tasman district council

Land Information Memorandum













LIM Summary

Thursday, 23 September 2021

This information has been compiled from Tasman District Council records and is made available in good faith, but its accuracy or completeness is not guaranteed.

Applicant Details

Prepared for	Email
Lanessa White C/ Bayleys-Vining Realty Group	lanessa.white@bayleys.co.nz

LIM Details

LIM number	Valuation Number	Certificate of Title	Requested on	Issued on
L210628	1933017305	654608	16/09/2021	23/09/2021

Contents

This Land Information Memorandum contains the following information:

1. **Property Information**
    - Property and owner information, rates, services, and classifications
    - Consents for building and resource management
    - Environmental information.
2. **Maps**
    - Aerial
    - Areas and Zones in the Tasman Resource Management Plan
    - Pipes
    - Bores
    - Fire Ban areas
3. **Additional Information**
    - Brochures and other relevant information
4. **Glossary**
5. **Site Plans**
    - Floor plan
    - Site plan
    - Drainage plan

Notes

- This Land Information Memorandum has prepared for the purposes of Section 44A of the Local Government Act 1987 and contains all the information known to the Tasman District Council to be relevant to the land as described in Subsection (2).
- Information provided is based on a search of council records only, and there may be other information relating to the land, which is not currently recorded in the Councils record system. Every care will be taken to ensure that the information is correct, however, Council cannot guarantee that the information is accurate and does not accept any liability for these records.
- A valuation assessment can consist of multiple land parcels. The information in this LIM covers the entire valuation assessment. If you are only interested in part of the land, you must wait until the subdivision of the land is complete before we can provide information that applies only to the newly subdivided valuation assessment.
- The Council has not undertaken any inspection of the land or any building on it for the purpose of preparing this LIM.
- Council records may not show illegal or unauthorised building works on the property.
- Conditions of any authorised uses of the land are contained in the Council's District and Regional Plans.
- A Development Contribution may be payable in accordance with the DC Policy set out in the Council's Long Term Plan and created under the Local Government Act 2002 in relation to subdivision and new development. You will need to refer to the DC Policy to see what DC's are payable for any particular building development and whether any limitations apply. The DC is required to fund District roads and infrastructural services other than reserves and community facilities.
- A Financial Contribution for Reserves and Community Services may be payable in accordance with the Tasman Resource Management Plan on all building other than first dwelling on a title. You will need to refer to the Tasman Resource Management Plan for full details of the FC's that are payable and whether any limitations or exceptions apply.
- The applicant is solely responsible for ensuring that the land is suitable for a particular use.
- This LIM has been produced at the issued date and is valid only as a statement of Council's information at that date.

1. Property Information

This section of the LIM provides information about the rates and services on the property, including:

- Property and owner information, rates, services, and classifications
- Consents for building and resource management
- Environmental information.

Property Information

Thursday, 23 September 2021

This information has been compiled from Tasman District Council records and is made available in good faith, but its accuracy or completeness is not guaranteed.

Property Location

Valuation	Legal Description	Address	Suburb	Current Rating Area (ha)
1933017305	LOT 2 DP 474985	233 Riwaka-Kaiteriteri Road	Kaiteriteri	2.1170

Rates Information

Rates are charged in four instalments for the period commencing 1 July and ending 30 June each year. Please note that if this property is a contiguous property, its rates will change if sold separately. Also note that this rating information relates to all parcels, i.e. Lot and DP numbers, under this valuation assessment.

Annual Rates	Current Instalment	Balance Owing	Arrears
$3246.31	$811.58	$0.00	$0.00

Rates Breakdown

The Annual Rates in the table above are broken down for the current financial year as follows:

Description	Rate	Units	Amount
General Rate	0.1971c/$CV	1220000	2404.62
Uniform Annual General Charge	$290.00/propert	1	290.00
WaimeaComDam-Env&ComBen-Distri	$28.78/property	1	28.78
Refuse/Recycling Rate	$135.51/propert	1	135.51
Shared Facilities Rate	$67.15/property	1	67.15
Mapua Rehabilitation Rate	$5.39/property	1	5.39
Museums Facilities Rate	$61.89/property	1	61.89
District Facilities Rate	$104.75/propert	1	104.75
Motueka Community Board	$19.26/property	1	19.26
Regional River Works - Area Z	0.0128c/$LV	550000	70.40
Stormwater: General Drainage	0.00480c/$CV	1220000	58.56

Warm Tasman Rate

Warm Tasman Home Insulation Rate does not apply for this property.

Rating Valuation

Tasman District Council uses a capital value rating system. Please note that this rating information relates to all parcels, i.e., Lot and DP numbers, under this valuation assessment.

Capital Value	Land Value	Improvements	Valuation Date
$1220000	$550000	$670000	01/10/2020

New Rating Valuation

Rating values are reviewed triennially. If the valuation of this property is going to change in the next rating year, it will show below as the New Capital Value. Please note that this rating information relates to all parcels, i.e., Lot and DP numbers, under this valuation assessment.

New Capital Value	New Land Value	New Improvements Value	New Valuation Date

New Capital Value	New Land Value	New Improvements Value	New Valuation Date
$1220000	$550000	$670000	01/10/2020

Water Meter Information

No Water Meter information is available for this property.

Services

No Services are available for this property.

Wheelie Bins

No wheelie bin has been issued to this property.

Services Notes

This property has the following Services notes on file. The Health Drinking Water Amendment Act (Section 69ZH of the Health Act 1956) requires councils to provide information relating to whether the land is supplied with drinking water and, if so, if the supplier is the owner of the land or a networked drinking water supplier. Note: Tasman District Council may not be aware of other drinking water systems connected to properties. There may also be private drinking water supply systems such as rainwater tanks or private bore/wells. Prospective purchasers are advised to clarify the drinking water supply and water quality with the landowner.

Notes
The property is not connected to any council reticulated services. There are no public drains crossing the property. Onsite Disposal – Council reticulated services are not available. Private Water Supply – No Council reticulated services are available.

Protected Trees

No protected trees have been found for this property.

Heritage Buildings

There are no heritage buildings on this property.

Planning Zones

The following Planning Zones pertain to this property. Please refer to the Tasman Resource Management Plan or contact a Duty Planner for detailed information about what activities can take place in a zone.

Zone	Zone Description
Rural Residential	The Rural Residential Zone provides for rural lifestyle living opportunities. Rules for development and subdivision generally seek to ensure that lifestyle living is enabled and that adequate servicing is provided, while maintaining rural character and amenity.

This information has been compiled from Tasman District Council records and is made available in good faith, but its accuracy or completeness is not guaranteed.

Building Consents

Please note that if a Code Compliance Certificate has not been issued, then the work has not been certified by the Council as complying with the Building Code.

Application Date	BC Number	Proposal	Status	CCC Issue Date
23/11/2015	151182	Construct a new dwelling with I/A garaging	Code Compliance Certificate Issued	09/06/2017
23/11/2015	151182P	Construct a new dwelling with I/A garaging	RM Certificate Lifted	
05/05/2015	150430	4 Storey dwelling with attached garage	Withdrawn	
05/05/2015	150430P	4 Storey dwelling with attached garage	Withdrawn	

Compliance Schedule

No Compliance Schedule records are available for this property.

Building Permits

No historical building permits have been found for this property.

LIM Building Notes

No additional building notes have been found for this property.

Swimming Pools

No Swimming Pool records have been found for this property.

Resource Consents

The following Resource Consents are noted against the property. Consents for water, discharges or coastal permits must be transferred to the person undertaking the activity. A fee will apply.

Application Date	RC Number	Proposal	Status	Decision Date
11/02/2016	160143	Discharge of stormwater to water	Consent Effective	11/03/2016
11/02/2016	160145	Earthworks within Land Disturbance Area 2 associated with the construction of a building platform and installation of a retaining wall	Consent Effective	11/03/2016

Planning Permits

No historical planning permits have been found for this property.

Planning Notes

These history notes include planning information relevant to this LIM.

TASMAN RESOURCE MANAGEMENT PLAN (TRMP) CHANGES: From time to time, changes are proposed to the planning provisions in the TRMP. Any such changes are publicly notified so that people can make submissions. Plan Changes may propose to alter zonings, policies or rules, and may affect this property or sites in the surrounding area.

Council-initiated Plan Changes can have some effect from the first day of notification as 'proposed changes'. From time to time Council receives a request for a Private Plan Change. These are processed by Council and have no effect until operative.

A list of all the current Plan Changes can be viewed on the Tasman District Council policy pages at www.tasman.govt.nz/link/trmp.

Notes
Tasman Resource Management Plan planning maps identify the property is within the Rural Residential Zone, the Land Disturbance Area 2 and partially within the Coastal Environment Area. Further information on these Zones and Areas can be found in the Section 2 Maps; Section 4 Glossary and/or on the Tasman Resource Management Plan pages on the Tasman District Council website at www.tasman.govt.nz/link/trmp.
While there are no identified archaeological sites registered on the property and the site is not within a Cultural Heritage Precinct, the area is archaeologically sensitive and may be of interest to local iwi or known to have archaeological significance with pre-European occupation. The NZ Archaeological Association’s Archaeological Site Recording Scheme website (www.archsite.org.nz) may have further records relating to the property. You can contact the ArchSite Coordinator at PO Box 6337, Dunedin or email admin@archsite.org.nz.
A Consent Notice is attached to the title for this property. A copy is enclosed for your information.
There is a discharge consent that affects this property. This consent will need to be transferred into the name of any new property owner/s. Information on the transfer process and an application form can be found on Tasman District Council’s website.
The property has no frontage to legal road.

Compliance Notes

No notes regarding compliance with permits or consent conditions have been recorded against this property.

This information has been compiled from Tasman District Council records and is made available in good faith, but its accuracy or completeness is not guaranteed.

Environmental Health and Licences

No Environmental Health or Licence information has been found for this property.

Licencing Notes

No notes regarding licences have been recorded against this property.

Air Shed

This property does not sit within a controlled Air Shed.

Hazardous Activities and Industries List (HAIL)

No verified HAIL site has been found for this property. However, if the site or any adjacent site has been used for industrial, horticultural or agricultural purposes in the past, we suggest you make further enquiries.

Wetlands

Council has no record of wetlands on this property.

Pest Inspection History

The Tasman-Nelson region has a Regional Pest Management Strategy for the control of declared pest plants, animals and organisms. The responsibility for the control of pests lies with the land occupier or owner. No pests have been recorded on this property.

Significant Native Habitats

Council has been compiling biodiversity reports (also called Ecological Property Reports or reports on Significant Native Habitats) for the past eight years and where these exist they are available. However, no report has been lodged on this property.

Hazard Notes

These notes include hazard information relevant to this LIM.

SEA LEVEL RISE AND COASTAL HAZARDS MAPPING

We have developed a coastal hazards map viewer which maps the extent of low-lying coastal land in Tasman and Golden Bays that may be affected by sea level rise. The viewer shows a range of sea level rise scenarios, including the effects of higher tides caused by storms. Areas of historical coastal erosion (sediment loss) and accretion (sediment gain), as well as the presence of coastal structures such as stopbanks, walls and rock revetments, have also been mapped.

You can view the coastal hazards map viewer on our website at tasman.govt.nz/link/coastal-management. On our website you will also find more information about the project.

Notes
Soils at this property are formed on deeply weathered granites and are susceptible to severe erosion when exposed, such as during earthworks and/or following vegetation removal. Slope failure on steeper slopes may occur if significant and prolonged rainfall results in deep saturation of the soil layer. Careful management of stormwater runoff is required. Council has no records of this property being affected by flooding or specific earthquake hazards. Some detail of the property's geotechnical setting and the right of way construction is contained in the attached reports prepared by Aurecon Ltd (dated 29 July 2012), Terra Firma Engineering Ltd (dated 22 May 2013) and Nelson Consulting Engineers

Notes
Ltd (26 March 2014).

2. Maps

Several maps are included in your LIM:

- An aerial overview
- A map of the water and sewer pipes around the property
- A map showing any bores on the property
- A map of the fire ban areas that may apply
- Maps of the Zones and Areas defined in the Tasman Resource Management Plan (TRMP) and their associated legends.

Please note that other rules defined in the TRMP may also apply to this property. The TRMP is available online at www.tasman.govt.nz.



Az Address Labels
Az Road Labels
Road Boundaries
Property Boundaries

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Aerial Photo Map

The information displayed is schematic only and serves as a guide.
It has been compiled from Tasman District Council records and is made available in good faith but its accuracy or completeness is not guaranteed.

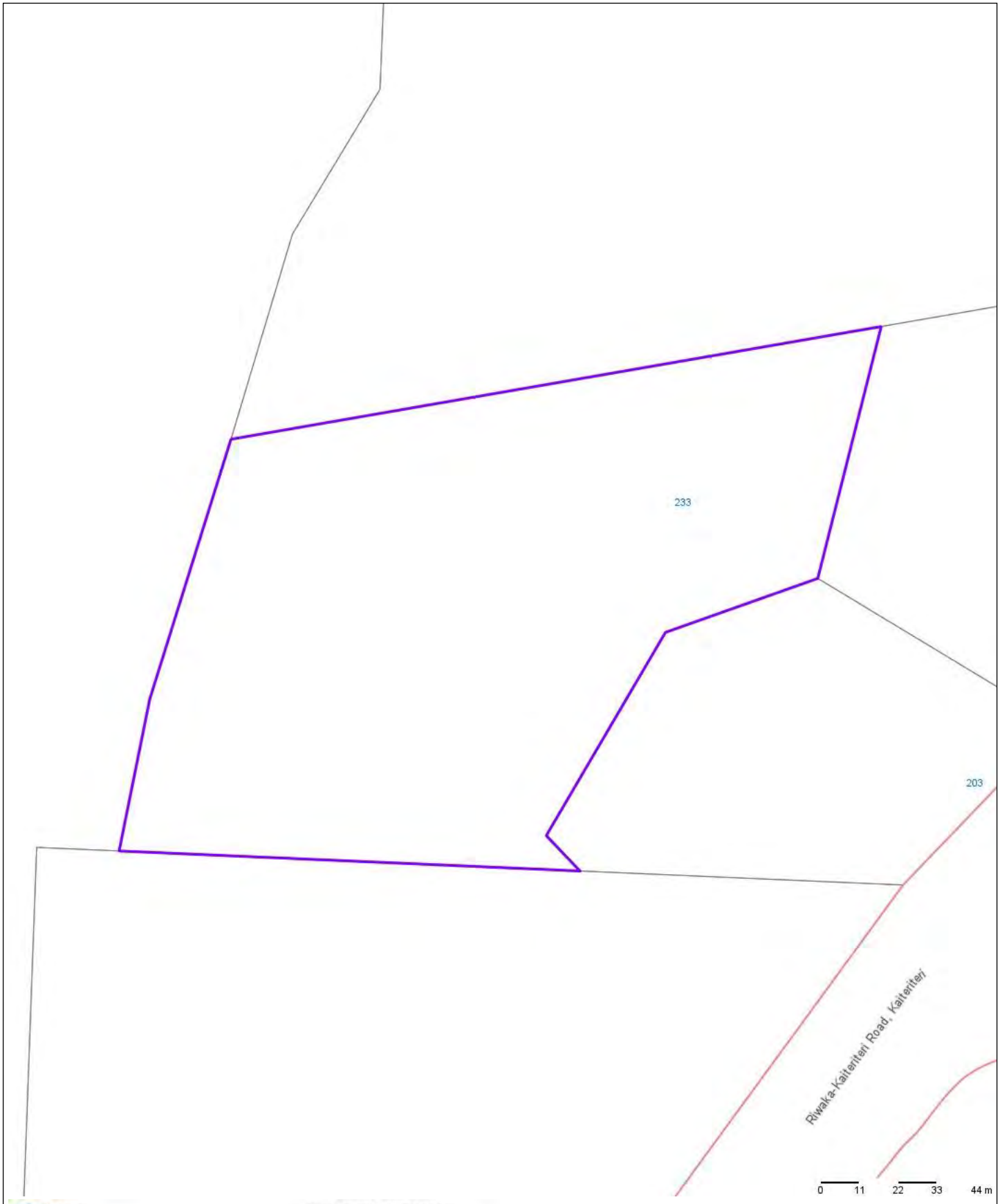
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NORTH

Scale 1:1500

Thursday, 23 September 2021

Original Sheet Size 210x297mm



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Bores Map

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WaterPipes
WastewaterPipes
Stormwaterpipes
StormwaterDrains
AddressLabels
RoadLabels
RoadBoundaries
PropertyBoundaries

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Pipe Network Map

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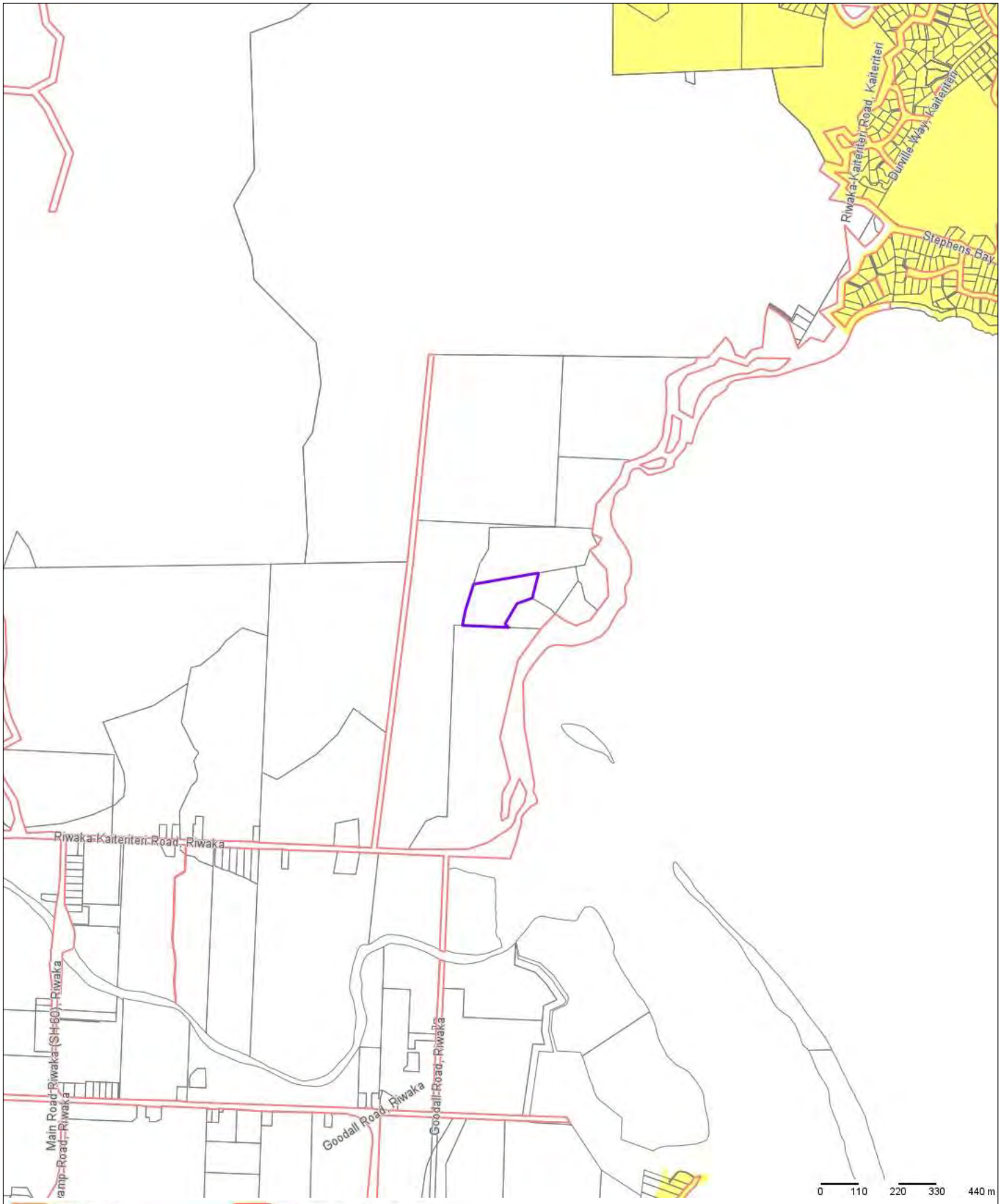
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Fire Ban Areas Map

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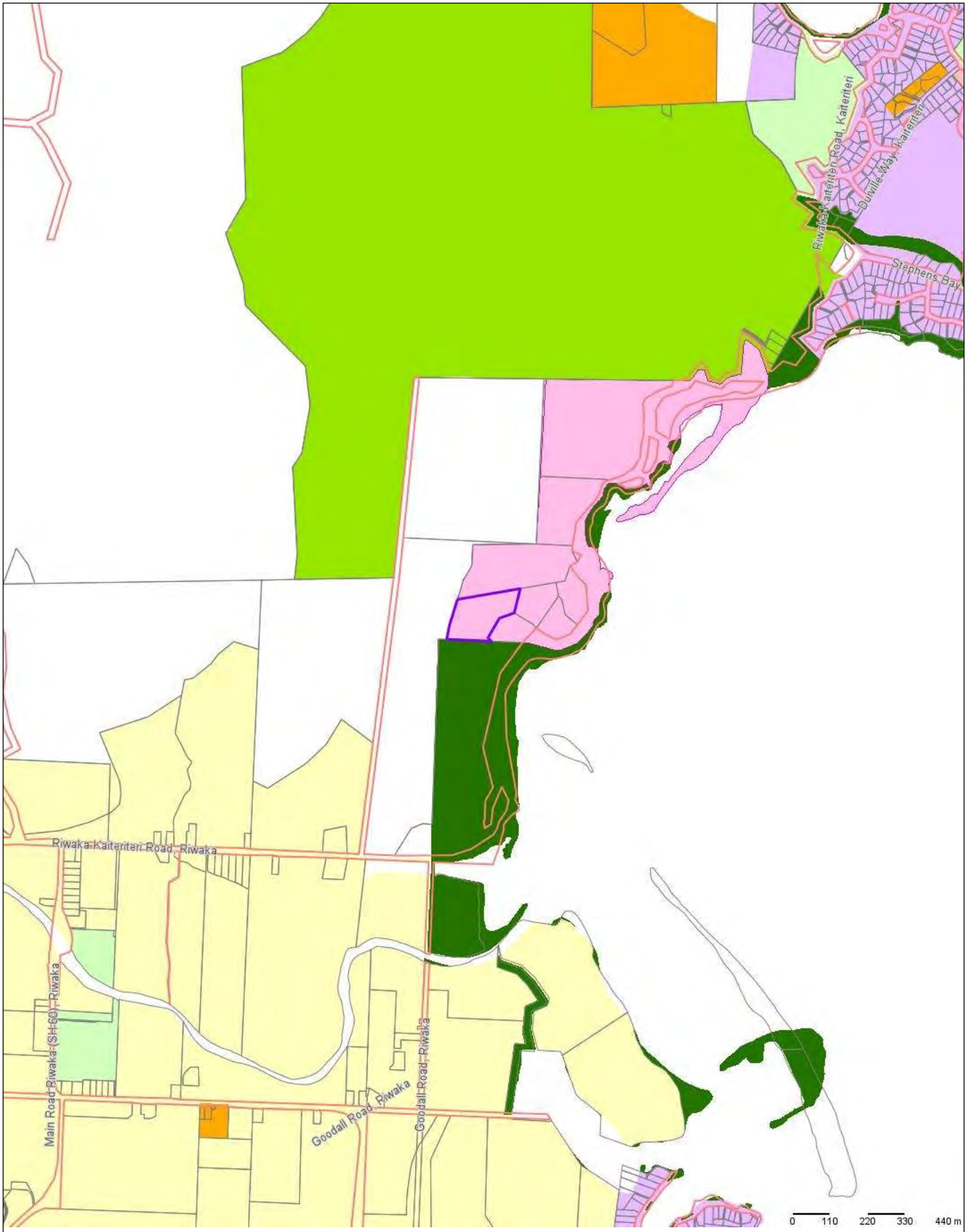
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The legend for this map is included on a separate page.

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TRMP Zones Map

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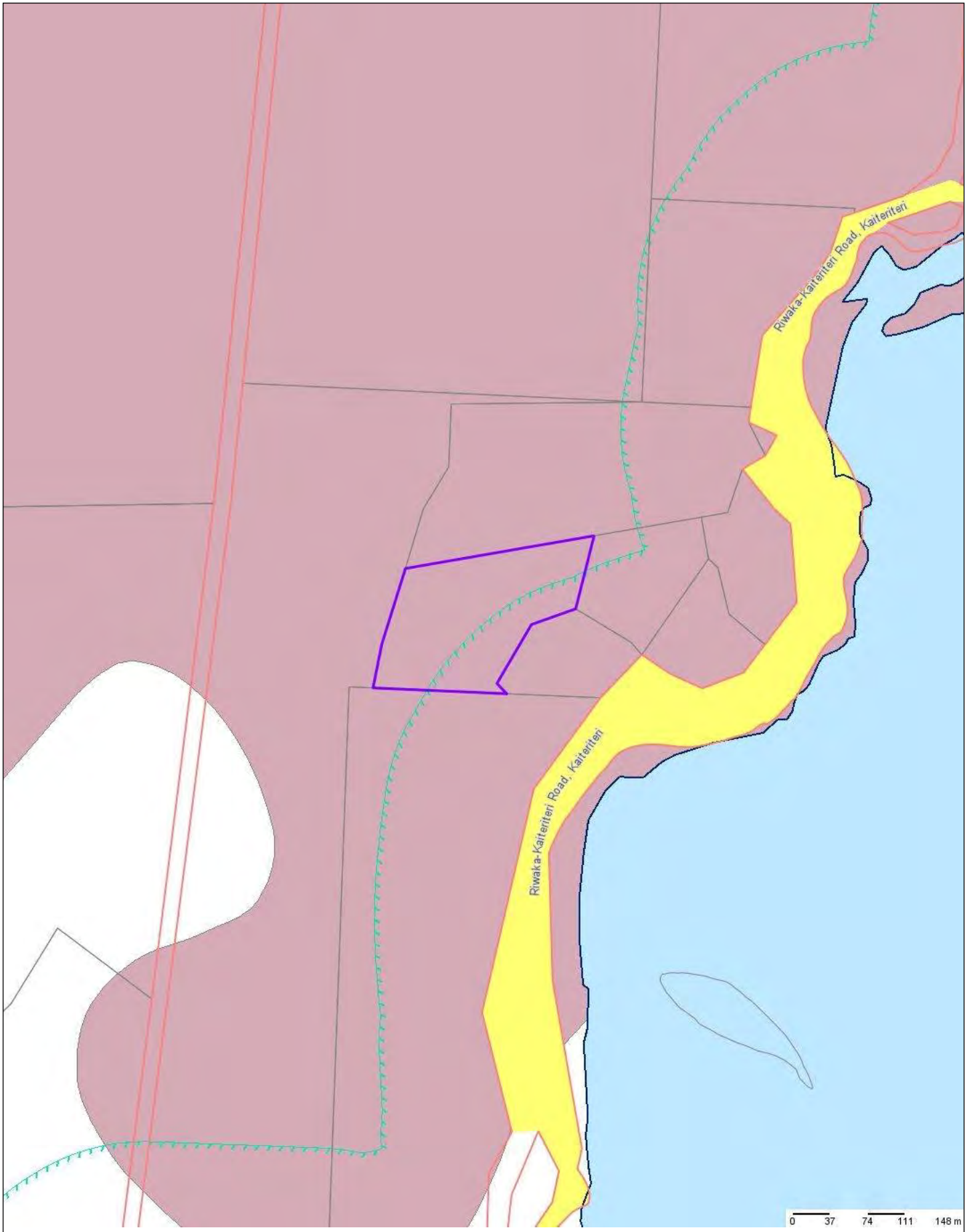
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Scale 1:15000

Thursday, 23 September 2021

Original Sheet Size 210x297mm



The legend for this map is included on a separate page.

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TRMP Areas Map

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NORTH

Scale 1:5000

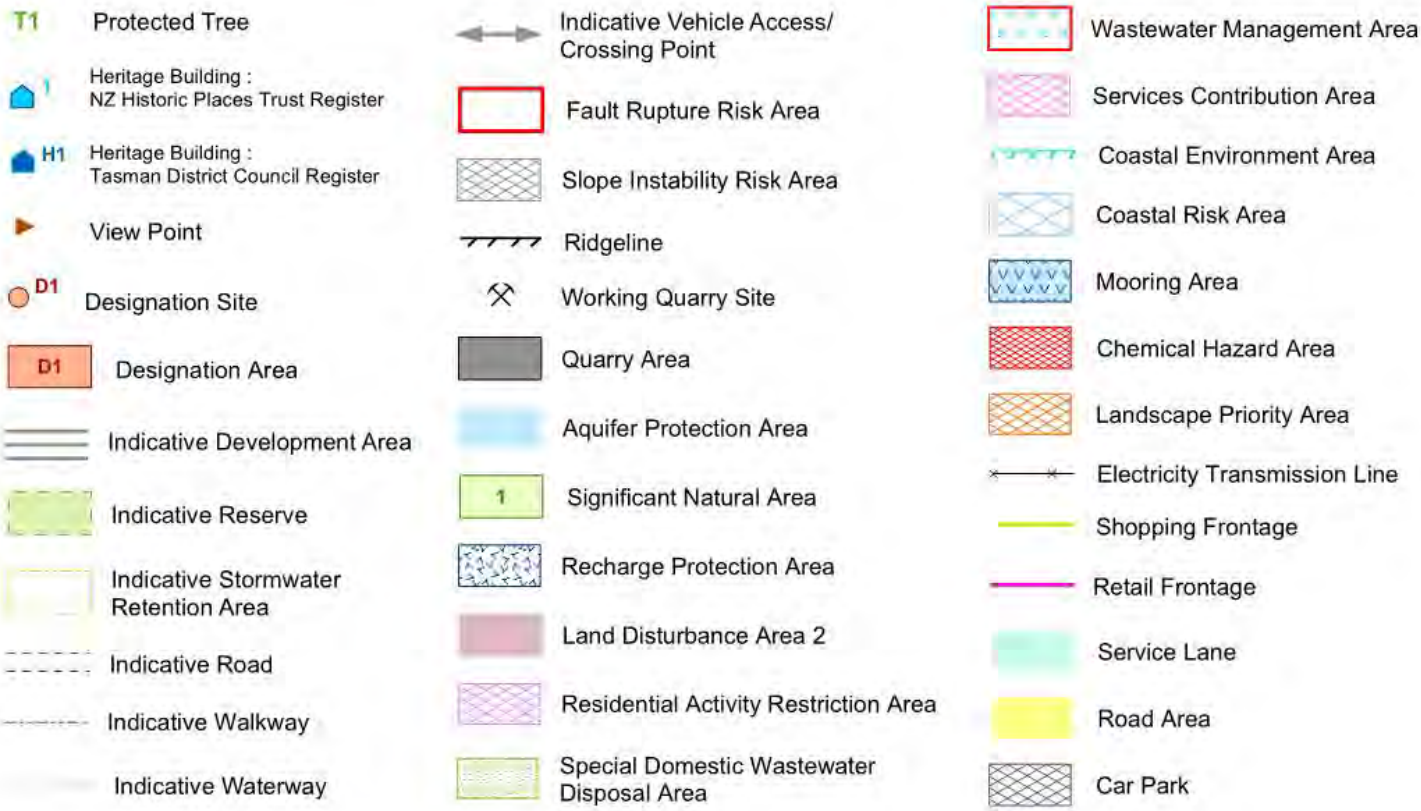
Thursday, 23 September 2021

Original Sheet Size 210x297mm

ZONE MAPS



AREA MAPS



3. Additional Information

This section of the LIM includes general information of interest to potential buyers in the area.

- **Civil Defence/Emergency Management**
  The Council jointly provides civil defence arrangements with Nelson City Council. Details of alerts and other information can be found on the website at www.nelsontasmancivildefence.co.nz.

4. Glossary

Term	Explanation/Note
Coastal Environment Area	The Coastal Environment Area is a Tasman Resource Management Plan overlay. Its purpose is to guide the management of Tasman District's coastline. The seaward boundary of the Coastal Environment Area is mean high water springs and the overlay extends approximately 200 metres inland from this boundary. Any building work within the Coastal Environment Area may require resource consent. Rules relating to this area can be found in Section 18.11 of the Tasman Resource Management Plan.
Coastal Risk Area	The Coastal Risk Area is a Tasman Resource Management Plan overlay that extends over parts of Ruby Bay and recognises the extent of coastal erosion and inundation in this area. Any building work within the Coastal Risk Area will need to comply with Tasman Resource Management Plan Rule 18.9.2.1 or a resource consent will be required.
Consent Notice	A consent notice is a form of covenant between the Council and a landowner. A consent notice will be registered on the title alerting current and future property owners of certain obligations that must be complied with on a continuing basis by the property owner. The process to change or cancel a consent notice requires a resource consent application to Council.
Deferred Fire Ban Area	The land is subject to deferred Fire Ban Area provisions which will take effect once the deferrals applying to the land use zones are uplifted. The fire ban provisions mean that outdoor burning will be prohibited except in particular circumstances relating to lot size. Until then the land is subject to Fire Sensitive provisions which limit outdoor burning during winter months.
Electricity Transmission Lines and Towers	Any property identified as having high-voltage electricity lines over or adjacent to the property or there are transmission towers/pylons on or adjacent to the property, the applicant/landowner must ensure that the proposed building or structure complies with the clearances prescribed in the New Zealand Electrical Code of Practice for Electrical Safety Distances (NZECP34:2001).
Fault Rupture Risk Area	This area encompasses active fault systems in the Tasman District. Rules in Section 18.13 apply to activities in this area.
Fire Ban Area	Rules 36.3.2.3, 36.3.3.3 and 36.3.7.3 apply to this property. The Rules are located in the Discharge Section of the Tasman Resource Management Plan. The rules mean outdoor fires (to burn waste paper and vegetation) are prohibited on properties less than 5,000m^2. Where properties are larger than 5,000m^2, resource consent is required to have an outdoor fire (the rules do not apply to barbecues or braziers).
Fire Sensitive Area	Rules 36.3.2.3, 36.3.3.3 and 36.3.5.3 apply to this property. The Rules are located in the Discharge Section of the Tasman Resource Management Plan. The rules mean that outdoor fires (to burn waste paper and vegetation) are not permitted during the months of June – August (inclusive) unless where there is disease on a horticultural crop (the rules do not apply to barbecues or braziers). Resource consent to burn other horticultural vegetation can also be sought for fires during June – August.

Term	Explanation/Note
Land Disturbance Area 1	This covers most of the District and is characterised by generally stable landscapes. Many land disturbance activities are permitted in this area subject to performance standards to maintain appropriate soil and surface water quality values. Consents may be required for some activities on the naturally higher risk terrains within the area such as steep hill country and the karst terrain. The full set of regulatory requirements are found in Section 18.5 "Land Disturbance Areas" of the Tasman Resource Management Plan (TRMP).
Land Disturbance Area 2	This covers the terrain known as Separation Point Granite, where land disturbance activities are known to pose special risks from erosion which may have detrimental effect both on site and off site. Few land disturbance activities are permitted in this area and generally consent is required for activities where mechanical land clearance is carried out on land exceeding 15 degrees and where track and road formation produce cuts greater than 0.5 metres. The full set of regulatory requirements are found in Section 18.5 "Land Disturbance Areas" of the Tasman Resource Management Plan (TRMP).
Landscape Priority Area	The Landscape Priority Area is a Tasman Resource Management Plan overlay that covers parts of St Arnaud and the Takaka Hill. Its purpose is to guide development in a way that protects the unique landscape and natural values of these areas. Any building work within the Landscape Priority Area may require resource consent. Rules relating to this area can be found in Section 18.2 of the Tasman Resource Management Plan.
Obstacle Limitation Surface	The Rule 36.3.3.1(g) relates to the safety of aircraft approaching Nelson Airport. Within the limitation surface area the efflex velocity of any discharge to air does not exceed 4.3 metres per second at a height greater than 60 metres.
Recharge Protection Area	This is an area where establishment of new plantation forest is regulated. Up to 20% new forest can be planted as a permitted activity in these areas - provided council is notified first. Otherwise resource consent is required. The objective for these provisions is to protect surface water yields and groundwater recharge from being reduced because of the rainwater interception effects of tall forest vegetation.
Services Contribution Area	Council has made an interim decision for properties in the Services Contribution Area that Council will not provide a reticulated wastewater system. All discharge of domestic wastewater will require a Resource Consent.
Slope Instability Risk Area	This area has particular rules relating to information requirements in relation to ground stability. Rules in Section 18.12 apply to activities in this Area.
Special Domestic Wastewater Disposal Area	Any new discharge of wastewater to land must meet the conditions of Rule 36.1.2.5 of the Tasman Resource Management Plan (including the installation of a treatment system that will treat the wastewater to the standards specified in the Rule). Any developments that increase the potential number of inhabitants, such as additional bedrooms, additional rooms that could be used as bedrooms, second dwellings or sleep-outs will require an upgrade of the wastewater treatment and disposal system so that it meets the conditions of Rule 36.1.2.5 of the Tasman Resource Management Plan (this may include the installation of a system that will treat the wastewater to the standards specified in the Rule), or alternatively a resource consent must be obtained.

Term	Explanation/Note
Wastewater Management Area	Any new discharge of wastewater to land will require resource consent. The wastewater treatment and disposal system should also meet the conditions of Rule 36.1.3.2 or Rule 36.1.4.2 of the Tasman Resource Management Plan (including the installation of a treatment system that will treat the wastewater to the standards specified in the Rule). Any developments that increase the potential number of inhabitants such as additional bedrooms, additional rooms that could be used as bedrooms, second dwellings or sleep-outs will require resource consent and will require and upgrade of the wastewater treatment and disposal system so that it meets the conditions of Rule 36.1.3.2 or Rule 36.1.4.2 of the Tasman Resource Management plan (including the installation of a treatment system that will treat the wastewater to the standards specified in the Rule).

5. Site Plans & Consent Information

This section of the document contains plans that are on file regarding the site. This may include:

- Resource Consent information
- Floor plans for any buildings on the site
- Drainage plans
- Overall site plans.

Council may hold additional plan information, such as technical specifications for items used in the construction of any buildings. If you would like a full copy of all the documents on file, please contact Customer Services. Note that this can be quite extensive in some cases, and a fee applies.

File: RM160143
Silent One ID:
jenna.wolter@tasman.govt.nz
Phone 543 8474

11 March 2016

Mark Holmes & Susan Holmes
C/- Mike Greer Homes
PO Box 3710
Richmond 7050

Dear Mark and Susan

Decision on Non-Notified Resource Consent Application No. RM160143 – Discharge of stormwater to water

Your application for resource consent has been granted. A copy of the Council's decision is attached. Please carefully read the conditions that have been attached to the consent and feel free to contact me if you have any questions about your consent or its conditions. My contact details are listed at the top of this letter.

Here are some matters that I need to highlight for you.

Section 357A of the Resource Management Act 1991 ("the Act") provides you with the right to lodge an objection with the Council against this decision including any of the conditions. Objections must be made in writing setting out the reasons for the objection together with a deposit fee of $200.00 (GST inclusive), and must be lodged here within 15 working days of receiving this letter.

The final cost of processing your application has not been calculated yet. If the final cost exceeds the deposit already paid, then as we previously advised, you will be invoiced separately for the additional cost. If the final cost is less than the deposit already paid, then you will receive a refund. Where the costs are equal to the deposit already paid, no further action is required. You will receive a letter shortly about the final costs of processing your application.

Under Section 125 of the Act, your consent will lapse in 5 years unless you have given effect to it before then.

Yours sincerely

Jenna Wolter
Consent Planner, Natural Resources

RESOURCE CONSENT DECISION

Resource consent number: RM160143

Pursuant to Section 104C of the Resource Management Act 1991 ("the Act"), the Tasman District Council ("the Council") hereby grants resource consent to:

Mark Quentin Holmes and Susan Joy Holmes

(hereinafter referred to as "the Consent Holder")

Activity authorised by this consent: Discharge of stormwater to water

Location details:

Address of property:	233 Riwaka-Kaiteriteri Road, Kaiteriteri
Legal description:	Lot 2 DP 474985
Certificate of title:	654608
Valuation number:	1933017305
Location co-ordinates:	1600013 E 5454912 N (NZTM)

Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

CONDITIONS

1 The stormwater discharge shall be carried out in general accordance with the information submitted in support of the application for resource consent RM160143, received on 11 February 2016, and attached RM160143 Plan A dated 11 March 2016, unless inconsistent with the conditions of this consent, in which case these conditions shall prevail.

2 The discharge shall not cause the production of conspicuous oil or grease films, scums or foams, or floatable or suspended material in any receiving water.

3 The quality of treated stormwater discharge authorised by this consent shall not exceed the following quality standards:

(a)	Total petroleum hydrocarbons	15 milligrams per litre
(b)	Total suspended solids	100 milligrams per litre

4 All aspects of the stormwater system shall be checked on a regular basis as required, but not less than once every year.

5 The discharge shall not cause or contribute to erosion of land, including gullies and the bed of any stream or drain, nor shall it contribute to any damage caused by flooding.

Review of Consent Conditions

6 The Council may, during the month of May each year, review any or all of the conditions of the consent pursuant to Section 128 of the Resource Management Act 1991 for all or any of the following purposes:

(a) to deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or

(b) to require the Consent Holder to adopt the best practical option to remove or reduce any adverse effects on the environment resulting from the discharge; and/or

(c) to review the contaminant limits, loading rates and/or discharge volumes and flow rates of this consent if it is appropriate to do so; and/or

(d) to review the frequency of sampling and/or number of determinands analysed if the results indicate that this is required and/or appropriate;

(e) to require consistency with any relevant Regional Plan, District Plan, National Environmental Standard or Act of Parliament.

Lapse and Expiry

7 Pursuant to Section 125 of the Act, this consent shall lapse 5 years after the date of issue of this consent unless either the consent is given effect to, or the Council has granted extensions pursuant to Section 125(1)(b) of the Act.

Advice Note:
The consent is given effect to once the works commence.

8 This resource consent expires on 11 March 2051.

ADVICE NOTES

1 Officers of the Council may also carry out site visits to monitor compliance with resource consent conditions.

2 The Consent Holder should meet the requirements of the Council with regard to all Building and Health Bylaws, Regulations and Acts.

3 Access by the Council or its officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act.

4 All reporting required by these consents should be made in the first instance to the Council's Co-ordinator Compliance Monitoring.

5 Council draws your attention to the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 that require you in the event of discovering an archaeological find (eg, shell, midden, hangi or ovens, garden soils, pit, depressions, occupation evidence, burials, taonga) to cease works immediately, and tangata whenua, the Tasman District Council and Heritage New Zealand should be notified within

24 hours. Works may recommence with the written approval of the Council's Environment & Planning Manager, and Heritage New Zealand.

6 These resource consents only authorise the activity described above. Any matters or activities not referred to in these consents or covered by the conditions must either:

(a) comply with all the criteria of a relevant permitted activity rule in the Tasman Resource Management Plan (TRMP);

(b) be allowed by the Resource Management Act; or

(c) be authorised by a separate resource consent.

REASONS FOR THE DECISION

Background to Proposed Activity

The applicant has applied to discharge stormwater from a new dwelling on site. Stormwater from the roof and deck areas will be directed into three 25000 litre tanks, with overflows piped to an ephemeral stream that runs through the subject property.

Tasman Resource Management Plan ("TRMP") Area and Rules Affected

According to the TRMP the following apply to the application site:

Area(s): Land Disturbance Area 2
Zone: Rural Residential

The activity authorised by this resource consent does not comply with Permitted Activity Rule 36.4.2.1 of the TRMP and is deemed to be a Restricted Discretionary Activity in accordance with Rule 36.4.2.3 of the TRMP.

This consent is bundled with earthworks consent RM160145, and therefore overall the activities are assessed as **restricted discretionary**.

Principal Issues (Actual and Potential Effects on the Environment)

The principal issue(s) associated with the proposed activity involve the actual and potential effects on the environment. For this application these were:

(a) receiving stream capacity and downstream effects; and

(b) effects on water quality and stream bank erosion.

I consider that the adverse effects of the activity on the environment will be no more than minor for the following reasons:

(a) The receiving stream is relatively short and has a small catchment area. The proposed discharge point is near the top of the catchment and enters the stream approximately 250m before the stream discharges at the coast. It is considered that the receiving waterway has capacity to receive the proposed stormwater flows without adversely affecting any downstream properties, and that the proposed stormwater solution is appropriate for the site.

(b) The outlet into the stream will be appropriately secured with concrete anchors and armoured with rock to prevent any scouring of the stream bank.

As the stormwater will be primarily from the roof of the building, it is considered that the water quality of the discharge will be well within permitted activity criteria. Any potential discharge of sediment as a result of construction activities will be dealt with by the erosion and sedimentation controls required by the earthworks consent.

Overall, the potential adverse effect on the environment subject to conditions of consent is considered to be less than minor. The proposed stormwater disposal is considered appropriate for the site and any potential effects will be contained on-site.

Relevant Statutory Provisions

In considering this application, I had regard to the matters outlined in Section 104 of the Act. In particular, I had regard to the relevant provisions of the following planning documents:

(a) the Tasman Regional Policy Statement (TRPS);
(b) the Tasman Resource Management Plan (TRMP).

Most of the objectives and policies contained within the TRPS are mirrored in the TRMP. The activity is considered to be consistent with the relevant objectives and policies contained in Chapter 33 of the TRMP.

The proposed activity contravenes Section 15 of the Act, and therefore I have also had regard to the matters outlined in Section 105 of the Act and I am also satisfied that the activity will not give rise to the effects outlined in Section 107 of the Act.

Part II Matters

I have taken into account the relevant principles outlined in Sections 6, 7 and 8 of the Act and it is considered that granting this resource consent achieves the purpose of the Act as presented in Section 5.

Notification and Affected Parties

The adverse environmental effects of the activity are considered to be no more than minor. The Council's Resource Consents Manager has, under the authority delegated to him, decided pursuant to Section 95 of the Act that the application did not require public or limited notification.

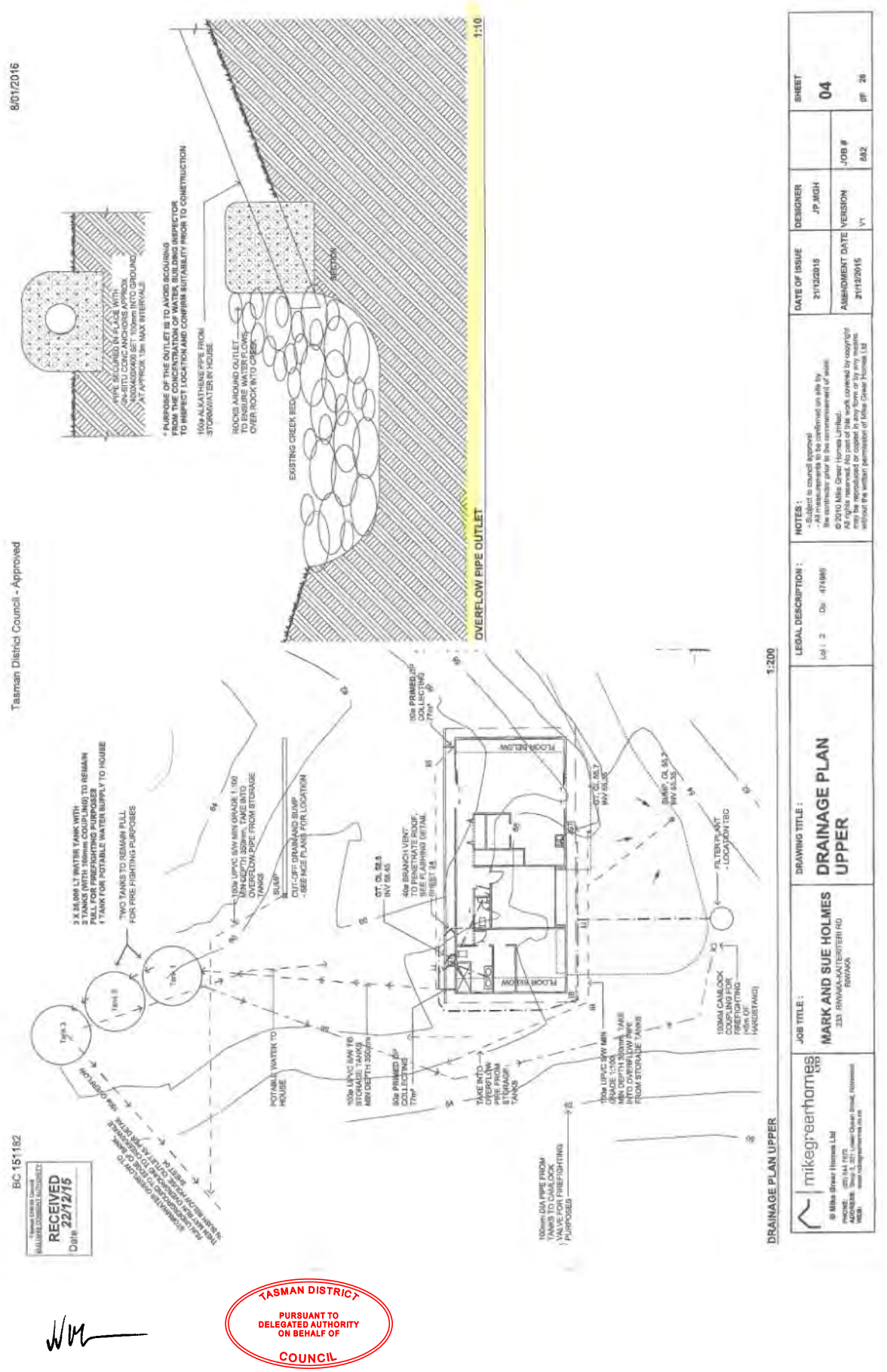
This consent is granted on 11 March 2016 under delegated authority from the Tasman District Council by:





Jenna Wolter
Consent Planner, Natural Resources

Plan A, RM160143 dated 11 March 2016



File: RM160145
Silent One ID:
jenna.wolter@tasman.govt.nz
Phone 543 8474

11 March 2016

Mark Holmes & Susan Holmes
C/- Mike Greer Homes
PO Box 3710
Richmond 7050

Dear Mark and Susan

Decision on Non-Notified Resource Consent Application No. RM160145 – Earthworks in Land Disturbance Area 2 associated with the construction of a building platform and installation of a retaining wall (retrospective)

Your application for resource consent has been granted. A copy of the Council's decision is attached. Please carefully read the conditions that have been attached to the consent and feel free to contact me if you have any questions about your consent or its conditions. My contact details are listed at the top of this letter.

Here are some matters that I need to highlight for you.

Section 357A of the Resource Management Act 1991 ("the Act") provides you with the right to lodge an objection with the Council against this decision including any of the conditions. Objections must be made in writing setting out the reasons for the objection together with a deposit fee of $200.00 (GST inclusive), and must be lodged here within 15 working days of receiving this letter.

The final cost of processing your application has not been calculated yet. If the final cost exceeds the deposit already paid, then as we previously advised, you will be invoiced separately for the additional cost. If the final cost is less than the deposit already paid, then you will receive a refund. Where the costs are equal to the deposit already paid, no further action is required. You will receive a letter shortly about the final costs of processing your application.

Yours sincerely

Jenna Wolter
Consent Planner, Natural Resources

RESOURCE CONSENT DECISION

Resource consent number: RM160145

Pursuant to Section 104C of the Resource Management Act 1991 ("the Act"), the Tasman District Council ("the Council") hereby grants resource consent to:

Mark Quentin Holmes and Susan Joy Holmes

(hereinafter referred to as "the Consent Holder")

Activity authorised by this retrospective consent: Earthworks within Land Disturbance Area 2 associated with the construction of a building platform and installation of a retaining wall.

Location details:

Address of property:	233 Riwaka-Kaiteriteri Road, Kaiteriteri
Legal description:	Lot 2 DP 474985
Certificate of title:	654608
Valuation number:	1933017305
Location co-ordinates:	1600013 E 5454912 N (NZTM)

Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

CONDITIONS

1 Works and activities shall be carried out in accordance with the details contained in the consent application formally received by Council on 11 February 2016, and attached RM160145 Plans A, B and C dated 11 March 2016, except where inconsistent with these conditions in which case these conditions shall prevail.

2 The Consent Holder shall take all practicable measures to limit the discharge of sediment with stormwater run-off to water or land where it may enter water during and after the construction period.

3 The recontouring of the site shall not change on any overland flow or stormwater drainage path so that it may cause adverse effects on any adjacent land.

4 The earthworks and resultant land contour shall not cause any slope failure, damage, erosion or slumping on any adjoining land or property.

5 All exposed ground shall be reinstated within 6 months of completion of the works so that erosion/downhill movement of soil is limited as much as is practical. This shall include supplemental planting of appropriate vegetation that enhances the stability and minimises surface erosion.

6 Excavated material disposed of on-site shall be appropriately compacted and planted so as to limit the discharge of sediment with stormwater run-off.

Expiry

7 This resource consent expires on 11 March 2017.

ADVICE NOTES

1 Officers of the Council may also carry out site visits to monitor compliance with resource consent conditions.

2 The Consent Holder should meet the requirements of the Council with regard to all Building and Health Bylaws, Regulations and Acts.

3 Access by the Council or its officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act.

4 All reporting required by this consent should be made in the first instance to the Council's Co-ordinator Compliance Monitoring.

5 This resource consent only authorises the activity described above. Any matters or activities not referred to in this consent or covered by the conditions must:

(a) comply with all the criteria of a relevant permitted activity rule in the Tasman Resource Management Plan (TRMP);
(b) be allowed by the Resource Management Act; or
(c) be authorised by a separate resource consent.

6 The proposed development is not near known archaeological sites. If during any site disturbance works, any material is found that may have any archaeological significance, all work should stop immediately and the Consent Holder should contact Tiakina te Taiao Limited, the Tasman District Council and Heritage New Zealand, who should be consulted so that appropriate action pursuant to the Heritage New Zealand Pouhere Taonga Act 2014 is undertaken.

7 Plans attached to this consent are (reduced) copies and therefore will not be to scale and may be difficult to read. Originals of the plans referred to are available for viewing at the Richmond office of the Council. Copies of the Council Standards and documents referred to in this consent are available for viewing at the Richmond office of the Council.

REASONS FOR THE DECISION

Background to Proposed Activity

The applicant has applied for a retrospective consent to address earthworks that were carried out on the site for the construction of a building platform and installation of a retaining wall. The earthworks are within Land Disturbance Area 2 and exceed an average excavation height of 0.5m.

Tasman Resource Management Plan ("TRMP") Area and Rules Affected

According to the TRMP the following apply to the application site:

Area(s): Land Disturbance Area 2
Zone: Rural Residential

The activity authorised by this resource consent does not comply with Permitted Activity Rule 18.5.3.1 of the TRMP and is deemed to be a **Controlled Activity** in accordance with Rule 18.5.3.2 of the TRMP.

This consent is bundled with stormwater discharge consent RM160143, and therefore overall the activities are assessed as **restricted discretionary**.

Principal Issues (Actual and Potential Effects on the Environment)

The principal issue(s) associated with the proposed activity involve the actual and potential effects on the environment. For this application these were:

(a) adverse effects of earthworks including slope stability, cultural and visual effects.

I consider that the adverse effects of the activity on the environment will be no more than minor for the following reasons:

(a) All construction effects shall be temporary and the majority of the cuts will be screened by the dwelling itself. It is considered that the effects of sedimentation have been contained within the site. A site visit was carried out and there was no evidence of sedimentation off the site. The earthworks were designed and supervised by a suitably qualified engineer and a sedimentation control plan was put in place during construction.

It is acknowledged that while there may be some adverse visual effects during the construction phase, it is considered that the excavations will ultimately be screened by the dwelling and appropriately landscaped. The site is not located within a statutory acknowledgement area.

It is considered that the excavation did not cause any adverse effects on the environment that were more than minor. Conditions of consent will require the currently exposed battered slopes to be vegetated as soon as possible.

Relevant Statutory Provisions

In considering this application, I had regard to the matters outlined in Section 104 of the Act. In particular, I had regard to the relevant provisions of the following planning documents:

(a) the Tasman Regional Policy Statement (TRPS);
(b) the Tasman Resource Management Plan (TRMP).

Most of the objectives and policies contained within the TRPS are mirrored in the TRMP. The activity is considered to be consistent with the relevant objectives and policies contained in Chapters 5, 8, 9 and 12 of the TRMP.

Part II Matters

I have taken into account the relevant principles outlined in Sections 6, 7 and 8 of the Act and it is considered that granting this resource consent achieves the purpose of the Act as presented in Section 5.

Notification and Affected Parties

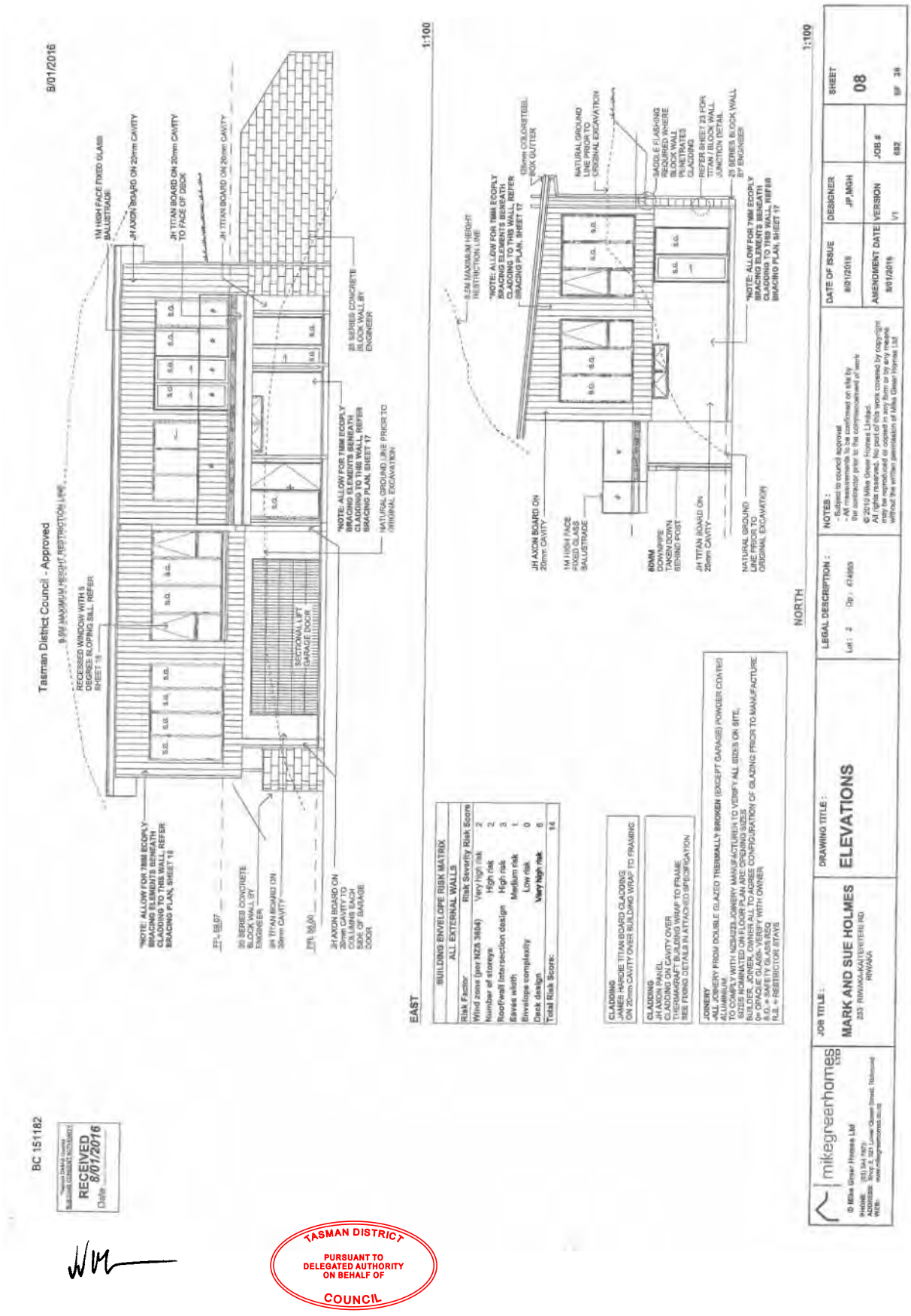
The adverse environmental effects of the activity are considered to be no more than minor. The Council's Resource Consents Manager has, under the authority delegated to him, decided pursuant to Section 95 of the Act that the application did not require public or limited notification.

This consent is granted on 11 March 2016 under delegated authority from the Tasman District Council by:

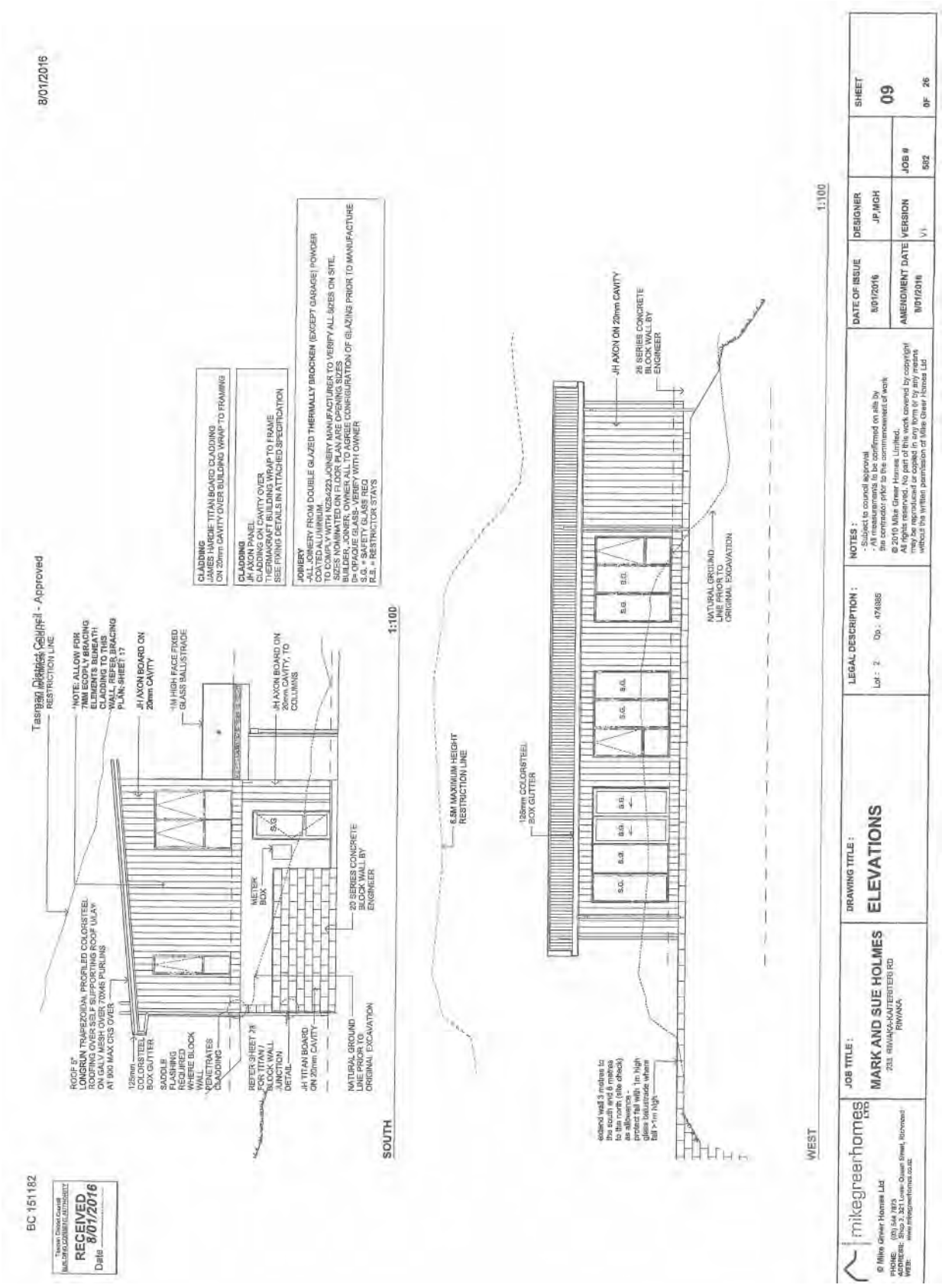


Jenna Wolter
Consent Planner, Natural Resources

Plan A, RM160145 dated 11 March 2016

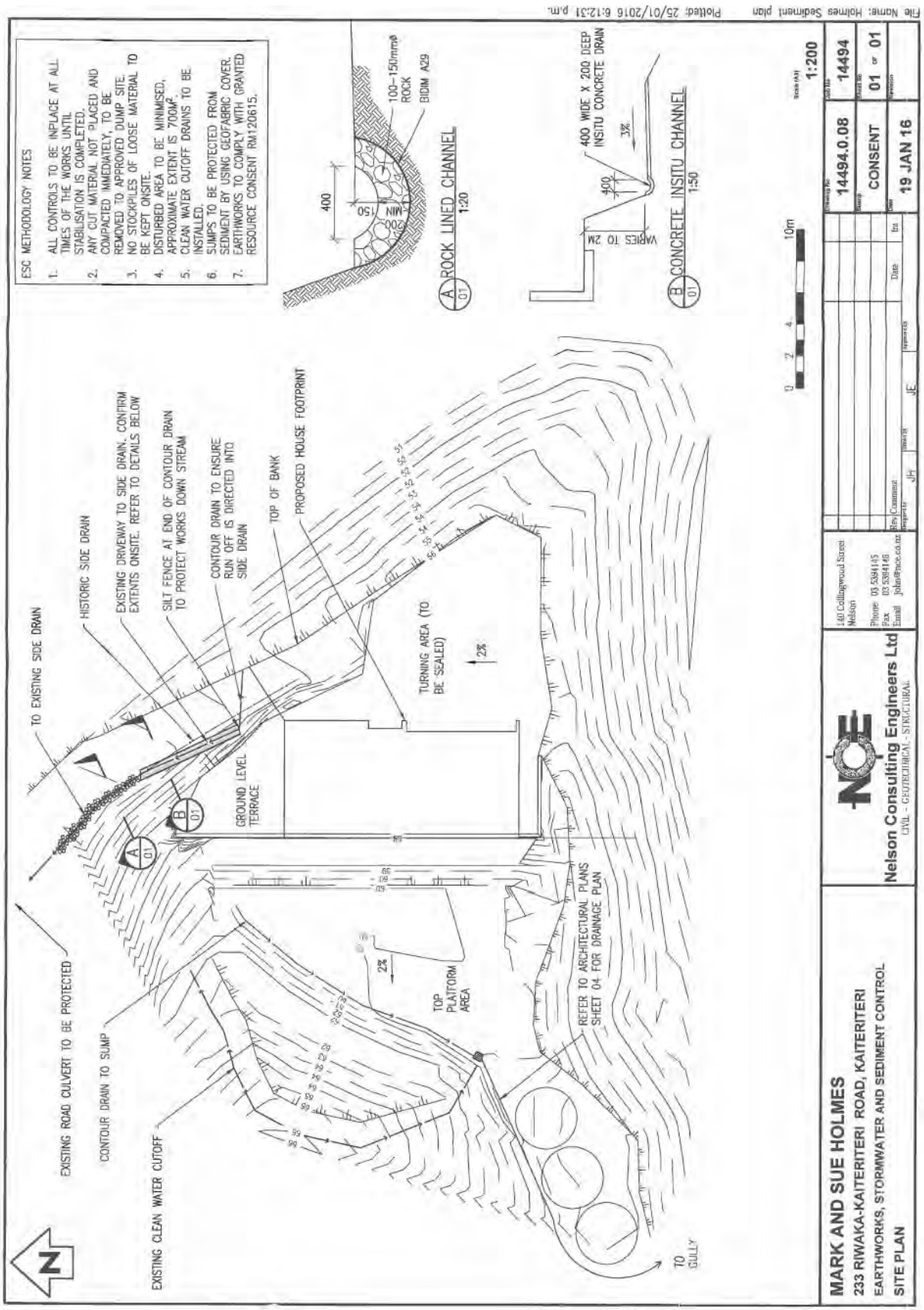


Plan B, RM160145 dated 11 March 2016



TASMAN DISTRICT
PURSUANT TO DELEGATED AUTHORITY ON BEHALF OF COUNCIL

Plan C, RM160145 dated 11 March 2016



TASMAN DISTRICT COUNCIL
PURSUANT TO DELEGATED AUTHORITY ON BEHALF OF

Nelson Consulting Engineers Ltd
CIVIL - GEOTECHNICAL - STRUCTURAL

26 March 2014

Job No: 14494

RECEIVED
17 DEC 2014
T.D.C. MOTUEKA

Mark Holmes
233 Riwaka – Kaiteriteri Road
RD 2
RIWAKA 7197

Dear Mark,

Re: Engineering Assessment for Proposed Building Area and On-Site Wastewater Disposal, 233 Riwaka-Kaiteriteri Road, Riwaka

1. Introduction

You have requested Nelson Consulting Engineers Ltd (NCE) to undertake an engineering investigation and assessment for a proposed building area and on-site wastewater disposal system to be located on new Lot 2, recently created by two lot subdivision of Lot 2 DP362048, 233 Riwaka–Kaiteriteri Road, authorised by Resource Consent RM110930.

Our work comprises a geotechnical assessment for the building area and effluent disposal area, and specifically includes:

- a stability assessment of the new building area,
- the expected general foundation conditions,
- a general review of groundwater and stormwater,
- site and soil assessment for the suitability of wastewater disposal to land,
- recommendations for the proposed wastewater treatment system,
- geotechnical recommendations for development,

and is suitable to accompany a Resource or Building Consent application.

2. Scope

This engineering assessment is based on the following scope of work:

- Review of the Tasman District Council (TDC) Resource Management Plan Area and Zone Maps 84, dated 1 November 2008.
- Review of the initial concept plans for the residence, provided by Project Homes Ltd.
- Review the geological map 9 *Nelson, Geology of the Nelson Area* (Rattenbury et al, 1998).
- Review the TDC GIS and Google Earth aerial photographs of the site and vicinity.
- Review the TDC Resource Consent Decision letter, RM110930, dated 29 October 2012.
- Review the geotechnical report titled *Geotechnical Assessment for Right of Way Stability, 233 Riwaka to Kaiteriteri Road*, dated 29 July 2012, prepared by Aurecon.

140 Collingwood Street, Nelson, New Zealand phone: 64-3-539-4145 fax: 64-3-539-4146
cellular: 0274-555-720 email: john@nce.co.nz web: **www.nce.co.nz**

- Engineering geological reconnaissance mapping and subsurface investigation of the proposed building area and land application area (LAA) for effluent disposal.
- Site and soil assessment for on-site wastewater disposal to land, including test pit, existing cut batter inspections, soil sample textural assessment and soil classification.
- Consultation with the client.
- Preparation of this report.

3. Investigations

3.1 Site Description

The 2.2ha property is located on generally southeast aspect hill slopes, which within the property comprise of three moderate to moderately steep spurs sloping down towards the coastline, separated by well defined gullies / drainages. During our visit, minor flow in the lower section of one channel adjacent to the Riwaka-Kaiteriteri Road culvert was observed. The proposed building area and land application area (LAA), or effluent disposal area, are located on the upper to mid section of the central spur, with a four wheel drive access track leading from an existing ROW, crossing the gully to the northeast as shown on the attached *Geotechnical Site Plan* dated 26 March 2014.

The topography of the property is generally smoothly varying, linear slopes with divergent form typical of spur features. The bounding gullies are deeply incised with shallow landslips within regolith located in the upper sections of the gullies, reported by the owner to have recently occurred during the severe rainfall events of June 2013. Natural ground slopes are generally between 10° and 20° along the central spur, with flanking side slopes up to 30° as measured in the field below horizontal. Adjacent to the existing cut platform / proposed building area and access track are fill batters with slopes of approximately 35° and cut batters ranging between 70° and 75° slope. The main cut batter of the platform is formed across the spur to an approximate maximum height of 3.7m as shown on the attached *Geotechnical Cross Sections A & B*.

The cut batters provide good exposure of the underlying ground materials, which are comprised of topsoil, colluvium and residual soil of reasonably consistent character. Highly weathered bedrock is exposed in the toe of some cuts, however generally the exposed ground is comprised of soil.

The upslope catchment affecting the proposed building site and effluent disposal field is not appreciable, and both areas are exposed to south to east quarter winds and generally receive all day sun.

Remnant tree stumps and recently cut pine trees indicate the site bounded or was formerly part of a pine plantation. Currently the property is generally covered by regenerating native vegetation, gorse, blackberry and broom.

3.2 Desktop Study

Our review of the TDC Resource Management Plan (TRMP) Map 84 shows the property is within a *Rural 2* Zone. The property is entirely overlain by the *Land Disturbance Area 2* and is partially within the *Coastal Environment Area* overlays. The *Land Disturbance Area 2* relates to areas underlain by Separation Point Granite terrain that poses risks associated with easily eroded sandy dispersive ground material that is susceptible to erosion, instability and sedimentation on and off site. For these

reasons the TRMP provides guidelines on the permitted clearance of vegetation and earthworks. Earthworks to provide for access to the building site is authorised by Resource Consent RM120615.

The LAA is not within any wastewater management area as defined by the TRMP.

Our review of the TDC GIS and Google Earth aerial / satellite photography reveals no features of significant, deep seated instability on site or in the vicinity. However, a small and apparently shallow landslip feature within the head of a gully is located upslope from the property boundary as shown on a Google Earth image dated February 2013 and our *Geotechnical Site Plan*.

3.3 Geology

The geology map of *Nelson* (IGNS, 1998), indicates that the site is underlain by the Separation Point Suite, comprising of *equigranular biotite granite and equigranular hornblende-biotite granodiorite and diorite*. Highly weathered bedrock and residual soil consistent with granite bedrock were observed in the test pits. A complete description of the ground material characteristics is outlined in the appended test pit logs.

3.4 Field Investigation

We undertook a preliminary site walkover and consultation with the client on 4 February 2014. This comprised of a general walk-over of the property, observing survey pegs, the recently formed access track and cut / fill batters, adjacent landslips, the general area for proposed on-site wastewater disposal, the existing cut platform, and general stormwater drainage patterns.

Our main field investigation was undertaken 11 February 2014, which comprised of a sub-surface investigation involving four test pits excavated to a maximum 2.5m depth using a 7 tonne digger, and Scala penetrometer tests performed in undisturbed ground adjacent to the test pit locations. Test pit location TP-4 was specifically excavated for soil assessment within the LAA.

Our site investigation was undertaken during a fine period. The test locations are shown on the *Geotechnical Site Plan* and results presented on the accompanying test pit and Scala penetrometer test logs.

3.5 Ground Conditions

The observed ground material within test pits is derived from the underlying Separation Point granite bedrock and mainly comprises of colluvium and residual soil. The topsoil observed on site is approximately 0.3m thick at the test locations.

The underlying colluvium is sandy CLAY to clayey SAND with minor quartz gravel remnants of the bedrock. The soil texture is relatively consistent, mainly varying in the amount of sand present, generally being of low plasticity with consistency varying between firm to stiff for clay or loose to medium dense for sand.

The interface with the underlying residual soil is generally irregular but relatively distinct by colour and the remnant rock structure observed within the test pit walls. The texture of residual soil varies from cohesive sandy CLAY to non-cohesive clayey SAND. Generally the residual soil is of low plasticity.

No bedrock was exposed at the test pit locations and was not observed within the main cut batter of the building platform. A band of quartz gravel exposed in the cut is a remnant lens from within the

former granite bedrock, which is completely weathered to residual soil. As demonstrated in the wider area from Tapawera through to Riwaka, Kaiteriteri - Sandy Bay Road to Marahau and the Able Tasman National Park, these soils are highly water sensitive.

Except for minor fill encountered at the edge of the building platform at test pit locations TP-1 and TP-2, the platform where tested is comprised of natural cut ground.

The results from Scala penetrometer tests indicate a variable depth to *good ground* as defined by the Building Code, at the test locations. Generally, *good ground* was encountered within residual soil at depths between approximately 0.3m to 1.4m. The locations where *good ground* is shallower typically relate to areas where the residual soil is exposed at the current building platform surface.

No groundwater was encountered within the test pit locations or observed as seepage on-site.

Note the test logs appended to this report indicate conditions on the date of exploration and may not represent conditions at other location and on other dates. Water levels and/or moisture content where shown are subject to variation. Stratification lines or depth intervals indicate approximate boundaries between material types and the transitions may be gradual unless otherwise indicated. Soil classifications shown are field classifications based on the Unified Soils Classification System (see the attached sheet - Soil Exploration Log Terminology).

4. Geotechnical Assessment

4.1 Stability Assessment

As previously mentioned, the site is located within the *Land Disturbance Area 2* characterised by ground material susceptible to soil erosion, instability and sedimentation. In addition, the character of soils and strength of bedrock where it may occur on-site and observed in the vicinity significantly varies, mainly in relation to the depth of weathering.

A GNS (2012) report of the Otuwhero Inlet and Marahau area reveals, following recent significant rainfall events, landslides frequently occur within the deeply weathered granite bedrock and overlying soil which is prone to saturation during heavy or prolonged rainfall events. Similar deeply weathered soils and bedrock exist in the Pohara region of Golden Bay, when in December 2011 a large storm event resulted in widespread landslides (GNS, 2012).

Based on our review of aerial photographs and field investigation, no evidence of deep seated instability within bedrock was observed within the proposed building area or the vicinity upslope or downslope. The proposed building area is located on a spur of divergent form which is less prone to the effects of concentrated stormwater runoff and deep, plastic clay soils were not encountered at the test locations. The natural status quo condition of the spur topography appears stable. However, recent high rainfall events appear to have triggered surficial instability, comprising shallow landslips within regolith, located in both gullies either side of the spur. At these locations, stormwater concentrates and the soils are generally more prone to groundwater saturation and deeper weathering. No appreciable land damage appears to have occurred within the proposed building area or LAA and near vicinity as a result of the recent storm events previously mentioned.

As part of maintaining and enhancing the stability of the site and mitigating on site erosion and coastal sedimentation, the existing vegetation should be retained and enhanced as much as practical. The attached *Planting for Stability* provides some recommended species.

We assess the risk of land instability within the property and affecting the neighbouring properties as a result of the proposed development, based on the chance of either or both extraordinary seismic

and rainfall events, using the Australian Geomechanics Society *Landslide Risk Management Concepts & Guidelines*. These guidelines describe qualitative measures of likelihood for such an event, the consequences to property of such an event, and derived from a risk analysis matrix, we outline the level of risk to property.

Land Instability Risk Assessment per Australian Geomechanics Society Guidelines

If the recommendations in this report are followed, we assess the risk of land instability on-site and affecting the neighbouring properties, based on the chance of either or both extraordinary seismic and rainfall events, to be as follows, using the Australian Geomechanics Guidelines, arising from the:

Proposed Development with the New Building Area

Likelihood: Possible (The event could occur under adverse circumstances)

Consequences to Property: Minor (Limited damage to part of the structure or part of the site requiring some reinstatement/stabilisation works)

Level of Risk to the Property: Low

4.2 Foundation Conditions for Structures

The concept plans of the proposed residence show a three level structure. Based on the prevailing ground conditions and ground slope, the proposed residence is suited to concrete slab and / or pole / pile foundations foundations. Specific foundation design is required to be undertaken by Chartered Professional Engineer practicing in geotechnical engineering.

Retaining Walls

We are not aware of proposed retaining walls at this point, however based on the existing cut batter, we anticipate retaining walls if required to retain up to 2.5m of cut ground. Retaining wall footings will be founded on competent ground. All retaining walls must be designed by Chartered Professional Engineer practicing in geotechnical engineering.

For the required retaining walls the following design parameters are advised for the upper 3 m of ground:

For Free Standing Cantilevered Walls

Analysis: Rankine or Coulomb OK

Material properties: Colluvium or Residual Soil

S_u = 75 Kpa

Or using a simplified model assuming granular material

ϕ = 30° (active pressure), ϕ = 30° (passive pressure), c = 0, γ_{moist} = 19 kN/m^3

Retaining walls should be well drained to prevent the build-up of hydrostatic pressure from elevated groundwater.

4.3 Earthworks

Based on the existing cut platform and access way the main area of proposed earthworks relates to foundation footing excavations for the residence and / or retaining walls as required. Depending on the final residential design, some additional excavation may be required to trim the existing main cut batter of the platform.

All works, including retaining walls if required, must be authorised by Building Consent. Our review of the TDC Resource Management Plan indicates earthworks as currently proposed, does not require Resource Consent.

All earthworks must be designed and monitored by Chartered Professional Engineer practicing in geotechnical engineering. Fill must be placed in accordance with NZS: 4431: 1989 - *Code of Practice for Earth Fill for Residential Development.* No spoils or other ground material or other ground material cut during construction is to be placed on site without the advice of the geotechnical engineer.

The existing native vegetation on the slopes of the property should be retained or supplementally planted as much as practical to maintain or enhance the status quo stability of the site, and control stormwater and sediment runoff. At completion of earthworks, exposed fill batters and other ground cleared for construction purposes should be replanted with appropriate vegetation, as much as practical. Refer to *Planting for Slope Stability in the Nelson - Richmond Area* attached to this report.

Adequate stormwater and sediment control is required to be in place to avoid sedimentation risk of adjacent waterways, as outlined in the TDC *Engineering Standards & Policies 2008* manual.

4.4 Groundwater

Groundwater was not encountered at any of our test pit locations or observed as surface seepage on site and is not anticipated to be a significant issue for development.

It should be noted that soil moisture may vary considerably in response to seasonal conditions. Our fieldwork was undertaken during wet winter weather and from our field assessment we do not anticipate ground water levels to be a significant issue for development of the proposed building and effluent disposal areas.

4.5 Stormwater

Stormwater management is an integral component to mitigate the risk of slope instability on the property and to protect the LAA from stormwater overland flow.

As previously mentioned, the soils on site and the vicinity are prone to surface erosion and shallow landslips. Areas cleared of vegetation and / or fill areas increase the risk of surface erosion and sedimentation. The development will require improvements to the existing stormwater system, including re-shaping the existing track, construction of stormwater side drains, and reticulation of captured roof stormwater to on-site storage tanks with outflow to the existing ephemeral drainage channels in a manner as to avoid the effects of concentrated flow discharging to surface soils prone to erosion.

No concentrated stormwater flow is to be directed towards or over cut or fill batters, or the effluent disposal area (LAA), or the building area.

The exact details for stormwater improvements must be designed or reviewed by a Chartered Professional Engineer practising in civil or geotechnical engineering and need to be provided as part of detailed design. We recommend stormwater improvements as outlined in the report to be fully implemented, as much as practical, prior to the construction of residential foundations, retaining walls, and the wastewater treatment system.

5. Site and Soil Evaluation for On-site Wastewater Disposal to Land

5.1 Topography and Geology

The property's topography, aspect, exposure and geology are adequately described in Sections 3.1 and 3.3. As shown on the *Geotechnical Site Plan* the approximate ground slope in the upper portion of the effluent disposal area / land application area (LAA) adjacent to test pit TP-4 is approximately 15° (27%), and increase to 30° (57%) on the flanks of the spur. The topography of the LAA and near vicinity is divergent natural ground slopes with regenerating native vegetation. The existing vegetation is best left with minimal disturbance to enable establishment / maturity of existing native species. Supplementarily planting with appropriate species is recommended where practical. No evidence of significant instability, erosion, overland flow or surface groundwater seepage was observed within or adjacent to the application area.

5.2 Setbacks

The setbacks of the proposed LAA from features of known risk meets the requirements outlined in the TDC Guidelines and AS/NZS 1547:2012 *On-site domestic wastewater management* Table R1 for the design of new on-site wastewater management systems, and are as follows:

- A minimum 1.5m setback from property boundaries is provided. The LAA is setback more than 20m from the *Coastal Marine Area*.
- The disposal laterals for effluent application are recommended to be surface laid and either cover with mulch or provided adequate warning notice of pathogen risk is erected, allowed to cover with natural mulch over time. No groundwater was encountered within test pits excavated to a minimum 1.7m depth, therefore we assess adequate separation from groundwater exists.
- The proposed residence is upslope with proposed setback greater than 2m from the LAA.
- The nearest waterway is an ephemeral stream draining the southwest portion of the property. The LAA as shown on the *Geotechnical Site Plan* is located northeast from the ephemeral stream channel, with a setback of approximately 30m.
- The site is elevated and not at risk of inundation.
- No water bores are known to be in the local area.
- No retaining walls or embankments are in close proximity. However a recent unsurveyed cut track to provide for electricity supply is near to the northeast side of the LAA. We recommend a minimum horizontal setback of the LAA from the top batter edge, equivalent to the corresponding height of the batter.

5.3 Soil Assessment

As previously mentioned, our geotechnical subsurface investigation includes four test pits and Scala tests. In addition we inspected the access track and building platform cut batters which provide good exposure of the underlying soils. Based on the textural consistency of shallow soils at test pit locations and within cut batters we do not anticipate a significant variation in soil characteristics within the LAA. The depth to bedrock is beyond the depth of the existing cut batters and test pits, and where observed in the vicinity, bedrock is highly weathered, with the disturbed texture of sandy clay / clayey sand.

We assess a satisfactory depth of soil exists to adequately filter pathogens contained within the secondary treated effluent, as required by AS/NZS1547.

Our textural analysis assessed structure, colour, staining, ribbon testing, resistance to bolus formation, plasticity, soil hydrometer testing, and modified Emerson's test. As described in the appended soil log, the topsoil is a strong structured sandy loam to loam with very few coarse fragments and is not dispersive. We assigned Soil Category 3 to the topsoil.

The colluvium is a weak structured, sandy clay loam – clay loam with few coarse fragments, and not dispersive. We assigned Soil Category 4 to the colluvium.

The residual soil extending below 0.8m depth and the maximum depth of the test pit (1.7m) is massive clayey sand containing few coarse gravel.

Soil **Category 4** is conservatively assigned for wastewater system design, based on the relatively thin topsoil horizon and underlying colluvium.

5.4 Recommended Land Application System and Design Irrigation Rate (DIR)

Based on the ground slope, available land area, existing vegetation and assigned soil category, we recommend a pressurized, surface laid drip irrigation system to be covered with mulch, to dispose of effluent treated to a secondary level via pressure compensating drip emitters. The extent of the application area shown on the *Geotechnical Site Plan* is based on site survey information.

As recommended by AS/NZS 1547, the DIRH of **3.5mm/day** (Table M1) and slope reduction factor of 50% (Table M2) is adopted, providing a DIR of **1.75mm/day**.

5.5 Assessment of Environmental Effects

Based on our desktop review and our site and soil assessment, we assess the LAA to be adequately setback from boundaries, buildings, surface water, recreational areas, coastal marine area, bores or wells and cuts or retaining walls. No groundwater was encountered, and no gleyed soil was encountered in test pits or cuts that would otherwise suggest prolonged periods of elevated groundwater.

Although portions of the LAA contain moderately steep slopes, the divergent topography and established vegetation mitigate the risk of concentrated stormwater flow and potential surface erosion or shallow instability. We have applied a conservative 50% slope reduction factor to the DIR, resulting in a very low effluent application rate to the LAA.

We assess the risk of stormwater flow crossing the LAA to be adequately mitigated by our recommendations for development and ongoing maintenance of the on-site stormwater system. The

stormwater system as generally recommended should be implemented as much as practical prior to construction of the wastewater treatment system. Enhancement of the existing vegetation within the LAA should be undertaken as soon as practically possible.

If the recommendations in this report are followed, we assess the risk of land instability within the LAA and affecting the upslope or downslope lands to be low. This risk is based on the possible occurrence under either or both extraordinary seismic and rainfall events, which may cause minor damage to the effluent disposal field requiring some reinstatement/stabilisation works.

Based on the available land area an alternative wastewater disposal area is likely to exist, suitable for reserve, but this area was not specifically assessed. In the case of unexpected failure within the LAA, it is likely to be more practical and cost effective to replace irrigation laterals if required, or improve the quality of topsoil.

5.6 Design Flow and Design Occupancy

As recommended by AS/NZS 1547, the proposed dwelling with three habitable spaces has a population equivalent of **5 persons** (Table J1). With roof water tank supply and fitted standard water fixtures the recommended domestic wastewater flow allowance is **180 L/person/day** (Table H3).

The calculated total daily wastewater design flow allowance is **900 L/day**.

Using the recommended application system and DIR provided in Section 5.4, the required minimum LAA for secondary treated effluent disposal is **514m^2**.

5.7 Secondary Treatment Wastewater System

A wastewater treatment system capable of filtering effluent to a secondary or higher level is required for the site. Power is available on-site, enabling a pump dosed application of effluent to the LAA which is located downslope from the proposed dwelling.

Based on the site and soil assessment, effluent load and on-site power, we recommend an advanced secondary treatment filter plant be installed, capable of filtering a minimum 900L/day effluent load.

Features suited to the site include system alarm to notify the users / owners of system irregularities and a high level of filtration, and facility for manual flushing of laterals at regular service intervals. Ideally, a treatment system should provide at least 24 hours of peak occupancy emergency storage.

Where practical, all irrigation lines should be installed parallel to the topographic contours. Pressure compensating, anti-leak drip emitters within the system ensure that acceptable variations (0-5m) from this rule do not point load low lying emitters during the application cycle. Depending on the final layout of the wastewater system, drip-line non-leak (DNL) valves may be required to mitigate the risk of long-term point loading at low lying emitters at the end of an application cycle. An air valve installed at the high point of the distribution field prevents suction of soil particles into the drip lines following an effluent application cycle.

The LAA is required to be positioned in a well drained, elevated area to avoid stormwater inundation and also be protected from traffic, which detrimentally affects soils used for wastewater disposal. Other than general landscaping, no development is allowed in the LAA, including the formation of landscaped hard or impervious surfaces. Provision should be made to ensure those likely to undertake future landscaping or gardening activity within the disposal areas are aware of the drip lines to avoid potential damage or pathogen risk.

No additional irrigation from other water sources, either potable, or stormwater should be applied to the LAA.

6. Conclusion

In our opinion, based on our geotechnical engineering investigation and assessment, and subject to the recommendations in this report,

a) a suitable *Building Area Subject to Specific Engineering Design* exists as shown on the *Geotechnical Site Plan,* which will have a low risk of ground instability that would affect the proposed development and/or that would appreciably impact neighbouring lands or developments.

b) a land application area (LAA) suitable for effluent disposal is available on the property as shown on the *Geotechnical Site Plan*.

7. Recommendations

The following recommendations shall be adopted for development of the building area and effluent disposal area shown on the *Geotechnical Site Plan*:

1. The proposed residence shall be positioned within the *Building Area Subject to Specific Engineering Design* depicted on the *Geotechnical Site Plan,* dated 26 March 2014. Residential foundations located outside of the building area will require additional specific investigation and design by a Chartered Professional Engineer practising in geotechnical engineering. Note that other TDC conditions may limit development within the designated area.
2. All foundations and retaining walls shall be specifically investigated, designed and inspected, or reviewed by a Chartered Professional Engineer practising in geotechnical engineering and experienced in foundation design.
3. See Section 4.3 for detailed earthworks recommendations.
4. All seepages encountered, including those discovered in excavations or during development, must be conveyed away from the building platform and discharged into a natural watercourse.
5. An advanced secondary treated wastewater system should be designed by suitably qualified wastewater system designer accredited by TDC, and installed as per the specifications and guidelines of the manufacturer, with secondary treated effluent directed to the land application area as shown on the *Geotechnical Site Plan*, dated 26 March 2014 attached to this report. See Section 5 for detailed recommendations for on-site wastewater management.
6. As outlined in the standard AS/NZS 1547:2012 *On-site domestic-wastewater management*, the property owner is responsible for operations and maintenance of the wastewater system. Guidelines for operation and maintenance shall be included with the detailed design of the system, as part of the Building Consent application.
7. All effluent including grey water from the residence on-site, but excluding any outflow from spa baths and swimming pools, must be directed into the secondary treated filter system.

8. Any earthworks, ground shaping including landscaping shall be constructed to prevent ponding as much as practical and provide a positive gradient away from the wastewater treatment plant and the designated wastewater disposal areas.
9. See Section 4.5 for detailed stormwater recommendations. Any spa drainage/outflow and/or swimming pool outflow shall be connected to the on-site stormwater system.
10. Existing native vegetation on the slopes of the property should be retained and/or supplementally planted with the appropriate species as much as practical to enhance slope stability, and control stormwater and sediment runoff. Refer to *Planting for Slope Stability in the Nelson Richmond Area* attached to this report. Covering steeper slopes, or slopes subject to elevated stormwater runoff, with weed cloth, is not recommended unless the effects of concentrated stormwater runoff are considered.

8. Limitation

This report is confidential and has been prepared solely for the benefit of Mark Holmes and Tasman District Council. No liability is accepted by Nelson Consulting Engineers Ltd or by any principal, director, employee or agent of this firm, in respect of its use by any other person. Any other person who relies upon any matter contained in this report without consultation and agreement with Nelson Consulting Engineers Ltd does so entirely at their own risk.

This report must be reviewed for its applicability in the event that any substantial modifications are made to the site or adjacent properties, such that site conditions are changed substantially from the conditions at the time of the investigations.

If conditions are observed that are not as indicated in this report, please contact this office immediately. Unusual conditions may include signs of seepage, subsidence, cracking or slumping.

This report shall remain valid five years from the date of issue.

9. References

AUSTRALIAN/NEW ZEALAND STANDARD, 2012: On-site domestic-wastewater management, AS/NZS 1547:2012.

RATTENBURY, M S, COOPER, R A & JOHNSTONE, M R, 1998: Geology of the Nelson Area, Institute of Geological & Nuclear Sciences Ltd (IGNS).

NEW ZEALAND GEOTECHNICAL SOCIETY, Geomechanics News, Issue 60, December 2000: Land Risk Management Concepts and Guidelines, by the Australian Geomechanics Society

NEW ZEALAND GEOTECHNICAL SOCIETY, 1985: Guidelines for the Field Description of Soils and Rocks in Engineering Use

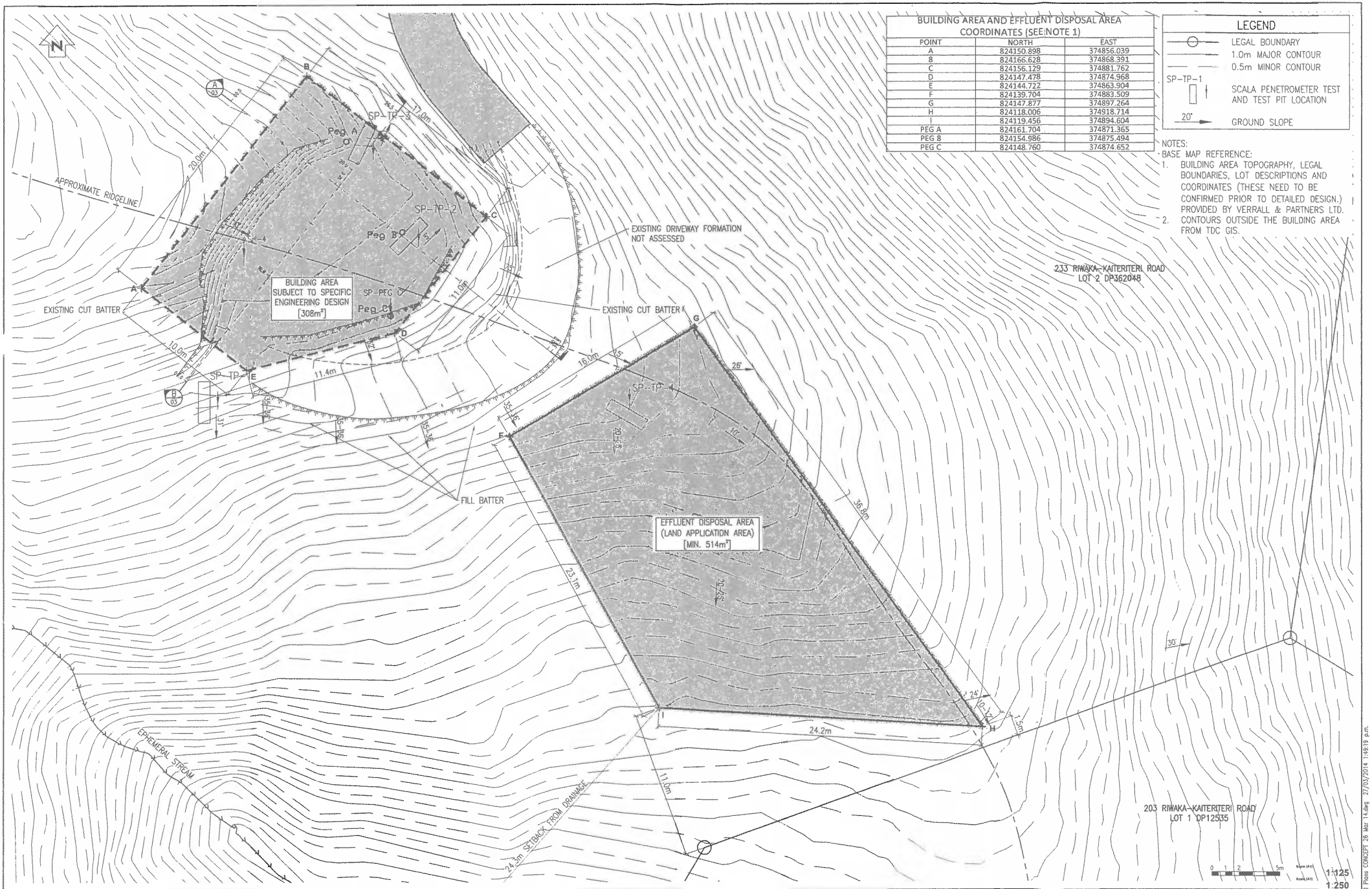
PAGE, M J, 2012: Landslides and debris flows caused by the 15-17 June 2012 rain storm in the Marahau-Motueka area, and the fatal landslide at Otuwhero Inlet. GNS Science Report 2013/44.

PAGE, M J, 2012: December 2011 debris flows in the Pohara-Ligar Bay area, Golden Bay. GNS Consultancy Report 2012/305.

Yours faithfully
NELSON CONSULTING ENGINEERS LTD

John Higginbotham, CPEng, MIPENZ (Geotechnical, Structural)
Principal Civil Engineer

Attachments: Overall Geotechnical Site Plan, Geotechnical Site Plan, Geotechnical Cross-Sections, Test Pit Logs (3 Sheets), Soil Log AS/NZS 1547:2012 (TP-4), Scala Penetrometer Tests (5 Sheets), Log Terminology Sheet, Planting for Stability in the Nelson Richmond Region.



MARK HOLMES

233 RIWAKA-KAITERITERI ROAD, RIWAKA

GEDTECHNICAL ASSESSMENT OF BUILDING AREA AND EFFLUENT DISPOSAL AREA

DETAILED GEOTECHNICAL SITE PLAN

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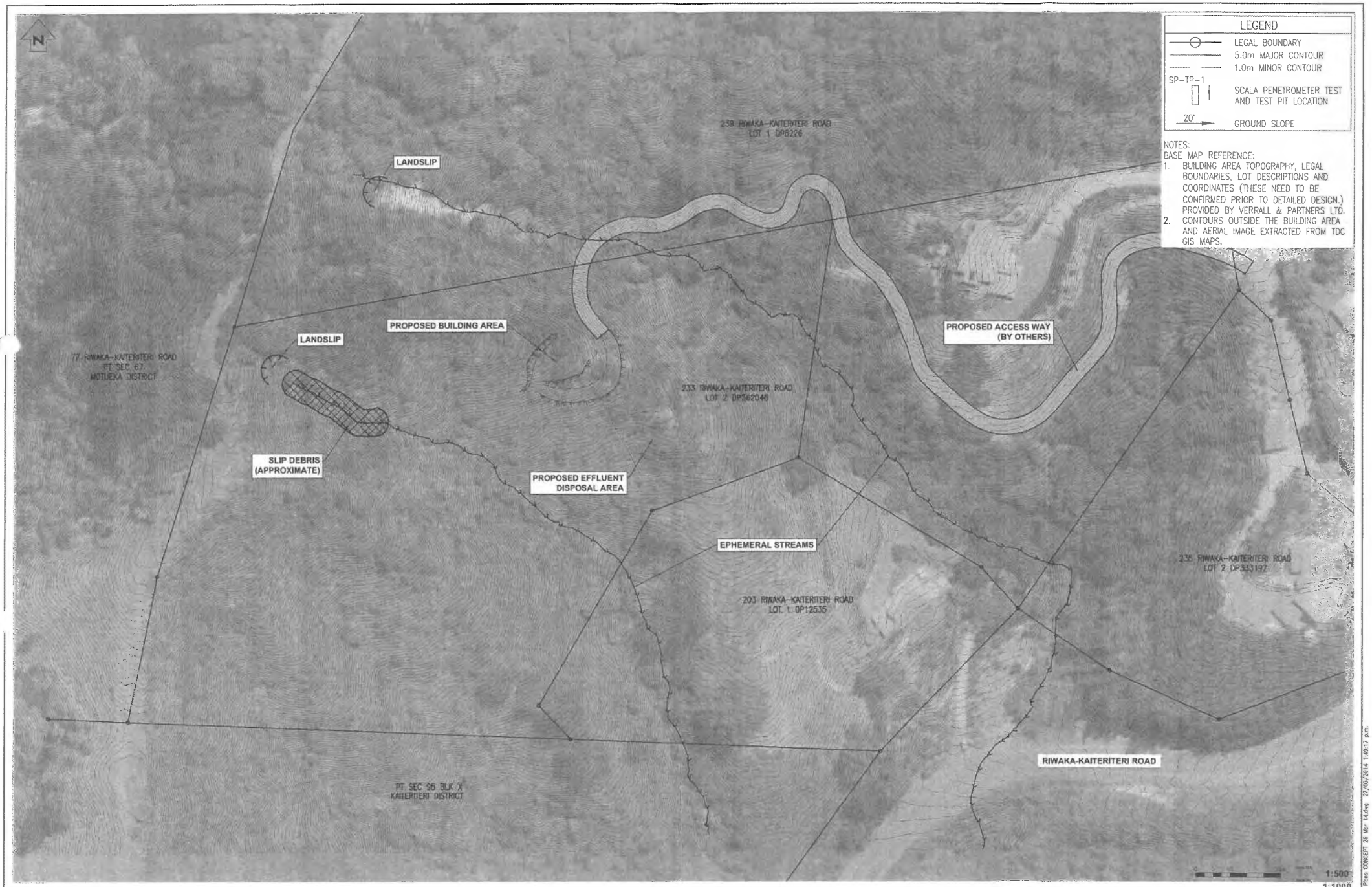
140 Collingwood Street
Nelson

Phone 03 5394145
Fax 03 5394146
Email john@nce.co.nz

Rev	Comment	Date	Initial
	Designed by AC Drawn by PF Approved by		

Drawing No 14494.0.02 | Job No 14494
Stamp CONCEPT | Sheet No 02 OF 03
Date 26 MAR 2014 | Revision

File Name: M:\Holmes Geotechnical Plans CONCEPT 26 Mar 14.dwg 27/03/2014 1:49:19 p.m.



MARK HOLMES

233 RIWAKA-KAITERITERI ROAD, RIWAKA

GEOTECHNICAL ASSESSMENT OF BUILDING AREA AND EFFLUENT DISPOSAL AREA

OVERALL GEOTECHNICAL SITE PLAN

Nelson Consulting Engineers Ltd
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140 Collingwood Street
Nelson

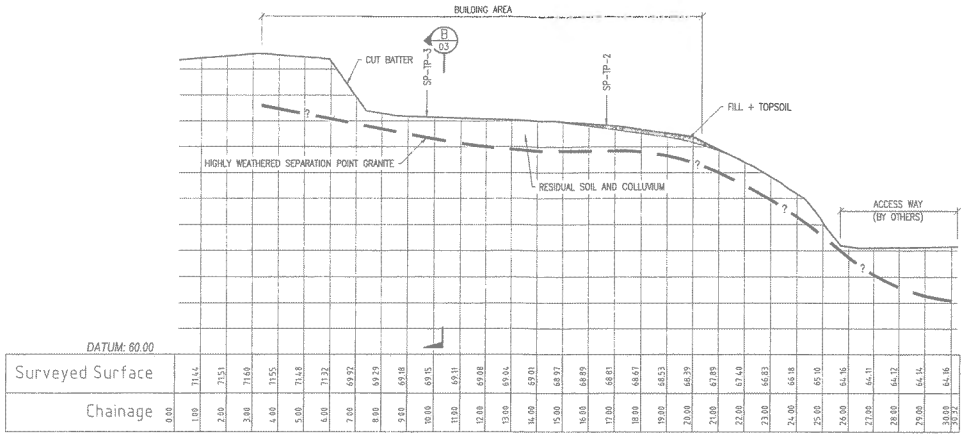
Phone 03 5394145
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Email john@nce.co.nz

Rev	Comment	Date	Initial
Originated	AC	Checked	PF

Drawing No: 14494.0.01
Job No: 14494
Stamp: CONCEPT
Sheet No: 01 OF 03
Date: 26 MAR 2014
Revision:

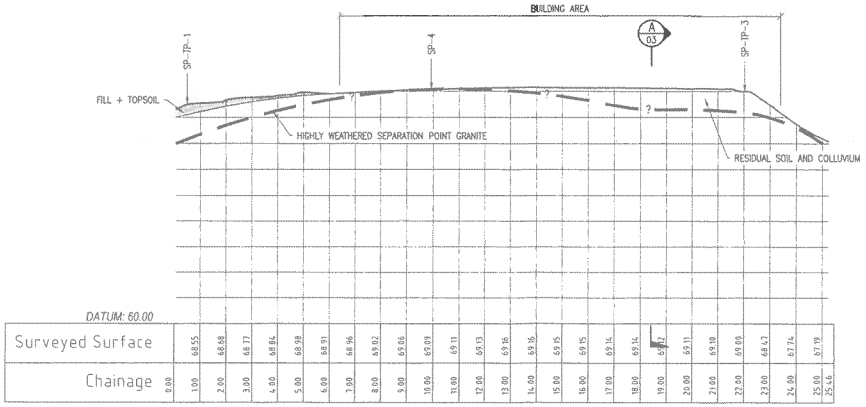
File name: Holmes Geotechnical Plans CONCEPT 26 Mar 14.dwg 27/03/2014 1:49:17 p.m.

NOTES:
BASE MAP REFERENCE:
1. SURVEYED LEVELS IN TERMS OF ASSUMED DATUM (APPROX TDC DATUM, SOURCE TDC) AND PROVIDED BY VERRALL & PARTNERS LTD.
2. LIDAR SURFACE CREATED FROM TDC CONTOURS.



Chainage	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	23.00	24.00	25.00	26.00	27.00	28.00	29.00	30.00	29.42
Surveyed Surface		71.44	71.51	71.60	71.55	71.48	71.32	69.97	69.29	69.18	69.15	69.11	69.08	69.04	69.01	68.97	68.89	68.81	68.67	68.53	68.39	67.89	67.40	66.83	66.18	65.10	64.16	64.11	64.12	64.14	64.16	

SECTION A 02
1 : 100



Chainage	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	23.00	24.00	25.00	25.46
Surveyed Surface		68.55	68.68	68.77	68.84	68.98	68.91	68.96	69.02	69.06	69.09	69.11	69.13	69.16	69.16	69.15	69.15	69.14	69.14	69.17	69.11	69.10	69.06	68.47	67.74	67.19	

SECTION B 02
1 : 100

MARK HOLMES
233 RIWAKA-KAITERITERI ROAD, RIWAKA
GEOTECHNICAL ASSESSMENT OF BUILDING AREA AND EFFLUENT DISPOSAL AREA
GEOTECHNICAL SITE CROSS SECTIONS

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Rev	Comment	Date	Initial
Designed by: AC	Drawn by: PF	Approved by:	

Scale (A3): 1:100
Scale (A1): 1:200

Drawing No: 14494.0.03
Job No: 14494
Status: CONCEPT
Sheet No: 03 OF 03
Date: 26 MAR 2014
Revision:

File Name: M Holmes Geotechnical Plans CONCEPT 26 Mar 14.dwg 27/03/2014 1:49:20 p.m.

TESTPIT / TRENCH No : TP - 1

LOCATION: AS PER SITE PLAN.

WEATHER : FINE

NOTES : 7 TONNE DIGGER WITH 750mm BUCKET.

UNITS		
DEPTH	No.	DESCRIPTION
0 - 0.3 m	①	Dark yellow brown - yellow brown sandy CLAY (CL), damp - moist, soft, low plasticity. [FILL]
0.3 - 0.5 m	②	Dark brown silty CLAY (CL), moist, soft - firm, medium plasticity, roots. [BURIED TOPSOIL]
0.5 - 1.5 m	③	Dark yellow brown silty CLAY (CL), moist, firm - stiff p=0.7 - 0.9 kg/cm2 (68 - 88 kPa), medium plasticity, few angular - sub-angular gravel <10mm (quartz) slight sand. [COLLUVIUM]
1.5 - 2.5 m	④	yellow brown - grey / white clayey SAND (SC), damp - moist, medium dense, residual quartz gravel, remnant rock structure observed within undisturbed test pit walls. [RESIDUAL SOIL / HW - CW SEPARATION POINT SUITE]
		No groundwater encountered.

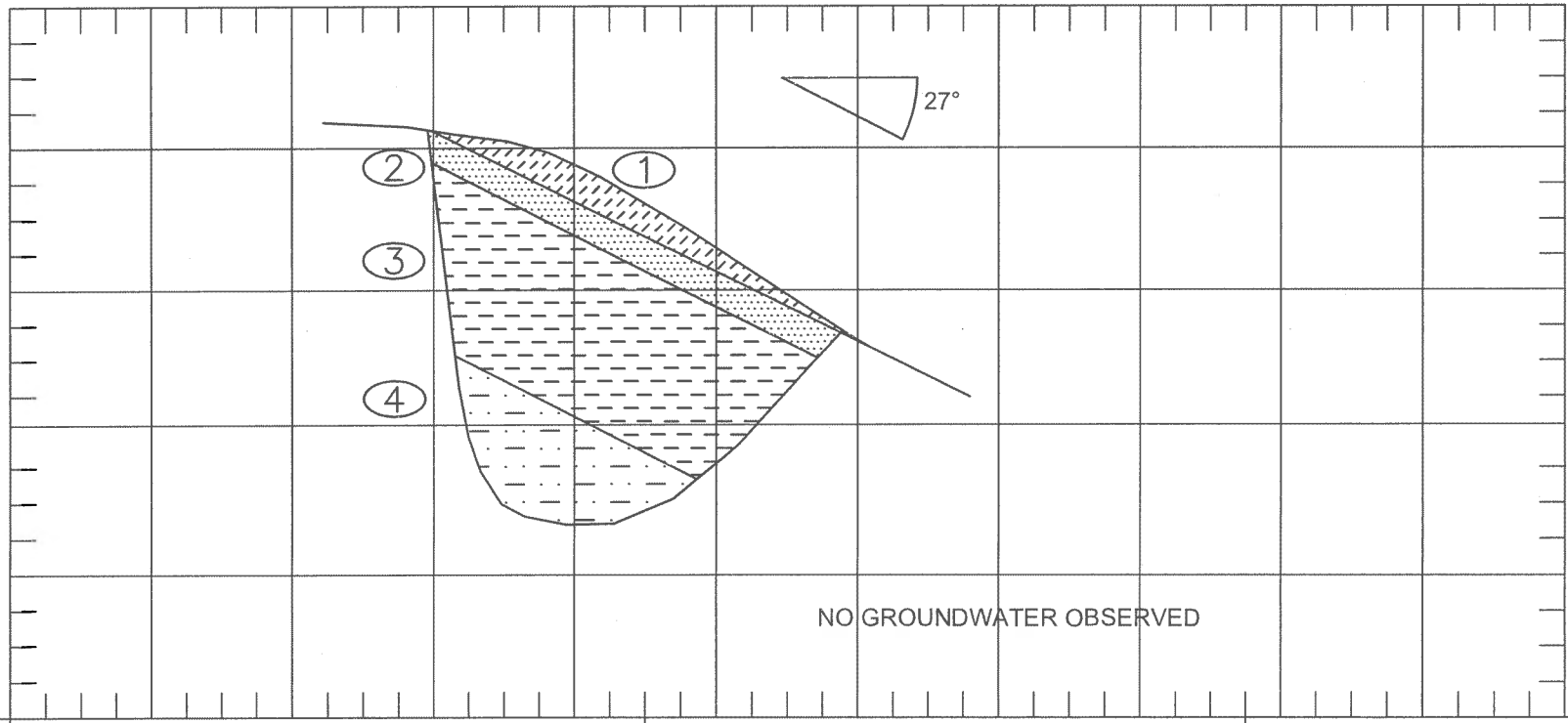
DEPTH (E.L.)

11 Feb 2014
DATE

AC
LOGGED BY

0 1
SCALE, m

BEARING



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GRAPHIC TEST PIT / TRENCH LOG

PROJECT: MARK HOLMES
233 RIWAKA-KAITERITERI ROAD
GEOTECHNICAL ASSESSMENT FOR PROPOSED RESIDENTIAL DEVELOPMENT

PROJECT No : 14494

SHEET 1 OF 3

TESTPIT / TRENCH No : TP - 2 LOCATION: AS PER SITE PLAN.

WEATHER : FINE NOTES : 7 TONNE DIGGER WITH 750mm BUCKET.

UNITS		
DEPTH	No.	DESCRIPTION
0 - 0.3 m	①	Brown sandy silty CLAY (CL), damp - moist, soft, low - medium plasticity. [FILL]
0.3 - 0.5 m	②	Dark brown - black silty CLAY (CL), damp - moist, soft - firm, medium plasticity, slight sand. [BURIED TOPSOIL]
0.5 - 0.9 m	③	Dark yellow brown sandy CLAY (CL), moist, firm - stiff p=0.75 - 1.25 kg/cm2 (74 - 123 kPa), low plasticity. [COLLUVIUM]
0.9 - 1.9 m	④	Dark yellow brown grading to grey / white clayey SAND (SC), moist, medium dense p=1 - 1.6 kg/cm2 (98 - 157 kPa), residual quartz gravel, remnant rock structure observed within undisturbed test pit walls, irregular interface with colluvium. [RESIDUAL SOIL / HW - CW SEPARATION POINT SUITE] No groundwater encountered.

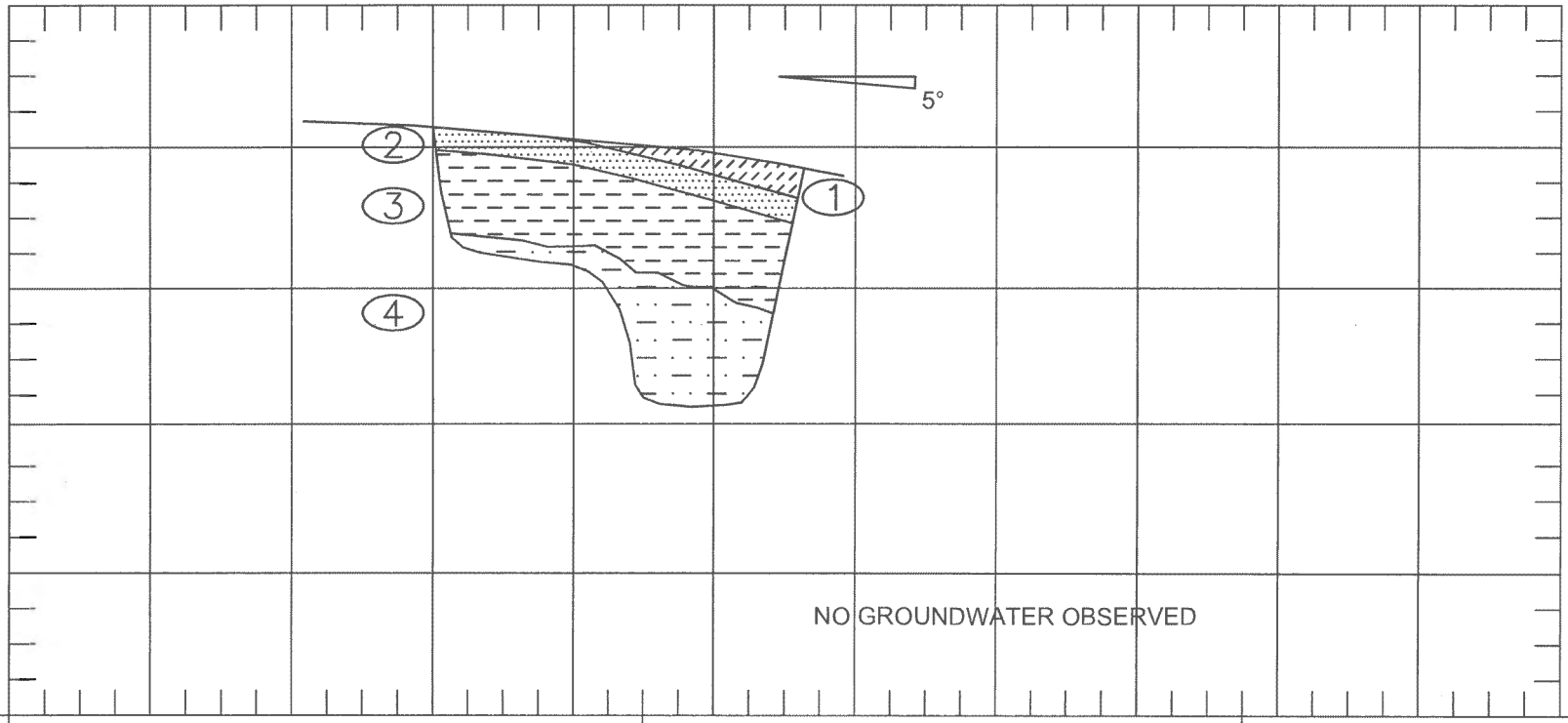
DEPTH (E.L.)

11 Feb 2014
DATE

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LOGGED BY

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SCALE, m

BEARING



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GRAPHIC TEST PIT / TRENCH LOG

PROJECT: MARK HOLMES
233 RIWAKA-KAITERITERI ROAD
GEOTECHNICAL ASSESSMENT FOR PROPOSED RESIDENTIAL DEVELOPMENT

PROJECT No : 14494

SHEET 2 OF 3

TESTPIT / TRENCH No : TP - 3 LOCATION: AS PER SITE PLAN.

WEATHER : FINE NOTES : 7 TONNE DIGGER WITH 750mm BUCKET.

UNITS		
DEPTH	No.	DESCRIPTION
0 - 0.2 m	①	Dark brown silty CLAY (CL), moist, soft, low - medium plasticity, slight sand. [TOPSOIL]
0.2 - 0.9 m	②	Dark yellow brown sandy CLAY (CL), moist, firm - stiff p=1.1 - 2.5 kg/cm2 (108 - 245 kPa), low plasticity. [COLLUVIUM]
0.9 - 2.4 m	③	Dark yellow brown, grades to light yellow brown clayey SAND (SC), moist, loose, then medium dense, residual quartz gravel, remnant rock structure observed within undisturbed test pit walls, irrgeular interface with colluvium. [RESIDUAL SOIL / HW - CW SEPARATION POINT SUITE] No groundwater encountered.

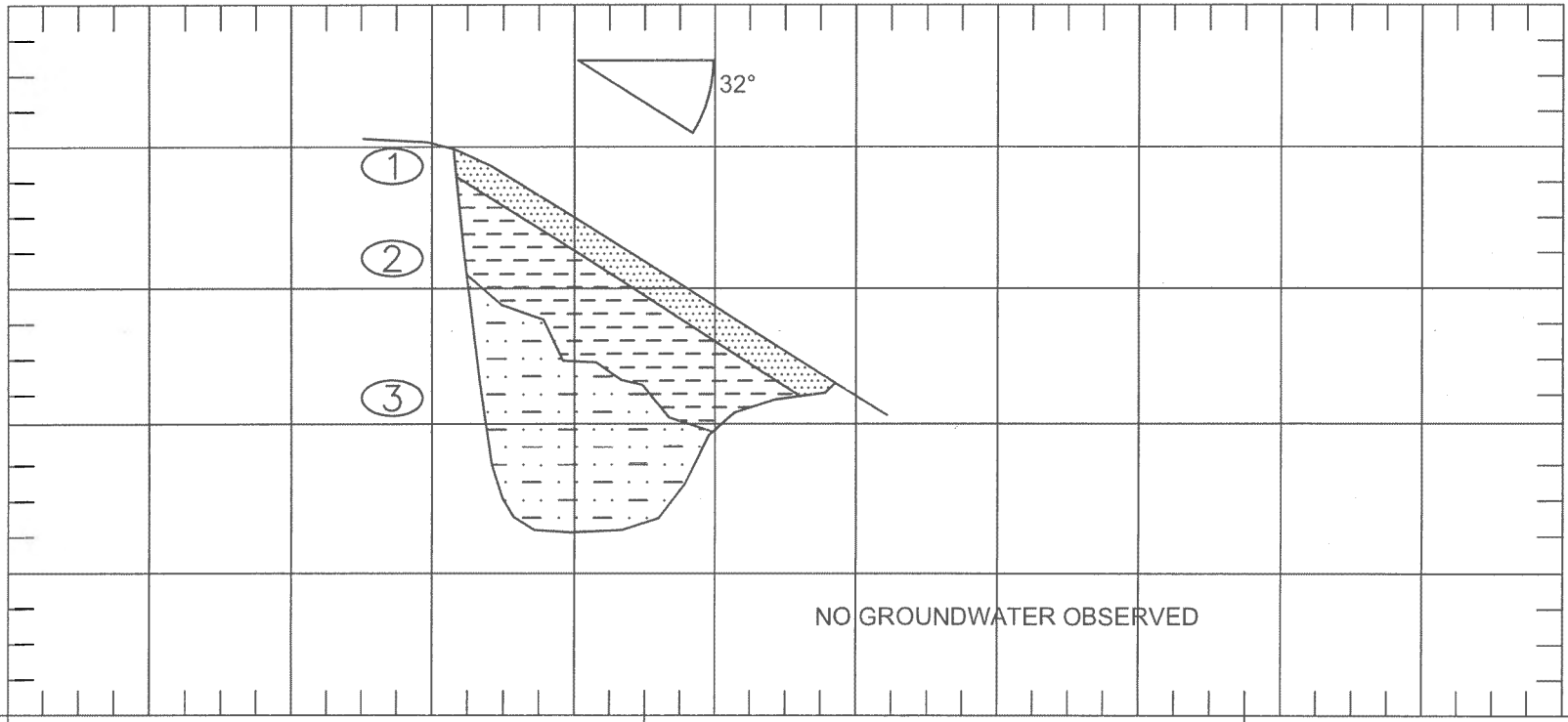
DEPTH (E.L.)

11 Feb 2014
DATE

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SCALE, m

BEARING



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GRAPHIC TEST PIT / TRENCH LOG

PROJECT: MARK HOLMES
233 RIWAKA-KAITERITERI ROAD
GEOTECHNICAL ASSESSMENT FOR PROPOSED RESIDENTIAL DEVELOPMENT

PROJECT No : 14494

SHEET 3 OF 3

Client: Mark Holmes Job: 14494 Excavation Number: TP-4 Logged by: AC

Address: Surface level: R L

Date of inspection: 11/02/2014

Slope: % 25 to 50 Land for element: mid slope / divergent Surface conditions: Damp - moist, smoothly varying Indiciative drainage: Moderately well drained

Surface stones: Few Ground cover: Native vegetation and scrub Watertable depth: Not encountered

Land surface notes: Smoothly varying, divergent, linear to waxing slope Parent material: Separation Point Granite Suite

Layer	Lower depth (mm)	Horizon	Moisture conditions (see Note 2)	Colour (moist)	Field texture	Coarse fragments % volume	Structure (see Note 3)	Modified Emerson	Sample taken (Y/N)	Consistency (see Note 4)	Soil category	Other assessment
1	200	Topsoil	Moist	Brown	Sandy loam-loam	0 - 2	Strong	Slake 2	Y	Soft	3	
2	800	Colluvium	Moist	Dark Y/Brown	Sandy clay loam-clay loam	0 - 2	Weak	Slake 3	Y	Firm	4	
3	1700	Residual soil	Moist	Light Y/Brown	Clayey sand	0 - 2	Massive		N	Loose - m. dense		

NOTE:
1. Use another for if >5 layers on major horizons.
2. Dry, moist, very moist, saturated.
3. Apedal (no peds) Either single grain or massive.
   Pedal (observable peds) Weak, moderate or strong.
4. Strength - loose, very weak, weak, firm, very firm, strong, very strong, rigid.
   Stickiness (when wet) - non, slightly, moderately, very.

Notes/ comments/ observations: Soil category 4 conservatively assigned to 800mm depth.

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Overall soil category assigned: 4 Maximum depth of system: Surface laid laterals to reduce vegetation and soil disturbance, with mulch over.

Soil appears favourable for (list system types): secondary treated surface irrigation. Checked by:

Format based on Figure B1 AS/NZS 1547:2012

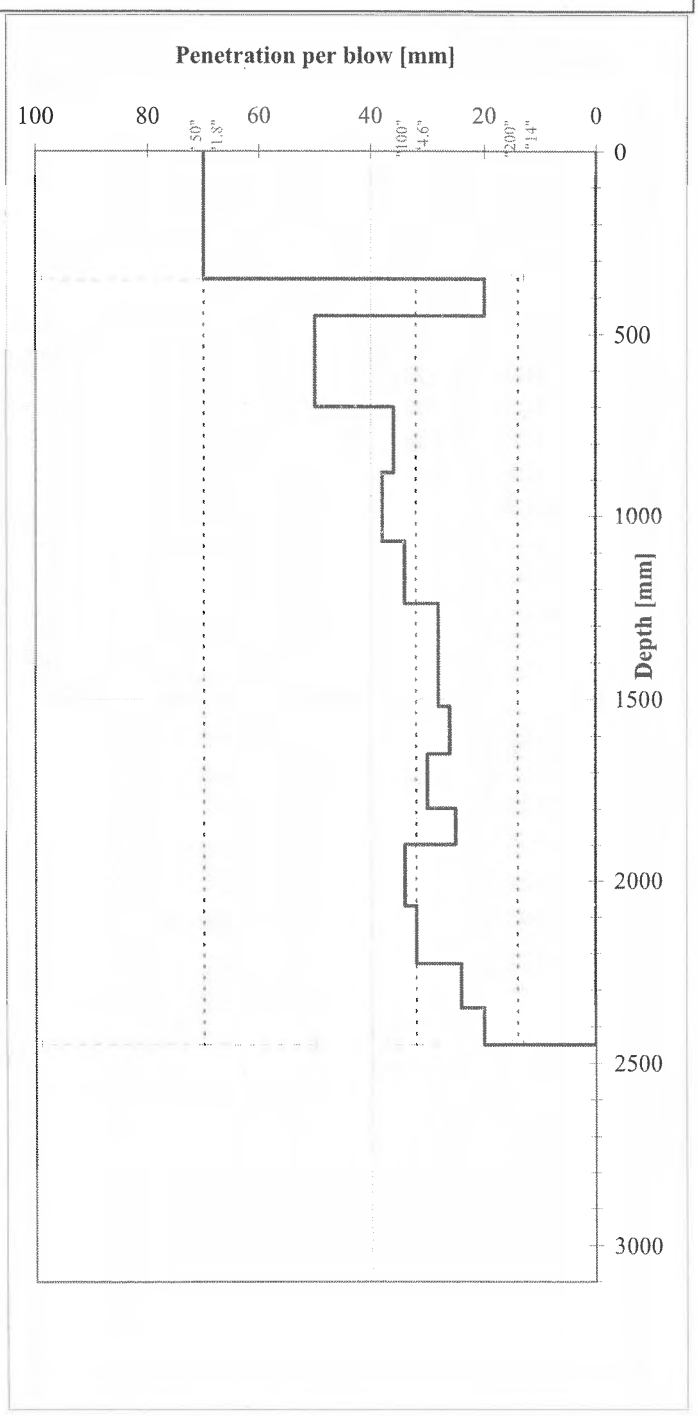
JOB	Geotechnical Assessment fro New Buiiding Site & Wastewater System				
LOCATION	233 Riwaka - Kaiteriteri Road,	TOP OF TEST RL 0.0 assumed			
WEATHER	Fine				
BY:	AC	DATE:	Tue 11 Feb 2014	FILE:	14944

Nelson Consulting Engineers Ltd
CIVIL - GEOTECHNICAL - STRUCTURAL

SCALA PENETROMETER TESTS

TEST: SP-TP-1 *Refer to SITE PLAN for location*

No. blows	Depth [mm]	SP-TP-1 Penetration per blow [mm]	Comments
5	350	70.0	0.3m below side
5	450	20.0	edge of TP-1
5	700	50.0	
5	880	36.0	
5	1070	38.0	
5	1240	34.0	
5	1380	28.0	
5	1520	28.0	
5	1650	26.0	
5	1800	30.0	
4	1900	25.0	
5	2070	34.0	
5	2230	32.0	
5	2350	24.0	
5	2450	20.0	



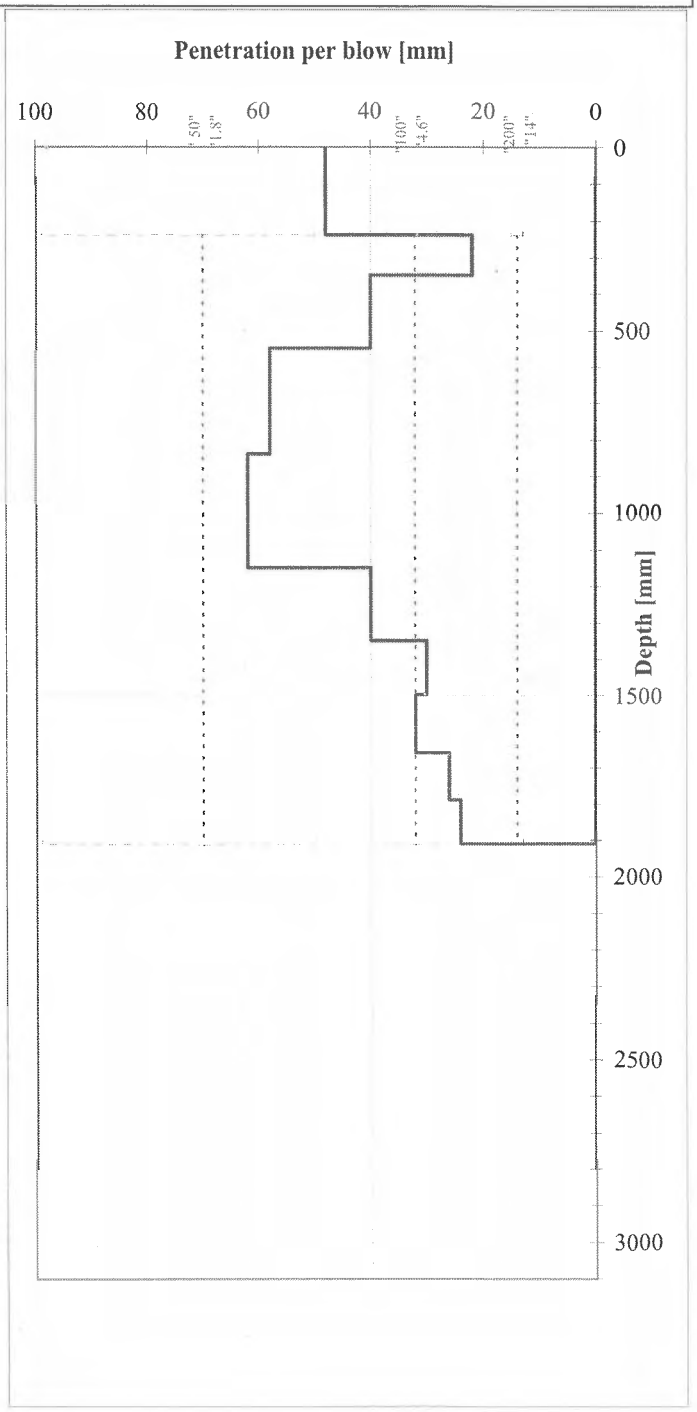
JOB	Geotechnical Assessment fro New Building Site & Wastewater System				
LOCATION	233 Riwaka - Kaiteriteri Road,	TOP OF TEST RL 0.0 assumed			
WEATHER	Fine				
BY:	AC	DATE:	Tue 11 Feb 2014	FILE:	14944

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SCALA PENETROMETER TESTS

TEST: **SP-TP-2** *Refer to SITE PLAN for location*

No. blows	Depth [mm]	SP-TP-2 Penetration per blow [mm]	Comments
5	240	48.0	
5	350	22.0	
5	550	40.0	
5	840	58.0	
5	1150	62.0	
5	1350	40.0	
5	1500	30.0	
5	1660	32.0	
5	1790	26.0	
5	1910	24.0	



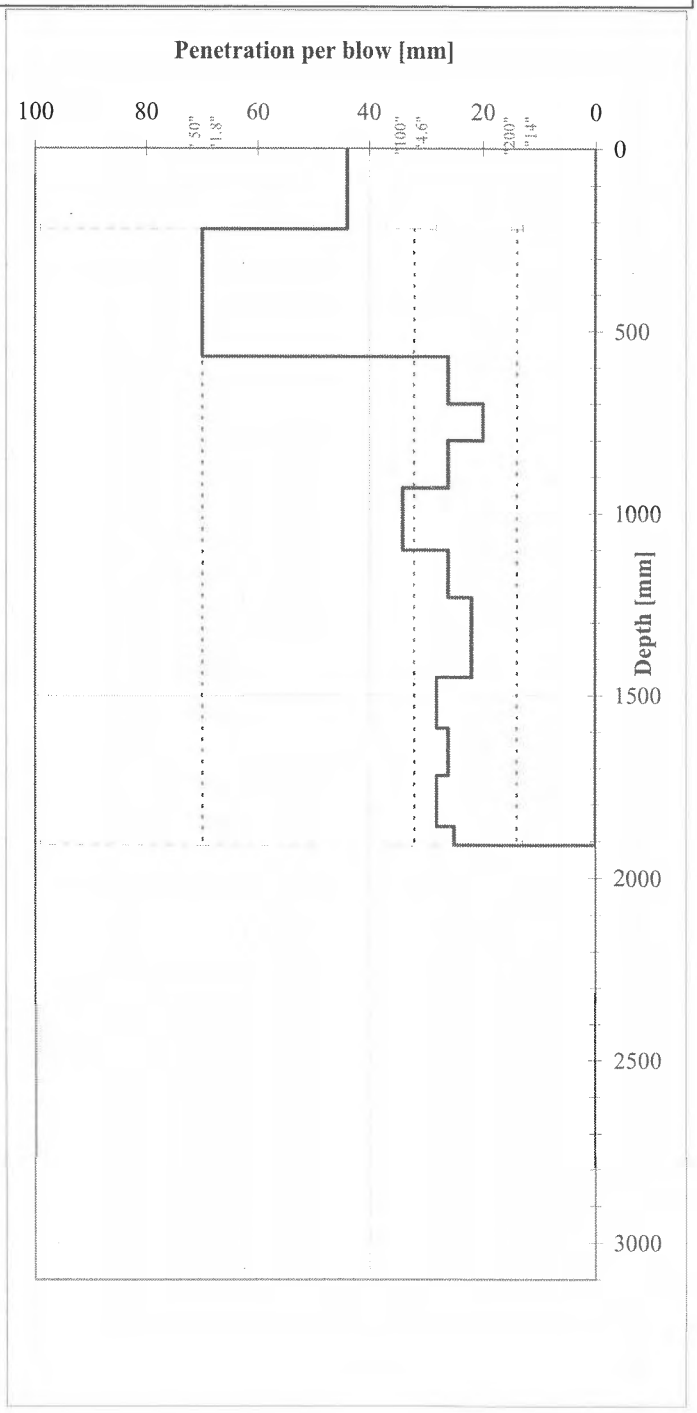
JOB	Geotechnical Assessment fro New Building Site & Wastewater System				
LOCATION	233 Riwaka - Kaiteriteri Road,	TOP OF TEST RL 0.0 assumed			
WEATHER	Fine				
BY:	AC	DATE:	Tue 11 Feb 2014	FILE:	14944

Nelson Consulting Engineers Ltd
CIVIL - GEOTECHNICAL - STRUCTURAL

SCALA PENETROMETER TESTS

TEST: **SP-TP-3** *Refer to SITE PLAN for location*

No. blows	Depth [mm]	SP-TP-3 Penetration per blow [mm]	Comments
5	220	44.0	
5	570	70.0	
5	700	26.0	
5	800	20.0	
5	930	26.0	
5	1100	34.0	
5	1230	26.0	
5	1340	22.0	
5	1450	22.0	
5	1590	28.0	
5	1720	26.0	
5	1860	28.0	
2	1910	25.0	



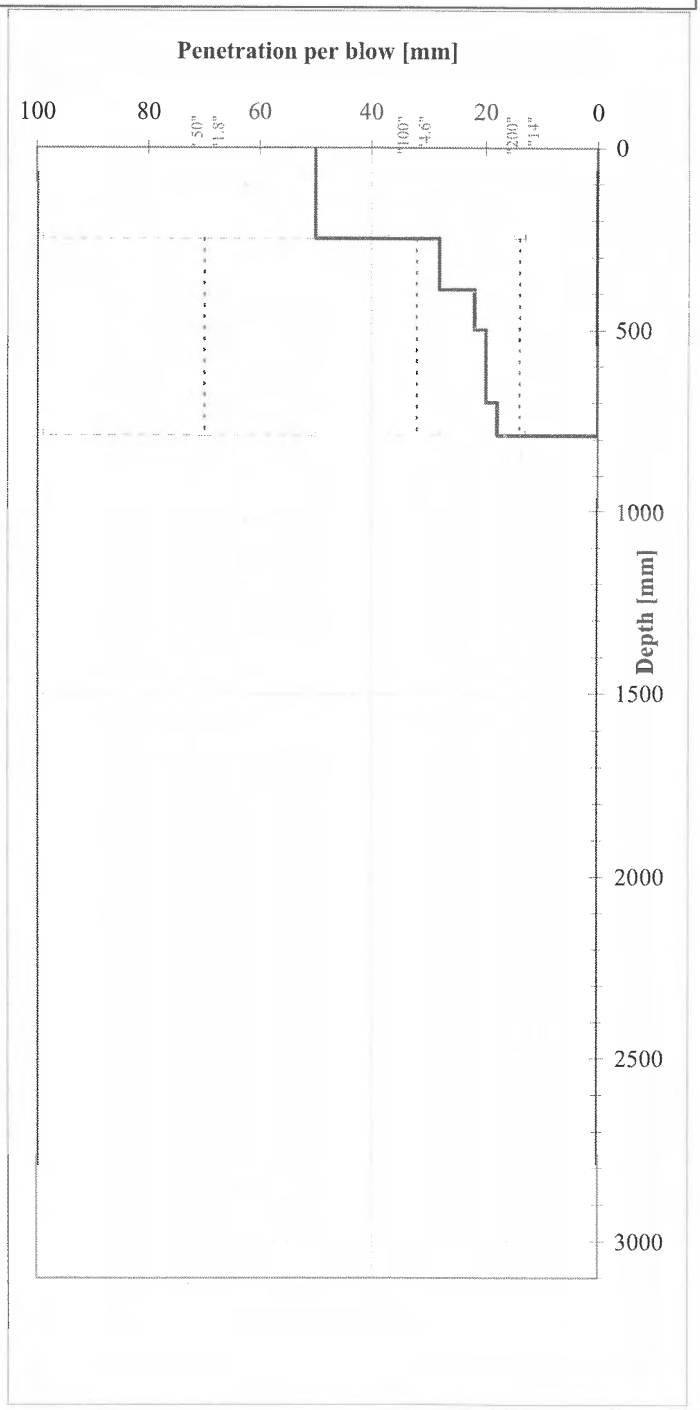
JOB	Geotechnical Assessment fro New Building Site & Wastewater System				
LOCATION	233 Riwaka - Kaiteriteri Road,	TOP OF TEST RL 0.0 assumed			
WEATHER	Fine				
BY:	AC	DATE:	Tue 11 Feb 2014	FILE:	14944

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SCALA PENETROMETER TESTS

TEST: **SP-4** *Refer to SITE PLAN for location*

No. blows	Depth [mm]	SP-4 Penetration per blow [mm]	Comments
5	250	50.0	At toe of 3.5m cut
5	390	28.0	
5	500	22.0	
5	600	20.0	
5	700	20.0	
5	790	18.0	



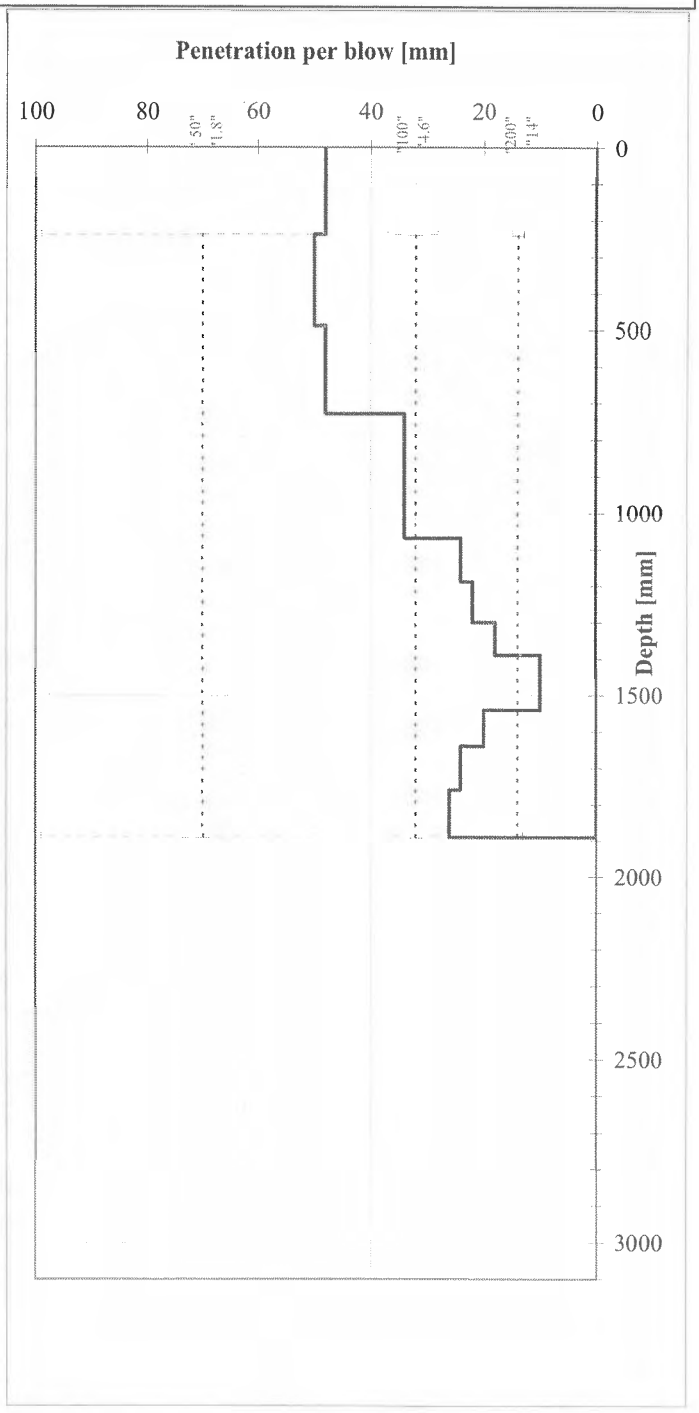
JOB	Geotechnical Assessment fro New Building Site & Wastewater System				
LOCATION	233 Riwaka - Kaiteriteri Road,	TOP OF TEST RL 0.0 assumed			
WEATHER	Fine				
BY:	AC	DATE:	Tue 11 Feb 2014	FILE:	14944

Nelson Consulting Engineers Ltd
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SCALA PENETROMETER TESTS

TEST: **SP-PEG-C** *Refer to SITE PLAN for location*

No. blows	Depth [mm]	SP-PEG-C Penetration per blow [mm]	Comments
5	240	48.0	0.8m west of PEG-C
5	490	50.0	
5	730	48.0	
5	900	34.0	
5	1070	34.0	
5	1190	24.0	
5	1300	22.0	
5	1390	18.0	
5	1440	10.0	
5	1490	10.0	
5	1540	10.0	
5	1640	20.0	
5	1760	24.0	
5	1890	26.0	



FIELD IDENTIFICATION PROCEEDURES (Excluding particles larger than 3 inches and basing fractions on estimated weights)				GROUP SYMBOL	TYPICAL NAMES
COARSE GRAINED SOILS More than half of the material is larger than than No 200 sieve size (The No. 200 sieve size is about the smallest particle visible to the naked eye)	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size (For visual classification the size may be used as equivalent to the No. 4 sieve size)	CLEAN GRAVELS (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate particle sizes	GW	Well graded gravels, gravel-sand mixtures, little or no fines
			Predominantly one size or a range of sizes with some intermediate sizes missing	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		GRAVELS WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML below)	GM	Silty gravels, poorly graded gravel-sand-clay mixtures
			Plastic fines (for identification procedures see CL below)	GC	Clayey gravels, poorly graded gravel-sand-clay mixtures
	SANDS More than half of coarse fraction is smaller than No 4 sieve size (For visual classification the equivalent to the No. 4 sieve size)	CLEAN SANDS (Little or no fines)	Wide range of grain sizes and substantial amounts of all intermediate particle sizes	SW	Well graded sands, gravelly sands, little or no fines
			Predominantly one size or a range of sizes with some intermediate sizes missing	SP	Poorly graded sands, gravelly sands, little or no fines
		SANDS WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML below)	SM	Silty sands, poorly graded sand-silt mixtures
			Plastic fines (for identification procedures see CL below)	SC	Clayey sands, poorly graded sand-clay mixtures
FINE GRAINED SOILS More than half of material is smaller than No. 200 sieve size (The No. 200 sieve size is about the smallest particle visible to the naked eye)	IDENTIFICATION PROCEEDURES ON FRACTION SMALLER THAN No. 40 SIEVE SIZE				
		DRY STRENGTH (CRUSHING CHARACTERISTIC)	DILATENCY (REACTION TO SHAKING)	TOUGHNESS (CONSISTENCY NEAR PLASTIC LIMIT)	
	SILTS AND CLAYS Liquid limit less than 50	None to slight	Quick to slow	None	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands with slight plasticity
		Medium to high	None to very slow	Medium	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		Slight to medium	Slow	Slight	OL	Organic silts and organic silt-clays of low plasticity
	SILTS AND CLAYS Liquid limit greater than 50	Slight to medium	Slow to none	Slight to Medium	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		High to very high	None	High	CH	Inorganic clays of high plasticity, fat clays
		Medium to high	None to very slow	Slight to medium	OH	Organic clays of medium to high plasticity
HIGHLY ORGANIC SOILS		Readily identified by colour, odour, spongy feel and frequently by fibrous texture			Pt	Peat and other highly organic soils

MOISTURE CONDITION

Increasing moisture →

Dry — Slightly Damp — Damp — Moist — Wet — Saturated

PLASTICITY

Plasticity of clays and silts is determined from the results of Atterburg limit tests. In the field the characteristics of fine grained soils are identified using dilatancy (reaction to Shaking) dry strength (crushing) and toughness (consistency near the plastic limit) behaviour – see USBR chart. The most characteristic test of plasticity in a soil is dilatency where an rapid shaking water appears and similar shaking gives no reaction for a plastic soil.

PARTICLE SIZE TERMINOLOGY AND GRAPHIC SYMBOLS

SOIL FRACTION		PARTICLE SIZE RANGE mm		
CLAY SIZE			<	0.002
SILT SIZE		0.002	–	0.06
SAND	Fine	0.06	–	0.2
	Med	0.2	–	0.6
	Course	0.6	–	2.0
GRAVEL	Fine	2.0	–	6.0
	Med	6.0	–	20.0
	Course	20.0	–	60.0
VERY COURSE GRAVEL		60.0	–	200.0
BOULDERS			>	200.0

GRAPHIC SYMBOLS: clay, silt, sand, gravel, boulders

STRENGTH

CLAYS and SILTS

TERM	DIAGNOSTIC FEATURES	"N-VALUE"	UNDRAINED COMPRESSIVE STRENGTH (kPa)
Very soft	Exudes between fingers when squeezed	0–2	<25
Soft	Easily indented by fingers	2–4	25 – 50
Firm	Indented only by strong finger preesure	4–8	50 – 100
Stiff	Indented by thumb pressure	8–15	100 –200
Very stiff	Indented by thumb-nail	15–30	200 –400
Hard	Difficult to indent by thumb-nail	over 30	400–1000

SANDS and GRAVELS

TERM	"N-VALUE"	SCALA PENETROMETER (No. Blows per 100mm)
Very loose	0–4	0–2
Loose	4–10	1–3
Medium dense	10–30	3–7
Dense	30–50	7–17
Very dense	over 50	> 17

NB: Although given in the same table no correlation is implied between the SPT and the Scala Penetrometer values.

The "N- value" represents the penetration resistance (PR) recorded during SPT Testing. It is the sum of the number of blows recorded between 150mm and 450mm recorded for a 450mm driving distance using a 50mm O.D split spoon sampler driven by a 63.5 kg hammer falling freely for 760mm.

Sources:

USBR 1974: Earth Manual, 2nd edition. U.S. Department of the interior, Bureau of Reclamation

New Zealand Geomechanics Society 1988: Guidelines for Field Description of Soils and Rocks in Engineering Use.

Nelson Consulting Engineers Ltd

CIVIL - GEOTECHNICAL - STRUCTURAL

SOIL EXPLORATION LOG TERMINOLOGY

Planting for Slope Stability in the Nelson City – Richmond Area

The following criteria are important for plant species maintaining and enhancing slope stability on hill slopes within Nelson City – Richmond residential areas:

- Easy to establish and maintain
- Tolerance to dry conditions i.e. watering of plants not required
- Wide root structure to help anchor the soil
- Height of mature trees to be less than 8m (to avoid topple over in storms, blocking views or causing shade)
- Resistant to wind
- Resistant to frost
- Suitability for clayey soils and soils with low nutrients
- Do not require fertiliser

1) Suggested species which are suitable for hill slopes and which grow well in Nelson City – Richmond area are:

Common Name	Botanical Name
Akeake	(Dodonea viscosa)
Kohuhu	(Pittosporum tenuifolium)
Lemonwood (Tarata)	(Pittosporum eugenoides)
Manuka	(Leptospermun scoparium)
Kanuka	(Kunzea ericoides)
Mahoe	(Melicytus ramiflorus)
Five finger	(Pseudopanax arboreus)
Marble-leaf	(Carpodetus serratus)
Cabbage tree	(Cordyline banksii)
Ngaio	(Myoporum laetum)
Kowhai	(Sophora microphylla)
Flax	(Phormium tenax)
Titoki	(Alectryon excelsus)

Note: The last two species suit slightly wetter sites

2) Suggested species that are suitable for planting on slip areas and grow well in Nelson City Richmond area are:

Poplar vironese

Note: This poplar is rapidly growing and is used by Nelson City Council for planting on slips in Nelson City area.

RM110930V1
Writer's Direct Dial No. (03) 543 8504
Writer's E-mail: wayne.horner@tasman.govt.nz

27 November 2014

Mark & Susan Holmes
C/- Selwyn Light
PO Box 145
Motueka 7143

Dear Mark & Susan

Decision on Non-Notified Resource Consent Application No. RM110930V1 – Change of Conditions to RM110930 – Two Lot Subdivision, 233 Riwaka - Kaiteriteri Road, Kaiteriteri

Your application for resource consent has been granted. A copy of the Council's decision is attached. Please carefully read the conditions that have been attached to the consent and feel free to contact me if you have any questions about your consent or its conditions. My contact details are listed at the top of this letter.

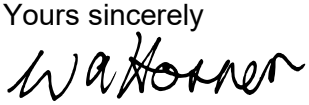
Here are some matters that I need to highlight for you.

Section 357A of the Resource Management Act 1991 ("the Act") provides you with the right to lodge an objection with the Council against this decision including any of the conditions. Objections must be made in writing setting out the reasons for the objection together with a deposit fee of $200.00 (GST inclusive), and must be lodged here within 15 working days of receiving this letter.

The final cost of processing your application has not been calculated yet. If the final cost exceeds the deposit already paid, then as we previously advised, you will be invoiced separately for the additional cost. If the final cost is less than the deposit already paid, then you will receive a refund. Where the costs are equal to the deposit already paid, no further action is required. You will receive a letter shortly about the final costs of processing your application.

Under Section 125 of the Act, your consent will lapse in 5 years unless you have given effect to it before then. In the case of subdivisions, the consent is given effect to when you have submitted a survey plan to the Council for the subdivision under Section 223 of the Act. Once the survey plan has been approved by the Council under that Section of the Act, the consent lapses 3 years thereafter unless it has been deposited with the District Land Registrar as outlined in Section 224 of the Act.

Yours sincerely



Wayne Horner
Consent Planner, Subdivision

Tasman District Council
Email info@tasman.govt.nz
Website www.tasman.govt.nz
24 hour assistance

Richmond
189 Queen Street
Private Bag 4
Richmond 7050
New Zealand
Phone 03 543 8400
Fax 03 543 9524

Murchison
92 Fairfax Street
Murchison 7007
New Zealand
Phone 03 523 1013
Fax 03 523 1012

Motueka
7 Hickmott Place
PO Box 123
Motueka 7143
New Zealand
Phone 03 528 2022
Fax 03 528 9751

Takaka
14 Junction Street
PO Box 74
Takaka 7142
New Zealand
Phone 03 525 0020
Fax 03 525 9972

DECISION ON APPLICATION TO CHANGE CONSENT CONDITIONS

Resource Consent Being Changed: RM110930
New Resource Consent Number: RM110930V1
Consent Holder: M Q & S J Holmes and Kennedy & Associates Trustee Company Ltd

Pursuant to Section 104B of the Resource Management Act 1991 ("the Act"), the Tasman District Council ("the Council") hereby grants changes to the conditions imposed on Resource Consent RM110930. The changes are as follows:

Advice Note: Only those consent conditions which are changed are presented below and the changes are shown either as underlined for additions or ~~strikethrough~~ for deletions. For the purposes of clarity, a complete amended set of conditions for the consent is attached at the end of this decision. The revised set of conditions is hereinafter referred to as Resource Consent RM110930V1.

REASONS FOR THE DECISION

Background to the Application, Conditions Requested to be Changed and Reasons

An application has been made pursuant to Section 127 of the Resource Management Act ("the Act") to change the conditions of Resource Consent RM110930, which authorises the creation of two new titles from an existing title for a property at 233 Riwaka – Kaiteriteri Road, Kaiteriteri.

This application seeks to delete the requirement for an underground telephone connection to Lot 2.

Consequently, changes are required to Conditions 4 and 5 of RM110930.

Changes to Conditions

4 **Consent Notice – Dwelling – Lot 2**

(a) ***Location***

That any dwelling to be constructed on Lot 2 be located within the building location area shown on the survey plan of subdivision.

(b) ***Height***

That the maximum height of the dwelling be 6.5 metres.

(c) ***Design and Appearance***

That the dwelling be designed and constructed to avoid, remedy or mitigate the effects of the design and appearance of the dwelling, including its scale, height, materials, landscaping and colour, on the amenity and natural character of the locality, having regards to the effects on:

(i) natural features;
(ii) landscape and seascape values;
(iii) significant natural values;
(iv) nature of any existing development.

(d) ***Geotechnical***

That any building restrictions or conditions identified in the geotechnical report required by Condition 2 to be brought forward as conditions of consent in a consent notice.

(e) ***Telecomunications Servicing***

That the owners of Lot 2 shall be responsible for providing telecommunications services to the lot, which have not been provided at the time of subdivision.

Advice Note:
The above conditions are to be complied with on a continuing basis and are therefore to be subject of a consent notice issued under Section 221 of the RMA, such notice to be prepared by the application and forwarded to Council for approval.

Changes to Condition 4 have been made requiring future owners to make their own provision for telecommunications services as a result of this consent not requiring underground telecommunications servicing at the time of subdivision.

5 **Electricity ~~and Telephone~~ – Lot 2**

That an electricity ~~and telephone~~ connection~~s~~ to service Lot 2 be provided to the building location area. Written confirmation that the connections have been satisfactorily installed is to be provided by the Network Authority.

Changes to Condition 5 show the deletion of the requirement to provide a telephone connection to the body of Lot 2.

REASONS FOR DECISION

The applicant has been granted consent under RM110930 for a two lot subdivision within the Rural 2 Zone and was required to provide telecommunications services to the boundary of Lot 2.

Chorus has cabling in the Riwaka-Kaiteriteri Road with the existing cabling installed in the right of way. There is no additional capacity in this cabling of the required standard and new telecommunications servicing would be required to be underground along this right of way. The total trench distance would be approximately 600m to the new dwelling site within Lot 2.

Power servicing will be via a mixture of overhead and underground servicing following a different route to the right of way so there is little opportunity for trench sharing.

Vodafone has confirmed via its website that this subdivision is within an area where Rural Broadband is currently available. The building location within Lot 2 is on a ridge at 65m amsl with line of site to a number of cell phone sites surrounding the Waimea Plains and Motueka area. The nearest cell phone tower would be located within the Motueka township at a distance of approximately 6.2 km. While Vodafone is the New Zealand Government-funded supplier of rural broadband via cell phones, it is likely that the future occupier of Lot 2 would have a number of service providers for telecommunications via the cellphone network.

The provision of broadband is considered to be important as it will allow the option of a small business to operate from the new lots and is required to maintain a modern computer and this can be provided via the cell phone network in this case.

There will be more costs for the future owners of the lots, particularly if they use large amounts of broadband data. However, the costs of data via the cell phone network are reducing over time.

The applicants have advised that they will occupy the new dwelling on Lot 2 and accept any limitations on telecommunications servicing.

Also, they have advised that it is unlikely further subdivision of Lot 2 would take place due to the steepness of the lot and therefore this application is not likely to present a barrier to the provision of underground services to future development.

Principal Issues (Actual and Potential Effects on the Environment)

The principal issue associated with the application to change the conditions of consent involve the actual and potential effects on the environment associated with the change. I consider that the adverse effects on the environment as a result of the changes will be no more than minor for the following reasons:

(a) the effects of this proposed change will be limited to the applicant and future owners of the lots with similar levels of service being available albeit at a higher monthly cost.

Relevant Statutory Provisions

Section 127(3)(a) of the Act states that any application to change consent conditions is deemed to be a discretionary activity.

In considering this application, I have had regard to the matters outlined in Section 104 of the Act. In particular, I have had regard to the relevant provisions of the following planning documents:

(a) the Tasman Regional Policy Statement (TRPS);
(b) the Tasman Resource Management Plan (TRMP).

How the activity relates to the objectives and policies contained within the TRPS and TRMP were covered in the original decision. It is considered that the changes being sought by the Consent Holder do not change these considerations.

Part II Matters

I have taken into account the relevant principles outlined in Sections 6, 7 and 8 of the Act and it is considered that granting these changes to the conditions achieves the purpose of the Act as presented in Section 5.

Notification and Affected Parties

The Council's Resource Consents Manager has, under the authority delegated to him, decided pursuant to Section 95 of the Act that the application did not require public or limited notification.

The change granted by this consent will not adversely affect any other parties and no written approvals have been required for RM110930V1.

Duration of the Consent

No change can be made to the duration of consent under Section 127 of the Act.

This change to conditions of consent is granted on 27 November 2014 under delegated authority from the Tasman District Council by:





Wayne Horner
Consent Planner, Subdivision

FULL SET OF AMENDED CONSENT CONDITIONS FOR RM110930V1

1 **Right of way – On-site Access**

(a) That the right of way shown C and D and the on-site access to the building location area on Lot 2 be designed and constructed in general accordance with "Recommended Engineering Conditions" in Aurecon report dated 29 July 2012 (attached as Appendix B), the engineering plan and stormwater calculations prepared by Selwyn Light Surveyors (attached as Appendix C), and otherwise in accordance with Council's Engineering Standards & Policies 2008 and the conditions of Land Disturbance Consent RM120615, noting in particular:

(i) minimum carriageway width 3.5 metres;

(ii) passing bay at chainage 205;

(iii) maximum grade 1:5;

(iv) constructed to an all-weather standard.

Advice Note:
The subject land is steep, potentially unstable and bisected by a number of gullies, all of which limit or restrict the land's suitability for the construction of a rural residential access road. Therefore it is particularly important that the access be constructed in strict accordance with the above conditions to ensure that is suitable for its intended purpose and there are no adverse effects on the environment or other persons.

(b) Prior to the construction of any works on the right of way or on-site access, fully detailed engineering drawings (Earthworks and Stormwater Design) are to be prepared by a Chartered Professional Engineer or Registered Professional Surveyor (the Designer) and submitted to Council for approval. For the avoidance of doubt, the Earthworks Design Drawings shall include:

(i) original and finished contours;

(ii) proposed earthworks (cut and fill);

(iii) longitudinal and cross sections;

(iv) erosion and sedimentation control;

(v) geotechnical engineer's input.

And the Stormwater Design Drawings shall include:

(i) catchment plans;

(ii) stormwater discharge calculations;

(iii) secondary flow paths and proposed easements;

(iv) stormwater pipes, pipe size, channels and drains.

All works are to be undertaken in accordance with the approved engineering drawings.

(c) At the completion of the works a Completion Certificate is to be submitted to Council. The Completion Certificate is to be prepared by the Designer and be in the form as shown in Appendix 2-4 of the Engineering Standards & Policies 2008.

2 **Building Site Certification – Lot 2**

That the building location area within Lot 2 shall be subject of a geotechnical completion report prepared by a geoprofessional. The geotechnical report shall identify any specific design requirements which would necessitate the building design deviating from NZS 3604 and be accompanied by a statement of professional opinion as set out in Schedule 2A NZS 4404.

3 **Building Location Area – Lot 2**

That the building location area on Lot 2 be shown on the survey plan of subdivision.

4 **Consent Notice – Dwelling – Lot 2**

(a) ***Location***

That any dwelling to be constructed on Lot 2 be located within the building location area shown on the survey plan of subdivision.

(b) ***Height***

That the maximum height of the dwelling be 6.5 metres.

(c) ***Design and Appearance***

That the dwelling be designed and constructed to avoid, remedy or mitigate the effects of the design and appearance of the dwelling, including its scale, height, materials, landscaping and colour, on the amenity and natural character of the locality, having regards to the effects on:

(i) natural features;
(ii) landscape and seascape values;
(iii) significant natural values;
(iv) nature of any existing development.

(d) ***Geotechnical***

That any building restrictions or conditions identified in the geotechnical report required by Condition 2 to be brought forward as conditions of consent in a consent notice.

(e) ***Telecomunications Servicing***

That the owners of Lot 2 shall be responsible for providing telecommunications services to the lot, which have not been provided at the time of subdivision.

Advice Note:
The above conditions are to be complied with on a continuing basis and are therefore to be subject of a consent notice issued under Section 221 of the RMA, such notice to be prepared by the application and forwarded to Council for approval.

5 **Electricity – Lot 2**

That an electricity connection to service Lot 2 be provided to the building location area. Written confirmation that the connections have been satisfactorily installed is to be provided by the Network Authority.

6 **Easements**

Any services located outside the boundary of the lot that they serve, to be protected by an appropriate easement by reference in Council's Section 223 RMA approval. The easements are to include, but not be limited to, the proposed rights of way.

7 **Financial Contributions**

That a financial contribution be paid as provided by Chapter 16.5 of the Tasman Resource Management Plan assessed as follows:

(a) 5.62% of the total market value (at the date of this consent) of a notional building site of 2500 square metres contained within Lot 2.

The Consent Holder shall request the valuation to be undertaken by contacting Council's Administration Officer (Subdivision). The valuation will be undertaken by Council's valuation provider at Council's cost.

If payment of the financial contribution is not made within 2 years of the date of this consent and a revised valuation is required as provided by Rule 16.5.2.4(c) of the Tasman Resource Management Plan, the cost of the revised valuation shall be paid by the Consent Holder.

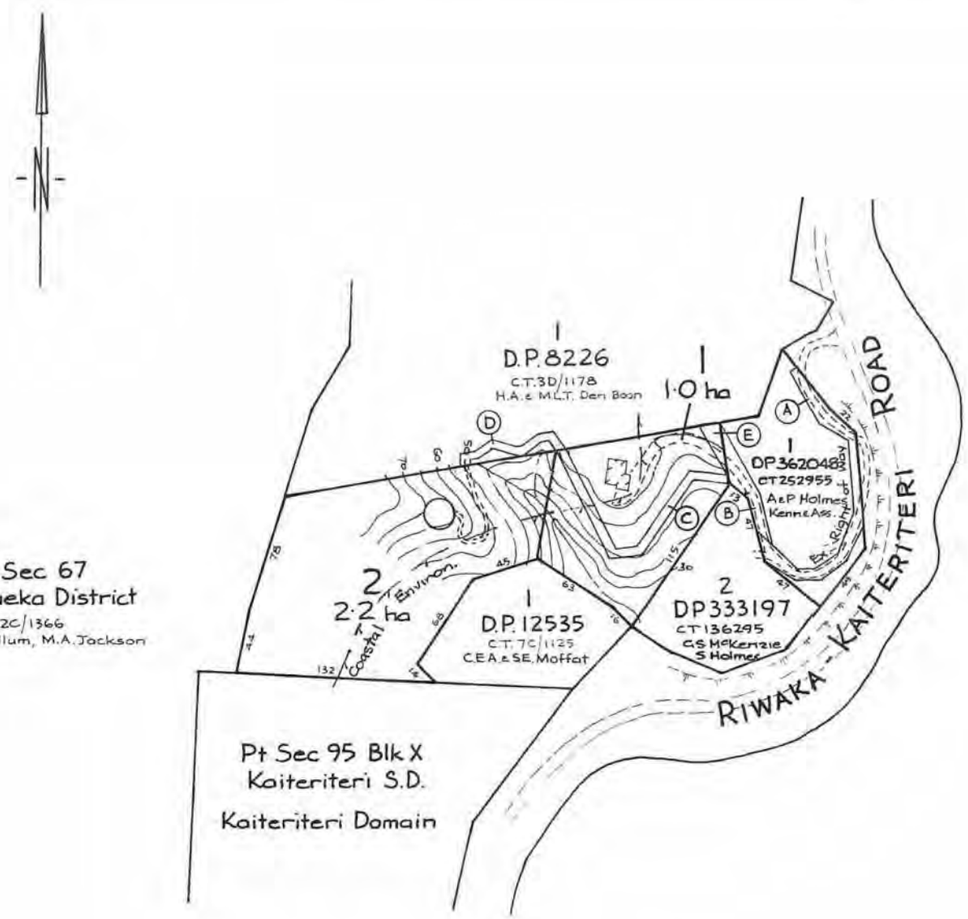
Advice Note:
A copy of the valuation together with an assessment of the financial contribution to be paid will be provided to the Consent Holder within 1 calendar month of Council receiving the request to undertake the valuation.

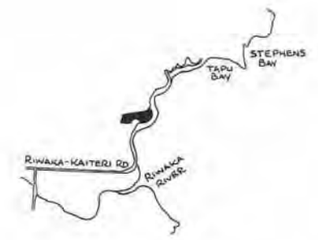
Development Contributions – Advice Note

Council will not issue the Section 224(c) certificate in relation to this subdivision until all relevant development contributions have been paid in accordance with the Council's Development Contributions Policy under the Local Government Act 2002. The power to withhold a Section 224(c) certificate is provided under Section 208 of the Local Government Act 2002.

The Development Contributions Policy is found in the Long Term Council Community Plan and the amount to be paid will be in accordance with the requirements which are current at the time the relevant development contribution is paid in full. This consent will attract a development contribution in respect of roading for one allotment.

Appendix A





LOCATION PLAN

~~PROPOSED AMALGAMATION CONDITION~~

~~That Lot 4 hereon be transferred to the owners of Lot 1 DP 12535 (CT 7C/1125) and that one certificate of title be issued to include both parcels.~~

PROPOSED EASEMENT

Purpose	Letter	Serv. Ten.	Dom. Ten.
Right of Way	C	Lot 1	Lot 2
	D	Lot 1 DP8226	Lot 2
	E	Lot 1	Lot 1 DP8226

○ Indicates proposed building site

PROPOSED SUBDN OF LOT 2 D.P.362048

CT 252956 MQ & SJ Holmes, Kennedy & Assoc. Trustees

Scale: 1:2500

Selwyn Light Surveyors Ltd November 2011

ereby certify that this application
a subdivision consent has been
pared in accordance with Section 88
the Resource Management Act 1991.

Regd Surveyor

This subdivision was approved as
a_____ activity on
the___day of_____
subject to the conditions noted
in file_____

_____
Consents Officer

RM 110930 A

Appendix B

3. Recommended Engineering Conditions

Based on the engineering conditions outlined above, the following engineering recommendations are provided to assist TDC in the preparation of consent conditions.

- The access should be constructed in general accordance with the engineering considerations outlined in the Aurecon NZ Ltd report, Geotechnical Assessment of Right of Way Stability – 233 Riwaka to Kaiteriteri Road, June 2012;
- The access should be formed at a maximum grade of 1 in 5 and shall have an all weather surface;
- Cut slopes in the residual soil should be no steeper than 1H: 1V. Cuts in the weathered granite should be no steeper than ½ H: 1V;
- Cuts greater than 2.5 m deep should be inspected during construction by an engineer experienced in earthworks to confirm the stability of cuts and the requirement for any additional works;
- cut off vee-drains should be constructed upslope of the cuts to intercept stormwater runoff and redirect this away from the cut face;
- Filling should be carried out in accordance with NZS4431. Benching to key the fills into the ground is required wherever the existing ground slope is steeper than 4H:1V and subsoil drains should be laid along benches wherever seeps are encountered;
- Installation of a subsoil drain on the uphill side of the northernmost portion of the access should be provided.
- Stormwater runoff from the Right of Way should be discharged in a controlled manner. A continuous water table should be formed along the inside (upslope) edge of the Right of Way and the surface of the Right of Way graded to provide positive crossfall towards the water table.
- Culverts should be appropriately sized for the contributing catchment in accordance with the TDC Engineering Standards and Policies and should be installed along the Right of Way at intervals no greater than 75 m.
- Bagged headwalls should be provided at both the inlet and outlet of all culverts. Scour protection and energy dissipation in the form of rockwork should be placed at culvert outlets.

Appendix C
Existing road
0
40
67
101
House
1
DP8226
104
New road
112
205
227
249
272
292
320
345
365
Open drain
2
Building site
STORMWATER
PLAN
SCALE 1:1000

M/S HOLMES STORMWATER

Culvert No	Culvert Culvert	Pipe Slope	Catchmnt Area	Runoff Coeff	Flow	HW Depth	Outlet Vel
	mm		ha		l/s	mm	m/s
1	300	0.1	0.6	0.6	76	339	4.8
2	300	0.1	0.32	0.35	28	180	4.8
3	300	0.2	0.25	0.35	22	162	6.8
4	300	0.2	0.25	0.35	22	162	6.8
5	300	0.2	0.45	0.35	35	210	6.8
6	300	0.2	0.76	0.35	60	300	6.8

Notes:

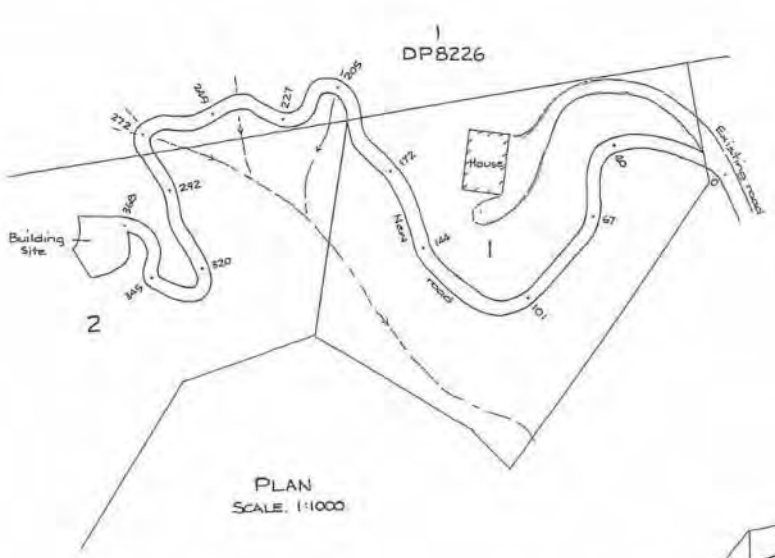
1. Although smaller pipe sizes could be used for the quantities involved, we consider 300mm diameter a minimum size to prevent blockage.

2. The pipes are shown on quite steep gradients with high velocities although some of the flows are quite small. Outlets may require some form of erosion control such as rock protection or the fitting of a culvert sock.

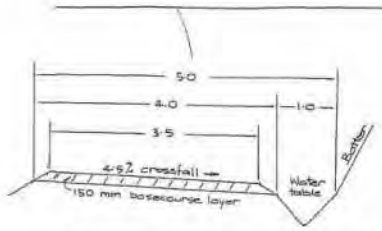
3. Water from all culverts will find its way into the main gully, which is in a deep cutting and increased runoff from the development will be easily handled by the system and not present any danger to other properties.

4. Roof water from the house site on Lot 2 will be collected for household purposes and other runoff from the site can be piped to the main gully if necessary.

Appendix C cont



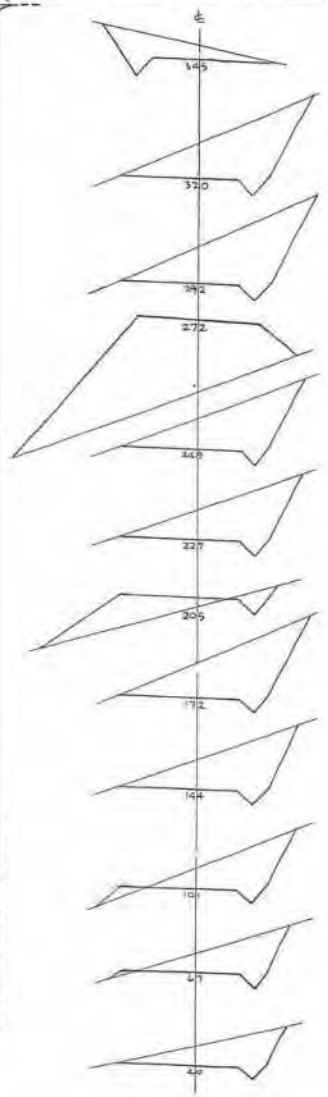
PLAN
SCALE: 1:1000



TYPICAL CROSS SECTION
SCALE: 1:50

HAD 39.0															
SURFACE LEVEL	45.5	43.1	41.1	40.9	45.1	46.6	48.0	50.3	51.8	47.7	53.0	57.6	62.0	66.0	
DESIGN	45.5	42.4	40.5	40.3	44.2	47.4	48.3	49.6	50.8	50.1	51.8	56.5	61.5	66.0	
CUT	0.0	0.7	0.6	0.6	0.9	1.2	-0.3	0.9	1.0	-2.6	1.2	1.1	0.5	0.0	
DISTANCE	0	40	67	101	144	172	205	227	249	272	292	320	345	368	
GRADIENT		1 in 12.9		1 in 113.3	1 in 10.2	1 in 8.2	1 in 47.1	1 in 16.9	1 in 12.2	1 in 12.8	1 in 9.1	1 in 6.0	1 in 5.0		

LONGITUDINAL SECTION
SCALES: H 1:1000 V 1:100

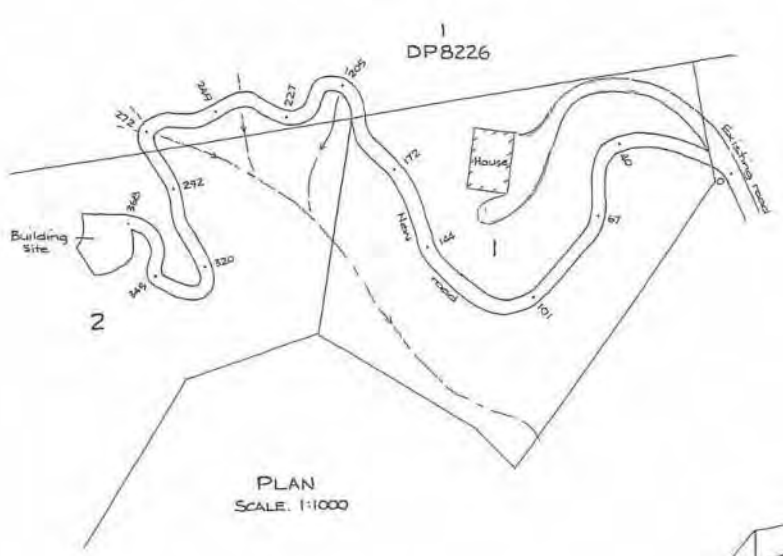


CROSS SECTIONS
SCALE: 1:100

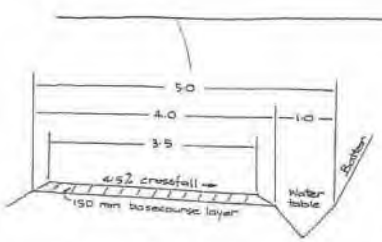
HOLMES SUBDN - RM110930

PREPARED BY SELWYN LIGHT SURVEYORS
APRIL 2012

Appendix C cont



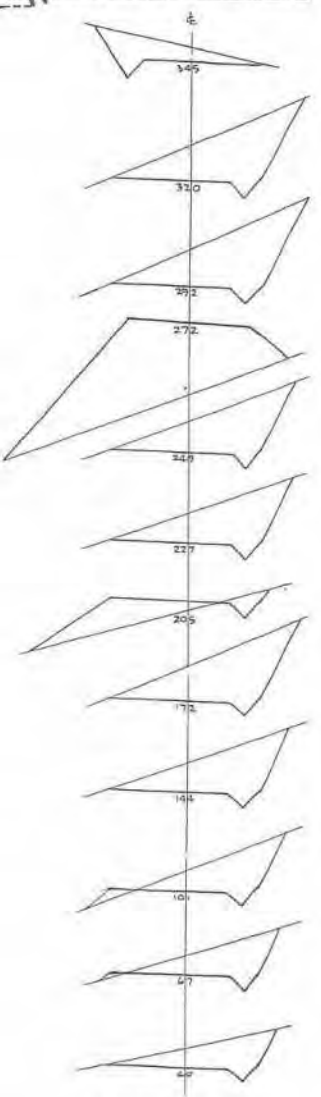
PLAN
SCALE. 1:1000



TYPICAL CROSS SECTION
SCALE: 1:50

HAD 39.0															
SURFACE LEVEL	45.5	43.1	41.1	40.9	45.1	48.6	48.0	50.5	51.8	47.1	53.0	57.6	62.0	66.0	
DESIGN	45.5	42.4	40.5	40.3	44.2	47.4	48.3	49.6	50.8	50.1	51.8	56.5	61.5	66.0	
CUT	0.0	0.7	0.6	0.6	0.9	1.2	-0.3	0.9	1.0	-2.4	1.2	1.1	0.5	0.0	
DISTANCE	0	40	67	101	144	172	205	227	249	272	292	320	345	368	
GRADIENT		1 in 12.9		1 in 113.3	1 in 10.2	1 in 8.2	1 in 47.1	1 in 16.9	1 in 12.2	1 in 12.8	1 in 9.1	1 in 6.0	1 in 5.0		

LONGITUDINAL SECTION
SCALES: H 1:1000 V 1:100



CROSS SECTIONS
SCALE: 1:100

HOLMES SUBDN - RM110930

PREPARED BY SELWYN LIGHT SURVEYORS
APRIL 2012

Our Ref: 13017
22 May 2013

Selwyn Light
Selwyn Light Surveyors Ltd.
PO Box 145
Motueka 7143

Attention: Selwyn Light

Dear Selwyn

Design Certificate
Subdivision & Access – 233 Riwaka – Kaiteriteri Road

As discussed, herewith the design certificate for this subdivision. Tasman District Council's RM110930 (*Subdivision*) and RM120615 (*Earthworks for Access and Building Site*) refer.

We have reviewed the design, including the adequacy of the proposed stormwater disposal arrangements. Based on the information provided to date, we consider that the design is appropriate both in terms of the likely nature and behaviour of underlying soils, and for the expected design stormwater flows.

By this letter, we also confirm to Tasman District Council that we have been engaged to act as DPA on this project, and also to provide specialist input covering construction and certification of the Right of Way formation and building site, particularly Conditions 1(b), 1(c), 2 & 4(d) of RM110930.

Please find attached a signed copy of the engineering plans, which should be submitted to Council for approval.

Yours sincerely

Andrew Palmer
Principal

Encl.

E:\Terra Firma\Data\Projects\13017 Light Survey\Consents\2013-05-22 Letter covering design certificate.doc
22 May 2013

PO Box 48, Mapua 7048, Nelson, New Zealand
Tel: 03 540 3715 Fax: 03 540 3716 Mobile: 027 278 9505
nelson@tfel.co.nz www.tfel.co.nz

ACENZ

Appendix 2-2 Design Certificate – Land Development/Subdivision Work

ISSUED BY: Terra firma Engineering Ltd.
(Approved certifier)

TO: M Q & SJ Holmes & Kennedy Associates Trustee Co.
(Developer/Owner)

TO BE SUPPLIED TO: Tasman District Council
(Territorial authority)

IN RESPECT OF: Subdivision & Provision of Access
(Description of land development/subdivision work)

AT: 233 Riwaka – Kaiteriteri Road
(Address)

Terra firma Engineering Ltd has been engaged by Selwyn Light Surveyors Ltd
(Consultant/Designer) *(Developer/Owner)*

to provide Design review services in respect of the land development and/or subdivision work described above.

I Andrew Palmer have the qualifications and experience relevant to this project as set out herein and have designed the subject works and confirm that the design is to current good engineering practice, and that it satisfies all relevant resource consent conditions, all relevant Tasman District Council requirements and applicable codes and standards. I/My practice holds professional indemnity insurance in the sum of $3,000,000 and run-off cover.

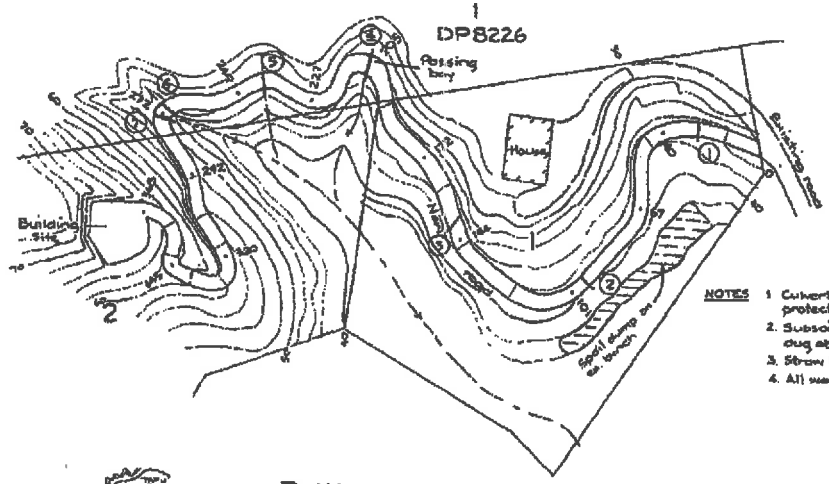
(Signature of approved certifier) Date 22.5.13

BSc, MSc, CPEng, MIPENZ, IntPE Member
(Professional Qualifications)

PO Box 48, Mapua 7048
(Address)

RPSurv	☐	CPEng	☑
Practice field			
Civil	☑	Mechanical	☐
Structural	☐	Electrical	☐
Geotechnical	☑	Industrial	☐
Environmental	☐		

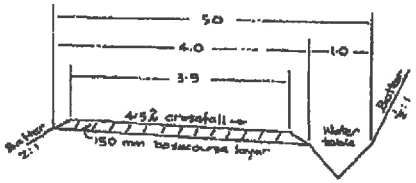
Outstanding Works



PLAN
SCALE: 1:1000

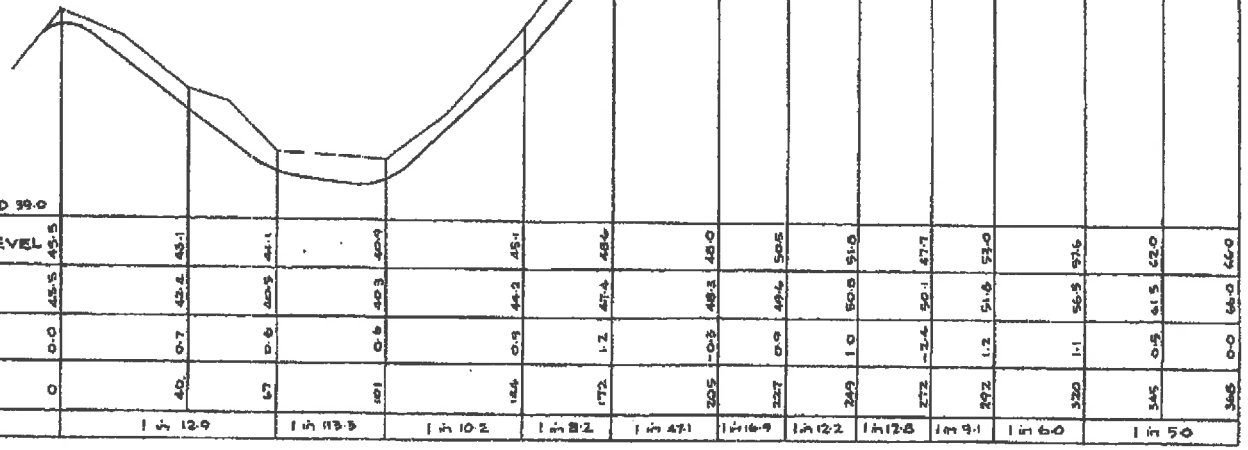


LOCATION PLAN



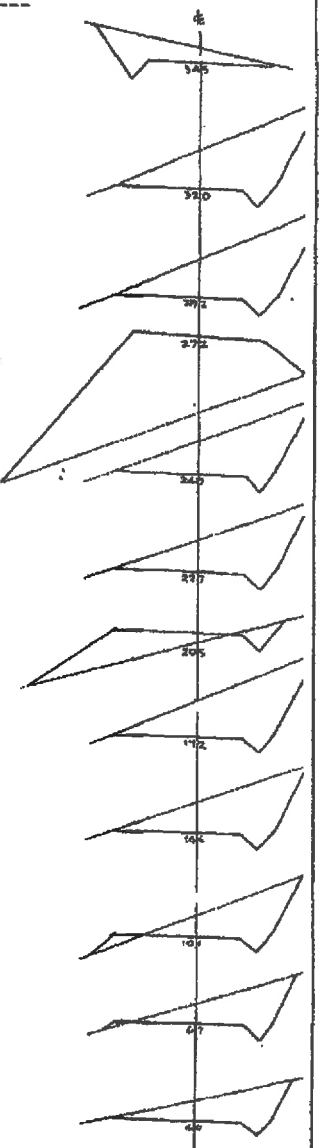
TYPICAL CROSS SECTION
SCALE: 1:50

NOTES
1. Culverts ① - ⑦ are 300 dia. PVC with bagged headwalls & scour protection at outlets.
2. Subsoil drain to be laid above road 205-265 and Varsins dug above other cut batters.
3. Straw bales to be fixed in place at toe of fill in gullies
4. All work to conform to TDC Engineering Standards 2008



HAD 39.0															
SURFACE LEVEL	45.5	45.1	44.1	40.9	45.1	48.4	48.0	50.5	51.6	47.7	53.0	57.6	62.0	66.0	
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CUT	0.0	0.7	0.6	0.6	0.9	1.2	-0.2	0.9	1.0	-2.4	1.2	1.1	0.5	0.0	
DISTANCE	0	40	57	101	164	172	205	237	249	272	292	320	345	365	
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LONGITUDINAL SECTION
SCALES: H 1:1000 V 1:100



CROSS SECTIONS
SCALE: 1:100

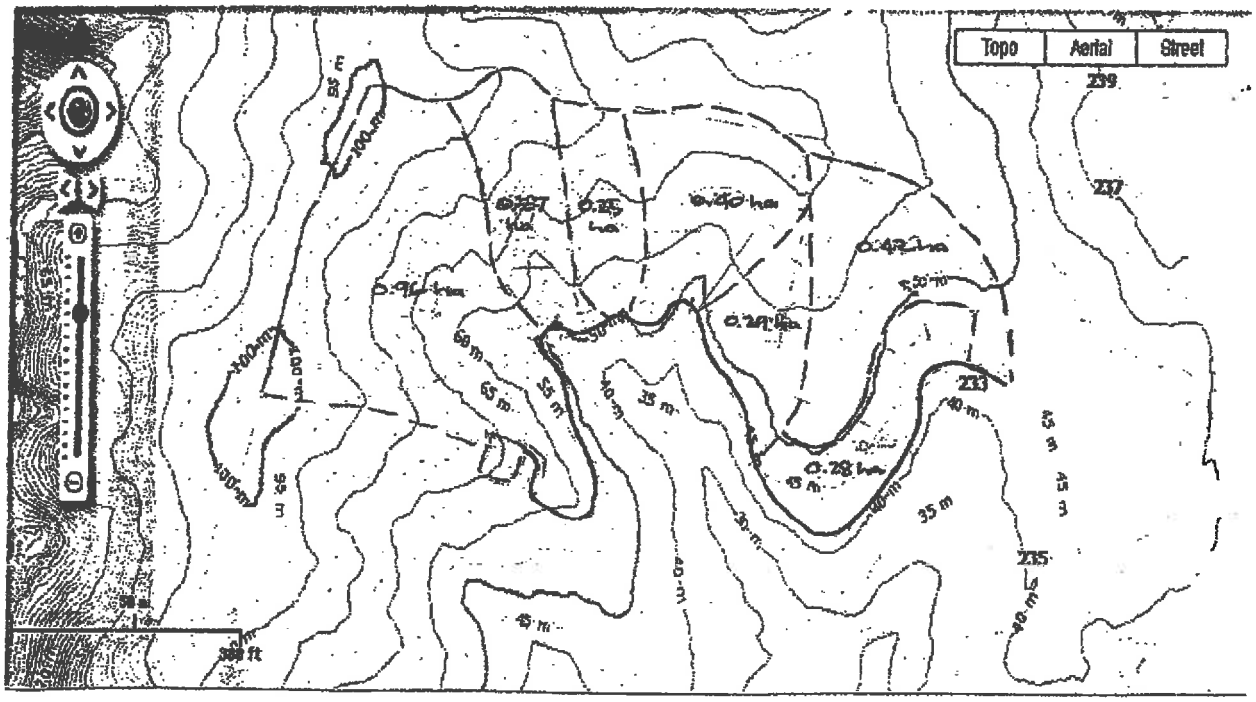
Revised A. Palmer 22/5/13
Terra firma Engineering Ltd.

HOLMES SUBDN - RM110930
PREPARED BY SELWYN LIGHT SURVEYORS
APRIL 2013

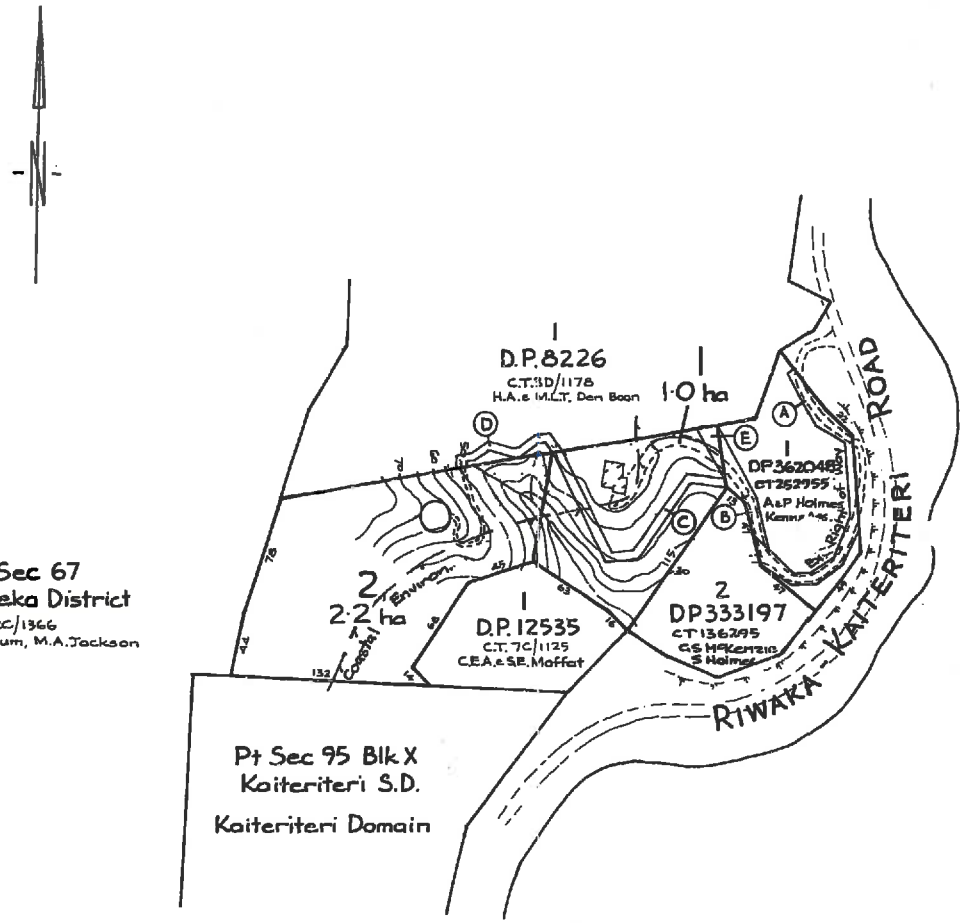
DESIGN: SRC LIGHT 23-5-13

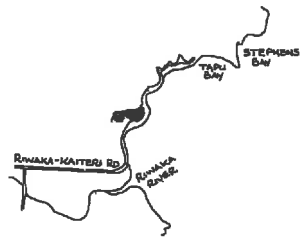
M S HOLMES STORMWATER

Culvert No	Culvert Culvert	Pipe Slope	Catchmnt Area	Runoff Coeff	Flow	HW Depth	Outlet Vel
	mm		ha		l/s	mm	m/s
1	300	0.1	0.42	0.35	33	192	4.8
2	300	0.1	0.28	0.5	29	180	4.8
3	300	0.1	0.29	0.35	23	168	4.8
4	300	0.2	0.4	0.35	31	188	6.8
5	300	0.4	0.25	0.35	20	156	9.7
6	300	0.3	0.27	0.35	21	158	8.4
7	300	0.3	0.96	0.35	65	339	8.4



Revised A. Palmer. 22/5/13
Terra Firma Engineering Ltd





LOCATION PLAN

PROPOSED AMALGAMATION CONDITION

That Lot 4 hereon be transferred to the owners of Lot 1 DP 12535 (CT 7C/1125) and that one certificate of title be issued to include both parcels.

PROPOSED EASEMENT

Purpose	Letter	Serv. Ten.	Dom. Ten.
Right of Way	C	Lot 1	Lot 2
	D	Lot 1 DP 8226	Lot 2
	E	Lot 1	Lot 1 DP 8226

○ Indicates proposed building site

PROPOSED SUBDN OF LOT 2 D.P. 362048

CT 252956 MG & SJ Holmes, Kennedy & Assoc. Trustees

Scale: 1:2500

Selwyn Light Surveyors Ltd November 2011

reby certify that this application
a subdivision consent has been
pared in accordance with Section 88
he Resource Management Act 1991.

Regd Surveyor

Revised A Palmer 22/5/13
Terra firma Engineering Ltd.

This subdivision was approved as a _____ activity on the ___ day of _____ subject to the conditions noted in file _____

_____
Consents Officer

Geotechnical Assessment for Right of Way Stability

233 Riwaka to Kaiteriteri Road

M. Holmes

Report ref:
230444-001
29 July 2012
Revision 1

aurecon

Document prepared by:

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E: nelson@aurecongroup.com
W: aurecongroup.com

Document control

aurecon

Document ID: Re230444 01af Geotechnical Report.doc

Rev No	Date	Revision details	Typist	Author	Verifier	Approver
0	28 June 2012	Draft	AF	AJF	JSM	CD
1	29 June 2012	For Client	AF	AJF	JSM	CD

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Appendix A

Subdivision Layout Drawing

Appendix B

Site Investigation Locations

Appendix C

Test Pit Logs

Appendix D

Scala Probe Logs

1. Executive Summary

1.1 Scope of the Investigation

M and S Holmes are proposing to subdivide their property at 233 Riwaka to Kaiteriteri Road, Riwaka. The legal description of the property is Lot 2 DP362048. Tasman District Council (TDC) has requested specific engineering information be provided on the Right of Way, including an assessment of land stability. M and S Holmes have engaged Aurecon NZ Ltd to provide a geotechnical assessment report on the stability of the proposed Right of Way. Our assessment covers the Right of Way only as no requirement was identified to assess potential building site suitability at this time.

The site investigation comprised a walkover inspection of the site by a geotechnical engineer, the excavation of three machine – dug test pits and eight Scala probes. Testing was carried out along the line of the proposed Right of Way.

1.2 Summary and Conclusions

The main purpose of this geotechnical assessment was to investigate the suitability of the proposed Right of Way.

There is no evidence of recent slipping above, below or along the line of the proposed Right of Way. Therefore based on the ground conditions, our general observations and our stability assessment we consider the proposed Right of Way will not be directly affected by slope instability.

Nonetheless any excavations of the existing ground for the proposed Right of Way will likely result in some fretting of the cut faces. Such small failures will need to be considered in the final design of the Right of Way. By designing appropriately in accordance with the recommendations provided in this report, the likely effects of time and environment on the site stability can be minimised and the effects of the Right of Way construction will be less than minor on slope stability.

1.3 Recommendations

In order to minimise the impact of the new Right of Way, recommendations relating to cuts, fills and stormwater control have been made. These recommendations should be read in conjunction with the relevant requirements from the TDC's Engineering Standards and Policies. A set of recommended engineering conditions has also been prepared and is included in Section 3.

A summary of the key recommendations is as follows:

- Where practicable the access should be constructed by cutting, limiting the extent of fills and the excess cut material not required for filling disposed of in a suitably located spoil dump;
- Where required, cut slopes in the residual soil should be no steeper than 1H: 1V and cuts in the weathered granite no steeper than ½ H: 1V. Cuts greater than 2.5m deep should be inspected by an engineer and where required a retaining wall should be used;
- Where required, fill should be placed at a slope no steeper than 2H:1V and placed in accordance to NZS4431. The excavated residual soils may be difficult to compact due to the high silt content. The preferred approach is for these to be treated as cut to waste and use only the underlying weathered granite or imported hardfill for filling;
- Surface drainage and subsurface drains should be used in the cuts and fills to control seeps, and collect surface runoff that could cause erosion;
- Stormwater runoff from the Right of Way should be discharged in a controlled manner and runoff over the outside edge of the Right of Way should be avoided. Stormwater should also be controlled during construction to minimise infiltration and ponding;
- Culverts should be appropriately sized for the contributing catchment in accordance with the TDC Engineering Standards and Policies and should be installed along the Right of Way at intervals no greater than 75 m.

2. Report

2.1 Introduction

M and S Holmes are proposing to subdivide their property at 233 Riwaka to Kaiteriteri Road, Riwaka. The legal description of the property is Lot 2 DP362048. TDC has requested specific engineering information be provided on the Right of Way, including an assessment of land stability. M and S Holmes have engaged Aurecon NZ Ltd to provide a geotechnical assessment report on the stability of the proposed Right of Way. Our assessment covers the Right of Way only as no requirement was identified to assess potential building site suitability at this time.

2.2 Site Description

The area to be subdivided is located at 233 Riwaka to Kaiteriteri Road (refer proposed subdivision plan drawing by Selwyn Light Surveyors Ltd in Appendix A). The general physical features of the area are as follows:

- The site is located on the southern flank of a west – east trending ridgeline that lies to the north of the site. Slopes vary across the site from 15° to 60°,with the steeper slopes typically located in gullies;
- A number of gullies are present across the site. The largest of these runs along a NW to SE alignment approximately midway between the existing house on the site and the building site on proposed Lot 2. Smaller gullies lead into this gully from higher ground on the adjoining property to the north of the subject lot;
- The land is covered in a mixture of regenerating bush with stands of Manuka and some cleared grassed areas. The main grassed area lies on a southeast sloping ground immediately downslope of the existing house. The areas of bush are on more steeply sloping parts of the site to the north and west within gullies. There are also some mature pine trees on the site.
- Access to the site is via the Riwaka to Kaiteriteri Road. The lower, eastern, part of the proposed Right of Way follows the line of the existing access.
- There is one existing dwelling on site and this will be located within Lot1. The proposed building site on the new Lot 2 is located on an elevated southeast trending spur located towards the western boundary of the site.

2.3 Geotechnical Investigations

The geotechnical assessment has been based on a review of published geological information on the area and a site investigation.

The site investigation comprised a walkover inspection of the site by a geotechnical engineer, the excavation of three machine – dug test pits and eight Scala proes. Testing was carried out along the line of the proposed Right of Way.

The test pit and Scala probe locations are shown on the Site Investigation Location drawing in Appendix B. The test pit and Scala probe logs are included in Appendices C, and D, respectively. An explanatory sheet outlining the terms and symbols used on test pit logs is also presented in Appendix C. Soil logging was carried out in accordance with NZ Geotechnical Society's "Guideline for the Field Classification and Description of Soil and Rock for Engineering Purposes: 2005".

2.4 Geotechnical Assessment

2.4.1 Regional Geology and Seismicity

The geology of the area is identified on the Geology of the Nelson Area scale 1:250,000 map (Institute of Geological and Nuclear Sciences, 1998) as Separation Point Suite granite.

The New Zealand Active Faults Database on the Institute of Geological and Nuclear Sciences website indicates no active faults in the immediate vicinity.

The 1:250,000 geological map of the area indicates that there are faults that lie in proximity to the site, however as these faults are not identified on the IGNS database, these are assumed to be inactive.

2.4.2 General Subsurface Conditions

The ground logged in the test pits and Scala probes indicate that the site is underlain by weathered Separation Point Suite granite with a covering layer of residual soil.

The granite ranges from highly weathered to extremely weathered and in some areas it has been weathered to a true residual soil. The residual soil was typically logged as soft to stiff, non to slightly plastic silt or clayey silt with varying amounts of sand sub fraction. The weathered granite was logged as stiff to very stiff, non plastic silty sand or sand.

From the Scala probe logs the strength of the residual soil varies from ½ to 1 blow per 50 mm penetration with most Scala logs indicating 2 blows per 50mm penetration or more within the top 1.0 m of the ground surface. Scala logs give blow counts ranging from 4 to 7 blows per 50 mm penetration within the underlying weathered granite.

Refusal or greater than 10 blows per 50mm penetration is inferred to be within the less weathered granite.

Groundwater was not encountered during the course of the investigation.

2.4.3 General Slope Stability

A review of published geological information and the TDC Area Maps from the Tasman Resource Management Plan (TRMP) indicates the site is not within an instability hazard zone or affected by recent instability. In addition the geological map indicates there is no unfavourable schistosity or bedding underlying the area. It should be noted that the maps are regional in nature and that any hazard potentials indicated on the maps do not necessarily apply to any specific site.

The specific assessment of the stability of the proposed Right of Way is therefore based on the walk-over inspection of the site.

Existing natural slopes within the site are typically standing at slopes of up to approximately 60 degrees. While most of these slopes are vegetated making it difficult to allow for visual inspection of their overall stability, there are no visible signs of slope instability observed in these areas.

While recent instability within the natural ground was not observed during our site inspection parts of the site are extensively covered in gorse and regenerating bush which limited access and visibility.

The cuts into the slopes made for the existing access are currently standing at slopes of up to approximately 80 degrees. These do not appear to have caused any instability of the natural slopes directly above the cuts. However there are some areas of the road cut where erosion of

the silts and small slips has occurred. This is not considered unusual considering the steepness of the cuts, the ground conditions and the rural nature of the access.

There is no evidence of recent slipping above, below or along the line of the proposed Right of Way. Therefore based on the ground conditions, our general observations and our stability assessment we consider the proposed Right of Way will not be directly affected by slope instability.

Nonetheless any excavations of the existing ground for the proposed Right of Way will likely result in some fretting of the cut face. Such small failures will need to be considered in the final design of the Right of Way.

It must be noted that over time the environmental factors affecting the slope can change and slopes such as these retain a certain degree of uncertainty despite our best efforts to accurately assess their stability. However by designing appropriately in accordance with the recommendations outlined below, the likely effects of time and environment on the site stability can be minimised and the effects of the Right of Way construction will be less than minor on slope stability.

2.5 Engineering Considerations

2.5.1 Introduction

From a general perspective, the main impact from the proposed Right of Way will be the temporary impact of the earthworks required during construction. The earthworks will need to be managed to ensure that silt run-off is controlled.

The following measures are recommended for the development of the Right of Way. These recommendations should be read in conjunction with the relevant requirements from the TDC's Engineering Standards and Policies. The engineering issues for the Right of Way are:

- Alignment;
- Cuts;
- Fills;
- Land Disturbance;
- Stormwater;

2.5.2 Alignment

- Access to proposed Lot 2 appears feasible skirting the steepest slopes of the main gully the slopes of the south eastern flank of the broad ridgeline located at the northwestern corner of the site (refer to Right of Way shown on proposed subdivision plan drawing by Selwyn Light Surveyors Ltd).
- The long section plan by Selwyn Light Surveyors indicates that the grades of the access are appropriate for all weather access to a rural site. The access will have a maximum grade of 1 in 5 over a short section immediately prior to the proposed building site on Lot 2. This is an appropriate maximum grade for a rural access of this nature;
- Where practicable the access should be constructed by cutting, limiting the extent of fills. Excavated material not required for filling should be disposed of in a suitably located spoil dump. Where filling is required, such as through the main gully crossing, fill placement should be carried out in accordance with NZS: 4431;
- The long section and cross section indicates most cuttings along the access are likely to be less than 3.0 m high. For cuttings within the underlying weathered granite we recommend

that slopes of ½ H: 1V be used. Cut slopes within residual soil are subject to higher erosion rates and slippages and therefore in this material we recommend slopes of 1H:1V;

- The lower portion of the Right of Way will follow the line of the existing access to the house on Lot 1. This access is constructed to a sound standard and it is not envisaged that any new works will be carried out over this portion;
- Installation of stormwater control and provision of an all-weather surface will be required over the new length of the Right of Way.

2.5.3 Cuts

We make the following recommendations for cuts:

- Within the residual soil, cut slopes of 1H: 1V should be stable, however they will be vulnerable to erosion. They should therefore be hydroseeded or otherwise protected as soon as practicable after excavation;
- Within the weathered granite, cut slopes should be stable at slopes of ½ H:1V, although as for the residual soil this material will be vulnerable to erosion;
- To minimise erosion of cut faces, surface runoff from the ground above the proposed cuts should be intercepted and redirected away from the cut face via cut off vee-drains upslope of the cut.
- Some maintenance of cut slopes will be required as surficial erosion and fretting is likely, particularly in the months immediately after excavation;
- Cuts exceeding 2.5 m in height should be inspected during construction by an engineer experienced in earthworks to confirm the stability of cuts and the requirement for any additional works;
- Groundwater was not found during the course of the inspection. However, if groundwater is encountered and left untreated, slumping of cuts could occur. Installation of a subsoil drain on the uphill side of the northernmost portion of the access should be provided, as this section is south facing and crosses a number of gullies.

2.5.4 Fills

General recommendations regarding fills are:

- The excavated residual soils may be difficult to compact due to the high silt/clay content. The preferred approach is for these to be treated as cut to waste and use only the underlying weathered granite or imported hardfill for filling;
- All areas where fill is to be placed should be stripped of topsoil and other organic material and stockpiled;
- Fills composed of site-won weathered granite or imported hardfill are likely to be stable at a slope of 2H:1V;
- Filling should be carried out in accordance with NZS4431 with appropriate on-site quality control;
- Benching to key the fills into the ground is required wherever the existing ground slope is steeper than 4H:1V;
- Subsoil drains should be laid along benches wherever seeps are encountered;
- It is not expected that any specific retaining structures are required for the access, however the filling and culvert installation in the main gully fill may require some specific engineering design;

2.5.5 Land Disturbance

We understand that the extent of the proposed earthworks for the Right of Way requires a land disturbance consent. As discussed above the proposed cut excavations at the heights indicated on the plans are not expected to increase the overall risk of slope instability provided the recommendations of this geotechnical report are implemented.

The proposed Right of Way excavations will generate a quantity of cut to waste material. While disposal off site is a possible option, given the likely volumes generated it is appropriate to identify an area within the site suitable for placement of this material.

Bulk earthworks volumes are estimated at approximately 2, 000 m^3 of cut excavation and 200 m^3.of filling, the majority within the main gully fill. Volumes are approximate only based on the detail of the existing survey and the preliminary status of the design. Final earthworks volumes would be determined and on completion of final design.

A specific disposal site for the excess cut material has not yet been confirmed with the client, however it will be feasible to place material downslope of the Right of Way on the more gently sloping ground above the main gully on Lot1. Placement of fill to an average depth of 1 metre over a footprint of approximately 75 m x 25 m should be possible in this area providing a disposal volume of 2, 000 m^3. If required the fill could be placed at greater depths over a smaller footprint top achieve the same volume.

In terms of the placement of this fill, the recommendations made in our geotechnical report, in terms of stripping, benching, compaction and drainage control remain valid. Stripping of the existing vegetation, (mainly gorse and scrub) would need to take place prior to fill placement. Revegetation of this area is recommended on completion of earthworks.

2.5.6 Stormwater

Stormwater runoff from the Right of Way should be discharged in a controlled manner. Provided that stormwater is discharged to the gullies and in a controlled manner, we consider there to be only limited potential for adverseiy affecting slope stability.

Details of this stormwater discharge should be confirmed at the time of final design of the Right of Way, however we make the following recommendations:

- Stormwater runoff over the outside edge of the Right of Way access should be avoided. A continuous water table should be formed along the inside (upslope) edge of the Right of Way and the surface of the Right of Way graded to provide positive crossfall towards the water table;
- Culverts should be installed along the Right of Way at intervals no greater than 75 m;
- Culverts should be appropriately sized for the contributing catchment in accordance with the TDC Engineering Standards and Policies;
- Bagged headwalls should be provided at both the inlet and outlet of all culverts;
- Scour protection and energy dissipation in the form of rockwork should be placed at culvert outlets;

Specific note at this site should be taken to ensure stormwater is controlled during construction after the site has been opened up to minimise infiltration or ponding, and not to leave areas stripped of vegetation for proionged periods.

3. Recommended Engineering Conditions

Based on the engineering conditions outlined above, the following engineering recommendations are provided to assist TDC in the preparation of consent conditions.

- The access should be constructed in general accordance with the engineering considerations outlined in the Aurecon NZ Ltd report, Geotechnical Assessment of Right of Way Stability – 233 Riwaka to Kaiteriteri Road, June 2012;
- The access should be formed at a maximum grade of 1 in 5 and shall have an all weather surface;
- Cut slopes in the residual soil should be no steeper than 1H: 1V. Cuts in the weathered granite should be no steeper than ½ H: 1V;
- Cuts greater than 2.5 m deep should be inspected during construction by an engineer experienced in earthworks to confirm the stability of cuts and the requirement for any additional works;
- cut off vee-drains should be constructed upslope of the cuts to intercept stormwater runoff and redirect this away from the cut face;
- Filling should be carried out in accordance with NZS4431. Benching to key the fills into the ground is required wherever the existing ground slope is steeper than 4H:1V and subsoil drains should be laid along benches wherever seeps are encountered;
- Installation of a subsoil drain on the uphill side of the northernmost portion of the access should be provided.
- Stormwater runoff from the Right of Way should be discharged in a controlled manner. A continuous water table should be formed along the inside (upslope) edge of the Right of Way and the surface of the Right of Way graded to provide positive crossfall towards the water table.
- Culverts should be appropriately sized for the contributing catchment in accordance with the TDC Engineering Standards and Policies and should be installed along the Right of Way at intervals no greater than 75 m.
- Bagged headwalls should be provided at both the inlet and outlet of all culverts. Scour protection and energy dissipation in the form of rockwork should be placed at culvert outlets.

4. Limitations

We have prepared this report in accordance with the brief as provided. The contents of the report are for the sole use of the Client and the TDC. Data or opinions contained within the report may not be used in other contexts or for any other purposes without our prior review and agreement.

The recommendations in this report are based on data collected at specific locations and by using suitable investigation techniques. Only a finite amount of information has been collected to meet the specific financial and technical requirements of the Client's brief and this report does not purport to completely describe all the site characteristics and properties. The nature and continuity of the ground

between test locations has been inferred using experience and judgement and it must be appreciated that actual conditions could vary from the assumed model.

This report is not to be reproduced either wholly or in part without our prior written permission.

5. References

Rattenbury M.S, Cooper R.A, & Johnston M.R (1998): Geology of the Nelson Area, Institute of Nuclear and Geological Sciences, Wellington, NZ.

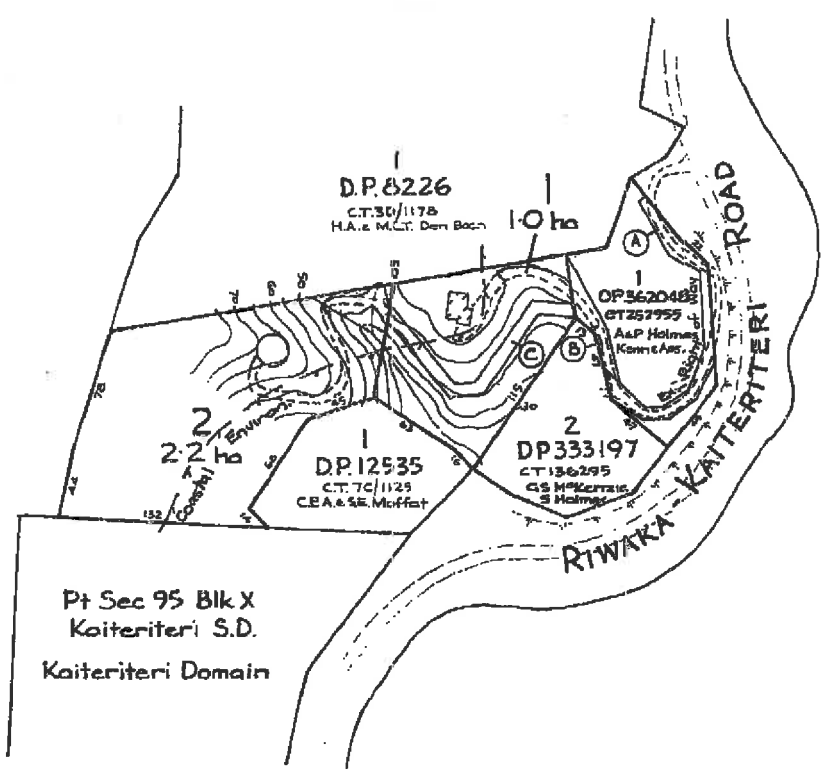
Tasman District Council, Tasman Resource Management Plan, Area Map 18 – Ngatimoti

Resource Management Act, 1991, Section 106.

NZS 4431, 1989: Code of practice for Earth Fill for Residential Development.

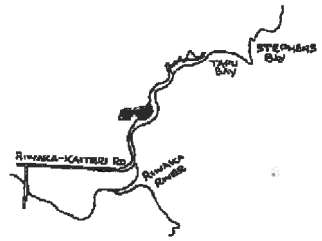
New Zealand Geotechnical Society (2005), "Guidelines for the Field Description and Classification of Soils and Rocks for Engineering Purposes".

Appendix A
Subdivision Layout Drawing



Pt Sec 67
Matueka District
C.T. 2C/1366
I.H.McCallum, M.A.Jackson

TASMAN BAY



LOCATION PLAN

PROPOSED AMALGAMATION CONDITION

That Lot 4 hereon be transferred to the owners of Lot 1 DP.12935 (RT.7C/1125) and that one certificate of title be issued to include both parcels.

PROPOSED EASEMENT

Purpose	Letter	Serv. Ten.	Dom. Ten.
Right of Way	C	Lot 1	Lot 2

○ Indicates proposed building site

PROPOSED SUBDN OF LOT 2 D.P.362048

CT 252956 MQ & SJ Holmes, Kennedy & Assoc. Trustees

Scale: 1:2500

Selwyn Light Surveyors Ltd November 2011

I hereby certify that this application for a subdivision consent has been prepared in accordance with Section 88 of the Resource Management Act 1991.

Regd Surveyor

This subdivision was approved as a _____ activity on the ___ day of _____ subject to the conditions noted in file _____

_____
Consents Officer

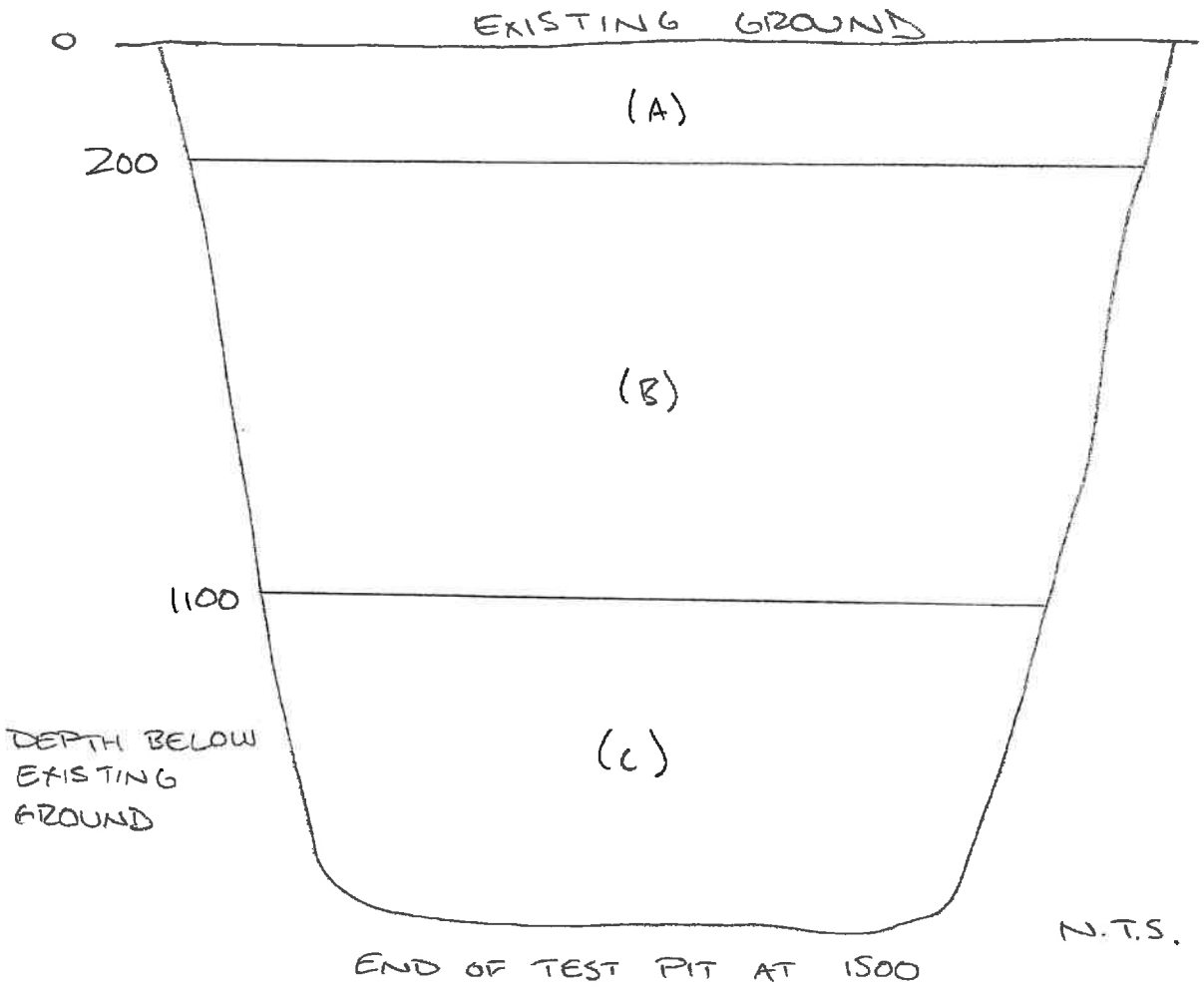
Appendix B
Site Investigation Locations



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New Zealand
Telephone: +64 3 539 0190
Email: nelson@aurecongroup.com

Client: Mark Holmes		SK001	
Location: 233 Riwaka to Kaiteriteri Road		Site Plan	A4
Tester: AJF	Date: 8 Jun 2012	Job Number: 230444	Rev: 1

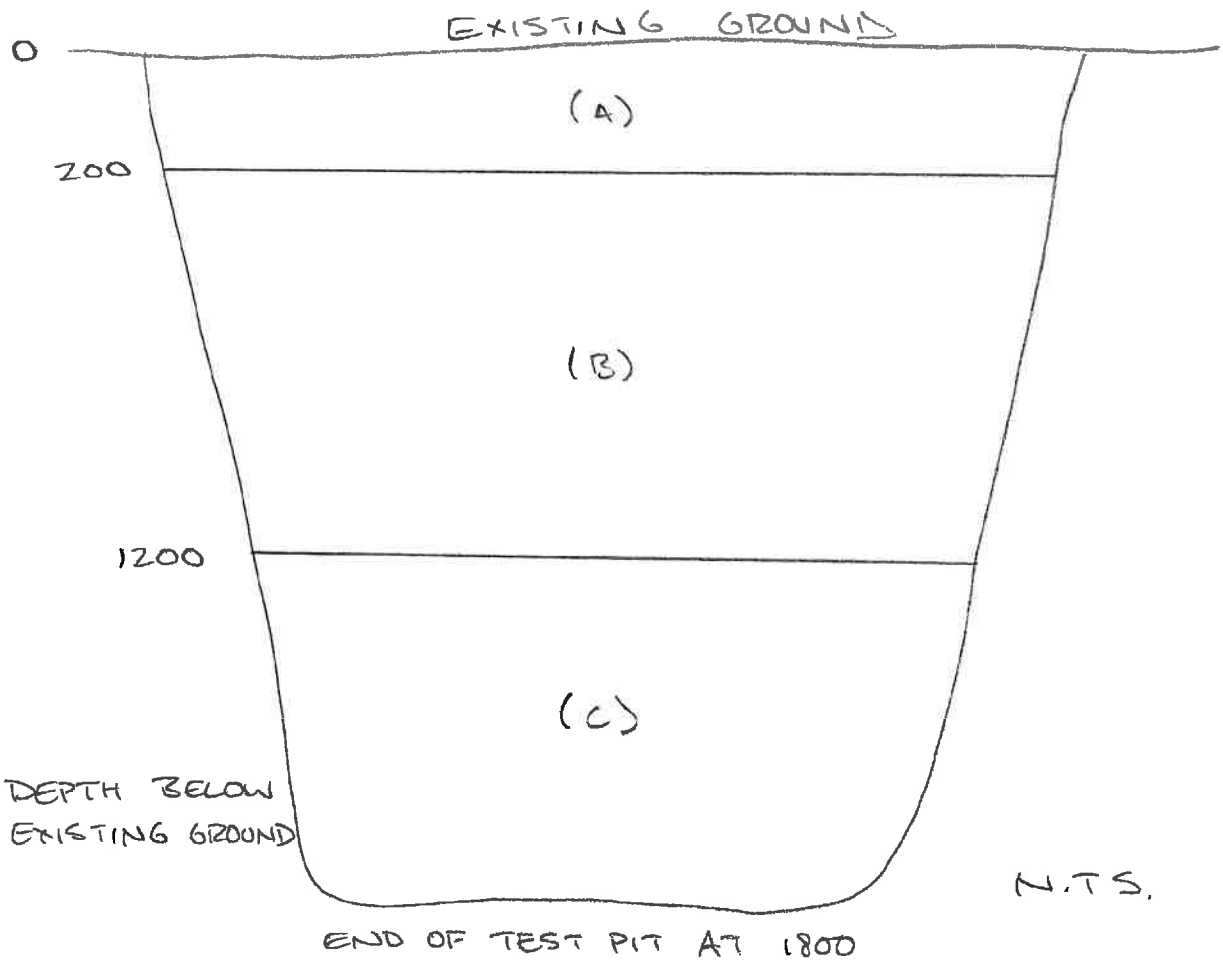
Appendix C
Test Pit Logs



A) **SILT:** dark brown, low plasticity, soft, moist. Trace rootlets. - **Topsoil**
B) **Silty SAND:** light brown, low plasticity, soft to firm, moist to dry. - **Residual Soil**
C) **Silty SAND:** light grey/ white, medium to coarse, medium dense to dense, dry. **completely weathered Granite**

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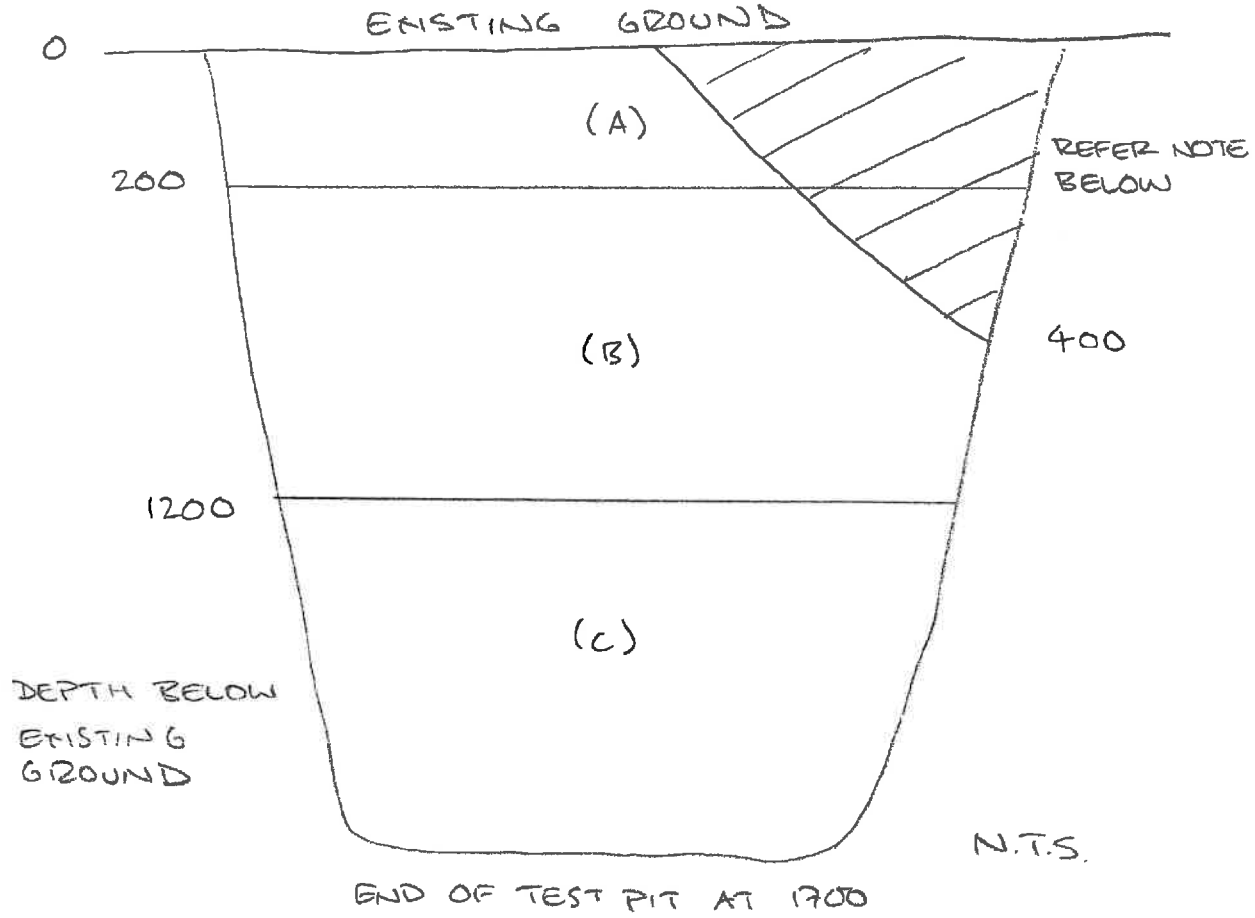
Client		Trench Log		
M & S Holmes				
Location		No		
233 Riwaka to Kaiteriteri Road		Test Pit TP1		A4
Logged by	Checked by	Date	Job Number	Rev
AJF		8-Jun-12	230444	1



A) **SILT:** dark brown, low plasticity, soft, moist. Trace rootlets. - **Topsoil**
B) **Silty SAND:** light brown, low plasticity, soft to firm, moist to dry. - **Residual Soil**
C) **Silty SAND:** light grey/ white, medium to coarse, medium dense to dense, dry. **compietely weathered Granite**

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Client: M & S Holmes		Trench Log	
Location: 233 Riwaka to Kaiteriteri Road		No: Test Pit TP2	A4
Logged by: AJF	Checked by:	Date: 8-Jun-12	Job Number: 230444 / Rev: 1



A) **SILT:** dark greyish brown, low plasticity, soft, moist. Trace rootlets. - **Topsoil**
B) **Silty SAND:** light brown, low plasticity, soft to firm, moist to dry.
Residual Soil (Note area of topsoil and uncompacted fill in northern corner of test pit to 400 mm depth).
C) **Silty SAND:** light grey, medium to coarse, medim dense to dense, dry.
completely weathered Granite

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Client: M & S Holmes		Trench Log	
Location: 233 Riwaka to Kaiteriteri Road		No: Test Pit TP3	A4
Logged by: AJF	Checked by:	Date: 8-Jun-12	Job Number: 230444 / Rev: 1

Appendix D
Scala Probe Logs

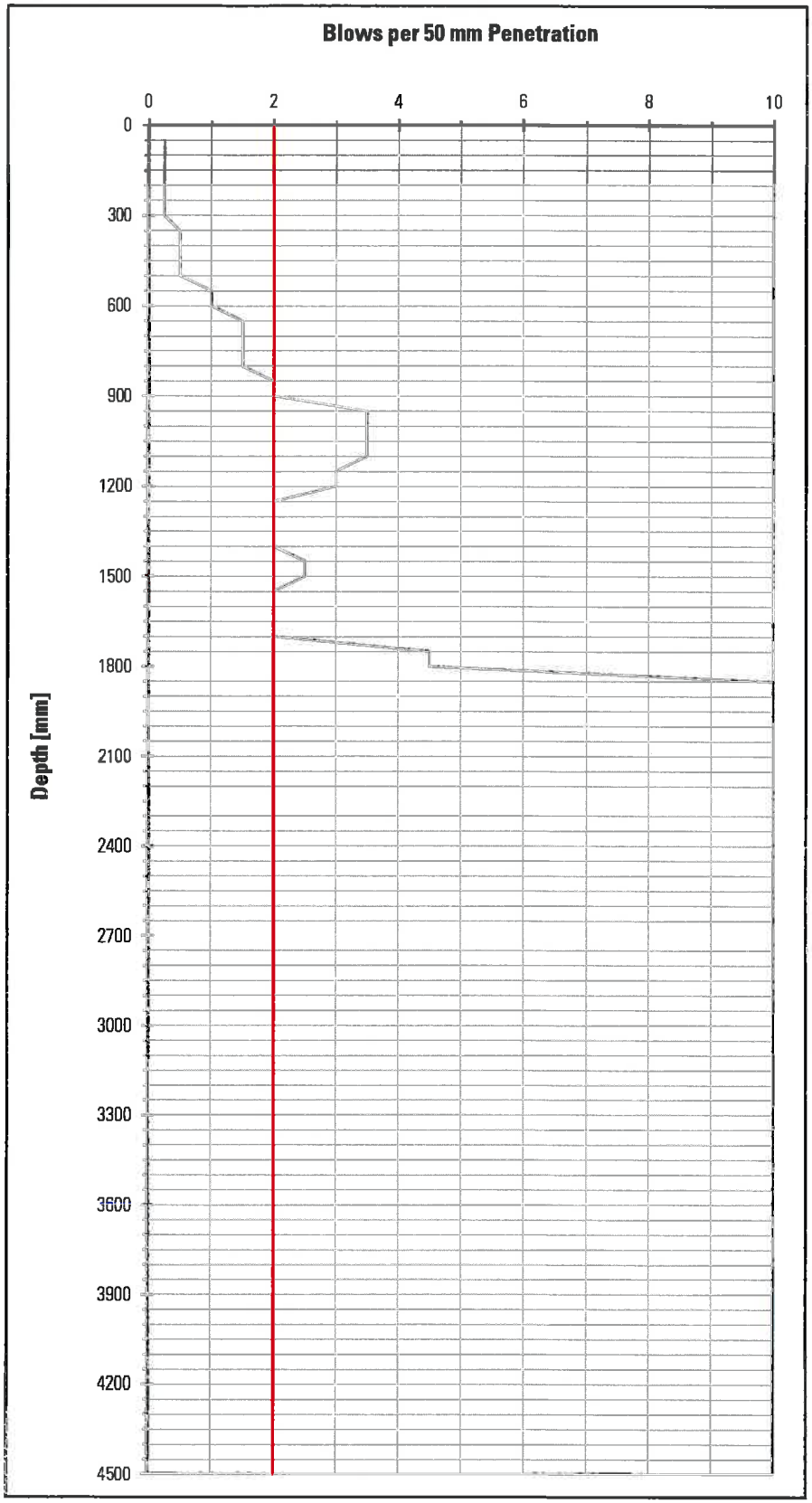
Site Description:

Refer attached site plan.

Notes:

Photo:

Depth (mm)	Blows (no.)	Depth (mm)	Blows (no.)
50	0.25	2300	
100	0.25	2350	
150	0.25	2400	
200	0.25	2450	
250	0.25	2500	
300	0.25	2550	
350	0.5	2600	
400	0.5	2650	
450	0.5	2700	
500	0.5	2750	
550	1	2800	
600	1	2850	
650	1.5	2900	
700	1.5	2950	
750	1.5	3000	
800	1.5	3050	
850	2	3100	
900	2	3150	
950	3.5	3200	
1000	3.5	3250	
1050	3.5	3300	
1100	3.5	3350	
1150	3	3400	
1200	3	3450	
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1750	4.5	4000	
1800	4.5	4050	
1850	10	4100	
1900	10	4150	
1950		4200	
2000		4250	
2050		4300	
2100		4350	
2150		4400	
2200		4450	
2250		4500	



PROBE DESCRIPTION:
9 kg Hammer falling half a metre to a steel anvil, driving a 16 mm diameter rod fitted with a 20 mm diameter cone.

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Client: Mark Holmes		SCALA PROBE	
Location: 233 Riwaka to Kaiteriteri Road		No: SP 1	A4
Tester: AJF	Date: 8-Jun-12	Job Number: 230444	Rev: 1

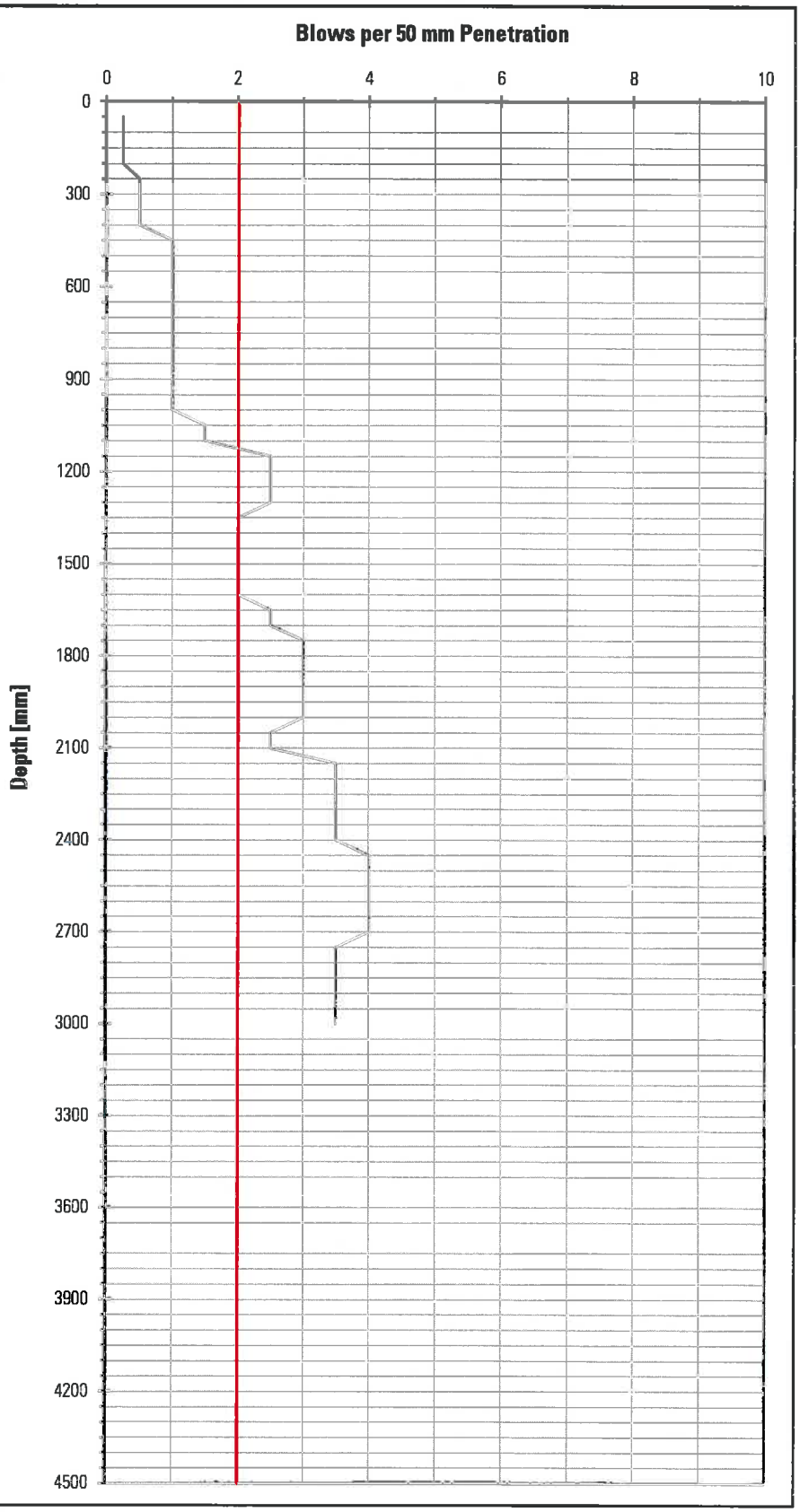
Site Description:

Refer attached site plan.

Notes:

Photo:

Depth (mm)	Blows (no.)	Depth (mm)	Blows (no.)
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100	0.25	2350	3.5
150	0.25	2400	3.5
200	0.25	2450	4
250	0.5	2500	4
300	0.5	2550	4
350	0.5	2600	4
400	0.5	2650	4
450	1	2700	4
500	1	2750	3.5
550	1	2800	3.5
600	1	2850	3.5
650	1	2900	3.5
700	1	2950	3.5
750	1	3000	3.5
800	1	3050	
850	1	3100	
900	1	3150	
950	1	3200	
1000	1	3250	
1050	1.5	3300	
1100	1.5	3350	
1150	2.5	3400	
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1250	2.5	3500	
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1350	2	3600	
1400	2	3650	
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1650	2.5	3900	
1700	2.5	3950	
1750	3	4000	
1800	3	4050	
1850	3	4100	
1900	3	4150	
1950	3	4200	
2000	3	4250	
2050	2.5	4300	
2100	2.5	4350	
2150	3.5	4400	
2200	3.5	4450	
2250	3.5	4500	



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Client: Mark Holmes		SCALA PROBE	
Location: 233 Riwaka to Kaiteriteri Road		No: SP 2	A4
Tester: AJF	Date: 8-Jun-12	Job Number: 230444	Rev: 1

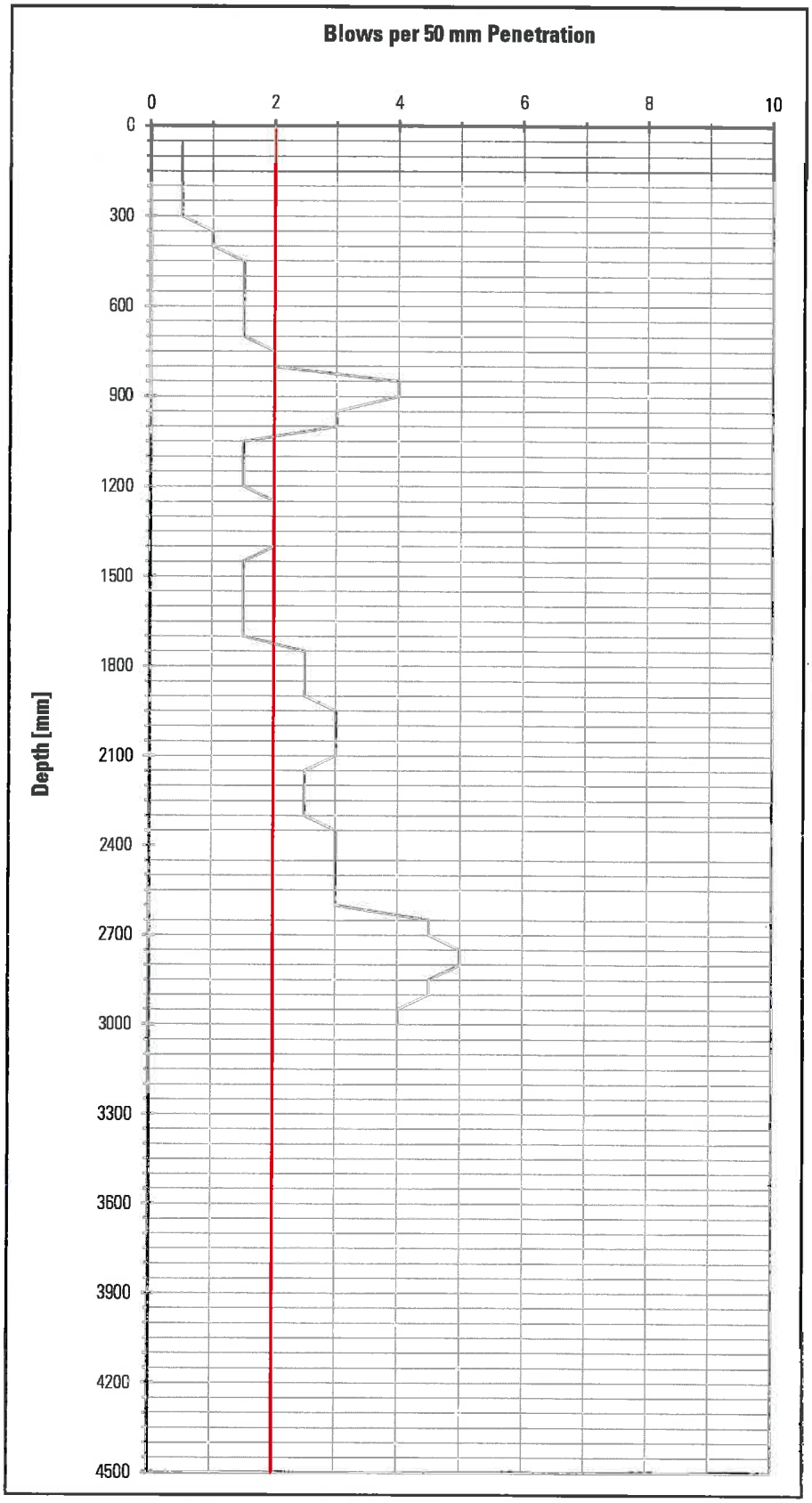
Site Description:

Refer attached site plan.

Notes:

Photo:

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150	0.5	2400	3
200	0.5	2450	3
250	0.5	2500	3
300	0.5	2550	3
350	1	2600	3
400	1	2650	4.5
450	1.5	2700	4.5
500	1.5	2750	5
550	1.5	2800	5
600	1.5	2850	4.5
650	1.5	2900	4.5
700	1.5	2950	4
750	2	3000	4
800	2	3050	
850	4	3100	
900	4	3150	
950	3	3200	
1000	3	3250	
1050	1.5	3300	
1100	1.5	3350	
1150	1.5	3400	
1200	1.5	3450	
1250	2	3500	
1300	2	3550	
1350	2	3600	
1400	2	3650	
1450	1.5	3700	
1500	1.5	3750	
1550	1.5	3800	
1600	1.5	3850	
1650	1.5	3900	
1700	1.5	3950	
1750	2.5	4000	
1800	2.5	4050	
1850	2.5	4100	
1900	2.5	4150	
1950	3	4200	
2000	3	4250	
2050	3	4300	
2100	3	4350	
2150	2.5	4400	
2200	2.5	4450	
2250	2.5	4500	



PROBE DESCRIPTION:
9 kg Hammer falling half a metre to a steel anvil, driving a 16 mm diameter rod fitted with a 20 mm diameter cone.

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Client: Mark Holmes		SCALA PROBE	
Location: 233 Riwaka to Kaiteriteri Road		No: SP 3	A4
Tester: AJF	Date: 8-Jun-12	Job Number: 230444	Rev: 1

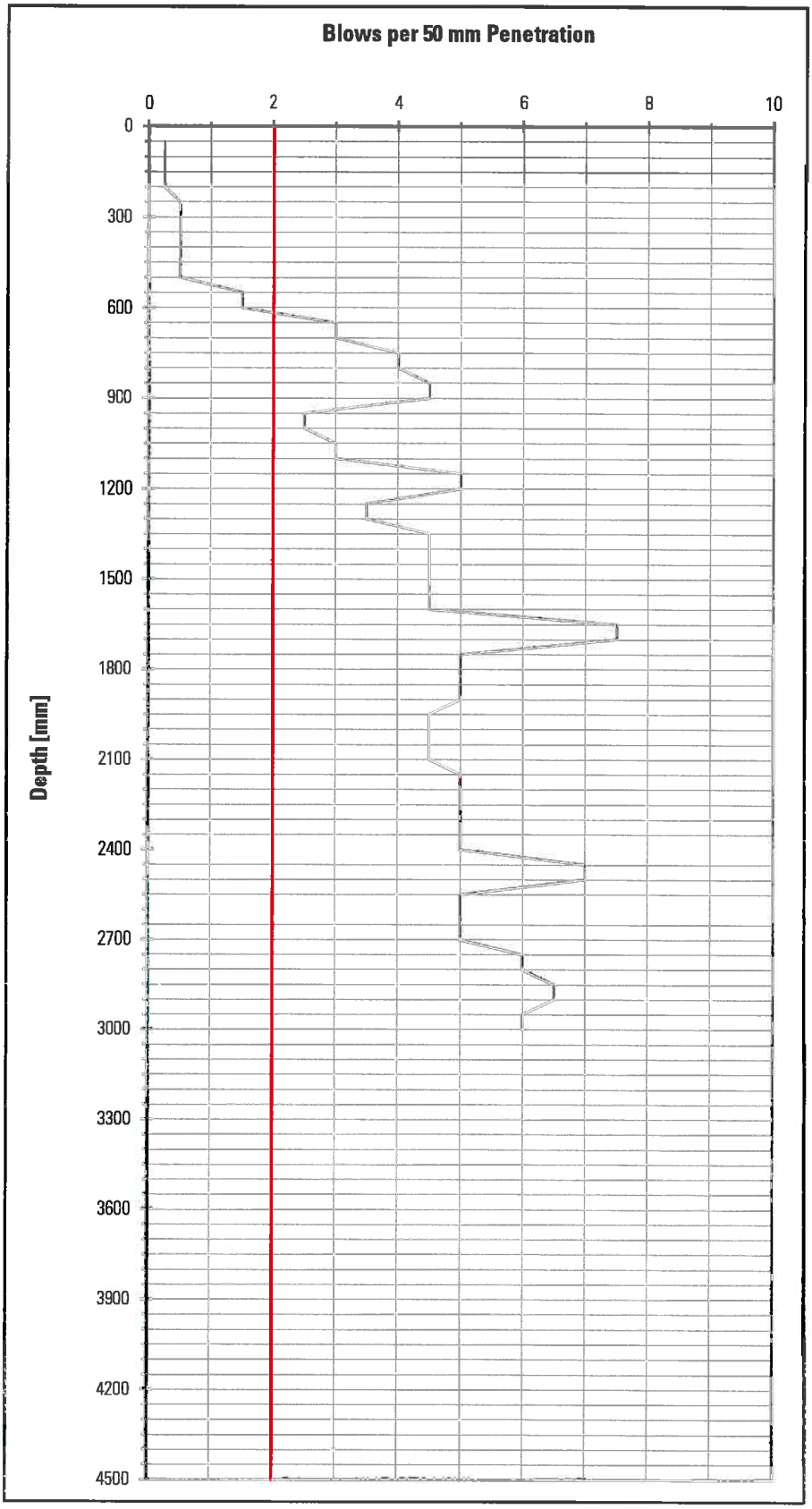
Site Description:

Refer attached site plan.

Notes:

Photo:

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150	0.25	2400	5
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250	0.5	2500	7
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350	0.5	2600	5
400	0.5	2650	5
450	0.5	2700	5
500	0.5	2750	6
550	1.5	2800	6
600	1.5	2850	6.5
650	3	2900	6.5
700	3	2950	6
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800	4	3050	
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1850	5	4100	
1900	5	4150	
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2000	4.5	4250	
2050	4.5	4300	
2100	4.5	4350	
2150	5	4400	
2200	5	4450	
2250	5	4500	



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Client: Mark Holmes		SCALA PROBE	
Location: 233 Riwaka to Kaiteriteri Road		No: SP 4	A4
Tester: AJF	Date: 8-Jun-12	Job Number: 230444	Rev: 1

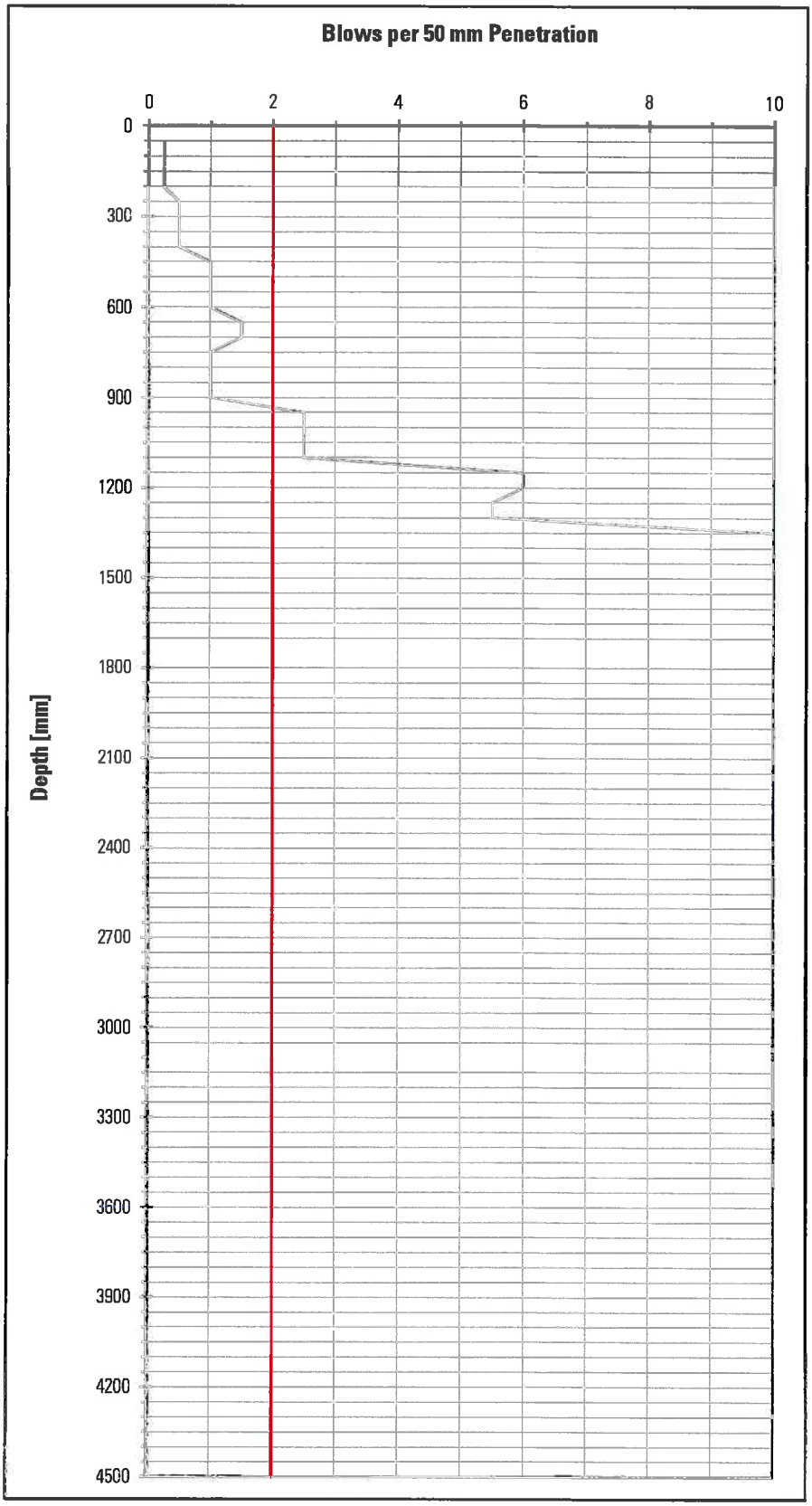
Site Description:

Refer attached site plan.

Notes:

Photo:

Depth (mm)	Blows (no.)	Depth (mm)	Blows (no.)
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100	0.25	2350	
150	0.25	2400	
200	0.25	2450	
250	0.5	2500	
300	0.5	2550	
350	0.5	2600	
400	0.5	2650	
450	1	2700	
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750	1	3000	
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1950		4200	
2000		4250	
2050		4300	
2100		4350	
2150		4400	
2200		4450	
2250		4500	



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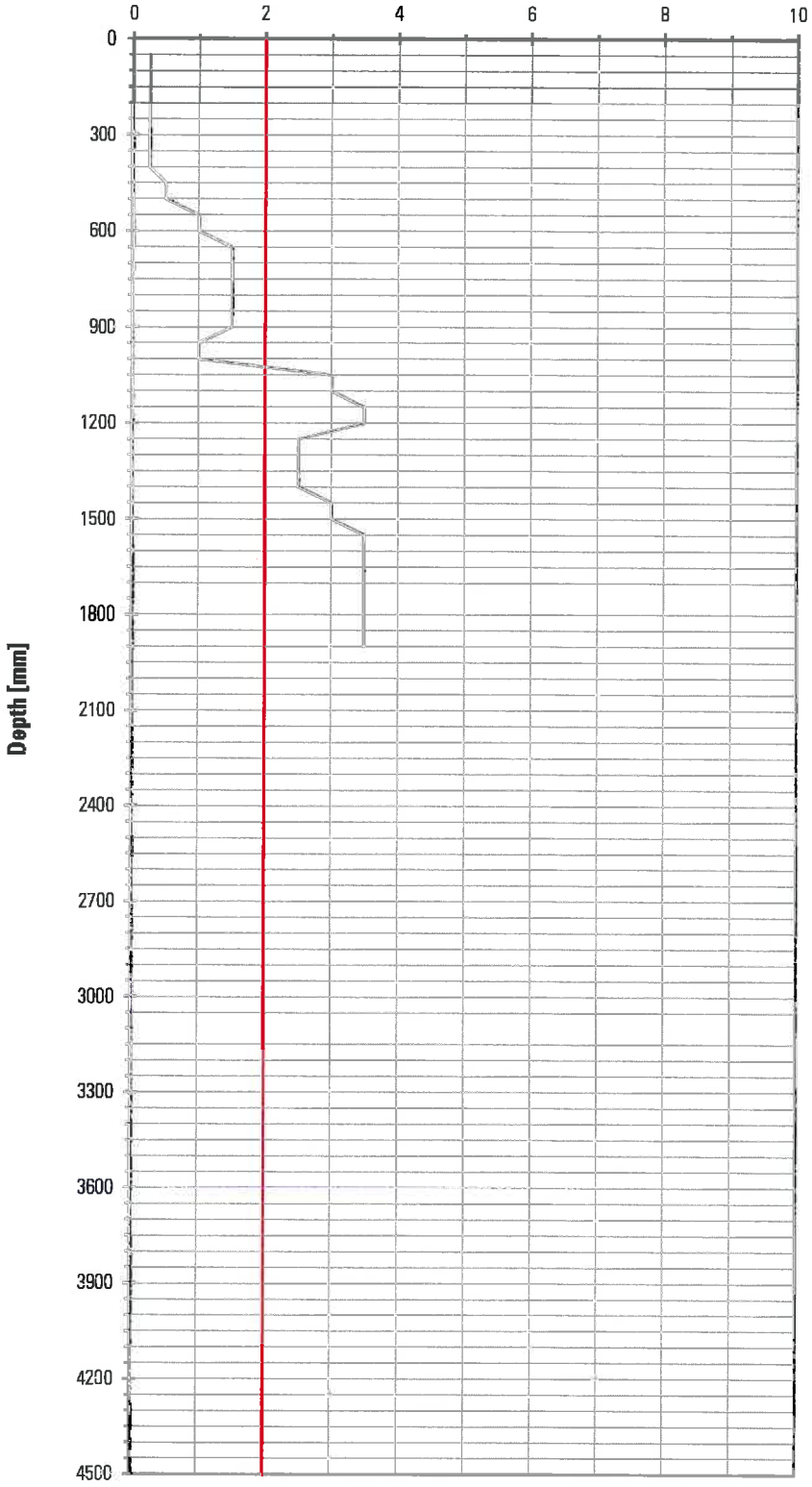
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Mark Holmes				
Location		No		
233 Riwaka to Kaiteriteri Road		SP 5		A4
Tester		Date	Job Number	Rev
AJF		8-Jun-12	230444	1

Site Description:

Refer attached site plan.

Notes:

Photo:



Depth (mm)	Blows (no.)	Depth (mm)	Blows (no.)
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100	0.25	2350	
150	0.25	2400	
200	0.25	2450	
250	0.25	2500	
300	0.25	2550	
350	0.25	2600	
400	0.25	2650	
450	0.5	2700	
500	0.5	2750	
550	1	2800	
600	1	2850	
650	1.5	2900	
700	1.5	2950	
750	1.5	3000	
800	1.5	3050	
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1850	3.5	4100	
1900	3.5	4150	
1950		4200	
2000		4250	
2050		4300	
2100		4350	
2150		4400	
2200		4450	
2250		4500	

PROBE DESCRIPTION:
9 kg Hammer falling half a metre to a steel anvil, driving a 16 mm diameter rod fitted with a 20 mm diameter cone.

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Client		SCALA PROBE	
Mark Holmes			
Location		No	
233 Riwaka to Kaiteriteri Road		SP 6	A4
Tester	Date	Job Number	Rev
AJF	8-Jun-12	230444	1

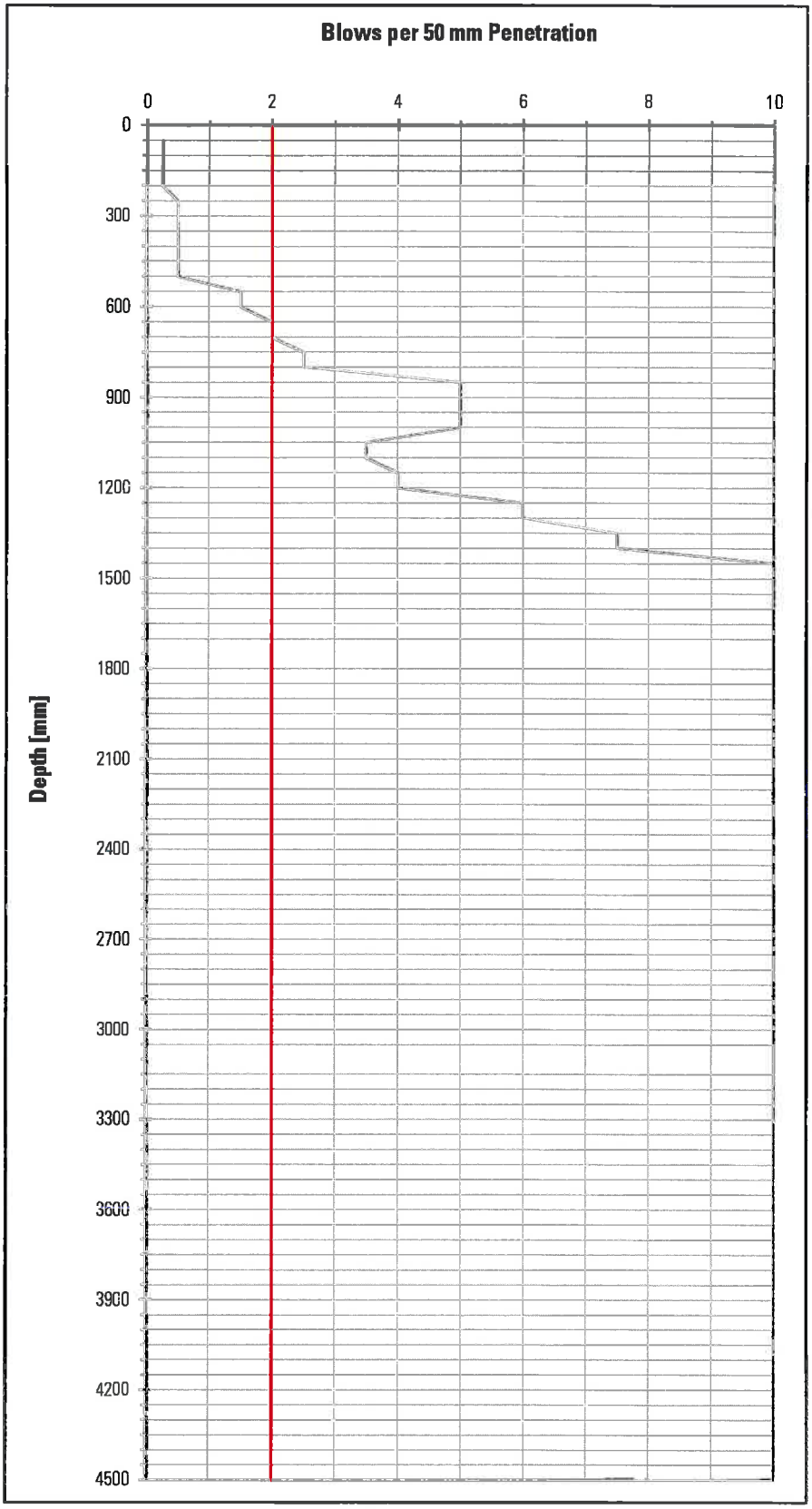
Site Description:

Refer attached site plan.

Notes:

Photo:

Depth (mm)	Blows (no.)	Depth (mm)	Blows (no.)
50	0.25	2300	
100	0.25	2350	
150	0.25	2400	
200	0.25	2450	
250	0.5	2500	
300	0.5	2550	
350	0.5	2600	
400	0.5	2650	
450	0.5	2700	
500	0.5	2750	
550	1.5	2800	
600	1.5	2850	
650	2	2900	
700	2	2950	
750	2.5	3000	
800	2.5	3050	
850	5	3100	
900	5	3150	
950	5	3200	
1000	5	3250	
1050	3.5	3300	
1100	3.5	3350	
1150	4	3400	
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1300	6	3550	
1350	7.5	3600	
1400	7.5	3650	
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1550		3800	
1600		3850	
1650		3900	
1700		3950	
1750		4000	
1800		4050	
1850		4100	
1900		4150	
1950		4200	
2000		4250	
2050		4300	
2100		4350	
2150		4400	
2200		4450	
2250		4500	



PROBE DESCRIPTION:
9 kg Hammer falling half a metre to a steel anvil, driving a 16 mm diameter rod fitted with a 20 mm diameter cone.

aurecon

Aurecon
PO Box 1545
Nelson 7040
New Zealand

Telephone: +64 3 539 0190
Email: nelson@aurecongroup.com

Client: **Mark Holmes**		SCALA PROBE	
Location: **233 Riwaka to Kaiteriteri Road**		No: **SP 7**	**A4**
Tester: **AJF**	Date: **8-Jun-12**	Job Number: **230444**	Rev: **1**

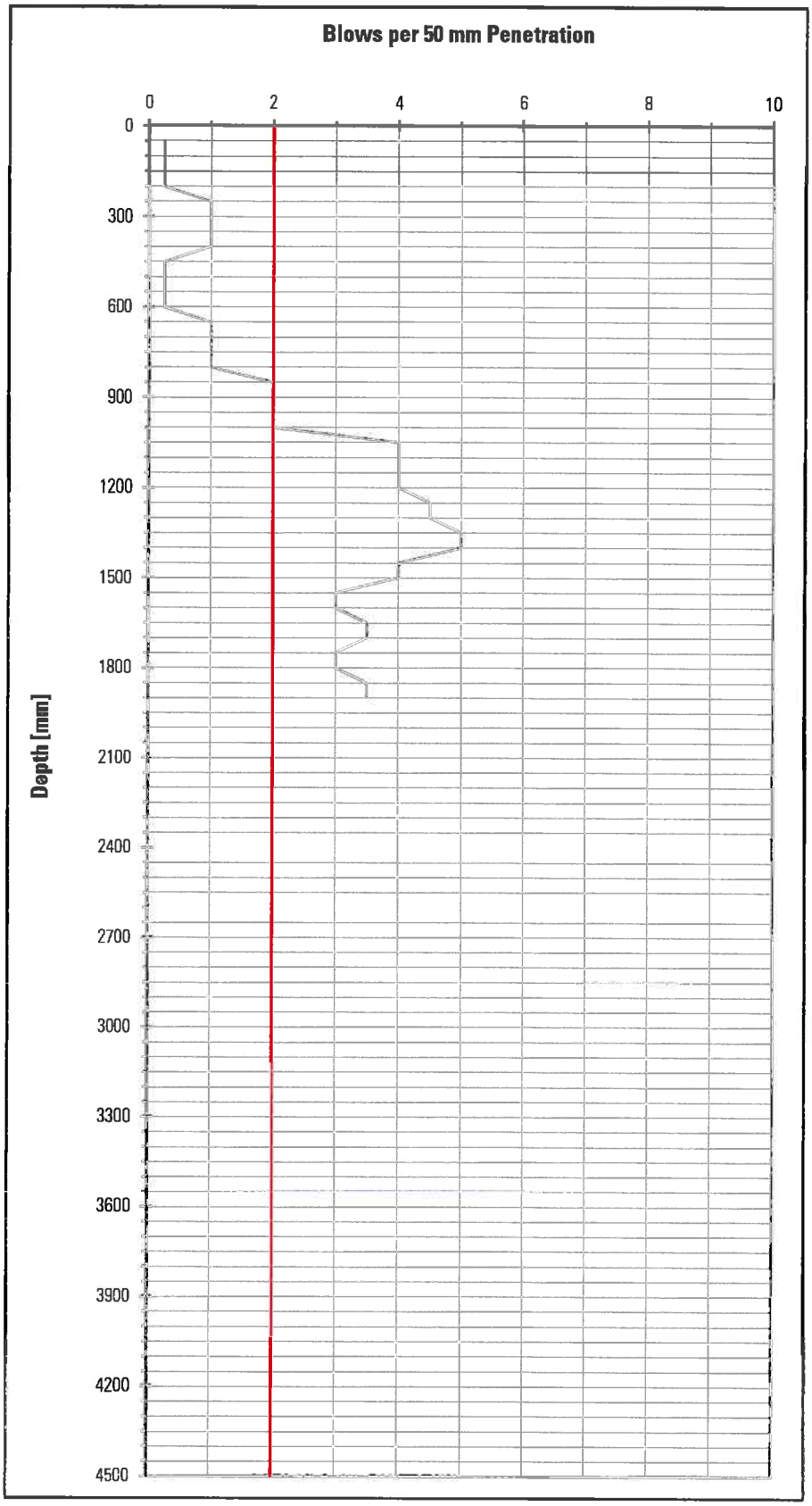
Site Description:

Refer attached site plan.

Notes:

Photo:

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50	0.25	2300	
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500	0.25	2750	
550	0.25	2800	
600	0.25	2850	
650	1	2900	
700	1	2950	
750	1	3000	
800	1	3050	
850	2	3100	
900	2	3150	
950	2	3200	
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1900	3.5	4150	
1950		4200	
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2200		4450	
2250		4500	



PROBE DESCRIPTION:
9 kg Hammer falling half a metre to a steel anvil, driving a 16 mm diameter rod fitted with a 20 mm diameter cone.

aurecon

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PO Box 1545
Nelson 7040
New Zealand

Telephone: +64 3 539 0190
Email: nelson@aurecongroup.com

Client		SCALA PROBE		
Mark Holmes				
Location		No		
233 Riwaka to Kaiteriteri Road		SP 8		A4
Tester	Date	Job Number	Rev	
AJF	8-Jun-12	230444	1	

RM120615
Writer's Direct Dial No. (03) 543 8474
Writer's E-mail: mike.mackiggan@tasman.govt.nz

9 November 2012

Mark & Susan Holmes
C/- Selwyn Light Surveyors Ltd
PO Box 145
Motueka 7143

Dear Sir/Madam

DECISION ON NON-NOTIFIED RESOURCE CONSENT APPLICATION NO. RM120615 – PROPOSED EARTHWORKS WITHIN THE COASTAL ENVIRONMENT AREA TO CONSTRUCT AN ACCESS TO A PROPOSED BUILDING PLATFORM AT 233 RIWAKA-KAITERITERI ROAD

Pursuant to Section 114 of the Resource Management Act 1991 ("the Act"), please find enclosed a copy of the Council's decision on your application for resource consent referred to above.

Section 357A of the Act provides you with the right to lodge an objection with the Council in respect of this decision and/or any associated conditions. Any such objection must be made in writing setting out the reasons for the objection and must be lodged with the Council, together with a deposit fee of $200.00 (GST inclusive), within 15 working days of receiving this letter.

At this stage the Council has not calculated the final costs of processing your application. Should the final costs exceed the deposit already paid, then as previously advised, you will be invoiced separately for these costs. Should the final costs be less than the deposit already paid, then you will receive a refund. Where the costs are equal to the deposit already paid, no further action is required. You will receive a letter shortly regarding the final costs of processing your application.

Please also note that this resource consent attracts a monitoring fee for which you will be invoiced separately. In addition, officers of the Council may also carry out site visits to monitor compliance with resource consent conditions.

You may commence your activity immediately unless you lodge an objection to this decision. However, it is important that you check the conditions of your consent carefully as some of them may require you to provide information and/or plans to the Council before you may commence your activity. In addition, in some cases you may also require other permits or building consents for your activity and these must be obtained before you can commence your activity.

Please note that under Section 125 of the Act, your consent will lapse in 5 years unless you have given effect to it before then.

Please feel free to contact me if you have any questions regarding any aspect of your consent or its conditions. My contact details are listed at the top of this letter.

Yours faithfully

Mike Mackiggan
Consent Planner, Natural Resources

RESOURCE CONSENT DECISION

Resource consent number: RM120615

Pursuant to Section 104C of the Resource Management Act 1991 ("the Act"), the Tasman District Council ("the Council") hereby grants resource consent to:

Mark Quentin Holmes and Susan Joy Holmes

(hereinafter referred to as "the Consent Holder")

Activity authorised by this consent: Earthworks within the Coastal Environment Area to construct an access to a building platform.

Location details:

Address of property:	233 (& 239) Riwaka-Kaiteriteri Road, Kaiteriteri
Legal description:	Lot 2 DP 362048 (& Lot 1 DP 8226)
Certificate of title:	252956 (& NL3D/1178)
Valuation number:	1933017303 (& 1933017200)
Location co-ordinates:	2509989 E, 6016693 N (New Zealand Map Grid Datum)

Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

CONDITIONS

1 Works and activities shall be carried out in accordance with the details contained in the consent application received on 10 August 2012 and as per the recommendations contained in Section 3 of the Aurecon Report Ref 230444-001 dated 29 July 2012 submitted in support of RM120615 except where inconsistent with these conditions (see Appendix A – Section 3 Aurecon Report).

2 A copy of this resource consent shall be available to contractors undertaking the works, and shall be produced without unreasonable delay upon request from a servant or agent of the Council.

3 The Consent Holder shall contact Council's Co-ordinator Compliance Monitoring at least 24 hours prior to commencing works for monitoring purposes.

4 The design and construction of any retained/surcharged walls shall be undertaken under the supervision of a Chartered Professional Engineer in line with the recommendations of a site-specific geotechnical report that will be required prior to lodging of any building consent application for construction.

Erosion and Sediment Control

5 Run-off and sediment control measures shall be of sufficient size, be suitably constructed for the purpose and maintained, so that adverse effects of stormwater contamination and sediment run-off beyond the work site are no more than minor.

6 A suitably qualified and experienced person shall certify that run-off and sediment control measures are installed prior to the commencement of work.

This certification may be in the form of dated digital photographs and shall be submitted to Council's Co-ordinator Compliance Monitoring a minimum of 24 hours prior to the commencement of work.

7 As far as is practicable, remediation works should not be carried out during periods of wet weather. All soil and erosion control measures shall be checked for integrity prior to any forecast heavy rain.

8 The Consent Holder shall take all practicable measures to limit the discharge of sediment with stormwater run-off to water or land where it may enter water during and after the construction period. In particular, the earthworks should be carried out during fine weather periods when the likelihood of erosion and sedimentation will be less.

9 All exposed ground shall be reinstated within 6 months of completion of the works so that erosion/downhill movement of soil is limited as much as is practical. This shall include supplemental planting of appropriate vegetation that enhances the stability and minimises surface erosion.

10 Surplus excavated material shall be disposed of on-site. Any surplus material must be placed on any slopes so that no soil material or vegetation shall be left where it may enter water or result in the contamination or destruction of any natural/stream habitat.

11 Pursuant to Section 125 of the Act this consent shall lapse 5 years after the date of this consent unless either the consent is given effect to, or the Council has granted an extension pursuant to Section 125(1)(b) of the Act. Once the consent has been given effect to, all works shall be completed within 1 year.

***Advice Note**:*
The consent is given effect to once excavations commence.

Review

12 Pursuant to Section 128 of the Resource Management Act 1991, the Consent Authority may review the conditions of this consent by serving notice for any of the following purposes:

(a) to deal with any adverse effect on the environment that may arise from the exercise of this consent, and which is appropriate to deal with at a later stage;

(b) to require the Consent Holder to adopt the best practicable option to remove or reduce any adverse effect on the environment;

(c) to assess the appropriateness of imposed compliance standards, monitoring regimes and monitoring frequencies and to alter these accordingly;

(d) to change the compliance standards imposed by conditions of this consent to standards that are consistent with any relevant Regional Plan, District Plan, or Act of Parliament.

ADVICE NOTES

1 With Separation Point Granites, there is the potential for erosion and downhill movement of soil material during high rainfall events. Suitable mitigation measures should be

implemented, and conditions of consent have been imposed accordingly to ensure that run-off/erosion is limited during and after the works.

2 Officers of the Council may also carry out site visits to monitor compliance with resource consent conditions.

3 Access by the Council officers or agents to the property is reserved pursuant to Section 332 of the Resource Management Act 1991.

4 Monitoring of this resource consent will be undertaken by the Council as provided for by Section 35 of the Act and a one-off fee has already been charged for this monitoring. Should the monitoring costs exceed this fee, the Council reserves the right to recover these additional costs from the Consent Holder. Costs can be minimised by consistently complying with conditions, thereby reducing the necessity and/or frequency of Council staff visits.

5 The proposed development is near known archaeological sites. If during any site disturbance works, any material is found that may have any archaeological significance, all work should stop immediately and the Consent Holder should contact Tiakina te Taiao, the Tasman District Council and the New Zealand Historic Places Trust, who should be consulted so that appropriate action pursuant to the Historic Places Act 1993 is undertaken.

6 The Consent Holder should meet the requirements of the Council with regard to all Building and Health Bylaws, Regulations and Acts.

7 Plans attached to this consent are (reduced) copies and therefore will not be to scale and may be difficult to read. Originals of the plans referred to are available for viewing at the Richmond office of the Council. Copies of the Council Standards and documents referred to in this consent are available for viewing at the Richmond office of the Council.

REASONS FOR THE DECISION

Background

The proposed earthworks involve volumes of material of in the nature of 2000 cubic metres of cut excavation and 200 cubic metres of fill and cuts greater than 2.0 metres in height, to establish an access track to a proposed building site to be created as part of a subdivision under RM110930. The earthworks may additionally involve an area of greater than 1000 square metres within any 12 month period and within the CEA delineation, depending upon final construction alignment and methodology.

The application includes a detailed geotechnical engineering report by Aurecon NZ Ltd that concludes, subject to appropriate conditions being imposed, the right of way can be constructed with less than a minor effect on slope instability.

The proposed right of way alignment now traverses the neighbouring property, and the written approval of the owners affected (H A & MLT Den Boon) has been obtained.

Tasman Resource Management Plan ("TRMP") Area and Rules Affected

According to the TRMP the following apply to the application site:

Area(s): Land Disturbance Area 2
Zone: Rural 2 (Deferred Rural Residential)
Coastal Environment Area

The activity authorised by this resource consent does not comply with Land Disturbance Area 2 Permitted Activity Rule 18.5.3.1 TRMP and is deemed to be a **Restricted Discretionary Activity** in accordance with Rule 18.5.3.3 of the TRMP as the earthworks may involve an area of greater than 1000 square metres within any 12 month period and within the CEA delineation, depending upon final construction alignment and methodology.

Principal Issues (Actual and Potential Effects on the Environment)

The principal issue(s) associated with the proposed activity involve the actual and potential effects on the environment. For this application these were:

(a) potential for failure or slip of earthwork excavations; and
(b) potential visual effects; and
(c) cultural heritage.

The Council considers that the adverse effects of the activity on the environment will be no more than minor for the following reasons:

(a) the earthworks involve a relatively small volume of material, the cuts will be suitably battered or retained by walls, and will be undertaken under the supervision of a suitably qualified and experienced Civil Engineer. Any effects can be mitigated by appropriate conditions of consent requiring engineered construction;

(b) the visual effects will be temporary and confined to the construction period only. Access roads are anticipated in this area to access building sites;

(c) the site has been previously modified and there are considered to be no new effects in relation to cultural heritage. There are no identified cultural heritage sites in the vicinity showing on Council's database. An Advice Note reminds the applicants of the need to mitigate effects on cultural heritage and notify the relevant iwi and authorities in the event of any discovery.

I am satisfied that on completion of the works there will be no adverse effects upon the immediately adjoining owners, or upon the wider environment.

Relevant Statutory Provisions

In considering this application, the Council has had regard to the matters outlined in Section 104 of the Act. In particular, the Council has had regard to the relevant provisions of the following planning documents:

(a) the Tasman Regional Policy Statement (TRPS);
(b) the Tasman Resource Management Plan (TRMP).

Most of the objectives and policies contained within the TRPS are mirrored in the TRMP. The activity is considered to be consistent with the relevant objectives and policies contained in Chapter 12 of the TRMP.

Part II Matters

The Council has taken into account the relevant principles outlined in Sections 6, 7 and 8 of the Act and it is considered that granting this resource consent achieves the purpose of the Act as presented in Section 5.

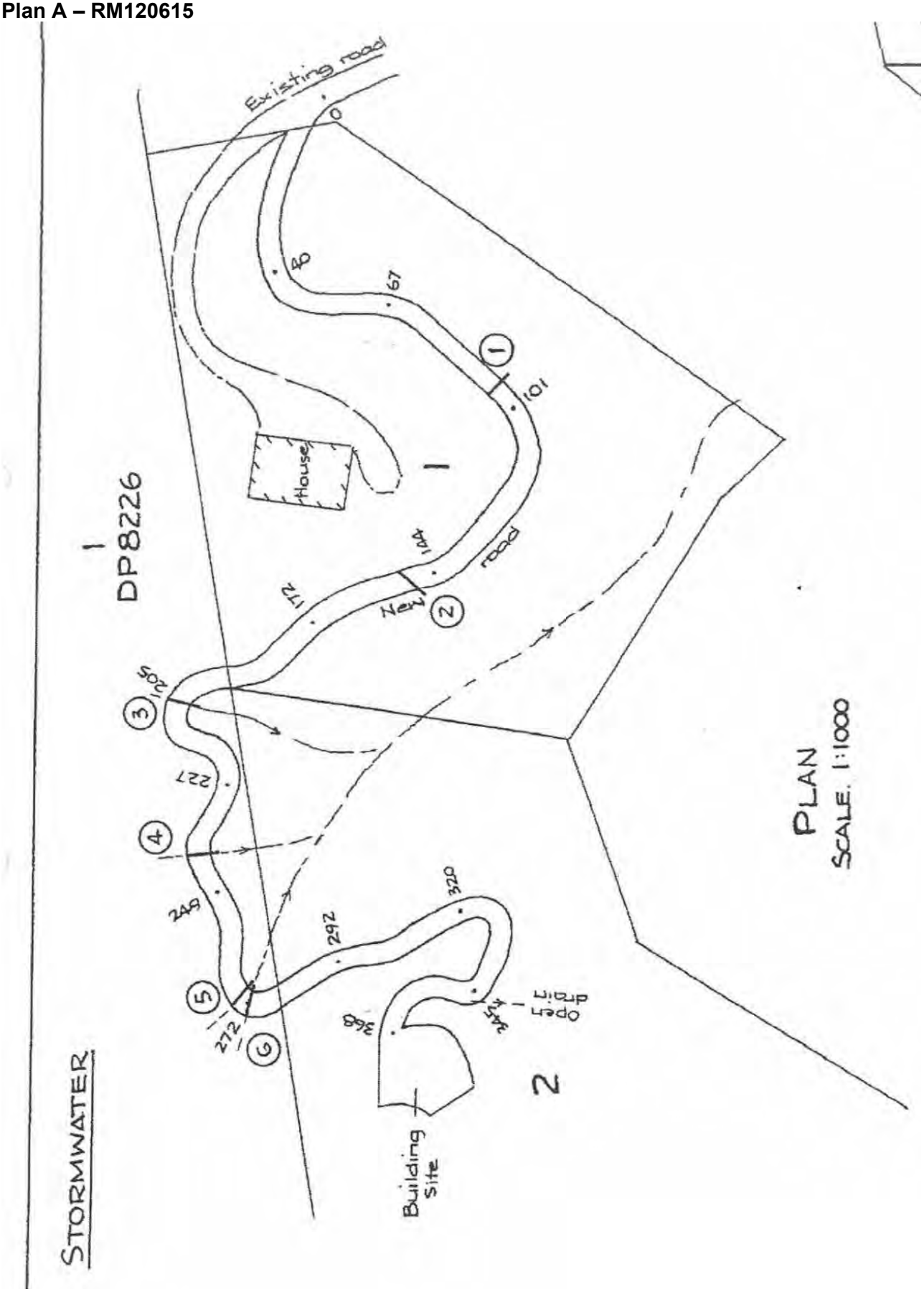
Notification and Affected Parties

The adverse environmental effects of the activity are considered to be no more than minor. The Council's Resource Consents Manager has, under the authority delegated to him, decided pursuant to Section 95 of the Act that the application did not require public or limited notification.

This consent is granted on 9 November 2012 under delegated authority from the Tasman District Council by:

Mike Mackiggan
Consent Planner, Natural Resources

Plan A – RM120615



Appendix A – Section 3 Aurecon Report

3. Recommended Engineering Conditions

Based on the engineering conditions outlined above, the following engineering recommendations are provided to assist TDC in the preparation of consent conditions.

- The access should be constructed in general accordance with the engineering considerations outlined in the Aurecon NZ Ltd report, Geotechnical Assessment of Right of Way Stability – 233 Riwaka to Kaiteriteri Road, June 2012;
- The access should be formed at a maximum grade of 1 in 5 and shall have an all weather surface;
- Cut slopes in the residual soil should be no steeper than 1H: 1V. Cuts in the weathered granite should be no steeper than ½ H: 1V;
- Cuts greater than 2.5 m deep should be inspected during construction by an engineer experienced in earthworks to confirm the stability of cuts and the requirement for any additional works;
- cut off vee-drains should be constructed upslope of the cuts to intercept stormwater runoff and redirect this away from the cut face;
- Filling should be carried out in accordance with NZS4431. Benching to key the fills into the ground is required wherever the existing ground slope is steeper than 4H:1V and subsoil drains should be laid along benches wherever seeps are encountered;
- Installation of a subsoil drain on the uphill side of the northernmost portion of the access should be provided.
- Stormwater runoff from the Right of Way should be discharged in a controlled manner. A continuous water table should be formed along the inside (upslope) edge of the Right of Way and the surface of the Right of Way graded to provide positive crossfall towards the water table.
- Culverts should be appropriately sized for the contributing catchment in accordance with the TDC Engineering Standards and Policies and should be installed along the Right of Way at intervals no greater than 75 m.
- Bagged headwalls should be provided at both the inlet and outlet of all culverts. Scour protection and energy dissipation in the form of rockwork should be placed at culvert outlets.

View Instrument Details

Instrument No.	9971556.5
Status	Registered
Date & Time Lodged	12 Feb 2015 15:21
Lodged By	Kennedy, Hamish
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991

Affected Computer Registers	Land District
654608	Nelson

Annexure Schedule: Contains 3 Pages.

Signature

Signed by Hamish Kennedy as Territorial Authority Representative on 12/02/2015 03:19 PM

***** End of Report *****

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IN THE MATTER of the Resource Management Act 1991

TASMAN DISTRICT COUNCIL

CONSENT NOTICE UNDER SECTION 221 RESOURCE MANAGEMENT ACT 1991

TASMAN DISTRICT COUNCIL CONSENT NO. RM 110930V1

Mark Quentin HOLMES, Susan Joy HOLMES and KENNEDY & ASSOCIATES TRUSTEE COMPANY LIMITED (hereinafter called the Owners), being the registered proprietors of an estate in fee simple in the Nelson Registration District, being all of Computer Freehold Register 654608.

The **TASMAN DISTRICT COUNCIL** hereby gives notice pursuant to Sections 108(2)(d) and 221 of the Resource Management Act 1991 that the subdivision consent in respect of Land Transfer Plan No.474985 being a subdivision of all Computer Freehold Register 252956 (Nelson Land Registration District) was granted subject to the following conditions being complied with in perpetuity

The Owners and their successors in title agree that:

(a) Building Location

any dwelling to be constructed on Lot 2 Deposited Plan 474985 be located within the building location area shown marked "J" on Deposited Plan 474985.

(b) Height

the maximum height of the dwelling be 6.5 metres

(c) Design and Appearance

the dwelling be designed and constructed to avoid, remedy or mitigate the effects of the design and appearance of the dwelling, including its scale, height, materials, landscaping and colour, on the amenity and natural character of the locality, having regards to the effects on:

(i) natural features;
(ii) landscape and seascape values;
(iii) significant natural values;
(iv) nature of any existing development.

(d) Geotechnical

(i) the proposed residence shall be positioned within the "Building Area Subject to Specific Engineering Design" shown on the on the Geotechnical Site Plan dated 26 March 2014 attached to this Consent Notice. Residential foundations located outside of the building area will require additional specific investigation and design by a Chartered Professional Engineer practising in geotechnical engineering. Note that other Tasman District Council conditions may limit development within the designated area.

(ii) *all foundations and retaining walls shall be specifically investigated, designed and inspected, or reviewed by a Chartered Professional Engineer practising in geotechnical engineering and experienced in foundation design.*

(iii) *an advanced secondary treated wastewater system should be designed by suitably qualified wastewater system designer accredited by Tasman District Council and installed as per the specifications and guidelines of the manufacture, with secondary treated effluent directed to the "land application area" as shown on the Geotechnical Site Plan dated 26 March 2014 attached to this Consent Notice.*

(e) Telecommunications Servicing

the owners of Lot 2 Deposited Plan 474985 shall be responsible for providing telecommunications services to the lot, which have not been provided at the time of subdivision.

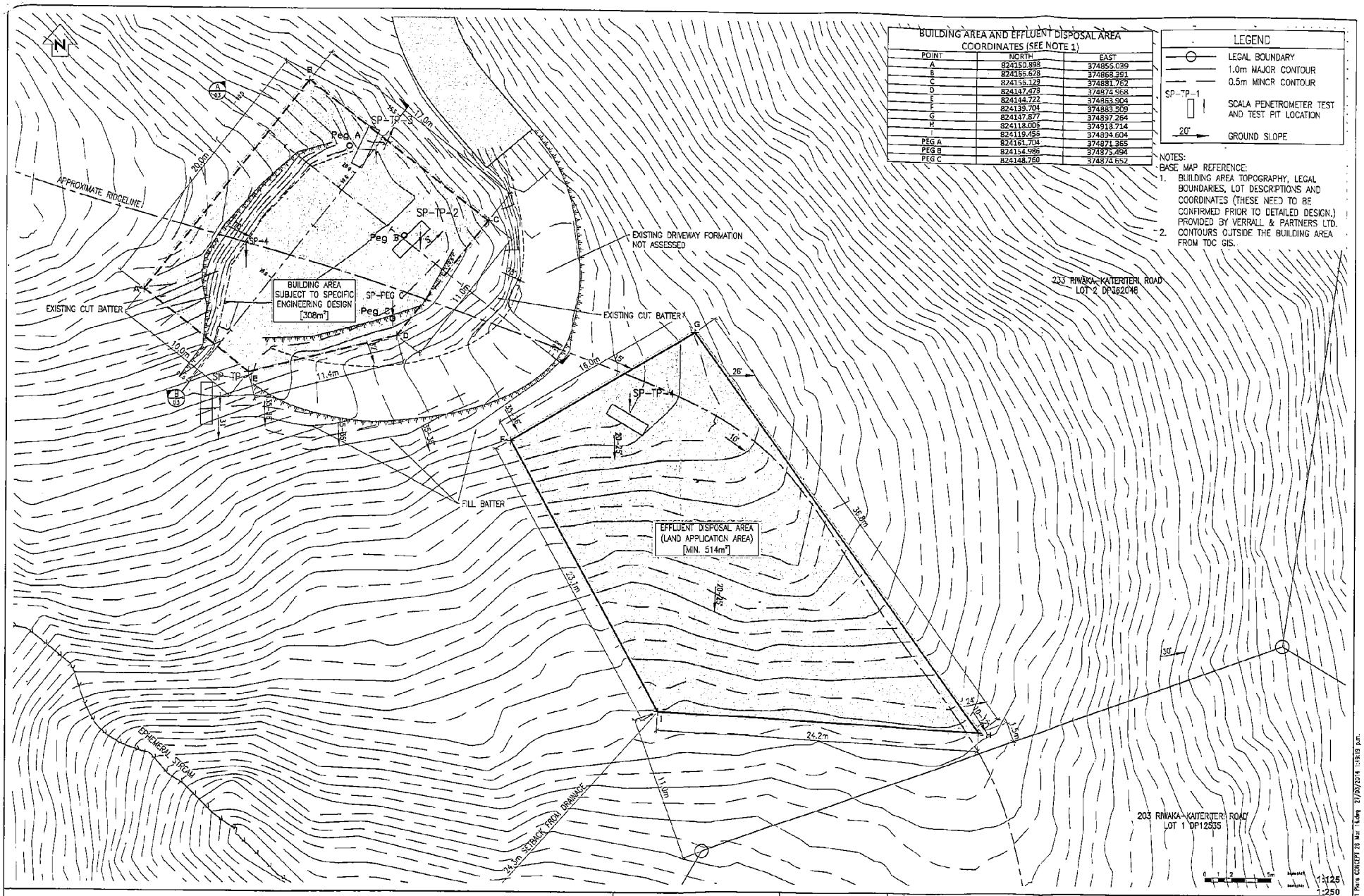
Dated this 16th day of January 2015

SIGNED by an Authorised Officer of the)
TASMAN DISTRICT COUNCIL under)
delegated authority given pursuant to Section)
715 of the Local Government Act 1974)

TASMAN DISTRICT COUNCIL
M. D. Morris
Authorised Officer

SIGNED by the Owners)
Mark Quentin Holmes, Susan Joy Holmes)
and **KENNEDY & ASSOCIATES TRUSTEE**)
COMPANY LIMITED)
in the presence of:)

Yolyn Shona Blows
Office Administrator
Motueka



MARK HOLMES

233 RIWAKA-KAITERITERI ROAD, RIWAKA

GEOTECHNICAL ASSESSMENT OF BUILDING AREA AND EFFLUENT DISPOSAL AREA

DETAILED GEOTECHNICAL SITE PLAN

Nelson Consulting Engineers Ltd
CIVIL - GEOTECHNICAL - STRUCTURAL

140 Collingwood Street
Nelson

Phone 03 5394145
Fax 03 5394146
Email john@nce.co.nz

Rev	Comment	Date	Initial
	AC		PF

Drawing No	14494.0.02
Job No	14494
Status	CONCEPT
Sheet No	02 OF 03
Date	26 MAR 2014
Revision	

M:\Holmes Geotechnical Plans CONCEPT 26 Mar 14.dwg 27/03/2014 1:19:19 p.m.

Annexure Schedule: Page:3 of 3

Code Compliance Certificate BC151182

Form 7: Section 95, Building Act 2004

The building

Street address of building: 233 Riwaka-Kaiteriteri Road, Kaiteriteri

Legal description of land where building is located: Lot 2 DP 474985

Valuation number: 1933017305

Current, lawfully established, use: Dwelling

Year first constructed: 2017

The owner

Name of owner: Holmes Mark Quentin & Holmes Susan Joy

Mailing address: 233 Riwaka-Kaiteriteri Road, RD 2, Motueka 7197

Daytime: 035447873

Email address: jpetersen@mikegreerhomes.co.nz

First point of contact for communications with the council/building consent authority:
Full Name: Mike Greer Homes

Mailing Address: PO Box 3710, Richmond 7050

Phones: 035447873

Email: jpetersen@mikegreerhomes.co.nz

Building work

Building consent number: 151182 Issued by: Tasman District Council

Construct a new dwelling with I/A garaging: Intended Use: Housing - detached

Code compliance

The building consent authority named below is satisfied, on reasonable grounds, that —

(a) the building work complies with the building consent.

TASMAN DISTRICT
ISSUED PURSUANT TO
DELEGATED AUTHORITY
ON BEHALF OF

9/06/2017

COUNCIL

Signature Position Date: 9/06/17
On behalf of: Tasman District Council

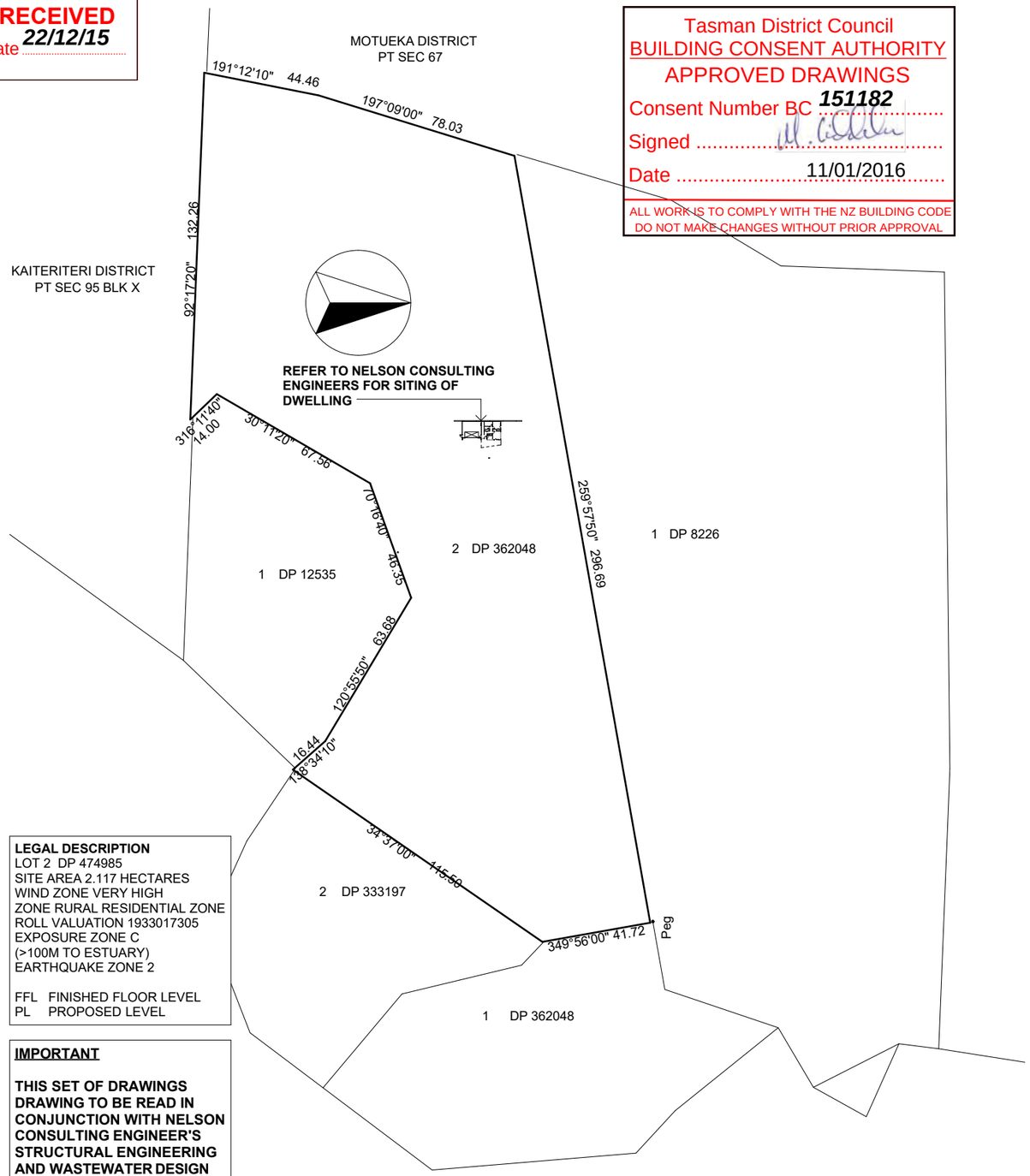
BC 151182

Tasman District Council - Approved

Tasman District Council
BUILDING CONSENT AUTHORITY
RECEIVED
Date 22/12/15

Tasman District Council
BUILDING CONSENT AUTHORITY
APPROVED DRAWINGS
Consent Number BC 151182
Signed .....
Date 11/01/2016
ALL WORK IS TO COMPLY WITH THE NZ BUILDING CODE
DO NOT MAKE CHANGES WITHOUT PRIOR APPROVAL

8/01/2016



LEGAL DESCRIPTION
LOT 2 DP 474985
SITE AREA 2.117 HECTARES
WIND ZONE VERY HIGH
ZONE RURAL RESIDENTIAL ZONE
ROLL VALUATION 1933017305
EXPOSURE ZONE C
(>100M TO ESTUARY)
EARTHQUAKE ZONE 2

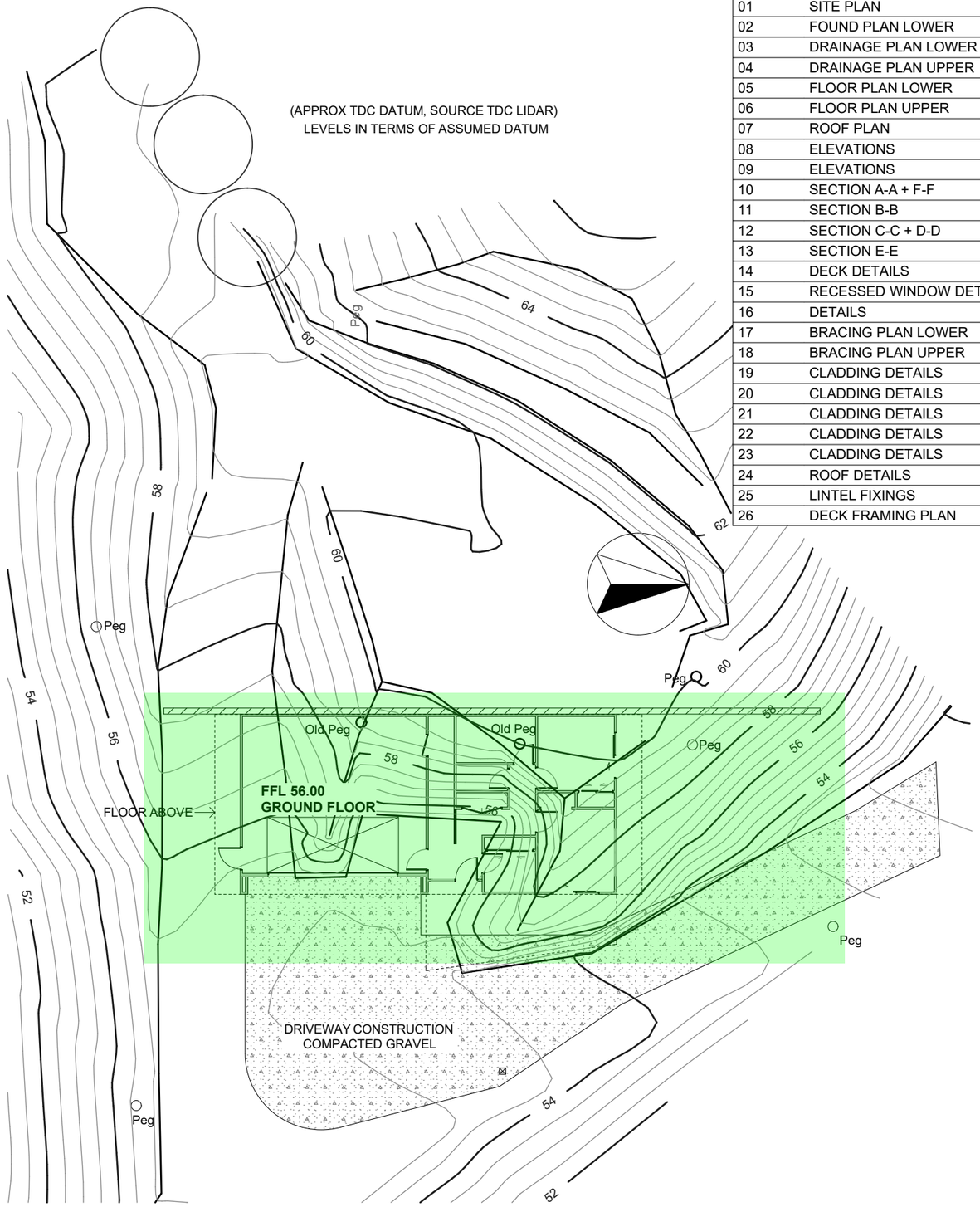
FFL FINISHED FLOOR LEVEL
PL PROPOSED LEVEL

IMPORTANT

THIS SET OF DRAWINGS DRAWING TO BE READ IN CONJUNCTION WITH NELSON CONSULTING ENGINEER'S STRUCTURAL ENGINEERING AND WASTEWATER DESIGN DRAWINGS. BUILDING LOCATION SITED BY NELSON CONSULTING ENGINEERS

LOCATION PLAN 1:2000

(APPROX TDC DATUM, SOURCE TDC LIDAR)
LEVELS IN TERMS OF ASSUMED DATUM



SITE PLAN 1:200

Sheet Index

Layout...	Layout Name
01	SITE PLAN
02	FOUND PLAN LOWER
03	DRAINAGE PLAN LOWER
04	DRAINAGE PLAN UPPER
05	FLOOR PLAN LOWER
06	FLOOR PLAN UPPER
07	ROOF PLAN
08	ELEVATIONS
09	ELEVATIONS
10	SECTION A-A + F-F
11	SECTION B-B
12	SECTION C-C + D-D
13	SECTION E-E
14	DECK DETAILS
15	RECESSED WINDOW DETAILS
16	DETAILS
17	BRACING PLAN LOWER
18	BRACING PLAN UPPER
19	CLADDING DETAILS
20	CLADDING DETAILS
21	CLADDING DETAILS
22	CLADDING DETAILS
23	CLADDING DETAILS
24	ROOF DETAILS
25	LINTEL FIXINGS
26	DECK FRAMING PLAN

mikegreerhomes LTD
© Mike Greer Homes Ltd
PHONE: (03) 544 7873
ADDRESS: Shop 3, 321 Lower Queen Street, Richmond
WEB: www.mikegreerhomes.co.nz

JOB TITLE :
MARK AND SUE HOLMES
233 RIWAKA-KAITERITERI RD
RIWAKA

DRAWING TITLE :
SITE PLAN

LEGAL DESCRIPTION :
Lot : 2 Dp : 474985

NOTES :
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work

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DATE OF ISSUE	DESIGNER		SHEET
21/12/2015	JP,MGH		01
AMENDMENT DATE	**VERSION**	**JOB #**	
21/12/2015	V1	582	0F 26

BC 151182

Tasman District Council - Approved

8/01/2016

Tasman District Council
BUILDING CONSENT AUTHORITY
RECEIVED
Date 8/01/2016

DRAINAGE NOTES

SEWER LINE

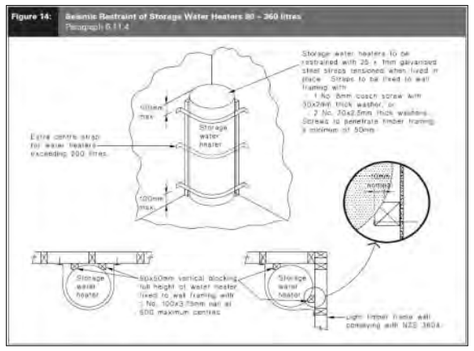
STORMWATER LINE

GT - GULLY TRAP
TV - TERMINAL VENT
DP - DOWN PIPE
IJ - INSPECTION JOIN
IB - INSPECTION BEND

WASTE SIZES	MIN GRADIENT
WC'S 100ø	1:60
SHOWERS 40ø	1:40
BATH 40ø	1:40
BASINS/SINK 40ø	1:40

WASTEWATER DESIGNED TO G13 FOUL WATER ACCEPTABLE SOLUTION AS1 SANITARY PLUMBING.

STORMWATER DESIGNED TO E1AS1 SURFACE WATER.

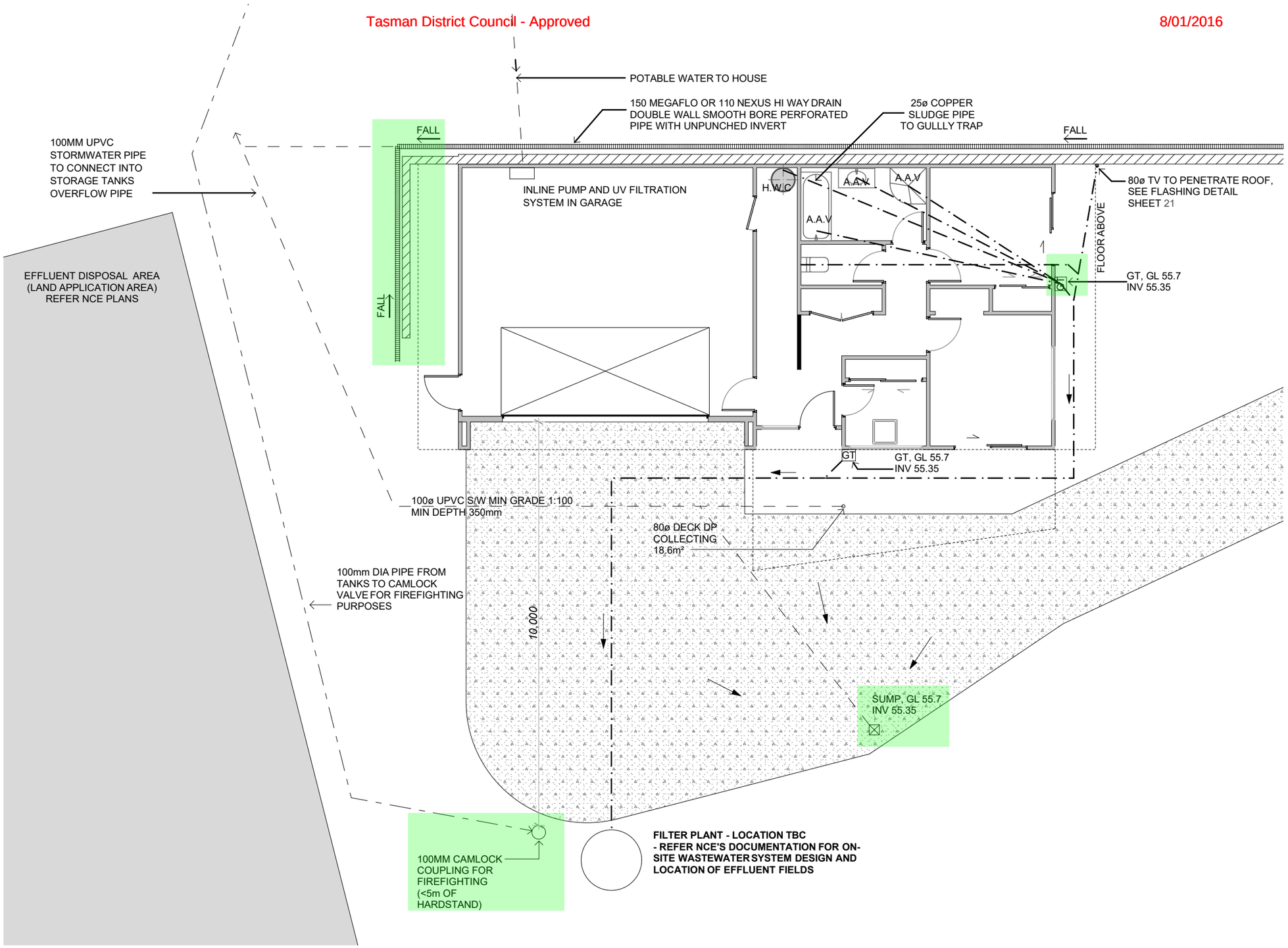


ENSURE HOT WATER SUPPLY TO SANITARY FIXTURES IS TEMPERED AND FLOW RATES AS PER TABLE 3

Table 3: Acceptable Flow Rates to Sanitary Fixtures
Paragraph 6.3.1

Sanitary fixture	Flow rate and temperature l/s and °C	How measured
Bath	0.3 at 45°C	Mix hot and cold water to achieve 45°C
Sink	0.2 at 60°C* (hot) and 0.2 (cold)	Flow rates required at both hot and cold taps but not simultaneously
Laundry tub	0.2 at 60°C* (hot) and 0.2 (cold)	Flow rates required at both hot and cold taps but not simultaneously
Basin	0.1 at 45°C	Mix hot and cold water to achieve 45°C
Shower	0.1 at 42°C	Mix hot and cold water to achieve 42°C

* The temperatures in this table relate to the temperature of the water used by people in the daily use of the fixture.
Note:
The flow rates required by Table 3 shall be capable of being delivered simultaneously to the kitchen sink and one other fixture.



DRAINAGE PLAN LOWER **1:100**

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233 RIWAKA-KAITERITERI RD
RIWAKA

DRAWING TITLE :
DRAINAGE PLAN LOWER

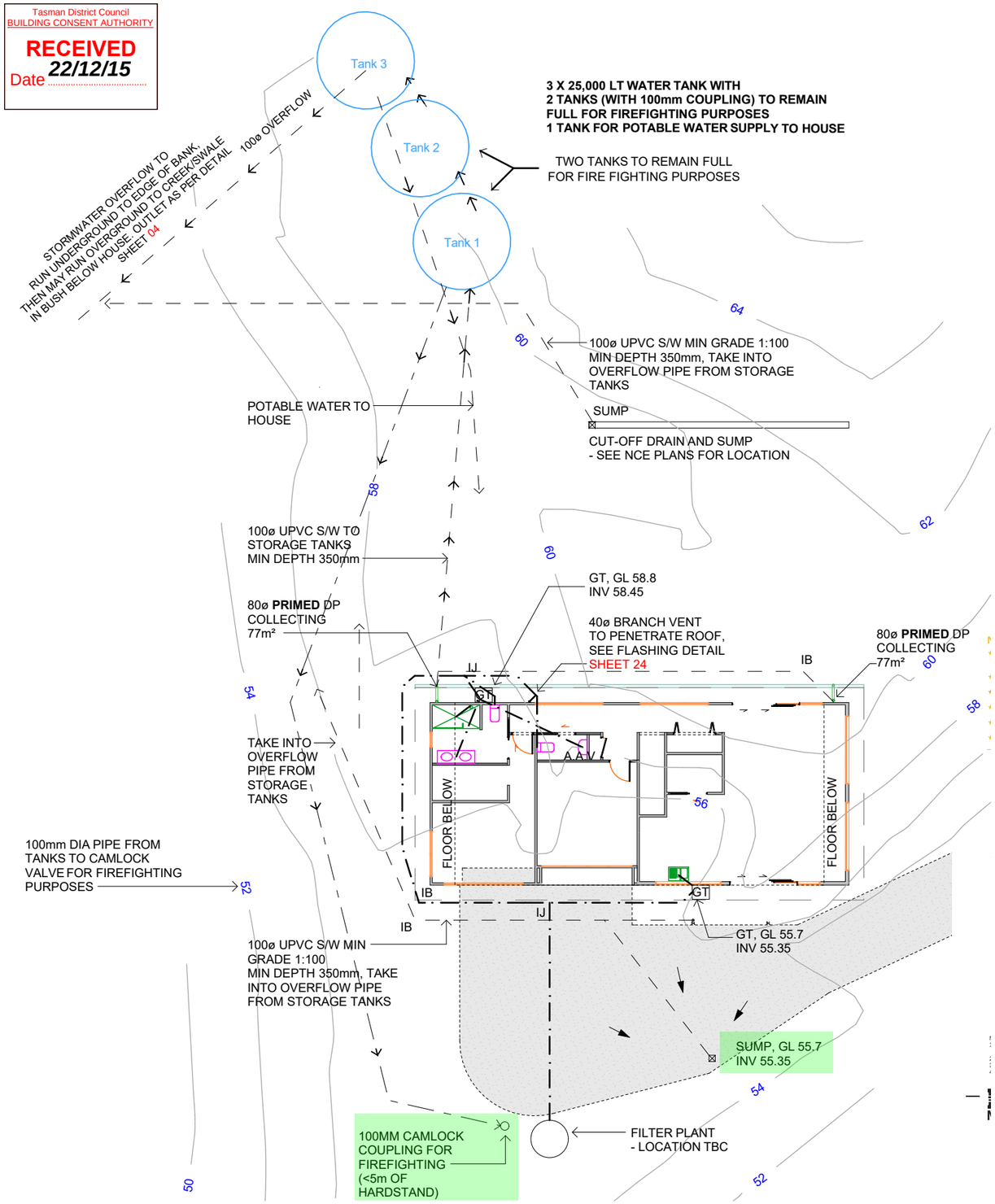
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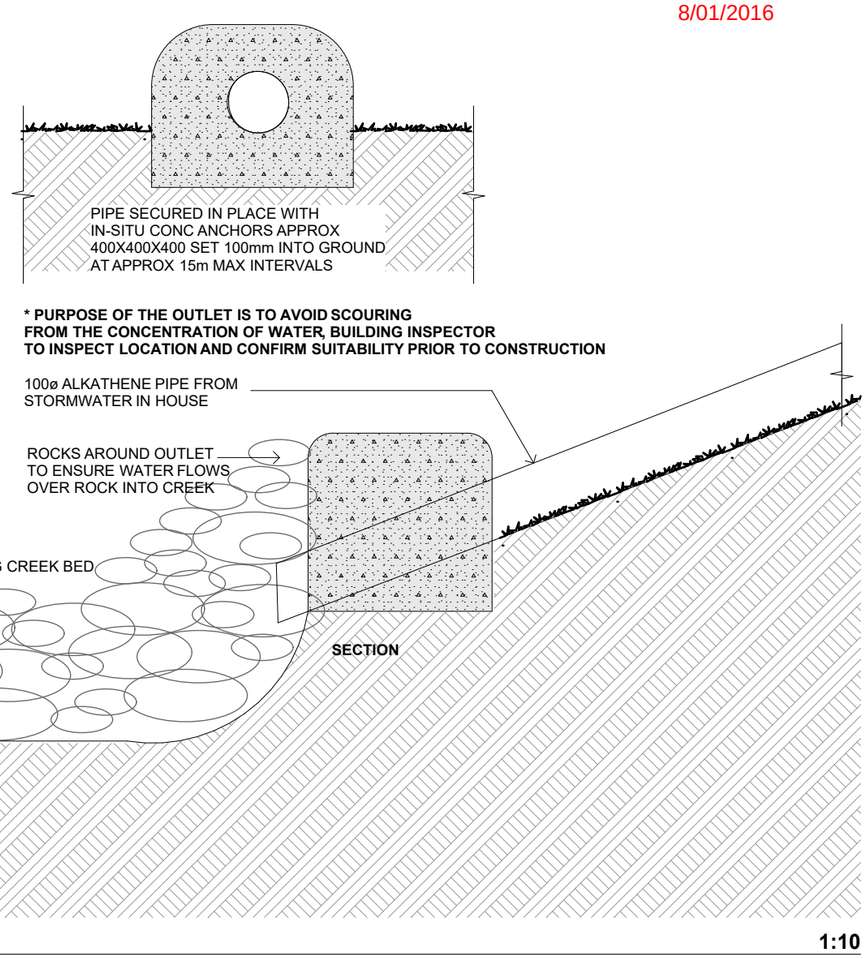
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DRAINAGE PLAN UPPER 1:200



OVERFLOW PIPE OUTLET 1:10

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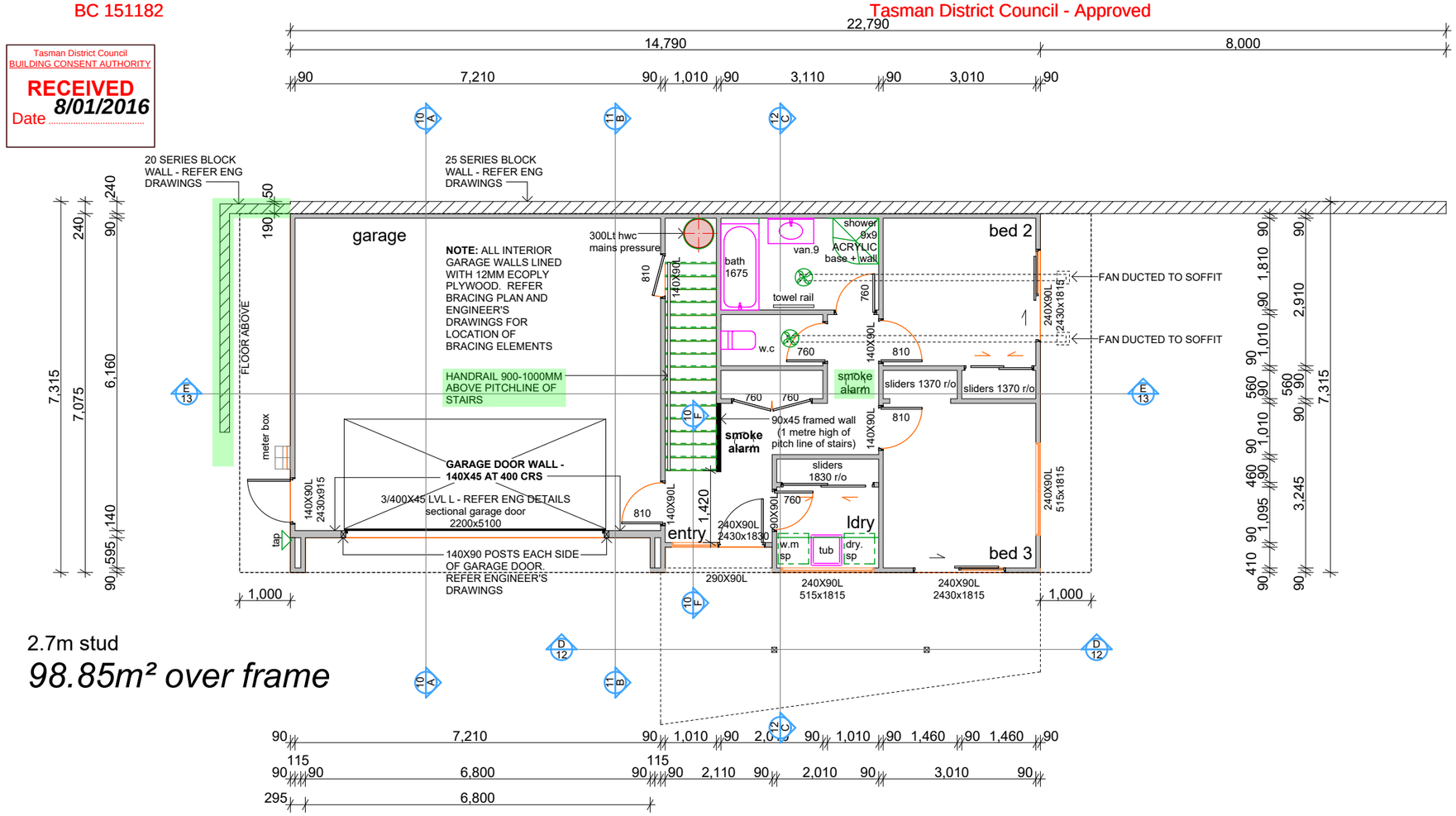
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BC 151182

Tasman District Council - Approved

Tasman District Council
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2.7m stud

98.85m² over frame

FLOOR PLAN LOWER

1:100

LEGEND

smoke alarm — SMOKE DETECTOR

ELECTRICAL METER BOARD

GENERAL: 8/01/2016
ALL WORK TO COMPLY WITH TERRITORIAL AUTHORITY REQUIREMENTS AND THE RELEVANT SECTIONS OF THE NEW ZEALAND BUILDING CODE - NZS 3604 2011.
CONTRACTOR TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING WORK.ALL DIMENSIONS ARE TO FRAMING LINES.

FRAMING TIMBER:

ALL TIMBER WALL AND FLOOR FRAMING TO BE DOUGLAS FIR (SG 8)

TIMBER WALL FRAMING CALCULATED USING NZS 3604 (2011) FOR SG8 TIMBER.
ALL EXTERIOR WALL STUDS = H1.2
ALL INTERIOR WALL FRAMING = H1.2
CAVITY BATTENS = H3.1
ROOF FRAMING = H1.2
PURLINS=H1.2
ALL FRAMING TIMBER TO BE KILN DRIED

STUD SIZES
TIMBER WALL FRAMING CALCULATED USING NZS 3604 2011 FOR SG8 TIMBER -**VERY HIGH** WIND ZONE

EXTERNAL LOADBEARING STUDS
STUDS UP TO 2.7m 90X45 AT 300 MAX CRS (EXCEPT GARAGE DOOR WALL AS NOTED)

ALL NON LOAD BEARING (PARTITION) WALLS 90X45 AT 600 MAX CRS
-ALL WITH DWANGS AT 800 CRS VERT

INSULATION
EXTERNAL WALLS R 2.8 WALL BATTS.

ROOF- R4 BATTS.

FLOOR- NO INSULATION REQUIRED TO SLAB, 'EXPOL R1.8 60mm BLACK EPS TO ENTIRE TIMBER FLOOR.

LININGS
10mm GIB TO WALLS, 13mm GIB TO CEILINGS, GIB AQUALINE TO BATHROOM -PAINT BATHROOMS AND L'DRY WITH AN ENAMEL ACRYLIC UNDERCOAT.

INTERNAL DOORS
-ALL INTERNAL DOORS ARE 810X1980 PANELS UNLESS OTHERWISE SPECIFIED
-REVEALS TO BE H1.2 TIMBER WITH 40X12 TIMBER ARCHITRAVES.

HOB
ENSURE THAT HOB IS POSITIONED 50mm MIN FROM GIB WALL.
MIN 150mm HIGH UPSTAND OF CERAMIC TILES OR GRAPHIC GLASS INSTALLED TO PROTECT GIB.

SMOKE ALARMS:
TO COMPLY WITH AS3786 WITH HUSH FACILITY
ENSURE THERE ARE SMOKE ALARMS INSTALLED
-TO ALL ESCAPE ROUTES ON ALL LEVELS.
-TO ALL BEDROOMS OR WITHIN 3m OF EVERY SLEEPING SPACE DOOR.

EXTERNAL WINDOWS/DOORS
ALL THERMALLY BROCKEN DBL GLAZED ACCEPT GARAGE
HEIGHT IS LISTED FIRST IE 1100X1500 MEANS HEIGHT IS 1100
ALL JOINERY CONFIGURATION, SIZES, HARDWARE, AND GLAZING TO BE VERIFIED BETWEEN OWNER AND JOINER PRIOR TO MANUFACTURE

LINTELS
ALL LOWER FLOOR LINTELS TO BE FIXED AS PER LINTEL FIXING DETAIL SHEET 16

DPC NOTE
ALL TIMBER TO CONCRETE CONNECTIONS TO BE SEPARATED BY DPC TYPICALLY

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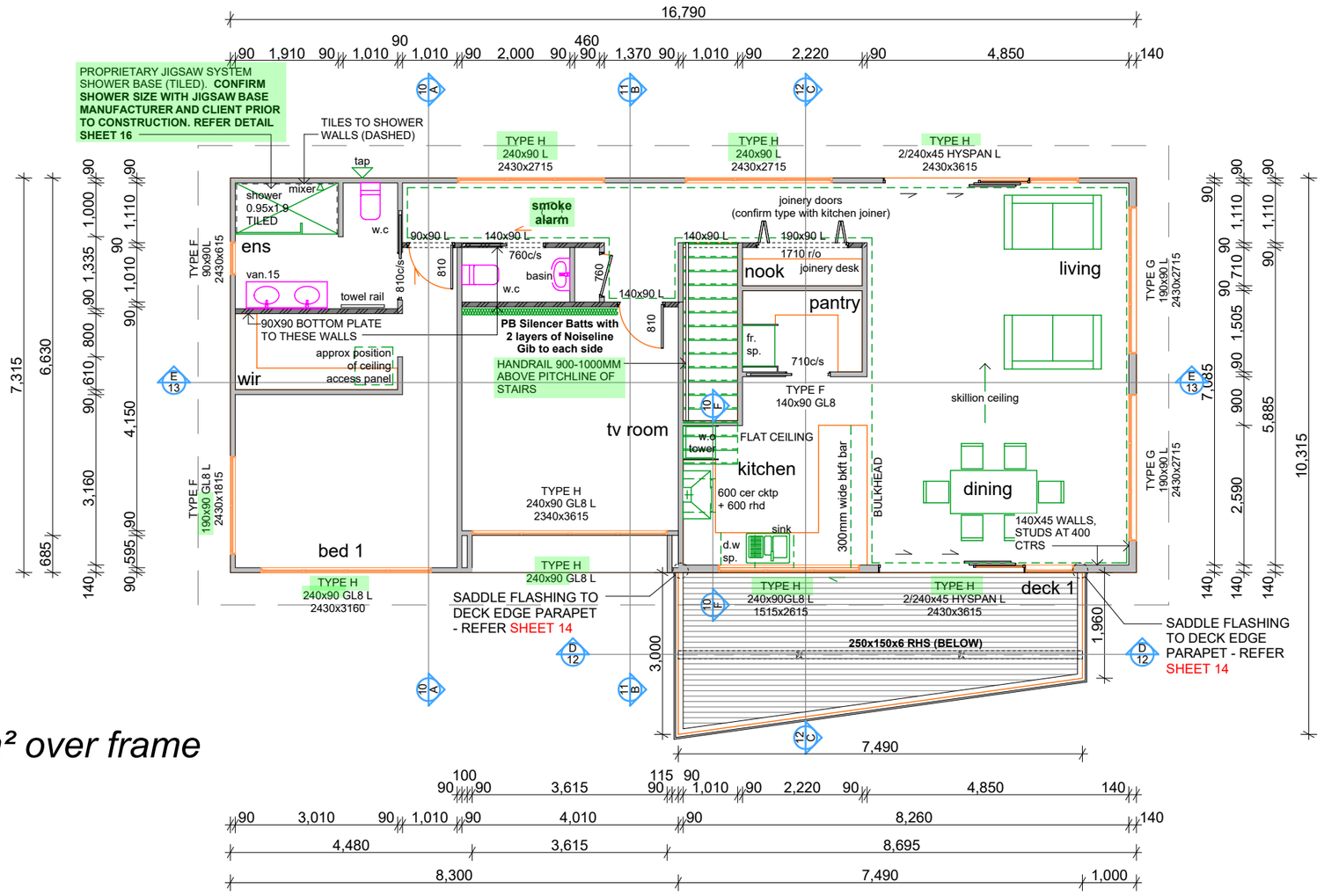
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5° roof

120.3m² over frame

FLOOR PLAN UPPER **1:100**

DPC NOTE
ALL TIMBER TO CONCRETE CONNECTIONS TO BE SEPARATED BY DPC TYPICALLY

FLOORING NOTE:
UPPER FLOOR FLOORING TO BE 20MM PARTICLE BOARD FLOORING GLUED AND SCREWED TO FLOOR JOISTS

GENERAL:
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PURLINS=H1.2
ALL FRAMING TIMBER TO BE KILN DRIED

STUD SIZES
TIMBER WALL FRAMING CALCULATED USING NZS 3604 2011 FOR SG8 TIMBER - **VERY HIGH** WIND ZONE

EXTERNAL LOADBEARING STUDS
STUDS UP TO 3.0m 90X45 AT 300 MAX CRS
STUDS UP TO 3.6m 140X45 AT 400 CRS

ALL NON LOAD BEARING (PARTITION) WALLS 90X45 AT 600 MAX CRS
-ALL WITH DWANGS AT 800 CRS VERT

LEGEND
smoke alarm — SMOKE DETECTOR
INDICATES WALL WITH 90X90 (ONE PIECE) BOTTOM PLATE

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FLOOR PLAN UPPER

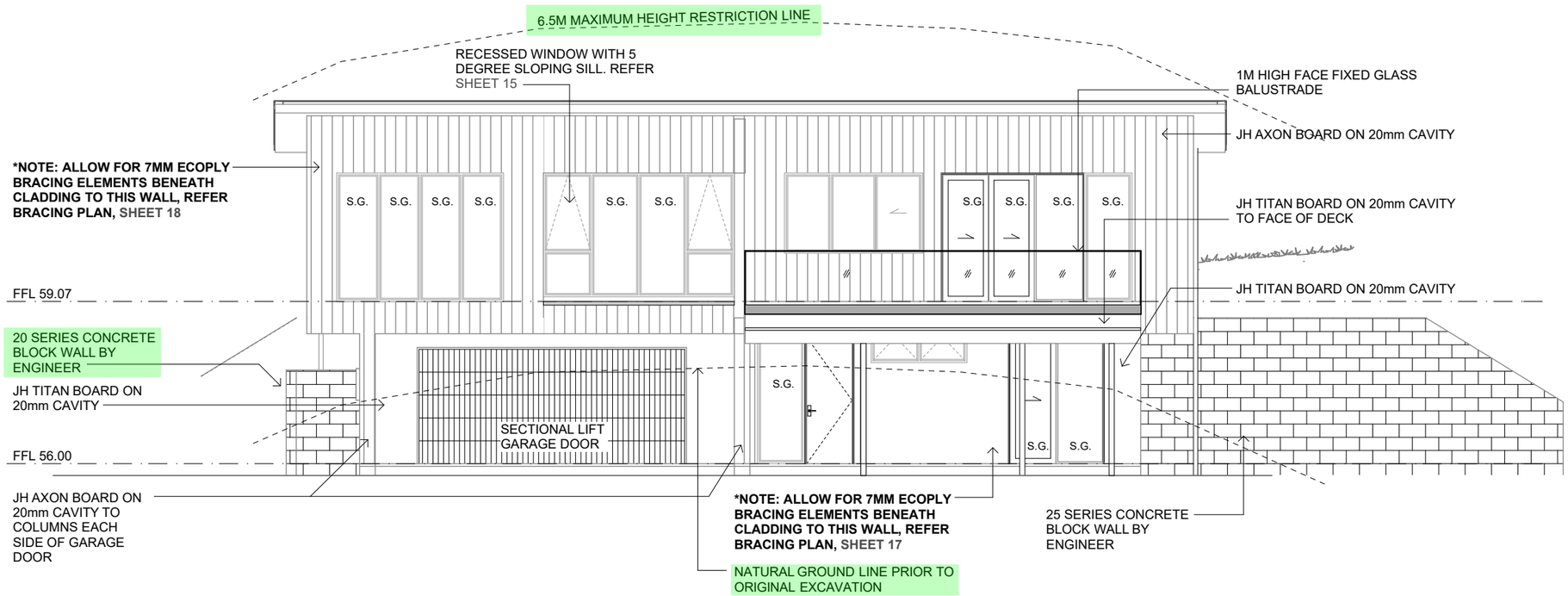
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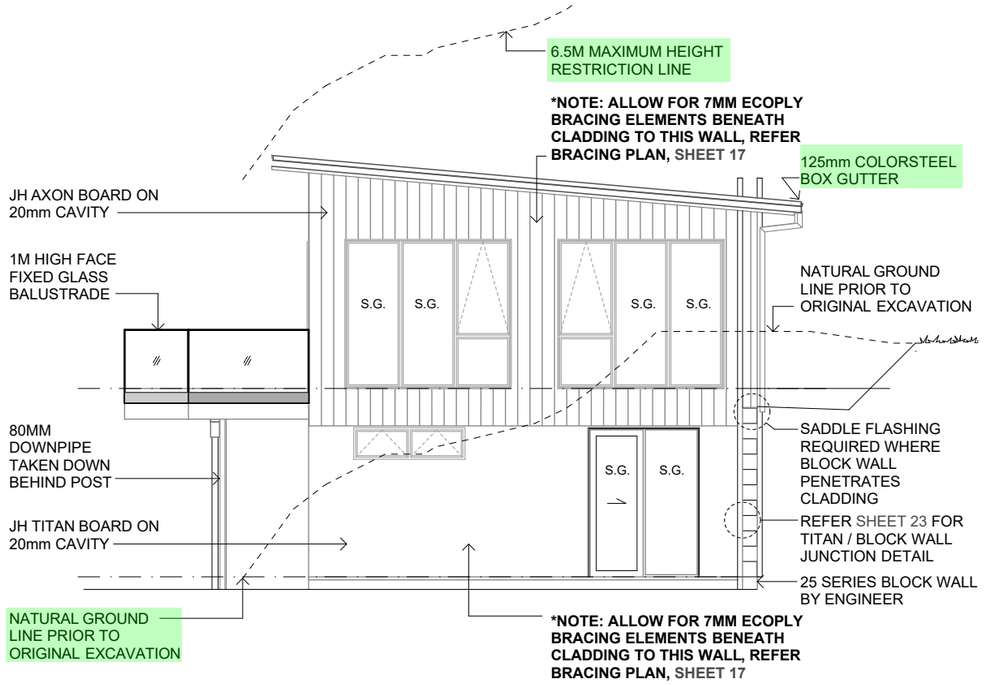
EAST **1:100**

BUILDING ENVELOPE RISK MATRIX		
ALL EXTERNAL WALLS		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	Very high risk	2
Number of storeys	High risk	2
Roof/wall intersection design	High risk	3
Eaves width	Medium risk	1
Envelope complexity	Low risk	0
Deck design	Very high risk	6
Total Risk Score:		**14**

CLADDING
JAMES HARDIE TITAN BOARD CLADDING
ON 20mm CAVITY OVER BUILDING WRAP TO FRAMING

CLADDING
JH AXON PANEL
CLADDING ON CAVITY OVER
THERMAKRAFT BUILDING WRAP TO FRAME
SEE FIXING DETAILS IN ATTACHED SPECIFICATION

JOINERY
-ALL JOINERY FROM DOUBLE GLAZED **THERMALLY BROKEN** (EXCEPT GARAGE) POWDER COATED ALUMINIUM.
TO COMPLY WITH NZS4223.JOINERY MANUFACTURER TO VERIFY ALL SIZES ON SITE,
SIZES NOMINATED ON FLOOR PLAN ARE OPENING SIZES
BUILDER, JOINER, OWNER ALL TO AGREE CONFIGURATION OF GLAZING PRIOR TO MANUFACTURE
0= OPAQUE GLASS- VERIFY WITH OWNER
S.G. = SAFETY GLASS REQ
R.S. = RESTRICTOR STAYS



NORTH **1:100**

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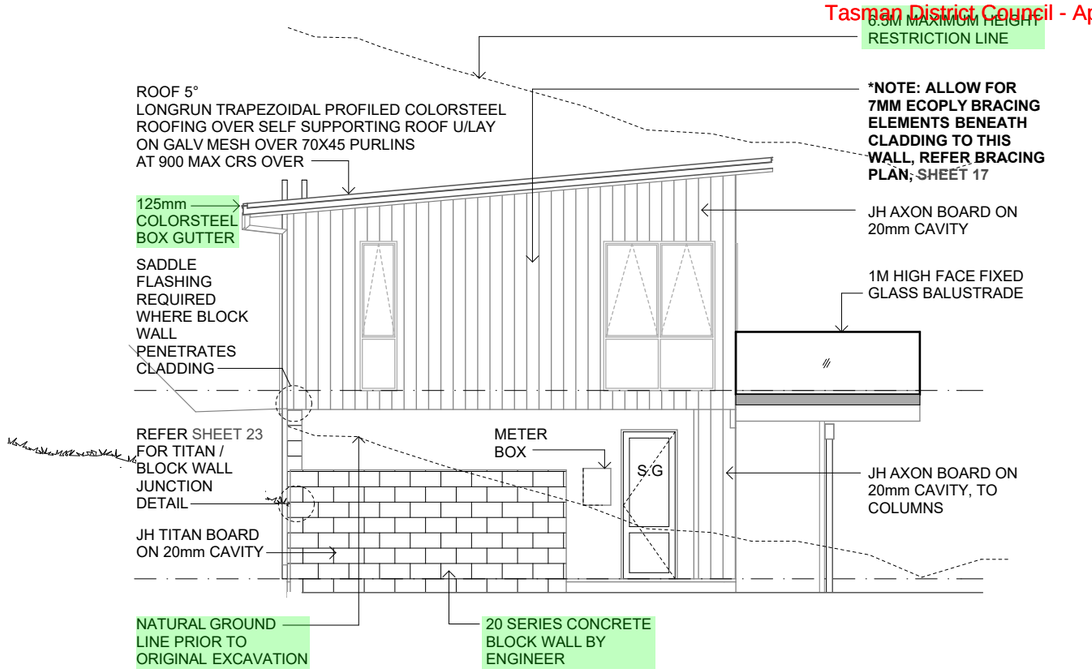
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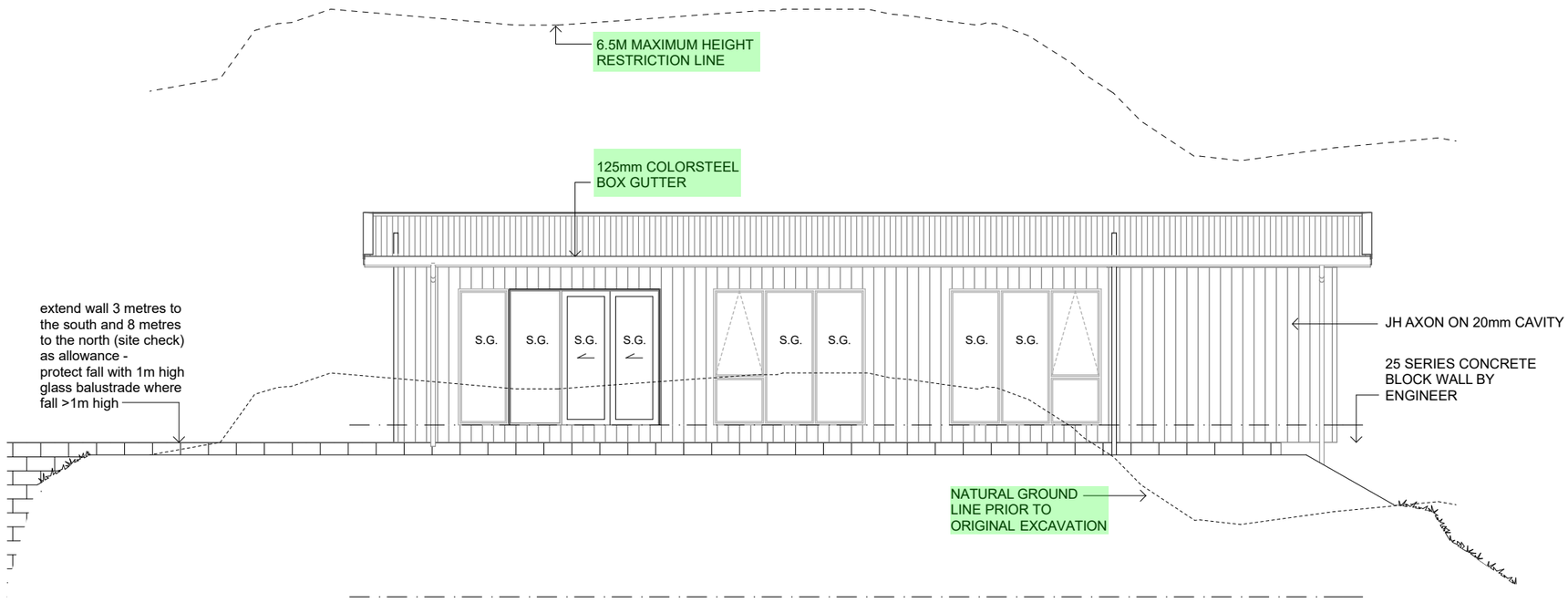


SOUTH **1:100**

CLADDING
JAMES HARDIE TITAN BOARD CLADDING
ON 20mm CAVITY OVER BUILDING WRAP TO FRAMING

CLADDING
JH AXON PANEL
CLADDING ON CAVITY OVER
THERMAKRAFT BUILDING WRAP TO FRAME
SEE FIXING DETAILS IN ATTACHED SPECIFICATION

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WEST **1:100**

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