE New Zealand/Engineering New Zealand 2004)
4 PN01 Guidelines on Producer Statements

www.acenz.org.nz
www.engineeringnz.org

HAIGH WORKMAN Ltd
Civil & Structural Engineers

Appendix J: Property File BC 2006 - 955



SCANNED

PART B: AS-BUILT SERVICES INFORMATION Continued.....

WASTEWATER – PRESSURE *(Pump Make/Model _____)*

Connection Diameter	Pipe Material	Connection Type
☐ 40mm	☐ uPVC	☐ Public Utility Service Connection
☐ 50mm	☐ Vitrified Clay	☐ Septic Tank
☐ 80mm	☐ Concrete	☐ Other _____
☐ Other _____ mm	☐ Other _____	

WASTE WATER – GRAVITY

Pipe Diameter	Pipe Material	Connection Type
☐ 65mm	☑ uPVC	☐ Public Utility Service Connection
☐ 80mm	☐ Vitrified Clay	☐ Septic Tank
☑ 100mm	☐ Concrete	☐ Other Arator.
☐ Other _____	☐ Other _____	

WASTEWATER – DISPOSAL SYSTEM DESCRIPTION

Septic Tank
Size _____ litres
Type: ☐ Eco tank
☐ Biocycle
☐ Other Clean-Stream.

Effluent Field
☐ Trench _____ m
☐ Deep Soakhole
☐ Depth _____ m
☐ No. of Holes _____
☐ Other Dripper Lines

Sanitary Facilities
☐ Toilet: (No. 2.)
☐ Bidet: (No. _____)
☐ Urinal: (No. _____)

Waste Disposal Unit
☑ No
☐ Yes – Type _____

I MB Woodward

Being ☐ owner/occupier
☐ craftsman plumber (Reg. No.: _____)
☑ registered drainlayer (Reg. No. 10326)

Certify that this Private Utility Service As-Built Record is an accurate representation of the work carried out.

Signature: MB Woodward.
Date: 24 / 4 / 07.

FAR NORTH DISTRICT COUNCIL
Private Bag 752, Memorial Ave, KAIKOHE
Freephone: 0800 920 029. Ph: (09) 405 2750. Fax: (09) 401 2137

PRIVATE UTILITY SERVICE AS BUILT RECORD
(Section 26, Building Act 1991)

PART A: CONSENT DETAILS
(To be completed in all cases)

Building Consent No: 2006 - 955.
Applicants Name Alex Mrs Sowl.
Mailing Address As Above.
Site Address 90 Path Rd Kaeo Kaeo

PART B; AS BUILT SERVICES INFORMATION
(To be completed in relation to service provided, ticking each box as appropriate)

STORMWATER

Pipe Diameter	Pipe Material	Connection Type
☑ 90 mm	☑ uPVC	☐ Public utility connection
☑ 100mm	☐ Vitrified Clay	☐ Soak Hole
☐ 150mm	☐ Ductile Iron	☐ Stream
☐ 225mm	☐ Concrete	☑ Drain overflow.
☐ Other	☐ Other	☐ Other To/tanks.

WATER SUPPLY

Pipe Material – COLD
☐ uPVC
☐ Copper
☐ Polybutylene
☐ Other _____

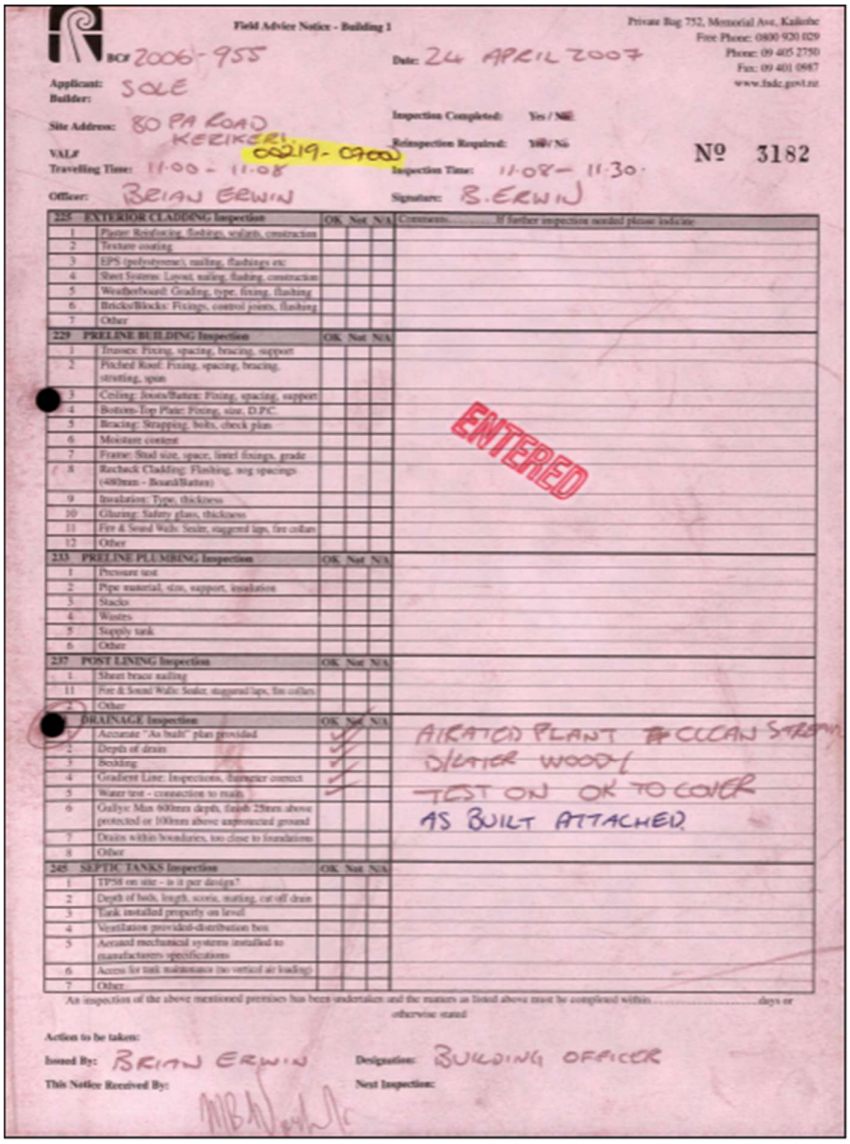
Hot Water Cylinder
☐ High Pressure _____ litre
☐ Low Pressure _____ litre

Meter Type
Make:
Model:
Serial No:
Reading: ☐☐☐☐☐☐ m^3
(Quote all black figures inclusive of zeros only)

Pipe Material – HOT
☐ uPVC
☐ Copper
☐ Polybutlene
☐ Other _____

PART B: AS-BUILT SERVICES INFORMATION Continued on last page

HAIGH WORKMAN Ltd
Civil & Structural Engineers



Field Advice Notice - Building 1

Private Bag 752, Memorial Ave, Kaikohe
Free Phone: 0800 920 029
Phone: 09 405 2750
Fax: 09 401 0987
www.fndc.govt.nz

BC# 2006-955 Date: 24 APRIL 2007

Applicant: SOLE
Builder:

Site Address: 80 PA ROAD KERIKERI 0219-0700

VALP

Travelling Time: 11.00 - 11.08

Officer: BRIAN ERWIN

Inspection Completed: Yes / No

Reinspection Required: Yes / No

Inspection Time: 11.08 - 11.30

Signature: B.ERWIN

Nº 3182

		OK	Not	N/A	Comments... If further inspection needed please indicate
225	EXTERIOR CLADDING Inspection				
1	Plaster: Reinforcing, flashings, scratch, construction				
2	Texture coating				
3	EPS (polystyrene), nailing, flashings etc				
4	Sheet Systems: Layout, nailing, flashing, construction				
5	Weatherboard: Grading, type, fixing, flashing				
6	Bricks/Blocks: Fixings, control joints, flashing				
7	Other				
229	PRELINE BUILDING Inspection	OK	Not	N/A	
1	Trusses: Fixing, spacing, bracing, support				
2	Pitched Roof: Fixing, spacing, bracing, strutting, span				
3	Ceiling: Joists/Battens: Fixing, spacing, support				
4	Bottom-Top Plate: Fixing, size, D.P.C.				
5	Bracing: Strapping, bolts, check plan				
6	Moisture content				
7	Frame: Stud size, space, lintel fixings, grade				
8	Recheck Cladding: Flashing, nog spacings (400mm - Board/Batten)				
9	Insulation: Type, thickness				
10	Glazing: Safety glass, thickness				
11	Fire & Sound Walls: Sealer, staggered lap, fire collars				
12	Other				
233	PRELINE PLUMBING Inspection	OK	Not	N/A	
1	Pressure test				
2	Pipe material, size, support, insulation				
3	Stacks				
4	Wastes				
5	Supply tank				
6	Other				
237	POST LINING Inspection	OK	Not	N/A	
1	Sheet brace nailing				
11	Fire & Sound Walls: Sealer, staggered lap, fire collars				
2	Other				
	DRAINAGE Inspection	OK	Not	N/A	
1	Accurate "As built" plan provided	✓			AIRATOR PLANT & CLEAN STREAM
2	Depth of drain	✓			DEATER WOOD
3	Bedding	✓			TEST ON OK TO COVER
4	Gradient Line: Inspections, diameter correct	✓			AS BUILT ATTACHED
5	Water test - connection to main				
6	Gullys: Min 600mm depth, finish 25mm above protected or 100mm above unprotected ground				
7	Drains within boundaries, too close to foundations				
8	Other				
245	SEPTIC TANKS Inspection	OK	Not	N/A	
1	TP58 on site - is it per design?				
2	Depth of bolt, length, screw, seating, cut off drain				
3	Tank installed properly on level				
4	Ventilation provided-distribution box				
5	Aerated mechanical systems installed to manufacturers specifications				
6	Access for tank maintenance (no vertical air leading)				
7	Other				

ENTERED

An inspection of the above mentioned premises has been undertaken and the matters as listed above must be completed within ..... days or otherwise stated

Action to be taken:

Issued By: BRIAN ERWIN Designation: BUILDING OFFICER

This Notice Received By: MBA Next Inspection:

HAIGH WORKMAN LTD
Civil & Structural Engineers

Appendix K: On-site Wastewater System Maintenance Certificate

Far North District Council

Notice Number: 15403

OSD Number: 2317

On-site Wastewater System Maintenance Certificate

FAR NORTH DISTRICT COUNCIL BYLAW - CHAPTER TWENTY EIGHT
(CONTROL OF ON-SITE WASTEWATER DISPOSAL BYLAW)
THE PURPOSE OF THIS NOTICE IS TO RECORD THE RESULTS OF A SITE ASSESSMENT OF THE ON-SITE WASTEWATER DISPOSAL SYSTEM LOCATED AT THE BELOW MENTIONED PROPERTY

Owner: Bert Lamb Date: 30/01/25 (12 monthly)
Address: 30A Pa Road, Kerikeri
System: Duracrete Model: Clearstream

Septic Tank						***Comments***
Sludge Accumulation	Low		Med	✓	High	
Crust Accumulation	Low		Med	✓	High	
Filter- Cleaned & Locked Down	Yes		No		N/A	
Pumpout Required	Yes		No	✓		
Inlet Juction Clear	Yes	✓	No			
Blower/ Aeration Pump						***Comments***
Make/Model						
Flow	Good	✓	Fair		Poor	
Noise	OK	✓	High			
Air Filter ~~Replaced~~	Yes	✓	N/A			
Inlet/Outlet Cleaned	Yes	✓	N/A			
Aeration Tank						***Comments***
Odour	Yes		No	✓		
Aeration	Good	✓	Ave		Poor	
Diffusers- Purged	Yes		N/A	✓		
Venturi- Cleaned	Yes		N/A	✓		
Sludge Accumulation surface	High		Low		None	✓
Clarifyer Clarity	Good	✓	Ave		Poor	
Air Balance	Good	✓	Ave		Poor	
Sludge Return To Primary Clear	Yes	✓	No			
Ripcord Sprayed	Yes	✓	No			→ air oil added
Lids Secured	Yes	✓	No			
Clarifyer desludged	Yes		No	✓	N/A	
Irrigation System						***Comments***
Pump Operation	Good	✓	Ave		Poor	
Pump Intake/ Outlet Cleaned	Yes	✓	N/A			
Flush Pumpout Drum	Yes		No	✓	N/A	
Sludge in pump out drum Est.	Yes		No	✓	ltr's	
Float Switch Levels/ Condition	OK	✓	Adjust		Repair	
Pressure Clean Irrigation Lines	Yes	✓	No		N/A	
Field Condition	Good	✓	Inaccessable			
	Ponding		Repair/Replace			✓
Filter/s Cleaned	Yes		No		N/A	✓
Pump Pressure	good				N/A	
Water Meter Reading					N/A	✓
Pump cycle run time. (min's)	good					
Electrical System						***Comments***
General Condition	Good	✓	Repair			
Clean Electrical Compartment	Yes	✓	N/A			
Water Alarm Test	Yes	✓	No			
Air Alarm Test	Yes	✓	No			
Power Box Vented	Yes	✓	No			
Aeration run time Hr's	hr's	24	min's			
Timeclock- Check/Reset	Yes	✓	No			

Service Company Name: Flush Septic Solutions

Printing.com Kaitaia - FNDC14 Aerated OSD Service Report Books

Stormwater Management Report

Building Additions

80a Pa Road, Kerikeri

Lot 1 DP 168091

for

Hannah and Henry Leventis

Haigh Workman reference 25 060

May-25

Phone: 0800 424 447 • info@haighworkman.co.nz • www.haighworkman.co.nz
Kerikeri • Whangarei • Warkworth

Revision History

Revision №	Issued By	Description	Date
A	Matthew Payton	For Consent	May 2025

Prepared by	Checked by	Approved by
Matthew Payton **Civil Engineer** NZDE (Civil)	Tom Adcock **Senior Civil Engineer** BEng Civil, MEngNZ	John Papesch **Director/Senior Civil Engineer** BE (Civil), CPEng, CMEngNZ

TABLE OF CONTENTS

TABLES

FIGURES

Executive Summary

Haigh Workman Ltd was commissioned by Hannah and Henry Leventis (the client) to undertake a stormwater management report for the proposed extensions at 80a Pa Road, Kerikeri.

The property is legally described as Lot 1 DP 168091 and has a total area of 4,003 m^2. The site is developed with a dwelling, the client intends to make alterations comprising extension to northwestern wing including master bedroom, ensuite, study and laundry. A new patio area off the eastern wing of house. Also, internal alterations including garage being reconfigured to bedrooms and a children's lounge and addition of a bathroom.

The proposed work is shown on Spooner Architectural Solutions Drawings PD01 - PD06 copy appended.

Stormwater Management
Total impermeable surfaces following the proposed development are estimated as 1,052.2m^2 or 26.3% of the site area. This exceeds the Restricted Discretionary Activity threshold of 20.0% making the activity Discretionary.

The site drains into the Kerikeri Inlet via the roadside swale drain running along the north-western boundary of the property and an open swale drain running along the north-eastern boundary of the property which also flows into the Council roadside drain. The roadside drain enters the tidal Kerikeri inlet approximately 75m downstream of the site.

Proposed Stormwater Management
The proposed development results in a small increase in runoff of 1.9L/s over the existing consented impermeable surfaces (BC 2006/955). Stormwater attenuation has been designed with a target of no more than 80% of the 10% AEP runoff of predevelopment, as per Council Engineering Standards 2023 Section 4.1.6.

Using a standard 15,000L cylindrical tank with a diameter of 3.0m fitted with a 25mm outlet orifice at the base of the tank an attenuation of 3.5L/s is achieved or 83.6% of pre-development. Retention is also provided by the two 25,000L collection tanks which will also contribute to a reduce site runoff.

The existing stormwater controls were inspected, and no shortfalls or defects were identified that might otherwise require improvement. Providing 3.5L/s of attenuation reduces site runoff to less than the existing condition, hence the existing stormwater controls can be retained without the need for any changes or modification.

1 Introduction

1.1 Introduction

Haigh Workman Ltd (Haigh Workman) was commissioned by Hannah and Henry Leventis (the client) to undertake a stormwater management report for the proposed building extensions at 80a Pa Road, Kerikeri (the 'Site').

The property is legally described as Lot 1 DP 168091 and has a total land area of 4,003 m^2. The site is developed with a 3-bedroom dwelling. The proposal is to extend the northwestern wing to include a master bedroom with ensuite, study and laundry and to convert the garage into a fourth bedroom with children's lounge. Also included is an extension to the patio area off the eastern wing of house.

The proposed work is shown on Spooner Architectural Solutions Drawings PD01 to PD06 appended.

1.2 Objective and Scope

The scope of this report is an assessment of impermeable surfaces, stormwater management and recommend mitigation measures for the proposed building additions.

1.3 Applicability

This report has been prepared for our client with respect to the particular brief given to us. This report is to be used by our Client and Consultants and may be relied upon by the Far North District Council when considering the application for the proposed development. The information and opinions contained within this report shall not be used in any other context for any other purpose without prior review and agreement by Haigh Workman Ltd.

2 Site Description

2.1 Site Identification

Site Address:	80a Pa Road, Kerikeri
Legal Description:	Lot 1 DP 168091
Site Area:	4,003m^2

The property is legally described as Lot 1 DP 168091 with a total land area of 4,003 m^2 and comprises a dwelling with two water tanks, a swimming pool, driveway, gardens comprising lawns and landscape planting.

Access is towards the end of Pa Road.

The site is generally moderately sloping towards the north / northeast and becomes steeper towards the northern boundary. The existing dwelling is located on a flat cut & fill platform.

Under the Far North District Plan the Site is zoned as Rural Living.

Figure 1: Site Location

3 Environmental Setting

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

3.1 Hydrology and Flooding

The site is not marked in either of the coastal or river flood hazard zones. It is also not listed in the flood susceptibility zone on the Northland Regional Council GIS databases.

A summary of available information pertaining to hydrology and hydrogeology sourced from District and Regional Council GIS databases is presented in Table 1.

Table 1 Surface Water Features & Flooding

	Presence/Location	Comments
Surface Water Features (Ponds, Lakes, etc.)	There are three ornamental ponds located on neighbouring properties to the east, northeast and north of the site. The tidal Kerikeri Inlet at its closest point is 44m from the property boundary.	The site contour naturally drains towards the northeastern pond but a track with an open stormwater drain running along the northern boundary intercepts the site run off directing it to the Council roadside drain on Pa Road. The eastern and northeastern ponds are approximately 5m from the property boundary at their closest points.
Watercourses (within 500m)	Kerikeri Inlet at its closest point is 44m from the property boundary. The three ornamental ponds located on neighbouring properties are on the line of a natural watercourse which has been mostly piped between the ponds keeping them topped up with water.	The three ornamental ponds located on neighbouring properties are on the line of a natural watercourse which has been mostly piped between the ponds keeping them topped up with water. The watercourse would have been some 10m from the property boundary at its closest point.
Flood Risk Status	None recorded within the site boundaries	Site is not within a mapped NRC flood hazard zone, and the building platform is elevated minimum 4m above the neighbouring ornamental pond.
Flood Susceptibility	None recorded on GIS databases	Site is not within the NRC flood susceptible land zone

3.2 Published Geology

The site geology was investigated and reported under Haigh Workman Geotechnical Investigation Report Ref. 25 060.

Reference is made to New Zealand Land Inventory maps NZMS 290 Sheet O04/05 (Soil map of the Whangaroa – Kaikohe area). This indicates the site is underlain by 'soils of the rolling and hilly land, *well to moderately well*

drained Kerikeri friable clay (KE)' and/or Kerikeri friable clay with large boulders (Keb), weathered to 'soft red brown or dark grey-brown clay to depths of 20m with many rounded corestones'.

4 Stormwater Management

4.1 Regulatory Framework

4.1.1 FNDC Operative Plan – Chapter 8 Rural Environment (Rural Living)

Rule 8.7.5.1.5 STORMWATER MANAGEMENT **Permitted Activity**

The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 12.5% or 3,000m², whichever is the lesser.

Rule 8.7.5.2.2 STORMWATER MANAGEMENT **Controlled Activity**

The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 20.0% or 3,300m², whichever is the lesser.

In order for an activity to be regarded as a controlled activity a report must be prepared to demonstrate the likely effects of the activity on stormwater run-off and the means of mitigating run-off to no more than the levels that would result from the permitted threshold of buildings and other impermeable surface coverage in Rule 8.7.5.1.5

4.1.2 Proposed Regional Plan

Regional Plan for Northland Rule C.6.4.2 provides for the diversion and discharge of stormwater from outside a public stormwater network provided (amongst other conditions) the diversion and discharge does not cause or increase flooding of land on another property in a storm event of up to and including a 10% annual exceedance probability, or flooding of buildings on another property in a storm event of up to and including a 1% annual exceedance probability.

The Regional Plan permitted activity rule does not specifically require attenuation to pre-development levels, provided there is no increase in downstream flooding for the 10% AEP event.

4.2 FNDC Engineering Standards 2023

Reference is made to the Council Engineering Standards for design guidance.

Section 4.2.5. Discharge to Land

Subject to the requirements of the NRC Regional Plans, discharge of stormwater from the development onto land is permitted provided that:

a. Flooding levels shall not be increased due to the development,

b. New Outlets to any low-lying areas shall be provided or existing outlets retained,

c. Dispersal of concentrated flow from the development shall be designed to occur at the shortest practicable distance and before a concentrated overland discharge to a neighbouring property occurs and,

d. An acceptable rate of dispersed discharge from stormwater runoff at the boundary is < 2 litres/sec/m (e.g. flow can be managed via dispersal swale or trench).

Section 4.3.2. Increases to Impervious Surface

Where any development increases impervious surface, the development shall be assessed in accordance with Section 4.1.2 Objectives and Section 4.1.3 Performance Standards to determine the requirements, if any, for water quality and quantity controls.

Design of new development or alteration to existing development, resulting in increased impervious surface shall also comply with the NRC.

Section 4.1.3 Performance Standards

e. The primary stormwater system shall be capable of conveying 10% AEP design storm events without surcharge (see Section 4.3.9 Hydrological Design Criteria).

h. Development shall not increase peak discharge rates to receiving environment. An increase may be acceptable for large events where it is demonstrated that there are no adverse effects (including potential, future, or cumulative effects), on the environment or downstream properties as a result of the increase.

i. The stormwater system shall provide the required amount of treatment through the use of low impact design and sustainable solutions (See Sections 4.3.20 Soakage Devices and 4.3.21 Stormwater Treatment and Detention Devices.

4.1.6. Managing Effects of Land Use on Receiving Environments

In the absence of more detailed assessment of stream stability, the discharges from detention devices into a stormwater network shall be constrained to 80% of pre-development peak flow rate.

Table 4.1 Minimum Design Summary

Flood control (1% AEP event) - Detention required, limit post-development 1% AEP event flow rates to 80% of pre-development, where downstream flooding hazard has been identified and there is no CMP or site-specific SMP.

Flow attenuation (50% & 20% AEP events) - Limit the post-development 50% & 20% AEP event flow rates to 80% of pre-development, where there is no CMP or site-specific SMP. Typically, always required in the upper catchment and sometimes not where development site is located in proximity to the catchment outlet, discharging to a watercourse with sufficient network capacity, and where flow attenuation may worsen flooding hazards due to relative timing of peak flows. If the proposed stormwater discharge is into a tidal zone, then no attenuation is required.

Design rainfall - Current rainfall (i.e. not climate change adjusted) shall be used for Determining pre-development stormwater runoff flows and volumes for use in combination with calculated post development flows to determine stormwater treatment (quantity and quality) requirements.

Climate change adjusted rainfall shall be used for determining post-development stormwater runoff flows and volumes for stormwater infrastructure design.

4.3 Impermeable Surfaces

Total impermeable surfaces following the proposed development are estimated as follows:

Table 2 Impermeable Surfaces

Component	Coverage (m^2)
Existing Surfaces	
Driveway - Gravel	294.0
Existing roof	450.0
Existing patio, paving and steps outside roof cover	15.00
Swimming Pool	66.00
Total Impermeable surfaces (Existing)	**825.0**
Site area	4003.0
Percentage Impermeable surfaces (existing)	20.6%

Proposed surfaces	
Driveway	344.0
Existing roof	450.0
Existing patio, paving and steps outside roof cover	145.0
Swimming Pool	66.00
Proposed roof extension	35.0
Proposed patio extension	12.0
Total Impermeable Surfaces (Proposed)	**1052.0**
Site area	4003.0
Percentage Impermeable surfaces (proposed)	26.3%

*District Plan definition for impermeable surfaces does not include water tanks up to 20m^2 area
Pathways <1m wide not included

The total impermeable surfaces for the site exceeds the Permitted Activity threshold of 500m^2 (12.5% of 4,003m^2) and the Controlled Activity threshold of 800m^2 (20.0% of 4,003m^2), making the activity Discretionary.

When considering a Discretionary Activity application, Council will have regard to the assessment criteria set out under Chapter 11. See Section 4.7 for assessment criteria.

4.4 Current Stormwater Management

There are three ornamental ponds located on neighbouring properties to the east, northeast and north of the site. The ponds are on the line of a natural watercourse which has been mostly piped between the ponds keeping them topped up with water.

The site contour naturally drains towards the northeastern pond but a track with an open stormwater drain running along the northern boundary intercepts the site run off directing it to the Council roadside drain on Pa Road.

Concentrated runoff from the roof water collection tanks and yarding is piped directly to the Council roadside drain on Pa Road.

A 300mm pipe from the neighbouring upslope property discharges into a similarly sized pipe that crosses the southeastern corner of the site, itself discharging into the eastern ornamental pond. This drainage is separate and closed from any stormwater runoff from the subject site.

The Council drainage on Pa Road, including the outlet from the three ornamental ponds discharges into the tidal Kerikeri Inlet at the end of the road. The open drain is generously sized and does not appear to have any restrictions or choke points that might otherwise be caused by vehicle crossing culverts and the like. The drain bed has suffered some scour damage in the past but appears to have somewhat stabilised. Refer to Haigh Workman Stormwater Management Plan 25 060/P01 and photographs appended.

4.5 Effects on Runoff

The peak stormwater runoff for the pre and post scenarios was calculated using Verification Method E1 Surface Water Rational Method for the 10% AEP event. Current rainfall was based on HIRDS. Runoff coefficients were taken from FNDC Engineering Standards 2023.

Table 3 Post development runoff (historical rainfall using HydroCAD)

Component	Area (m^2)	CN	I_{10} (24hr rainfall) (mm/hr)	Q (L/s)
Driveway - Concrete	344.0	98	7.03	3.80
Existing roof & Proposed roof extension	485.0	98	7.03	5.40
Existing patio, swimming pool, paving and steps outside roof cover and Proposed Patio extension	223.0	98	7.03	2.50
Grass / landscaping	2951.0	74	7.03	19.70
Total	**4003.0**			**31.40**

Table 4 Current runoff (historical rainfall using HydroCAD)

Component	Area (m^2)	CN	I_{10} (24hr rainfall) (mm/hr)	Q (L/s)
Driveway - Gravel	294.0	89	7.03	2.90
Existing Roof	450.0	98	7.03	5.00
Existing patio, swimming pool, paving and steps outside roof cover	81.0	98	7.03	0.90
Grass & landscaping	3178.0	74	7.03	20.70
Total	**4003.0**			**29.50**
80% of developed areas				**27.74**
Additional run-off				**3.66**

Stormwater attenuation of 3.66 L/s is required to limit the 10% AEP runoff to no more than 80% of the predevelopment impermeable surfaces (27.74 L/s), as per Engineering Standards Section 4.1.6.

The predevelopment areas have been taken from the consented drawings (BC 2006/955) retrieved from the property file from 2006 when the house was built, this drawing is included in the appendices as site plan drawing number A-101/01 Rev C. The existing driveway noted on this drawing as loose metal was not

included in the impermeable surfaces as metalled surfaces were not counted as impermeable surface at the time of consenting. We have included the metalled driveway figures in our predevelopment calculations. On the existing consented site plan drawing under the site cover they have referred to building area instead of roof area, we have reviewed the existing consented plan against current dwelling and these dimensions match, we have used the existing roof area provide by the architect for the roof areas.

4.6 Proposed Stormwater System

The existing stormwater controls will be retained. With the proposed attenuation there will be a reduction in runoff due to the 80% of the predevelopment target. Following the site walkover, no shortfalls or defects were identified that might otherwise require improvements.

Stormwater for the site was modelled with Hydro CAD using historical rainfall from HIRDs V4 (i.e. current not climate change adjusted as per Engineering Standards Table 4.1).

Using a standard 15,000L cylindrical tank with a diameter of 3.0m fitted with a 25mm outlet orifice at the base of the tank achieves 3.5L/s attenuation which is sufficiently close to the 3.66L/s target and less than the existing consented runoff (BC 2006/955). Furthermore, the retention provided by the two 25,000L collection tanks also helps to reduce site runoff.

The site drains into the Council open drain close to the end of Pa Road and its outfall into the Kerikeri Inlet. The drain is generously formed with no visible capacity issues, we are satisfied that the existing stormwater controls and proposed attenuation are adequate.

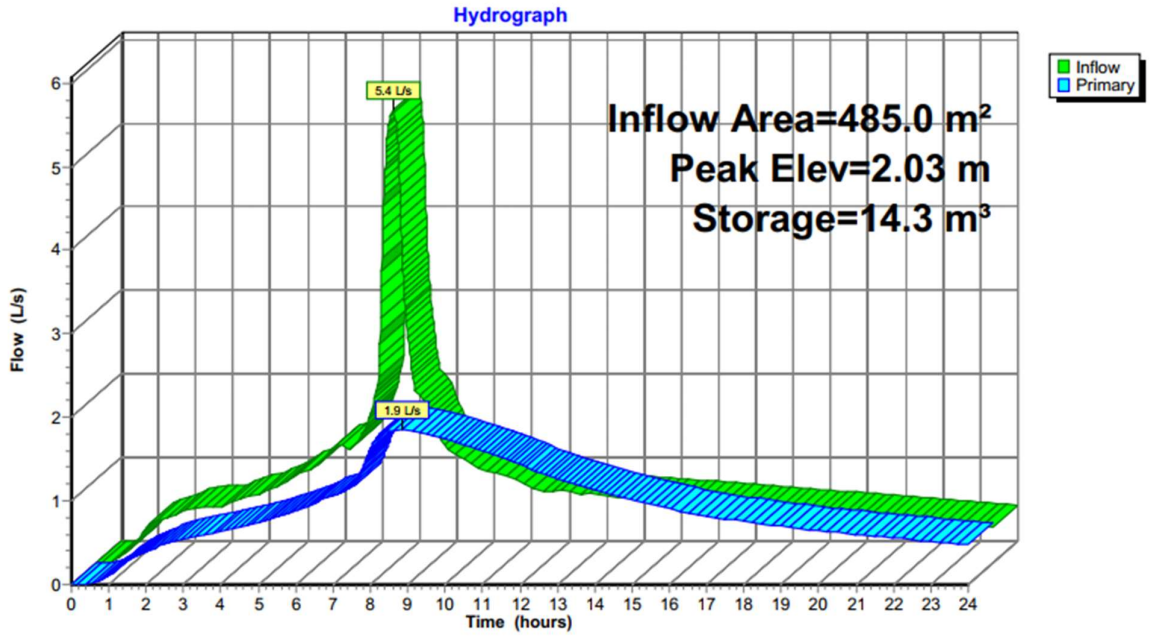


Figure 2: 1 x 15,000L Tank Attenuation Hydrograph

The hydrograph shows inflow reaching a maximum rate at 7.94 hours and maximum release at a 1.9 L/s into the existing stormwater swale on Pa Road over an extended period of time until the tank is empty.

4.7 FNDC Assessment Criteria

The proposed stormwater management has been assessed against the Assessment Criteria in Section 11.3 of the Far North District Plan as follows:

Criterion		Assessment
(a)	The extent to which building site coverage and impermeable surfaces result and the provisions of any catchment or drainage plan for that catchment.	The site is located adjacent the Kerikeri Inlet so the increase in impermeable surfaces will have negligible effect on the overall catchment impermeability.
(b)	The extent to which Low Impact Design principles have been used to reduce site impermeability.	The development already has tanks to capture roof water for domestic supply, this will provide a some retention. All runoff including the tank overflow will be discharged into the roadside swale drain.
(c)	Any cumulative effects on total catchment impermeability.	The site is located adjacent the Kerikeri Inlet so there will be no cumulative effects on total catchment impermeability.
(d)	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.	Drainage patterns or absorption properties of the soil will not be altered by the new development.
(e)	The physical qualities of the soil type.	The underlaying soil are described as well to moderately well drained Kerikeri friable clay and Kerikeri friable clay with large boulders.
(f)	Any adverse effects on the life supporting capacity of soils.	There will be a small increase in impermeable surfaces due to development but no adverse effects on the life supporting capacity of soils in the remaining undeveloped parts of the site.
(g)	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 location of the wastewater disposal dripper lines is known. Stormwater runoff will be discharged well away from the disposal field.
(h)	The extent to which paved, impermeable surfaces are necessary for the proposed activity.	Impermeable surfaces are required for the proposed development.
(i)	The extent to which landscaping may reduce adverse effects of run-off.	The stormwater system has been designed using runoff coefficients based on grass cover for undeveloped areas of the site with some of these areas being covered in plantings and landscaping resulting in lower runoff.
(j)	Any recognised standards promulgated by industry groups.	Stormwater design is to recognised engineering standards.
(k)	The means and effectiveness of mitigating stormwater run-off to that expected by the permitted activity threshold.	Stormwater runoff is able to exceed that expected by the permitted activity due the sites location adjacent to the Kerikeri Inlet, meaning there are no downstream properties that are affected.
(l)	The extent to which the proposal has considered and provided for climate change.	We have adopted HIRDS V4 historical rainfall estimates, not climate adjusted, as per Council Engineering Standards Table 4.1
(m)	The extent to which stormwater detention ponds and other engineering solutions are used to mitigate any adverse effects.	Stormwater ponds are not proposed as they are not required for this site.

Appendix A – Drawings

Spooner Architectural Solutions Drawings – PD01 – PD06

Haigh Workman Ltd Stormwater Management Plan Drawings - 25 060/P01

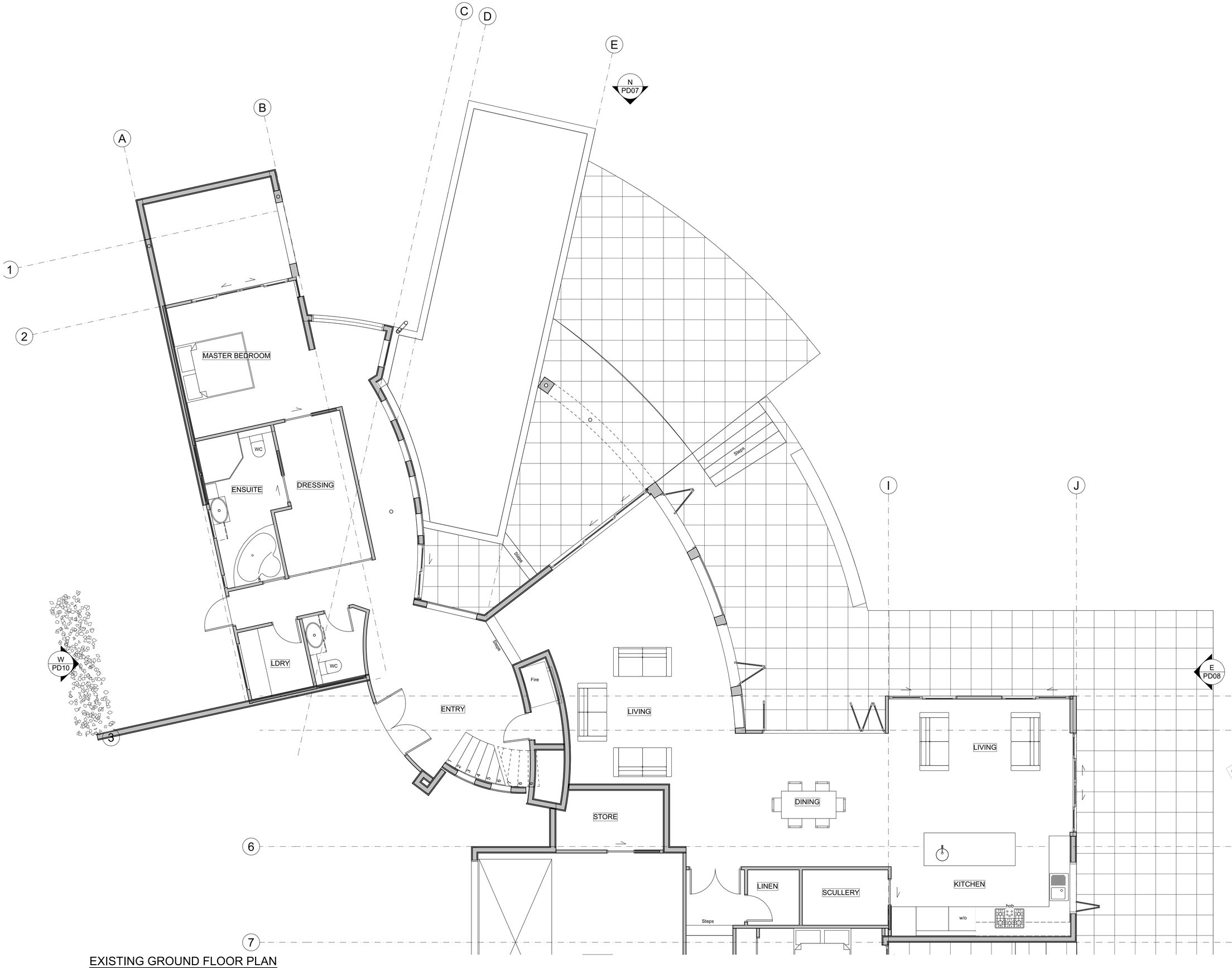
Typical Detention Storage Drawing

BC 2006/955 Site plan drawing - A-01/01 Rev C & A-01/02 Rev A

Do not scale from drawings.
The Contractor must check and verify all dimensions on site prior to commencing any work.

All work to be in accordance with
The Building Act 2004,
The New Zealand Building Code, NZS 3604 and
Any additional Territorial Authority requirements.
Refer Specification for references to other
New Zealand / Australian Standards to be complied with as they apply to this project.

WIND ZONE: HIGH
EXPOSURE ZONE: D



EXISTING GROUND FLOOR PLAN
SCALE 1:50 @ A1

A PRELIMINARY DESIGN 06-03-25

REVISIONS

DRAWING
EXISTING GROUND FLOOR PLAN

PRELIMINARY

JOB
80A PA ROAD
KERIKERI

Spooner architectural solutions
PO Box 10 KERIKERI 0245
e: paulspooner@xtra.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
1:200 @ A1	PD01

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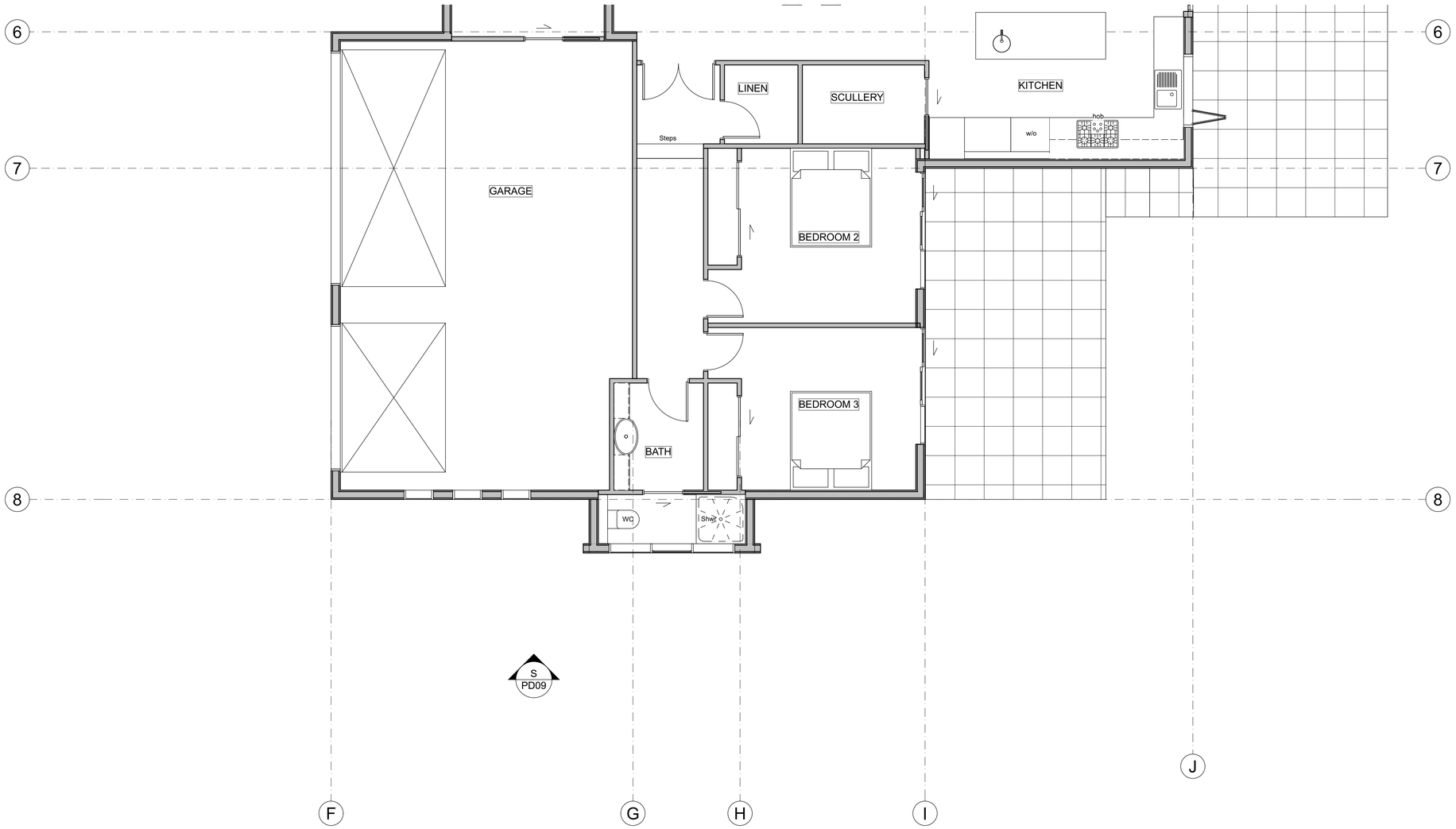
WIND ZONE: HIGH
EXPOSURE ZONE: D



EXISTING GROUND FLOOR PLAN
SCALE 1:50 @ A1

A PRELIMINARY DESIGN 06-03-25

REVISIONS

DRAWING
EXISTING GROUND FLOOR PLAN

PRELIMINARY

JOB
80A PA ROAD
KERIKERI

Spooner architectural solutions
PO Box 10 KERIKERI 0245
e: paulspooner@xtra.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE

SHEET No.
PD02

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Any additional Territorial Authority requirements.
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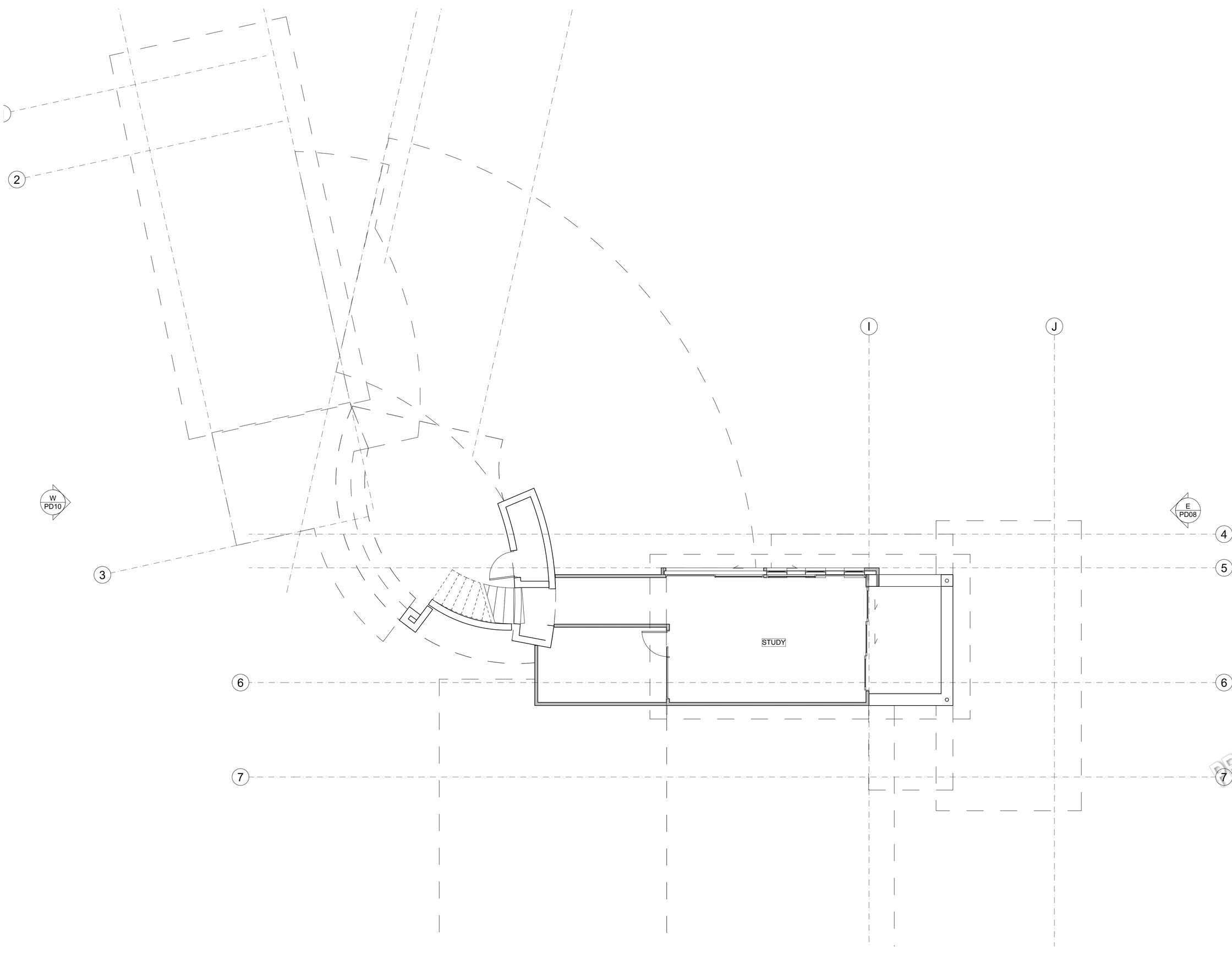
WIND ZONE: HIGH
EXPOSURE ZONE: D



EXISTING UPPER FLOOR PLAN
SCALE 1:50 @ A1

A PRELIMINARY DESIGN 06-03-25

REVISIONS

DRAWING
EXISTING UPPER FLOOR PLAN

PRELIMINARY

JOB
80A PA ROAD
KERIKERI

Spooner architectural solutions

PO Box 10 KERIKERI 0245

e: paulspooner@xtra.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE	SHEET No.
1:100 @ A1	PD03

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Any additional Territorial Authority requirements.
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WIND ZONE: HIGH
EXPOSURE ZONE: D

MASTER BEDROOM
FL: 100.60
ENSUITE
WC
DRESSING
WC
STUDY
Skylight
Skylight
Cabinetry
LDRY
COATS & SHOES
Seat
Dr
Dr
WM
Umbrella Stand
Garden
Fence
Fence
Fence
Fence
6,420
2,510
4,320
2,600 Extension
1,400
1,530
900
3,020
1,210
4,450
4,400
5,630
1,140
2,000
2,000
3,900
3,900
A PD12
B PD12
A PD12
SWIMMING POOL
FL: 100.25
SPA
Glass Balustrade
Glass Balustrade
FL: 99.4
Steps Down
BATH
WC
Gate
Gate
B PD12
FL: 100.55
Steps
Steps
ENTRY
FL: 100.60
New gas fire
Custom sofa
LIVING
FL: 100.30
TV
Tall cabinet
Cabinetry
SOLAR
New door
Bar Cabinet
DINING
TV with cabinet
LIVING
FL: 100.30
Shift wall 400mm
Cabinetry
LINEN
SCULLERY
KITCHEN
u'bench wine fridge
Fridge / Freezer
w/o
hob
Bin drawers
Dish drawers x 2
2,020
Steps
KIDS LOUNGE
I
J
1
2
3
6
7

PROPOSED GROUND FLOOR PLAN - OPTION ONE

SCALE 1:50 @ A1

A PRELIMINARY DESIGN 06-03-25

REVISIONS

DRAWING
PROPOSED GROUND FLOOR PLAN OPTION ONE
5

JOB
80A PA ROAD
KERIKERI

PRELIMINARY

Spooner architectural solutions
PO Box 10 KERIKERI 0245
e: paulspooner@xtra.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE

SHEET No.
PD04

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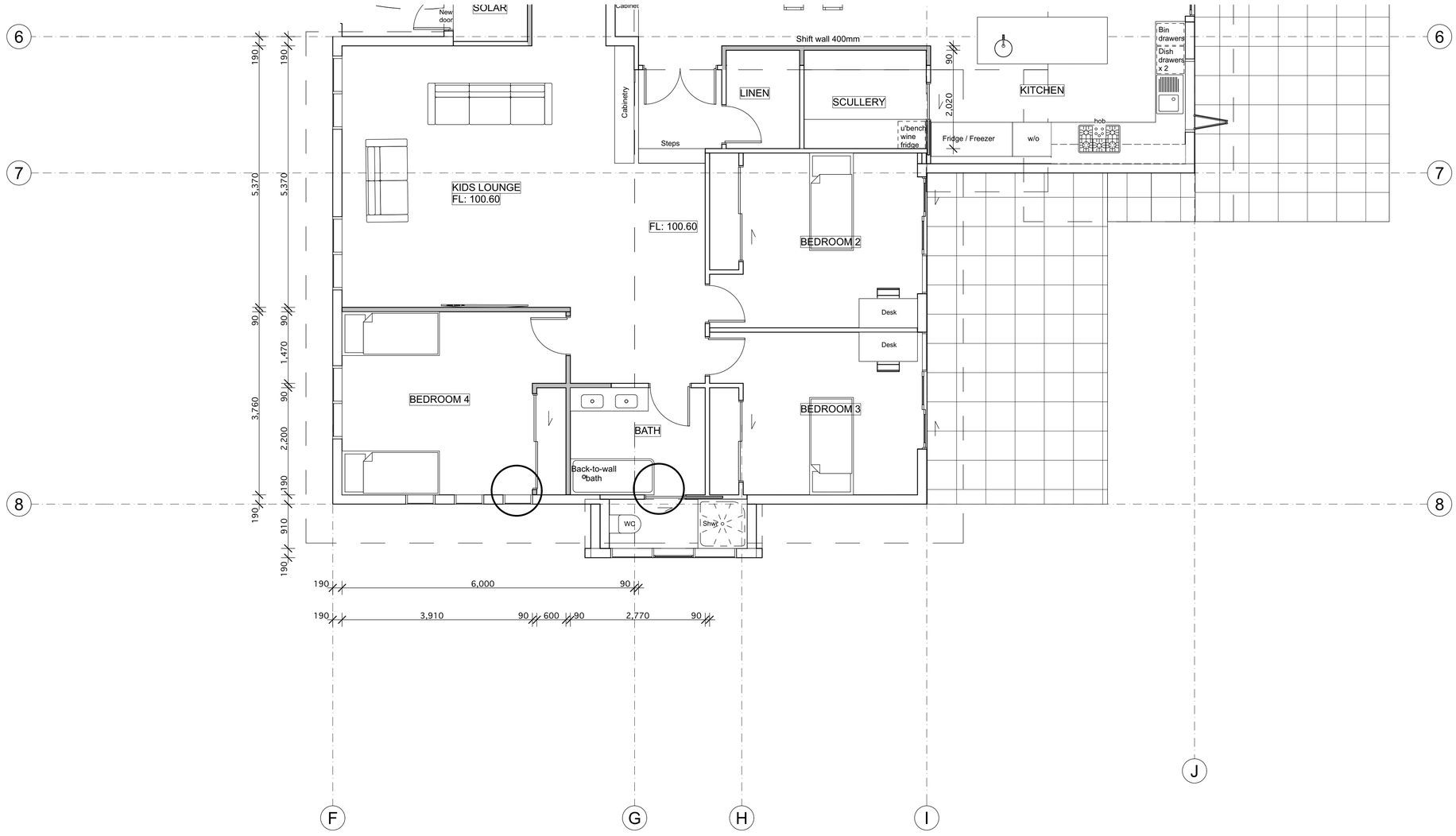
Any additional Territorial Authority requirements.
Refer Specification for references to other
New Zealand / Australian Standards to be complied with as they apply to this project.

WIND ZONE: HIGH
EXPOSURE ZONE: D



PROPOSED GROUND FLOOR PLAN
SCALE 1:50 @ A1

A PRELIMINARY DESIGN 06-03-25

REVISIONS

DRAWING
PROPOSED GROUND FLOOR PLAN

PRELIMINARY

JOB
80A PA ROAD
KERIKERI

Spooner architectural solutions
PO Box 10 KERIKERI 0245
e: paulspooner@xtra.co.nz
p: (09) 407 3107 m: 027 289 1221
Spooner Architectural Services Ltd.

SCALE	SHEET No.
	PD05

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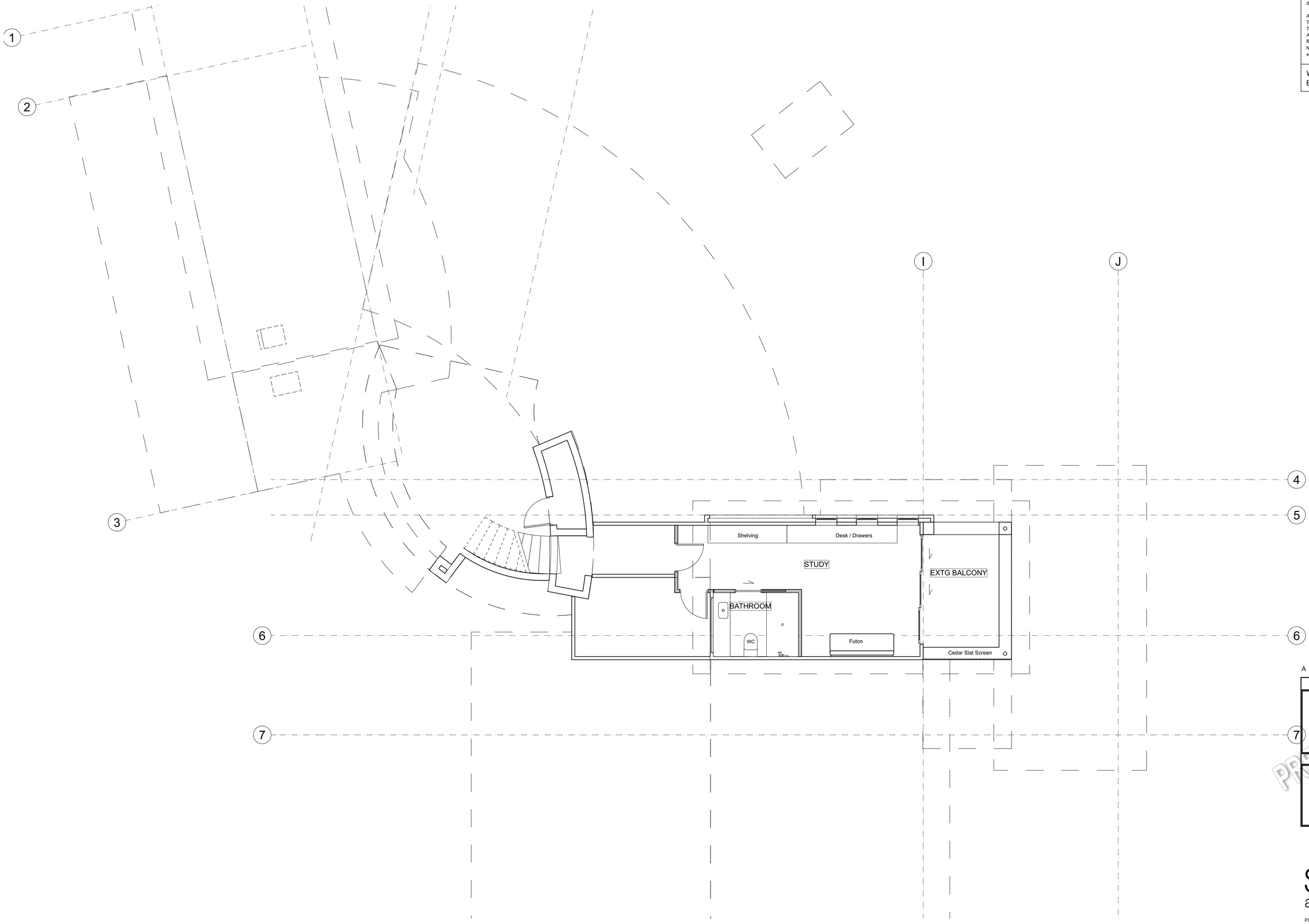
WIND ZONE: HIGH
EXPOSURE ZONE: D



PROPOSED UPPER FLOOR PLAN
SCALE 1:50 @ A1

A PRELIMINARY DESIGN 06-03-25

REVISIONS

DRAWING
PROPOSED UPPER FLOOR PLAN

PRELIMINARY

JOB
80A PA ROAD
KERIKERI

Spooner architectural solutions
PO Box 10 KERIKERI 0245
e: paulspooner@xtra.co.nz
p: (09) 407 3107 m: 027 289 1221

SCALE

SHEET No.
PD06

Rev	Date	Description	By	Checked
A	02/05/2025	FIRST ISSUE	AS	JP

DWG Proposed Stormwater Management Plan

A3 Scale 1: 500 (0 10 25)

Date 02/05/2025

Drawn AS | Checked MP | Approved JP

File T:\CLIENTS\HANNAH AND HENRY LEVENTIS\25 060 - 80A PA ROAD, KERIKERI\ENGINEERING\CIVIL\DRAWINGS\25_060_PLAN.DWG

HAIGH WORKMAN LTD
Civil & Structural Engineers
6 Fairway Drive
Kerikeri, BOI
T: 09 407 8327
F: 09 407 8378
E: info@haighworkman.co.nz

Project 80a Pa Road
Kerikeri

Client Hannah and Henry Leventis

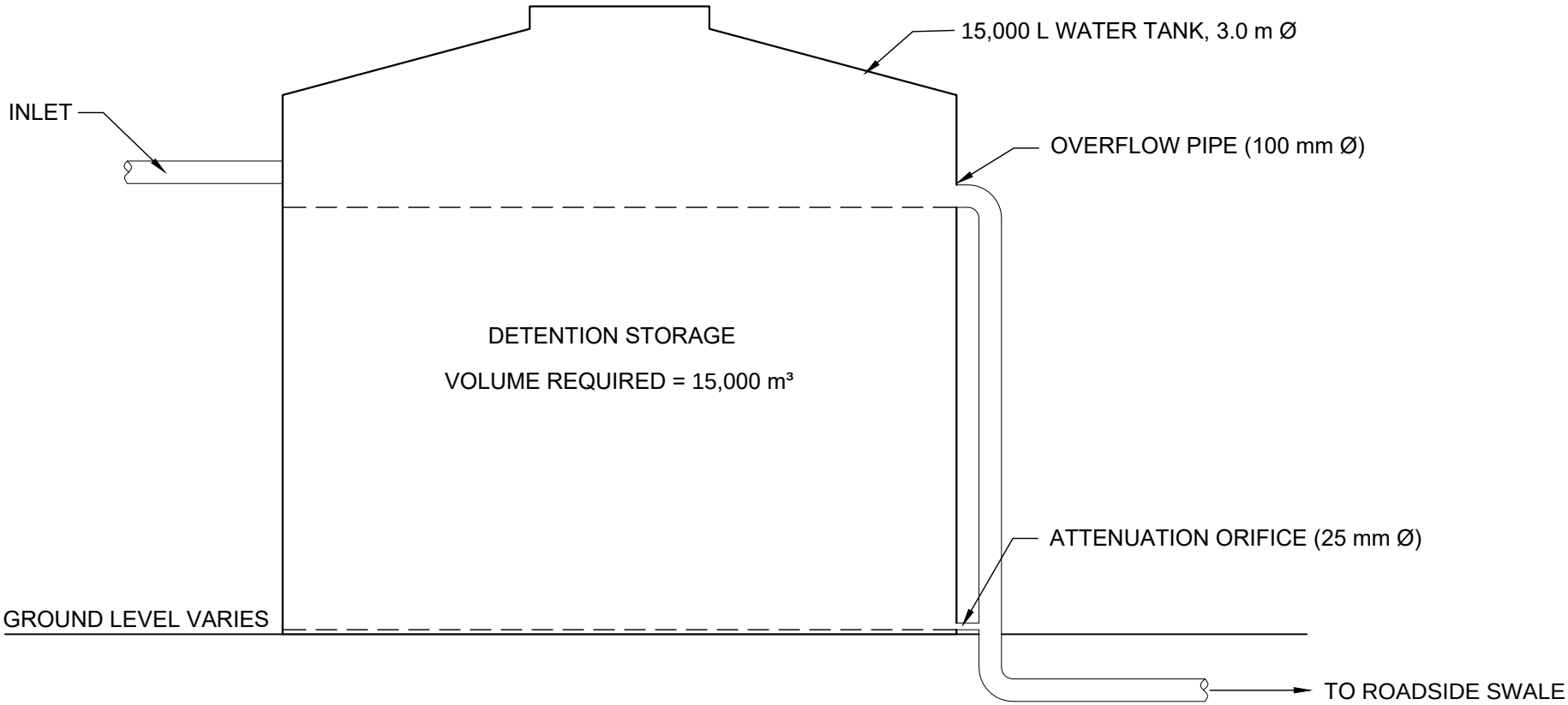
Project No. 25 060

RC no.

Stage

Dwg No. P01

Sheet No. 1 of 1



Issue	Date	Revision
A	20/12/18	FIRST ISSUE

DWG: Schematic Arrangement of Detention Storage

Note:

DWG No. 02 | Scale NTS | Drawn MP | Check TA | Approved JP | Filename T:\CLIENTS\HANNAH AND HENRY LEVENTIS\25 060 - 80A PA ROAD, KERIKERI\ENGINEERING\CIVIL\DRAWINGS | Date 02/05/2025

HAIGH WORKMAN Ltd
Civil & Structural Engineers
6 Fairway Drive, Kerikeri, BOI.
T: 09 407 8327
F: 09 407 8378
E: info@haighworkman.co.nz

Project: 80A Pa Road, Kerikeri

Client: Hannah and Henry Leventis

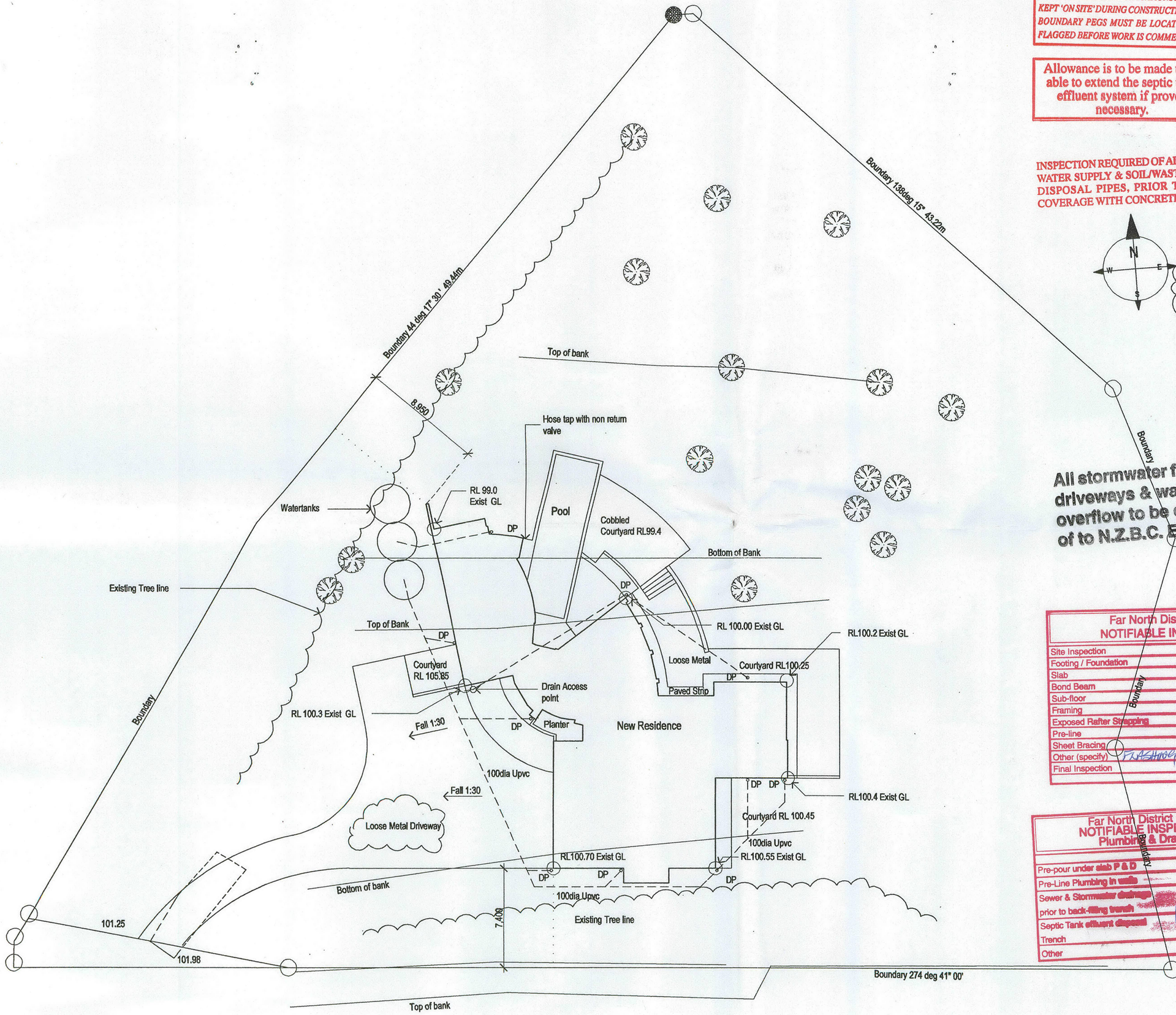
Project No. 25 060 | RC no.

THESE PLANS AND SPECIFICATIONS MUST BE KEPT 'ON SITE' DURING CONSTRUCTION. ALL BOUNDARY PEGS MUST BE LOCATED AND FLAGGED BEFORE WORK IS COMMENCED.

Allowance is to be made to be able to extend the septic tank effluent system if proved necessary.

Far North District Council Received

INSPECTION REQUIRED OF ALL WATER SUPPLY & SOIL/WASTE DISPOSAL PIPES, PRIOR TO COVERAGE WITH CONCRETE.



80 Pa Road
CT 102B/170

Site Area:	4003 sqm
Site Cover:	
Building	318 sqm
Pool / Pool Lounge	66 sqm
Cobbled Courtyards	15 sqm
Total Site Cover	399 sqm

Ground Floor Area: 318 sqm
Second Floor Area: 27 sqm
Refer to site survey plan for all boundary dimensions and existing ground levels.

All stormwater from roof, driveways & watertank overflow to be disposed of to N.Z.B.C. E1

Rev A Client/Builder/Engineer review
Rev B For Building Consent
Rev C Revised site cover calculation
Cobbled Driveway
DP connection to SW system
Non return Valve and hose tap location

Far North District Council
NOTIFIABLE INSPECTIONS

Site Inspection	✓	
Footing / Foundation	✓	42
Slab	✓	42
Bond Beam	✓	
Sub-floor	✓	
Framing	✓	
Exposed Rafter Strapping	✓	
Pre-line	✓	
Sheet Bracing	✓	
Other (specify) FLASHING	✓	
Final Inspection	✓	

APPROVED PIM/BC 2006/955
Date 23/3/06
Signed
FAR NORTH DISTRICT COUNCIL

Far North District Council
NOTIFIABLE INSPECTIONS
Plumbing & Drainage

Pre-pour under slab P & D	✓	
Pre-Line Plumbing in walls	✓	
Sewer & Stormwater drainage prior to back-filling trench	✓	
Septic Tank effluent disposal Trench	✓	
Other		

PROJECT
SOLE RESIDENCE
80 PA ROAD
KERIKERI

DRAWING TITLE
Site Plan

PK Engineering Ltd
21 MAR 2006
Checked

PROJECT NUMBER 0501

DRAWING NUMBER A-01/01 Rev C

DATE Feb 06

3 METRE CLEARANCE MINIMUM TO ALL BOUNDARIES

RESERVE AREA OF 60m² (3·5 x 17·5m)
SEEPAGE ASSISTED
EVAPOTRANSPIRATION MOUND (3 x 20m)
TO BE CONSTRUCTED AS SHOWN
ON THE INCLUDED CROSS SECTION

DISTRIBUTION BOX

4500 LITRE DUAL CHAMBERED SEPTIC TANK
TO BE FITTED WITH ORENCO TYPE FILTER

SURFACE WATER CUTOFF DRAINS MIN FALL 1IN50

20 METRE CLEARANCE MINIMUM TO
ALL WATER BODIES

ALL STORMWATER TO BE PIPED TO THE
ROADSIDE OPEN CHANNEL DRAIN
FROM THE FOLLOWING SOURCES
DRIVEWAY DRAINS
PAVED AREAS
SUBSURFACE RETAINING WALL DRAINS

EXISTING ROADSIDE OPEN CHANNEL DRAIN

Boundary

Top of bank

150mm PVC STORMWATER

HYNDS CP450 450 CESSPIT

SURFACE DRAIN

2m

6m

8.693

Ø150mm PVC

RL 99.0 Exist GL

Watertanks

DP

Courtyard RL99.4

NOVA COIL IN SCORIA BEHIND RETAINING WALL

Bottom of Bank

SH

Ø 500mm x 3.5m DEEP SCORIA FILLED SOAKPIT FOR POOL BACKWASH.

Existing Tree line

HYNDS CP450450 CESSPIT

Top of Bank

SURFACE DRAINS

Courtyard RL 105.85

RL 100.00 Exist GL

RL100.2 Exist GL

Courtyard RL 100.25

RL 100.3 Exist GL

Fall 1:30

Planter

New Residence

Fall 1:30

DP DP

RL100.4 Exist GL

Courtyard RL 100.45

RL100.70 Exist GL

RL100.55 Exist GL

Bottom of bank

7.609

Existing Tree line

101.25

101.98

Top of bank

EXISTING 150 PVC FROM NEIGHBOURING PROPERTY

Boundary

EXISTING OPEN CHANNEL DRAIN

LAKE

80 Pa Road
CT 102B/170

Site Area: 4003 sqm
Site Cover: 383 sqm
Ground Floor Area: 318 sqm
Second Floor Area: 27 sqm

Rev A Client/Builder/Engineer review

Preliminary

- PROJECT
  SOLE RESIDENCE
  80 PA ROAD
  KERIKERI

- DRAWING TITLE
  Site Survey

SCALE 1:300

- PROJECT NUMBER 0501
- DRAWING NUMBER A-01/02 Rev A
- DATE July 05

SITE PLAN SHOWING STORMWATER + EFFLUENT DISPOSAL SYSTEMS

Appendix B – Photographs

Roadside drain outside 80A Pa Rd – looking South-west

Roadside drain outside 80A Pa Rd – Looking North-east

450mm culvert from open drain into Pa Rd swale

Existing overflow outlet from water tanks

Appendix C – Hydro CAD