Westland District Council
36 Weld Street
Private Bag 704
HOKITIKA
03 756 9010
Email: planning@westlanddc.govt.nz

Resource Consent Application Form and Assessment of Environmental Effects (Land Use)

All actual and reasonable costs incurred by the Council will be charged to the applicant at the conclusion of the appeal period of the Council decision. A full record will be kept of all expenses incurred in processing applications.

Please note, further information can be given on additional pages if need be.

Applications for resource consents are public documents and information within this application may be supplied to members of the public.

OFFICE USE ONLY

Date Received: _____
Fees Paid: _____
Receipt No: _____
Valuation No: _____

Resource Consent Application Form (under the Resource Management Act 1991)

Full name/s of applicant/s Forest Habitats Limited

[Note: An application can be made in the name of an individual/ couple/partnership/business, etc.]

Applicant's Postal Address: ..... Applicant's ☎: .....

..... Applicant's Email .

Agent's Postal Address: ..... Agent's ☎: 027 228 2386

17 Cliffs Road, St Clair, Dunedin 9012

..... Agent's Email: barry@macdonellconsulting.co.nz

Please send all correspondence to: Agent ☑ Applicant ☐ or both ☐

Property owner's name: (if not the applicant) Property owner's ☎: .....

..... Email: .....

Location of activity and/or property address: Map Reference (if relevant)

117 Arthurstown Road NZMS 260: .....
e.g. (1:50.000)

Hokitika CT No.: see attached

Legal description of site: .....

see attached planning report

.....

(From rates notice, valuation notice or Certificate of Title.)

What zone is the site? *(tick one box)*

Rural	☑	Residential	☐	Small Settlement	☐
Tourist	☐	Coastal Settlement	☐	Residential Mixed	☐
Commercial Core	☐	Industrial/Commercial	☐	Coastal Erosion	☐
Waiho River General Flood Hazard Area			☐		

[If unsure of zoning, then check with Council staff or the Westland District Plan]

NATURE OF CONSENT(S) BEING APPLIED FOR *(TICK BOX):*

Subdivision: ☑

Land Use: ☐

☐ residential in rural zone

☐ prospecting or mining
☐ clearance of indigenous vegetation
☐ commercial or industrial undertaking in residential or rural area
☐ signage
☐ reduction of yard setbacks
☐ height limit/recession plane encroachments
☐ relocate building/s
☐ additional dwellings
☐ parking reduction
☐ roading formation

Term of consent sought:

☑ indefinite
☐ years ..... *(please specify)*

National Environmental Standard for Assessing Contaminants in Soil to Protect Human Health (NES): Please complete and sign form RC001 *(attached to the back of this form)* or provide a statement that no activity associated with MFE's Hazardous Activities and Industries list has been undertaken on site in accordance with the National Environmental Standard for Managing Contaminants in Soil to Protect Human Health.

Do you require additional resource consents from the West Coast Regional Council in relation to this proposal, e.g., for works in a riverbed or discharges (odour, dust)?

Yes ☐ No ☑ If yes, have these consents been applied for? Yes ☐ No ☐

What consent is being sought from the Regional Council .....

CHECKLIST OF DOCUMENTS

Have you remembered to?

✔

- ☑ Attach a completed Assessment of Environmental Effects
- ☑ Attach a copy of current Certificate of Title for the site *(if relevant)*
- ☑ Sketch the locality and access points *(if relevant)*
- ☑ Supply an aerial photograph *(if relevant)*
- ☑ Attach technical plans (subdivision plan/site plan/building plan)
- ☐ Attach affected party approval forms *(if obtained)*
- ☐ Attach a cheque for application fee/deposit

I hereby certify that, to the best of my knowledge and belief, the information given in this application and the accompanying Assessment of Environmental Effects is true and correct. I undertake to pay all actual and reasonable application costs incurred by the Westland District Council.

Signature of applicant: ..... Date: 10/10/22

(or person authorised to sign on behalf of applicant)

Name:(in BLOCK CAPITALS) BARRY MACDONELL

Type of application: **Subdivision** ☑ **Land Use** ☐

Controlled ☐ **Discretionary** ☐

Non-complying ☐

Land Use Activities
Assessment of Environmental Effects

You should use this form for all proposed land use activities that do not have a specific application form.

Please answer all questions fully. You can discuss your application with Council officers before completing this form or seek expert advice.

Please note: Your proposed activity could have a range of effects (both positive and negative) on the environment. Completing this form will help you to identify the effects.

'Effects on the environment' means: any effects on the surrounding area and includes possible effects on people, plants and animals.

What do you want to do?

Subdivide 6 existing titles into 12 titles for rural residential / rural lifestyle use, plus 1 balance farm lot. Refer attached planning assessment / AEE.

What are the surrounding land uses (e.g., housing, farmland, etc):

Farming & rural residential / lifestyle blocks.

EFFECTS ON THE ENVIRONMENT (POSITIVE OR NEGATIVE)

Will your proposed activity have any social or economic effects on people, including yourself as applicant: (e.g., employment)?
Yes ☑ No ☐

Will your proposed activity have any effect on the surrounding landscape or the visual amenity (views)?
Yes ☐ No ☑

Will there be any property shading of neighbours or any impact on the privacy of neighbours?
Yes ☐ No ☑

Will there be any lighting effects or glare created off site?
Yes ☐ No ☑

Will there be any new signage erected either off-site or on-site?
Yes ☐ No ☑

Will there be increased traffic movements because of your proposal?
Yes ☑ No ☐

Will additional parking off site be required?
Yes ☐ No ☑

Will your proposed activity produce any noise that will be heard at the boundary of the site?
Yes ☐ No ☑

Will there be any generation of wastes by the proposed activity?
Yes ☑ No ☐

Will there be any activity on the surface of water bodies (rivers and lakes)?
Yes ☐ No ☑

Will your proposal have any impact on indigenous vegetation or habitat (e.g., forest, wetland)?
Yes ☐ No ☑

Will your proposal have any impact on indigenous wildlife (birds, animals, fish, etc)?
Yes ☐ No ☑

Will your proposed activity have any impact on any known historic or cultural/spiritual values in the area?
Yes ☐ No ☑

Will your proposed activity have any impact on the recreational use of the area?
Yes ☐ No ☑

Will your proposed activity include the use of hazardous substances (e.g. fuels, oils, chemicals)?
Yes ☐ No ☑

Will your proposed activity result in any discharges of hazardous substances to the

environment? (e.g. fuel, paint)
Yes ☐ No ☑

If you have ticked **yes** to any of the above questions then please describe the effects for any of the boxes you have ticked:

A benefit will be additional housing opportunity for those wishing to live in the Hokitika area. There will be a minor increase in traffic, and there will be on site waste water systems. We understand that consent is required for a new dwelling as a controlled activity. This will be sought once the subdivision application is approved, and building platform designs are finalised.

Please describe what steps you propose to reduce or avoid the adverse effects on the environment you have identified:

Refer attached planning assessment.

SCALE OF EFFECTS

Looking at all of the effects you have identified as a whole, what scale of effects will occur? *(tick one box)*

- ☑ Within the site only
- ☐ Restricted to the surrounding neighbours
- ☐ Affecting the whole settlement or town

Any comments about the overall nature of the effects?

Refer attached planning assessment.

SERVICING REQUIREMENTS

Will your proposal result in the need for new services (e.g. power, telecommunications, roads, water supply, etc)?

Yes ☑ No

If yes, please describe what new services will be required:

electricity + telecoms : confirmation included that both can be provided

NATURAL HAZARDS

Is your site subject to flooding or inundation?
Yes ☑ No ☐

Is your site subject to landslides or land instability?
Yes ☐ No ☑

Is your site subject to erosion?
Yes ☐ No ☑

Is your site subject to contamination from any source?
Yes ☐ No ☑

If you answered **yes** to any of the above questions, then what effects could the identified natural hazard/s have on your proposed activity?

Flood hazard, however this has been addressed in the 2 engineering reports provided with the application.

How do you propose to address the identified natural hazards?

Refer planning & engineering reports.

[Note: If your site is subject to natural hazard/s and you are unsure of how to proceed, then advice can be sought from a Chartered Professional Engineer (CPEng).]

CONSULTATION

You may have consulted other people or agencies about your proposal (eg DOC, Fish and Game NZ, Te Runanga o Makaawhio, Te Runanga o Ngati Waewae, Heritage New Zealand).

Please outline what consultation steps you have taken (if any):

N/A

What was the response?

AFFECTED PARTIES

You will need to consider which people or agencies might be affected by your proposal. *(Consider the following as a guide and tick boxes below):*

- ☐ Neighbours (list details below)
- ☐ Local community
- ☐ New Zealand Transport Agency
- ☐ Agency or other group (name them): N/A

[Also note that the Council rules on who is an affected party. You can seek the written approval of affected parties - please use the Council's Affected Party Approval form.]

For neighbours: Please list the names and addresses:

SUPPORTING INFORMATION – A CHECKLIST

You need to supply the following information to support your application *(tick relevant boxes)*:

- ☑ Resource consent application form
- ☑ Completed Assessment of Effects on the Environment form (this form)
- ☑ Copy of the current Certificate of Title for the site (if relevant)
- ☑ Sketch of locality and access points and/or aerial photo (if relevant)
- ☐ Affected party approval forms *(if obtained)*
- ☑ Technical plans relevant such as site plans, building plans

Other information may be relevant, such as:

- ☐ Size and design of advertising signs
- ☐ Details of proposed landscaping
- ☐ Location of features on site (trees, streams, archaeological site)

Westland District Council
Hazardous Activities and Industries Checklist (RC001)

Prior to any changes in the use of land including constructing/altering buildings, creating foundations, undertaking earthworks, soil sampling or subdivision, the National Environmental Standard (NES) for Assessing Contaminants in Soil to Protect Human Health requires the land owner to identify whether or not any of the activities listed below have previously, currently or are going to be undertaken on the site.

Further information on the NES and the Ministry for the Environment's Hazardous Activities and Industries List (below) can be found at www.mfe.govt.nz.

Using information from the West Coast Regional Council, Westland District Council's property files, anecdotal evidence and any other reference, **read through the following list and please tick if the activity has previously occurred or will occur on the site.**

Hazardous Activities and Industries List (HAIL)

Chemical manufacture, application and bulk storage	**YES**
Agrichemicals including commercial premises used by spray contractors for filling, storing or washing out tanks for agrichemical application	
Chemical manufacture, formulation or bulk storage	
Commercial analytical laboratory sites	
Corrosives including formulation or bulk storage	
Dry-cleaning plants including dry-cleaning premises or the bulk storage of dry-cleaning solvents	
Fertiliser manufacture or bulk storage	
Gasworks including the manufacture of gas from coal or oil feedstocks	
Livestock dip or spray race operations	
Paint manufacture or formulation (excluding retail paint stores)	
Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds	
Pest control including the premises of commercial pest control operators or any authorities that carry out pest control where bulk storage or preparation of pesticide occurs, including preparation of poisoned baits or filling or washing of tanks for pesticide application	
Pesticide manufacture (including animal poisons, insecticides, fungicides or herbicides) including the commercial manufacturing, blending, mixing or formulating of pesticides	
Petroleum or petrochemical industries including a petroleum depot, terminal, blending plant or refinery, or facilities for recovery, reprocessing or recycling petroleum-based materials, or bulk storage of petroleum or petrochemicals above or below ground	
Pharmaceutical manufacture including the commercial manufacture, blending, mixing or formulation of pharmaceuticals, including animal remedies or the manufacturing of illicit drugs with the potential for environmental discharges	
Printing including commercial printing using metal type, inks, dyes, or solvents (excluding photocopy shops)	
Skin or wool processing including a tannery or fellmongery, or any other commercial facility for hide curing, drying, scouring or finishing or storing wool or leather products	
Storage tanks or drums for fuel, chemicals or liquid waste	
Wood treatment or preservation including the commercial use of anti-sapstain chemicals during milling, or bulk storage of treated timber outside	
Electrical and electronic works, power generation and transmission	**Yes**
Batteries including the commercial assembling, disassembling, manufacturing or recycling of batteries (but excluding retail battery stores,	
Electrical transformers including the manufacturing, repairing or disposing of electrical transformers or other heavy electrical equipment	
Electronics including the commercial manufacturing, reconditioning or recycling of computers, televisions and other electronic devices	
Power stations, substations or switchyards	
Explosives and ordinances production, storage and use	**YES**
Explosive or ordinance production, maintenance, dismantling, disposal, bulk storage or re-packaging	
Gun clubs or rifle ranges, including clay targets clubs that use lead munitions outdoors	
Training areas set aside exclusively or primarily for the detonation of explosive ammunition	
Metal extraction, refining and reprocessing, storage and use	**Yes**
Abrasive blasting including abrasive blast cleaning (excluding cleaning carried out in fully enclosed booths) or the disposal of abrasive blasting material	
Foundry operations including the commercial production of metal products by injecting or pouring molten metal into moulds	
Metal treatment or coating including polishing, anodising, galvanising, pickling, electroplating, or heat treatment or finishing using cyanide compounds	
Metalliferous ore processing including the chemical or physical extraction of metals, including smelting, refining, fusing or refining metals	

Engineering workshops with metal fabrication	
Mineral extraction, refining and reprocessing, storage and use	**Yes**
Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition	
Asphalt or bitumen manufacture or bulk storage (excluding single-use sites used by a mobile asphalt plant)	
Cement or lime manufacture using a kiln including the storage of wastes from the manufacturing process	
Commercial concrete manufacture or commercial cement storage	
Coal or coke yards	
Hydrocarbon exploration or production including well sites or flare pits	
Mining industries (excluding gravel extraction) including exposure of faces or release of groundwater containing hazardous contaminants, or the storage of hazardous wastes including waste dumps or dam tailings	
Vehicle refuelling, service and repair	**Yes**
Airports including fuel storage, workshops, washdown areas, or fire practice areas	
Brake lining manufacturers, repairers or recyclers	
Engine reconditioning workshops	
Motor vehicle workshops	
Port activities including dry docks or marine vessel maintenance facilities	
Railway yards including goods-handling yards, workshops, refuelling facilities or maintenance areas	
Service stations including retail or commercial refuelling facilities	
Transport depots or yards including areas used for refuelling or the bulk storage of hazardous substances	
Cemeteries and waste recycling, treatment and disposal	**Yes**
Cemeteries	
Drum or tank reconditioning or recycling	
Landfill sites	
Scrap yards including automotive dismantling, wrecking or scrap metal yards	
Waste disposal to land (excluding where biosolids have been used as soil conditioners)	
Waste recycling or waste or wastewater treatment	
Any land that has been subject to the migration of hazardous substances from adjacent land in sufficient quantity that it could be a risk to human health or the environment	
Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment	

If you have answered yes to any of the above, the NES applies to the land. Please consult the NES and if you have any questions, contact the Planning Department.

Statement:
I hereby certify that to the best of my knowledge the information given is true and correct.

Name: Barry MacDonell

Signature: BMacDonell

Date: 10/10/22

Forest Habitats Ltd

Proposed subdivision at 117 Arthurstown Road, Hokitika

Resource Consent Application

10 October 2022

1 APPLICANT AND PROPERTY DETAILS

Applicant:	Forest Habitats Ltd
Location:	117 Arthurstown Road, Hokitika
Legal Description:	Lots 1 to 15 being a proposed subdivision of Lots 8 to 29 DP 142, Pt RS 1300, RS 1603, RS 1602, RS 1421, RS 1588, Pt RS 1589 and Pt RS 4363 6 titles, totalling 27.3834 ha. Refer Appendix 1
Site Area:	27.3834 ha
Address for Service:	MacDonell Consulting Ltd 17 Cliffs Road St Clair Dunedin 9012 barry@macdonellconsulting.co.nz Phone: 027 228 2386

2 PROPOSAL

The applicant is seeking consent to create 12 rural residential sites (Lots 1 – 12), with a larger more rural type balance site, comprising Lots 13, 14 & 15 and Pt RS 4363 (comprised in one title), for a total of 13 titles. There is an existing dwelling and sheds on the balance title.

The starting point for the subdivision is 6 existing titles. By commencing with 6 titles and finishing with 13 titles, 6 of the new titles are therefore being created by boundary adjustment, with 7 new additional titles being created.

The proposed subdivision is contained within a 100 ha farm.

Refer proposed scheme plan at Appendix 2.

The 12 rural residential lots range in size from 6100 m^2 to 1.02 ha.

Several of the lots will have a shared access to Arthurstown Road to ensure the minimum spacing of 100 m between property access points is maintained, in accordance with Table 8.9.1 in the District Plan.

The engineering reports at Appendix 3 confirm that the property is suitable for this rural residential development, and that building platforms can be created above the floodplain and outside the tsunami risk area.

3 SITE DESCRIPTION

The 27 ha site is located on Arthurstown Road, which is accessed off SH6, approximately 300 m south of the Hokitika bridge. The site is located directly across the river from the town of Hokitika.

There is an existing dwelling and a range of farm sheds on the balance title.

The site is around 2.5 m to 5.5 m above sea level, and around 1.5 km inland from the coast. It is recommended that the building platforms have a minimum RL of 5.5.

The property is predominantly vegetated in pasture, with a watercourse flowing through Lots 5 and 14, towards the Hokitika River. This watercourse is unaffected by the development.

A proposed pedestrian ROW walkway runs along the rear of most of the rural residential lots, allowing legal access to the river.

4 STATUTORY ASSESSMENT

The land is zoned Rural in the Westland District Council – District Plan.

In accordance with Table 7.1, a new lot with an area over 5000 m^2 in the Rural Zone is a discretionary activity. The matters for discretion are set out in 7.6.

Resource Management Act

Section 104 of the Resource Management Act (1991) states that:

a) Any actual and potential effects on the environment of allowing the activity, and

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

b) Any relevant provisions of -

i. a national environmental standard
ii. other regulations
iii. a national policy statement
iv. a New Zealand coastal policy statement
v. a regional policy statement or proposed regional policy statement
vi. a plan or proposed plan; and

c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

The proposal must therefore be assessed in terms of actual and potential effects on the environment, the relevant objectives and policies of the Westland District Plan, and Part 2 of the Resource Management Act.

5 ASSESSMENT OF ENVIRONMENTAL EFFECTS

The relevant assessment criteria / matter for discretion are found at 7.6 of the District Plan.

The matters particularly relevant to this proposal relate to; size and shape of the new lot, effects on infrastructure, waste water disposal, effects on nearby settlement areas, land stability, landscape effects, reverse sensitivity, access, effects on productive soils, and effects on rural character.

Size and shape of the new lots

The proposed sizes and shapes of the lots are appropriate for the proposed rural residential / lifestyle purposes (12 lots) with the balance title remaining for farming purposes within the wider farm property owned by the applicant.

Effects on infrastructure

As confirmed in the engineering reports (Appendix 3), any adverse effects on Council infrastructure will be less than minor as any new dwellings will be self contained in respect of waste water disposal and water supply.

Spark has confirmed there is good 4G coverage over the area (Appendix 4A) and Electronet has confirmed that electricity supply can be provided (Appendix 4B).

Waste water disposal

Any new dwellings will have an on site waste water disposal system.

Effects on nearby settlement areas

The potential for 7 new titles for rural lifestyle purposes within this large farm block will not compromise the integrity or viability of any nearby settlements. In the TTPP there is proposed Rural Residential zoning (Settlement) nearby.

Land stability & Flooding

There are no land stability issues associated with these relatively level sites. The geotechnical investigation at Appendix 3A confirms that the proposed sites are suitable for development.

The flood assessment report at Appendix 3B confirms that if building platforms are constructed to a minimum of RL 5.5 with a finished floor level for dwellings of RL 6, the dwellings will be above the flood plain and outside the tsunami hazard area.

Landscape effects

The low elevation of the property means any additional dwellings will not be highly visible, bearing in mind there are already several buildings and a dwelling on the property, and other dwellings on surrounding properties.

Reverse sensitivity

As the applicant owns the surrounding farm land, there will not be any properties adversely affected in respect of reverse sensitivity.

Access

The access points comply with Table 8.9.1.

Effects on productive soils

The soils on the property are not highly productive. In any event, the 12 rural lifestyle blocks will affect just 9 ha out of the overall 100 ha farm property. This is based on an average rural residential lot size of 7500 m^2. Note also that 6 of the sites are existing titles.

Effects on rural character

The rural character of the area will not be adversely affected by the 7 additional titles (noting that there are 6 existing titles) and any potential subsequent new dwellings, bearing in mind that there are already established buildings on the property, including a dwelling, and many dwellings on surrounding properties. The proximity to Hokitika reinforces the notion that this is an area suitable for rural lifestyle living.

In respect of the suitability of the site for a modest level of rural lifestyle development, it is noted as follows;

- Site is within walking distance of Hokitika
- Close proximity to the rail trail

- Above the flood plain
- Geotechnical suitability
- Adjoining proposed Settlement Zone - Rural Residential Precinct
- Attractive amenity values, with north facing aspect towards Hokitika

6 RELEVANT OBJECTIVES AND POLICIES

Objectives / Part 3

3.7.1

To recognise and provide for the unique values and importance of natural environments and ecosystems in Westland.

3.7.2

To recognise that the people of the district can provide for their needs within the context of sustainable management.

3.7.3

To protect the integrity, functioning, and health of indigenous ecosystems and maintain the current diversity of indigenous flora and fauna.

3.8.1

To avoid, remedy or mitigate adverse effects of land use activities on land and water resources.

3.8.2

To protect and maintain the productive potential of the higher quality soils in Westland District.

Policies / Part 4

<u>Amenity</u>

Policy A

The effects of activities which can have significant adverse effects on amenities and the well being of residents shall generally be avoided, remedied or mitigated.

Policy B

Noxious, offensive, and/or dangerous activities shall be segregated where there is potential to generate adverse effects on the environment.

Policy C

The development and use of energy efficient design and technology should be encouraged within working, living and leisure environments.

Policy D

The safe handling, management and disposal of hazardous substances in a manner which protects community wellbeing, road safety, and soil and water resources shall be encouraged.

Policy E

The effects of activities which can be seen as adversely affecting the overall environmental amenity of the District shall be avoided.

Policy F

To ensure that signs are appropriate to the character of the area and do not detract from the amenity values of that environment.

Policy G

To avoid a proliferation of signs which have the potential to result in cumulative adverse effects on amenity values.

Natural Hazards

Policy A

Development and subdivision for the purposes of accommodating and/or servicing people and communities should avoid areas of known natural hazard risk unless the risk of damage to property and infrastructure, community disruption and injury and potential loss of life can be adequately mitigated.

Analysis of Relevant Objectives & Policies

The objectives and policies that are particularly relevant to this proposal relate to effects on the natural environment, productive soils, amenity and natural hazards.

The additional titles, with the potential for new dwellings, on a site that is not elevated or in any way highly visible, will not generate any adverse amenity effects that are more than minor.

The existing pasture is not highly productive, and in any event the additional dwellings will not compromise the productive potential of this 100 ha property.

7 CONSULTATION

The applicant has not consulted with any neighbouring property owners as none are affected. Any adverse effects beyond the boundary of this 100 ha rural property will be less than minor. As of right the applicant could develop 6 new dwellings along Arthurstown Road, on the existing titles.

8 CONCLUSION

The application is consistent with the provisions of the District Plan. The proposal will allow for additional rural residential lots on a large farm property located close to Hokitika, and ideally suited for this style of development.

As there are no adverse environmental effects that are more than minor associated with this proposal, and the proposal is not contrary to the relevant objectives and policies, it is concluded that consent should be granted.

MacDonell Consulting Ltd
Planning Consultants

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General of Land

Identifier	**WS3A/1401**
Land Registration District	**Westland**
Date Issued	14 April 1969

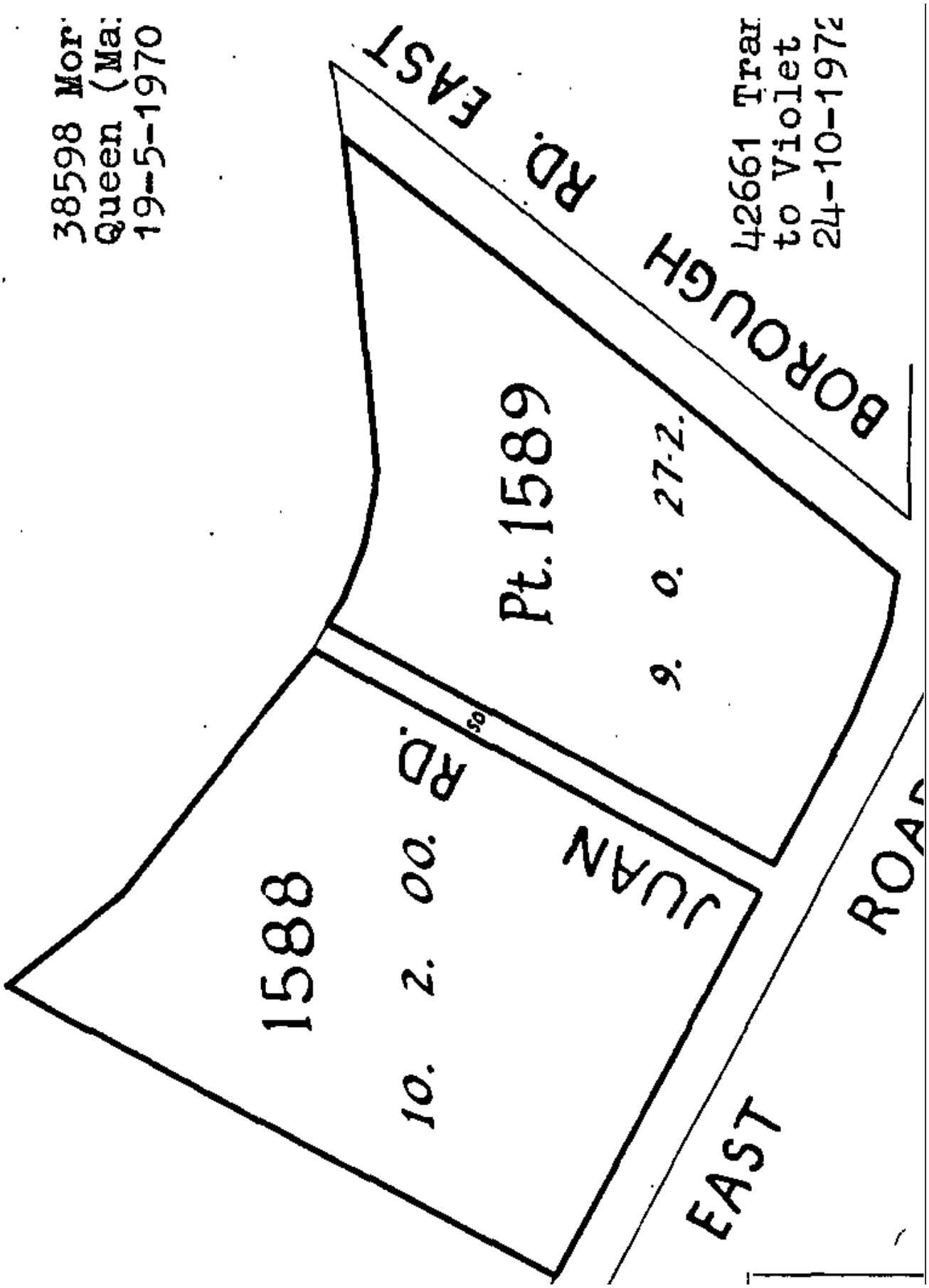
Prior References
WS1B/200

Estate	Fee Simple
Area	7.9602 hectares more or less
Legal Description	Rural Section 1588 and Part Rural Section 1589

Registered Owners
Forest Habitats Limited

Interests

Subject to the rules and regulations for mining on private property within the Provincial District of Westland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RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

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R.W. Muir
Registrar-General
of Land

Identifier	**WS3A/1400**
Land Registration District	**Westland**
Date Issued	14 April 1969

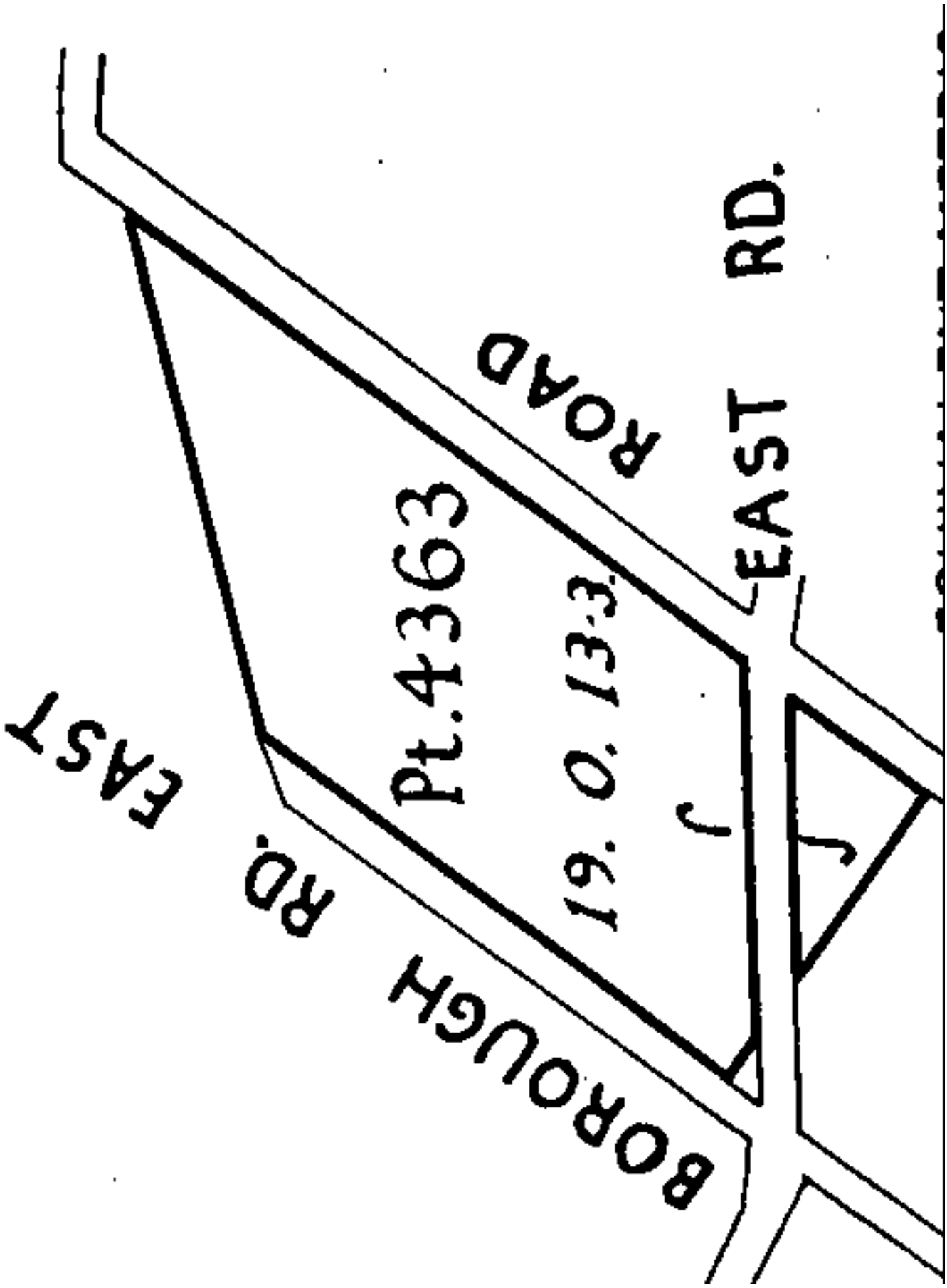
Prior References
WS2D/1203

Estate	Fee Simple
Area	7.7227 hectares more or less
Legal Description	Part Rural Section 4363
Registered Owners	

Forest Habitats Limited

Interests

Subject to a right (in gross) to transmit electricity over part marked A DP 324059 in favour of Westpower Limited created by Easement Instrument 5931577.1 - 15.3.2004 at 9:00 am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ROAD
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Pt.4363
19.0.13.3
BOROUGH RD.
EAST

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

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R.W. Muir
Registrar-General
of Land

Identifier **WS2C/1195**
Land Registration District **Westland**
Date Issued 01 August 1966

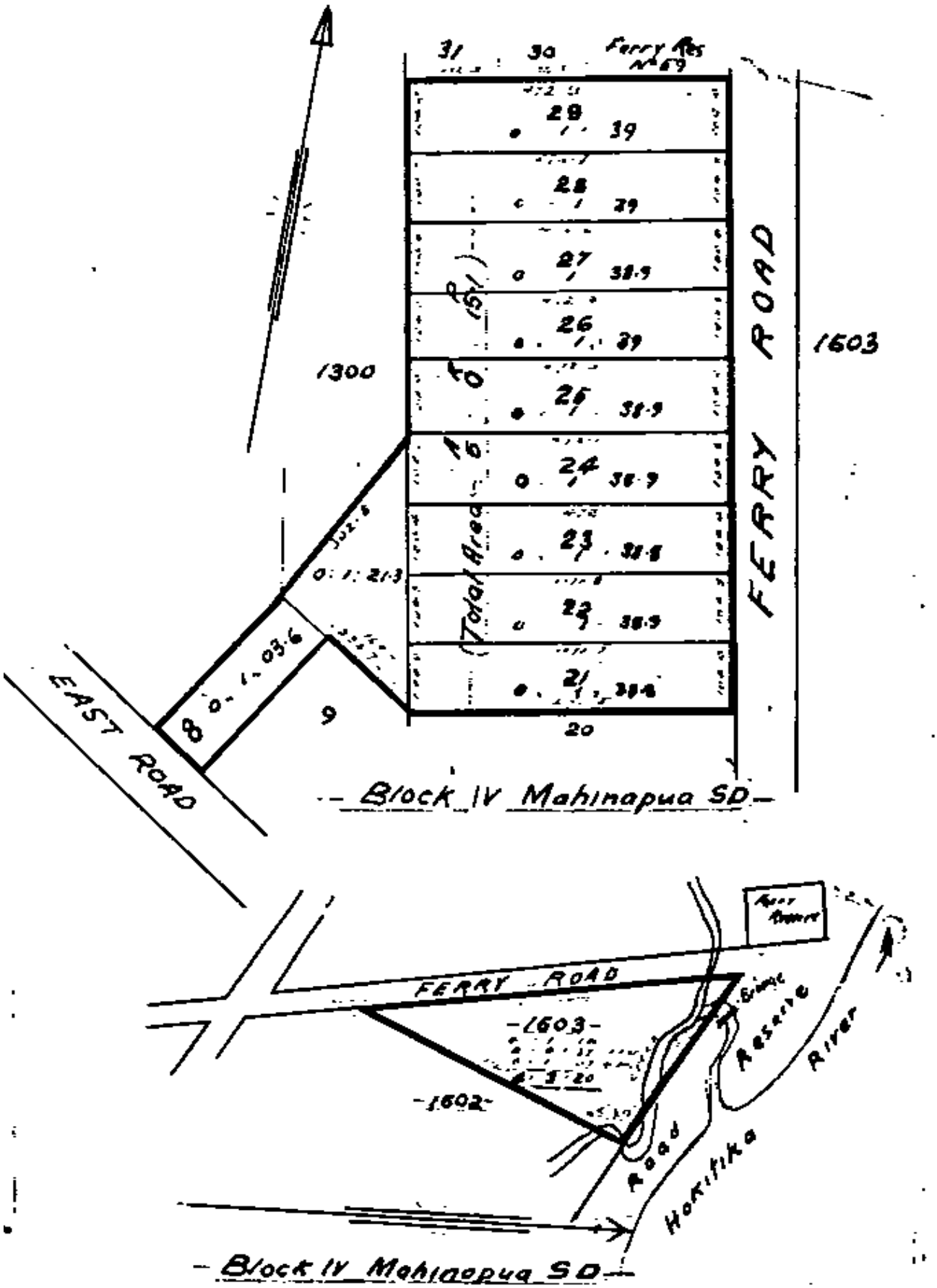
Prior References
WS20/261

Estate	Fee Simple
Area	4.0345 hectares more or less
Legal Description	Rural Section 1603 and Part Rural Section 1300 and Lot 8, 21-29 Deposited Plan 142

Registered Owners
Forest Habitats Limited

Interests

Subject to all the rules and regulations for mining on Private Property within the Provincial District of Westland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Ferry Res
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38.9
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38.4
1300
1603
FERRY ROAD
Total Area
0: 1: 21.3
0: 1: 03.6
8
9
20
EAST ROAD
Block IV Mahinapua SD
FERRY ROAD
1603
1602
Bridge
Reserve
RIVER
Road
HOKITIKA
Block IV Mahinapua SD

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**WS2C/1017**
Land Registration District	**Westland**
Date Issued	23 May 1966

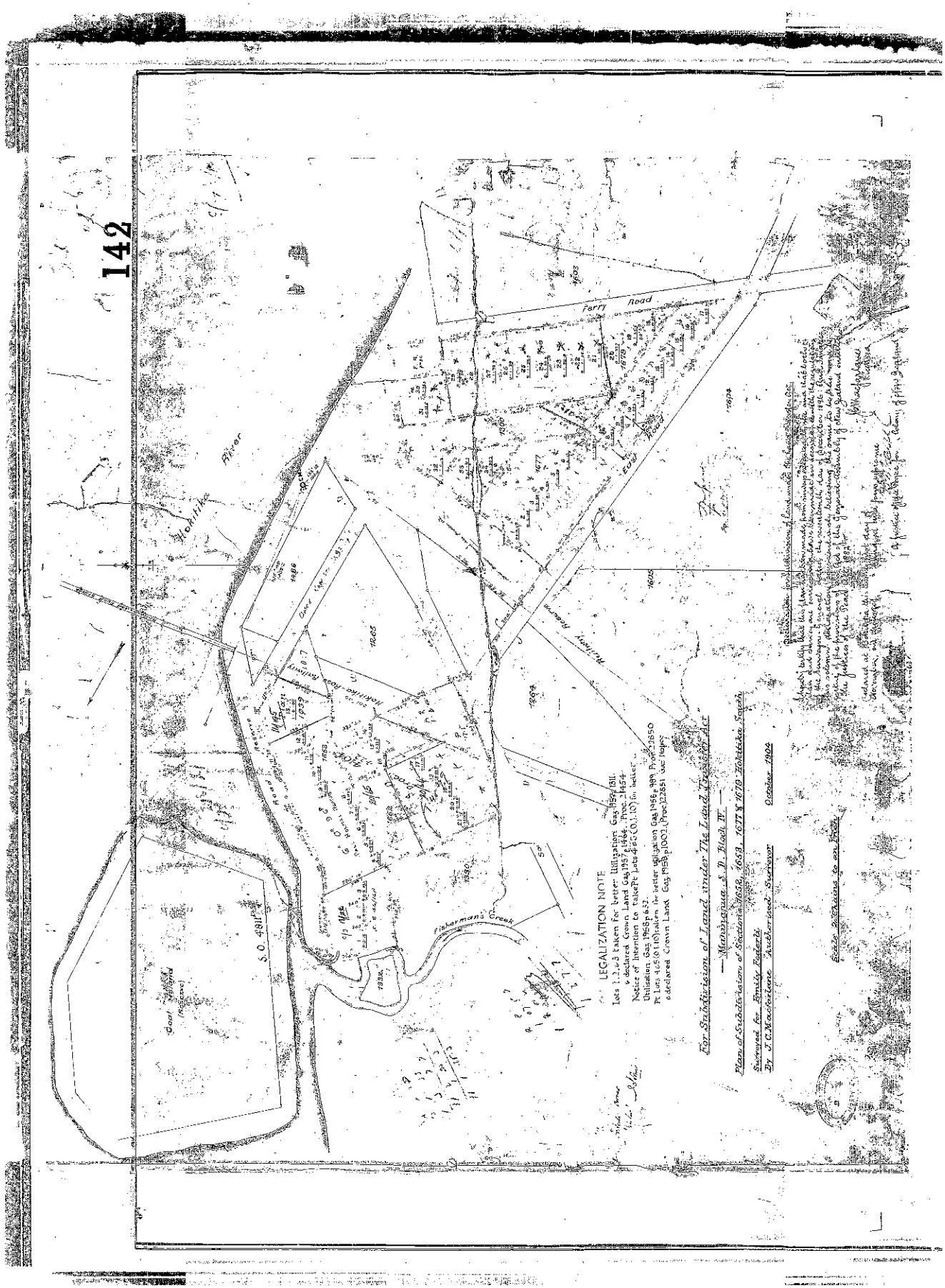
Prior References
WS21/17

Estate	Fee Simple
Area	1.3615 hectares more or less
Legal Description	Lot 10-20 Deposited Plan 142
Registered Owners	

Forest Habitats Limited

Interests

Subject to the Rules and Regulations for mining on private property within the Provincial District of Westland


142
Ferry Road
Manawatu River
Fisherman's Creek
Railway Road
LEGALIZATION NOTE
For Subdivision of Land under The Land Transfer Act
Plan of Subdivision of Section 1658, 1677 & 1678 Hokitika South
Surveyed for Emily Roberts
By J.C.Macfarlane Auckland Surveyor
October 1904

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

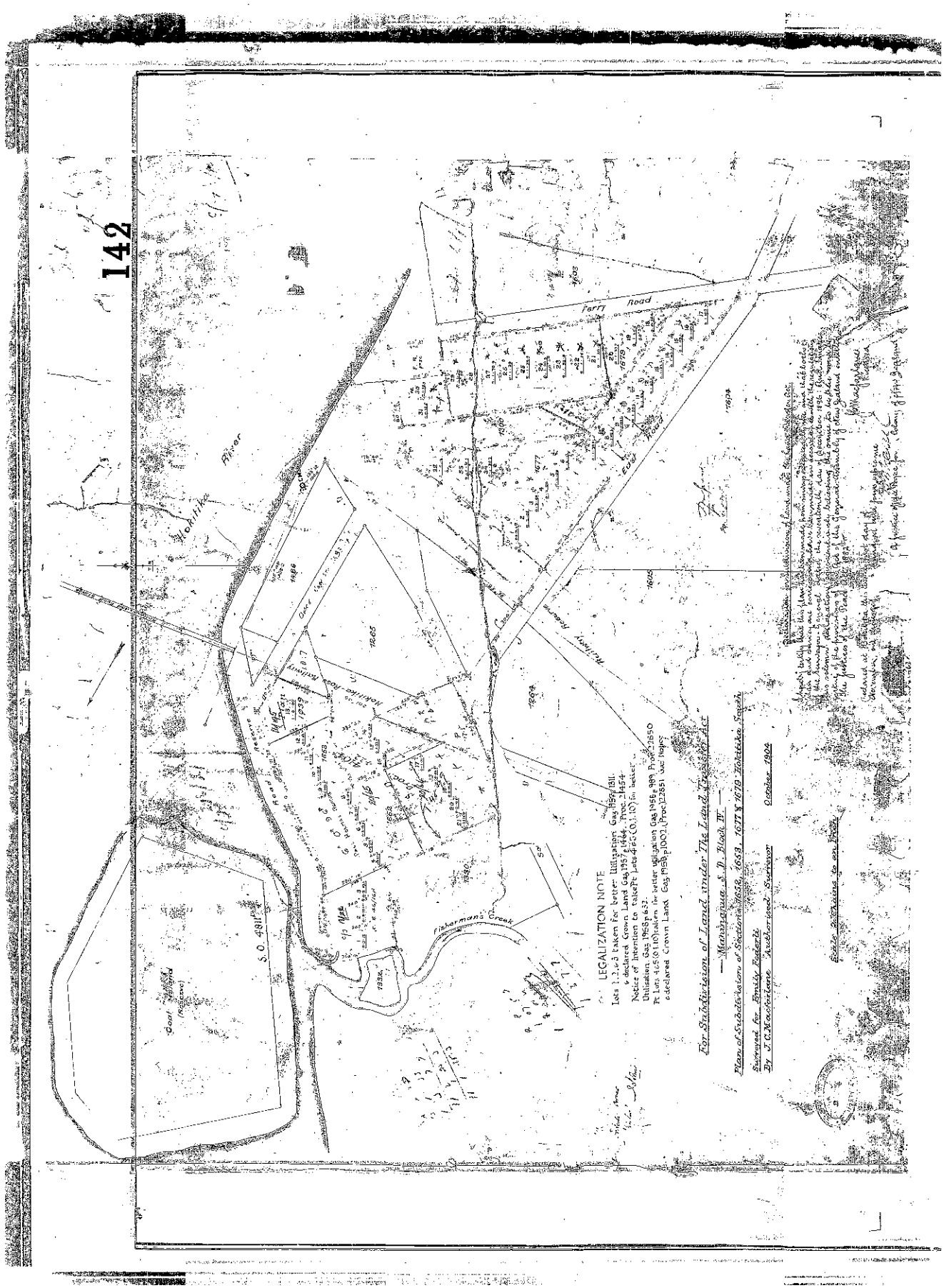
Identifier **WS2C/763**
Land Registration District **Westland**
Date Issued 19 April 1966

Prior References
WS24/140

Estate Fee Simple
Area 1103 square metres more or less
Legal Description Lot 9 Deposited Plan 142
Registered Owners
Forest Habitats Limited

Interests

Subject to all the rules and regulations for mining on private property within the Provincial District of Westland


142
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October 1904

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

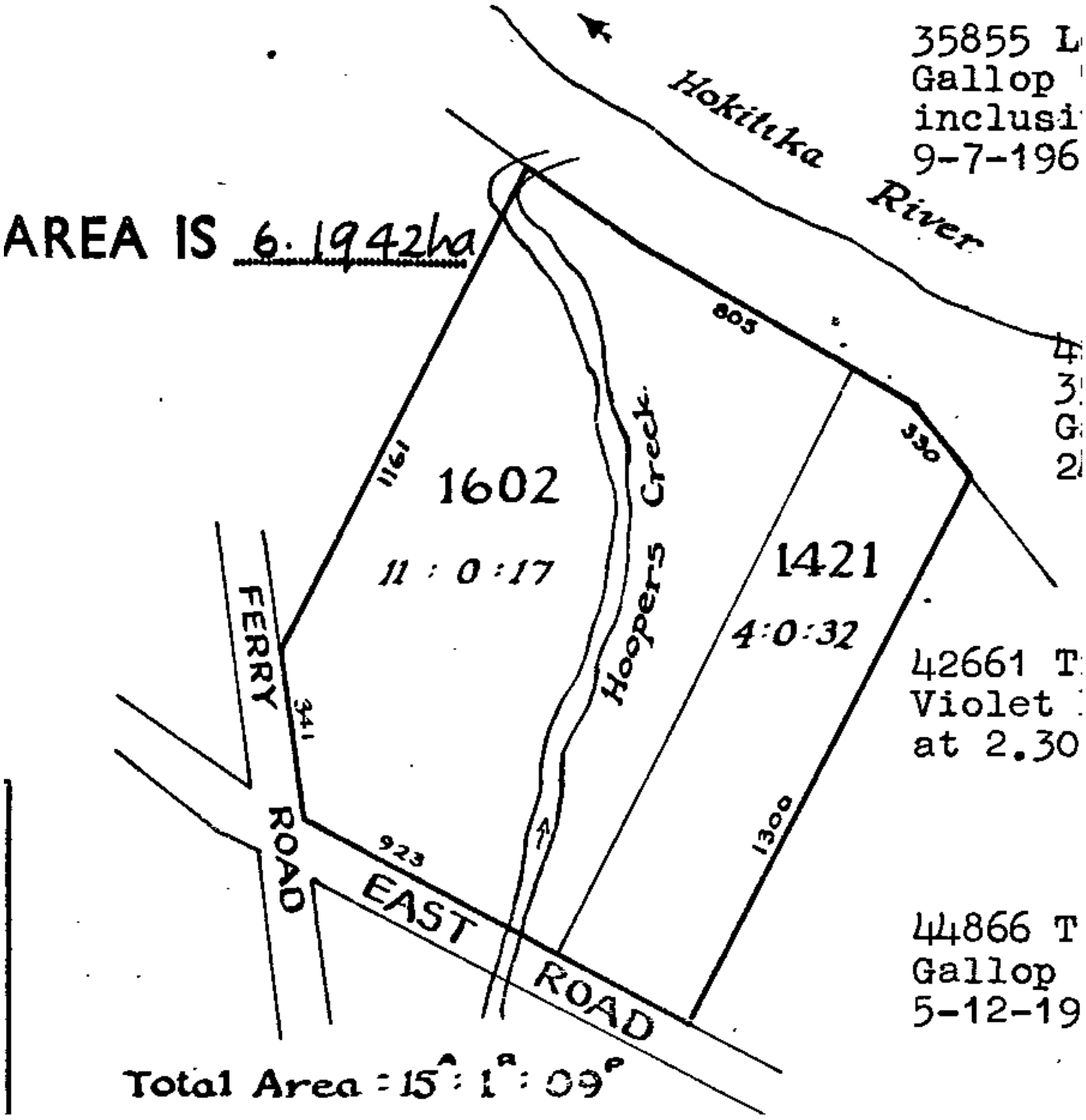
Identifier **WS1B/723**
Land Registration District **Westland**
Date Issued 12 June 1963

Prior References
WS59/100

Estate Fee Simple
Area 6.1942 hectares more or less
Legal Description Rural Section 1421 and Rural Section 1602
Registered Owners
Forest Habitats Limited

Interests

Subject to the rules and regulations for mining on private property within the Provincial District of Westland


AREA IS 6.1942ha
Hokitika River
803
1161
1602
11 : 0 : 17
Hoopers Creek
330
1421
4 : 0 : 32
FERRY
341
ROAD
923
EAST ROAD
1300
Total Area = 15 : 1 : 09
35855 L
Gallop
inclusi
9-7-196
42661 T
Violet
at 2.30
44866 T
Gallop
5-12-19

Proposed Easements

Purpose	Shown	Servient Tenement (Burdened Land)	Dominant Tenement (Benefited Land)
R.O.W. & Services	A	Lot 2	Lot 3
	B	Lot 3	Lot 2
	C	Lot 5	Lot 6
	D	Lot 6	Lot 5
	E	Lot 7	Lot 8
	F	Lot 8	Lot 7
Pedestrian R.O.W.	G	Lot 1	Lots 2 & 3
	H	Lot 14	Lots 1 to 12
	I	Lot 12	Lot 1 to 11, 13 to 15 & Pt. RS 4363

Proposed Amalgamation Condition

Lots 13, 14 & 15 hereon are to be amalgamated with Pt. RS 4363 (WS3A/1400) and one record of title to be issued to include them all.

Comprised in Record of Titles:

WS2C/1195, 4.0345 ha.
WS2C/1017, 1.3615 ha.
WS2C/763, 0.1103 ha.
WS1B/723, 6.1942 ha.
WS3A/1401, 7.9602 ha.
WS3A/1400, 7.7227 ha.

Total Area: 27.3834 ha.

Hokitika River Bed

Legal Road (Plotted from LINZ SO Plans)

Res 54 (Reserve)
30 DP 142
31 DP 142
Pt. RS 1300
6 DP 142
7 DP 142

Lot 15
1.20 ha.
WS2C/1195

Lot 14
8.00 ha.
WS2C/1195
WS3A/1401
WS1B/723

Lot 13
1.40 ha.
Existing Sheds
WS3A/1401

Lot 12
9100m²

Pt. RS 4363
(7.7227) ha.
WS3A/1400

Existing Dwelling

(Legal Road)

East Road

Lot 1
8200m²

Lot 2
6400m²

Lot 3
8500m²

Lot 4
1.02 ha.

Lot 5
8400m²

Lot 6
6700m²

Lot 7
6500m²

Lot 8
6200m²

Lot 9
6100m²

Lot 10
6800m²

Lot 11
6900m²

WS2C/1017
WS2C/763

Pedestrian walkway

Shared Entry

Entry

Arthurstown Road

RS 4654

RS 4655

Pt. RS 4363
(7.7227) ha.
WS3A/1400

A B C D E F G H I

Lots 1 to 15 Being a Proposed Subdivision of Lots 8 to 29 DP 142, Pt. RS1300, RS 1603, RS 1602, RS 1421, RS 1588, Pt. RS 1589, & Pt. RS 4363

Notes:

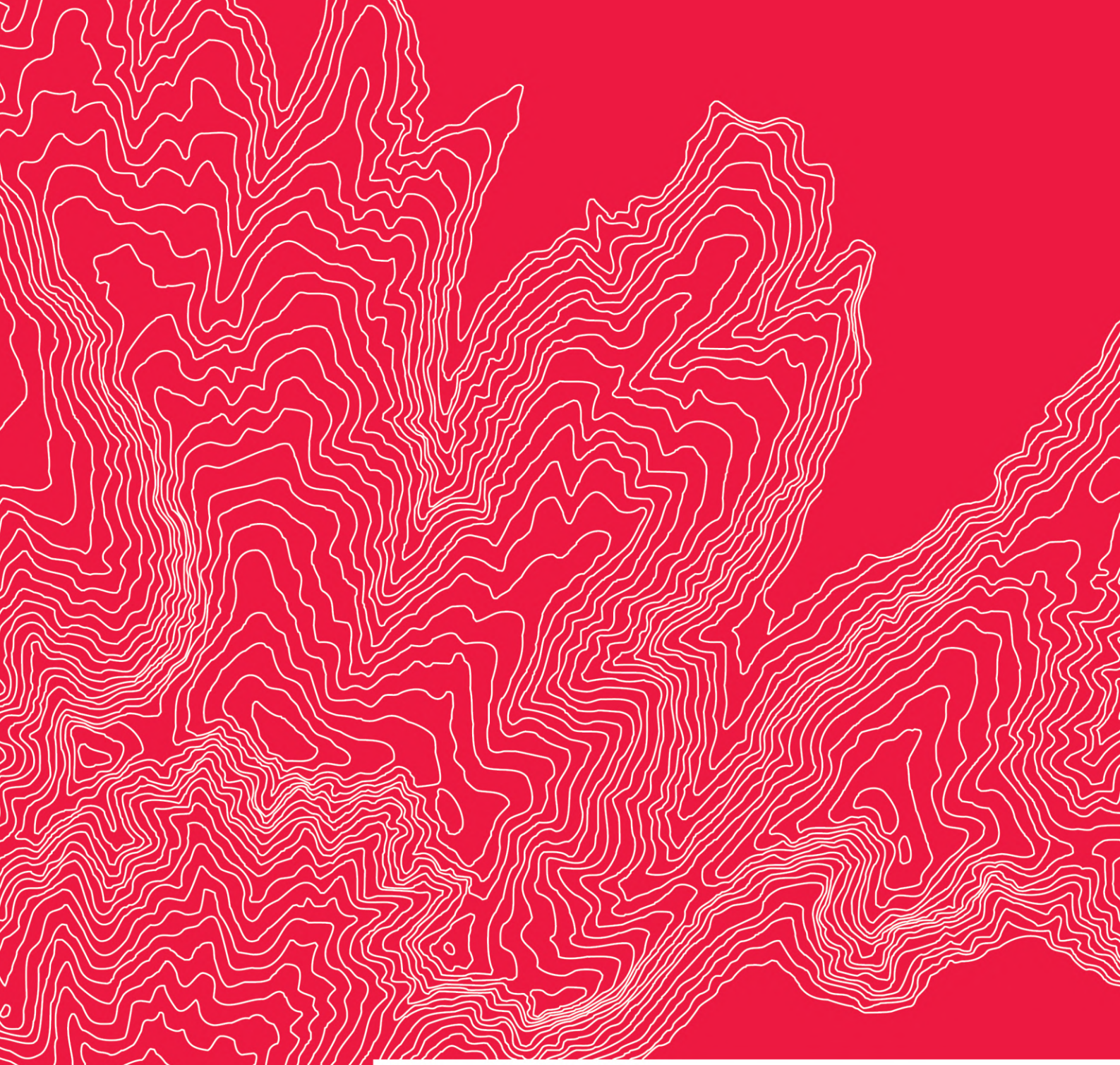
1. This plan is prepared for the purpose of obtaining resource consent and should be used for any other purpose.
2. All metric measurements and areas are subject to final survey.
3. Final Boundary and Easement alignments are to be determined on site at time of LT Survey / 223 approval stage.

Surveying & Development Consulting Ltd.
Phone: 0274902876 Email: chris@sdcltd.co.nz

Project:
Forest Habitats Ltd.
117 Arthurstown Road
Hokitika

Drawing Title: **Subdivision Scheme Plan**

Original Size:	Original Scale:	Date:	Job Number:
A3	1:3000	20 Sept. 2022	22008



Subdivision Suitability Report

117 Arthurstown Road, Hokitika

Prepared for Forest Habitats Ltd

510714

eliot sinclair

Subdivision Suitability Report

117 Arthurstown Road, Hokitika

Prepared for Forest Habitats Ltd

510714

Quality Control Certificate

Eliot Sinclair & Partners Limited

eliotsinclair.co.nz

Action	Name	Signature	Date
Prepared by:	Shannon Hopkins Survey Technician		29 August 2022
Reviewed by:	Paul Sykes Geotechnical Engineer BE(Hons) Mining MEngNZ		22 September 2022
Directed and approved for release by:	Stuart Challenger Civil Engineer | Branch Manager, Hokitika BE NatRes BSc CMEngNZ CPEng		28 September 2022
Status:	B		
Release date:	30 September 2022		
Distributed to:	Forest Habitats Ltd		

Version History

Status	Description	Author	Release Date
A	First issue of document	Shannon Hopkins	September 2022
B	Updated scheme plan Figure 2	Cushla Stone	30 September 2022

Contents

1. Introduction

1.1. Scope of Works

Eliot Sinclair has been engaged by Forest Habitats Ltd to undertake a geotechnical investigation on 117 Arthurstown Road, Hokitika. The purpose of the investigation was to:

- Assess the site's natural hazards to determine site suitability for subdivision and ensure future dwellings would be safe from hazards, and
- Investigate the shallow ground conditions to determine minimum foundation requirements for future dwellings.

2. Site Description

2.1. Legal Description

The legal description of the site is Lots 8 – 29 DP 142, RS 1602, 1603, 1421, 1588 and Pt RS 1589. The properties to be subdivided are held in four separate titles with a title area of approximately 19.55 ha. Arthurstown Road can be accessed off State Highway 6 to the west of the site which it intersects approximately 300m south of the Hokitika bridge. Figure 1 below illustrates an overview of the site location.

Figure 1. Figure showing location of site (Eliot Sinclair, 2022)

2.2. Proposed Subdivision

We understand it is proposed to subdivide the site into fifteen lots with two multi lane accessways and a single right of way to access the proposed lots. Figure 2 below is a copy of the proposed subdivision scheme plan.

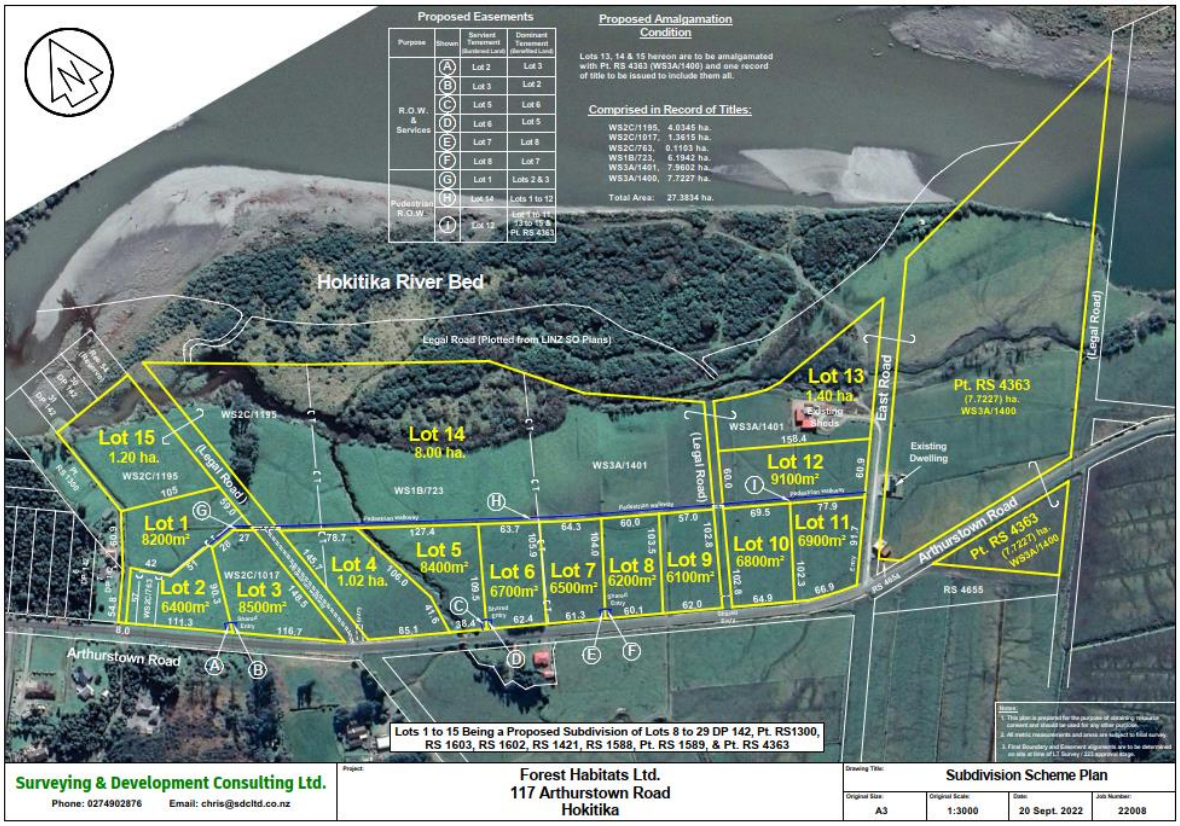


Figure 2. Copy of the proposed subdivision scheme plan (Surveying & Development Consulting Ltd, Sept 2022).

3. Geological Review

3.1. Engineering Geology

Geological mapping[1] of the area notes most of the site is underlain by Holocene Era river deposits (Q1a) of gravel, sand and silt.

3.2. Active Faults

The GNS database[2] indicates the closest active fault is the Alpine Fault approximately 23km south-east of the site. The site is not in any known fault hazard avoidance areas. The area is in the NZS3604: 2011 Zone 3 earthquake rating zone.

[1] Nathan, S., Rattenbury, M.S., Suggate, R.P. (compliers) 2002. Geology of the Greymouth area. Institute of Geological and Nuclear Sciences 1: 250 000 geological map 12. 1 sheet + 58p. Lower Hutt, New Zealand. Institute of Geological and Nuclear Sciences Limited

[2] https://data.gns.cri.nz/af/

3.3. Topography

The site is located approximately 400m south of the Hokitika River, at a level between 2.5m – 5.5m above sea level, and around 1.5km east of the coastline. The closest waterways are Charcoal Creek which runs through the site and the Hokitika River which is located just to the north of the property. The site has an elevated area located at the eastern and western ends and adjacent to Arthurstown Road. There is an area of lower elevation located in the central, northern area of the property, this lower area has not been covered in this report.

4. Geotechnical Investigation

4.1. Overview

On 7th September 2022 a site investigation was undertaken to determine the soil profile and bearing capacity. The investigation included eight test pits, in a grid like pattern across all proposed lots, and 12 dynamic cone penetrometer tests. The results from these tests can be found in Appendix B.

We did not undertake any testing in Lot 13, 14 or 15. Lot 13 has the existing dairy shed, plus we consider that the results from Lot 12 will be applicable to that lot. Lot 14 is a large lot and will require site-specific investigation. We consider that the results from lot 1 will be applicable to Lot 15.

Whilst we did not test every lot, we believe from the tests undertaken on site we have gained a reliable understanding of the soil profile across the site and can make informed recommendations about the soil types encountered.

A visual-tactile field classification of the soils encountered during the shallow investigation was carried out in general accordance with '*Guidelines for the Field Classification and Description of Soil and Rock for Engineering Purposes*' (NZGS, 2005) and DCP testing was carried out in accordance with NZS 4402:1988, Test 6.5.2, '*Dynamic Cone Penetrometer*'.

4.2. Test Pit Excavations

The general profile encountered by the test pits was a typical of alluvial deposits and comprised a surficial layer of silty topsoil with rootlets approximately 0.2m thick, overlying silts and sands with some organics to a maximum depth of 4.3m below ground level (bgl).

We did not encounter any expansive soils (clay-like), highly organic soils (peat) or significant deposits of uncontrolled fill during our investigation.

4.3. Groundwater

Static ground water was encountered at test locations 3, 4 and 6 at depths of between 3.1m and 3.3m bgl.

4.4. Dynamic Cone Penetrometer (DCP) Testing

Below the topsoil, DCP resistances generally revealed at least 2 blows per 100mm penetration within the underlying insitu layers of silt and sandy silt to a depth of around 0.8m bgl. Below 0.8m the blow counts at the test locations increased with increasing depth.

4.5. Geotechnical Ultimate Bearing Capacity

We have inferred an index ultimate bearing capacity of only 200kPa to around 0.8m bgl. From about 1.0m depth, the relative density of the soils met the requirements of good ground to around 2m depth where the testing was terminated. We have inferred an index ultimate bearing capacity of at least 300kPa from 0.8m to around 2m bgl.

The assessment of bearing capacity given here is the *index* geotechnical ultimate bearing capacity (GUBC) using the DCP blow count profile method given in the MBIE Residential Guidance Section 3.4.

Figure 3. Approximate test locations (Eliot Sinclair, 2022)

5. Natural Hazards Risk Assessment

5.1. Introduction

Council can refuse subdivision consent if there is a significant risk from natural hazards. To determine whether there is a significant risk from natural hazards, decision-makers are guided by the requirements of RMA Section 106(1A). This requires a combined assessment of:

- The **likelihood** of natural hazards occurring (whether individual or in combination); and
- The **consequences** (material damage) that would result from natural hazards to land where the consent is sought, other land, or structures; and
- Any **likely subsequent use** of the land where the consent is sought that would **accelerate, worsen, or result in material damage**.

Decision-makers are required to consider the magnitude of risk of natural hazards, including natural hazards that have a high impact but low probability of occurrence. This aligns the assessment with the definition of '*effect*' Section 3 of the RMA.

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

Hazard identification is a key component of any site-specific risk assessment. The risk assessment for relevant natural hazards at the site is presented below, which considers the likelihood and consequences of the hazard at the site in the context of the proposed activity (rural residential subdivision) as compared against the current site context.

We have considered the risk of falling debris, subsidence, wind, drought, fire, geothermal activity, sedimentation, climate change, sea level rise, and volcanic activity and conclude these are very unlikely to pose an unacceptable risk to life at this site.

In relation to other potential natural hazards, we comment as follows:

5.2. Risk Assessment

5.2.1. Earthquake Shaking

New Zealand is a seismically active country. New buildings and infrastructure will be designed, consented, and built to acceptable industry standards and New Zealand Building Code requirements and as such will be designed for any likely shaking as detailed in the current design codes, which will address the risk.

5.2.2. Earthquake Fault Rupture

There are no recorded active fault traces across the site. The site is not located within a fault hazard area or fault avoidance zone. The closest active fault is the Alpine Faultline, which lies approximately 23km south-east of the site.

5.2.3. Erosion

An investigation of aerial photography dating back to 1943 shows that the low area within the site was riverbed in 1943. Aggradation occurred to the extent that the area of riverbed was almost completely reclaimed as pasture by 1951. Some erosion occurred between 1970 and 1984 in the western area, at and around the mouth of Charcoal Creek. This area has subsequently aggraded with the most recent aerial photography showing vegetation well beyond the river boundary location shown on survey plans dating back as far as 1874.

We consider that the current land between the proposed building locations on the higher elevated areas will not be subject to erosion and that erosion will not materially affect buildings on the new allotments assuming modern design methods and our construction recommendations are followed.

5.2.4. Flooding

As part of this natural hazards assessment we have reviewed the report titled '*Hokitika River, Hydraulic Modelling and Food Hazard Mapping'*[3]. Figure 4 is an excerpt of flood hazard mapping for a 100-year event including climate change (2100), representative concentration pathway (RCP) scenario 8.5, 1.4m sea level rise, 0.4m storm surge.

The vast majority of the site is coloured yellow (H5) which represents water velocities that are '*Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust buildings subject to failure'*.

The south eastern portion of the site are coloured light and dark blue (H2 and H1) which represents water velocities that are '*Unsafe for small vehicles'* (H2) and '*Generally safe for vehicles, people and buildings' (H1)*.

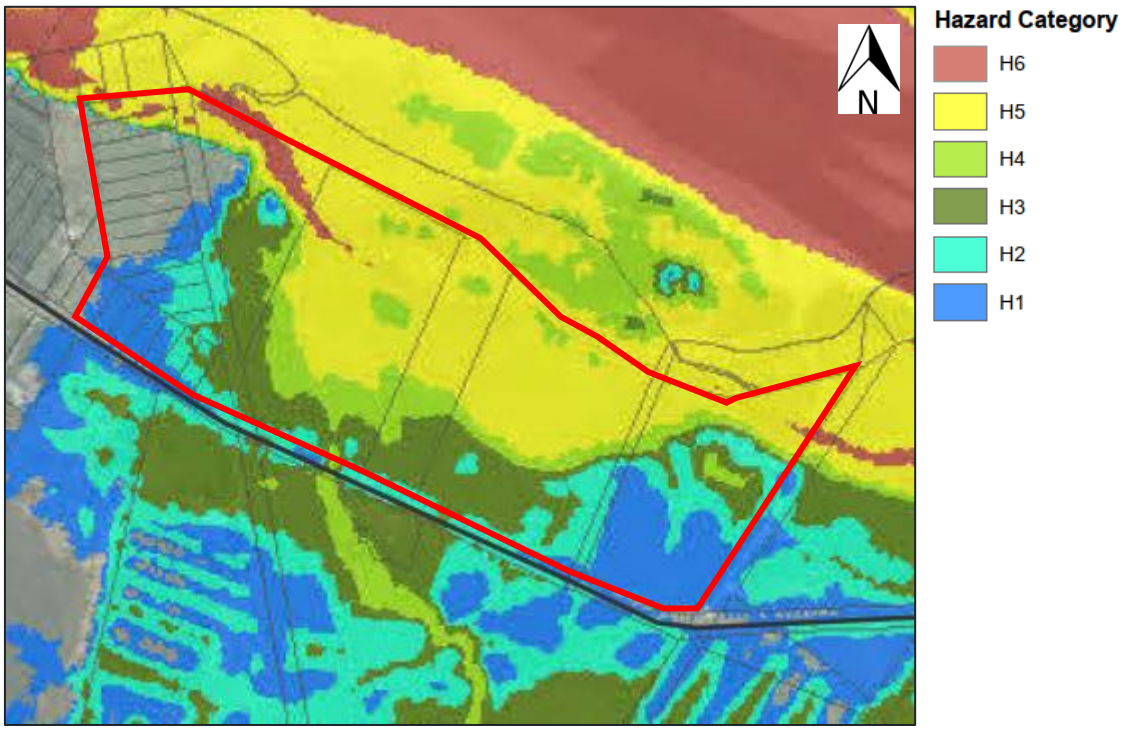


Figure 4. Flood hazard modelling map showing water velocities

Figure 5 indicates the flood peak water depth for a 1 in 50-year event, a 1m sea level rise and 0.4m storm surge. The water depths are generally between 0.1m to 0.5m and deeper at the margins of Charcoal Creek to the west.

[3] Hokitika River, Hydraulic Modelling and Food Hazard Mapping', dated June 2020, for West Coast Regional Council prepared by Matthew Gardner

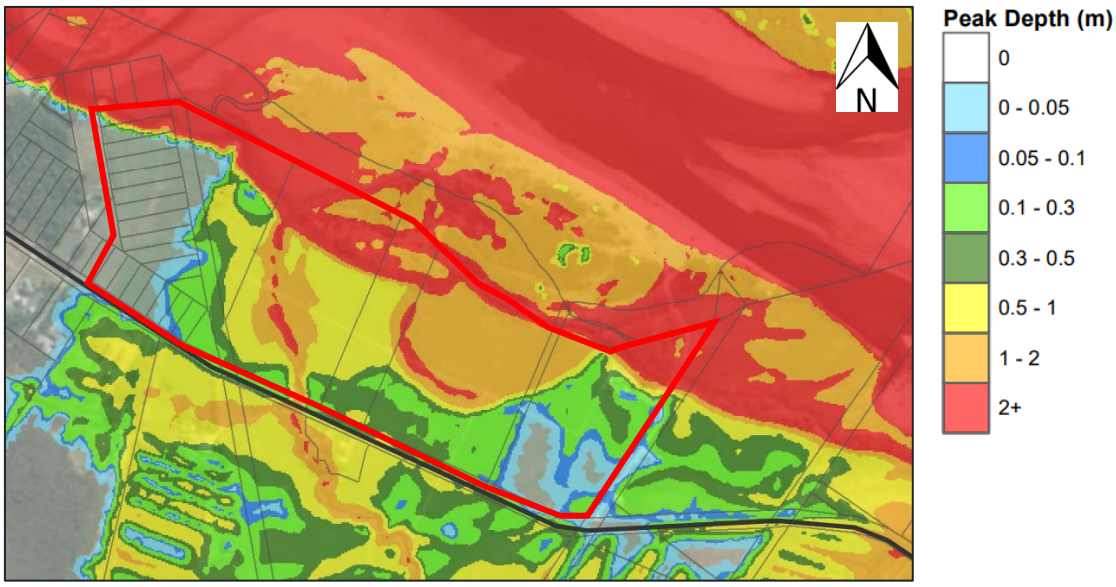


Figure 5. Flood water depth during 1:50-year event

We recommend any future dwellings within these lots are located towards the south side of the lots close to Arthurstown Road. The minimum floor heights for any proposed dwellings within the subdivision should be above the modelled water depth plus freeboard. Westland District Council should advise on the final floor levels for dwellings within the proposed subdivision as part of the consenting process.

5.2.5. Liquefaction

Strong seismic shaking can result in liquefaction in areas where the water table is within 5 metres of the ground surface[4]. If liquefaction occurs at less than about 10m below surface there is likely to be surface deformation and expression at the surface (sand boils), deeper occurrence will likely have less impact. Coastal areas and river flood plains are usually suspectable to liquefaction, which results in ground deformation and/or lateral spreading.

The site is classified in the West Coast Regional Liquefaction Assessment[5] as being in an area where liquefaction damage is possible. The assessment indicates (figure 2-2) that the site has a high-moderate susceptibility to liquefaction.

We consider it is likely that the site could be affected by liquefaction. Measures to mitigate the risk of liquefaction will need to be undertaken, this includes the strengthening of any engineered gravel pad with geo grid or supporting proposed dwellings on piles embedded within suitable and non-liquefiable strata. Provided the preliminary recommendations in Section 6 are followed then we consider that liquefaction potential and the risk of structural and land damage is low.

5.2.6. Tsunami

Due to the location of the site (adjacent to the Hokitika River and 1.5km from the Tasman Sea) it is susceptible to Tsunamis on a larger scale. Below is the Tsunami Hazard Map showing areas of the site being in the orange and yellow zones. The yellow zone covers the largest area that would need to be evacuated in the event of a maximum-impact tsunami, the orange zone shows areas to be evacuated in a 1m to 5m event.

[4] PJ Glassey, DW Heron 2012. Amplified ground shaking and liquefaction susceptibility, Invercargill City. GNS Science Consultancy Report 2012/014.
[5] Beca Limited. West Coast Regional Liquefaction Assessment, 1 November 2021

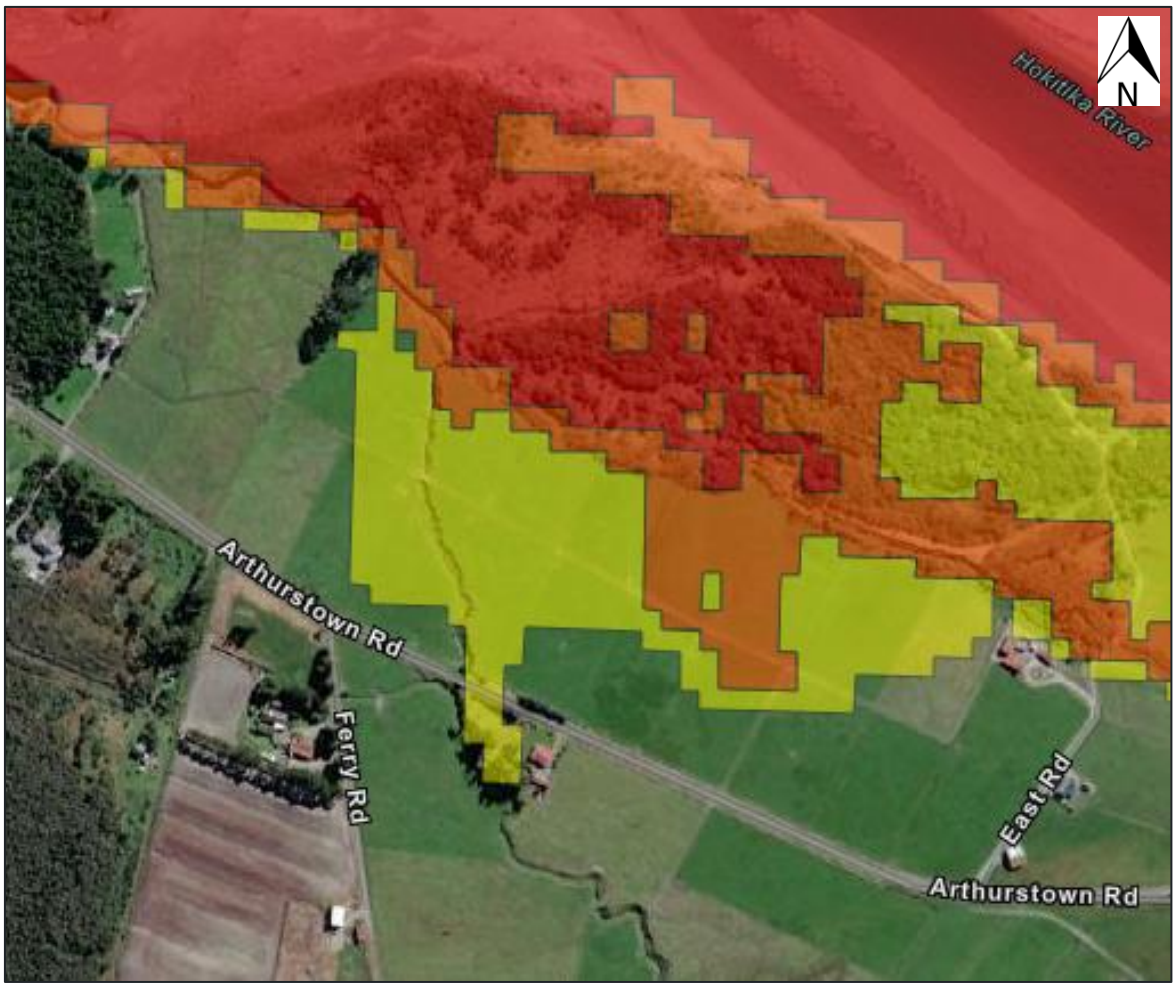


Figure 6. Tsunami Evacuation Zones (https://www.civildefence.govt.nz/get-ready/get-tsunami-ready/tsunami-evacuation-zones/)

Most intended building sites are outside of the yellow zone, but it is important that the occupants are aware of the Civil defence recommendations that should be followed '*this area must be evacuated if there is a long or strong earthquake. The earthquake may be the only warning of a tsunami, so people are advised not to wait for further instructions, notifications or advice, immediate evacuation is required after shaking has stopped*'.

6. Foundation Recommendations

Based on our geotechnical investigation, we can confirm the site contains firm silts capable of supporting a building and have a geotechnical ultimate bearing capacity of 300kPa from around 0.8m below the surface.

Due to the likelihood of flooding over the site in the future the floor level for any future buildings will be required to be elevated above ground level. We consider there are three feasible options for foundations for residential dwellings constructed on each lot. These are described below.

6.1. Gravel raft with TC2 slab foundation

To reduce the risk of liquefaction-induced settlement occurring to shallow foundations and to address the weak soils in the upper layers, we recommend shallow ground improvement be undertaken to remediate the upper 1.2m shallow soil profile. This can be achieved by excavation and construction of a geogrid reinforced compacted gravel raft.

A suitably qualified geotechnical engineer should inspect the exposed excavated subgrade before placing any geogrid to confirm the soil profile and bearing resistances. The exposed subgrade should not contain any obvious organic matter, topsoil, buried logs, or any other very soft or unsuitable materials. A layer of geogrid should be placed across the base of the excavation and up the sides, such as Triax TX160 or equivalent. It is important that the grid is sufficiently tensioned to remove any wrinkles, bulges, folds etc. prior to placing the gravel fill on top of the geogrid.

AP40 or AP65 or river-run sandy gravel can then be used as controlled fill providing there are no large cobbles or boulders (particle size > 60mm). If compaction is an issue, then a layer of no fines fill (ballast) can be placed across the base of the excavation to provide a suitable base from which to proceed the backfilling.

Sandy gravel fill shall be placed and compacted in ~200mm thick layers, in accordance with the requirements of NZS4431:2022. A minimum of two layers of geogrid spaced 400mm apart should be placed within the gravel raft below existing ground level. The compacted dry densities achieved by the filling work shall exceed 95% of the maximum dry density of the sandy gravel.

The compacted gravel above ground should be battered at an angle no steeper than 3:1. The landscaping design for the site will need to take into account the elevated building platforms in order to achieve suitable driveway and footpath gradients.

6.2. Gravel raft with Type 2A surface structure

Following the geogrid reinforced gravel raft construction as above, the in-ground slab should bear 0.1m into the gravel raft and can be designed assuming an ultimate bearing capacity of at least qu=300kPa. The in-ground slab should protrude a minimum of 50mm above the upper surface of the gravel raft.

A geotechnical strength reduction factor of Φbc=0.5 should be adopted by the foundation design engineer when assessing the effects of both long-term static loads and short-term seismic loads.

The crawl space around the perimeter of the outer piles should be clad and braced with painted plywood as per Figure 15.21 Part C of the MBIE Guide. See Figure 7 for a copy of the plywood stiffening for the Type 2A surface structure.

Figure 15.21: Detail of plywood stiffening to Type 2 surface structure (Type 2A illustrated)

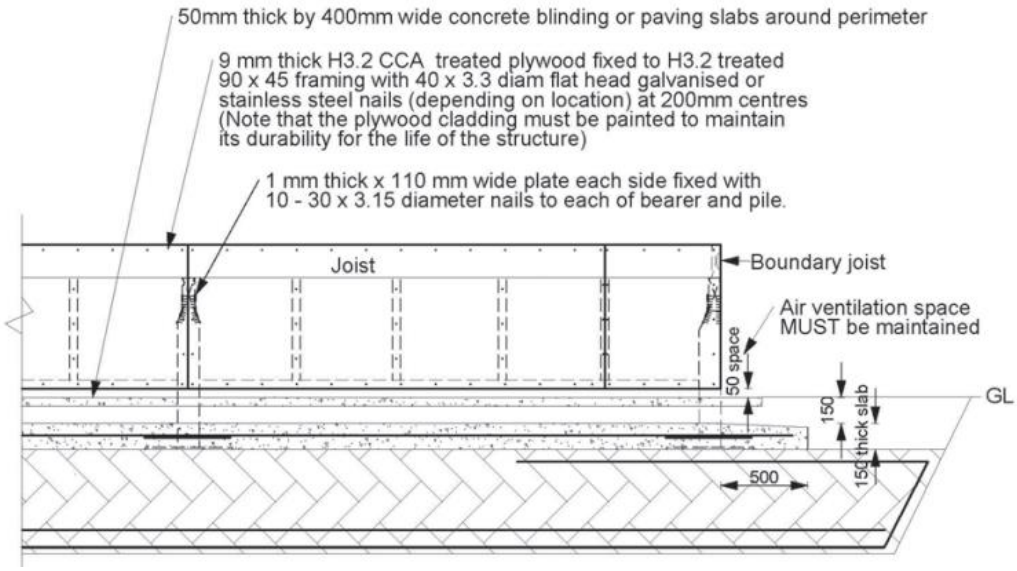


Figure 7. An excerpt from the MBIE Guide illustrating the plywood bracing

6.3. Driven timber piles

Another option is a driven timber pile foundation, whilst the minimum bearing resistance required for driven timber piles under NZS3604: 2011 was met at around 0.8m, it is necessary that the piles be driven a minimum of 1.2m below the surface. The piles will need to extend above the surface to ensure the dwelling is not subject to inundation. Westland District Council are to advise on final floor levels for dwellings within the subdivision.

6.4. Restricted Building Area (RBA)

A restricted building area is recommended to ensure that all dwellings constructed on sites as part of this subdivision are protected against both inundation and erosion, see figure 8 below. Any future building in the area as shown in red will require a specific foundation investigation undertaken by a suitably qualified individual, it is expected that the foundation investigation would also provide measures for the mitigation of any potential liquefaction and flooding hazard.

Figure 8. Area to be restricted from building (Eliot Sinclair 2022)

7. Infrastructure Requirements

7.1. Potable Water

There is no Council reticulated water available to the site. Rainwater tanks will be required for water supply. We recommend a minimum of 45m^3 of water storage onsite to allow for residential supply and firefighting purposes. It is also recommended that a leaf diverter and a first flush diverter be installed.

7.2. Wastewater

There is no Council sewer available to the site. Onsite wastewater treatment and disposal will be required. Most of our test pits did not encounter groundwater within 3.5m of the ground surface. Standing water was found in test pits 3, 4 and 6 at between 3.1 and 3.3m bgl. We consider that the soil category, in terms of AS/NZS1547: 2012, to be category 4. Category 4 soils have limited permeability and it is recommended that specifically designed secondary wastewater treatment systems be used.

Category 4 soils do not meet the requirements of rule 79 in the West Coast Regional Council's Land and Water Plan for permitted activity and the land application (discharge) of wastewater will therefore require a resource consent from the West Coast Regional Council.

7.3. Stormwater

There are no Council storm reticulation in the local area, stormwater overflow from the rainwater tank will need to be discharged appropriately without causing erosion or ponding. If onsite stormwater disposal is required, the underlying silts may be a limiting infiltration layer and will need to be considered appropriately.

7.4. Vehicle Access

There is currently access to the site from Arthurstown Road.

All future access will be off Arthurstown Road, either directly from the road or via easements/access strips.

8. Conclusion

Based on our geotechnical investigation, we consider the site on Arthurstown Road suitable for subdivision into fifteen Lots as proposed. Our geotechnical investigation on each of the proposed lots confirmed the presence underlying silts which have sufficient load carrying capacity for residential use. Dwellings shall be founded on an engineered gravel raft or on driven timber piles, with a floor height above the surrounding ground level. The final floor heights and freeboard will be determined by Westland District Council as part of the consenting process. We consider the site can be subdivided and that any natural hazard can be mitigated to ensure the safety of both dwellings and people.

Disclaimer

This report has been prepared by Eliot Sinclair & Partners Limited ("Eliot Sinclair") only for the intended purpose as a Natural Hazards Risk Assessment. Our analysis is based on our inspection of the site and geotechnical testing.

The report is based on:

- Information shown on the NZGD, Westmaps and GNS's Active Faults Database.
- Ministry of Business, Innovation and Employment's (MBIE) December 2012 guidelines.

Where data supplied by Forest Habitats Ltd or other external sources, including previous site investigation reports, have been relied upon, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Eliot Sinclair for incomplete or inaccurate data supplied by other parties.

Whilst every care has been taken during our investigation and interpretation of the subsurface conditions to ensure that the conclusions drawn, and the opinions and recommendations expressed are correct at the time of reporting, Eliot Sinclair has not performed an assessment of all possible conditions or circumstances that may exist at the site. Variations in conditions may occur between investigatory locations and there may be conditions such as subsoil strata and features that were not detected by the scope of the investigation that was carried out or have been covered over or obscured over time. Additionally, on-going seismicity in the general area may lead to deterioration or additional ground settlement that could not have been anticipated at the time of writing this report. Eliot Sinclair does not provide any warranty, either express or implied, that all conditions will conform exactly to the assessments contained in this report.

The exposure of conditions that vary from those described in this report, or occurrence of additional strong seismicity, or any future update of MBIE's guidelines may require a review of our recommendations. Eliot Sinclair should be contacted to confirm the validity of this report should any of these occur.

This report has been prepared for the benefit of Forest Habitats Ltd and Westland District Council for the purposes as stated above. This report is specifically prepared for the proposed subdivision and should not be used to support any future consent application without prior review and approval by Eliot Sinclair. No liability is accepted by Eliot Sinclair or any of their employees with respect to the use of this report, in whole or in part, for any other purpose or by any other party.

Appendix A. Site Photographs

Figure 1. Photo of test pit 01

Figure 2. Photo of test pit 03

Figure 3. Photo of test pit 04

Figure 4. Photo of test pit 06

Figure 5. Photo of test pit 07

Figure 6. Photo of test pit 09

Figure 7. Photo of test pit 10

Figure 8. Photo of test pit 12

Figure 9. Photo of Charcoal Creek, looking towards river from bridge on site

Figure 10. Photo of Charcoal Creek, looking towards Arthurstown Road from bridge on site

Figure 11. Photo of site looking west from Charcoal Creek

Figure 12. Photo of site looking east from Charcoal Creek

Figure 13. Photo looking west across site east to west

Figure 14. Photo looking east from low area of site

Figure 15. Photo looking west from low point on site

Appendix B. Site Investigation Records

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

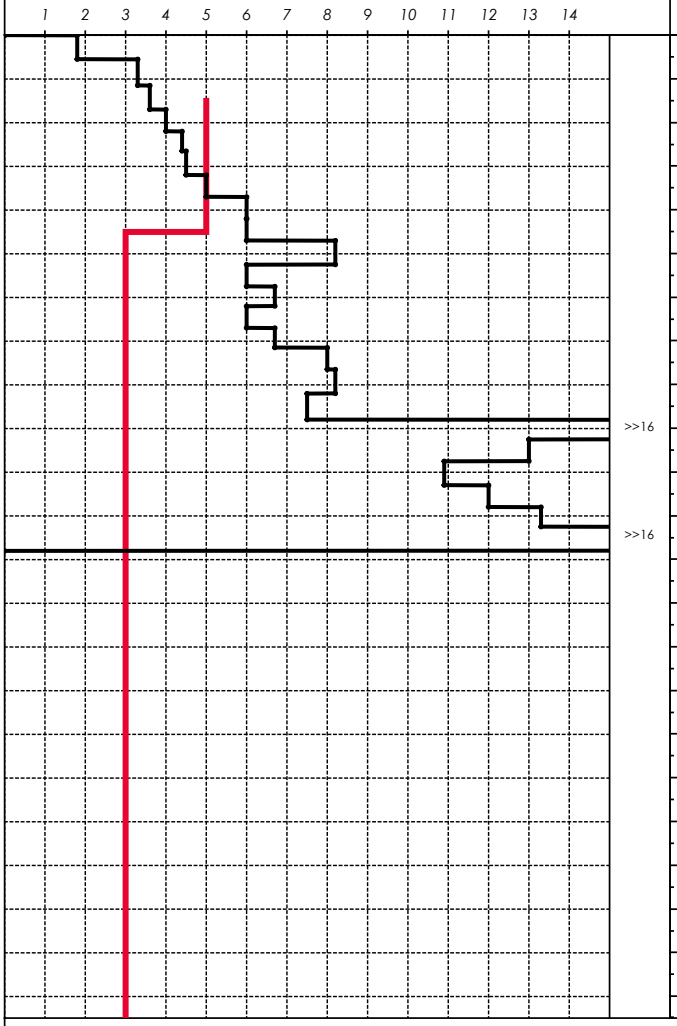
Technical Category: N/A

Lot: 23 **D.P.:** 142

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1 **Project No.:** 510714

Dynamic Cone Penetrometer (DCP) Test Results



01

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Soil Profile

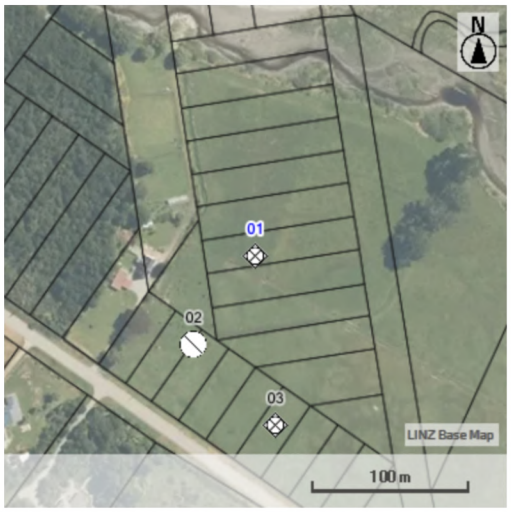
Test Location 01

TS	SILT; dark brown. Rootlets.
	SILT; grey . Large organics and logs.
	SILT, with minor sand; grey . Damp.

Water

Groundwater Not Encountered

Site Plan: (Not to Scale)



Comments:

Dynamic Cone Penetrometer: Lot 1

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☑ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot: 10 9

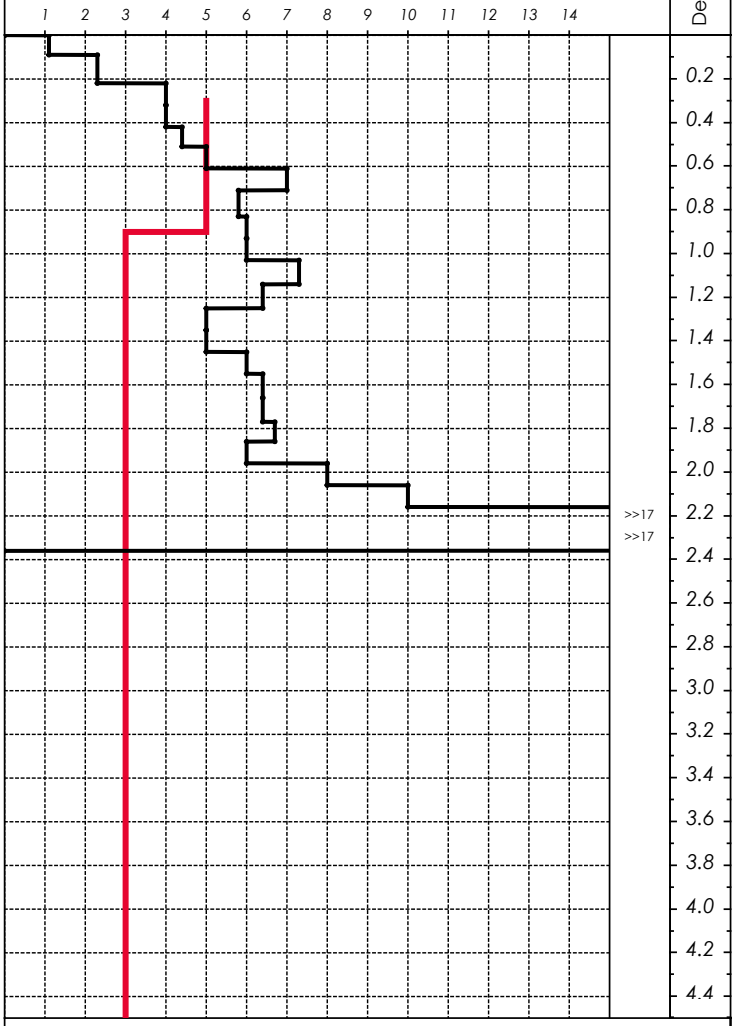
D.P.: 142, 142

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



Soil Profile

Water

02

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Site Plan: (Not to Scale)

Comments:

Dynamic Cone Penetrometer: Lot 2

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☐ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

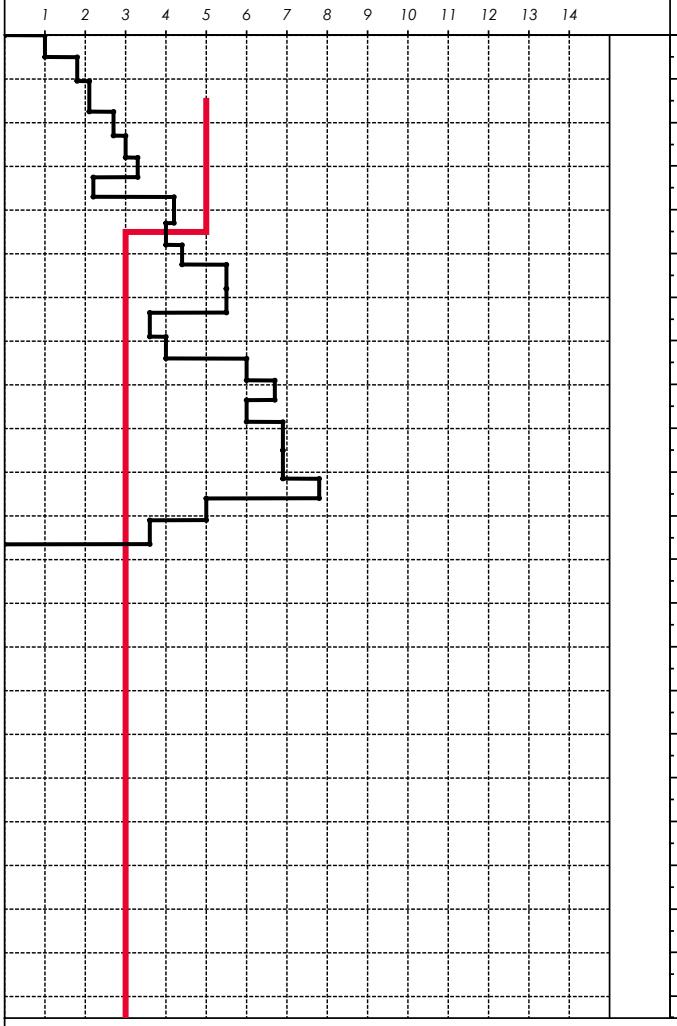
Technical Category: N/A

Lot: 13 **D.P.:** 142

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1 **Project No.:** 510714

Dynamic Cone Penetrometer (DCP) Test Results



03

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Soil Profile

Test Location 03

	Water
TS SILT; dark brown. Wet; Rootlets.	
SILT, with minor sand; brown . Firm; damp; Rootlets.	
SILT, with minor sand; grey . Firm; damp.	
2.70m - 2.70m: Buried log	
SAND, with minor silt; grey . Damp to saturated; saturated at 3.3m.	▽ 3.3m

Site Plan: (Not to Scale)

Comments:

Dynamic Cone Penetrometer: Lot 3

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☑ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot:

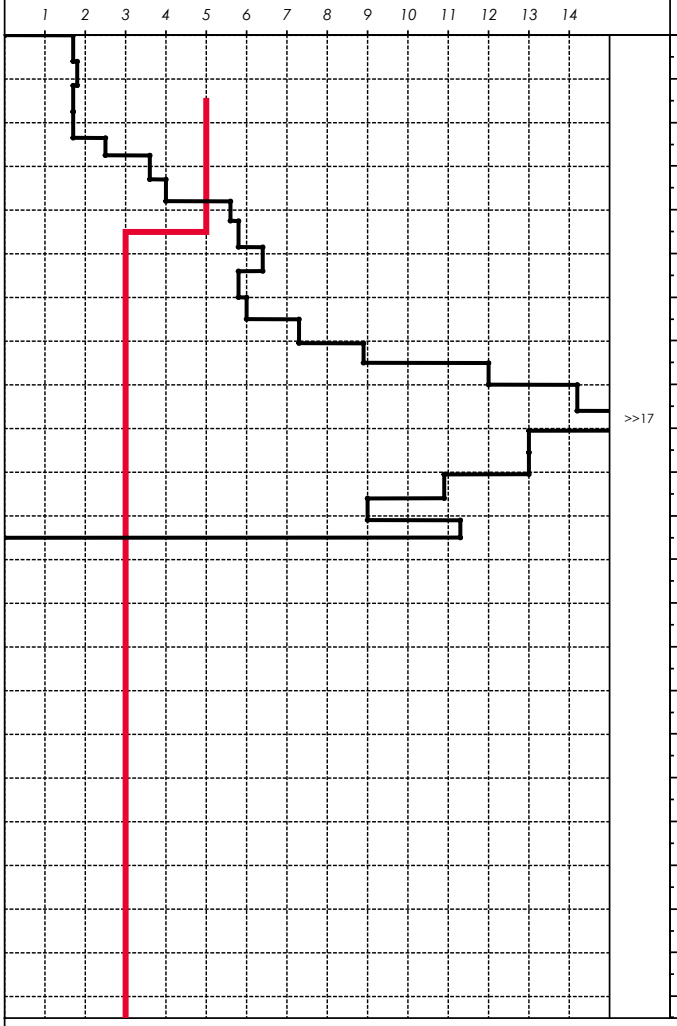
D.P.:

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



04

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Soil Profile

Test Location 04

		Water
TS	SILT; dark brown. Wet; Rootlets.	
	SILT, with minor sand; brownish grey. Damp; Rootlets to 0.5m bgl.	
	Fine SAND, with minor silt; grey . Damp to saturated.	
	3.20m - 3.20m: Becoming saturated	▽ 3.2m

Comments:

Dynamic Cone Penetrometer: Lot 4

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☑ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Site Plan: (Not to Scale)

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot:

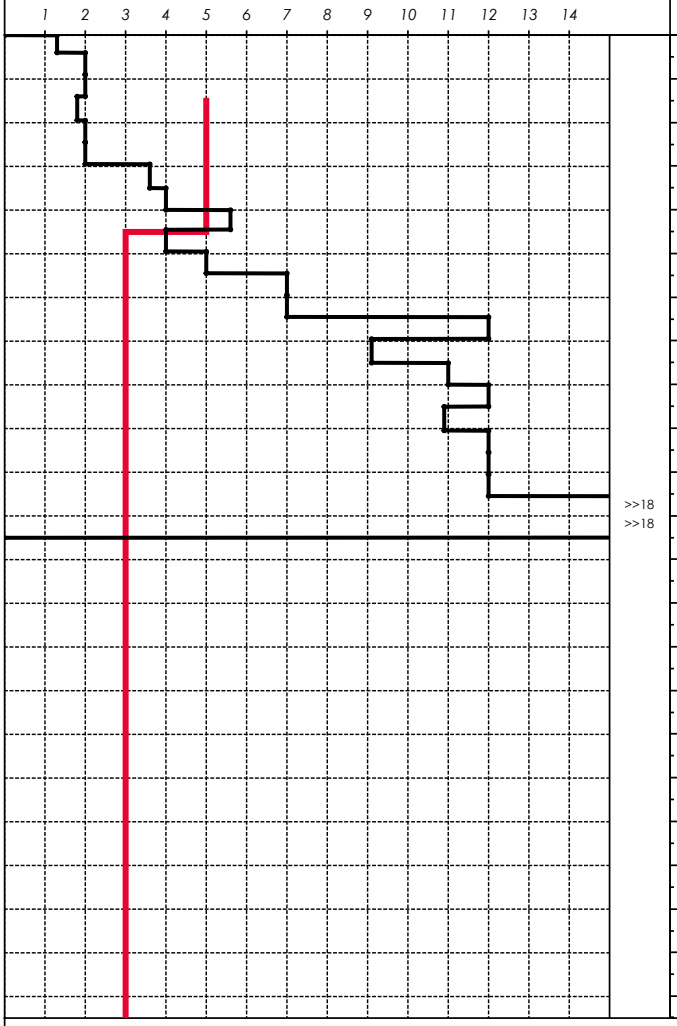
D.P.:

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



Soil Profile

Water

05

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Site Plan: (Not to Scale)

Comments:

Dynamic Cone Penetrometer: Lot 5

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☐ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot:

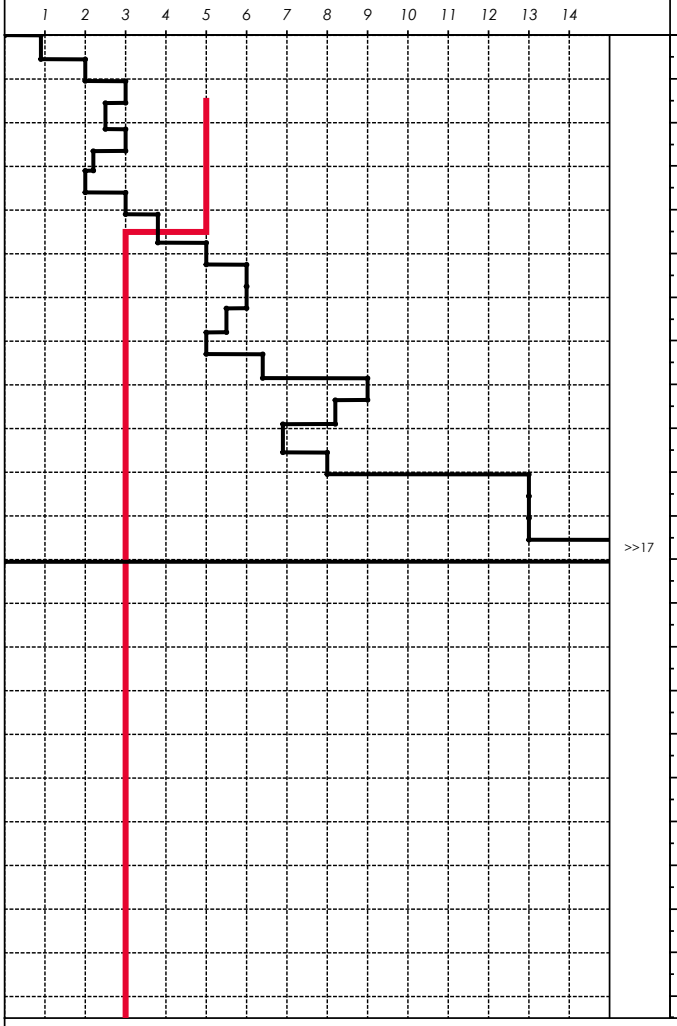
D.P.:

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



06

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Soil Profile

Test Location 06

	Water
TS SILT; dark brown. Rootlets.	
SILT, with minor sand; brownish grey. Firm; damp.	
SILT, with minor sand; grey . Damp.	
SAND, with minor silt; grey . Damp to saturated.	
SAND, with some gravel; grey . Saturated; gravel, fine; Pea gravels. Becoming saturated at 3.1m bgl.	▽ 3.1m

Site Plan: (Not to Scale)

Comments:

Dynamic Cone Penetrometer: Lot 6

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☑ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot:

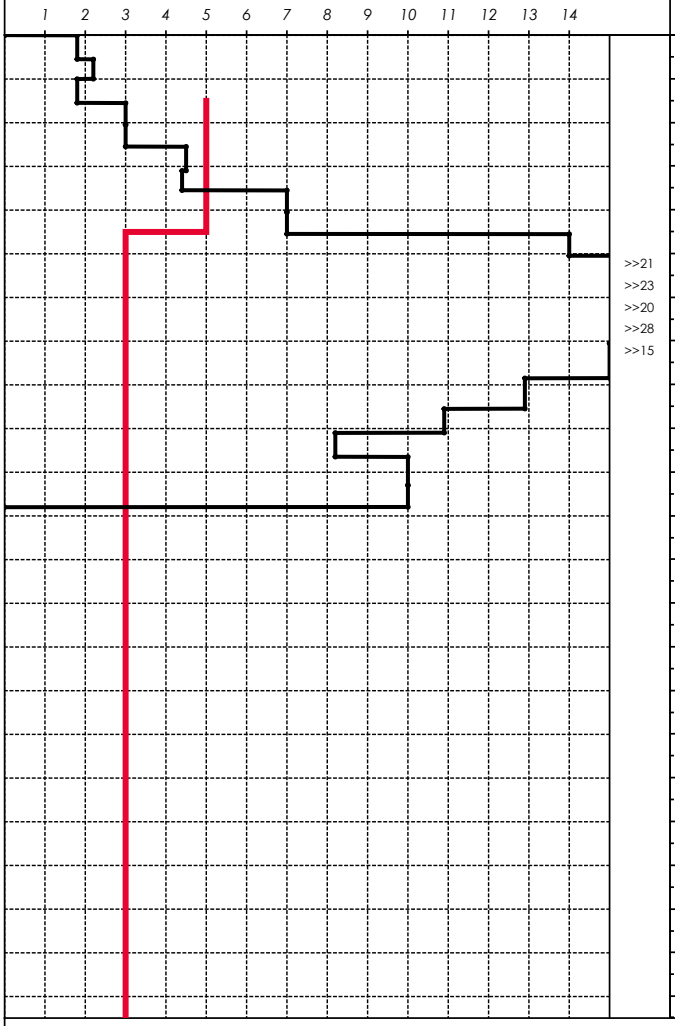
D.P.:

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



Depth (m)

0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4

Soil Profile

Test Location 07

TS	SILT; dark brown. Rootlets.
	SILT; brown . Damp to wet; Some rootlets.
	SILT, with minor sand; grey . Damp.
	SAND, with minor silt; grey . Damp.

Water

Groundwater Not Encountered

07

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Site Plan: (Not to Scale)

Comments:

Dynamic Cone Penetrometer: Lot 7

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☑ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot:

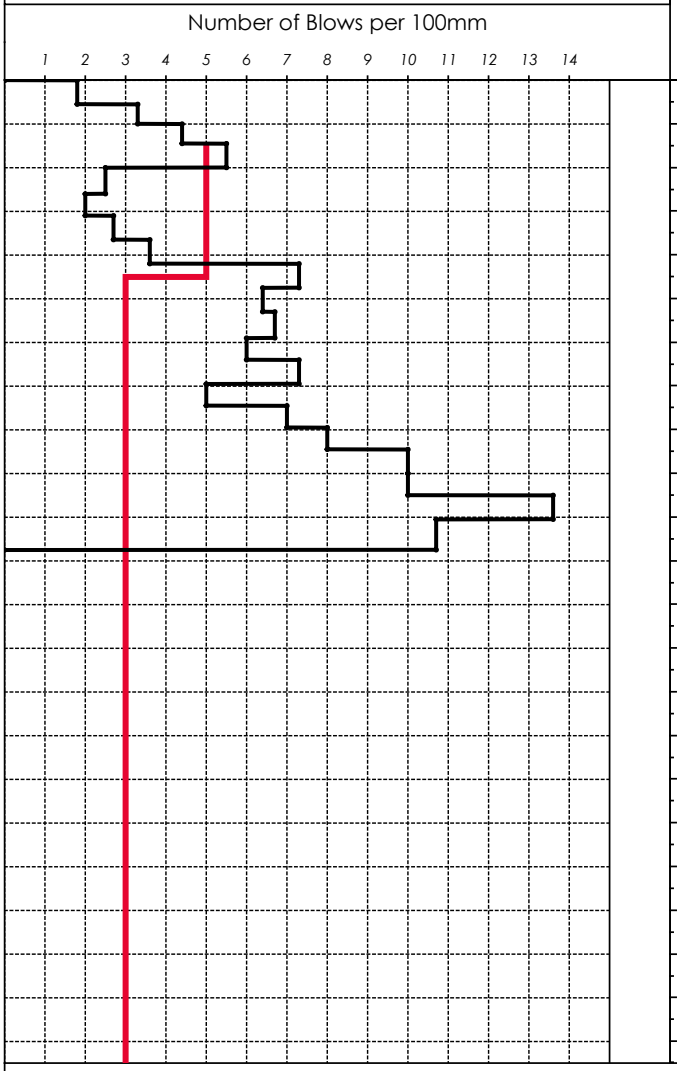
D.P.:

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



Soil Profile

Water

08

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Site Plan: (Not to Scale)

Comments:

Dynamic Cone Penetrometer: Lot 8

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☐ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot:

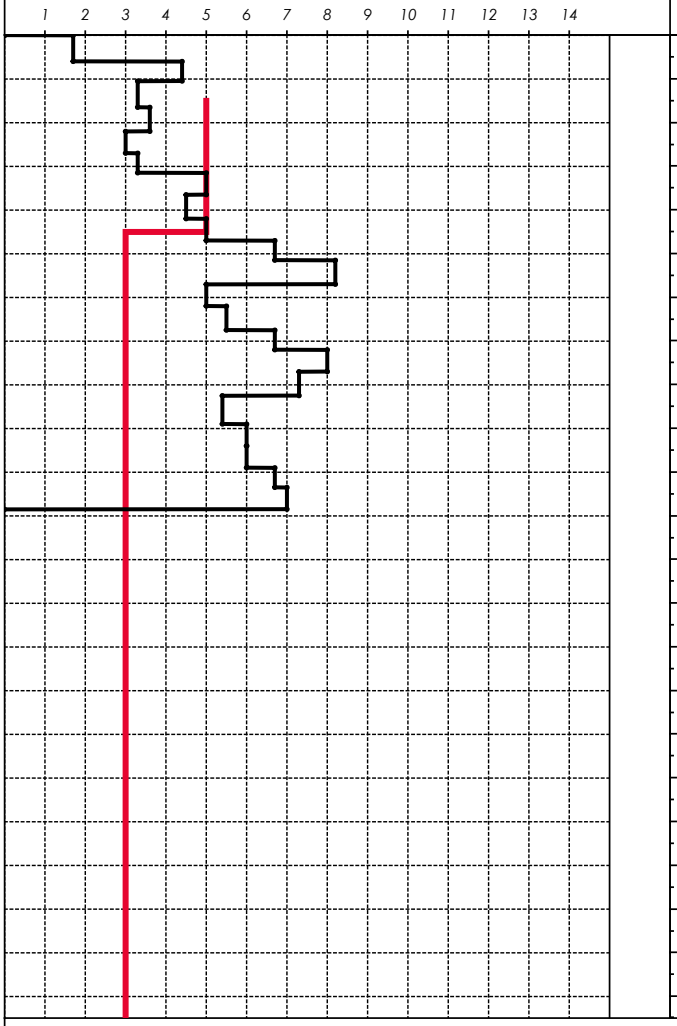
D.P.:

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



09

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Soil Profile

Test Location 09

TS	SILT; dark brown. Damp to wet; Rootlets.
	SILT; brown . Damp.
	SILT, with minor sand; grey . Damp; Buried log at 2.6m bgl.
	SAND, with minor silt; grey . Damp.

Water

Groundwater Not Encountered

Comments:

Dynamic Cone Penetrometer: Lot 9

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☑ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Site Plan: (Not to Scale)

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot:

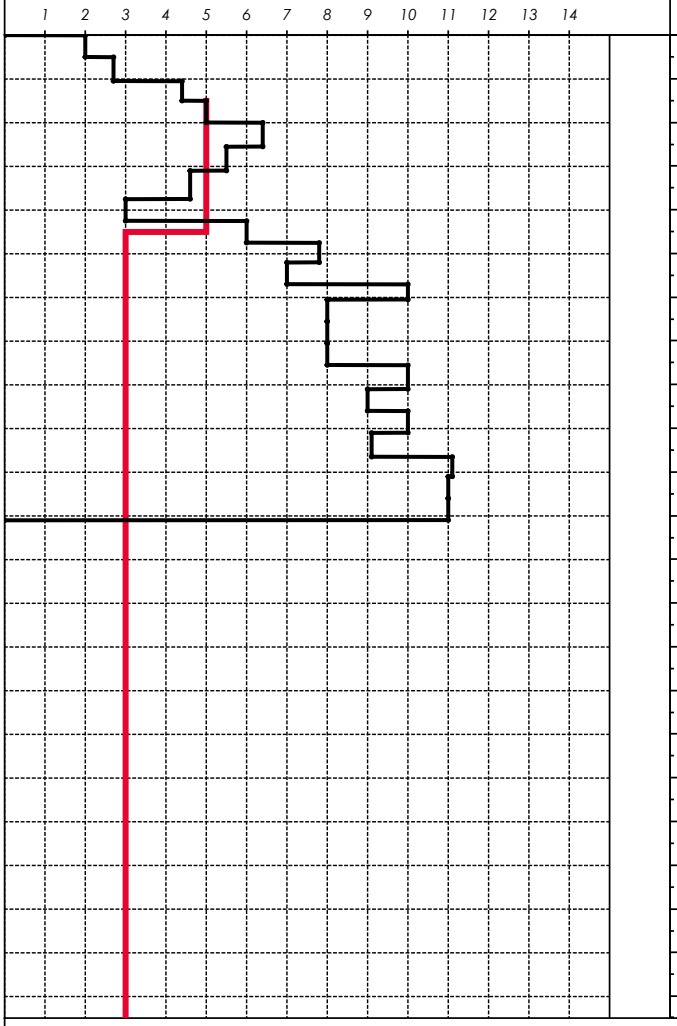
D.P.:

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



10

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Soil Profile

Test Location 10

TS	SILT; dark brown. Wet.
	SILT; brown . Damp.
	SILT, with minor sand; grey . Damp.
	SAND, with minor silt; grey . Damp.

Water: Groundwater Not Encountered

Site Plan: (Not to Scale)

Comments:

Dynamic Cone Penetrometer: Lot 10

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☑ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot:

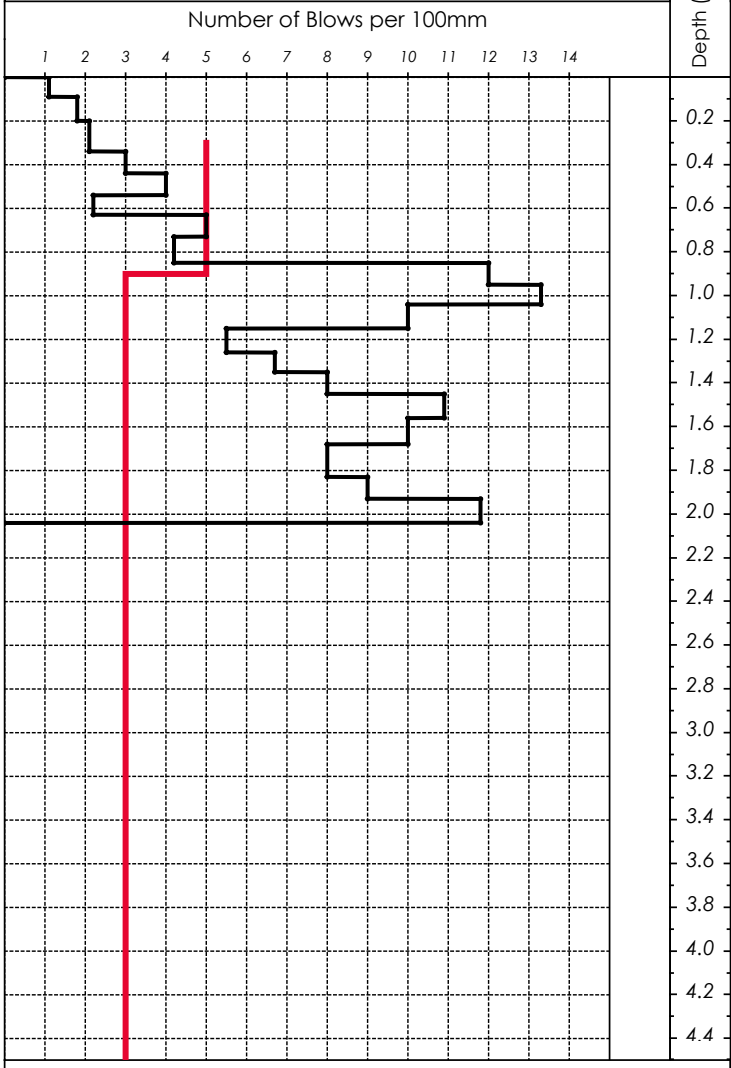
D.P.:

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



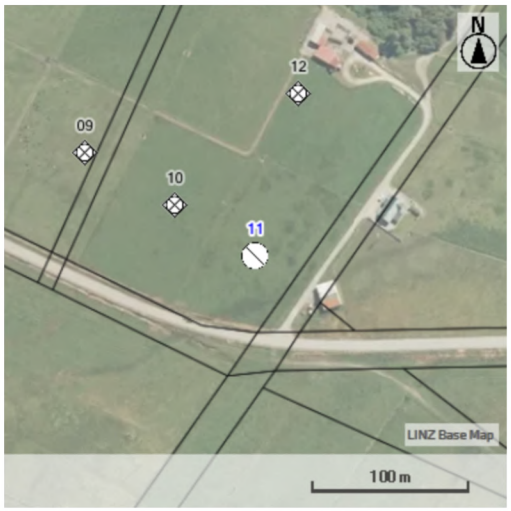
Soil Profile

Water

11

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Site Plan: (Not to Scale)



Comments:

Dynamic Cone Penetrometer: Lot 11

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☐ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Site Investigation Record

Client: Forest Habitats Ltd

Site: Arthurstown Road, Hokitika

Technical Category: N/A

Lot:

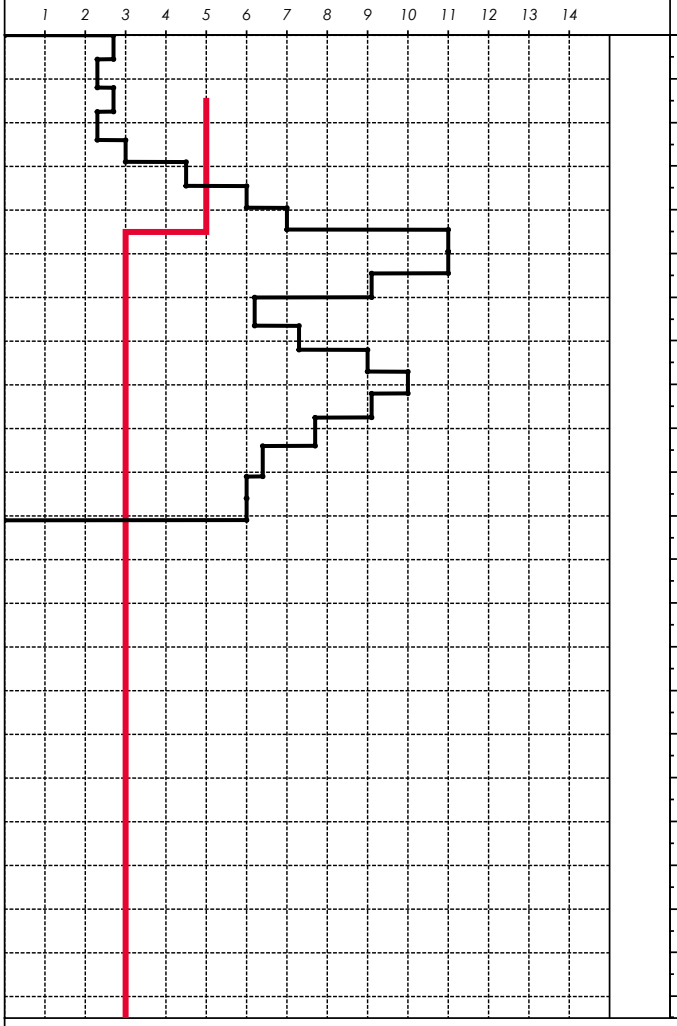
D.P.:

Date Tested: 7-Sep-2022

Log Sheet No.: 1 of 1

Project No.: 510714

Dynamic Cone Penetrometer (DCP) Test Results



12

Minimum penetration resistance (based on 300mm wide footing founded at 300mm depth) required for 'Good Ground' as defined in the Acceptable Solutions and Verification Methods for NZBC Clause B1 Structure.

Soil Profile

Test Location 12

TS	SILT; dark brown. Damp to wet; Rootlets.
	SILT, with minor sand; grey . Damp.
	SAND, with minor silt; grey . Damp.

Water

Groundwater Not Encountered

Comments:

Dynamic Cone Penetrometer: Lot 12

Field Staff:	Prepared By:	Soil Profile From:
SJH, JAG	JAG	☑ Hand Auger
Job Manager:	**Approved By:**	☐ Spade Hole
SCC	SCC	☐ Test Pit

Site Plan: (Not to Scale)

Note: This record identifies the geotechnical conditions encountered at the noted test location(s) only. It is possible that ground conditions could be different away from the point(s) of testing.

Appendix C. 1.2m Structural Gravel Raft Specification

Structural Gravel Raft Specification with Single Layer of Geogrid

- The excavation is to extend down to "Good Ground", or as specified in our report, below the building foundations and 1.0m beyond the footprint of the building.
- The base of the excavation shall be clear of any loose material and if necessary, shall be benched and compacted.
- The sides of the excavation are to be no steeper than 2 vertical to 1 horizontal.
- If the excavation base is benched, level the base with compacted AP65 in no more than 200mm thick layers.
- Install one layer of geogrid (Tensar TX160 or similar) to the base of the excavation, extend to the walls of the excavation. Adjacent sheets are to lap a minimum of 450mm.
- Clean sandy gravel AP65 is to be placed and compacted in maximum 200mm thick layers over the geogrid until the required level is achieved.
- The total depth of fill must be a minimum of 1.2m
- When the fill is to be brought above the surrounding ground level, the fill shall be battered at least 1.0m from the building foundation and at a slope no steeper than 1 in 3 (1 vertical to 3 horizontal).
- If the backfill material has not been previously tested, the Contractor shall have a 25kg sample of the backfill material tested at an accredited laboratory for maximum dry density and optimum moisture content. The test results shall be supplied to the engineer for approval at least 24 hours prior to starting backfilling.
- Each layer shall be compacted to a minimum density of 92% and an average of no less than 95% of the maximum dry density achieved in the laboratory tests before the subsequent layer is placed. The test method is the vibrating hammer compaction (NZS 4402: 1988 – Test 4.1.3)

The following inspections are required:

1. Completed excavation prior to placing geogrid;
2. Placed geogrid to ensure laps are correct and it is fully tensioned;
3. Mid depth of compacted gravels; and
4. Completion of the final compacted gravel layer.

The contractor is to contact the engineer 24 hours before they start the excavation so we can arrange the inspections.

The Engineers Contact details are:

Eliot Sinclair & Partners Ltd
Como House 51 Tancred Street
PO Box 298
Hokitika 7842

Phone 03 755 8184 cell 027 224 2635

Email stuart.challenger@eliotsinclair.co.nz

Appendix D. Statement of Professional Opinion

SCHEDULE 2A

STATEMENT OF PROFESSIONAL OPINION ON SUITABILITY

OF LAND FOR BUILDING CONSTRUCTION

Development: Fifteen Lot Subdivision

Developer: Forest Habitats

Location: Arthurstown Road, Hokitika

I, **Stuart Challenger** of **Eliot Sinclair, Hokitika**

Hereby confirm that:

1. I am a geo-professional as defined in section 1.2.2 of NZS 4404:2010 and was retained by the developer as the geo-professional on the above development.
2. The extent of my site investigations are described in the **Eliot Sinclair** report number **510714** dated **29 September 2022**, and the conclusions and recommendations of that document have been re-evaluated in the preparation of this certification.
3. In my professional opinion, not to be construed as a guarantee, I consider that council is justified in granting consent incorporating the following conditions (delete as appropriate):

   ~~(a) The earth fills shown on the attached Plan No. ..... have been placed in compliance with the requirements of the ..... Council and my specification.~~

   ~~(b) The completed works take into account land slope and foundation stability considerations, subject to the appended foundation recommendations and earthworks restrictions as set out in this report.~~

   (c) Subject to 3(a) and 3(b) of this Schedule, the original ground not affected by filling is suitable for erection of buildings designed according to NZS 3604 provided that:

      i) The recommendations provided in Section 6 of Eliot Sinclair's report reference 510714 dated 29 September 2022 are followed. (Copied below)

      ii) ……..

   ~~(d) Subject to 3(a) and 3(b) of this Schedule, the filled ground is suitable for erection of buildings designed according to NZS 3604 provided that:~~

      ~~i) .....~~

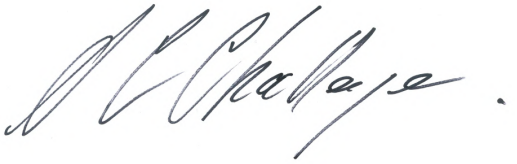
      ~~ii) .....~~

   (e) The original ground (not affected by filling) is not subject to erosion, subsidence, or slippage in accordance with the provisions of Section 106 of the Resource Management Act 1991 provided that:

      i) The recommendations provided in Eliot Sinclair's report reference 510714 dated 29 September 2022 are followed. (Copied below)

      ii) ……..

4. This professional opinion is furnished to the **Westland District Council** and the developer for their purposes alone on the express condition that it will not be relied upon by any other person and <u>does not remove the necessity for the normal investigation and inspection of foundation conditions at the time of erection of buildings.</u>
5. This certificate shall be read in conjunction with Eliot Sinclair's geotechnical report referred to in clause 2 above and shall not be copied or reproduced except in conjunction with the full report.



Signed ..... Date: 29 September 2022

Stuart Challenger

BE (Nat Res) BSc CMEngNZ CPEng Reg. No. 171997.

We recommend any future dwellings within these lots are located towards the south side of the lots close to Arthurstown Road. The minimum floor heights for any proposed dwellings within the subdivision should be above the modelled water depth plus freeboard. Westland District Council should advise on the final floor levels for dwellings within the proposed subdivision as part of the consenting process.

Foundations shall comprise of one of the following systems:

Gravel raft with TC2 slab foundation

Gravel raft with Type 2A surface structure

Driven timber piles

FOREST HABITATS LTD

117 ARTHURSTOWN ROAD, HOKITIKA

Prepared for Forest Habitats Ltd

October 2022 Ref L24312c

Hutchinson
CONSULTING ENGINEERS

Forest Habitats Ltd

Engineering Report
12 Lot Rural Residential Subdivision

117 Arthurstown Road
Hokitika

Prepared by Matt Symons
ENGINEER

Hutchinson Consulting Engineers Ltd
P O Box 150, Orewa 0946
154 Centreway Road, Orewa 0931

Reviewed by Paige Farley
CIVIL MANAGER

+64 9 426 5702
info@hc.co.nz
www.hc.co.nz

Approved by Ian Hutchinson
MANAGING DIRECTOR

Date 04 October 2022
Status Version 3

Contents

Our Ref: L24312c

04 October 2022

MacDonell Consulting Ltd
17 Cliffs Road
St Clair
Dunedin 9012

Dear Barry

RE: 12 LOT RURAL RESIDENTIAL SUBDIVISION AT 117 ARTHURSTOWN ROAD, HOKITIKA
FOR FOREST HABITATS LTD

1.0 Introduction

Further to your request, this office has investigated the engineering requirements for the proposed rural residential subdivisional development at 117 Arthurstown Road, Hokitika.

It is proposed to subdivide 12 lots varying in size from 6223 m² to 10253 m² from the underlying parcels of land. All lots aside from one are serviced from Arthurstown Road with Lot 12 gaining access from East Road.

2.0 Site

The 19 hectare (or there-about) site is located on the northern side of Arthurstown Road approximately 1.0 km east of its intersection with Ruatapu Road (SH6), Hokitika. The property is on the southern side of the Hokitika river mouth. The site comprises pastural grazing and is relatively level at an elevation of between around RL3.0m and RL5.0m. The site drains gently towards the north to the Hokitika River. The site is subject to flood inundation during peak river flood flows.

3.0 Earthworks

As part of the proposed development, flood free building platforms will be created on each lot. Based on the flood flow analysis detailed in Section 5.0 of this report the peak flood flow is expected to reach a maximum elevation of around RL5.5m. The building platforms should be constructed to at least this elevation.

Given that the natural ground levels vary from around RL3.0m to RL5.0m the earthfilling requirements will average around 1200m³ per site to form a 30m x 30m flood free building platforms to RL5.5m on each lot. Given that there are 12 platforms to be constructed a total earthworks compacted fill volume of around 14,000m³ will be required.

4.0 Stormwater

The only stormwater works to be completed on the site is the installation of the roadside culvert crossings to accommodate the new entranceways into the individual lots and the clearing out of original farm drains to improve surface drainage.

5.0 Potential Inundation

We have reviewed the West Coast Regional Council report Hokitika River Hydraulic Modelling and Flood Hazard Mapping dated 10th June 2020.

https://www.wcrc.govt.nz/repository/libraries/id:2459ikxj617q9ser65rr/hierarchy/Documents/Publications/Natural%20Hazard%20Reports/Westland%20District/Hokitika/2020_LRS_Hokitika%20River_Hydraulic%20modelling%20and%20flood%20hazard%20mapping_v2-10-12-2020%20optimized%20for%20web.pdf

Assuming Scenario 6 for the flood mapping reporting, 100 Year, Climate Change Scenario RCP6.0 (2100), 1m Sea Level rise including 400mm of storm surge the site will be in the range of around existing ground level to around 2m below water during the peak flood flow events.

The topographical survey plan of this site prepared by Chris J Coll Surveying Ltd indicates the majority of the site is around RL3.0m to RL5.0m. The Hokitika River Flood Modelling report indicates that the November 2018 Flood Debris Levels in the vicinity of the site were to an elevation of RL4.83 (refer Appendix A), essentially a good part of the subdivision site remained flood free during this storm. Refer attached engineering plan A3-24312 RC GE-04.

The reason for the conservative flood free building platform level of RL5.5m is that the flood modelling takes into effect sea level rise, global warming and storm surge contemporaneously.

The 1 in 100 year event including climate change (2100) RCP Scenario 6.0 with a 1m sea level rise and 0.4m Storm Surge the site inundates to 0.0m to 2.0m flood depth, refer Appendix B.

The flood depth model has been superimposed over the topographical model of the proposed subdivision and flood elevations typically range from around RL4.5m at the western end of the proposed development to around RL5.5m at the eastern end of the proposed development. There are outlier peaks of up to around RL6.0m in certain areas however this is not representative of the RL5.5m average over the site.

Flood free building platforms should be constructed to a minimum elevation of RL5.5m. Finished floor levels of habitable space should be set no lower than RL6.0m however all future building sites should be assessed at the time of building consent to ensure the higher modelled flood levels above RL5.5 are not applicable to that particular site. Finished floor levers of future

habitable dwellings should be constructed no lower than 500mm above the inundation level for that particular site.

The same flood modelling report defines flood risk on the Hazard Map for most of the site as H1 and H2, generally safe for vehicles, people buildings, and unsafe for small vehicles respectively, refer Appendix C.

Given the inundation potential for the site and intended use the proposed development is appropriate and the potential flood risk to the activity is low particularly given the building sites will be elevated above the flood risk.

This office has prepared an existing ground level above RL4.0m plan, refer A3-24312 RC GE-08. This plan indicates the land area that is most suitable for development to provide platform levels to a minimum elevation of RL5.5m.

Although the imperviousness of the future sites will increase from pasture to portions of increased impermeability, any adverse effect will be mitigated in that the site is at the lowest portion of the catchment close to the discharge point and any analysis of increased discharge would be offset by the flood plain evident in any peak flood flow event bring discharged before the time of concentration is reached. Imperviousness has little effect if the site is theoretically already flooded also.

6.0 Roading

The proposed subdivisional development will be serviced from Arthurstown Road and East Road, Arthurstown Road is formed and sealed however East Road is unsealed. East Road should be upgraded to a sealed standard to the entrance to the proposed Lot 12.

The roadway will be constructed to a 500mm deep roading pavement, 200mm compacted depth of basecourse over 300mm compacted depth of subbase over a subgrade with a CBR of at least 3.

7.0 Summary

The site is suitable for its intended use provided flood free building platforms are constructed to a minimum elevation of RL5.5m and any future habitable space is constructed no lower than RL6.0m.

Consideration should be given to certain areas of the site where theoretical flood levels are above RL5.5m and the minimum finished floor levels adjusted accordingly.

Should you wish to discuss any aspects of the above information, please contact this office.

We trust this meets with your approval.

Yours faithfully,

HUTCHINSON CONSULTING ENGINEERS LTD

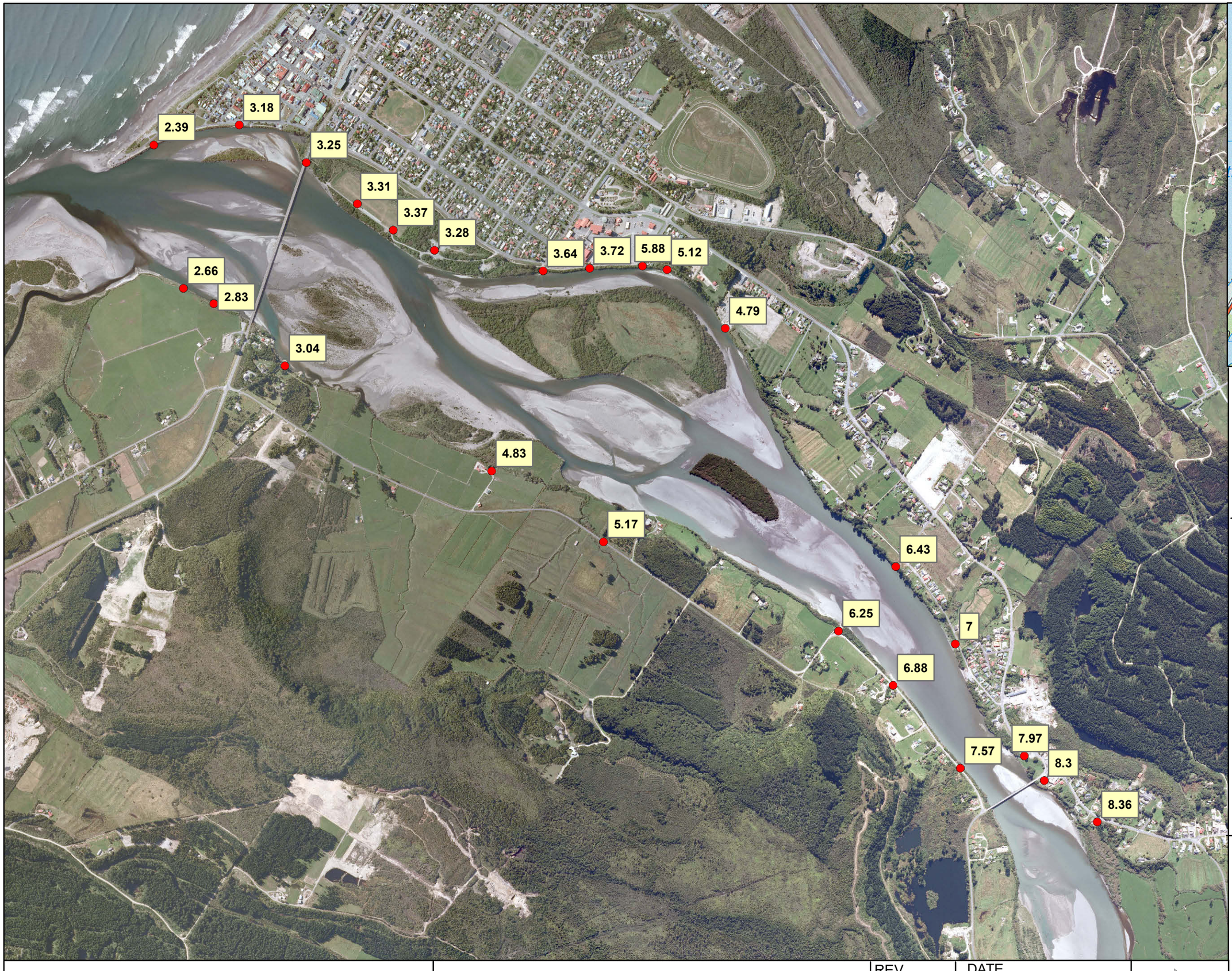
Prepared by Matt Symons
ENGINEER

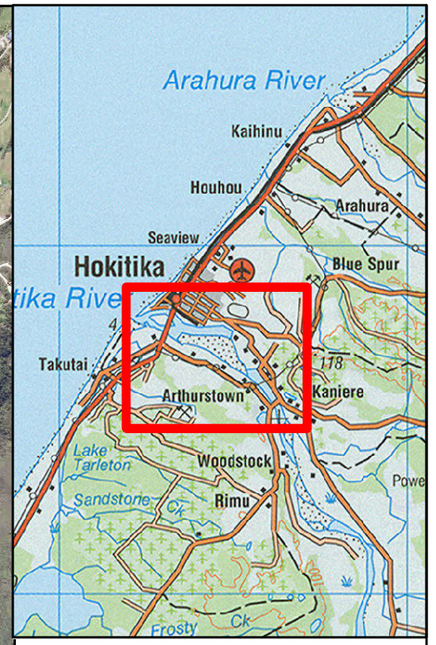
Reviewed by Paige Farley
CIVIL MANAGER

Approved by Ian Hutchinson
MANAGING DIRECTOR

APPENDIX A

Hokitika River Flood Modelling – Debris Level November 2018 Flood Event





LANDRIVERSEA CONSULTING

Legend

- Debris Levels (Nov 2018)

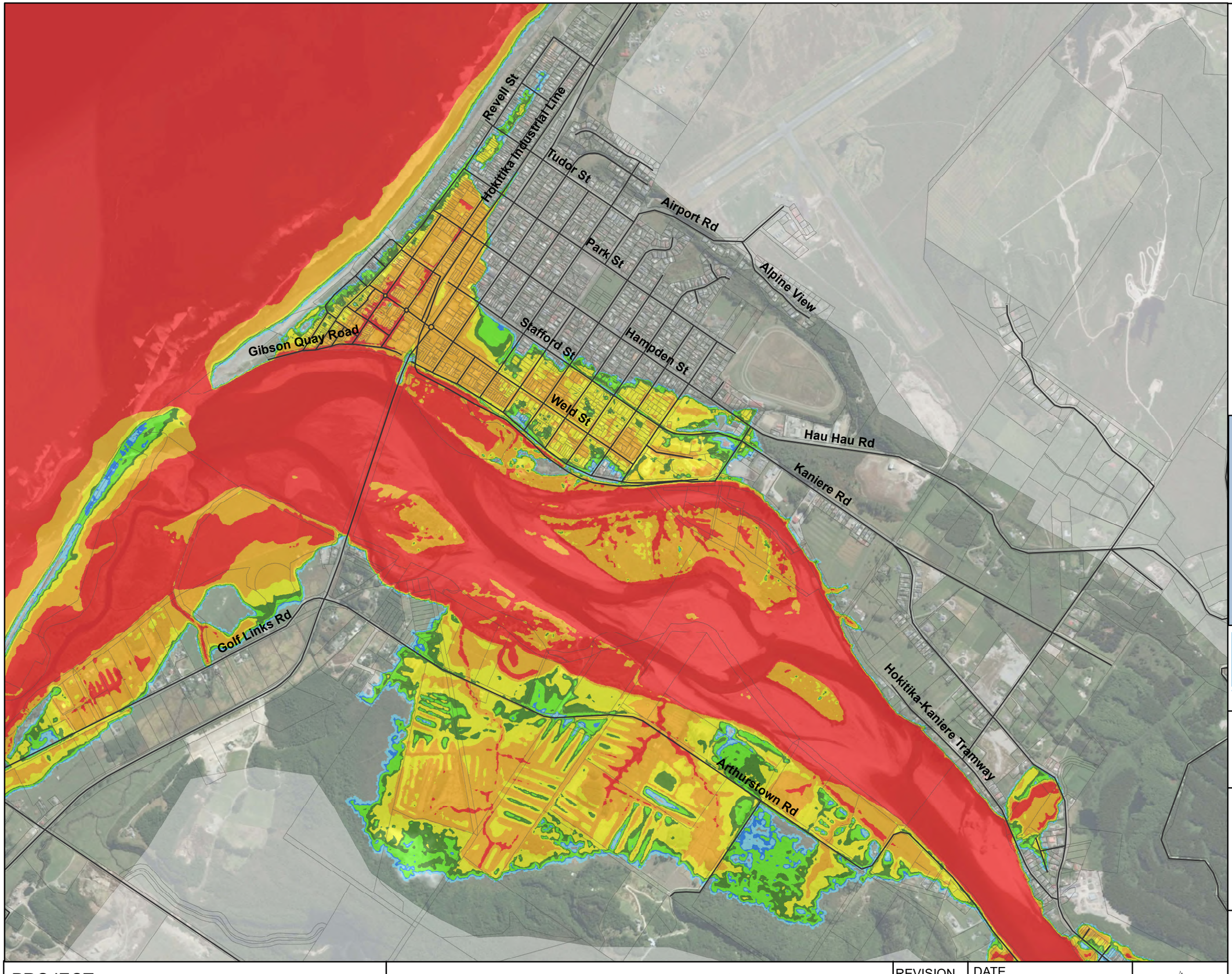
PROJECT
Hokitika River Flood Modelling

MAP TITLE **Recorded Debris Levels from November 2018 Flood Event**

REV	DATE
01	**16 September 2019**
A3 SCALE **1:15,000**	AUTHOR **Matthew Gardner**

N

APPENDIX B
Hokitika River Flood Modelling – Peak Depth Map



Legend

Roads

Property Boundary

Peak Depth (m)

- 0
- 0 - 0.05
- 0.05 - 0.1
- 0.1 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 2
- 2+

LANDRIVERSEA CONSULTING

THE WEST COAST REGIONAL COUNCIL

Map1 of 3

0 0.25 0.5 1

Kilometers

PROJECT
Hokitika River Flood Modelling

MAP TITLE
PEAK DEPTH MAP
1 in 100 year event including climate change (2100)
RCP Scenario 6.0, 1m Sea Level Rise, 0.4m Storm Surge

REVISION	DATE
01	**02 June 2020**
A3 SCALE	AUTHOR
1:16,000	**Matthew Gardner**

N

APPENDIX C
Hokitika River Flood Modelling – Hazard Map

H1 - Generally safe for vehicles, people and buildings
H2 - Unsafe for small vehicles
H3 - Unsafe for vehicles, children and the elderly
H4 - Unsafe for vehicles and people
H5 - Unsafe for vehicles and people
All buildings vulnerable to structural damage
Some less robust buildings subject to failure
H6 - Unsafe for vehicles and people
All building types considered vulnerable to failure

Revell St
Hokitika Industrial Line
Tudor St
Airport Rd
Park St
Alpine View
Gibson Quay Road
Stafford St
Hampden St
Weld St
Hau Hau Rd
Kaniere Rd
Golf Links Rd
Hokitika-Kaniere Tramway
Arthurstown Rd

Legend

Roads

Property Boundary

Hazard Category

H6
H5
H4
H3
H2
H1

LANDRIVERSEA CONSULTING

THE WEST COAST REGIONAL COUNCIL

Map 1 of 3

0 0.25 0.5 1
Kilometers

PROJECT
Hokitika River Flood Modelling

MAP TITLE **HAZARD MAP**
1 in 100 year event including climate change (2100)
RCP Scenario 6.0, 1m Sea Level Rise,0.4m Storm Surge

REVISION **01**
DATE **10 December 2020**
A3 SCALE **1:16,000**
AUTHOR **Matthew Gardner**

N

APPENDIX D
Drawings

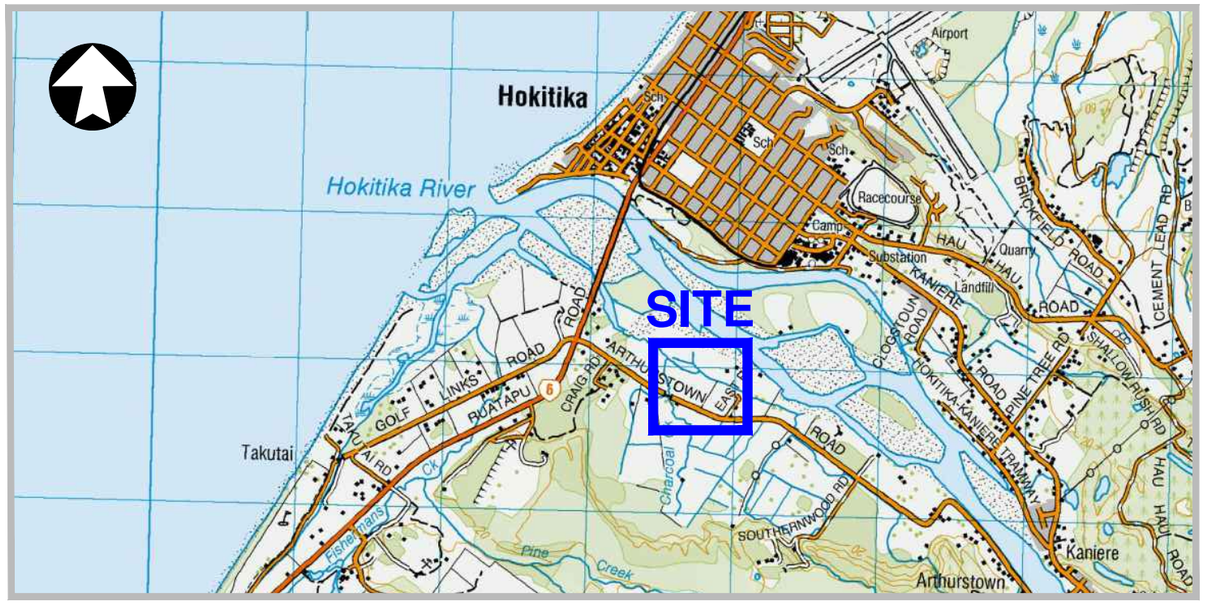
FOREST HABITATS LTD
PROPOSED SUBDIVISION
117 ARTHURSTOWN ROAD
HOKITIKA

Hutchinson
CONSULTING ENGINEERS

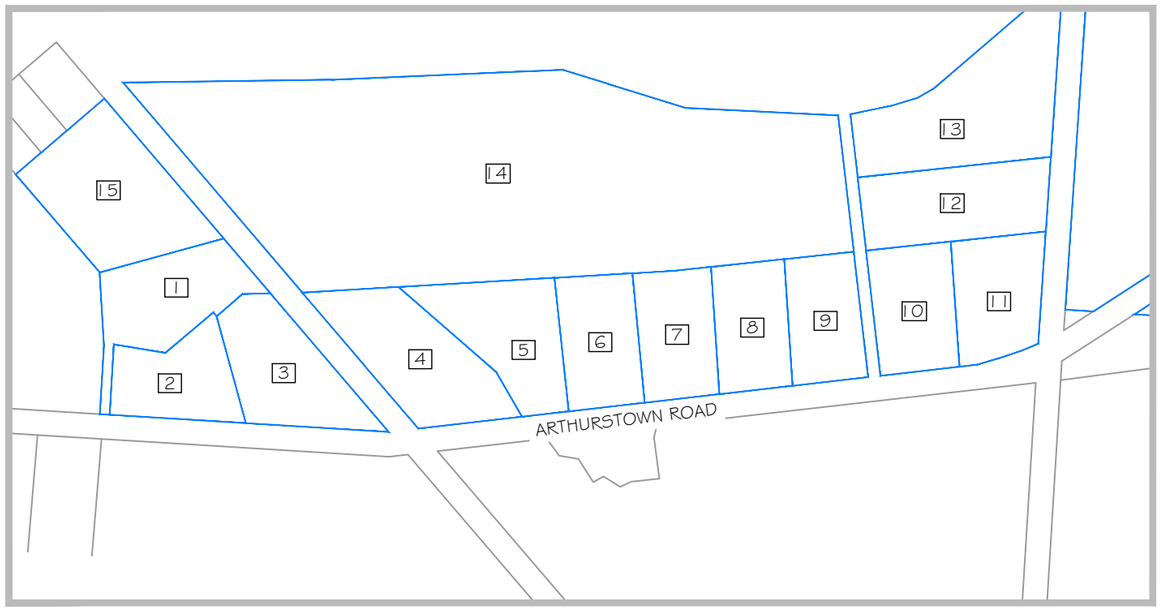
154 Centreway Road
Orewa
Auckland

P.O. Box 150
Orewa
Auckland

Telephone (09) 426-5702
Email info@hc.co.nz

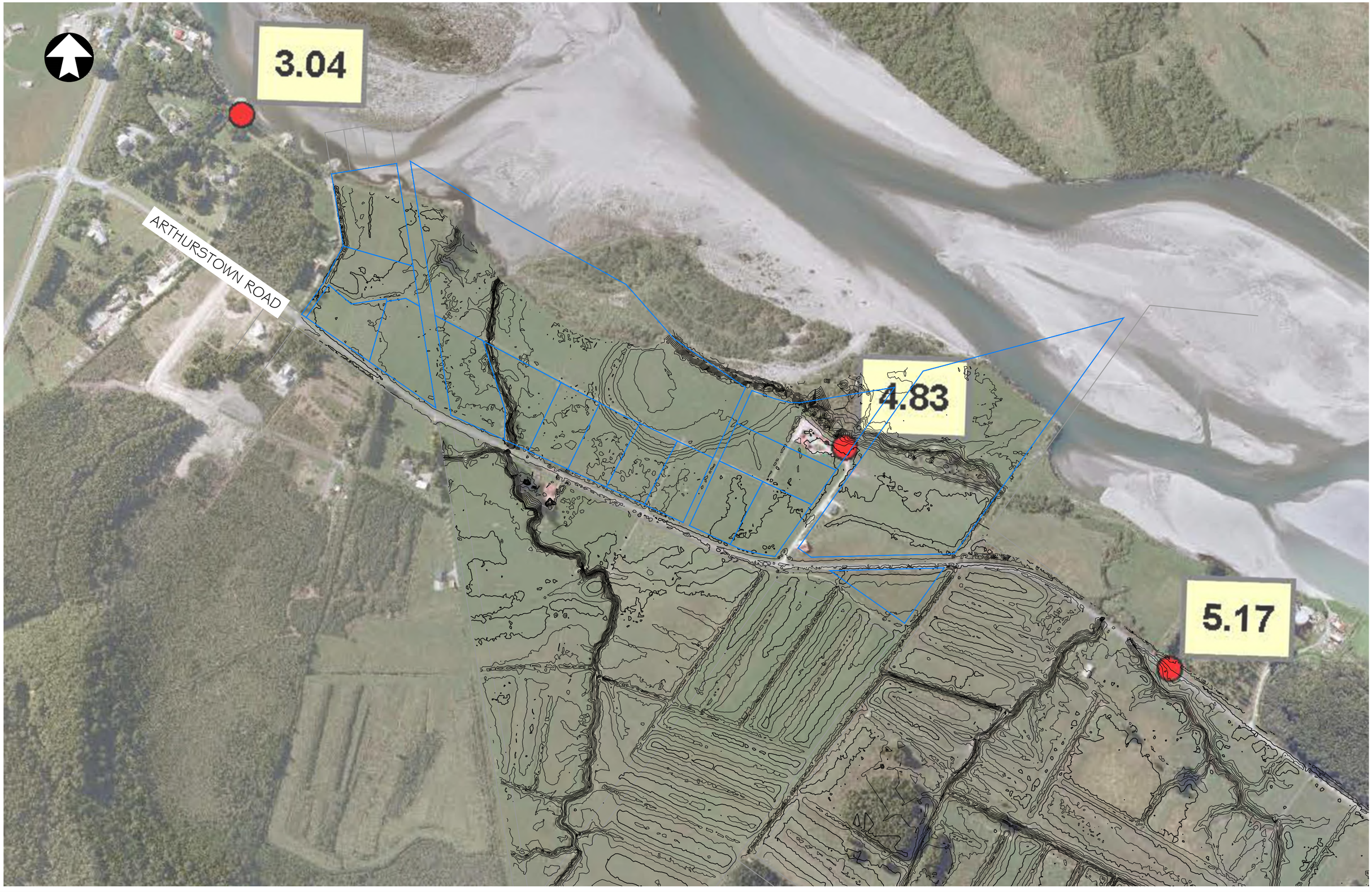


DRAWINGS - GE



FOR RESOURCE CONSENT ONLY
NOT FOR CONSTRUCTION

24312 GE-01
OCTOBER 2022



No.	Revision	Drawn	Chk.	Appd.	Date
-	-	-	-	-	-

Hutchinson
CONSULTING ENGINEERS
PO Box 150, Orewa 0946
154 Centreway Road, Orewa 0931
Ph: 09 426 5702 **www.hc.co.nz**

Design	M. SYMONS	OCT 2022
Drawn	M. SYMONS	OCT 2022
Checked	P. FARLEY	OCT 2022
Approved	I. HUTCHINSON	OCT 2022
Scale	1:5000 @ A3	
Scale vert. exag.		

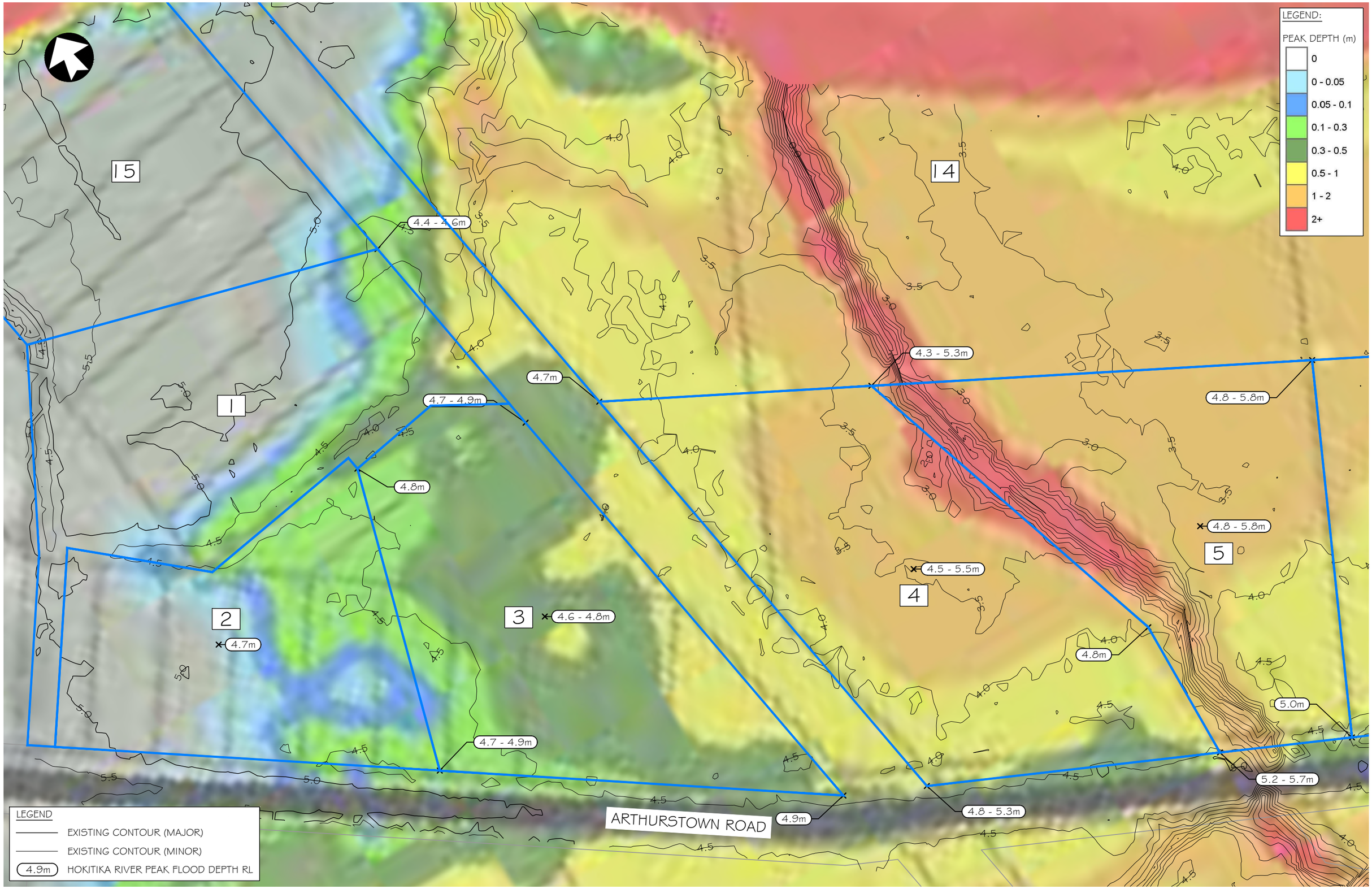
Project
FOREST HABITATS LTD
PROPOSED SUBDIVISION
117 ARTHURSTOWN ROAD
HOKITIKA

Title
HOKITIKA RIVER DEBRIS LEVELS (2018)

Sheet No.
GE-02

Job No.
A3-24312 RC

Rev.
-



No.	Revision	Drawn	Chk.	Appd.	Date
-	-	-	-	-	-

Hutchinson CONSULTING ENGINEERS
PO Box 150, Orewa 0946
154 Centreway Road, Orewa 0931
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Design	M. SYMONS	OCT 2022
Drawn	M. SYMONS	OCT 2022
Checked	P. FARLEY	OCT 2022
Approved	I. HUTCHINSON	OCT 2022
Scale	1:1000 @ A3	
Scale vert. exag.		

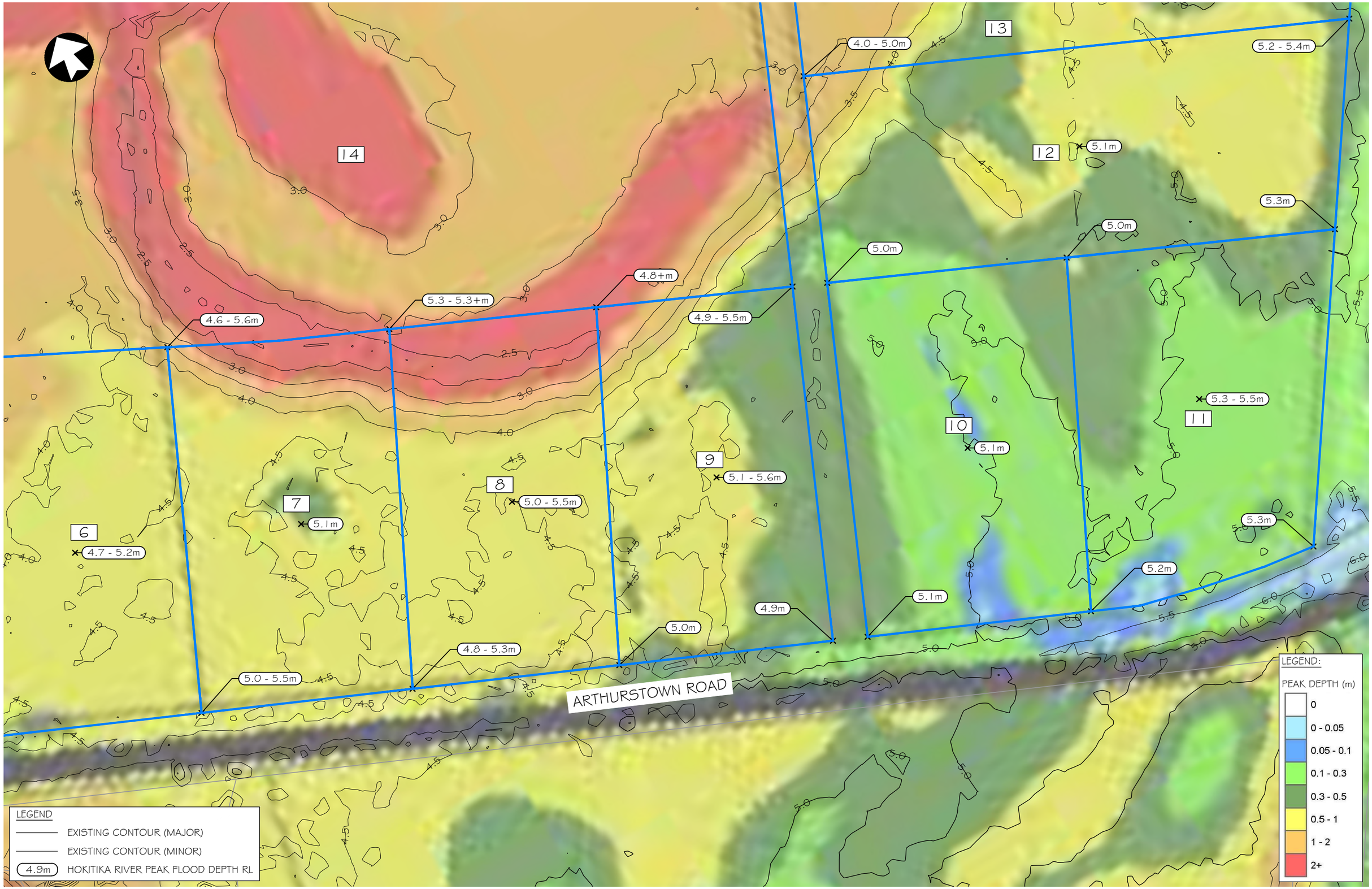
Project
FOREST HABITATS LTD
PROPOSED SUBDIVISION
117 ARTHURSTOWN ROAD
HOKITIKA

Title
HOKITIKA RIVER PEAK FLOOD DEPTHS - SHEET 1 OF 2

Job No.
A3-24312 RC

Sheet No.
GE-03

Rev.
-



No.	Revision	Drawn	Chk.	Appd.	Date
-	-	-	-	-	-

Hutchinson CONSULTING ENGINEERS
PO Box 150, Orewa 0946
154 Centreway Road, Orewa 0931
Ph: 09 426 5702 **www.hc.co.nz**

Design	M. SYMONS	OCT 2022
Drawn	M. SYMONS	OCT 2022
Checked	P. FARLEY	OCT 2022
Approved	I. HUTCHINSON	OCT 2022
Scale	1:1000 @ A3	
Scale vert. exag.		

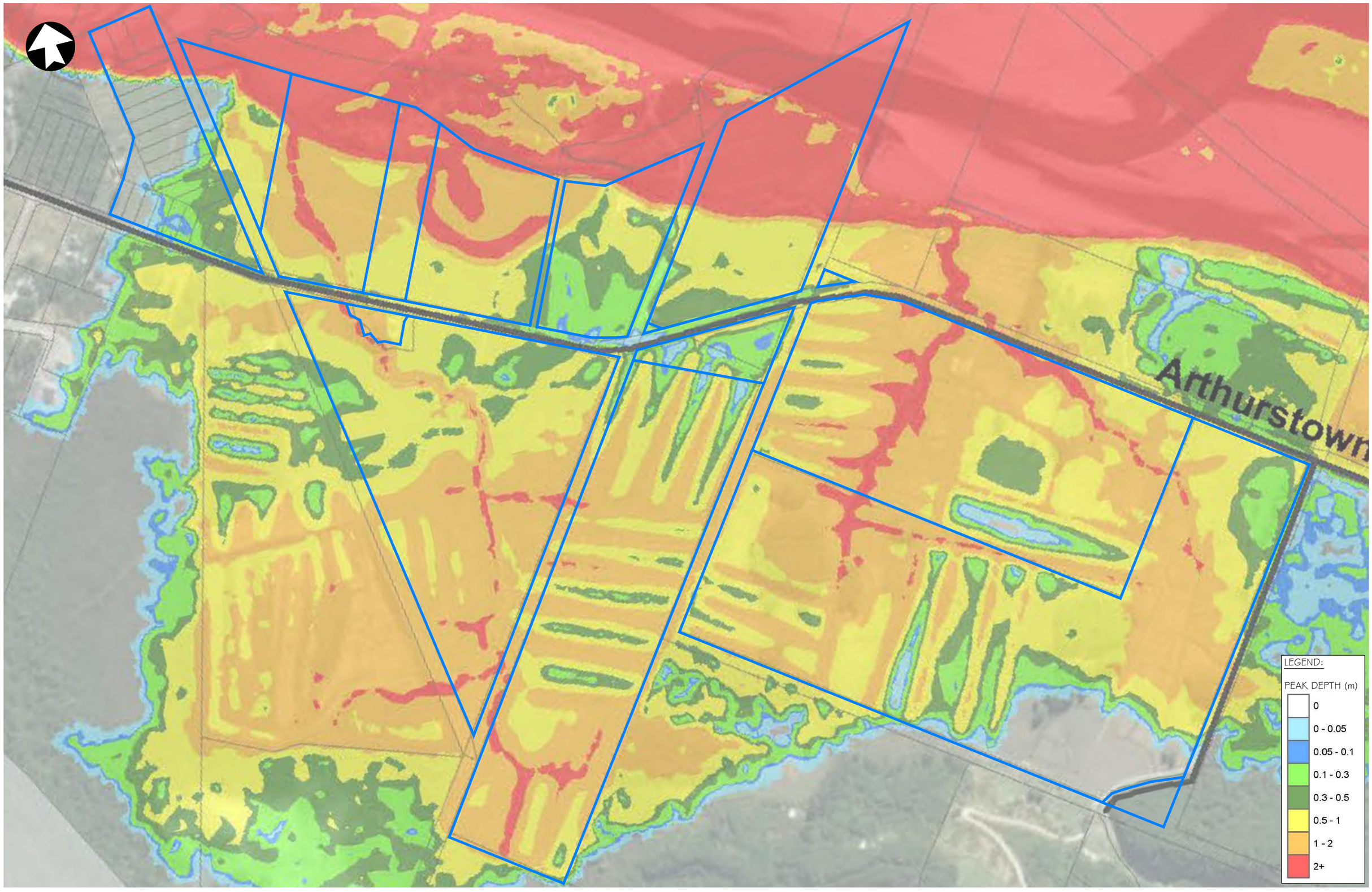
Project
FOREST HABITATS LTD
PROPOSED SUBDIVISION
117 ARTHURSTOWN ROAD
HOKITIKA

Title
HOKITIKA RIVER PEAK FLOOD DEPTHS - SHEET 2 OF 2

Job No.
A3-24312 RC

Sheet No.
GE-04

Rev.
-



No.	Revision	Drawn	Chk.	Appd.	Date
-	-	-	-	-	-

Hutchinson
CONSULTING ENGINEERS
PO Box 150, Orewa 0946
154 Centreway Road, Orewa 0931
Ph: 09 426 5702 **www.hc.co.nz**

Design	M. SYMONS	OCT 2022
Drawn	M. SYMONS	OCT 2022
Checked	P. FARLEY	OCT 2022
Approved	I. HUTCHINSON	OCT 2022
Scale	1:5000 @ A3	
Scale vert. exag.		

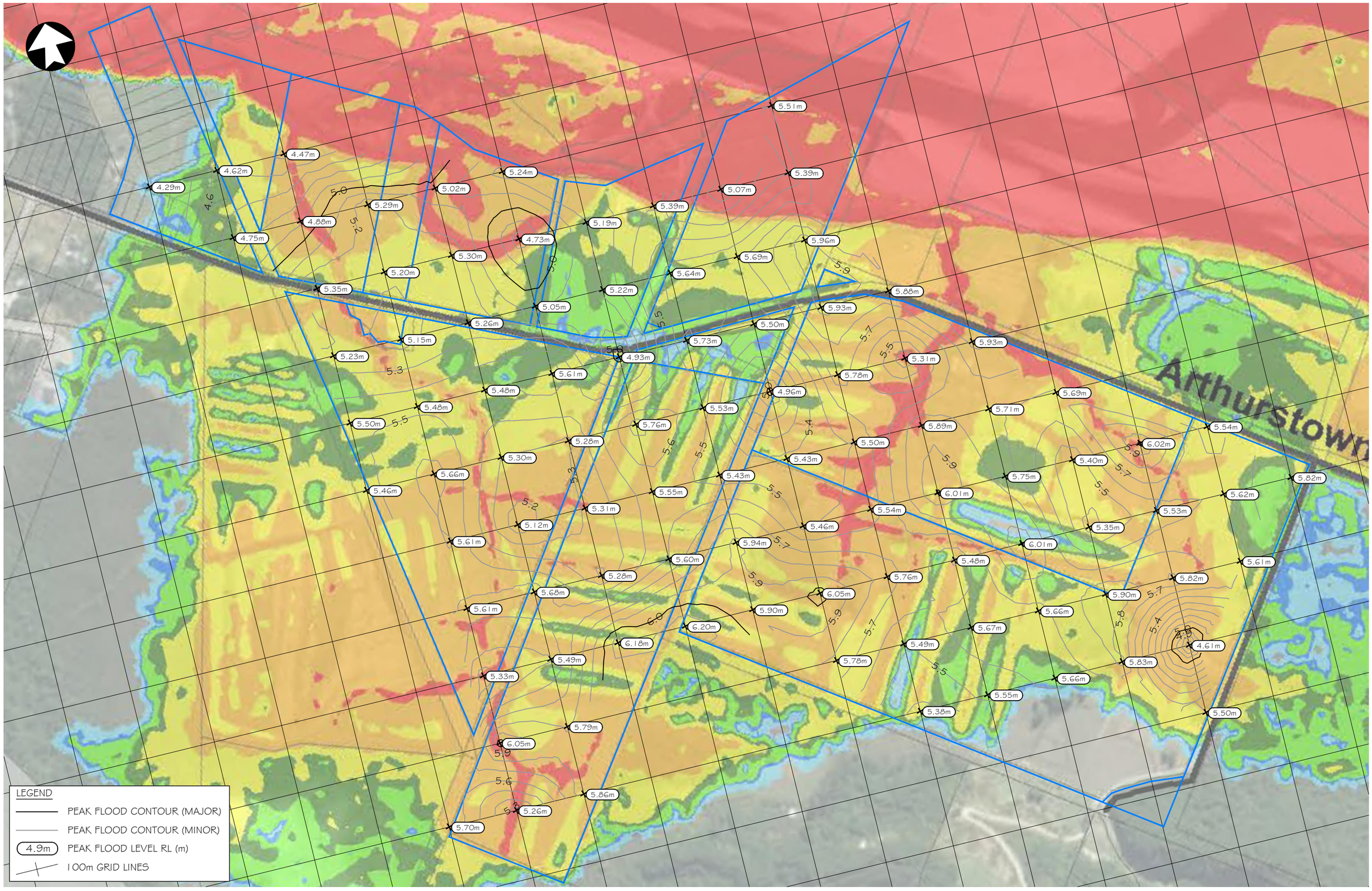
Project
FOREST HABITATS LTD
PROPOSED SUBDIVISION
117 ARTHURSTOWN ROAD
HOKITIKA

Title
117 ARTHURSTOWN BLOCK - HOKITIKA RIVER PEAK FLOOD DEPTHS

Sheet No.
GE-05

Job No.
A3-24312 RC

Rev.
-



No.	Revision	Drawn	Chk.	Appd.	Date
-	-	-	-	-	-

Hutchinson
CONSULTING ENGINEERS
PO Box 150, Orewa 0946
154 Centreway Road, Orewa 0931
Ph: 09 426 5702 **www.hc.co.nz**

Design	M. SYMONS	OCT 2022
Drawn	M. SYMONS	OCT 2022
Checked	P. FARLEY	OCT 2022
Approved	I. HUTCHINSON	OCT 2022
Scale	1:5000 @ A3	
Scale vert. exag.		

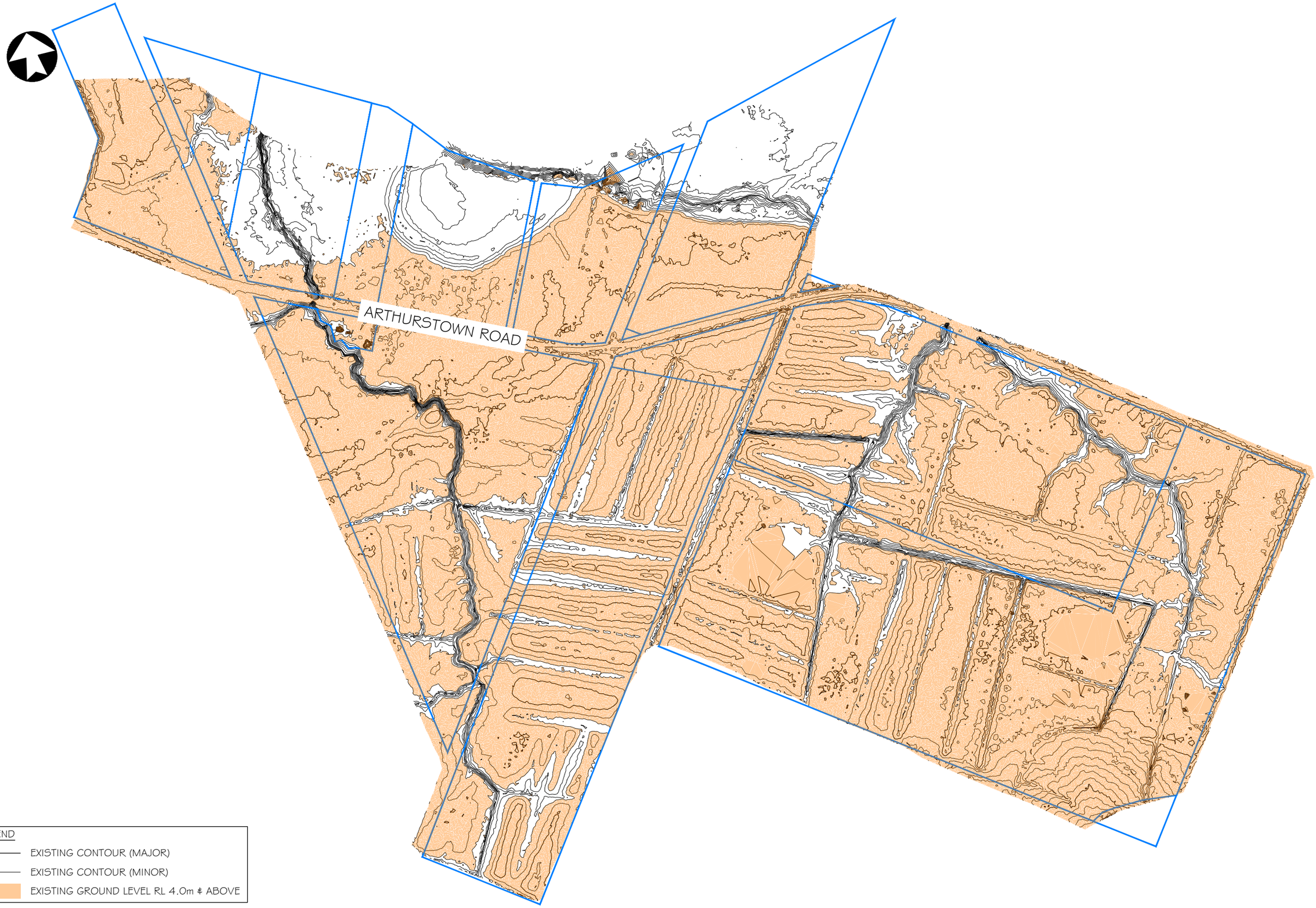
Project
FOREST HABITATS LTD
117 ARTHURSTOWN ROAD
HOKITIKA

Title
117 ARTHURSTOWN BLOCK - HOKITIKA RIVER PEAK FLOOD LEVELS (100m GRID)

Sheet No.
GE-06

Job No.
A3-24312 RC

Rev.
-



LEGEND

EXISTING CONTOUR (MAJOR)

EXISTING CONTOUR (MINOR)

EXISTING GROUND LEVEL RL 4.0m & ABOVE

No.	Revision	Drawn	Chk.	Appd.	Date
-	-	-	-	-	-

Hutchinson
CONSULTING ENGINEERS
PO Box 150, Orewa 0946
154 Centreway Road, Orewa 0931
Ph: 09 426 5702 **www.hc.co.nz**

Design	M. SYMONS	OCT 2022
Drawn	M. SYMONS	OCT 2022
Checked	P. FARLEY	OCT 2022
Approved	I. HUTCHINSON	OCT 2022
Scale	1:5000 @ A3	
Scale vert. exag.		

Project
FOREST HABITATS LTD
117 ARTHURSTOWN ROAD
HOKITIKA

Title
EXISTING GROUND LEVEL ABOVE RL 4.0m

Sheet No.
GE-07

Job No.
A3-24312 RC

Rev.
-

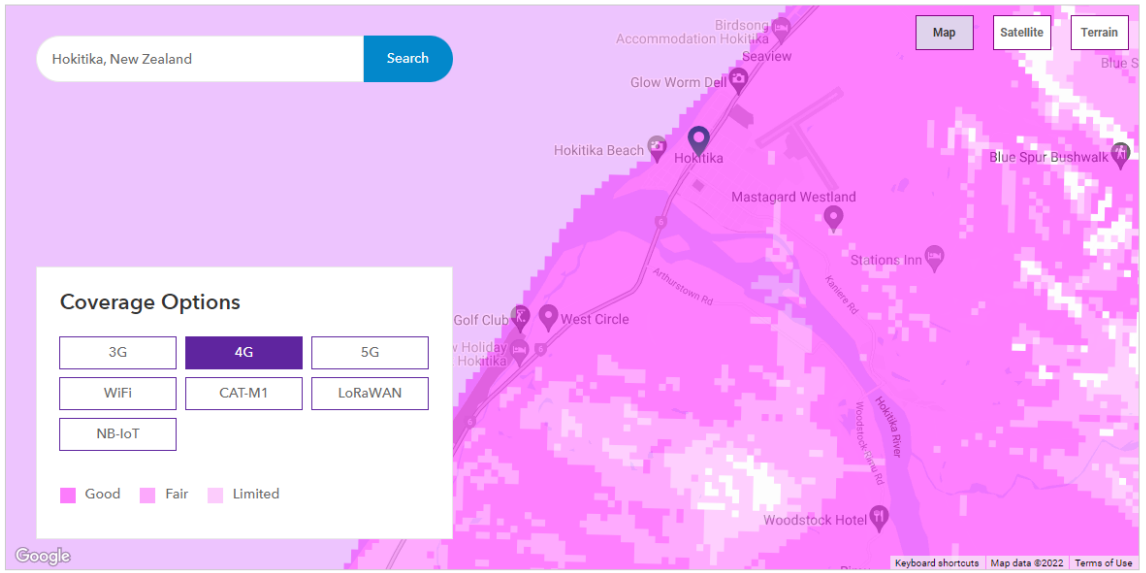
Proposed Te Tai o Poutini Plan - | District Plan | Westland District C | Spark NZ network coverage

spark.co.nz/shop/mobile/network/

Google | Air NZ | ASB | CMC | Auck Council | Google Earth | Westpac | MineLife | KITCO | 10 Bagger | Lowell | Dropbox | Barchart | LINZ | Stockhead | Small Caps | Equity Story | Hatch | Market Index | Other bookmarks

Network coverage map

Am I covered?



Note: Coverage maps are updated on a monthly basis around mid-month. They may not reflect the coverage we have available today due to the timing of updates and the nature of coverage being predicted. RCG customers select "4G" in the options above to check your coverage. If you're in a rural area and a nearby site has recently been activated you will see reception bars and the words 'Spark NZ' displayed at the top of your mobile whilst you are located in the area you're expecting coverage and using an eligible device.

Got a question?
Send us a message

Type here to search

ENG 9:56 AM 23/09/2022

bmacdonell@xtra.co.nz

From: Cosmin Cosma <ccosma@electronet.co.nz>
Sent: Monday, 10 October 2022 9:45 am
To: Jeremy Dillon
Cc: 'Barry MacDonell'; Ben Lemon
Subject: RE: 135 Ruatapu - Ross Rd - Owner Forest Habitats Ltd

Hi Jeremy,

I can confirm that electricity supply can be provided to the residential allotments (Lot 1 to Lot 12) of the proposed subdivision, but a network extension will be required. The network extension may consist of 11 kV and LV reticulation work.

Best Regards,

Cosmin Cosma
BE (Electrical) & BCom (Marketing)
MIPENZ CPEng, IntPE(NZ)
Asset Manager

Tel: 03 768 2707 | Fax: 03 768 2766
Email: cosmin.cosma@electronet.co.nz
Mobile: +64 (0)27 477 3944
Web: www.westpower.co.nz
www.electronet.co.nz

From: Jeremy Dillon <jeremydillon24@gmail.com>
Sent: Monday, 3 October 2022 2:23 p.m.
To: Cosmin Cosma <ccosma@electronet.co.nz>
Cc: 'Barry MacDonell' <bmacdonell@xtra.co.nz>; Ben Lemon <BLemon@electronet.co.nz>
Subject: RE: 135 Ruatapu - Ross Rd - Owner Forest Habitats Ltd

Hi Cosmin

Forest Habitats Ltd also owns the property at 117 Arthurs town Rd Hokitika.

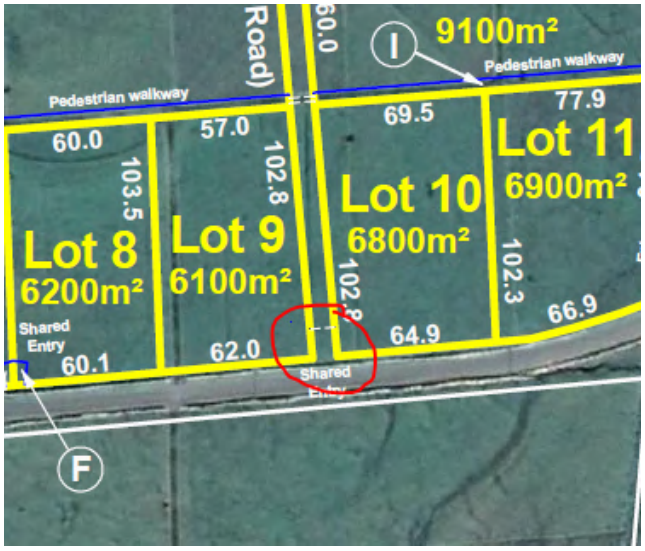
I am applying to the WDC to subdivide the land in terms of the attached scheme plan. The number of new house lots being created that will require a new connection is 12 being lots 1-12.

Re: RC220120 - s. 92 Further Information Request

Anna Johnson <anna@scoped.nz>
Tue 25/10/2022 17:37
To: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>

Hi Barry,

In item 14 I am referring to the vehicle accesses located within the legal road reserve which serve Lots 9 and 10.



Kind regards,

Anna Johnson
Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

SCOPED
PLANNING AND DESIGN

From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: 21 October 2022 13:51
To: Anna Johnson <anna@scoped.nz>
Subject: RE: RC220120 - s. 92 Further Information Request

Anna

At (14), where you say 'accessway' are you referring to the pedestrian access, regarding legal road reserve ?

Regards
Barry

From: Anna Johnson <anna@scoped.nz>
Sent: Thursday, 20 October 2022 4:30 pm
To: barry@macdonellconsulting.co.nz
Subject: RC220120 - s. 92 Further Information Request

Hi Barry,

Further information is required in order to continue processing the above resource consent application.

Please see the attached letter for detail.

Kind regards,

Anna Johnson
Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

SCOPED
PLANNING AND DESIGN

Re: RC220120 - s. 92 Further Information Request

Anna Johnson <anna@scoped.nz>

Tue 25/10/2022 17:38

To: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>

Hi Barry,

Please see my prior email, however you will need to provide confirmation of all vehicle access points which will not meet the applicable District Plan standards.

Kind regards,

Anna Johnson
Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

SCOPED
PLANNING AND DESIGN

From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: 21 October 2022 14:06
To: Anna Johnson <anna@scoped.nz>
Subject: FW: RC220120 - s. 92 Further Information Request

Anna

I think you are referring to the vehicle access points.

Is it 8.9.3(2) ? and is it Lots 4 and 11 that are potentially showing an access point within 50 m of an intersection ?

From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: Friday, 21 October 2022 1:52 pm
To: 'Anna Johnson' <anna@scoped.nz>
Subject: RE: RC220120 - s. 92 Further Information Request

Anna

At (14), where you say 'accessway' are you referring to the pedestrian access, regarding legal road reserve ?

Regards
Barry

From: Anna Johnson <anna@scoped.nz>
Sent: Thursday, 20 October 2022 4:30 pm
To: barry@macdonellconsulting.co.nz
Subject: RC220120 - s. 92 Further Information Request

Hi Barry,

Further information is required in order to continue processing the above resource consent application.

Please see the attached letter for detail.

Kind regards,

Anna Johnson
Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

SCOPED
PLANNING AND DESIGN

Re: RC220120 - s. 92 Further Information Request

Anna Johnson <anna@scoped.nz>
Tue 25/10/2022 17:47
To: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>

2 attachments (5 MB)
210122 & 210123 Full Signed Decision.pdf; 210017 210018 Revised Decision - s357 Objection Upheld.pdf;

Hi Barry,

I've attached some consents which include conditions that have been proposed by the applicant as design controls. These are conditioned as consent notices within the subdivision component of the decision document.

Kind regards,

Anna Johnson
Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

SCOPED
PLANNING AND DESIGN

From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: 25 October 2022 09:24
To: Anna Johnson <anna@scoped.nz>
Subject: RE: RC220120 - s. 92 Further Information Request

Anna

Regarding Condition 8, can you please send us examples of conditions that could be included.

Regards
Barry

From: Anna Johnson <anna@scoped.nz>
Sent: Thursday, 20 October 2022 4:30 pm
To: barry@macdonellconsulting.co.nz
Subject: RC220120 - s. 92 Further Information Request

Hi Barry,

Further information is required in order to continue processing the above resource consent application.

Please see the attached letter for detail.

Kind regards,

Anna Johnson

Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

SCOPED
PLANNING AND DESIGN

Re: HAIL

Anna Johnson <anna@scoped.nz>
Tue 25/10/2022 17:48
To: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>

Hi Barry,

Thank you for sending this through, I can confirm item 11 is satisfied.

Kind regards,

Anna Johnson
Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

SCOPED
PLANNING AND DESIGN

From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: 25 October 2022 10:24
To: Anna Johnson <anna@scoped.nz>
Subject: FW: HAIL

Anna

I will provide you with just one comprehensive response to your s92 queries, but this is confirmation from WCRC that it's not a HAIL site.

Regards
Barry

From: Emma Perrin-Smith <emmaps@wcrc.govt.nz>
Sent: Tuesday, 25 October 2022 10:06 am
To: 'barry@macdonellconsulting.co.nz' <barry@macdonellconsulting.co.nz>
Cc: Kayla Sims <kayla.sims@wcrc.govt.nz>; Leah Templeman <leaht@wcrc.govt.nz>
Subject: FW: HAIL

Good morning Barry,

The area of land related to the proposed subdivision is not on the WCRC SLUS register. See map below.

Regards,

Emma Perrin-Smith
Senior Water Quality Technician
Tel. 03 744 7325| Mob. 021 191 1599
E: emmaps@wcrc.govt.nz

PO Box 66, Greymouth 7840
388 Main South Road
www.wcrc.govt.nz

From: Jenny Burns <jenny.burns@wcrc.govt.nz>
Sent: Friday, October 21, 2022 3:52 PM
To: Kayla Sims <kayla.sims@wcrc.govt.nz>; Emma Perrin-Smith <emmaps@wcrc.govt.nz>; Leah Templeman <leaht@wcrc.govt.nz>
Subject: FW: HAIL

From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: Friday, 21 October 2022 2:12 PM
To: WCRC Info <info@wcrc.govt.nz>
Subject: HAIL

Hi

We are applying for a subdivision consent at 117 Arthurstown Road, Hokitika. The District Council has asked us to contact you (WCRC) to see if the site is, or has been, subject to a HAIL activity.

I would appreciate it if you could let me know.

Regards
Barry

MacDonell Consulting Ltd
027 228 2386

Re: RC220120 - s. 92 Further Information Request

Anna Johnson
Mon 31/10/2022 16:58
To: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>

Hi Barry,

Lots 14 and 15 contain land within the Hokitika Riverbed.

The legislation listed within the s. 92 further information request is applicable. Please provide an assessment as requested in order to complete the statutory assessment pursuant to s. 104 of the Act.

Kind regards,

Anna Johnson
Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

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From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: 26 October 2022 09:21
To: Anna Johnson <anna@scoped.nz>
Subject: RE: RC220120 - s. 92 Further Information Request

Anna

That diagram indicates that at its maximum extent, the coast management area would stop at the top of the Hokitika River bank.

In any event, there is a legal road between the river and the subject land, putting the subject land even further back from the 'coastal management area'. See attached. I therefore don't think any of the subject land is 'coastal'.

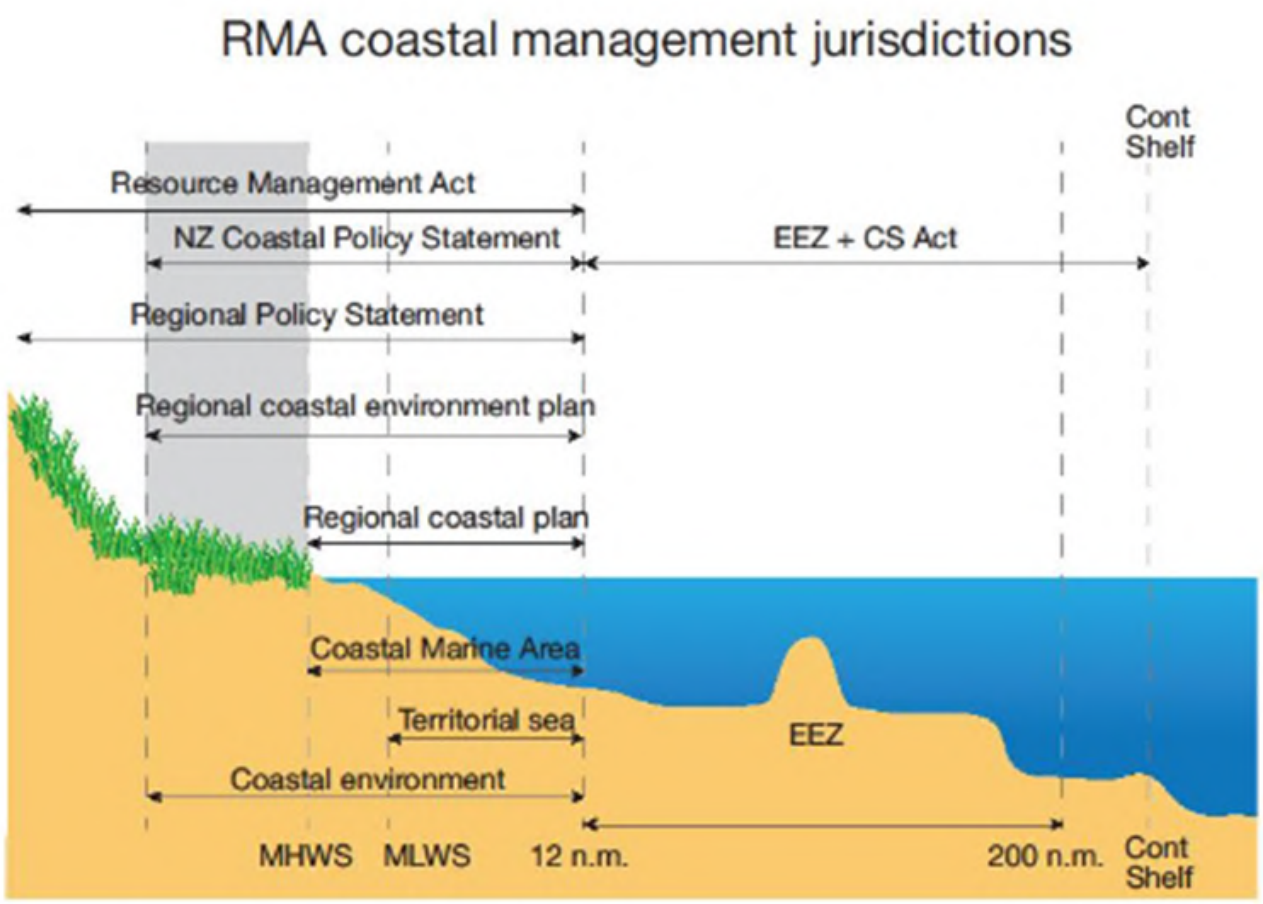
Regards
Barry

From: Anna Johnson <anna@scoped.nz>
Sent: Tuesday, 25 October 2022 5:53 pm
To: barry@macdonellconsulting.co.nz
Subject: Re: RC220120 - s. 92 Further Information Request

Hi Barry,

Unfortunately, Council disagrees with this assessment as the West Coast Regional Coastal Plans dictate where the coastal environment ends within the tidal environment that is the Hokitika River mouth.

Where the relevant legislation takes effect is demonstrated within the below diagram. The original can be found within the Quality Planning New Zealand website:



MHWS = Mean High Water Springs
MLWS = Mean Low Water Springs
EEZ = Exclusive Economic Zone
Cont Shelf = Continental Shelf
EEZ + CS Act = Eclusive Economic Zone + Continental Shelf (Economic Effects) Act 2012
n.m. = nautical miles

I hope this helps.

Kind regards,

Anna Johnson
Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

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From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: 25 October 2022 14:27

To: Anna Johnson <anna@scoped.nz>
Subject: RE: RC220120 - s. 92 Further Information Request

Anna

Looking at your Questions 4, 6 & 7. I don't believe the site is located within the 'coastal environment'. The 'coast' is that area seaward of MHWS, and in the case of the Hokitika River, it extends upstream from the mouth of the river to a line extending across the river from Davie Street. While I accept the CMA in this instance includes the riverbed, I don't believe it includes land either side of the river.

It would not make sense for the normal coastal boundary to stop at MHWS, ie seaward of land, and yet up a river, further from the actual coast, the CMA would include land above water level.

Regards
Barry

From: Anna Johnson <anna@scoped.nz>
Sent: Thursday, 20 October 2022 4:30 pm
To: barry@macdonellconsulting.co.nz
Subject: RC220120 - s. 92 Further Information Request

Hi Barry,

Further information is required in order to continue processing the above resource consent application.

Please see the attached letter for detail.

Kind regards,

Anna Johnson
Principal Planner

✉ Anna@scoped.nz 📞 021 0869 1484

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Re: RC220120 - s. 92 Further Information Request

AJ Anna Johnson
To: barry@macdonellconsulting.co.nz
Thu 03/11/2022 11:12

Hi Barry,

You will need to show the no build line and proposed building platforms on the subdivision plan. You will also need to formally volunteer any conditions, i.e. no residential use of the balance Lot, should that be the applicant's intention.

The main issue is the application and the second engineering report have conflicting information, so you will need to be very clear around the applicant's intent.

I hope this clarifies.

Kind regards,

Anna Johnson

SCOPED PLANNING & DESIGN

Anna Johnson
PRINCIPAL PLANNER
anna@scoped.nz
021 0869 1484

From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: 26 October 2022 14:34
To: Anna Johnson <anna@scoped.nz>
Subject: RE: RC220120 - s. 92 Further Information Request

Anna

Can you please help to clarify Question 18 for me. There are building platform areas available on all lots apart from the balance farm lots (13,14 & 15), in accordance with the Eliot Sinclair no build area. The application does indeed adopt the no build line from the ES report. The only issue seems to be that on the balance lot (13,14,15) the applicant could apply for consent for a dwelling when the contractors yard consent is granted and given effect to. However the applicant has the balance of a 100 ha property to construct another dwelling and so would not want to seek to build in the no build zone when there are better locations on the property. So the applicant is likely to agree to a consent notice to the effect that they would not build a dwelling on that balance lot title.

Am I understanding the concern correctly, and does that address the issue ? Before I get Eliot Sinclair to start addressing the other engineering related matters.

Regards
Barry

From: Anna Johnson <anna@scoped.nz>
Sent: Thursday, 20 October 2022 4:30 pm
To: barry@macdonellconsulting.co.nz
Subject: RC220120 - s. 92 Further Information Request

Hi Barry,

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Re: RC220120 - s. 92 Further Information Request

AJ Anna Johnson
To: barry@macdonellconsulting.co.nz
Thu 03/11/2022 11:28

Hi Barry,

This is my understanding. I would suggest getting in touch with your surveyor to confirm.

Kind regards,

Anna Johnson

SCOPED PLANNING & DESIGN

Anna Johnson
PRINCIPAL PLANNER
anna@scoped.nz
021 0869 1484

From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: 01 November 2022 07:46
To: Anna Johnson <anna@scoped.nz>
Subject: RE: RC220120 - s. 92 Further Information Request

Anna

I'll provide you with confirmation of the watercourse width, running through Lot 5.

Regarding your comments on 'allotment vs title', are you suggesting that if Lot 15 or 13, being less than 4 ha, even though they will be contained within one title greater than 4 ha, abuts the Hokitika River bed, then an esplanade reserve there is required ?

Regards
Barry

From: Anna Johnson <anna@scoped.nz>
Sent: Monday, 31 October 2022 5:21 pm
To: barry@macdonellconsulting.co.nz
Subject: Re: RC220120 - s. 92 Further Information Request

Hi Barry,

Please demonstrate that the stream is less than 3m in width. This measurement is determined by the Resource Management Act to be at its annual fullest flow of the stream without overtopping banks. The failure of a performance standard means a resource consent must be granted for the activity to be undertaken.

Evidence will need to be provided.

Please note, the requirements of s. 230 involves esplanade reserves to be created where allotment of under 4ha are produced. An allotment is defined as:

Traffic Impact Assessment

117 Arthurstown Road Subdivision

Forest Habitats Ltd

February 2023

Prepared by Mel Sutherland West Coast Consulting Ltd.

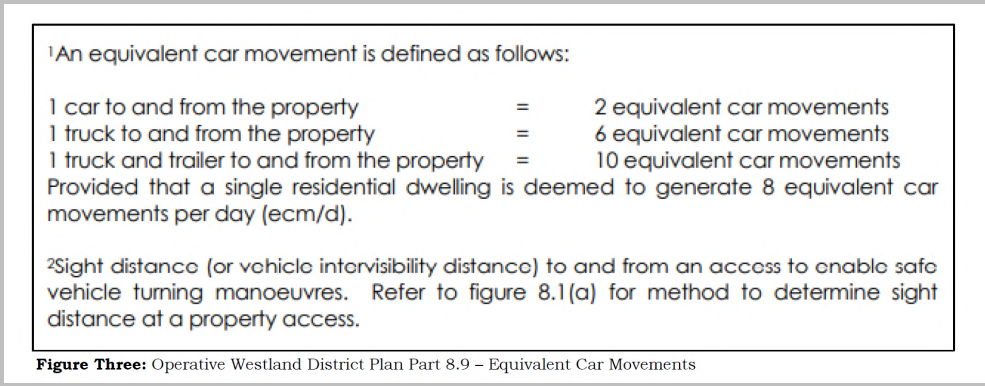
Contents

1 Request for Additional Information

Westland District Council as the Consent Authority has requested additional information. This report covers the following items raised in the request.

Access and Land Use Provisions

12. The application does not contain an adequate assessment of traffic effects. Please provide an assessment of traffic effects based on the calculations for daily vehicle movements prescribed within the Operative Westland District Plan, which are demonstrated below within Figure Three.



[1]An equivalent car movement is defined as follows:

1 car to and from the property	=	2 equivalent car movements
1 truck to and from the property	=	6 equivalent car movements
1 truck and trailer to and from the property	=	10 equivalent car movements

Provided that a single residential dwelling is deemed to generate 8 equivalent car movements per day (ecm/d).

[2]Sight distance (or vehicle intervisibility distance) to and from an access to enable safe vehicle turning manoeuvres. Refer to figure 8.1(a) for method to determine sight distance at a property access.

Figure Three: Operative Westland District Plan Part 8.9 – Equivalent Car Movements

14. The accessways located within the intersections of legal road reserve will not comply with the standards of 8.9.3 which requires a separation of vehicle access points from any Rural Zone intersection. Please demonstrate compliance with the applicable standards, or alternatively provide an assessment of the rule failure.

16. The Westland District Council District Assets Department has noted an issue with the vehicle access entrance point for Lots 5 and 6 due to the proximity with the bridge contained within Arthurstown Road. Due to the increase in traffic volumes, it is likely that a guard rail will be required which will reduce visibility for future users entering and exiting the site. It is requested that the access point to Lots 5 and 6 are relocated in order to preserve the safety of future occupants and road users. It has also been noted that the proposed separation from the bridge is likely to result in safety issues.

Details relating to the subdivision are provided in the subdivision consent application and scheme plan and are not repeated here. Attachment A is a copy of the latest Scheme Plan. It is noted the proposed subdivision is in three stages.

Appendix A provides a list of key source information and documents referenced. Abbreviations are also listed in Appendix A.

2 Traffic Impact Assessment

2.1 Formed Roads

2.1.1 Geometric capacity.

The following advice is related to Item 12 of the Request for Further Information.

Attachment B provides a general plan showing the named roads in the Arthurstown Road area and is referred to in this assessment.

2.1.1.1 Arthurstown Road

Westland District Council (WDC) Road Assessment Maintenance Management System (RAMM) indicates:

1. Formed road width is 7 metres, however more recent sealed surface information indicates minimum sealed width of 6.5 metres.
2. This excludes Gallop Creek bridge which RAMM information confirms is 3.66 metres wide. This is not an unusual width as given that the bridge was constructed in 1963 it was constructed to the standard 12-foot width for a single lane bridge. (This matter will be discussed further below. See Figure 1.
3. Arthurstown Road is as a connector road. It intersects with State Highway 6 to the west and Woodstock Rimu Road to the east. If is just over a total of 4 km in length.
4. The subdivision is located closer to the State Highway 6 (SH6) end of Arthurstown Road with the first new lot being around 380 meters from the intersection.
5. The road is classified as a Secondary Collector under the NZTA One Network Road Classification System (ONRC).
6. Latest WDC RAMM traffic estimates for the road are an average annual daily traffic (AADT) of 250 vehicles per day (vpd) of which 9 percent are heavy commercial vehicles.

The subdivision application indicates 12 rural residential lots are proposed to be created. This will create an additional 96 equivalent car movements per day (ecm/d) once all the rural – residential

dwellings have been established. This increase in traffic is based on the guidance note under Section 8.9.2.a of the WDC District Plan (DP). That is 8 equivalent car movements per day (ecm/d).

Total traffic on Arthurstown Road is therefore estimated to be 346 vehicles per day.

Noting the current seal width of 6.5 and that some of this seal width is a sealed shoulder, based on Table 3.2 of NZS 4404 the Arthurstown Road has move than adequate capacity for the increase in traffic generated by the subdivision. Refer to page 66 of Table 3.2. Assuming a minimum sealed movement lane width of 5.5 metres with sealed shoulders the road has a capacity for around 1000 vehicles per day.

Figure 1: Gallops Creek Bridge - View looking eastwards.

2.1.1.2 East Road

There is an access formed over this legal road to a gravel standard. The formed access width is approximately 3.5 metres.

Figure 2: East Road looking north-west (new Lot 11 and 12)

There is no RAMM information on this road which indicates that Council may not maintain it, notwithstanding that the road is vested in WDC.

Traffic volumes are estimated to be 10 ecm/d as use appears to be for farming purposes with a dwelling located on the east side and existing sheds on the west side of the road.

It is proposed that Lot 11 is to have a vehicle entry from East Road. It is not clear if a vehicle entry from East Road is also proposed for Lot 12. It is assumed that this will be the case.

Therefore, total future traffic on East Road is likely to be 26 ecm/d.

Given that East Road is owned by Council and referring to NZS 4404, Table 3.2, page 66 ideally the road should be sealed up to and including the entrance for Lot 12. The movement lane seal width should be 5.5 metres with 0.5 metre sealed shoulders.

It is recommended that the above be discussed further with Council as the Road Controlling Authority as given the rural-residential nature of the subdivision, sealing the shoulders for instance may not be considered necessary as given the size of the proposed lots, it is unlikely vehicles will be parking on the road shoulders.

Furthermore, noting that there will only be a total of 3 dwellings on this road once the subdivision is developed and Council currently does not maintain the road, the option of retaining the existing 3.5 metre formation could be considered and just extending the seal from the intersection to as far as and including the two new dwelling entrances for Lot 11 and Lot 12.

Alternatively, just the intersection with Arthurstown Road could be sealed back 6 metres and the rest of the road could remain as a gravel formation to the WDC – COP Unsealed Rural Road standard, see Diagram C520.

Any potential upgrade of East Road should only be required at Stage 3, as per the staging plans.

The extent of the upgrade is further discussed below under Section 2.2.

2.1.2 Road Structural Capacity

2.1.2.1 Arthurstown Road

It has not been requested to provide a specific designs. General comments are provided.

Ultimate total traffic volumes are low at an AADT of 346 vehicles per day.

This means in relation to structural design of the pavement layers the design requirements are at the lower end. See for instance Australian Guide to Pavement Design Part 2 (AGPT02)

Future traffic composition is likely to be mostly light vehicles given the proposal is for rural residential development. Structural capacity of roads is primarily determined by heavy vehicle use which again given the nature of the subdivision is not predicted to increase.

Therefore, for Arthurstown Road, it is not considered that there are any structural capacity issues as a result of the increased traffic from the subdivision.

If anything, damage to the road could occur during the construction period for the formation of the new accessways and building platforms. Typically, the Council Authority includes a resource consent condition to make good any construction damage.

2.1.2.2 East Road

Noting the comments under 2.1.1.2 if it is deemed that East Road should be widened and sealed then the following as shown in Diagram C521 of WDC COP could be applied.

Considering the requirements of NZS4404 as well, a basecourse thickness of 100 mm should be acceptable with the subgrade layer (minimum 500 mm) also including below the basecouse layer a

sub-base layer of 165 mm of all passing[1] (AP) 65 mm compacted gravels.

However as per Section 2.1.1.2 Council as the Road Controlling Authority may consider a lower standard where Diagram C520 could be appropriate, provided the intersection with Arthurstown Road is sealed. See also further advice under Section 2.2.

2.1.3 Other factors – Traffic Safety

2.1.3.1 Crashes

Table 1; Crash History

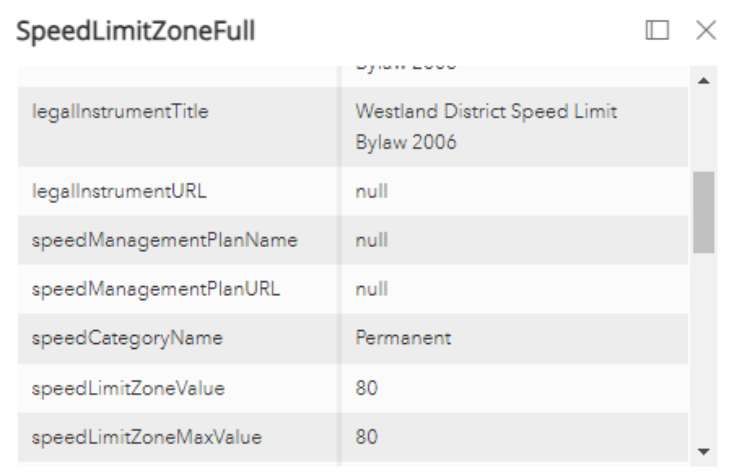
Fatal injury count	Serious injury count	Minor injury count	Non-injury count	Crash year	Intersection	Side road	Direction from feature or side road	Distance from side road
0	0	0	1	2017	No	SOUTHERNWOOD ROAD	East	840
0	0	0	1	2010	No	SH 6	East	1770
0	0	0	1	2004	No	SH 6	East	2800
0	0	0	1	2004	No	WOODSTOCK RIMU ROAD	West	980
0	0	0	2	2002	No	WOODSTOCK RIMU ROAD	North	1000

A review of crashes indicates that there have been no reported crashes in the area of the proposed subdivision.

If the requirements of the District Plan, the WDS COP and as further recommended in this assessment, together with continuing maintenance and replacement of road assets, it is not anticipated that road factors would be a contributing cause to future crashes.

The NZTA National Speed Limit Register confirms the permanent posted speed limit for Arthurstown Road is 80 km/hr.

[1] "All passing" means no stones bigger than 165 mm when put through a steel mesh grading screen.

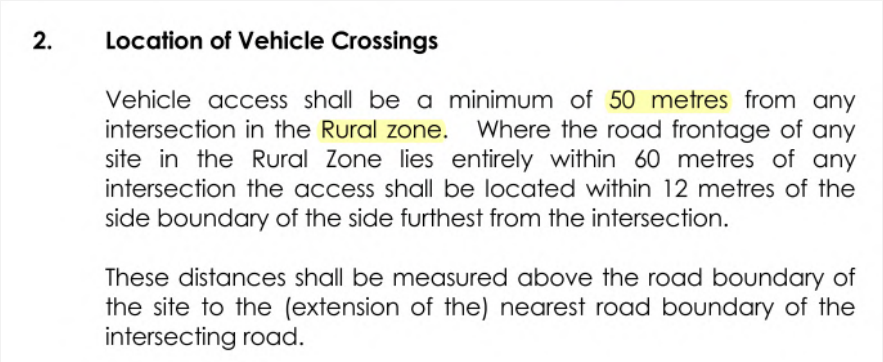


2.2 Accessways

2.2.1 Access locations and standards

The following advice is related to Item 14 of the Request for Further Information.

The request for additional information has identified the issue of noncompliance with rule 8.9.3.2 of the WDC DP.



2. Location of Vehicle Crossings

Vehicle access shall be a minimum of 50 metres from any intersection in the Rural zone. Where the road frontage of any site in the Rural Zone lies entirely within 60 metres of any intersection the access shall be located within 12 metres of the side boundary of the side furthest from the intersection.

These distances shall be measured above the road boundary of the site to the (extension of the) nearest road boundary of the intersecting road.

Referring to the Scheme Plan, Attachment A, this issue affects Lot 4 where it is proposed to place an access from Arthurstown Road across currently unformed Ferry Road. It also affects Lots 9 and 10 where it is proposed to place a shared access across currently unformed Juan Road.

Looking at the location of proposed accesses on the Scheme Plan the separation of new accesses is sensible with good separation distances between each access. Shared accesses between two adjacent lots are considered to be a good practice to minimise the total number of accesses along road frontages. Normally where there are only two properties involved it is likely that the property owners will agree on future maintenance.

To construct and form what is currently unformed road, requires permission of the owner of the road and may also require resource consents, in this case being the Westland District Council as the Road Controlling Authority.

Advice has been sought from Council as the Road Controlling Authority on this matter. A response was provided by the Councils Transportation Manager on 13 February 2023. See Attachment C below.

The advice is confirmed here:

2.2.1.1 For Lot 4

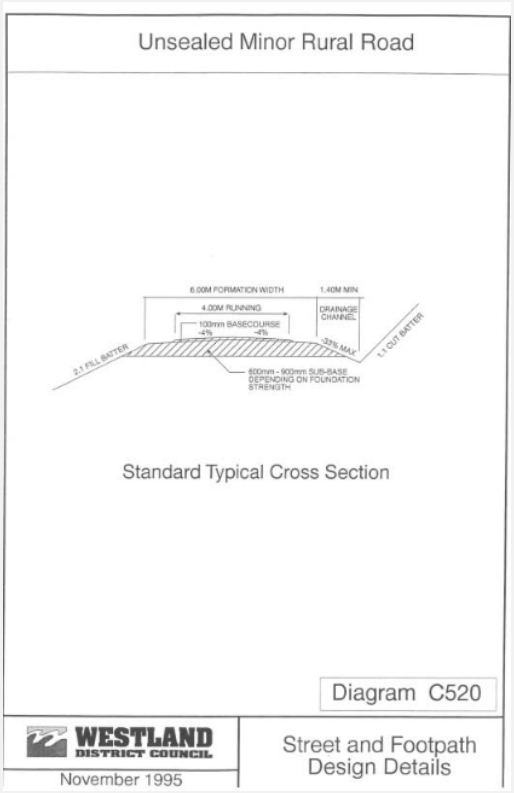
> ***"With regards to forming the access within unformed legal road (Ferry Road), this is acceptable and would not require a license to occupy. There will however be specific conditions around the formation and construction. The location would be best sited centrally with a formation that partially follows the paper road alignment for 20m before turning 90degrees into the section. This would need to be formed to a rural single lane road standard. Chipsealing of the intersection would need to be done to 6m back from the existing sealed road. This then allows for future expansion of the unformed road. As it is a driveway access then other standard dimensions for a rural access should apply."***

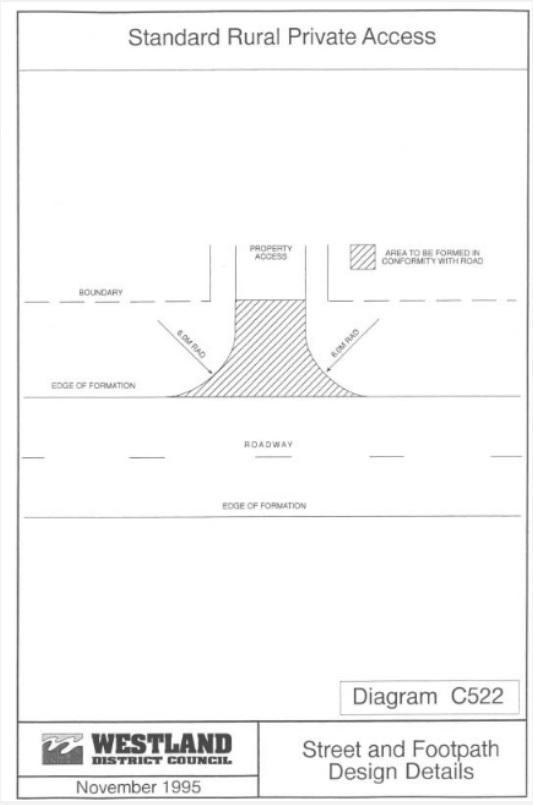
2.2.1.2 For Lots 5 and 6

> ***"In general, the same scenario as for Lot 4 should also apply with the exception that there will be 2 opposing entrances off this formation.(Juan Road)"***

With respect to the writer's suggestion of a licence to occupy, the Transportation Manager has clarified this point.

Referring to WDC – COP the following diagrams would cover in general terms the Transportation Manager's requirements with final details needing to be confirmed.





Section 8.11 (c) of the WDC – COP has relevance.

(c) Rural Areas

One vehicle crossing shall be provided for each allotment. Construction shall be as for roading and formation shall be in accordance with Diagram C522 with the width at the narrowest point being a minimum of 3.5 m and a maximum 6.0 m. The final formation shall be in conformity with the road surface that the access serves.

It appears to be accepted practice to allow shared accesses. It is noted that the adjacent Arthurstown Road formation has a sealed chipseal surface, so the entrance from this road would need to be chipseal as well. However, the vehicle crossings to the properties which are required to be set back 20 metres from the intersection with Arthurstown Road on Ferry Road and Juan Road could be to a gravel formation.

2.2.1.3 Lot 11 and 12

The entry access to Lot 11 was also discussed with the Transport Engineer, who has confirmed 20 metres setback from the intersection between Arthurstown Road and East Road is acceptable. It is not clear where the entrance accessway for Lot 12 is to be located. As per section 2.1.1.2 and above an acceptable solution is to chip seal East Road back for the first 6 metres from Arthurstown Road and then confirm or upgrade the rest of the road to a gravel 4-metre-wide formation with the two

new entranceways also being to a gravel formation standard.

2.2.2 Other factors

2.2.2.1 Other accessways

All other accessways should be formed to WDC – COP Diagram 522.

Vegetation that is over road boundaries or on road reserve and obstructing sight lines will need to be removed. This appears to be the case for Lot 6 only.

2.2.2.2 Roadside culverts

All accessways and the new entrance – intersections with Arthurstown Road should be piped with suitable size culverts where there are existing roadside drains or drains on the adjacent properties that will need to be crossed over for the new accessed to WDC – COP standards .

2.2.2.3 Sight distances

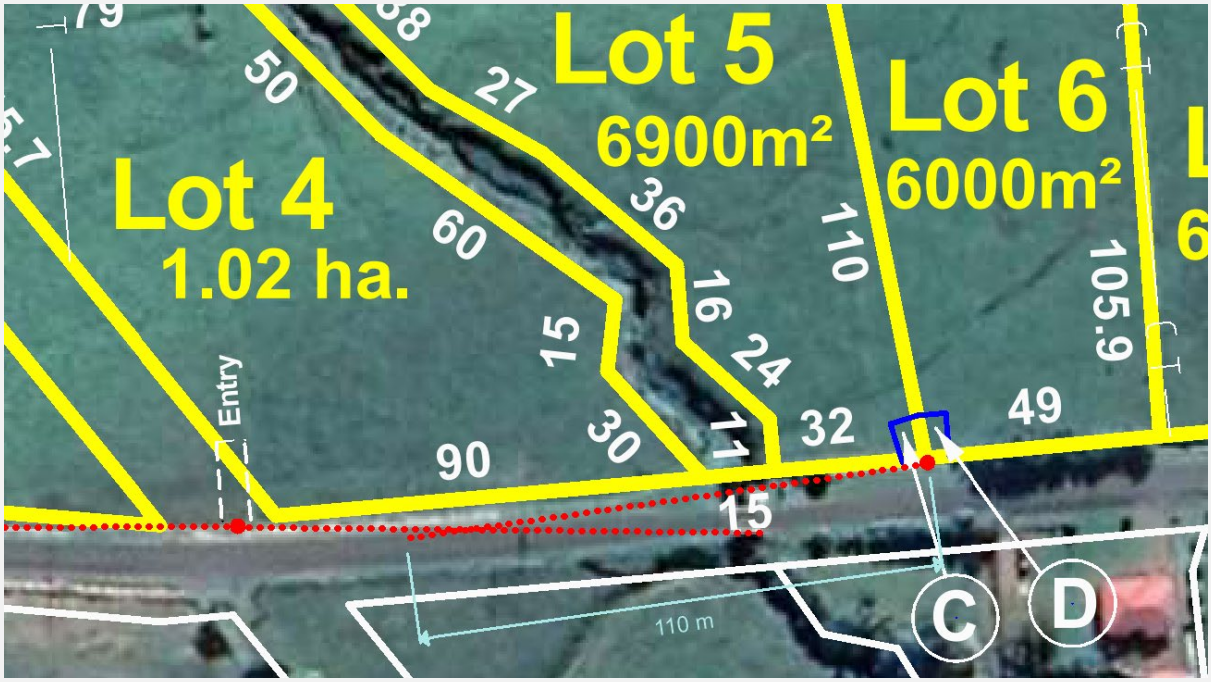
Sight distances have been checked using WDC COP Table 8.9.3 and Figure 8.1a.

Generally, the road is straight.

The curve in Arthurstown Road near East Road was checked, see Figure 3, and meets the requirements.

Figure 3 Sight Distance Accessway Lots 9 and 10

Figure 4 Accessways for Lot 4 and Lots 5 and 6 (shared)



Sight distance for Lot 4 is acceptable with the distance of 110 metres meeting the Gallops Creek Bridge. Moving the Lot 4 access away so that is central with Ferry Road would make a slight improvement.

While there is sight distance to the west for the shared entrance for Lots 5 and 6 this is compromised due to the concrete handrail system on Gallops Creek Bridge, see Figure 4. This matter is discussed further in the next section.

2.3 Gallops Creek bridge

2.3.1 Sight Lines for adjacent access

2.3.1.1 Day Time Driving (Good Visibility)

The following is related to Item 16 of the Request for Further Information.

Feedback on this matter from Council's Transport Engineer is also provided in Attachment C.

Council proposes to replace the existing concrete post and galvanised steel handrails which have been measured in site to be 1.235 metres (1235 mm) total height above the deck level with W section guardrail.

The existing concrete and steel handrail system at 1.235 metres momentarily blocks visibility to the west for the proposed shared accessway for Lots 5 and 6. As per Figure 8.1(a) sight distances shall

be measured to and from a height of 1.15 metres above the road surface.

While the following is not a detailed design a review of the standards has been undertaken to assess what is likely to be proposed and if what is proposed has any mitigating features for the subdivision.

In accordance with the NZTA Bridge Manual Appendix B Barrier systems on structures it is assumed a TL3 standard is proposed. Road Controlling Authorities other than NZTA State Highways can continue to use this system.

B3.1.4 Barrier performance level 3

A barrier performance level 3 barrier provides for the safe containment of light vehicles, with occasional use by medium-heavy commercial vehicles, such as stock trucks and/or farm equipment.

These barriers may be considered for use on structures on non-state highway rural roads that:

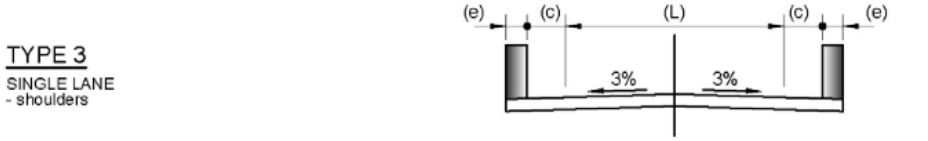
a. have low traffic volumes (typically less than 500vpd) and in low speed environments (70km/h or less); or

b. are short structures (<10m) with low height above ground (<1.5m), or across shallow water (<1.0m).

With the addition of the subdivision traffic total traffic volumes will be 346 vehicles per day. The bridge is 4 metres (deck length), and the waterway is shallow. Allowing for traffic growth of 2% per year it will take around 19 years to exceed 500 vehicles per day on Arthurstown Road.

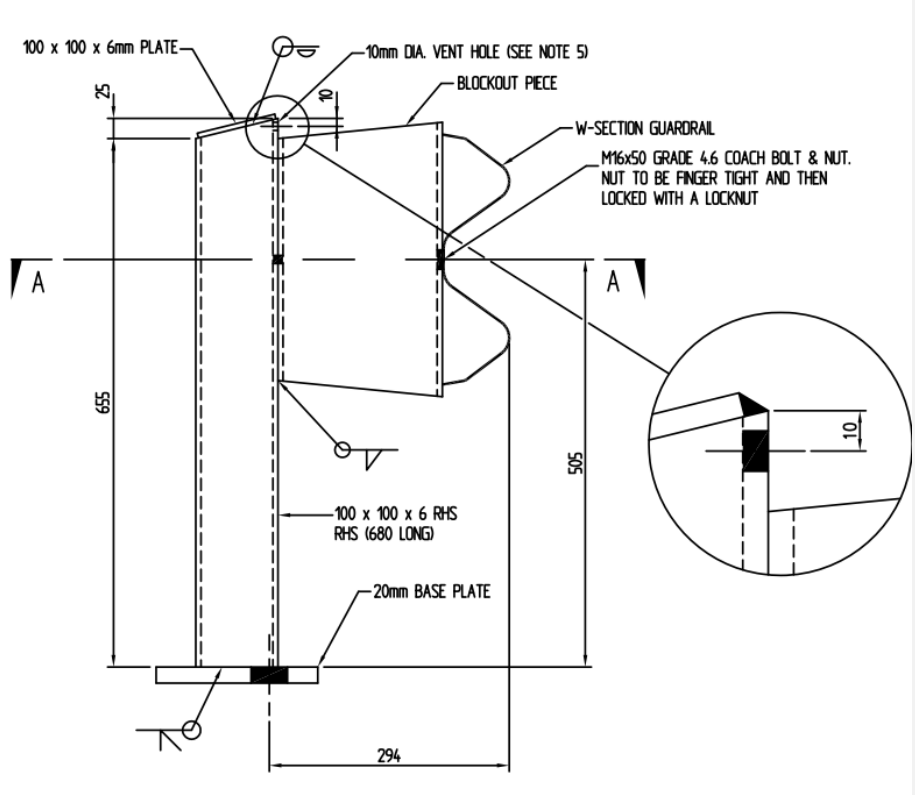
It is likely that if the concrete and steel handrails and existing concrete kerbs are removed the bridge will have a cross section shape similar a Type 3 NZTA single lane bridge, see Figure 4.

Figure 5: Future bridge cross section



Referring to NZTA M23 Specification for road safety barrier systems Appendix A and Appendix B for a W Section semi rigid barrier the height is likely to be governed by the height of the road barriers which are up to 800 mm high, above the ground, where with the approval of the Road Controlling Authority W section barrier on the bridge is 700 mm high. See Drawing, see Figure 6.

Figure 6: Future Bridge Guard Rail.



Source NZTA Standard Drawings B1 – W Beam assembly and fixing details (No top rail).

Based on typical heights of the top of vehicles, passenger cars are 1250 mm above the road, (see Table 5.1 (Austroads Part 3).

To summarise the above if the finished surface level of the shared access for Lots 5 and 6 was at the same height as the deck of Gallops Creek bridge there will be at least 450 mm clear sight line above the W section guard rail system to see oncoming traffic or oncoming traffic to see a vehicle located at the access. It should also be checked that approaches to the bridge over the 110-metre sight distance are also around the same level as the bridge deck. The road in the area is generally flat so it has been assumed the 450 mm clear sight line above the guard rail is not compromised.

The above assumes that there is no requirement to cater for pedestrians or cyclist on the bridge.

2.3.1.2 Night time driving (Poor visibility)

Another issue is night-time driving or diving in poor visibility. It is assumed here headlights are turned on. For passenger vehicles the headlights are assumed to be 650 mm above ground. The guardrail as outlined above it 700 mm to 800 mm above the road, therefore there is a partial obstruction. However, posts on the bridge and road guardrail are at around 2 metre centres and if

flared and curved back into the road shoulders, headlights will be visible through the gaps.

For added mitigation a permanent warning concealed accessway sign could be installed as per the NZTA Manual of Traffic Signs and Marking, on the western side of the approach to the Gallop Creek Bridge for the Lot 5 and 6 accessway. However, this is not recommended at this stage, with the for this additional measure to be monitored. For the one lane bridge there will need to be retained reflectorised advanced one-lane bridge signs and bridge end markers posts. These safety signs will slow down motorists at night and any vehicle exiting the Lot 5 and 6 accessway should also have on their headlights and turning indicator lights.

2.3.2 Other factors

While based on the above by keeping a lower profile road and bridge guard rail system a sight line can be retained, the other issue is the extent of guardrail that will be placed each side of the bridge.

The posted speed limit is 80 km/hr. It is assumed the approach speed towards the bridge where a vehicle does not have to stop and give way to a vehicle approaching in the opposite direction will still reduce to 70 km/hr. Even with the existing concrete and steel handrail system replaced with W section guard rail the clearance between the single traffic lane of 3.5 metres and the face of the guardrail will only be 300 mm each side, (minimum clearance required by NZTA Bridge Manual). This closeness of the barrier will cause vehicles to slow down.

Based on Austroads Guide to Road Design Part 6 the flair length of the guardrail assuming the guardrail is flared will need to be a minimum of 16.4 metres on the approach side of the bridge. Given that both sides are an approach this minimum applies in both directions.

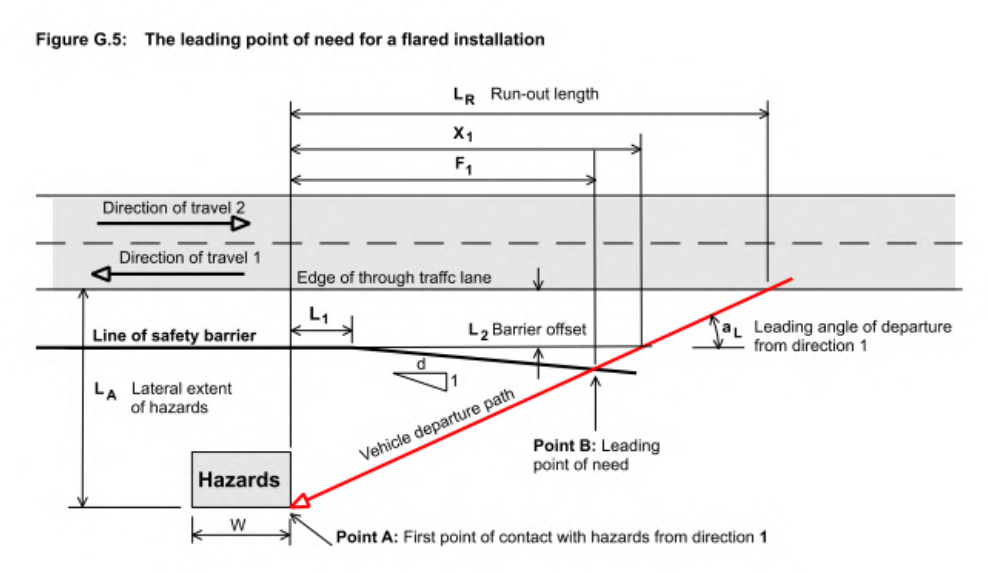


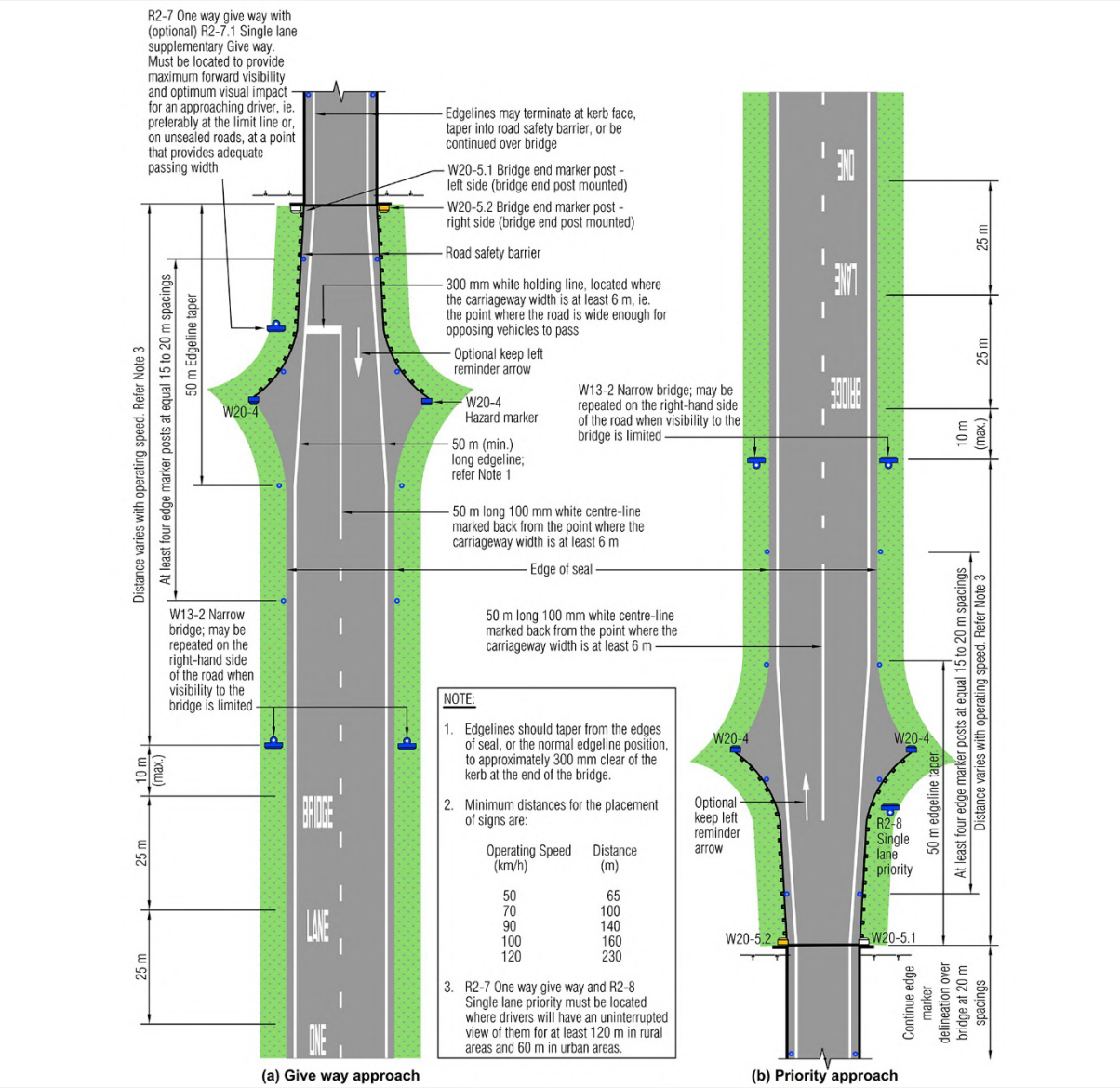
Table 2; Guard Rail Length

Flared Installations	Symbol		Comment
Leading Point of Need			
Run out length (m)	LR	38	
Lateral Extent of the Hazard (m)	LA	2.31	Same direction traffic lane
Distance to start of flare beyond the hazards (m)	L1	1.905	Assume 1.905 m length of rail

Flared Installations	Symbol		Comment
Barrier Offset (m)	L2	0.3	
Flare rate. Maximum flare rates from Table 6.9	d:1	18	Used 70 Km/hr and barrier closer to the road than recommended barrier offsets
((LA - L2 + L1/d) / (1/d + lA/lr))	F1a	16.4	
((LA - L2 + l1/d) / (1/d + 1/8))	F1b	11.7	
Location of the leading Point of need in advance of the hazards (Max of F1a or F1b) (m)	**F1**	**16.4**	

In addition to the minimum flair length, the guard rail will need to be curved out over a widened road shoulder as shown in the NZTA diagram below, see Figure 6. This extra length has not been assessed, but the overall set out would need to be similar to this NZTA diagram. It is estimated the overall length of guardrail will need to be between 20 and 22 metres.

Figure 7 : Guardrail Setout.



Based on the above it is recommended that the overall length of guardrail is confirmed with the WDC the Road Controlling Authority as allowing for the flare length and the curved splay it is possible that there is sufficient space to allow the shared accessway for Lots 5 and 6 to remain where they are proposed on the Scheme Plan.

3 Appendix 1

The following documents and information have been referred to:

1. Applicants Scheme Plan, refer **Attachment A**.
2. Eliot Sinclair's Subdivision Suitability Report 117 Arthurstown Road, Hokitika prepared

for Forest Habitats Ltd 510714. 30 September 2022.

3. Westland District Council (WDC) District Plan (WDC – DP)

4. Westland District Council Code of Practice for Engineering Works (WDC-COP)

5. Westland District Council Online Maps https://www.westlanddc.govt.nz/westland-district/online-maps/

6. NZS 4404: 2010 Land Development and Subdivision Infrastructure – New Zealand Standard. (NZS 4404). Copy owned by the writer.

7. Westland District Council Road Assessment Maintenance Management System (RAMM) Think Project. Access approved by WDC.

8. Waka Kotahi (NZTA) Crash Analysis System (CAS). Access approved by NZTA (NZTA CAS)

9. Waka Kotahi (NZTA) Bridge Manual SP/022 Third Edition, Amendment 4

10. Australian Guide to Road Design Part 3 Geometric Design (Austroads Part 3 2021)

11. Australian Guide to Road Design Part 6 Roadside Design, Safety (Austroads Part 6 2022)

12. Google Maps (2023 Imaginary)

13. Site and area inspection by writer on 4 December 2022

4 DOCUMENT CONTROL

Title:	Traffic Impact Assessment	
Client:	Forest Habitats Ltd	
My Reference	202302	
Report Prepared By:	M D Sutherland BSc (Geography) BE (Civil) CMEngNZ	22/02/2023
Version	Final	22/02/2023

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1.2. This assessment and attachments have been prepared for the sole use of:

1.2.1. The Client

1.2.2. The client's agent being MacDonnell Consulting Ltd 17 Cliffs Road St Clair Dunedin 9012 c/o barry@macdonellconsulting.co.nz

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1.5. Advice and recommendations provided relate specifically to the matters the Client's agent has requested to be covered in the Consent Authorities request for additional information. No advice or recommendations can be inferred for the appropriateness of any other aspects of the proposed subdivision.

5 ATTACHMENTS

5.1 ATTACHMENT A Scheme Plan

See separate attached pdf named:

ATTACHMENT A 117 Arthurstown Road Block_SchemePlanswithStages_20Feb2023. It is noted the subdivision is to be developed in three stages as shown on the separate plans.

5.2 ATTACHMENT B ARTHURSTOWN ROAD AREA

See separate attached pdf named:

ATTACHMENT B ATHURSTOWN ROAD AREA

5.3 ATTACHMENT C – TRANSPORTATION MANAGER RESPONSES

From: Karl Jackson <karl.jackson@westlanddc.govt.nz>

Sent: Monday, February 13, 2023, 12:03 PM

To: mel.sutherlandwestcoastsinz@gmail.com

Subject: RE: Arthurstown Road - Proposed Subdivision - Forest Habitats Ltd

Kia ora Mel,

Answers below with the raised questions…

Karl Jackson | Transportation Manager

Te Kahui o Poutini | Westland District Council

36 Weld Street, Private Bag 704, Hokitika 7842 |

+64 3 756 9032 | +64 27 608 5045 | karl.jackson@westlanddc.govt.nz

Please consider the environment before printing this email

From: mel.sutherlandwestcoastsinz@gmail.com <mel.sutherlandwestcoastsinz@gmail.com>

Sent: Wednesday, 8 February 2023 11:21 pm

To: Karl Jackson <karl.jackson@westlanddc.govt.nz>

Subject: Arthurstown Road - Proposed Subdivision - Forest Habitats Ltd

Hi Karl

After some advice around what Council would consider for some of the entrance locations proposed for this subdivision and for Gallops Creek.

I have been engaged to provide some additional information for the above subdivision. The aspects I am looking at are below, but specific questions I have are as follows:

Proposing some shared entrances and entrances that are spatially occupying unformed legal roads rather than the frontage to Arthurstown Road. Locations seem sensible for separation between entranceways and sight distance requirements, but the ones located on the side legal roads breach the DP rules (8.9.3).

Further details below.

Lot 4

This is proposed to be formed on the existing unformed legal road that runs at an angle to

Arthurstown Road. It would seem unlikely that the angled road is ever going to be formed. Would Council consider allowing formation of the entrance on the legal road. Would this need a licence to occupy?

In the unlikely event that at some future date side road was formed there could be an agreement that owner of Lot 4 must form a new access on this side road back from the intersection with Arthurstown Road.

With regards to forming the access within unformed legal road (Ferry Road), this is acceptable and would not require a license to occupy. There will however be specific conditions around the formation and construction. The location would be best sited centrally with a formation that partially follows the paper road alignment for 20m before turning 90degrees into the section. This would need to be formed to a rural single lane road standard. Chipsealing of the intersection would need to be done to 6m back from the existing sealed road. This then allows for future expansion of the unformed road. As it is a driveway access then other standard dimensions for a rural access should apply.

Lot 9 and 10

Same question for proposed shared entrance for lots 9 and 10 as proposing to construct over unformed legal road here as well.

In general, the same scenario as for Lot 4 should also apply with the exception that there will be 2 opposing entrances off this formation.(Juan Road)

Lot 11

For 11, new entrance is proposed to be on the side road (known as East Road). Just checking how far back this needs to be set from the intersection? 30m as stated below seems quite reasonable although 20m as above would be acceptable and consistent with the other 2 paper road scenarios.

While DP Tables 8.9.1 and 8.9.2 apply to state highways if you apply the side road entrance requirement this would be 30 metres back from the Arthurstown Road boundary (if I have interpreted correctly)?

Gallops Creek Bridge (photo looking westwards attached).

Question 16 below indicates Council looking at replacing the "tombstone" handrails with guardrail.

Current estimated traffic volumes on road are 250 vehicles per day (RAMM). Subdivision will generate extra 96 vpd (12 lots and 8 ecm/day). Making 346 vpd.

From NZTA Bridge Manual you can consider TL3 where:

B3.1.4 Barrier performance level 3

A barrier performance level 3 barrier provides for the safe containment of light vehicles, with occasional use by medium-heavy commercial vehicles, such as stock trucks and/or farm equipment.
These barriers may be considered for use on structures on non-state highway rural roads that:
a. have low traffic volumes (typically less than 500vpd) and in low speed environments (70km/h or less); or
b. are short structures (<10m) with low height above ground (<1.5m), or across shallow water (<1.0m).

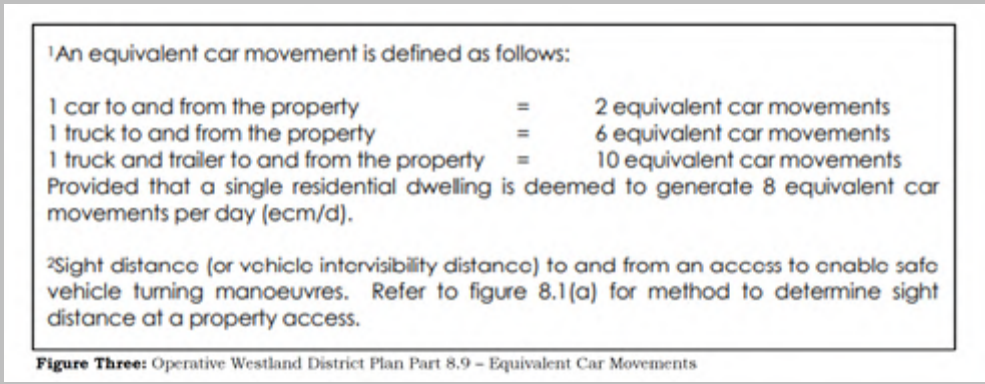
Not sure what Council is proposing to do but current concrete handrail is 1.235m high above road. Thinking is you could use TL3 which has a height of 700 mm so would be below driver eye height of 1.15 metres. The shared entranceway would need to be at the same level as the bridge deck. Noted road is posted at 80 km/hr but assuming bridge is to stay single lane approach speeds should be less. Longer term the approach here would be to replace the existing railing with W section Guard rail and terminal end treatments. We are not in any position to replace or widen this structure. The main concern raised was regarding the potential for conflict with sight visibility lines around terminal end treatments. Adequate forms of mitigation do need consideration in this instance and raising the entranceways could be suitable if practical to do so. A boundary adjustment and driveway relocation slightly South East along Arthurstown road could also be suitable. At this stage we haven't done any scoping or design in this area, so it is a challenging item to judge based on the information provided to date.

Thanks Mel

Access and Land Use Provisions

12. The application does not contain an adequate assessment of traffic effects. Please provide an assessment of traffic effects based on the calculations for daily vehicle movements prescribed within the Operative

Westland District Plan, which are demonstrated below within Figure Three.



[1]An equivalent car movement is defined as follows:

1 car to and from the property	=	2 equivalent car movements
1 truck to and from the property	=	6 equivalent car movements
1 truck and trailer to and from the property	=	10 equivalent car movements

Provided that a single residential dwelling is deemed to generate 8 equivalent car movements per day (ecm/d).

[2]Sight distance (or vehicle intervisibility distance) to and from an access to enable safe vehicle turning manoeuvres. Refer to figure 8.1(a) for method to determine sight distance at a property access.

Figure Three: Operative Westland District Plan Part 8.9 – Equivalent Car Movements

14. The accessways located within the intersections of legal road reserve will not comply with the standards of 8.9.3 which requires a separation of vehicle access points from any Rural Zone intersection. Please demonstrate compliance with the applicable standards, or alternatively provide an assessment of the rule failure.

16. The Westland District Council District Assets Department has noted an issue with the vehicle access entrance point for Lots 5 and 6 due to the proximity with the bridge contained within Arthurstown Road. Due to the increase in traffic volumes it is likely that a guard rail will be required which will reduce visibility for future users entering and exiting the site. It is requested that the access point to Lots 5 and 6 are relocated in order to preserve the safety of future occupants and road users. It has also been noted that the proposed separation from the bridge is likely to result in safety issues.

22 February 2023

Westland District Council
Hokitika

Attention: Anna Johnson

Dear Anna

RC Application 220120 / Forest Habitats Ltd / Proposed Subdivision at 117 Arthurstown Road

Please find attached our response to Council's s92 request of 20 October 2022.

Please note that the scheme plan has been updated to address the matters outlined below, including now providing for staging of the development, and identifying the 'no build' area. Refer updated scheme plan attached.

1 Land use component

Eliot Sinclair have prepared a response to your s92 questions, 18 – 21. Attached. In their response they note that if any earthworks for building platforms are required they will be carried out once the subdivision consent is approved. Refer response to Question 20. These earthworks are likely to be permitted. Furthermore, it is quite likely that the required floor levels for new dwellings will be achieved through timber piles.

2 Westland District Council / Objectives & Policies

Please refer to Appendix 1.

3 TTPP / Objectives & Policies and other provisions

Please refer to Appendix 2.

4 NZ Coastal Policy Statement
6 Operative West Coast Regional Coastal Plan
7 Proposed West Coast Regional Coastal Plan

The subject land is not in the coastal management area, as the land where actual physical development will occur is well inland from the top of the river bank, as determined by the no build line.

Furthermore, Chris Wech, a registered professional surveyor, has marked on the scheme plan where the coastal area extends to.

5 West Coast Regional Policy Statement

Please refer to Appendix 3.

8 Amenity & Design

The applicant is happy to volunteer design controls that are considered appropriate for rural residential subdivisions. Using approved subdivision consent RC210017 as an example, the applicant offers the proposed design controls as per Appendix 4.

The applicant has consulted with local real estate agents, and confirmed that it is important to provide for minor household units, as well as a principal dwelling, to accommodate elderly parents and extended family, particularly on these larger rural residential sites, which are not located on elevated, highly visible sites, and also away from busy main roads.

9 Telecommunications

The applicant confirms that there is no fibre along Arthurstown Road, only copper. As there is good 4G coverage, there would be no demand for a copper connection for a phone land line.

10 Electricity Easement

Please note on the updated scheme plan, the location of the electricity easement (G). It extends across the river bed and is unaffected by the subdivision.

11 HAIL

As noted in the email to you dated 25 October 2022, the WCRC has confirmed that this is not a HAIL site.

12 Traffic

Please refer to the traffic report attached.

13 Pedestrian Access

While this would have been an attractive amenity feature for future residents, the applicant has decided to delete this feature from the proposal, as Council is ‘making it too hard’. Please refer to the updated scheme plan – pedestrian access removed.

14 Lot Entrances
16 Lots 5 & 6 / Bridge Proximity

Please refer to the traffic report attached.

15 East Road

Eliot Sinclair have also confirmed that chip sealing the already formed part of East Road to the Lot 12 entrance, does not require consent. In any event, as recommended by the traffic engineer, East Road really only requires sealing from 6 m from the Arthurstown Rd intersection, with the rest of the road remaining as gravel.

17 Esplanade Reserve

As confirmed in previous email correspondence there is no requirement for an esplanade reserve where allotments have an area greater than 4 ha. Because Lots 13, 14 and 15 are to be held in one title, this is considered to be one allotment, and this allotment is over 4 ha.

In respect of the original scheme plan showing a watercourse flowing through Lot 5 – this has been amended so the watercourse is now contained within Lot 14.

18 Flooding
19 Building Platforms
20 Earthworks for Building Platforms
21 Erosion & Sediment Control Plan

Please refer to the Eliot Sinclair response, attached.

Yours faithfully
MacDonell Consulting Ltd

Barry MacDonell

ARTHURSTDOWN ROAD AREA

Created By:
Print Date: 18/02/2023
Print Time: 4:16 PM

Scale: 1:4000
Original Sheet Size A3

Projection: NZGD2000 / New Zealand Transverse Mercator 2000
Bounds: 1432662.36258266,5266437.35591172
1434560.24734874,5267590.32408508

Appendix 4: Design Controls

Based on Approved Subdivision Consent RC210017

Consent Notices

A section 221 Consent Notice shall be registered on the lots authorised for dwellings, stating as follows;

a. The maximum height of residential buildings shall be no more than 7 m as measured from existing ground level.

b. The maximum height of accessory buildings shall be no more than 5.5 m as measured from existing ground level.

c. The footprint of any dwelling shall not exceed 450 m^2 and the footprint of any accessory building shall not exceed 150 m^2.

d. All buildings and structures shall be designed, finished and thereafter maintained to a reflectivity value of no more than 50%.

e. One minor household unit permitted per site, up to a floor area of 150 m^2.

Appendix 3: West Coast Regional Policy Statement

1.2 Regional Policy Statement Guiding Principles

The WCRC has developed this RPS using the following principles. They provide strategic direction on what is important to the communities of the West Coast.

PEOPLE

People are at the heart of this RPS. All district and regional plans should have regard to people and communities and their need for a healthy environment, well managed infrastructure, employment, business opportunities and education for their wellbeing and long-term economic success.

7A Natural Character

OBJECTIVES

1. Protect the natural character of the region's wetlands, and lakes and rivers and their margins, from inappropriate subdivision, use and development.

2. Provide for appropriate subdivision, use and development to enable people and communities to maintain or enhance their economic, social and cultural wellbeing.

POLICIES

1. Use regionally consistent criteria to identify the elements, patterns, processes and qualities of the natural character of wetlands, and lakes and rivers and their margins.

2. Protect the elements, patterns, processes and qualities that together contribute to the natural character of wetlands, and lakes and rivers and their margins from inappropriate subdivision, use and development.

3. When determining if an activity is appropriate, the following matters must be considered:

a) The degree and significance of actual or potential adverse effects on the elements, patterns, processes and qualities that contribute to natural character;

b) The value, importance or significance of the natural character at the local, or regional level;

c) The degree of naturalness;

d) The potential for cumulative effects to diminish natural character, and the efficacy of measures proposed to avoid, remedy or mitigate such effects; and

e) The vulnerability of the natural character to change, and its capacity to accommodate change, without compromising its values.

4. Allow activities which have no more than minor adverse effects on natural character.

8 Land & Water

OBJECTIVES

1. The life-supporting capacity of freshwater is maintained or improved.

2. Provide for a range of land and water uses to enable the economic, social and cultural wellbeing of West Coast communities while maintaining or improving water quality and aquatic ecosystems.

3. Determine allocation of water within environmental controls.

4. Identify and protect the significant values of wetlands and outstanding freshwater bodies.

5. Achieve the integrated management of water and the subdivision, use and development of land within catchments, recognising the interconnections between land, fresh water, and coastal water, including by managing adverse effects of land and water use on coastal water quality.

POLICIES

1. Adverse effects on fresh and coastal water quality and aquatic ecosystems arising from:

a) Subdivision, use or development of land;

b) Discharges of contaminants to water and to land in circumstances which may result in contaminants entering water;

c) Water use and take; and

d) Activities in, or on, water including damming and diversion, will be avoided, remedied or mitigated, to ensure that water quality and aquatic ecosystems are maintained or improved.

2. To give effect to Objective 2 of Chapter 3, the adverse effects of subdivision, use and development on Poutini Ngāi Tahu cultural values will be avoided, remedied or mitigated taking into account the following matters:

a) A preference by Poutini Ngāi Tahu for discharges to land over water where practicable;

b) The value of riparian margin vegetation for water quality and aquatic ecosystems; and c) Effects on the sustainability of mahinga kai, and protection of taonga areas.

3. To give effect to Objective 2 of Chapter 3, manage land and water use in a way that avoids significant adverse effects (other than those arising from the development, operation, maintenance, or upgrading of RSI and local roads) and avoids, remedies or mitigates other adverse water quality effects on sites that are significant to Poutini Ngāi Tahu, including the following:

a) Estuaries, hāpua lagoons, and other coastal wetlands; and

b) Shellfish beds and fishing areas.

4. Until priority frameworks for water take and use are developed through the FMU processes and added to a regional plan, consent applications will be processed on a “first-come, first served’’ basis, and in making decisions, the following matters must be considered:

a) The reasonably foreseeable future requirements for domestic and community water supply needs, stock drinking, and firefighting;

b) The degree of community, regional or national benefit from the take, use, damming or diversion of water;

c) Any adverse environmental effects from the take, use, damming or diversion of water will be avoided, remedied or mitigated including where applicable by applying provisions of the regional plan;

d) Applying rates of take, volume limits and residual flows at the point of take to ensure that there is enough water for the purpose of the take, and to maintain or improve water quality and aquatic ecosystems;

e) The extent to which the proposal maximises the efficient allocation and efficient use of water; and

f) The reasonable needs of other water users.

5. Maintain or improve water quality within freshwater management units. 6 Including the habitat of trout and salmon. 37

6. Identify the significant values of wetlands and outstanding freshwater bodies in regional plans and protect those values.

7. Encourage the coordination of urban growth, land use and development including the provision of infrastructure to achieve integrated management of effects on fresh and coastal water.

8. Provide for the social, economic and cultural wellbeing derived from the use and development of land and water resources, while maintaining or improving water quality and aquatic ecosystems.

9. Implement the National Policy Statement for Freshwater Management including the National Objectives Framework.

11 Natural Hazards

OBJECTIVE

1. The risks and impacts of natural hazard events on people, communities, property, infrastructure and our regional economy are avoided or minimised.

POLICIES

1. Reduce the susceptibility of the West Coast community and environment to natural hazards by improving planning, responsibility and community awareness for the avoidance and mitigation of natural hazards.

2. New subdivision, use or development should be located and designed so that the need for hazard protection works is avoided or minimised. Where necessary and practicable, further development in hazard-prone areas will be restricted.

3. Avoid or mitigate adverse effects on the environment arising from climate change by recognising and providing for the development and protection of the built environment and infrastructure in a manner that takes into account the potential effects of rising sea levels and the potential for more variable and extreme weather patterns in coming decades.

4. The appropriateness of works and activities designed to modify natural hazard processes and events will be assessed by reference to:

a) The levels of risk and the likely increase in disaster or risk potential;

b) The costs and benefits to people and the community;

c) The potential effects of the works on the environment; and

d) The effectiveness of the works or activities and the practicality of alternative means

Analysis of Relevant Objectives & Policies

The RPS confirms that providing for people is 'at the heart' of this Policy Statement. Providing for housing is therefore a key component of this principle.

The objectives and policies of the RPS that are particularly relevant in this proposal, relate to natural character, effects on land and water, and avoidance of natural hazards. These are similar issues to those outlined in the Westland District Plan and the TTPP.

In summary, the large lots will ensure that the existing rural character and amenity is maintained. There are not highly productive soils here and in any event the balance of this 100 ha farm property will continue to be used for rural production purposes. All earthworks will be managed with appropriate erosion and sediment control measures, and finally the building platforms for the dwellings will all be above the floodplain, therefore avoiding any adverse natural hazard effects.

Appendix 2: Te Tai o Poutini Proposed Plan

The site is zoned General Rural Zone (GRUZ) in the TTPP.

RURAL ZONES / RELEVANT OBJECTIVES & POLICIES

RURZ O1

This objective seeks to maintain the amenity and rural character values of the rural environment, while retaining highly productive land and rural activities, and supporting a productive rural working environment.

RURZ O2

This objective provides for low density rural lifestyle living on the outskirts of settlements.

RURZ O3

This objective seeks to maintain the distinctive rural character and amenity of West Coast settlements.

RURZ O4

This objective provides for the expansion of existing settlements, where hazard risk can be managed.

RURZ O6

This objectives requires on-site servicing for this type of rural subdivision.

RURZ P1

This policy seeks to enable a range of activities in the zone, while maintaining rural amenity and character. Of particular relevance in this proposal, outside of settlements, activities should;

- For buildings and structures have a bulk and location that is characteristic of rural environments.
- Maintain privacy and rural outlook for residential buildings.
- Be compatible with existing development and the surrounding area.
- Have appropriate setbacks from the road and significant natural and cultural features.

RURZ P2

This policy provides for new housing opportunities in locations that do not pose a significant risk to life, safety and property damage from natural hazards.

RURZ P4

This policy provides for rural lifestyle development on the outskirts of towns and settlements, which should be large lots with on-site servicing.

RURZ P5

This policy seeks to avoid locating non-agricultural activities outside of highly productive locations.

RURZ P7

Recognise that where non rural activities are located in rural areas, this should not be to the detriment of the effective function of towns and settlements, or to avoid the costs of connection to community funded infrastructure.

RURZ P11

Subdivision in this zone should recognise the rural character and form of the General Rural Zone.

RURZ P15

New development should be designed and located with sufficient buffers so that existing rural uses and consented activities are not unreasonably compromised by the proximity of sensitive neighbouring activities.

SUBDIVISION / RELEVANT OBJECTIVES & POLICIES

SUB O1

This objective provides for development that is compatible with the purpose, character and qualities of the General Rural Zone.

SUB O2

This objective provides for development that will not adversely affect infrastructure, enables access and connectivity, provides for the expansion of living opportunities, provides for the well being of the community (eg housing), and avoids natural hazards.

SUB O3

This objective requires development to respond to the physical characteristics and constraints of the site.

SUB O5

This objective seeks to have esplanade reserve vested, where required.

SUB O6

This objective seeks to provide for adequate open space around lots.

SUB P1

This policy requires lots to be of an adequate size, consistent with the purpose, character and qualities of the zone.

SUB P2

This policy requires that each lot will be adequately serviced.

SUB P3

This policy seeks to avoid adverse effects on biodiversity, Iwi sites and other historical heritage values.

SUB P4

This policy requires natural hazard risk to be adequately mitigated.

SUB P6

This policy seeks to avoid subdivision in areas that are not appropriate for this type of development.

SUB P9

This policy requires the esplanade provisions of the RMA to be implemented, where required.

Analysis of Relevant Objectives & Policies

As with the relevant WDC objectives and policies, the relevant TTPP objectives and policies seek to maintain rural character and amenity values, and to protect highly productive soils.

The proposal is consistent with all of the relevant TTPP objectives and policies due to the large open lots with high amenity, located above the flood plain, with good connectivity to Hokitika, and consistent with the prevailing rural character and amenity. The balance of this 100 ha property will continue to be used for farming and rural related activities.

SUBDIVISION RULES

In accordance with SUB S1, the minimum lot size for this zone is 4 ha.

This proposal becomes Discretionary, as it does not comply with the minimum lot size (SUB R6).

While part of the property is affected by the Coastal Tsunami Hazard overlay and the Flood Severe overlay, where the dwellings will be located is only affected by the Flood Plain and Flood Susceptibility overlays. This is a Discretionary activity (SUB R13).

Appendix 1: Westland District Plan

RELEVANT OBJECTIVES AND POLICIES

Objectives / Part 3

3.7.1

To recognise and provide for the unique values and importance of natural environments and ecosystems in Westland.

3.7.2

To recognise that the people of the district can provide for their needs within the context of sustainable management.

3.7.3

To protect the integrity, functioning, and health of indigenous ecosystems and maintain the current diversity of indigenous flora and fauna.

3.8.1

To avoid, remedy or mitigate adverse effects of land use activities on land and water resources.

3.8.2

To protect and maintain the productive potential of the higher quality soils in Westland District.

3.9.2

To provide for the 'intermingling' of land use activities within Westland's settlements and towns, where this does not detrimentally impact on the amenities, health and safety of residents and workers.

3.10.3

To ensure that land uses, building and development have regard to the natural landscape in which they are located or seek to be located.

There are also objectives and policies that seek to avoid areas of severe hazard, eg 3.13.1.

Policies / Part 4

Amenity

Policy A

The effects of activities which can have significant adverse effects on amenities and the well being of residents shall generally be avoided, remedied or mitigated.

Policy C

The development and use of energy efficient design and technology should be encouraged within working, living and leisure environments.

Policy E

The effects of activities which can be seen as adversely affecting the overall environmental amenity of the District shall be avoided.

Natural Hazards

Policy A

Development and subdivision for the purposes of accommodating and/or servicing people and communities should avoid areas of known natural hazard risk unless the risk of damage to property and infrastructure, community disruption and injury and potential loss of life can be adequately mitigated.

Analysis of Relevant Objectives & Policies

The objectives and policies that are particularly relevant to this proposal relate to effects on the natural environment, productive soils, amenity and natural hazards.

The additional titles, with the potential for new dwellings, on a site that is not elevated or in any way highly visible, will not generate any adverse amenity effects that are more than minor. The applicant is prepared to offer appropriate design controls.

The existing pasture is not highly productive, and in any event the additional dwellings will not compromise the productive potential of this 100 ha property.

In respect of flooding hazard, all building platforms will be constructed to be above the flood plain, as determined by suitably qualified professional engineers.

Hokitika Office
Como House
51 Tancred Street
PO Box 298
Hokitika 7810
+64 3 755 8184
eliotsinclair.co.nz

16 February 2023

Forest Habitats Limited
C/- MacDonell Consulting Limited
17 Cliffs Road
St Clair
Dunedin 9012

Our reference: 510714

Via Email: barry@macdonellconsulting.co.nz

Dear Barry

117 Arthurstown Road Request for Further Information

We respond to the Westland District Council RFI as follows:

Natural Hazards

18. Whilst our report demonstrates that there could be a risk, that risk will be mitigated by having a no build line so that no dwellings are built in the area of greatest risk, and by having the floor levels on the remaining sites being at least 400mm above the projected flood level.

    Through this review we have slightly amended our no-build zone increasing the area that we do not recommend building in from our report dated 30 September 2022. The amended no-build zone is attached with this letter.

    The flood level chosen is that modelled by Land River Sea in 2018 for the 1 in 100 year event including climate change (2100) RCP Scenario 6.0 with a 1m sea level rise and 0.4m Storm Surge. To this we have added a 400mm free board.

    The recommend minimum floor heights are shown in Table 1, below. To calculate these, we divided the site into 100m grids and assessed the flood height (based on Sheet GE- 06 from the Hutchison report), to be conservative we took the highest flood height in each quadrant and added 400mm free board, which gives the minimum floor height in that quadrant.

Table 1. Recommended minimum Finished floor heights for each Lot.

Lot	Finished floor height. m	Height above ground level (highest contour on lot) m
1	5.02	0.0
2	5.15	0.15
3	5.15	0.65
4*	5.75	1.25

Lot	Finished floor height. m	Height above ground level (highest contour on lot) m
5*	5.75	1.25
6	5.70	1.20
7	5.70	1.2
8	5.66	1.16
9	5.66	1.16
10	6.04	1.04
11	6.13	1.13
12	6.04	1.04

* We recommend that the building for Lots 4 and 5 be located as close to Arthurstown Road as practical.

19 We do not consider it appropriate to designate building platforms to each lot as the lot areas are all greater than 0.6Ha, and future purchasers may decide to build in a different location or to a different shape or size to that approved. We feel it is better to prescribe a minimum finished floor level and let the future purchasers decide where they will build.

20 As part of the subdivision works, there will be minimal earthworks undertaken, being formalisation of entranceways and minor roading improvements. As pointed out in our response to point 19, it is not proposed to form the building platforms as part of the subdivision development.

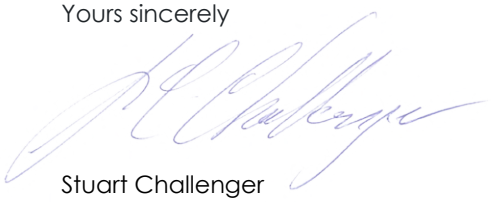
Whilst it is possible to form building platforms by excavation and backfilling, as the height above the surround ground would range from 0m to 1.25m it may be better for some of the dwellings to be on a suspended timber floor on driven timber piles, so excavation and backfilling may not be necessary. Should the potential purchaser wish to build a dwelling with a concrete floor, then an excavation and backfill would be required. This work would be undertaken following the subdivision of the land and in order to comply with the permitted activity status the minimum volume of earthworks will depend on the lot size, but for the smallest lot 0.61Ha, the annual volume of earthworks shall be less than 3050m³ (Rule 3 of the WCRC Land and Water Plan). Allowing for a total depth of fill of 2.4m (1.2m down and 1.2m up) means that a building platform with an area of at least 1,000m² can be formed on the site as part of the permitted activities. Any such excavation and backfilling would also need to comply with the sediment control measures, however, those works would not be undertaken as part of the subdivision.

21 As stated in point 20, there will be minimal earthworks as part of the subdivision, and we do not anticipate that any erosion control measures will be required. However, in case we find that earthworks are required as part of the road formation then a stabilised entrance will be prepared and if necessary silt fences installed. We enclose an typical

details for Erosion and sediment control to demonstrate what will be undertaken as part of the subdivision if required.

Please contact me if you require any further information.

Yours sincerely



Stuart Challenger

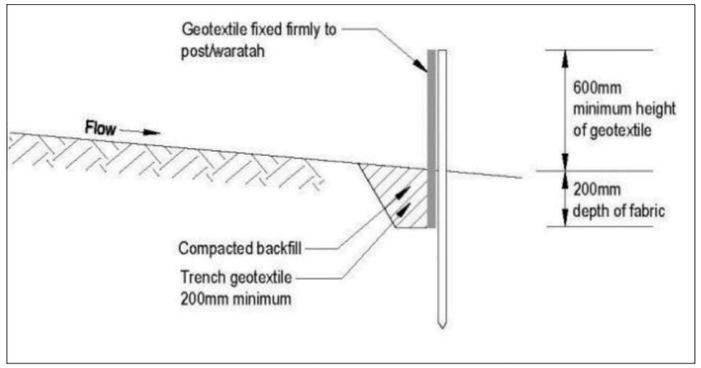
Civil Engineer | Branch Manager, Hokitika

BE NatRes BSc CMEngNZ CPEng

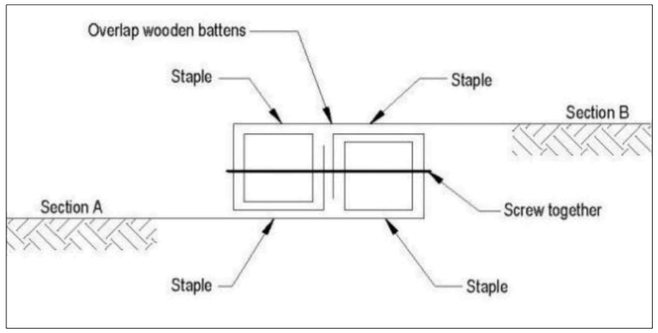
stuart.challenger@eliotsinclair.co.nz

Encl. Erosion and Sediment Control Details

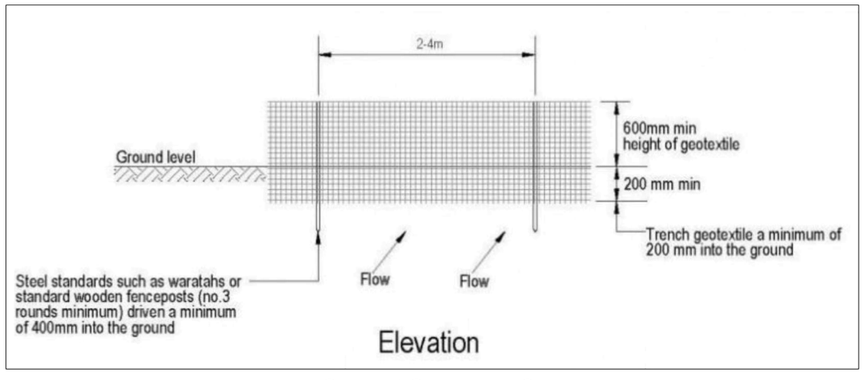
Amended No-Build Zone



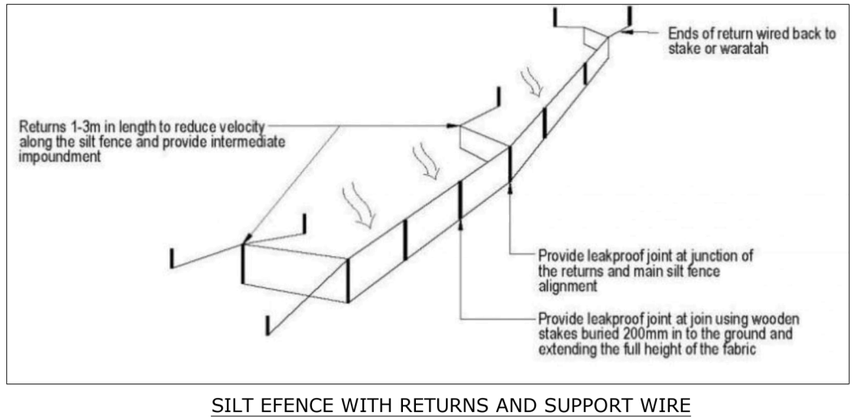
SILT FENCE CROSS SECTION



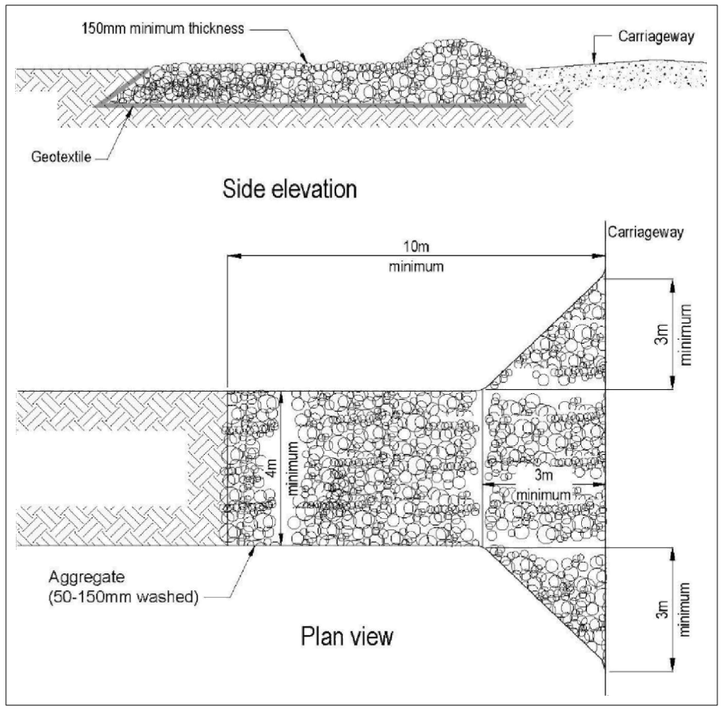
SILT FENCE STANDARD FABRIC JOINT



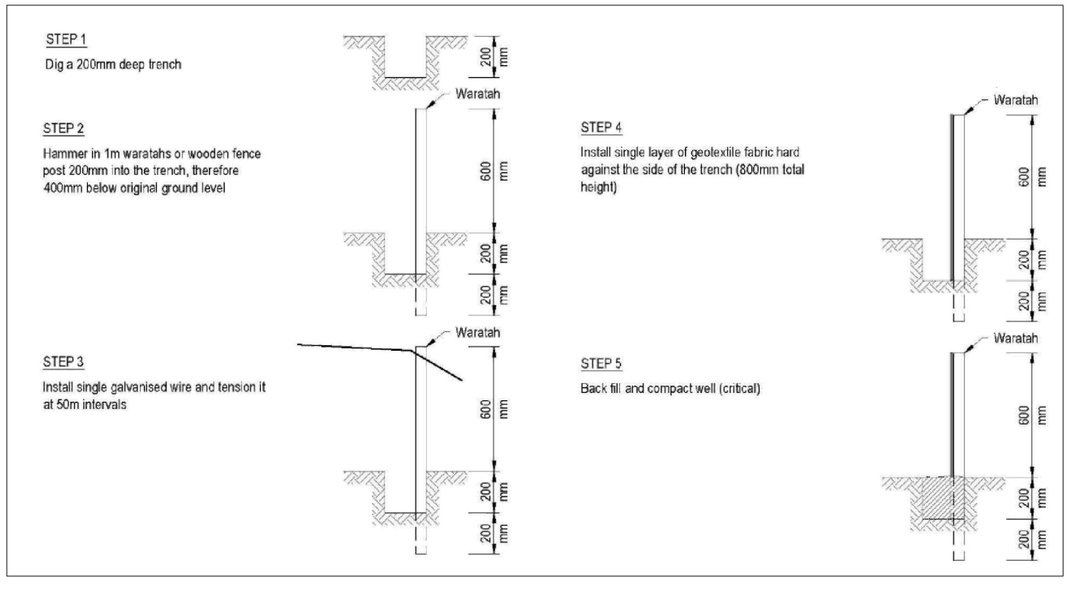
SILT FENCE ELEVATION



SILT EFENCE WITH RETURNS AND SUPPORT WIRE



STABILISED SITE ENTRANCE



SILT FENCE INSTALLATION

NOTES
1. Contractors to verify all dimensions and the location of all underground services on site prior to commencing work.
2. Unless noted otherwise, all work shall be undertaken in accordance with the NZBC and any relevant Territorial Authority Engineering Standards and Specifications as a minimum standard.

GENERAL EROSION SEDIMENT NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSTALLED IN ACCORDANCE WITH THE ENVIRONMENT CANTERBURY EROSION AND SEDIMENT CONTROL TOOLBOX FOR CANTERBURY & COMPLY WITH ALL RESOURCE CONSENT CONDITIONS RELATING TO THE PROJECT.
2. EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED PRIOR TO COMMENCEMENT OF EARTHWORKS.
3. ALL PERSONNEL INCLUDING SUB-CONTRACTORS, MUST BE FAMILIAR WITH ALL RELEVANT CONSENT AND PLAN REQUIREMENTS. A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN MUST BE KEPT ON SITE AT ALL TIMES.
4. ALL EROSION AND SEDIMENT CONTROL STRUCTURES ARE TO BE INSPECTED EACH WORKING DAY AND MAINTAINED IN GOOD WORKING ORDER. THE EFFECTIVENESS OF THE MEASURES IS TO BE REVIEWED IMMEDIEALITY AFTER ANY SIGNIFICANT RAIN.
5. IF NECESSARY, SEDIMENT CONTROL MEASURES MUST BE ALTERED TO PREVENT EXCESS SEDIMENT DISCHARGING OFF SITE.

DUST CONTROL NOTES:

1. THE CONTRACTOR IS TO HAVE ACCESS TO A SUITABLE WATER SUPPLY ONSITE TO BE USED TO MITIGATE DUST. WHERE APPROPRIATE CONTROL DUST BY SPRAYING WATER LIGHTLY ON EXPOSED AREAS OF SOIL.
2. NATURAL OR CONSTRUCTED WIND BREAKS OR BARRIERS CAN REDUCE WIND VELOCITY THROUGH A SITE AND THEREFORE REDUCE THE POSSIBILITY OF SUSPENDED PARTICLES. WIND BREAKS CAN COMPRISE OF TREES OR SHRUBS LEFT IN PLACE DURING SITE CLEARING OR CONSTRUCTED BARRIERS SUCH AS A WIND FENCE, TARP CURTAIN, HAY BALES, CRATE WALL OR SEDIMENT FENCE.
3. STABILISED MATRIX CHEMICALS ARE A QUICK AND EFFECTIVE METHOD TO PROVIDE MEDIUM TERM SOLUTIONS TO DUST CONTROL. THIS METHOD REQUIRES THE SPREADING OF CHEMICALS TO GLUE SMALLER SOIL PARTICLES TOGETHER, TO FORM LARGER WIND RESISTANT PARTICLES. THERE ARE VARIOUS DUST SUPPRESSANT CHEMICALS AVAILABLE, HOWEVER ONLY CHEMICALS THAT HAVE BEEN GRANTED A GLOBAL RESOURCE CONSENT BY ECAN SHALL BE USED ON THIS SITE.

STOCKPILE NOTES:

1. STOCKPILE LOCATIONS TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
2. STOCKPILES WILL NEED TO BE MOISTENED BY IRRIGATION OR STABILISED USING POLYMER CHEMICAL DUST SUPPRESSANTS OR VEGETATION UNTIL THEY ARE CONSOLIDATED TO A SUFFICIENT DEGREE TO PREVENT EROSION OR DUST.
3. THE SIDE SLOPE WILL BE KEPT TO A MINIMUM BUT WILL NOT BE GREATER THAN THE NATURAL SLUMP ANGLE OF THE DRY MATERIAL.

VEHICLE ACCESS NOTES:

1. ANY TRACKING OF MATERIAL MUST BE AVOIDED AND IF THIS DOES OCCUR IT MUST BE CLEANED UP AS SOON AS POSSIBLE.
2. SHAKER RAMPS CAN BE USED PROVIDED THEY ARE A MINIMUM OF 5 M LONG TO ALLOW AT LEAST ONE FULL REVOLUTION OF A TRUCK TYRE. THE SHAKER RAMP MUST BE DEEP ENOUGH SO THAT THE MATERIAL DROPPED FROM ONE VEHICLE IS NOT PICKED UP BY THE NEXT.

REV.	DRAWN	DATE	NOTE
A	sccc	15.02.23	Preliminary

CLIENT

FOREST HABITATS LIMITED

DESIGNED	scc
DRAWN	scc
REVIEWED	jf
APPROVED	15.02.23 scc
STATUS	PRELIMINARY
SCALE	N.T.S.

Proposed Subdivision

117 Arthurstown Road
RC 220120

Erosion and Sediment Control Measures Typical Details

PROJECT	SET	SHEET	REV.
510714	C1	01	A

eliot sinclair


Ferry Road
Arthurstown Road
Juan Road
East Road

Proposed Easements

Purpose	Shown	Servient Tenement (Burdened Land)	Dominant Tenement (Benefited Land)
R.O.W. & Services	A	Lot 2	Lot 3
	B	Lot 3	Lot 2
	C	Lot 5	Lot 6
	D	Lot 6	Lot 5
	E	Lot 7	Lot 8
	F	Lot 8	Lot 7

Proposed Amalgamation Condition

Lots 13, 14, 15, 16 & 17 hereon are to be amalgamated with Pt. RS 4363 (WS3A/1400) and one record of title to be issued to include them all.

Comprised in Record of Titles:

WS2C/1195, 4.0345 ha.
WS2C/1017, 1.3615 ha.
WS2C/763, 0.1103 ha.
WS1B/723, 6.1942 ha.
WS3A/1401, 7.9602 ha.
WS3A/1400, 7.7227 ha.

Total Area: 27.3834 ha.

Proposed Land Covenants

Areas shown (H) to (S) are to be subject to land covenants to restrict building in these areas. (Refer Eliot Sinclair report dated 16 Feb. 2023)

Existing right (in gross) to transmit Electricity in favour of Westpower Ltd. Created by EI 5931577.1

Extension of upstream side of Davie Street

Hokitika River

Coastal Enviroment Area

River Bank

Legal Road (Plotted from LINZ SO Plans)

(Legal Road)

East Road

Arthurstown Road

Creek

Lot 15 (H) 1.10 ha.

Lot 17 1200m²

Lot 14 8.26 ha.

Lot 16 700m²

Lot 13 1.40 ha. Existing Sheds

Lot 12 8400m²

Lot 1 8200m²

Lot 2 6200m²

Lot 3 8500m²

Lot 4 1.02 ha.

Lot 5 6900m²

Lot 6 6000m²

Lot 7 6500m²

Lot 8 6700m²

Lot 9 5000m²

Lot 10 6800m²

Lot 11 6900m²

Pt. RS 4363 (7.7227) ha. WS3A/1400

Existing Dwelling

Pt. RS 4363 (7.7227) ha. WS3A/1400

RS 4655 Owner: Forest Habitats Ltd.

RS 3551 Owner: Forest Habitats Ltd.

Pt. Subdivision B RS 1604 Owner: Forest Habitats Ltd.

Res 54 (Reserve)

DP 142 30

DP 142 31

Pt. RS 1300

WS2C/1195

WS2C/1017

WS2C/763

WS1B/723

WS3A/1401

WS3A/1400

Shared Entry

Farm Access

Entry

RS 4654

Lots 1 to 17 Being a Proposed Subdivision of Lots 8 to 29 DP 142, Pt. RS1300, RS 1603, RS 1602, RS 1421, RS 1588, Pt. RS 1589, & Pt. RS 4363

Sheet 1 of 4

For Stages see Sheets 2 to 4.

Notes:

1. This plan is prepared for the purpose of obtaining resource consent and should be used for any other purpose.
2. All metric measurements and areas are subject to final survey.
3. Final Boundary and Easement alignments are to be determined on site at time of LT Survey / 223 approval stage.

Surveying & Development Consulting Ltd.

Phone: 0274902876 Email: chris@sdcltd.co.nz

Project:

Forest Habitats Ltd.
117 Arthurstown Road
Hokitika

Drawing Title: **Subdivision Scheme Plan - Overall**

Original Size:	Original Scale:	Date:	Job Number:
A3	1:3000	20 Feb. 2023	22008_SP1

Proposed Easements

Purpose	Shown	Servient Tenement (Burdened Land)	Dominant Tenement (Benefited Land)
R.O.W. & Services	A	Lot 2	Lot 3
	B	Lot 3	Lot 2

Proposed Amalgamation Condition

Lots 15 & 17 hereon are to be amalgamated with RS 1603 (WS2C/1195 bal.) and RS 1421 & RS 1602 (WS1B/723) and one record of title to be issued to include them all.

Proposed Land Covenants

Areas shown (H) to (K) are to be subject to land covenants to restrict building in these areas. (Refer Eliot Sinclair report dated 16 Feb. 2023)

Comprised in Record of Titles: (Stage 1)

WS2C/1195, 4.0345 ha.
WS2C/1017, 1.3615 ha.
WS2C/763, 0.1103 ha.
WS1B/723, 6.1942 ha.

Hokitika River Bed

Legal Road (Plotted from LINZ SO Plans)

Res 54 (Reserve)

30 DP 142

31 DP 142

Pt. RS 1300

RS 1603
WS2C/1195
1.9728 ha.

Lot 15 (H)
1.10 ha.

WS2C/1195

(I)

105

(Legal Road)

73.0

Lot 17
1200m²

RS 1602

WS1B/723
6.1942 ha.

RS 1421

Lot 1 (J)
8200m²

27

17

21

28

(K)

72

40

53

WS2C/1017

8.17 ha.
(Total new title
9.39 ha.)

RS 1588
WS3A/1401

(Legal Road)

Pt. RS 1589
WS3A/1401

East Road

Pt. RS 4363
(7.7227) ha.
WS3A/1400

(Legal Road)

160.9

6 DP 142

7 DP 142

54.8

64.5

57.0

WS2C/763

42

Lot 2
6200m²

106.3

95

Lot 3
8500m²

148.5

Shared Entry

116.7

8.0 5.0

Arthurstown Road

(A)

(B)

Arthurstown Road

Pt. RS 4363
(7.7227) ha.
WS3A/1400

RS 4654

RS 4655
Owner: Forest Habitats Ltd.

Pt. Subdivision B
RS 1604
Owner: Forest Habitats Ltd.

RS 3551
Owner: Forest Habitats Ltd.

Sheet 2 of 4

Lots 1, 2, 3, 15 & 17 Being a Proposed Subdivision of Lots 8 to 29 DP 142, Pt. RS1300, RS 1603, RS 1602 & RS 1421.

Notes:

1. This plan is prepared for the purpose of obtaining resource consent and should be used for any other purpose.
2. All metric measurements and areas are subject to final survey.
3. Final Boundary and Easement alignments are to be determined on site at time of LT Survey / 223 approval stage.

Surveying & Development Consulting Ltd.
Phone: 0274902876 Email: chris@sdcltd.co.nz

Project:

Forest Habitats Ltd.
117 Arthurstown Road
Hokitika

Drawing Title: **Subdivision Scheme Plan - Stage 1**

Original Size:	Original Scale:	Date:	Job Number:
A3	1:3000	20 Feb. 2023	22008_SP2

Proposed Easements

Purpose	Shown	Servient Tenement (Burdened Land)	Dominant Tenement (Benefited Land)
R.O.W. & Services	C	Lot 5	Lot 6
	D	Lot 6	Lot 5
	E	Lot 7	Lot 14
	F	Lot 14	Lot 7

Proposed Amalgamation Condition

Lot 14 hereon are to be amalgamated with Lots 15 & 17 Stage 1 and Pt. RS 1589 (WS3A/1401 bal.) and one record of title to be issued to include them all.

Comprised in Record of Titles: (Stage 2)

Stage 1 Bal. Title, 9.39 ha.
WS3A/1401, 7.9602 ha.

Proposed Land Covenants

Areas shown (L) to (M) are to be subject to land covenants to restrict building in these areas. (Refer Eliot Sinclair report dated 16 Feb. 2023)

Hokitika River Bed

Legal Road (Plotted from LINZ SO Plans)

Res 54 (Reserve)

30 DP 142

31 DP 142

Lot 15 Stage 1 1.10 ha.

Pt. RS 1300

(Legal Road)

Lot 17 Stage 1 1200m²

Lot 14 9.40 ha. (Total new title 14.33 ha.)

WS3A/1401

Pt. RS 1589 WS3A/1401 3.71 ha.

East Road

(Legal Road)

Pt. RS 4363 (7.7227) ha. WS3A/1400

Lot 1 Stage 1

Lot 2 Stage 1

Lot 3 Stage 1

Shared Entry

Lot 4 1.02 ha.

Lot 5 6900m²

Lot 6 6000m²

Lot 7 6500m²

Shared Entry

109.3 64.3 63.7 79 50 38 27 145.7 60 36 16 24 110 105.9 104.0 15 30 11 32 49 61.3 90 15

(L) (M) (N) (C) (D) (E) (F)

Arthurstown Road

Pt. RS 4363 (7.7227) ha. WS3A/1400

RS 4654

RS 4655 Owner: Forest Habitats Ltd.

Pt. Subdivision B RS 1604 Owner: Forest Habitats Ltd.

RS 3551 Owner: Forest Habitats Ltd.

Sheet 3 of 4

Lots 4 to 7 & 14 Being a Proposed Subdivision of Lots 15 & 17 Stage 1, RS 1603, RS 1602, RS 1421 RS 1588 & Pt. RS 1589.

Notes:

1. This plan is prepared for the purpose of obtaining resource consent and should be used for any other purpose.
2. All metric measurements and areas are subject to final survey.
3. Final Boundary and Easement alignments are to be determined on site at time of LT Survey / 223 approval stage.

Surveying & Development Consulting Ltd.
Phone: 0274902876 Email: chris@sdcltd.co.nz

Project:
Forest Habitats Ltd.
117 Arthurstown Road
Hokitika

Drawing Title: **Subdivision Scheme Plan - Stage 2**

Original Size:	Original Scale:	Date:	Job Number:
A3	1:3000	20 Feb. 2023	22008_SP3

Proposed Easements (Created Stage 2)

Purpose	Shown	Servient Tenement (Burdened Land)	Dominant Tenement (Benefited Land)
R.O.W. & Services	E	Lot 7	Lot 8
	F	Lot 8	Lot 7

Proposed Amalgamation Condition

Lots 13, 14 & 16 hereon are to be amalgamated with Lots 15 & 17 Stage 1 and Pt. RS 4363 (WS3A/1400) and one record of title to be issued to include them all.

Comprised in Record of Titles: (Stage 3)

Stage 2 Bal. Title, 14.33 ha.
WS3A/1400, 7.7227 ha.

Proposed Land Covenants

Areas shown (O) to (S) are to be subject to land covenants to restrict building in these areas. (Refer Eliot Sinclair report dated 16 Feb. 2023)

Existing right (in gross) to transmit Electricity in favour of Westpower Ltd. Created by EI 5931577.1

Hokitika River Bed

Legal Road (Plotted from LINZ SO Plans)

Res 54 (Reserve)
30 DP 142
31 DP 142
Pt. RS 1300
6 DP 142
7 DP 142

Lot 15 Stage 1 1.10 ha.
Lot 1 Stage 1
Lot 2 Stage 1
Lot 3 Stage 1
Lot 17 Stage 1 1200m²
Lot 4 Stage 2
Lot 5 Stage 2
Lot 6 Stage 2
Lot 7 Stage 2
Lot 14 8.20 ha. (Total new title 18.61 ha.)
Lot 8 6700m²
Lot 9 5000m²
Lot 16 700m²
Lot 13 1.40 ha.
Existing Sheds
Lot 12 8400m²
Lot 10 6800m²
Lot 11 6900m²
Pt. RS 4363 (7.7227) ha. WS3A/1400
RS 4655 Owner: Forest Habitats Ltd.
RS 4654
RS 3551 Owner: Forest Habitats Ltd.
Pt. Subdivision B RS 1604 Owner: Forest Habitats Ltd.

(Legal Road)
East Road
Arthurstown Road
Farm Access
Entry
Shared Entry

WS3A/1401
158.4
55.0
55.8
148.3
45.6
5.0
5.1
65.4
104.0
103.5
102.8
69.5
77.9
91.7
102.3
64.9
66.9
64.0
52.0
6.0

Sheet 4 of 4

Lots 8 to 14 & 16 Being a Proposed Subdivision of Lots 15 & 17 Stage 1, Lot 14 Stage 2, Pt. RS 1589, & Pt. RS 4363

Notes:
1. This plan is prepared for the purpose of obtaining resource consent and should be used for any other purpose.
2. All metric measurements and areas are subject to final survey.
3. Final Boundary and Easement alignments are to be determined on site at time of LT Survey / 223 approval stage.

Surveying & Development Consulting Ltd.
Phone: 0274902876 Email: chris@sdcltd.co.nz

Project:
Forest Habitats Ltd.
117 Arthurstown Road
Hokitika

Drawing Title: **Subdivision Scheme Plan - Stage 3**

Original Size:	Original Scale:	Date:	Job Number:
A3	1:3000	20 Feb. 2023	22008_SP4

Arthurstown Roads

barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>

Wed 22/02/2023 09:40

To: Anna Johnson <anna@scoped.nz>

9 attachments (8 MB)

s92 response letter.pdf; Appendix 1 WDC.pdf; Appendix 2 TTPP.pdf; Appendix 3 WCRPS.pdf; Appendix 4 Design Controls.pdf; 117 Arthurstown Rd Block_SubdivisionSchemePlan_20Feb2023.pdf; Traffic Impact Assessment Forest Habitats Subdivision Final.pdf; ATTACHMENT B ARTHURSTOWN ROAD AREA.pdf; 510714_RFI response_R2_signed.pdf;

Anna

It's taken a while, but here is the response to your s92 letter of 20 October 2022.

Regards
Barry

MacDonell Consulting Ltd
027 228 2386

Re: Arthurstown Roads - s. 92 Further Information Requirements

Anna Johnson <anna@scoped.nz>

Mon 13/03/2023 14:24

To: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>

Hi Barry,

Thank you for sending the information through.

Further clarification is required for the following items:

1. Item one requests confirmation as to whether the proposal involves a land use component, or if only subdivision consent has been applied for. This item also requires confirmation that the proposal will not trigger any failures in respect to Operative District Plan Table 5.7 standards, including modification to riparian margins. Please be aware, residential buildings in the rural zone requires land use consent. Please address item 1.

2. Complete.

3. In accordance with the TTPP, the site is located within various flood hazard overlays (including flood plain, coastal tsunami hazard, flood hazard susceptibility, flood hazard severe), the coastal environment and the pounamu management overlay. Please ensure an assessment of all relevant sections of the TTPP are considered.

4. Complete.

5. Complete.

6. Complete.

7. Complete.

8. Please clarify following:

   b. Does this consent notice restrict the total area of accessory buildings to 150m^2, or does it provide for an uncontrolled number of accessory buildings (there are not site coverage standards in this zone), all being up to 150m^2 in area?
   e. Does this consent notice imply a second dwelling can be constructed on each site? Please be aware, a second dwelling within the Rural Zone is a discretionary activity. Council cannot provide for an activity which contravenes a District Plan standard via a consent notice. This will need to be addressed via a land use consent application. Please see item 1.

9. This confirmation needs to be provided for the supplier. A snip of any correspondence will be sufficient.

10. Complete.

11. Complete.

12. Awaiting comments from our transportation engineers.

13. Complete.

14. The entranceway to Lots 9 and 10 will fail to meet the standards of 8.9.3 of the Operative District Plan. This item has not been addressed. This road is also unformed. If the unformed legal road is to be formed, this will require land use consent pursuant to Part 6 of the Operative District Plan. Please provide an assessment of the applicable standards and confirm if land use consent is required.

15. Where no unformed portion of East Road will be formed (only upgrades to the existing formation will occur), the activity will meet permitted activity standards. Please confirm only upgrades to the existing formation will occur.

16. Awaiting comments from our transportation engineers.

17. Complete.

18. Complete.

19. Complete.

20. Complete.

21. Complete.

I will get back to you as soon as I hear from the relevant staff regarding items 12 and 16, however the remainder of the s. 92 request can be addressed in the interim.

Kind regards,

Anna Johnson

SCOPED
PLANNING & DESIGN

Anna Johnson
PRINCIPAL PLANNER

anna@scoped.nz
021 0869 1484

From: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Sent: 22 February 2023 09:40
To: Anna Johnson <anna@scoped.nz>
Subject: Arthurstown Roads

Anna

It's taken a while, but here is the response to your s92 letter of 20 October 2022.

Regards
Barry

MacDonell Consulting Ltd
027 228 2386

Delete Archive Report Reply Reply all Forward Read / Unrea

RE: Arthurstown Roads - s. 92 Further Information Requirements

You replied on Wed 22/03/2023 15:32

B barry@macdonellconsulting.co.nz
To: Anna Johnson
Tue 14/03/2023 14:23

second s92 response letter.pdf | Appendix 1 220054 Signed Dec...

Show all 5 attachments (2 MB) Save all to OneDrive - Scoped Planning and Design Download all

Anna

Response attached regarding those final outstanding matters.

Regards
Barry

From: Anna Johnson <anna@scoped.nz>
Sent: Monday, 13 March 2023 2:42 pm
To: barry@macdonellconsulting.co.nz
Subject: Fw: Arthurstown Roads - s. 92 Further Information Requirements

Hi Barry,

I can confirm that items 12 and 16 have been accepted by our transport engineers as complete.

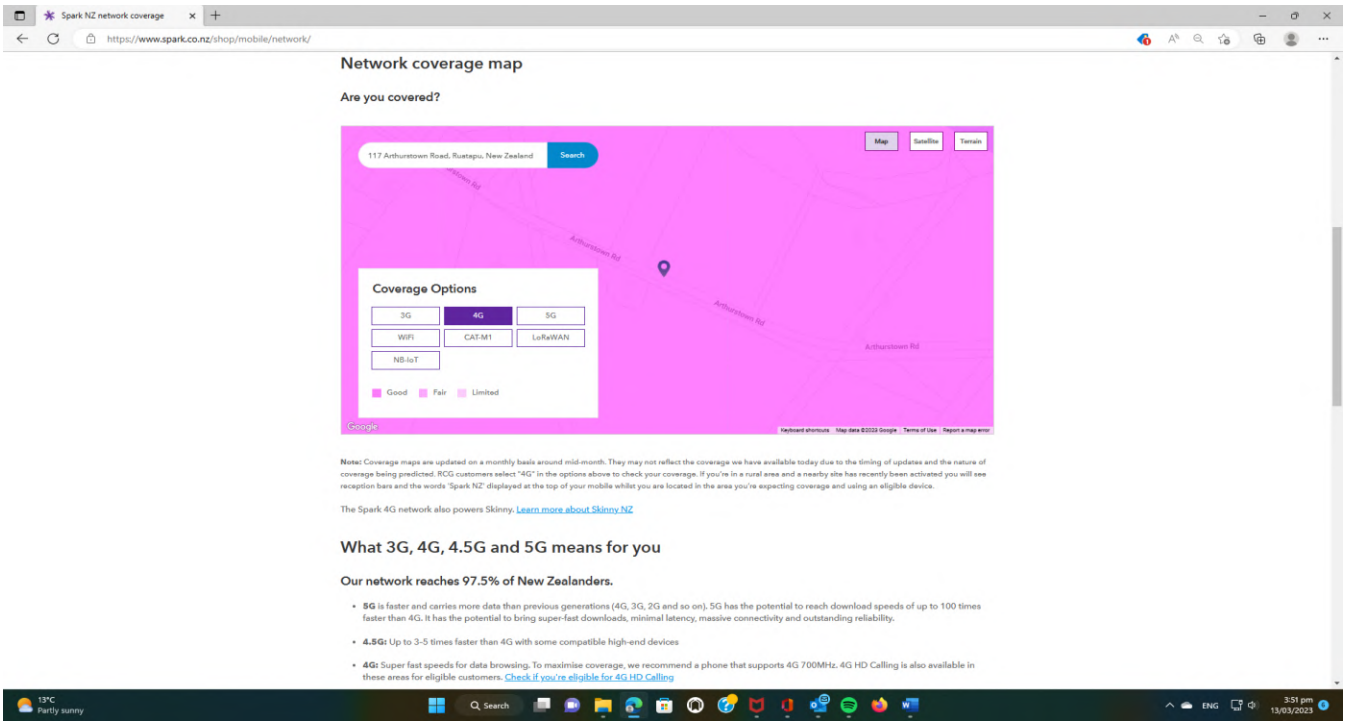
Kind regards,

Anna Johnson

SCOPED PLANNING & DESIGN

Anna Johnson
PRINCIPAL PLANNER
anna@scoped.nz
021 0869 1484

From: Anna Johnson <anna@scoped.nz>
Sent: 13 March 2023 14:24
To: barry@macdonellconsulting.co.nz <barry@macdonellconsulting.co.nz>
Subject: Re: Arthurstown Roads - s. 92 Further Information Requirements


Spark NZ network coverage
https://www.spark.co.nz/shop/mobile/network/
Network coverage map
Are you covered?
117 Arthurstown Road, Ruatapu, New Zealand
Search
Map
Satellite
Terrain
Arthurstown Rd
Coverage Options
3G
4G
5G
WiFi
CAT-M1
LoRaWAN
NB-IoT
Good
Fair
Limited
Google
Note: Coverage maps are updated on a monthly basis around mid-month. They may not reflect the coverage we have available today due to the timing of updates and the nature of coverage being predicted. RCG customers select "4G" in the options above to check your coverage. If you're in a rural area and a nearby site has recently been activated you will see reception bars and the words 'Spark NZ' displayed at the top of your mobile whilst you are located in the area you're expecting coverage and using an eligible device.
The Spark 4G network also powers Skinny. Learn more about Skinny NZ
What 3G, 4G, 4.5G and 5G means for you
Our network reaches 97.5% of New Zealanders.
5G is faster and carries more data than previous generations (4G, 3G, 2G and so on). 5G has the potential to reach download speeds of up to 100 times faster than 4G. It has the potential to bring super-fast downloads, minimal latency, massive connectivity and outstanding reliability.
4.5G: Up to 3-5 times faster than 4G with some compatible high-end devices
4G: Super fast speeds for data browsing. To maximise coverage, we recommend a phone that supports 4G 700MHz. 4G HD Calling is also available in these areas for eligible customers. Check if you're eligible for 4G HD Calling
13°C
Partly sunny
Search
ENG
3:51 pm
13/03/2023

Appendix 3: Design Controls

Based on Approved Subdivision Consent RC210017

Consent Notices

A section 221 Consent Notice shall be registered on the lots authorised for dwellings, stating as follows;

a. The maximum height of residential buildings shall be no more than 7 m as measured from existing ground level.

b. The maximum height of accessory buildings shall be no more than 5.5 m as measured from existing ground level.

c. The footprint of any dwelling shall not exceed 450 m^2 and the footprint of any accessory building shall not exceed 150 m^2. No more than 2 accessory buildings per site.

d. All buildings and structures shall be designed, finished and thereafter maintained to a reflectivity value of no more than 50%.

Appendix 2: Te Tai o Poutini Proposed Plan

The site is zoned General Rural Zone (GRUZ) in the TTPP.

RURAL ZONES / RELEVANT OBJECTIVES & POLICIES

RURZ O1

This objective seeks to maintain the amenity and rural character values of the rural environment, while retaining highly productive land and rural activities, and supporting a productive rural working environment.

RURZ O2

This objective provides for low density rural lifestyle living on the outskirts of settlements.

RURZ O3

This objective seeks to maintain the distinctive rural character and amenity of West Coast settlements.

RURZ O4

This objective provides for the expansion of existing settlements, where hazard risk can be managed.

RURZ O6

This objectives requires on-site servicing for this type of rural subdivision.

RURZ P1

This policy seeks to enable a range of activities in the zone, while maintaining rural amenity and character. Of particular relevance in this proposal, outside of settlements, activities should;

- For buildings and structures have a bulk and location that is characteristic of rural environments.
- Maintain privacy and rural outlook for residential buildings.
- Be compatible with existing development and the surrounding area.
- Have appropriate setbacks from the road and significant natural and cultural features.

RURZ P2

This policy provides for new housing opportunities in locations that do not pose a significant risk to life, safety and property damage from natural hazards.

RURZ P4

This policy provides for rural lifestyle development on the outskirts of towns and settlements, which should be large lots with on-site servicing.

RURZ P5

This policy seeks to avoid locating non-agricultural activities outside of highly productive locations.

RURZ P7

Recognise that where non rural activities are located in rural areas, this should not be to the detriment of the effective function of towns and settlements, or to avoid the costs of connection to community funded infrastructure.

RURZ P11

Subdivision in this zone should recognise the rural character and form of the General Rural Zone.

RURZ P15

New development should be designed and located with sufficient buffers so that existing rural uses and consented activities are not unreasonably compromised by the proximity of sensitive neighbouring activities.

SUBDIVISION / RELEVANT OBJECTIVES & POLICIES

SUB O1

This objective provides for development that is compatible with the purpose, character and qualities of the General Rural Zone.

SUB O2

This objective provides for development that will not adversely affect infrastructure, enables access and connectivity, provides for the expansion of living opportunities, provides for the well being of the community (eg housing), and avoids natural hazards.

SUB O3

This objective requires development to respond to the physical characteristics and constraints of the site.

SUB O5

This objective seeks to have esplanade reserve vested, where required.

SUB O6

This objective seeks to provide for adequate open space around lots.

SUB P1

This policy requires lots to be of an adequate size, consistent with the purpose, character and qualities of the zone.

SUB P2

This policy requires that each lot will be adequately serviced.

SUB P3

This policy seeks to avoid adverse effects on biodiversity, Iwi sites and other historical heritage values.

SUB P4

This policy requires natural hazard risk to be adequately mitigated.

SUB P6

This policy seeks to avoid subdivision in areas that are not appropriate for this type of development.

SUB P9

This policy requires the esplanade provisions of the RMA to be implemented, where required.

COASTAL ENVIRONMENT / RELEVANT OBJECTIVES & POLICIES

CE O1

To preserve the natural character, landscapes and biodiversity of the coastal environment while enabling people and communities to provide for their social, economic and cultural wellbeing in a manner appropriate for the coastal environment.

CE O2

The relationship of Poutini Ngai Tahu with their cultural values, traditions, interests and ancestral lands in the coastal environment is recognised and provided for and Poutini Ngai Tahu are able to exercise tino rangitiratanga and kaitiakitanga.

CE O3

To provide for activities which have a functional need to locate in the coastal environment in such a way that the impacts on natural character, landscape, natural features, access and biodiversity values are minimised.

CE Policies not relevant.

NATURAL HAZARDS / RELEVANT OBJECTIVES & POLICIES

Including coastal & flood hazard overlays

NH O1

To use a regionally consistent, risk based approach to natural hazard management.

NH O2

To reduce the risk to life, property and the environment from natural hazards, thereby promoting the well being of the community and environment.

NH O5

To recognise and provide for the effects of climate change, and its influence on the frequency and severity of natural hazards.

NH Policies not relevant.

POUNAMU

Under the Pounamu Vesting Act all pounamu is owned by Te Runanga o Ngai Tahu.

The applicant acknowledges this and agrees to contact the relevant authorities in the event of any accidental discovery.

Analysis of Relevant Objectives & Policies

As with the relevant WDC objectives and policies, the relevant TTPP objectives and policies seek to maintain rural character and amenity values, and to protect highly productive soils.

There are also objectives and policies that seek to avoid the adverse effects of natural hazards, including coastal and flooding hazards.

The TTPP confirms that all pounamu is owned by Ngai Tahu.

The proposal is consistent with all of the relevant TTPP objectives and policies due to the large open lots with high amenity, with a no build area to avoid coastal hazard and flood risk, with good connectivity to Hokitika, and consistent with the prevailing rural character and amenity. The balance of this 100 ha property will continue to be used for farming and rural related activities.

SUBDIVISION RULES

In accordance with SUB S1, the minimum lot size for this zone is 4 ha.

This proposal becomes Discretionary, as it does not comply with the minimum lot size (SUB R6).

While part of the property is affected by the Coastal Tsunami Hazard overlay and the Flood Severe overlay, where the dwellings will be located is only affected by the Flood Plain and Flood Susceptibility overlays. This is a Discretionary activity (SUB R13).

14 March 2023

Westland District Council
Hokitika

Attention: Anna Johnson

Dear Anna

RC Application 220120 / Forest Habitats Ltd / Proposed Subdivision at 117 Arthurstown Road

Thanks for your emails of 13 March.

This response deals with the remaining issues, ie 1, 3, 8, 9, 14 and 15.

1 Land Use

This application relates primarily to a subdivision, however there is a minor land use component regarding access. This is discussed further under (14).

This proposal does not involve any infringements in respect of the Table 5.7 standards. It is understood that a dwelling requires consent in this zone, however no dwellings are proposed. It will be up to the new owners of the lots to obtain consent for their dwellings. The alternative would be to provide more than 10 sets of plans and elevations for dwellings, which is clearly unreasonable and not a normal requirement for a subdivision.

The applicant has recently obtained resource consent for a subdivision at Ruatapu. See attached, Appendix 1. Here it was acknowledged that consent would be required for the new dwelling, but that was the end of the matter and subdivision consent was granted.

There will be no modification of riparian margins.

3 TTPP

Please refer to Appendix 2.

8 Consent Notice

The applicant accepts your point about accessory buildings and proposes to limit the number of accessory buildings to a maximum of 2 per site.

Regarding the minor household unit proposal, if this would be regarded as a second dwelling then yes the applicant will delete that from the proposed consent notice. That matter can be dealt with by the new lot owners.

Refer Appendix 3 for amended Design Controls / Consent Notice.

9 Telecommunications

We contacted Spark and they referred us to their Network Coverage Map, which shows good 4G coverage for the site. Refer Appendix 4.

There is also the Starlink option, which covers all of NZ.

14 Lots 4, 9, 10 & 11

It is acknowledged that a new vehicle access for a lot should be 50 m from any road intersection, in accordance with 8.9.3. As discussed in the traffic report, and as agreed by the Council Transport Engineer, in this case it is acceptable for the lot entrances to be 20 m back from Arthurstown Road. This is covered on pages 24 and 25 of the traffic report. While this requires consent as a discretionary activity (an infringement of a standard), it is concluded by both the applicant's traffic engineer and the Council engineer (Karl Jackson) that any adverse effects will be acceptable.

Likewise, constructing driveways within unformed legal road is a restricted discretionary activity in accordance with 6.4(a), in respect of Lots 4, 9 and 10. The access for Lot 11 is off the formed part of East Road. Any effects will be less than minor, and this has been endorsed by Karl Jackson.

15 East Road

The upgrading of part of East Road will only occur where the road has been formed, and is therefore a PA.

Yours faithfully
MacDonell Consulting Ltd

Barry MacDonell

Delete Archive Report

RE: Arthurstown Roads - s. 92 Further Information Requirements

B barry@macdonellconsulting.co.nz
To: Anna Johnson
Fri 24/03/2023 16:50

Planning Assessment Addendu...

Anna

Here is the addendum to cover the dwelling component of the proposal.

Included in this is an explanation of the driveway situation for Lots 4, 9 and 10.

Have a good weekend.

Regards
Barry

From: Anna Johnson <anna@scoped.nz>
Sent: Thursday, 23 March 2023 4:29 pm
To: barry@macdonellconsulting.co.nz
Subject: Re: Arthurstown Roads - s. 92 Further Information Requirements

Hi Barry,

Please submit an addendum to the application which provides a summary of what you are proposing as a land use (e.g. on dwelling per allotment) and also provide an assessment against the applicable land use standards. The more detail you can provide, the better.

We will need to know specifics in respect to the formation of the legal road reserve, including the length of the formation. This can be indicated on the plan also.

Kind regards,

Anna Johnson

SCOPED PLANNING & DESIGN

Anna Johnson
PRINCIPAL PLANNER
anna@scoped.nz
021 0869 1484

Forest Habitats Ltd

Proposed subdivision at 117 Arthurstown Road, Hokitika

Addendum - Dwellings

25 March 2023

1 PROPOSAL

The applicant is seeking land use consent to authorise 1 dwelling per lot on the titles being created. In accordance with 5.6.2.2 (B) of the Westland District Plan, this is a controlled activity if the standards in Table 5.7 are complied with. In this case the applicant is seeking consent for each new dwelling to have a maximum ground floor area of 450 m^2, rather than the 300 m^2 specified for a controlled activity. This makes the dwelling component of the proposal a discretionary activity in accordance with Table 5.7.

The proposed dwellings will comply with all other Table 5.7 requirements for controlled activities, including 1 dwelling per site, compliance with yards, height and riparian setbacks. In respect of height, the applicant is proposing a maximum height of 7 m rather than the maximum allowable height of 10 m for a residential building in Table 5.7.

2 ASSESSMENT OF ENVIRONMENTAL EFFECTS

For controlled activities, the relevant matters that Council wishes to assess are access, effluent disposal, reverse sensitivity matters, and amenity values. While it is acknowledged that this is a discretionary activity because of the proposed dwelling sizes being up to 450 m^2 rather than 300 m^2, these are still the most relevant matters for consideration.

Access

In respect of the construction of driveways within unformed legal road, it has been confirmed that this does not require resource consent as it does not constitute the construction of a 'road', as set out in 6.4(a). The driveway situation applies to Lots 4, 9 and 10.

As noted in the applicant's traffic report, and endorsed by the Council Transportation Engineer, the driveways will be 3.5 m wide, sealed for 6 m from Arthurstown Road and then metalled in accordance with the rural access standards. The driveways will enter the lots a minimum of 20 m back from Arthurstown Road.

Effluent Disposal

All new dwellings will have an on-site wastewater disposal system.

Reverse Sensitivity

As the applicant owns the surrounding farm land, there will not be any properties adversely affected in respect of reverse sensitivity.

Amenity

The low elevation of the property means any additional dwellings will not be highly visible, bearing in mind there are already several buildings and a dwelling on the property, and other dwellings on surrounding properties.

The applicant is offering design controls, to be included as a Consent Notice on the new titles, limiting the maximum height of all residential buildings to 7 m, and all accessory buildings to a maximum height of 5.5 m, with no more than 2 accessory buildings with a footprint of up to 150 m^2 per site.

All buildings will have a reflectivity value of no more than 50%.

The rural character of the area will not be adversely affected by the 7 additional titles (noting that there are 6 existing titles) and the subsequent new dwellings on these large sites. The proximity to Hokitika reinforces the notion that this is an area suitable for rural lifestyle living.

In respect of the suitability of the site for a modest level of rural lifestyle development, it is noted as follows;

- Site is within walking distance of Hokitika
- Close proximity to the rail trail
- Above the flood plain
- Geotechnical suitability
- Adjoining proposed Settlement Zone - Rural Residential Precinct
- Attractive amenity values, with north facing aspect towards Hokitika

These are large rural residential sites, suitable for 1 dwelling per site, so as to retain open character and limit pressure on the resources of this rural area, as explained at 5.6.4 (c).

3 RELEVANT OBJECTIVES AND POLICIES

Objectives / Part 3

3.7.1

To recognise and provide for the unique values and importance of natural environments and ecosystems in Westland.

3.7.2

To recognise that the people of the district can provide for their needs within the context of sustainable management.

3.7.3

To protect the integrity, functioning, and health of indigenous ecosystems and maintain the current diversity of indigenous flora and fauna.

3.8.1

To avoid, remedy or mitigate adverse effects of land use activities on land and water resources.

3.8.2

To protect and maintain the productive potential of the higher quality soils in Westland District.

Policies / Part 4

Amenity

Policy A

The effects of activities which can have significant adverse effects on amenities and the well being of residents shall generally be avoided, remedied or mitigated.

Policy C

The development and use of energy efficient design and technology should be encouraged within working, living and leisure environments.

Policy E

The effects of activities which can be seen as adversely affecting the overall environmental amenity of the District shall be avoided.

Natural Hazards

Policy A

Development and subdivision for the purposes of accommodating and/or servicing people and communities should avoid areas of known natural hazard risk unless the risk of damage to property and infrastructure, community disruption and injury and potential loss of life can be adequately mitigated.

Analysis of Relevant Objectives & Policies

The proposed new dwellings on large rural residential sites, not elevated or in any way highly visible, will not generate any adverse amenity effects that are more than minor.

The provision of additional housing options is important for retaining and attracting people to the Hokitika area, which in turn is important for the sustainability and social cohesion of the community. This directly impacts the viability of schools, businesses and social and cultural elements of the community.

Building new energy efficient houses is particularly relevant in respect of Policy C.

The other relevant objectives and policies relating to natural hazards etc have been addressed in the subdivision component of this proposal.

4 CONSULTATION

The applicant has not consulted with any neighbouring property owners as none are affected. Any adverse effects beyond the boundaries of this 100 ha rural property will be less than minor. As of right the applicant could develop 6 new dwellings along Arthurstown Road, on the existing titles.

5 CONCLUSION

The application is consistent with the provisions of the District Plan. The proposal will allow for additional rural residential lots on a large farm property located close to Hokitika, and ideally suited for this style of development.

As there are no adverse environmental effects that are more than minor associated with this proposal, and the proposal is not contrary to the relevant objectives and policies, it is concluded that consent should be granted.

MacDonell Consulting Ltd
Planning Consultants