APPLICATION AS NOTIFIED

J & M Wikstrom
(RM230541)

FORM 12

File Number RM230541

QUEENSTOWN LAKES DISTRICT COUNCIL

PUBLIC NOTIFICATION

Notification of an application for a Resource Consent under Section 95A of the Resource Management Act 1991.

The Queenstown Lakes District Council has received an application for a resource consent from:

John Wikstrom and Maria Wikstrom

What is proposed:

Application under Section 88 of the Resource Management Act 1991 (RMA) for combined land use consent / subdivision consent to construct a residential unit outside and accessory buildings outside of a registered building platform; and to undertake a two-lot fee simple subdivision creating one additional residential building platform with associated vehicle access, landscaping and earthworks.

The location in respect of which this application relates is situated at:

160 Lower Shotover Road, Wakatipu Basin

The application includes an assessment of environmental effects. This file can also be viewed at our public computers at these Council offices:

- **74 Shotover Street, Queenstown;**
- **Gorge Road, Queenstown;**
- **and 47 Ardmore Street, Wanaka during normal office hours (8.30am to 5.00pm).**

Alternatively, you can view them on our website when the submission period commences:

https://www.qldc.govt.nz/services/resource-consents/notified-resource-consents#public-rc or via our edocs website using RM230541 as the reference https://edocs.qldc.govt.nz/Account/Login

The Council planner processing this application on behalf of the Council is Andrew Woodford, who may be contacted by phone at 03 450 1726 or email at andrew.woodford@qldc.govt.nz.

Any person may make a submission on the application, but a person who is a trade competitor of the applicant may do so only if that person is directly affected by an effect of the activity to which the application relates that –

a) adversely affects the environment; and
b) does not relate to trade competition or the effects of trade competition.

If you wish to make a submission on this application, you may do so by sending a written submission to the consent authority no later than:

5th October 2023

The submission must be dated, signed by you and must include the following information:

a) Your name and postal address and phone number/fax number.
b) Details of the application in respect of which you are making the submission including location.
c) Whether you support or oppose the application.
d) Your submission, with reasons.
e) The decision you wish the consent authority to make.
f) Whether you wish to be heard in support of your submission.

You may make a submission by sending a written or electronic submission to Council (details below). The submission should be in the format of Form 13. Copies of this form are available Council website:

https://www.qldc.govt.nz/services/resource-consents/application-forms-and-fees#other_forms

You must serve a copy of your submission to the applicant (John Wikstrom and Maria Wikstrom) as soon as reasonably practicable after serving your submission to Council:

c/- Emma Ryder
emma@jea.co.nz
John Edmonds and Associates
PO Box 95
Queenstown, 9300

QUEENSTOWN LAKES DISTRICT COUNCIL

_____

(signed by Jacob Neaves, Senior Planner pursuant to a delegation given under Section 34A of the Resource Management Act 1991)

Date of Notification: 7th September 2023

Address for Service for Consent Authority:

Queenstown Lakes District Council	**Phone**	**03 441 0499**
Private Bag 50072, Queenstown 9348	**Email**	**rcsubmission@qldc.govt.nz**
Gorge Road, Queenstown 9300	**Website**	**www.qldc.govt.nz**

TechnologyOne ECM Document Summary
Printed On 06-Sep-2023

Class	Description	Doc Set Id / Note Id	Version	Date
PUB_ACC	Updated Form 9 05.09.2023	7748245	1	05-Sep-2023
PUB_ACC	Updated AEE (Assessment of Environmental Effects) - 05.09.2023	7748246	1	05-Sep-2023
PUB_ACC	Appendix 1 - Covenant 6969388.3	7691779	1	19-Jul-2023
PUB_ACC	Appendix 1 - Covenant 769961.5	7691783	1	19-Jul-2023
PUB_ACC	Appendix 1 - Covenant 829946.12	7691780	1	19-Jul-2023
PUB_ACC	Appendix 1 - Covenant 829946.6	7691782	1	19-Jul-2023
PUB_ACC	Appendix 1 - Covenant 829946.9	7691781	1	19-Jul-2023
PUB_ACC	Appendix 1 - Covenant 8899576.1	7691778	1	19-Jul-2023
PUB_ACC	Appendix 1 - Record of Title	7691777	1	19-Jul-2023
PUB_ACC	Appendix 2 - Scheme Plan - 14.08.23	7719590	1	14-Aug-2023
PUB_ACC	Appendix 3 - Landscape Plans - 14.08.23	7719589	1	14-Aug-2023
PUB_ACC	Appendix 4 - Landscape Assessment - 14.08.23	7719588	1	14-Aug-2023
PUB_ACC	Appendix 5 - Design Controls - 14.08.23	7719587	1	14-Aug-2023
PUB_ACC	Appendix 6 - Infrastructure Report	7691772	1	19-Jul-2023

PUB_ACC	Appendix 7 - QLDC Confirmation	7691771	1	19-Jul-2023
PUB_ACC	Appendix 8 - Earthworks Plans - 14.08.23	7719586	1	14-Aug-2023
PUB_ACC	Appendix 9 - Geotechnical Report	7691784	1	19-Jul-2023
PUB_ACC	Appendix 10 - Environmental Management Plan (EMP) - 14.08.23	7719585	1	14-Aug-2023
PUB_ACC	Appendix 11 - Aurora Supply Confirmation	7691788	1	19-Jul-2023
PUB_ACC	Appendix 12 - Chorus Confirmation	7691787	1	19-Jul-2023
PUB_ACC	Appendix 13 - APA - Brown	7692441	1	20-Jul-2023
PUB_ACC	Appendix 13 - APA - Stalker	7692440	1	20-Jul-2023
PUB_ACC	Appendix 13 - APA - Wadworth Watts	7692930	1	20-Jul-2023
PUB_ACC	Appendix 14 - Architecture Plans - 14.08.23	7719584	1	14-Aug-2023
PUB_ACC	Elevations 05.09.20253	7748247	1	05-Sep-2023

APPLICATION FOR RESOURCE CONSENT OR
FAST TRACK RESOURCE CONSENT

FORM 9: GENERAL APPLICATION

QUEENSTOWN LAKES DISTRICT COUNCIL

Under Section 87AAC, 88 & 145 of the Resource Management Act 1991 (Form 9)

PLEASE COMPLETE ALL MANDATORY FIELDS* OF THIS FORM.

This form provides contact information and details of your application. If your form does not provide the required information it will be returned to you to complete. Until we receive a completed form and payment of the initial fee, your application may not be accepted for processing.

APPLICANT //

- Must be a person or legal entity (limited liability company or trust).
- Full names of all trustees required.
- The applicant name(s) will be the consent holder(s) responsible for the consent and any associated costs.

*Applicant's Full Name / Company / Trust: John and Maria Wikstrom
(Name Decision is to be issued in)

All trustee names (if applicable):

*Contact name for company or trust:

*Postal Address: 160 Lower Shotover Road, Queenstown

*Post code: 9371

*Contact details supplied must be for the applicant and not for an agent acting on their behalf and must include a valid postal address

*Email Address: john.wikstrom@magicmemories.com

*Phone Numbers: Day

Mobile: 027 436 9633

*The Applicant is:

- [x] Owner
- [ ] Prospective Purchaser (of the site to which the application relates)
- [ ] Occupier
- [ ] Lessee
- Other - Please Specify:

[x] Our preferred methods of corresponding with you are by email and phone.
The decision will be sent to the Correspondence Details by email unless requested otherwise.

CORRESPONDENCE DETAILS // If you are acting on behalf of the applicant e.g. agent, consultant or architect please fill in your details in this section.

*Name & Company: John Edmonds - JEA

*Phone Numbers: Day 03 450 0009

Mobile: 021 409 075

*Email Address: john@jea.co.nz

*Postal Address: PO Box 95, Queenstown

*Postcode: 9300

INVOICING DETAILS //

Invoices will be made out to the applicant but can be sent to another party if paying on the applicant's behalf.
For more information regarding payment please refer to the Fees Information section of this form.

*Please select a preference for who should receive any invoices and how they would like to receive them.

- Applicant: [x]
- Agent: [ ]
- Other - Please specify:
- Email: [ ]
- Post: [ ]

*Attention: John Wikstrom

*Postal Address: 160 Lower Shotover Road, Queenstown

*Post code: 9371

*Please provide an email AND full postal address.

*Email: john.wikstrom@magicmemories.com

OWNER DETAILS // Please supply owner details for the subject site/property if not already indicated above

Owner Name:

Owner Address:

Owner Email:

If the property has recently changed ownership please indicate on what date (approximately) AND the names of the previous owners:

Date:

Names:

DEVELOPMENT CONTRIBUTIONS INVOICING DETAILS //

If it is assessed that your consent requires development contributions any invoices and correspondence relating to these will be sent via email. Invoices will be sent to the email address provided above unless an alternative address is provided below. Invoices will be made out to the applicant/owner but can be sent to another party if paying on the applicant's behalf.

*Please select a preference for who should receive any invoices.

Details are the same as for invoicing ☑

Applicant: ☐ Landowner: ☐ Other, please specify:

*Attention:

*Email:

Click here for further information and our estimate request form

DETAILS OF SITE // Legal description field must list legal descriptions for all sites pertaining to the application. Any fields stating 'refer AEE' will result in return of the form to be fully completed.

*Address / Location to which this application relates:

160 Lower Shotover Road, Queenstown

*Legal Description: Can be found on the Computer Freehold Register or Rates Notice – e.g Lot x DPxxx (or valuation number)

Lot 4 DP 22781 Shotover SD

District Plan Zone(s): Wakatipu Basin Rural Amenity

SITE VISIT REQUIREMENTS // Should a Council officer need to undertake a site visit please answer the questions below

Is there a gate or security system restricting access by council?	YES ☐	NO ☑
Is there a dog on the property?	YES ☐	NO ☑
Are there any other hazards or entry restrictions that council staff need to be aware of? If 'yes' please provide information below	YES ☐	NO ☑

Please contact planner prior to site visit

PRE-APPLICATION MEETING OR URBAN DESIGN PANEL

Have you had a pre-application meeting with QLDC or attended the urban design panel regarding this proposal?

☐ Yes ☑ No ☐ Copy of minutes attached

If 'yes', provide the reference number and/or name of staff member involved:

CONSENT(S) APPLIED FOR // * Identify all consents sought // ALSO FILL IN OTHER CONSENTS SECTION BELOW

☑ Land use consent

☑ Change/cancellation of consent or consent notice conditions

☐ Extension of lapse period of consent (time extension) s125

☐ Land use consent includes Earthworks

☑ Subdivision consent

☐ Certificate of compliance

☐ Existing use certificate

QUALIFIED FAST-TRACK APPLICATION UNDER SECTION 87AAC

☐ Controlled Activity

☐ Deemed Permitted Boundary Activity

If your consent qualifies as a fast-track application under section 87AAC, tick here to opt out of the fast track process ☐

BRIEF DESCRIPTION OF THE PROPOSAL // * Please complete this section, any form stating 'refer AEE' will be returned to be completed with a description of the proposal

*Consent is sought to:

Undertake a two-lot subdivision and establish a residential building platform and to construct a residential unit and accessory buildings at 160 Lower Shotover Road, Speargrass Flat. The application includes a curtilage area around the residential building platform and associated access, water tanks and landscaping. The proposal requires resource consent for earthworks to establish the access and level building platform and seeks resource consent to allow an 722m2 building coverage.

APPLICATION NOTIFICATION

Are you requesting public notification for the application?

☑ Yes ☐ No

Please note there is an additional fee payable for notification. Please refer to Fees schedule

OTHER CONSENTS

Is consent required under a National Environmental Standard (NES)?

- NES for Assessing and Managing Contaminants in Soil to Protect Human Health 2012

An applicant is required to address the NES in regard to past use of the land which could contaminate soil to a level that poses a risk to human health. Information regarding the NES is available on the website https://environment.govt.nz/publications/national-environmental-standard-for-assessing-and-managing-contaminants-in-soil-to-protect-human-health-information-for-landowners-and-developers/

You can address the NES in your application AEE OR by selecting ONE of the following:

☐ This application does not involve subdivision (excluding production land), change of use or removal of (part of) a fuel storage system. Any earthworks will meet section 8(3) of the NES (including volume not exceeding 25m^3 per 500m^2). Therefore the NES does not apply.

☑ I have undertaken a comprehensive review of District and Regional Council records and I have found no record suggesting an activity on the HAIL has taken place on the piece of land which is subject to this application.
NOTE: depending on the scale and nature of your proposal you may be required to provide details of the records reviewed and the details found.

OTHER CONSENTS // CONTINUED

☐ I have included a Preliminary Site Investigation undertaken by a suitably qualified person.

☐ An activity listed on the HAIL has more likely than not taken place on the piece of land which is subject to this application. I have addressed the NES requirements in the Assessment of Environmental Effects.

■ Any other National Environmental Standard

☐ Yes ☑ N/A

Do you need any consent(s) from Otago Regional Council?

☑ Yes ☐ N/A

If Yes have you applied for it?

☐ Yes ☑ No

If Yes supply ORC Consent Reference(s)

If ORC Earthworks Consent is required would you like a joint site visit ?

☐ Yes ☑ No

INFORMATION REQUIRED TO BE SUBMITTED //

Attach to this form any information required (see below & appendices 1-2).

To be accepted for processing, your application should include the following:

☑ Computer Freehold Register for the property (no more than 3 months old) and copies of any consent notices and covenants
(Can be obtained from Land Information NZ at https://www.linz.govt.nz/).

☑ A plan or map showing the locality of the site, topographical features, buildings etc.

☑ A site plan at a convenient scale.

☑ Written approval of every person who may be adversely affected by the granting of consent (s95E).

☑ An Assessment of Effects (AEE).
An AEE is a written document outlining how the potential effects of the activity have been considered along with any other relevant matters, for example if a consent notice is proposed to be changed. Address the relevant provisions of the District Plan and affected parties including who has or has not provided written approval. See Appendix 1 for more detail.

☑ We prefer to receive applications electronically – please see Appendix 5 – Naming of Documents Guide for how documents should be named. Please ensure documents are scanned at a minimum resolution of 300 dpi. Each document should be no greater than 10mb

PRIVACY INFORMATION

The information you have provided on this form is required so that your application can be processed under the Resource Management Act 1991 and may also be used in statistics collected and provided to the Ministry for the Environment and Queenstown Lakes District Council. The information will be stored on a public register and may be made available to the public on request or on the company's or the Council's websites.

FEES INFORMATION

Section 36 of the Resource Management Act 1991 deals with administrative charges and allows a local authority to levy charges that relate to, but are not limited to, carrying out its functions in relation to receiving, processing and granting of resource consents (including certificates of compliance and existing use certificates).

Invoiced sums are payable by the 20th of the month after the work was undertaken. If unpaid, the processing of an application, provision of a service, or performance of a function will be suspended until the sum is paid. You may also be required to make an additional payment, or bring the account up to date, prior to milestones such as notification, setting a hearing date or releasing the decision. In particular, all charges related to processing of a resource consent application are payable prior to issuing of the decision. Payment is due on the 20th of the month or prior to the issue date – whichever is earlier.

FEES INFORMATION // CONTINUED

If your application is notified or requires a hearing you will be requested to pay a notification deposit and/or a hearing deposit. An applicant may not offset any invoiced processing charges against such payments.

Section 357B of the Resource Management Act provides a right of objection in respect of additional charges. An objection must be in writing and must be lodged within 15 working days of notification of the decision.

LIABILITY FOR PAYMENT – Please note that by signing and lodging this application form you are acknowledging that the details in the invoicing section are responsible for payment of invoices and in addition will be liable to pay all costs and expenses of debt recovery and/or legal costs incurred by QLDC related to the enforcement of any debt.

MONITORING FEES – Please also note that the fee paid at lodgement includes an initial monitoring fee of $273 for land use resource consent applications and designation related applications, as once Resource Consent is approved you will be required to meet the costs of monitoring any conditions applying to the consent, pursuant to Section 35 of the Resource Management Act 1991.

DEVELOPMENT CONTRIBUTIONS – Your development, if granted, may also incur development contributions under the Local Government Act 2002. You will be liable for payment of any such contributions.

A list of Consent Charges is available on the on the Resource Consent Application Forms section of the QLDC website. If you are unsure of the amount to pay, please call 03 441 0499 and ask to speak to our duty planner.

Please ensure to reference any banking payments correctly. Incorrectly referenced payments may cause delays to the processing of your application whilst payment is identified.

If the initial fee charged is insufficient to cover the actual and reasonable costs of work undertaken on the application you will be required to pay any additional amounts and will be invoiced monthly as work on the application continues. Please note that if the Applicant has outstanding fees owing to Council in respect of other applications, Council may choose to apply the initial fee to any outstanding balances in which case the initial fee for processing this application may be deemed not to have been paid.

PAYMENT // An initial fee must be paid prior to or at the time of the application and proof of payment submitted.

Please reference your payments as follows:

Applications yet to be submitted: RM followed by first 5 letters of applicant name e.g RMJONES

Applications already submitted: Please use the RM# reference that has been assigned to your application, this will have been emailed to yourself or your agent.

Please note processing will not begin until payment is received (or identified if incorrectly referenced).

I confirm payment by:

- [x] Bank transfer to account 02 0948 0002000 00 (If paying from overseas swiftcode is – BKNZNZ22)
- [ ] Invoice for initial fee requested and payment to follow
- [ ] Manual Payment (can only be accepted once application has been lodged and acknowledgement email received with your unique RM reference number)

*Reference RMWIKST

*Amount Paid: Landuse and Subdivision Resource Consent fees - please select from drop down list below

$3696 - Other subdivision (e.g. Rural Residential, Rural Lifestyle)

(For required initial fees refer to website for Resource Consent Charges or spoke to the Duty Planner by phoning 03 441 0499)

*Date of Payment 7/19/23

Invoices are available on request

APPLICATION & DECLARATION

The Council relies on the information contained in this application being complete and accurate. The Applicant must take all reasonable steps to ensure that it is complete and accurate and accepts responsibility for information in this application being so.

☐ If lodging this application as the Applicant:

I/we hereby represent and warrant that I am/we are aware of all of my/our obligations arising under this application including, in particular but without limitation, my/our obligation to pay all fees and administrative charges (including debt recovery and legal expenses) payable under this application as referred to within the Fees Information section.

OR:

◉ If lodging this application as agent of the Applicant:

I/we hereby represent and warrant that I am/we are authorised to act as agent of the Applicant in respect of the completion and lodging of this application and that the Applicant / Agent whose details are in the invoicing section is aware of all of his/her/its obligations arising under this application including, in particular but without limitation, his/her/its obligation to pay all fees and administrative charges (including debt recovery and legal expenses) payable under this application as referred to within the Fees Information section.

☑ I hereby apply for the resource consent(s) for the Proposal described above and I certify that, to the best of my knowledge and belief, the information given in this application is complete and accurate.

PLEASE TICK

Signed (by or as authorised agent of the Applicant) **

Full name of person lodging this form Emma Ryder

Firm/Company JEA

Dated 4/07/2023

**If this form is being completed on-line you will not be able, or required, to sign this form and the on-line lodgement will be treated as confirmation of your acknowledgement and acceptance of the above responsibilities and liabilities and that you have made the above representations, warranties and certification.

Section 2 of the District Plan provides additional information on the information that should be submitted with a land use or subdivision consent.

The RMA (Fourth Schedule to the Act) requires the following:

1 INFORMATION MUST BE SPECIFIED IN SUFFICIENT DETAIL

- Any information required by this schedule, including an assessment under clause 2(1)(f) or (g), must be specified in sufficient detail to satisfy the purpose for which it is required.

2 INFORMATION REQUIRED IN ALL APPLICATIONS

- (1) An application for a resource consent for an activity (the activity) must include the following:
    - (a) a description of the activity:
    - (b) a description of the site at which the activity is to occur:
    - (c) the full name and address of each owner or occupier of the site:
    - (d) a description of any other activities that are part of the proposal to which the application relates:
    - (e) a description of any other resource consents required for the proposal to which the application relates:

Information provided within the Form above

    - (f) an assessment of the activity against the matters set out in Part 2:
    - (g) an assessment of the activity against any relevant provisions of a document referred to in section 104(1)(b).

(2) The assessment under subclause (1)(g) must include an assessment of the activity against—

    - (a) any relevant objectives, policies, or rules in a document; and
    - (b) any relevant requirements, conditions, or permissions in any rules in a document; and
    - (c) any other relevant requirements in a document (for example, in a national environmental standard or other regulations).

(3) An application must also include an assessment of the activity's effects on the environment that—

    - (a) includes the information required by clause 6; and
    - (b) addresses the matters specified in clause 7; and
    - (c) includes such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.

Include in an attached Assessment of Effects (see Clauses 6 & 7 below)

ADDITIONAL INFORMATION REQUIRED IN SOME APPLICATIONS

- An application must also include any of the following that apply:
    - (a) if any permitted activity is part of the proposal to which the application relates, a description of the permitted activity that demonstrates that it complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under section 87A(1)):
    - (b) if the application is affected by section 124 or 165ZH(1)(c) (which relate to existing resource consents), an assessment of the value of the investment of the existing consent holder (for the purposes of section 104(2A)):

ASSESSMENT OF ENVIRONMENTAL EFFECTS

Clause 6: Information required in assessment of environmental effects

- (1) An assessment of the activity's effects on the environment must include the following information:
    - (a) if it is likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:
    - (b) an assessment of the actual or potential effect on the environment of the activity:
    - (c) if the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment that are likely to arise from such use:
    - (d) if the activity includes the discharge of any contaminant, a description of—
        - (i) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and
        - (ii) any possible alternative methods of discharge, including discharge into any other receiving environment:
    - (e) a description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect:
    - (f) identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any person consulted:
    - (g) if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved:
    - (h) if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).

(2) A requirement to include information in the assessment of environmental effects is subject to the provisions of any policy statement or plan.

(3) To avoid doubt, subclause (1)(f) obliges an applicant to report as to the persons identified as being affected by the proposal, but does not—

- (a) oblige the applicant to consult any person; or
- (b) create any ground for expecting that the applicant will consult any person.

CLAUSE 7: MATTERS THAT MUST BE ADDRESSED BY ASSESSMENT OF ENVIRONMENTAL EFFECTS

- (1) An assessment of the activity's effects on the environment must address the following matters:
    - (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects:
    - (b) any physical effect on the locality, including any landscape and visual effects:
    - (c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity:
    - (d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations:
    - (e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants:
    - (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.

(2) The requirement to address a matter in the assessment of environmental effects is subject to the provisions of any policy statement or plan.

A2 APPENDIX 2 // Information requirements for subdivision

UNDER THE FOURTH SCHEDULE TO THE ACT:

- An application for a subdivision consent must also include information that adequately defines the following:
    - (a) the position of all new boundaries:
    - (b) the areas of all new allotments, unless the subdivision involves a cross lease, company lease, or unit plan:
    - (c) the locations and areas of new reserves to be created, including any esplanade reserves and esplanade strips:
    - (d) the locations and areas of any existing esplanade reserves, esplanade strips, and access strips:
    - (e) the locations and areas of any part of the bed of a river or lake to be vested in a territorial authority under section 237A:
    - (f) the locations and areas of any land within the coastal marine area (which is to become part of the common marine and coastal area under section 237A):
    - (g) the locations and areas of land to be set aside as new roads.

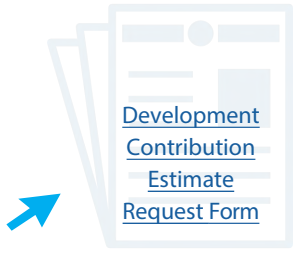
A3 APPENDIX 3 // Development Contributions

Will your resource consent result in a Development Contribution and what is it?

- A Development Contribution can be triggered by the granting of a resource consent and is a financial charge levied on new developments. It is assessed and collected under the Local Government Act 2002. It is intended to ensure that any party, who creates additional demand on Council infrastructure, contributes to the extra cost that they impose on the community. These contributions are related to the provision of the following council services:
    - Water supply
    - Wastewater supply
    - Stormwater supply
    - Reserves, Reserve Improvements and Community Facilities
    - Transportation (also known as Roading)

Click here for more information on development contributions and their charges

OR Submit an Estimate request *please note administration charges will apply



A4 APPENDIX 4 // Fast - Track Application

Please note that some land use consents can be dealt with as fast track land use consent. This term applies to resource consents where they require a controlled activity and no other activity. A 10 day processing time applies to a fast track consent.

If the consent authority determines that the activity is a deemed permitted boundary activity under section 87BA of the Act, written approval cannot be withdrawn if this process is followed instead.

A fast-track application may cease to be a fast-track application under section 87AAC(2) of the Act.

A5 APPENDIX 5 // Naming of documents guide

While it is not essential that your documents are named the following, it would be helpful if you could title your documents for us. You may have documents that do not fit these names; therefore below is a guide of some of the documents we receive for resource consents. Please use a generic name indicating the type of document.

- Application Form 9
- Assessment of Environmental Effects (AEE)
- Computer Register (CFR)
- Covenants & Consent Notice
- Affected Party Approval/s
- Landscape Report
- Ecological Report
- Engineering Report
- Geotechnical Report
- Wastewater Assessment
- Traffic Report
- Waste Event Form
- Urban Design Report

ASSESSMENT OF EFFECTS ON THE ENVIRONMENT

For 2 Lot Subdivision, Building Platform & Residential Unit

160 Lower Shotover Road

For John and Maria Wikstrom

September 2023

1.0 EXECUTIVE SUMMARY OF PROPOSAL

[1] **John and Maria Wikstrom** (the Applicant) seek resource consent to undertake a two-lot subdivision, to establish a residential building platform, and to subsequently construct a residential unit and accessory buildings at 160 Lower Shotover Road, Speargrass Flat. The application includes a curtilage area around the 722m^2 residential building platforms, associated access, water tanks and landscaping. The proposal requires resource consent for earthworks to establish the access and level building platform.

[2] The Applicant seeks public notification of the application.

Location:	160 Lower Shotover Road, Speargrass Flat
Legal Description:	Lot 4 DP 22781 Shotover SD
Territorial Authority:	Queenstown Lakes District Council
Plan:	Operative District Plan (ODP) Proposed District Plan (PDP)
Zoning:	ODP – Rural General PDP – Wakatipu Basin Rural Amenity Zone
Natural Hazards **Other**	The site is not subject to any natural hazards. There is an overland flow path that runs through the rear of the site. There are no known heritage features, cultural heritage or archaeological sites. The site is not identified as a HAIL site.
Activity Status:	Non-complying

2.0 APPENDICIES

Appendix 1 – Record of Title and Interests

Appendix 2 – Scheme Plan – JEA

Appendix 3 – Landscape Plans – Baxter Design

Appendix 4 – Landscape Assessment – Baxter Design

Appendix 5 – Design Controls – Baxter Design

Appendix 6 – Infrastructure Report – JEA

Appendix 7 – QLDC – Confirmation of Water Supply and Confirmation from Glenpanel Water Scheme

Appendix 8 – Geotechnical Report – Geosolve

Appendix 9 – Earthworks Plans – JEA

Appendix 10 – Environmental Management Plan (EMP) – JEA

Appendix 11 – Aurora– Connection Approval

Appendix 12 – Chorus – Connection Approval

Appendix 13 – Affected Party Approvals

Appendix 14 – Architectural Plans

3.0 INTRODUCTION

[3] This Assessment of Effects on the Environment (AEE), inclusive of appendices, has been prepared in accordance with Schedule 4 of the Resource Management Act (RMA). Together these documents provide:

- A description of the application site and surrounding environment;
- A description of the proposal;
- A description of the consents sought;
- An assessment of environmental effects;
- Identification and assessment of relevant objectives and policies of the Operative and Proposed District Plan; and
- A conclusion.

3.1 Overview

[4] Resource consent is sought to undertake a two-lot subdivision, to establish a residential building platform, and to subsequently construct a residential unit and accessory buildings at 160 Lower Shotover Road, Speargrass Flat. The application includes a curtilage area around the residential building platform and associated access, water tanks and landscaping. The proposal requires resource consent for earthworks to establish the access and level building platform and seeks resource consent to allow an 722m^2 building coverage.

[5] The subject site is shown in yellow below (Figure 1).

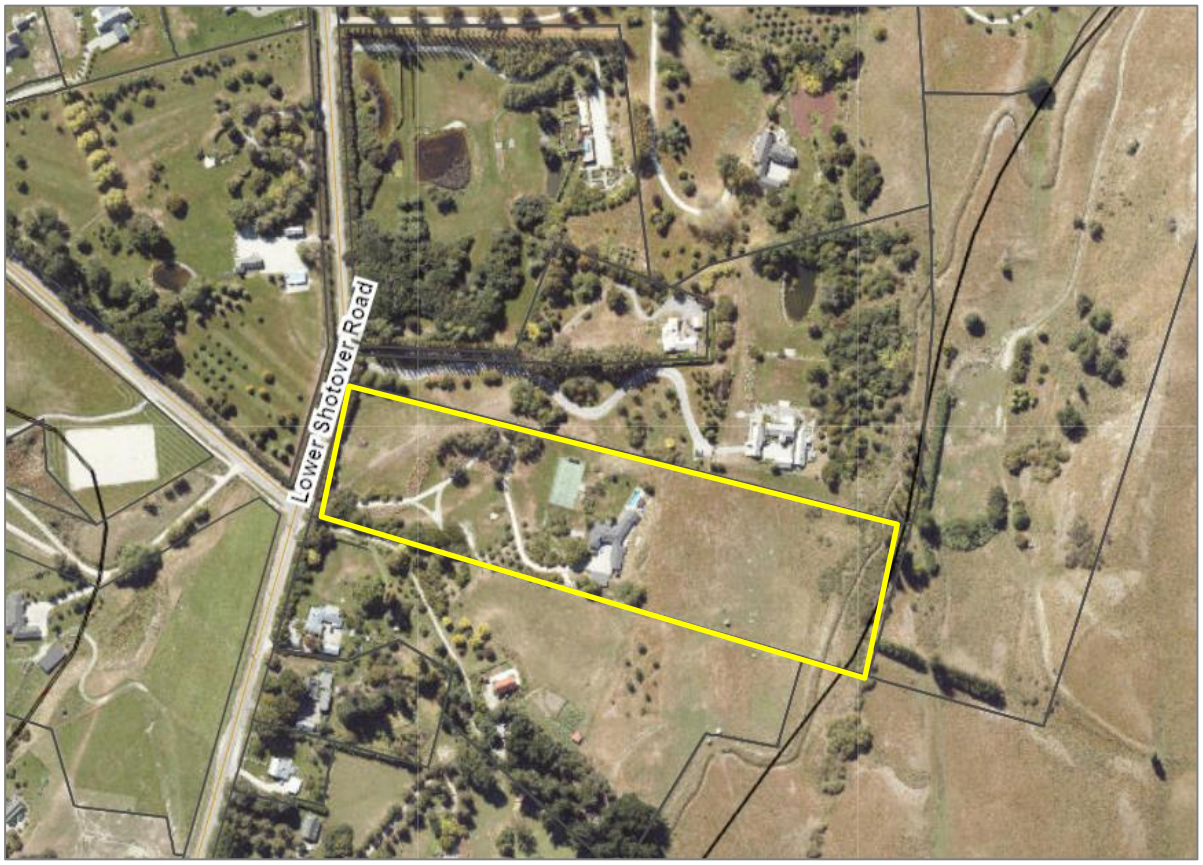


Figure 1: Site Location

[6] Overall, it is considered that the proposal will result in a less than minor effect upon the adjoining properties and a minor effect on the environment. The proposal is consistent with the strategic direction provided for in the Proposed District Plan (PDP).

3.2 Site Description

[7] The Site has an area of 4.1435 hectares and is rectangular in shape. The land is moderately sloping and descends from Slope Hill down to Lower Shotover Road.

[8] The surrounding area is characterised by rural residential activity within the immediate vicinity of the site, being the 'Hawthrone Triangle' located adjacent to the northwest of the site, and development that extends north towards Slopehill Road.

[9] Shotover River is located to the west of the Site, at a distance of approximately 540m to the nearest point.

[10] There is an existing residential unit and associated tennis court, swimming pool and garage established on the site. These are located within the middle portion of the Site. There is a shed within the southwest of the site. The dwelling and accessory buildings were constructed in 2007-2008 (RM070043) and the garage and swimming pool were constructed in 2015 (RM150270) and a pavilion and shed were constructed in 2019/2020 (RM191097).

[11] Access to the property is via a gravel driveway traversing from Lower Shotover Road to the existing residential unit.

[12] The existing dwelling is serviced by its own private reticulated stormwater, effluent and potable water systems. The water supply is via the Glenpanel Water Scheme which was recently connected to the QLDC reticulated network.

[13] There is an Arrow Irrigation water race through the rear of the Site, which sits at a higher elevation than any of the proposed development.

[14] The Council's Hazards Register does not identify any natural hazards on the site.

3.3 Record of Title

[15] The Site is legally described as Lot 4 DP 22781 Shotover SD and held in Record of Title OT14D/626 (attached as Appendix 1).

[16] <u>Land Covenant 829946.6 and Land Covenant 829946.9</u>

- This covenant relates to the Water Supply Scheme.

[17] <u>Land Covenant 829946.12</u>

- This covenant relates to the installation and maintenance of the water supply scheme which provides 1,000 litres of water per day to the site.

[18] <u>Land Covenant 6969388.3</u>

- This covenant requires any residential dwelling (including accessory buildings) to be located within the building platform identified as "A" on the title plan.
- The dwelling and external appearance of any building within the building platform is to incorporate the following design controls:
    - Maximum height of 7m, and no greater than 410m above sea level.

- Roof pitch between 22.5 and 50 degrees. Flat roofs only permitted as connections and shall not exceed 20% of the total roof area.
- Roof claddings to be limited to painted steel (of a dark colour), shingles, slate or similar materials. LRV to be 5% or less and in a range of natural colours.
- Wall material to be timber, plaster or stone and natural and recessive in colour.
- Joinery, flashings, guttering and details shall be painted a consistent/ complementary colour to the principal colour of the building.
- Any exterior lighting is to be design and directed so that light spill is directed within the boundaries of the site.

[19] Variation of Land Covenant 6969388.3 (8899576.1)

- This covenant requires that any residential dwelling (including accessory buildings) must be located within the building platform marked “Area A”.

[20] Covenant 769961.5

- This covenant relates to the Water Supply Scheme.

[21] There are also several easements registered on the Record of Title which relate to the conveyance of water. Easement ‘A’ runs through the site as shown in Figure 2 below.

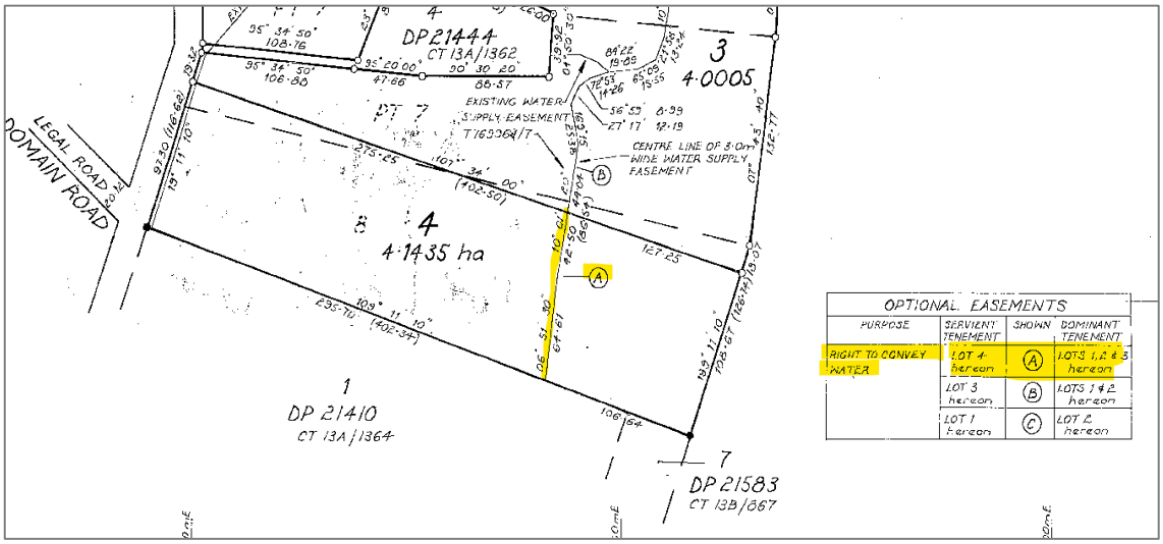


Figure 2: Location of Easement 'A' Right to Convey Water

4.0 DESCRIPTION OF PROPOSAL

4.1 Subdivision

[22] The applicant proposes to undertake a two-lot subdivision to create two (2) freehold titles as described in Table 1. The subdivision will be undertaken prior to construction of the residential unit on proposed Lot 2.

Allotment	Description	Site Area (ha)
Lot 1	Existing residential unit (marked 'Area A')	0.9091
Lot 2	Proposed residential building platform (marked 'X', 'Y', 'Z')	3.2344

Table 1: Proposed Subdivision Layout

[23] The Scheme Plan of subdivision is included in Appendix 2 and reproduced in Figure 3 below.

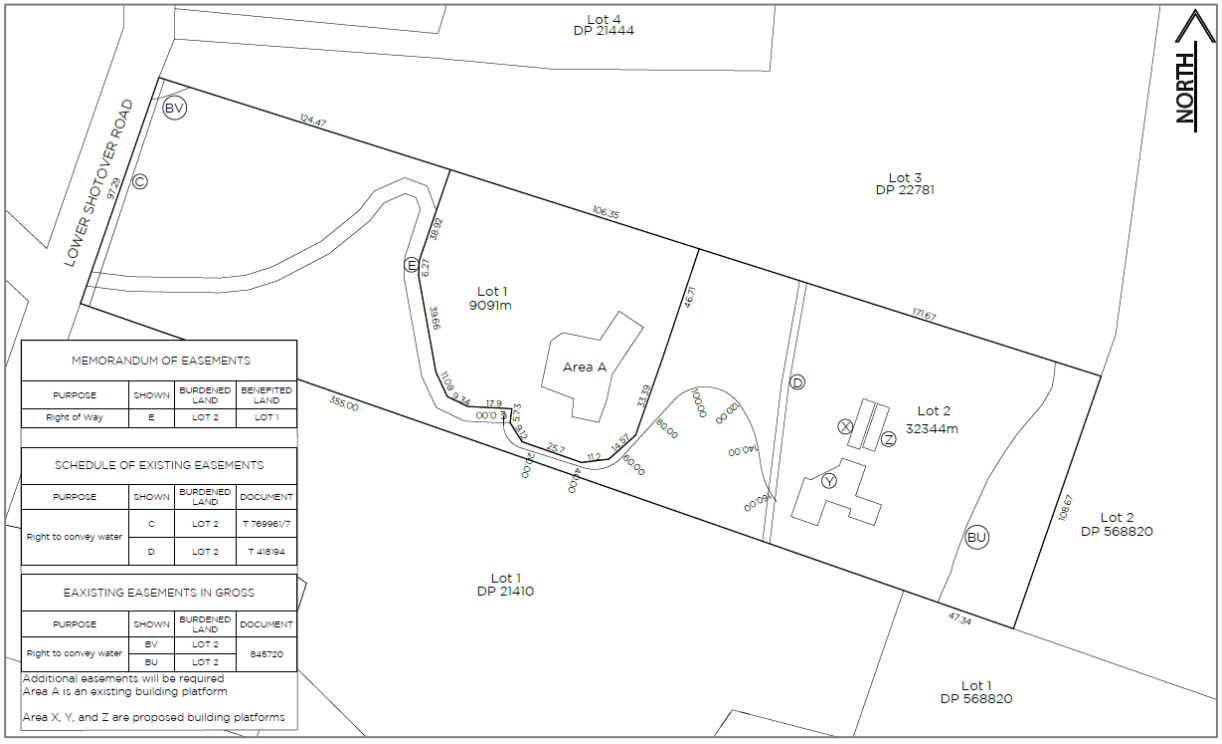


Figure 3: Scheme Plan for Subdivision

Residential Building Platform

[24] Proposed Lot 2 comprises 3.2344ha and includes a residential building platform that is split into three areas (X, Y, Z) to reflect the activity and associated building heights in those areas.

[25] Area 'Y' will contain the residential unit and is irregularly shaped. The total area of this part of the building platform is 522m^2, with a maximum height of 4.5m above ground level for the building and a maximum height of 5m and 6.5m for the chimneys.

[26] Area 'X' is to provide for a swimming pool. Under the district plan, a swimming pool meets the definition of an 'accessory building', therefore, the applicant seeks to ensure that all necessary consents are

identified to in this application. The pool (Area Y) is located to the north of the dwelling platform and will have a total area of 104m^2. The swimming pool will be in ground.

[27] Area 'Z' is to contain accessory buildings. The platform has a total area of 96m^2. The maximum height of any building or structure within this platform will be 3.5m and might include a gazebo, pump house etc.

[28] The building platform has a total area of 722m^2.

[29] The proposed residential building platform is located inside a curtilage area for domestic activity around it with an area of 5,080m^2 (including the building platform). Activity within the curtilage area will be limited to all domestic activity such as mown lawns, amenity gardens, garden structures, paved areas, play equipment, clothes lines and external lighting shall be restricted to the curtilage area. All areas outside the curtilage area shall be maintained in pastoral grass by way of grazing and/or mowing.

Easements

[30] As part of the subdivision, the following easements will be created:

- Right to Convey Water (marked 'BV' on Scheme Plan)
- Right to Convey Water (marked 'BU' on Scheme Plan)
- Right of Way (marked 'E' on Scheme Plan)

[31] Any additional easements that may be required will be identified at the s224(c) stage.

4.2 Existing Residential Unit

[32] No changes are sought to the existing residential unit as part of this application.

4.3 Design Controls

[33] The application includes a set of Design Controls to manage the form, bulk, scale and cladding materials for future buildings to be constructed within the residential building platforms.

[34] The Design Controls are summarised as follows:

- Maximum building height of 4.5m for buildings (excluding chimneys) within platform Y and 3.5m within platform Z.
- Light reflectance value (LRV) of roofs to be less than 20%
- LRV of exterior cladding to be less than 30%

4.4 Proposed Residential Unit

[35] Following the subdivision being undertaken, the applicant seeks consent for a residential unit within the proposed building platform. Architecture Plans are included in Appendix 14. The residential unit is single storey with a maximum height of 4.5m. Two chimneys are proposed which are 5m and 6.5m in height. The residential unit has a floor area of 295m^2 and a 60m^2 garage. The residential unit will contain an open plan living/ dining/ kitchen, three bedrooms, each with an ensuite, a mudroom and a three-bay garage.

[36] An accessory building is proposed adjacent to the swimming pool (accessory building) which will have a floor area of 55m^2 and a maximum height of 3.5m.

[37] The development is fully contained within the building platforms and meets all proposed design controls.

4.5 Landscaping

[38] A Landscape Plan has been prepared by Baxter Design. A copy of the plan is shown in Figure 4 below and included in Appendix 3.

[39] The proposed landscaping includes clusters of trees. The structural tree planting comprises Scarlet Oak, Norway Maple, Dutch Elm, and Western Red Cedars. Native shrub planting is proposed to the north and south of the building platform/ curtilage area, comprising Coprosma propinqua, Phormium tenax, Olearia odorata, Pittosporum tenuifolium, Cordyline australis and Griselinia littoralis planted at 1.5m spacing and a minimum size of PB5 at time of planting. The planting will be undertaken prior to construction commencing.

[40] The areas outside of the curtilage and that are not planted, will be maintained as pastoral grass by way of grazing and/ or mowing.

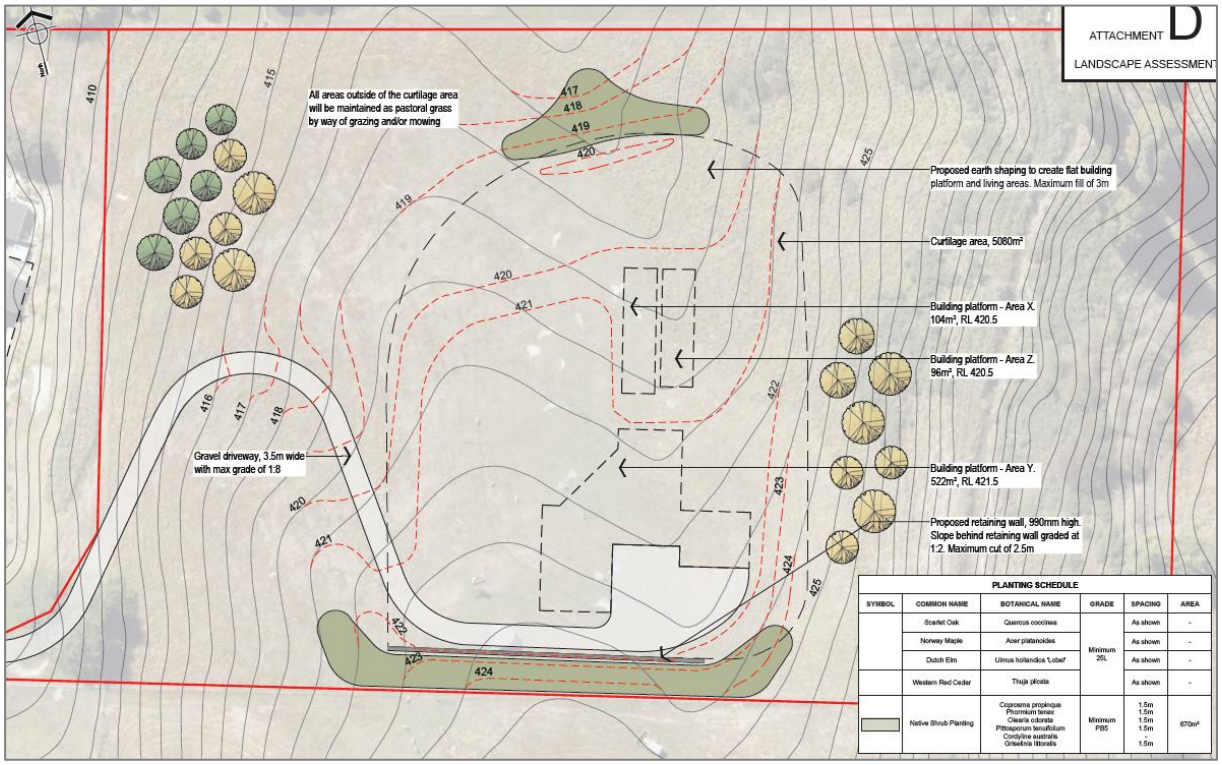


Figure 4: Proposed Landscaping

4.6 Infrastructure

[41] An Infrastructure Report is included in Appendix 6, and the key points are summarised below.

Water

[42] The existing water supply is via the Glenpanel Water Scheme. The Scheme was recently connected to the QLDC reticulated network via a 63mm rider main. This replaced the bore supply.

[43] Confirmation from QLDC Property and Infrastructure (P&I) has confirmed an additional 2,100l/day connection can service the additional allotment and confirmation is provided from the Glenpanel Water Scheme that the connection can be accommodated in the network. These confirmations are provided in Appendix 7.

Wastewater

[44] The site is not located within the Lake Hayes Catchment.

[45] There is no reticulated wastewater within this area of the Wakatipu Basin.

[46] The existing house is serviced by its own disposal field located west of the tennis court.

[47] The new lot has sufficient land available to locate its own wastewater disposal field. The location of the disposal field and detailed design will be completed in association with the dwelling design.

[48] Geotechnical investigations have confirmed the ground conditions are suitable for onsite wastewater disposal. The alluvial sand and glacial till soils observed to overlie the schist bedrock are classified as Class 6 and the wastewater system will need to be designed to meet this.

Stormwater

[49] There is no reticulated stormwater supply within this area of the Wakatipu Basin and the current house disposes of stormwater to onsite soakpits.

[50] Geotechnical investigations (Appendix 9) have confirmed the ground conditions have a soakrate of 1mm per hour, initial calculations show a 4.5m x 4.5m x 2m soakpit can service a 500m² developed area. Alternatively, a dry pond could be utilised.

Firefighting Water Supply

[51] At the time a dwelling is constructed on the proposed lot, the landowner will install a minimum 45,000 litres of static firefighting storage in accordance with PAS SNZ4509:2008.

Electricity and Telecommunications

[52] Confirmation from Chorus NZ Ltd and Aurora Energy have confirmed the additional allotment can be serviced by the existing infrastructure. A copy of these confirmations is included in Appendix 11 and 12.

[53] Chorus NZ have confirmed that a copper connection is available to the site. The applicant proposes to either install a copper connection at the time of subdivision or a consent notice condition will be included in the subdivision that requires an alternative wireless (cell) network to be provided when a residential unit is constructed on the lot.

Access

[54] Access to proposed Lot 1 will be via the existing driveway access and an extension to this is proposed to the dwelling within Lot 2. The driveway will have a width of 3.5m, with a maximum gradient of 1:8. A right of way easement will be provided where the driveway is within Lot 2 to provide access for Lot 1. The right of way easement will have a width of 6m.

4.7 Earthworks

[55] Earthworks are required for the construction of the right of way access to the proposed allotment and to form a level building platform. An Earthworks Plan is included in Appendix 8 and Figure 5 below.

[56] A total earthworks volume of 5,977m^3 is proposed, comprising 2,495m^3 of fill and 2,566m^3 of cut. The maximum depth of cut is 2m and the maximum height of fill is 3.5m.

[57] The earthworks are over an area of 5,977m^2. Resource consent will be sought from Otago Regional Council for residential earthworks over an area greater than 2,500m^2.

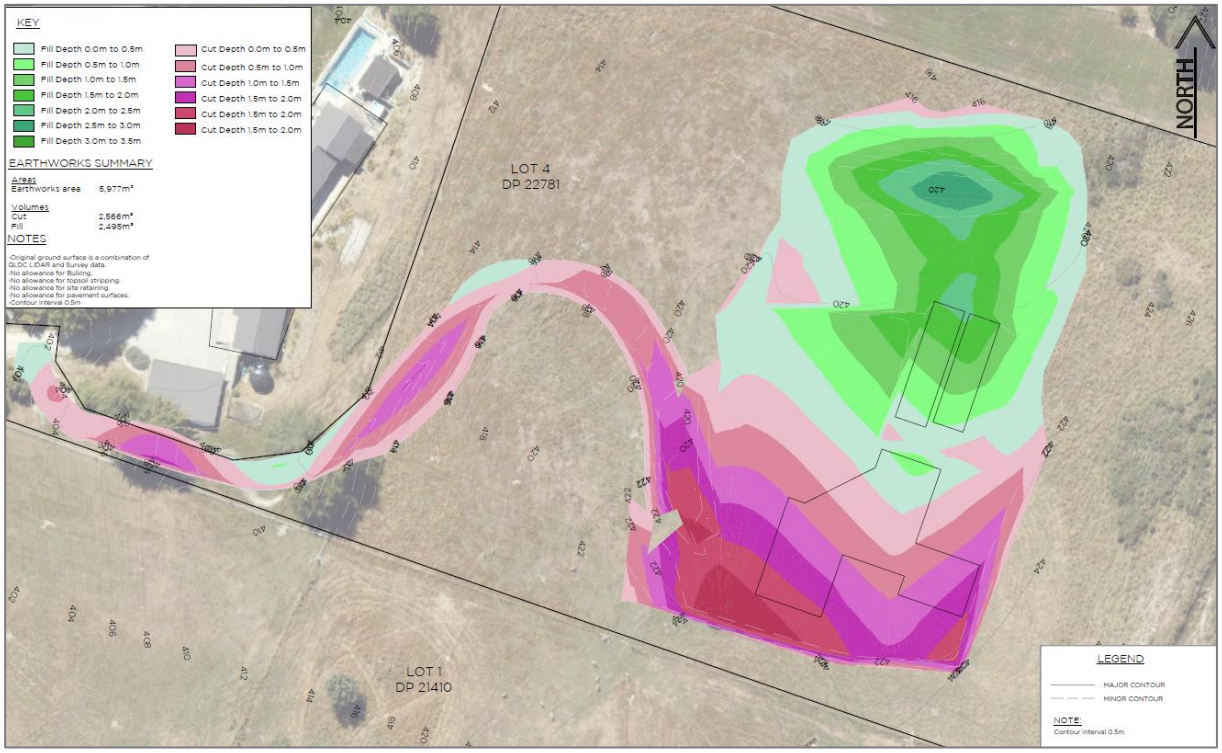


Figure 5: Proposed Earthworks

5.0 DISTRICT PLAN PROVISIONS

5.1 Proposed District Plan (PDP)

[58] The Council notified its decisions on Stage 1 of the PDP on 21 March 2019. Stages 3 and 3B of the PDP were notified on 1 April 2021. The Environment Court has released two Interim Decisions[i] regarding the Proposed District Plan (PDP) provisions relating to the Wakatipu Basin.

[59] In those decisions, the Environment Court sets out both final determinations and provisions that are for final determination through Topic 31 of the PDP appeals. The changes are in relation to the wording of various objectives and policies of Chapter 3 (Strategic Directions) and objectives, policies and rules of Chapter 24 (Wakatipu Basin) and Chapter 27 (subdivision) of the PDP. As it relates to this proposal, there are no provisions that are to have final determination through Topic 31. Therefore, with the findings of the Interim Decisions released, in relation to this application, weight can be given to these PDP decisions and the ODP has not been considered.

[i] Environment Court Decision [2022] NZEnvC 58 (First Interim Decision) and Environment Court Decision [2023] NZEnvC 41 (Second Interim Decision)

[60] The Site is identified on Planning Map 13d as Wakatipu Basin Rural Amenity zone (WBRAZ), with the rear extent of the site being zoned Rural and within an Outstanding Natural Feature (ONF) (Slope Hill) as shown in Figure 6 below.

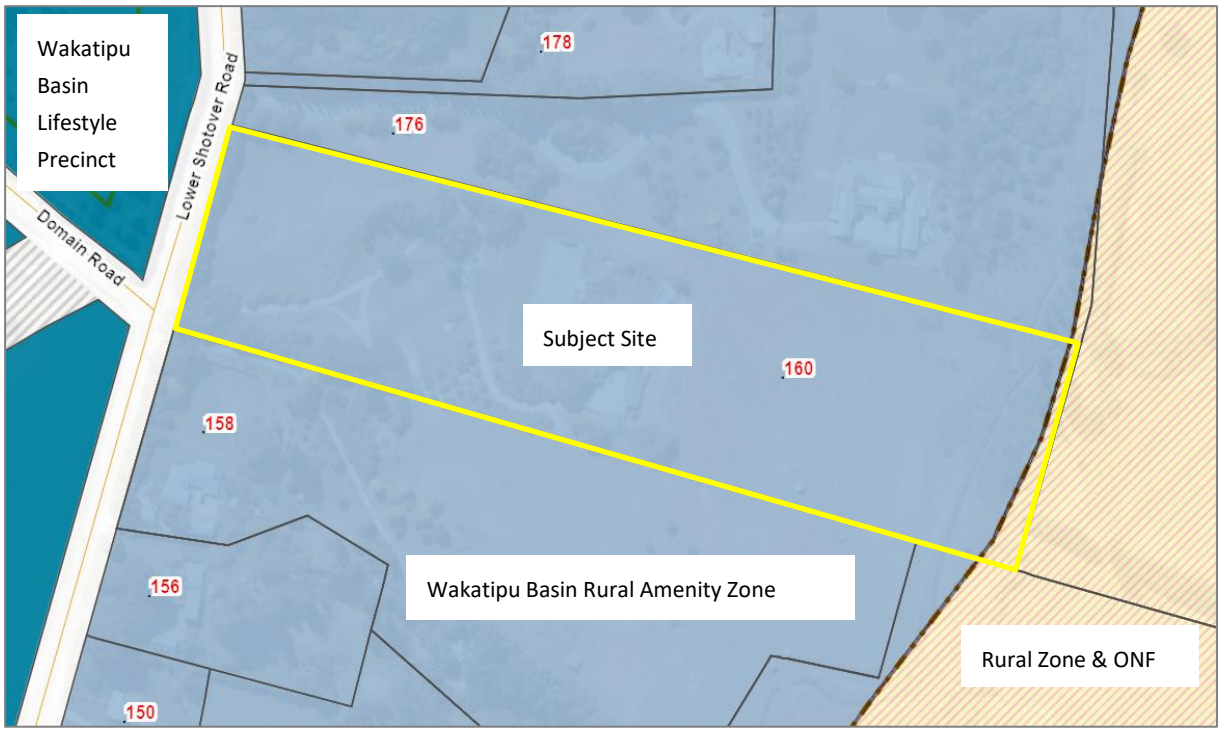


Figure 6: Zoning of the Site (Light blue = Wakatipu Basin Rural Amenity Zone; Blue = Wakatipu Basin Precinct; Yellow = Rural; Red hatch = ONF)

Wakatipu Basin Rural Amenity zone

[61] The purpose of the Wakatipu Basin Rural Amenity Zone is described in Part 24.1 of the PDP as:

'to maintain or enhance the character and amenity of the Wakatipu Basin, while providing for rural living and other activities.

…

The Rural Amenity Zone is applied to areas of the Wakatipu Basin which have either reached, or are nearing a threshold where further landscape modification arising from additional residential subdivision, use and development (including buildings) is not likely to maintain the Wakatipu Basin's landscape character and visual amenity values. There are some areas within the Rural Amenity Zone that have a landscape capacity rating to absorb additional development of Moderate, Moderate-High or High. In those areas limited and carefully located and designed additional residential subdivision and development is provided for while maintaining or enhancing landscape character and visual amenity values.

Other activities that rely on the rural land and landscape resource are contemplated in the Rural Amenity Zone including recreation, commercial and tourism activities. Farming activities are enabled while noting that farming is not the dominant activity in many locations.

…

While the Rural Amenity Zone does not contain Outstanding Natural Features or Landscapes, it is a distinctive and high amenity value landscape located adjacent to, or nearby to, Outstanding Natural Features and Landscapes. There are no specific setback rules for development adjacent to Outstanding Natural Features or Landscapes. However, all buildings (except small farm buildings) and subdivision require resource consent to ensure that inappropriate buildings and/or subdivision does not occur adjacent to those features and landscapes.

…

Proposals in areas rated to have Very Low, Low or Moderate-Low development capacity are to be assessed against the landscape character and amenity values of the landscape character unit they are located within, as well as the Wakatipu Basin as a whole. Proposals in areas rated to have Moderate development capacity are to be assessed against the landscape character and amenity values of the landscape character unit they are located within.

Controls on the location, scale and visual effects of buildings are used to provide a design led response to the identified character and values.'

[62] The Site is identified within the Slope Hill 'Foothills' (11) Landscape Character Unit (LCU). The character unit is described as:

'Elevated and complex patterning of hills ranging from moderate to steeply sloping in places. Elevated hummock pattern throughout central portion with remnant kettle lakes. The southern part of the unit's western edge comprises Slope Hill's lower slopes. These moderate to steep east facing slopes have their relatively consistent gradient broken up by small, localised benches and terraces.'

[63] The District Plan describes the Landscape Character Unit as being characterised by a mix of rural and rural residential land uses. The LCU is identified as having a *Low* capacity to absorb additional development.

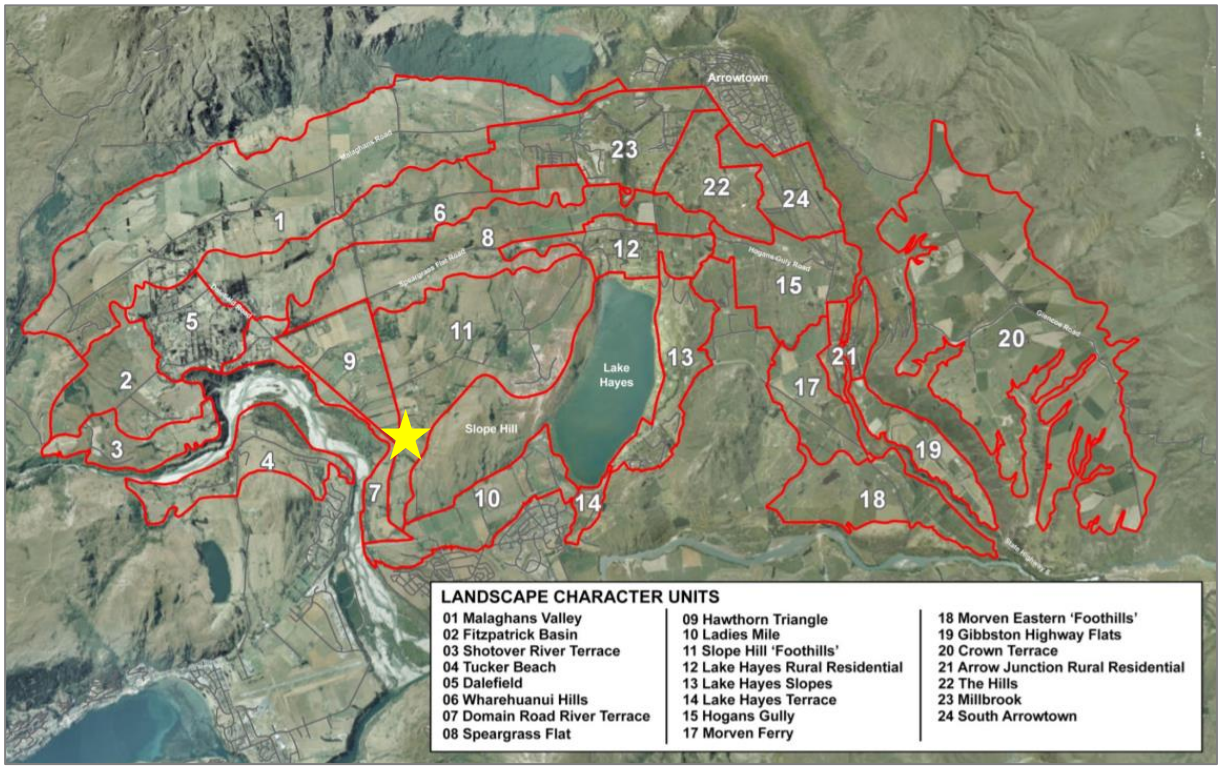


Figure 7: Location of the subject Site within the Landscape Character Units (subject site identified with yellow star)

[64] The purpose of the Rural zone is described in Part 21.1 of the PDP as:

'…to enable farming activities and provide for appropriate other activities that rely on rural resources while protecting, maintaining and enhancing landscape values, ecosystem services, nature conservation values, the soil and water resource and rural amenity.'

[65] Under the PDP, Resource Consent is sought for the following:

Chapter 27 – Subdivision and Development

[66] A **restricted discretionary** activity resource consent pursuant to Rule 27.5.9 for the subdivision of land within the Wakatipu Basin Rural Amenity zone.

Councils' discretion is restricted to:

a. Location of building platforms and vehicle access;
b. Subdivision design and lot layout including the location of boundaries, lot shape and dimensions (but excluding lot area);
c. Location, scale and extent of landform modification, and retaining structures;
d. Property access and roading;
e. Esplanade provision;
f. Natural hazards;
g. Firefighting water supply and access;
h. Water supply;
i. Network utility services, energy supply and telecommunications;
j. Open space and recreation provision;
k. Opportunities for nature conservation values, and natural landscape enhancement;
l. Easements;
m. Vegetation, and proposed planting;
n. Fencing and gates;
o. Wastewater and stormwater management;
p. Connectivity of existing and proposed pedestrian networks, bridle paths, cycle networks;
q. Where the site is located within the Lake Hayes Catchment as identified in Schedule 24.9, the contributions of, and methods adopted by, the proposal to improving water quality within the Lake Hayes Catchment.

[67] A **discretionary** activity resource consent pursuant to Rule 27.5.12 for the subdivision of land within the Rural zone.

[68] A **non-complying** activity resource consent pursuant to Rule 27.5.22 as the proposed subdivision will breach the minimum lot size prescribed for the WBRAZ of 80 hectares.

Chapter 24 – Wakatipu Basin Rural Amenity Zone

[69] A **non-complying** activity resource consent pursuant to Rule 24.5.1.5 for that part of all other sites in the WBRAZ wholly located outside of the Precinct, a maximum of one residential unit per 80 hectares net site area. The proposal will result in two residential units, each on a site less than 80 hectares in area.

[70] A **restricted discretionary** activity resource consent pursuant to Rule 24.4.6 for the construction of buildings for residential activity not provided for by Rules 24.4.5 or 24.4.7A. Three water tanks will be provided within Lot 2 for firefighting water supply and potable water and two additional water tanks will be provided within Lot 1 for firefighting water supply.

Councils' discretion is restricted to:

a. *Effects on landscape character associated with the bulk and external appearance of buildings;*
b. *Access;*
c. *Infrastructure;*
d. *Landform modification, exterior lighting, landscaping and planting (existing and proposed);*
e. *Natural hazards.*
f. *Where the site is located within the Lake Hayes Catchment as identified in Schedule 24.9, the contribution of, and methods adopted by, the proposal to improving water quality within the Lake Hayes Catchment.*
g. *Where Electricity Sub-transmission Infrastructure or Significant Electricity Distribution Infrastructure as shown on the District Plan web mapping application is located within the adjacent road, any adverse effects on that infrastructure.*

[71] A **restricted discretionary** activity pursuant to Rule 24.5.6 as the building coverage must not exceed 15% of the net site area or 500m^2, whichever is the lesser. The proposed building platforms are 722m^2 and consent is sought to allow a building coverage up to this.

Councils' discretion is restricted to:

a. Building scale and form;
b. Visual prominence from both public places and private locations.

Following the subdivision:

[72] A **controlled** activity resource consent pursuant to Rule 24.4.5. Council's control is reserved over:

a. *Effects on landscape character associated with the bulk and external appearance of buildings;*
b. *Access;*
c. *Infrastructure;*
d. *Landform modification, exterior lighting, landscaping and planting (existing and proposed).*
e. *Where the site is located within the Lake Hayes Catchment as identified in Schedule 24.9, the contribution of, and methods adopted by, the proposal to improving water quality within the Lake Hayes Catchment.*

<u>Chapter 25 – Earthworks</u>

[73] A **restricted discretionary** activity resource consent pursuant to Rule 25.5.18.1 for earthworks not setback an equal distance to depth of cut. The earthworks will be setback 1.8m from the southern boundary, where they have a cut depth of 2m.

Councils' discretion is restricted to:

a. *Soil erosion, generation and run-off of sediment.*
b. *Landscape and visual amenity values.*
c. *Effects on infrastructure, adjacent sites and public roads.*
d. *Land stability.*
e. *Effects on water bodies, ecosystem services and biodiversity.*
f. *Cultural, heritage and archaeological sites.*
g. *Nuisance effects.*
h. *Natural Hazards.*
i. *Functional aspects and positive effects.*

[74] It is noted that under 25.3.2.5 of the PDP, earthworks associated with subdivision under Chapter 27 are exempt from the following rules:

- 25.2 Maximum Volume;
- 25.5.15 Cut Standard;
- 25.5.16 Fill Standard;
- 25.5.21 Transport of Cleanfill.

5.2 Other Matters

Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011

[75] The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (the NES) apply to activities if the land is covered by the NES, i.e. if any activity or industry on the Hazardous Activities and Industries List (HAIL) is being undertaken, has been undertaken, or is more likely than not to have been undertaken on the piece of land.

[76] The method outlined in Section 6(2) of the regulations has been used to determine whether or not the piece of land is covered by the NES. This involves a review of the information held about the site by the Queenstown Lake District Council (QLDC) and Otago Regional Council, which found that the site is not identified as a potential HAIL site.

[77] The NES does not apply to this site.

National Policy Statement for Highly Productive Land 2022 (NPS-HPL "Guidelines")

[78] The NPS-HPL came into force on 17 October 2022, with most provisions having immediate effect, placing restrictions on rezoning, subdivision and land-use proposals on land that meets the transitional definition of HPL (Land Use Capability (LUC) classes 1–3, with some exceptions).

[79] Clause 3.4(1) of the NPS-HPL sets out what is defined as 'Highly Productive Land':

(1) Every regional council must map as highly productive land any land in its region that:

(a) is in a general rural zone or rural production zone; and

(b) is predominantly LUC 1, 2, or 3 land; and

(c) forms a large and geographically cohesive area.

[80] The subject site is identified as LUC 3[ii].

[81] A declaration has been sought from the Environment Court as to whether the NPS-HPL applies to the WBRAZ. In the absence of this declaration, as the site is identified as LUC 3, it is considered that the NPS-HPL is applicable to this site as the land meets the transitional definition of 'Highly Productive Land'.

[82] Pursuant to clause 3.8(1), the subdivision of highly productive land is to be avoided unless the applicant can demonstrate that the proposed lots will retain the overall productivity of the subject land over the long term. Guidance on this aspect of the NPS-HPL is provided on page 21 of the Guidelines as follows:

[ii] Mapping based on the New Zealand Land Resource Inventory is conclusive of LUC status

The key measure of productive capacity depends on the potential capacity of the land to support land-based primary production activities. To assess whether the 'overall productive capacity' will be retained in the context of a subdivision application (under clause 3.8(1)(a)), the emphasis is on the 'overall' productive capacity and not just the balance lot. This assessment will require the existing productive capacity of the subject land to be assessed so that an overall comparison between the existing and proposed can be made.

[83] The NES defines 'productive capacity', in relation to land, to mean *'the ability of the land to support land-based primary production over the long term, based on an assessment of:*

(a) physical characteristics (such as soil type, properties, and versatility); and

(b) legal constraints (such as consent notices, local authority covenants, and easements); and

(c) the size and shape of existing and proposed land parcels'.

[84] The existing site is 4.1435 hectares in area. The exiting residential activity is located within a consented residential building platform within the lower two thirds of the site. This includes the driveway, boat storage area, tennis court, swimming pool, dwelling, sheds and vehicle manoeuvring area. There is a small cluster of orchard trees planted for domestic purposes and a chicken run. The residual land contains a small paddock at the rear of the lot of approximately 1.4 ha. This area of land is not used for any productive purposes and is too small in its own right to have productive capacity to support land-based primary production activities. In addition, this paddock cannot be farmed due to lack of any formed access.

[85] In conclusion, this land is exempt from NPS-HPL.

6.0 ACTIVITY STATUS AND ASSESSMENT MATTERS

[86] The activity status of the application is **non-complying**.

[87] Sections 104, 104B and 104D set out the relevant assessment matters for resource consent applications carrying the non-complying activity status:

104 Consideration of applications

(1) When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to–

- *a) any actual or potential effects on the environment of 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*

104B Determination of applications for discretionary or non-complying activities

After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority –

(a) may grant or refuse the application; and

(b) if it grants the application, may impose conditions under section 108.

104D Particular restrictions for non-complying activities

(1) Despite any decision made for the purpose of section 95A(2)(a) in relation to adverse effects, a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either—

(a) the adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii)applies) will be minor; or

(b) the application is for an activity that will not be contrary to the objectives and policies of—

(i) the relevant plan, if there is a plan but no proposed plan in respect of the activity; or

(ii) the relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or

(iii) both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.

(2) To avoid doubt, section 104(2) applies to the determination of an application for a non-complying activity.

7.0 CONSULTATION

[88] Affected Party Approval (APA) has been provided by the following persons at the neighbouring properties identified in Table 2 and Figure 8 below. A copy of the Approvals is included in Appendix 13.

[89] Pursuant to s.95D(e) of the RMA, Council must disregard any effect on these persons when processing this resource consent application.

Figure 8: Location of persons who have provided APA (yellow star), subject site identified in red

Ref.	Description and location from subject site	Name	Address	Legal Description
1	Adjoining landowner	David Leslie Watts and Elizabeth Ann Wadworth	158 Lower Shotover Road	Lot 1 DP 21410 BLK III Shotover SD
2	Adjoining landowner	Julian Robert Brown and Julie Olive Evelyn Brown	176 Lower Shotover Road	Lot 3 DP 22781 BLK III Shotover SD - Easement DP 25635
3	Adjoining landowner	Kristan Myles Stalker and Emma Jane Stalker	208B & 208C Lower Shotover Road	Lot 1 & 2 DP 568820

Table 2: Affected Party Approvals

8.0 NOTIFICATION

[90] The applicant requests public notification of the application in accordance with respect to section 95A(3)(a) of the Resource Management Act 1991.

9.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

9.1 Existing Use & Receiving Environment

[91] The receiving environment is one lot, currently held in one title. A residential unit with associated garaging, swimming pool, pavilion and shed have been lawfully established on the site. This includes the existing access and mature landscaping throughout out the site.

[92] There are no resource consents or building permits for the site that have yet to be given effect to.

[93] The existing environment is that the land is zoned Wakatipu Basin Rural Amenity Zone under the PDP. The zone provisions seek to maintain and enhance the character and amenity of the Wakatipu Basin, while providing for rural living and other activities.

9.2 Permitted Baseline

[94] Under section 104(2) of the RMA, Council may disregard an adverse effect of a proposed activity on the environment if a plan permits an activity with that effect. The permitted baseline refers to the effects of permitted activities or activities which have already been granted resource consent on the subject site. The permitted baseline may be taken into account and the council has the discretion to disregard those effects where an activity is not fanciful.

[95] Under the Proposed District Plan, in the Wakatipu Basin Rural Amenity Zone permitted activities which could be undertaken on this site include:

- Farming activity;
- Use of existing land and buildings for residential activity – e.g. planting and landscaping (subject to earthworks conditions) associated with the residential activity;

- Alterations to the existing buildings subject to standards;
- Farm buildings and Roadside stall buildings (subject to minimum standards, e.g. setback, colour and material, building coverage, building height, and Gross Floor Area requirements);
- Informal airports;
- Retail sales of garden or farm produce or handicrafts grown, reared or produced on site;
- Commercial recreation activities undertaken on land outside and restricted to no more than 12 persons.

[96] In this case, it is considered that there is no permitted baseline commensurate to the nature of the proposal, and it is not considered further.

9.3 General

[97] In respect of the 4th Schedule of the RMA, this assessment is framed around the basis that:

- The proposal will not adversely affect ecosystems.
- The proposal will not adversely affect the exercise of any protected customary right.
- The proposal does not include the use of hazardous installations. Accordingly, it will not increase any risk to the neighbourhood, the wider community, or the environment through hazardous installations.
- The scale and significance of the activity's effects are mitigated through the location and scale of the building platform and the use of design controls to mitigate the effects of future built form within the building platforms.
- The proposal will not result in any significant adverse effect on the environment (so a description of any possible alternative locations or methods for undertaking the activity has not been provided).
- The physical effect on the locality, including any landscape and visual effects are mitigated through the utilisation of the existing site context and through the proposed design controls. Accordingly, the activity will not result in any adverse effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations. It is therefore also considered the proposal will not have any adverse effect on people in the surrounding area.

9.4 Actual & Potential Effects

[98] The following effects have been considered in respect of the proposed land use consents:

- Positive Effects
- Landscape & Visual Effects
    - Effects on Visual Amenity
    - Effects on Landscape Quality and Character
    - Design and Density of Development
    - Cumulative Effects
- Subdivision
    - Location of building platforms
    - Access and Connectivity

- Infrastructure and Services
- Nature Conservation and Cultural Values

- Geotechnical
- Earthworks
  - Soil erosion, generation and run-off of sediment
  - Landscape and visual amenity values
  - Effects on infrastructure, adjacent sites and public roads
  - Land stability
  - Effects on water bodies, ecosystem services and biodiversity
  - Cultural, heritage and archaeological sites
  - Nuisance effects
  - Natural Hazards
  - Functional aspects and positive effects

[99] These are all relevant to the current proposal and discussed below.

9.5 Positive Effects

[100] This proposal will provide an additional allotment and residential unit in the Wakatipu Basin Rural Amenity zone, providing potential purchasers with a rural living opportunity within the Wakatipu Basin.

[101] The proposal is a carefully planned and integrated development.

9.6 Landscape and Visual Effects

[102] A *Landscape Assessment Report* has been prepared by Baxter Design Ltd and is included in Appendix 4. The report includes an assessment of the potential landscape and visual effects of the proposal, including the subdivision and residential building platform.

[103] Three adjoining neighbours have provided written approval, and as such, any potential landscape or visual effects on them have been disregarded.

Effects on Visual Amenity

[104] The proposed building platform and associated development will be concentrated in the eastern portion of the site, setback from the road and positioned behind the existing development. As such, the future built form has been positioned in the least visible location on the site with a higher potential to absorb development than the western portion of the site which is more visible to surrounding areas.

[105] The proposal is potentially visible from the following locations:

- Brief glimpses from the south-eastern areas of the Hawthorn Triangle, at a distance of 900m and 1,200m from the site.
- Intermittently along Tucker Beach Road, at a distance of 1,300m and 2,100m from the site.
- For over 1km of Dalefield Road/Domain Road, at a distance of 2,400m and 3,500m from the site.
- The proposal will not be visible in any other areas on Domain Road due to the existing hedgerows adjacent to the road and the existing vegetation below the site.

[106] LCU 11 places particular emphasis on maintaining existing open views to Slope Hill from western areas, especially from within the Hawthorn Triangle'[iii]. The proposal, including earthworks and planting will be visible in the short-term from western views within the Hawthorn Triangle as shown in Figure 9 below[iv]. When considering the existing landscape character at the base of Slope Hill, the proposed planting, earthworks and a future dwelling would sit within the existing pattern of development. The proposed planting has been located to continue the existing pattern of trees across the western slopes of LCU 11. Once the proposed planting has established, the future built form would likely not be visible from areas within the Hawthorn Triangle due to the screening the planting would provide.

[107] The Landscape Assessment finds that 'The existing open views of Slope Hill will be retained, with the proposal forming a minor component of the wider landscape, which will not be visually prominent on the western slopes of Slope Hill. Any potential adverse effects arising from this proposal on the natural and arcadian character of the landscape, when viewed from these locations, will be low'[v].

[108] The proposed planting will assist in screening the future built form from these views, without impeding views of Slope Hill, and without extending into the pastoral landscape of Slope Hill.

Figure 9: View from the Hawthorne Triangle towards the subject site at a distance of 920m from subject site.

[109] Views from Tucker Beach Road and Dalefield Road/ Domain Road will be at greater viewing distance than from within the Hawthorne Triangle. When viewing the site from these areas, the patterning of rural-residential developments, hedgerows, driveways and vegetation clusters of the western slopes of Slope Hill and the wider landscape is more apparent than from within the Hawthorn Triangle[vi]. The proposal will be seen in the context of the wider landscape and will not be discernible due to the viewing distances.

[iii] Landscape Assessment prepared by Baxter Design, page 7, para. 37.
[iv] Landscape Assessment prepared by Baxter Design, page 7, para. 39
[v] Landscape Assessment prepared by Baxter Design, page 8, para. 43.
[vi] Landscape Assessment prepared by Baxter Design, page 8, para. 44.

Figure 10: View from Domain Road at a viewing distance of 2,670m

Figure 11: View from Tucker Beach Road toward the subject site at a viewing distance of 1,600m

[110] The Landscape Assessment finds that 'the proposal (consisting of earthworks, mitigation planting, a proposed RBP and a potential future dwelling) will be easily absorbed into this landscape, which will become part of this existing patterning. When viewing the site from Tucker Beach Road, the low native shrub planting to the south of the proposed RBP will also assist in screening a future dwelling on the proposed RBP from these views…. with existing views of Slope Hill maintained'.

[111] The Landscape Assessment concludes that any potential adverse visual effects of the development from these viewpoints, will be very low[vii].

[112] The proposal will have less than minor adverse effects on visual amenity.

Effects on Landscape Quality and Character

[113] The subject site is within LCU 11 which is characterised by a mix of rural and rural residential land uses. The landscape character is a 'transitional landscape, characterised by loose groupings of rural dwellings, enclosed by clusters of mixed, exotic vegetation'[viii].

[114] 'The mitigation planting is considered to be in keeping with the vegetation patterns of the western slopes of the LCU 11, which currently consists of maturing clusters of vegetation (primarily exotic), with denser patches and greater species variety than the rest of LCU 11. The proposed vegetation clusters will sit within the existing tree line of the western slopes of Slope Hill and contribute to the '*highly attractive backdrop to the intensive patterning throughout the Hawthorn Triangle.*'[ix]

[vii] Landscape Assessment prepared by Baxter Design, page 7, para. 45.
[viii] Landscape Assessment prepared by Baxter Design, page 7, para. 41.
[ix] Landscape Assessment prepared by Baxter Design, page 7, para. 40.

[115] The proposed development is adjacent to the Slope Hill ONF. Slope Hill ONF is a pastoral landscape[x] and the proposed development will maintain the values of the ONF. The proposal sits on land below the ONF and will not extend horizontally or vertically into the pastoral landscape of the ONF. 'The existing open views of Slope Hill will be retained'[xi].

[116] The Landscape Assessment concludes that "the proposed additional rural living development is considered to be appropriate in the context of the site and surrounding area… To that end, the above measures (including the proposed design controls, mitigation planting and retained open space) will ensure that any adverse effects on the open and natural character of Slope Hill, arising from this proposal, will be Very Low."

[117] The proposal will have less than minor adverse effects on the existing landscape quality and character of the LCU 11.

Design and Density of Development

[118] In terms of the density of development, 'the proposed lots are collectively similar in size to surrounding lots in the southern portion of LCU 11, which include existing groupings of dwellings of a similar density and nature. Given its lack of visibility, the proposal will be of a similar character to the surrounding settlement patterns, consisting of loose groupings of dwellings amongst established clusters of planting, with the ability to be absorbed in this rural-residential landscape. The proposal will not introduce densities characteristic of urban areas'[xii].

[119] The proposal has been located on this site to utilise the existing topography and to locate the future built form in the most discrete location of the site. The existing driveway has been utilised as much as possible.

[120] The application includes the proposed residential unit design, which is consistent with the shape, size, height and use for prescribed in the design controls and building platforms. The house will be constructed following the registration of the building platforms on the record of title. This provides more certainty around the location, nature and scale of the future development so that the exact effects can be established.

[121] In addition, as part of the proposal, design controls are also offered to set the character of the built form and designed landscape within the proposed Lot. The design controls will ensure a high-quality architectural form, with materials and colours that are sympathetic to the landscape, while ensuring future development is appropriately integrated into the site. The 4.5m maximum building height for the future dwelling and the prescribed building platform will ensure that the bulk of built form is appropriately managed. A curtilage area is proposed around the building platform, with all domestic activity to be contained within this area.

[122] The Landscape Assessment concludes that 'Overall, it is considered that the form and density of the proposed development is appropriate within the context of the surrounding rural amenity landscape'[xiii].

---

[x] Landscape Assessment prepared by Baxter Design, page 7, para. 41.

[xi] Landscape Assessment prepared by Baxter Design, page 8, para. 43.

[xii] Landscape Assessment prepared by Baxter Design, page 10, para. 59.

[xiii] Landscape Assessment prepared by Baxter Design, page 10, para. 63.

[123] Overall, it is considered that the proposal will have less than minor design and density of development effects.

Cumulative effects of subdivision and development on the landscape

[124] The proposal introduces one additional rural residential allotment and associated rural residential development.

[125] The site is located within a visually contained landscape and 'the nature and extent of the proposed development is considered to be appropriate with the existing landscape character identified above. The glimpse views of the future dwelling will not lead to further degradation or domestication of the landscape such that the existing development and land use may represent a threshold with respect to the vicinity's ability to absorb further change'[xiv].

[126] The nature and extent of established rural residential development within the vicinity is typified by mixed clusters of maturing exotic trees, areas of open pasture grass, driveways and farm fencing. Within this landscape, views of scattered farm buildings and residential dwellings with associated amenity planting are established and expected.

[127] The Landscape Assessment concludes that 'the proposed location of the RBP within the existing topography, along with the proposed mitigation planting, mitigates any potential cumulative effects of the built form, by significantly limiting the visual catchment'[xv].

[128] The proposal will have less than minor cumulative effects.

[129] The Landscape Assessment concludes that 'the proposed development is considered to be visually coherent with the existing landscape character and any potential visibility will have a Low adverse visual effect on the character and quality of the existing landscape'[xvi].

9.7 Water Tanks

[130] The water tanks will be fully buried (no resource consent required) or will be partially buried (consent required) so that they are no more than 1m higher than ground level and will be mass planted.

[131] The water tanks are necessary to provide firefighting water supply, potable water and irrigation water to the proposed residential unit and firefighting water supply to the existing dwelling (currently tanks are located within proposed Lot 2). The water tanks for Lot 1 will be located behind the existing residential unit. The water tanks for Lot 2 will be located near the proposed access and will be partially buried so that they do not have any adverse effects on landscape character. Mass planting will be undertaken to provide additional screening of the tanks for on-site amenity.

[132] The water tanks will have less than minor effects.

9.8 Subdivision

[133] The relevant matters of discretion for subdivision within the Wakatipu Basin Rural Amenity Zone are included in 27.5.9 and the relevant assessment matters for subdivision within the Wakatipu Basin Rural

[xiv] Landscape Assessment prepared by Baxter Design, page 10, para. 65.
[xv] Landscape Assessment prepared by Baxter Design, page 11, para. 66.
[xvi] Landscape Assessment prepared by Baxter Design, page 11, para. 70.

Amenity Zone are included under 27.9.3.3. These relate to Subdivision Design and Landscape; Access and Connectivity; Infrastructure and Services; Nature Conservation and Cultural values and Hazards.

Location of building platforms and vehicle access

[134] The proposal includes the identification of an 722m^2 building platform, which is separated into three distinct uses; residential unit (any garaging), swimming pool, and associated swimming pool building. In addition, building controls are proposed to manage the built form, colours and materials for the future development, ensuring it is consistent with existing surrounding development and to ensure that the development is appropriately integrated into the landscape.

[135] As outlined above, the proposed landscaping has been designed around the proposal to ensure the buildings and proposed vehicle access is integrated into the site in an appropriate manner. This includes the location of mounding and planting consistent with the existing topography of the site and planting within the adjacent area.

[136] The proposed lot boundaries are in relation to the existing residential unit and associated development. This will maintain the spaciousness of the site and facilitates the successful integration of the future development within the rear of the allotment.

[137] There is an existing consent notice registered on the record of title. This consent notice will not fall onto proposed Lot 2 as the proposal includes design controls that will apply to future development within the allotment.

[138] As discussed in Section 9.6 above, the proposal will maintain the values of the Adjacent Slope Hill ONF.

[139] The proposal will not affect any Escarpment, Ridgeline and River Cliff Features shown on the District Plan web mapping application.

[140] The proposal does not include any buildings within the road setback.

[141] The proposal complies with all setbacks.

[142] The proposed landscaping will be subject to a consent notice to ensure the structural planting is maintained in perpetuity.

[143] The proposal does not include the provision of any reserve of accessways for public use.

[144] The proposal includes design controls which will form part of the consent notice to ensure that the subdivision maintains the landscape character and visual amenity of LCU 11.

Access and Connectivity

[145] The proposal does not include any pedestrian, cycle, or bridlepaths on the site. The vehicle access has been extended from the existing access and has been designed in a manner which minimises any potential adverse effects on soil stability, landform patters and features and vegetation.

[146] Access to the Site is provided by an existing driveway from Lower Shotover Road. No new vehicle crossing is proposed. The access will be extended from below the existing dwelling to the proposed lot. A right of way will be provided over the part of the driveway within Lot 1.

[147] The access will not affect waterbodies, ecosystems, drainage patterns or ecological values.

[148] The proposal utilises the existing vehicle crossing and will maintain the lot frontage as currently exists.

Infrastructure and Services

[149] As outlined in the Infrastructure Report (Appendix 5), the proposal will be sufficiently serviced with water, wastewater, stormwater, electricity and telecommunications.

[150] There is no reticulated stormwater supply available at the site. It has been confirmed in the geotechnical investigations that an appropriate soakage rate can be achieved and a stormwater disposal system will designed at the time a residential unit is constructed on proposed Lot 2.

[151] There is sufficient land available for a wastewater disposal system to be provided within proposed Lot 2. This will be undertaken at the time a residential unit is constructed on the site.

[152] Firefighting water supply will be provided to the site at the time a residential unit is constructed. This will be required through a consent notice to be registered on the record of title for proposed Lot 2.

[153] A sufficient water supply can be provided to service the additional allotment. On-site stormwater and effluent disposal systems will be installed when a dwelling is constructed on the site. A review of the Site by Geosolve has confirmed that these services can be accommodated on the lot and systems will be designed to ensure that any adverse effects on natural water systems or ecological values of the Site and surrounding area will be less than minor.

Nature Conservation and Cultural Values

[154] The proposal includes structural tree planting which is consistent with the existing species of trees in the area.

[155] The proposal will not affect any waterbodies.

9.9 Geotechnical

[156] A Geotechnical Report has been prepared by Geosolve and this is included in Appendix 7. The report assesses the ground, groundwater conditions and surface water runoff on the site.

[157] The Geotech Report finds that the proposed development is appropriate, provided it is undertaken in accordance with the following recommendations:

- *The stratigraphy at the site comprises topsoil overlying alluvial sand, glacial till and schist bedrock. Schist bedrock was observed at the base of all test pits from depths of between 1.7 and 2.6 m;*
- *Perched groundwater seepages were encountered on top of the schist bedrock in TP 4, SP 2 and SP 3, at depths of between 0.8 and 2.6 m, and may be encountered during future earthworks;*
- *The proposed building platform is located in an existing shallow depression that will concentrate overland flow. Diversion channels will be required around the proposed building platform location;*
- *The construction of the building platform will need to consider groundwater seepage, and ensure suitable drainage is installed to maintain a stable and dry platform.*
- *A review of the proposed excavation batters indicates no significant issues however local retaining and construction review will be required to confirm the final engineering requirements;*
- *Foundation bearing will vary across the platform and will not meet Good Ground as outlined in NZS3604. Specific engineering design will therefore be required;*

- *Any fill that is utilised as bearing for foundations should be placed and compacted in accordance with NZS 4431:2022 and certification provided to that effect;*
- *The building platform is likely to transition from Class B (rock) in the southern part, to Class C (shallow soil) in the northern part. Confirmation can be provided once earthworks plans have been finalised.*
- *Inspections of the earthworks batters, foundation sub-grade and engineered fills should be completed during construction by a suitably qualified Geotechnical Engineer or Engineering Geologist to confirm geotechnical conditions are in accordance with the recommendations of this report;*
- *Site soakage testing was completed to assess suitability of onsite stormwater and wastewater soakage. Soakage test results are provided in Section 7 and Appendix C.*
- *The site is not well suited for soakage to ground and recommendations are provided in Section 7.* The ground conditions have a soakrate of 1mm per hour, initial calculations show a 4.5mx4.5mx2m soakpit can service a 500m² developed area. Alternatively, a dry pond could be utilised. A wastewater system will be designed at the time a dwelling is constructed within the RBP.

[158] The Applicant will undertake the proposed works in accordance with the recommendations contained in the Geotech Report.

9.10 Earthworks

[159] The relevant matters of discretion for earthworks are included in 25.7.1 and the relevant assessment matters for earthworks are included under 25.8.

[160] An *Environmental Management Plan* (EMP) is included in Appendix 9. The EMP sets out erosion and sediment controls that are to be in place for the duration of earthworks.

Soil erosion, generation and run-off of sediment

[161] The assessment matters are outlined in section 25.8.2 of Chapter 25.

[162] The applicant will ensure that sediment and erosion control measures are in place for the duration of the works in accordance with the EMP (Appendix 9) and all the earthworks will be undertaken in accordance with recognised engineering standards.

[163] The EMP sets out how clean water and dirty water will be diverted through the site to a sediment basin within the north-western corner of the site. The main silt fence will be installed around the earthworks extents/boundaries and ensure no sediment leaves the earthworks area. This will be located to the west of the site, preventing potential sediment to the driveway below and the existing dwelling. A second silt fence will be installed below the fill area, running parallel and offset 3m from the existing fence, on the northern property boundary, to prevent any sediment reaching the neighbours property, and this will extend into the hill to the east.

[164] Therefore, any effect on soil erosion, generation and surface water run-off are considered to be less than minor.

Landscape and visual amenity values

[165] The assessment matters are outlined in section 25.8.3 of Chapter 25.

[166] The existing environment is characterised by rural and rural living activities.

[167] The machinery operating will be a temporary activity associated with the construction of the access and level building platform. Any effect on landscape and visual amenity will be less than minor as discussed in Section 9.6 above.

[168] Given the above, it is considered that any landscape and visual amenity effects from earthworks on the area by the proposed works will be less than minor.

Effects on infrastructure, adjacent sites and public roads

[169] The assessment matters are outlined in section 25.8.4 of Chapter 25.

Infrastructure:

[170] The proposed earthworks will be contained within the subject site. The proposed works will not affect infrastructure or services provision located outside of the site.

Adjacent sites:

[171] The proposed works will be contained within the subject site. The earthworks have been designed and setback from neighbouring properties ensure there are no adverse effects on neighbouring properties.

Public roads:

[172] The proposed works will be managed to ensure the disruption to the use of the local network is kept to a minimum. A Traffic Management Plan will be in place to manage these movements.

[173] Any effects on traffic are anticipated to be less than minor and temporary in nature.

Land stability

[174] The assessment matters are outlined in section 25.8.5 of Chapter 25.

[175] The earthworks have been designed to ensure stability of the land during and following the works. The works will be undertaken in accordance with the recommendations in the Geotech Report.

[176] Therefore, any effect on land stability is considered to be less than minor.

Effects on water bodies, ecosystem services and biodiversity

[177] The assessment matters are outlined in section 25.8.6 of Chapter 25.

[178] As outlined in the EMP, works will be managed to ensure that no sediment is leaving the site, therefore there will be no adverse effects on water bodies, ecosystem services or biodiversity.

Cultural, heritage and archaeological sites

[179] The assessment matters are outlined in section 25.8.7 of Chapter 25.

[180] There are no heritage sites identified in proximity to the subject site.

Nuisance effects

[181] The assessment matters are outlined in section 25.8.8 of Chapter 25.

[182] During construction works, dust suppression will be used to ensure there is no nuisance from dust on persons at neighbouring properties, noting that the nearest neighbouring dwelling is located approximately 20m from the subject site. Any noise associated with the proposed works will be undertaken within the permitted maximum noise limits as required by the District Plan.

[183] Nuisance effects associated with the proposed works will be less than minor.

Natural Hazards

[184] The assessment matters are outlined in section 25.8.9 of Chapter 25.

[185] A Geotechnical Report has been prepared by Geosolve and is included in Appendix 7. There are no natural hazards identified on the site.

Functional aspects and positive effects

[186] The assessment matters are outlined in section 25.8.10 of Chapter 25.

[187] The earthworks are not for the purpose of a fire break.

[188] The earthworks are not for the purpose of a public recreation trail.

[189] The earthworks are not necessary for the remediation of contaminated land.

[190] The proposed earthworks are required to be facilitate the construction of an access to the site and provide a level building platform. Adverse effects are considered to be less than minor.

9.11 Summary of Effects

[191] The proposal includes the subdivision of the Site into two allotments and the establishment of a residential building platform.

[192] On balance, any effects on the environment are considered to be less than minor.

10.0 OBJECTIVES AND POLICY ASSESSMENT

The site has been zoned Rural General under the Operative District Plan (ODP), and Wakatipu Basin Rural Amenity Zone under the Proposed District Plan (PDP). All appeals on the relevant objectives and policies of the Proposed District Plan have been resolved and are beyond contention. Therefore, the ODP objectives and policies are no longer relevant and have no weight.

Considering this, only the PDP objectives and policies are considered below.

10.1 Proposed District Plan

[193] The relevant provisions are contained within Chapter 3 – Strategic Direction; Chapter 6 – Landscapes, Chapter 24 – Wakatipu Basin, Chapter 25 – Earthworks and Chapter 27 – Subdivision and Development.

[194] The Rural Chapter objectives and policies have not been assessed here as only a very small portion of the site is included in the Rural Zone, being that land above the water race which comprises approximately 880m^2.

Environment Court Interim Decision

[195] The Environment Court has released its Interim Decisions regarding the Proposed District Plan (PDP) provisions relating to the Wakatipu Basin[xvii].

[196] In the decisions, the Environment Court sets out final determinations in relation to the wording of various objectives and policies of Chapter 3 (Strategic Directions), Chapter 24 (Wakatipu Basin) and Chapter 27 (subdivision) of the PDP. There are some provisions for final determination through Topic 31.

Chapter 3 – Strategic Direction	
Policy 3.2.5.8	Within the Wakatipu Basin Rural Amenity Zone: a. the landscape character and visual amenity values of the Basin and of its Landscape Character Units, as identified in Schedule 24.8 are maintained or enhanced; and b. the landscape capacity of each Landscape Character Unit and of the Basin as a whole is not exceeded.
Schedule 24 refers to the Landscape Character Units within the Wakatipu Basin, and the site is located within Landscape Character Unit 11. The landscape character and visual amenity values of LCU 11 are described in Schedule 24 as: *Landform pattern and mature vegetation features. Careful integration of buildings with landform and planting. Throughout the more elevated western flanks, future built development should be sited to exploit the containment provided by existing localised benches, terraces or hollows and the screening influence of mature vegetation features. Throughout the low lying flat to gently sloping land along the western edge of the unit, future build development should be positioned to optimise the screening and filtering effect of mature roadside vegetation features. Set back of buildings from ridgeline crests to north and east of unit. Retention of existing open views to Slope Hill ONF.* The site is located within the western edge of the unit. The elevation of the site at the foot of the Slope Hill ONF and the design and location of the proposed residential building platform ensure that open views to Slope Hill ONF are retained. The capacity to absorb additional development is identified as being Low in Schedule 24.	

[xvii] Environment Court Decision [2022] NZEnvC 58 (First Interim Decision) and Environment Court Decision [2023] NZEnvC 41 (Second Interim Decision)

Policy 3.3.23	Ensure that the effect of cumulative subdivision and development for the purposes of Rural Living does not compromise: a. the protection of the landscape values of Outstanding Natural Features and Outstanding Natural Landscapes; and b. the maintenance of the landscape character and maintenance or enhancement of the visual amenity values of Rural Character Landscapes
Policy 3.3.23 is relevant because the Topic 30 amendments include an adjustment to the interpretive section (3.1B.5(d)) of the Strategic Chapter – by including the term 'Rural Living' within the Wakatipu Basin Rural Amenity Zone. The residential building platform is located adjacent to the Slope Hill ONF, with the ONF extending into the site by a maximum depth of 4-17m along the eastern boundary. The design of the subdivision does not introduce any new lot boundaries through that part of the site that is identified as ONF. The site is not adjacent to any Rural Character Landscape (RCL), therefore the proposal will maintain the values of the RCL.	
Chapter 6 – Landscape	
Objective 6.3.1	**Rural Landscape Categorisation**
Policy 6.3.1.1	Categorise the Rural Zoned landscapes in the District as: a. Outstanding Natural Feature (ONF); b. Outstanding Natural Landscape (ONL); c. Rural Character Landscape (RCL) (SO 3.2.5 and SP 3.3.28, 3.3.32).
The eastern extent of the site is zoned Rural and identified as Slope Hill ONF.	
Objective 6.3.3	**Managing Activities on Outstanding Natural Features and in Outstanding Natural Landscapes**
Policy 6.3.3.1	Recognise that subdivision and development is inappropriate on Outstanding Natural Features or in Outstanding Natural Landscapes unless: a. landscape values are protected; and b. in the case of any subdivision or development, all buildings and other structures and all changes to landform or other physical changes to the appearance of land will be reasonably difficult to see from beyond the boundary of the site in question.

	(SO 3.2.1, 3.2.1.7, 3.2.1.8, 3.2.5, 3.2.5.2, 3.2.5.3, 3.2.5.4 and SP 3.3.2, 3.3.23, 3.3.30, 3.3.31)
The proposal will maintain the values of Slope Hill ONF as no development is proposed on the ONF and the maximum height of the building platform ensure that development will not encroach onto the ONF. In addition, the building platform is set forward from the ONF by approximately 65m and there are no new boundaries being created through the ONF.	
Policy 6.3.3.5	Maintain the open landscape character of Outstanding Natural Features and Outstanding Natural Landscapes where it is open at present. (SO 3.2.1, 3.2.1.7, 3.2.1.8, 3.2.5, 3.2.5.2, 3.2.5.3, 3.2.5.4, and SP 3.3.2, 3.3.21, 3.3.23, 3.3.30, 3.3.31).
The part of the site that is identified as ONF is limited to the approximately 4-17m from the eastern site boundary. The subdivision does not introduce any new boundaries within the ONF and the building platform is set forward from the ONF by approximately 65m. The appearance, including the openness of the ONF will be maintained as a result of the proposal.	
Policy 6.3.1.4	Provide a separate regulatory regime for the Wakatipu Basin Rural Amenity Zone, within which the Outstanding Natural Feature, Outstanding Natural Landscape and Rural Character Landscape categories and the policies of this Chapter related to those categories do not apply.
Chapter 6 does not directly apply that part of the site that is zoned WBRAZ and that the relevant objectives and policies are provided for in Chapter 24.	
Chapter 24 – Wakatipu Basin	
Objective 24.2.1	**Landscape character and visual amenity values in the Wakatipu Basin Rural Amenity Zone are maintained or enhanced.**
This policy is similar to Policy 3.2.5.8, and the same conclusion applies – that the application is consistent with this policy.	
Policy 24.2.2.1X	Identify in Schedule 24.8 and on the planning maps the relative landscape capacity of areas outside of the Precinct to absorb subdivision and residential development according to the following rating scale: a. Very Low capacity; b. Low capacity; c. Moderate-Low capacity; d. Moderate capacity; e. Moderate-High capacity; and

	f. High Capacity.
The site is located within LCU 11 which is identified as having *low* capacity.	
Policy 24.2.1.1	~~Require an 80 hectare minimum site area be maintained within the Wakatipu Basin Rural Amenity Zone outside of the Precinct.~~ Subdivision or residential development in all areas outside of the Precinct that are identified in Schedule 24.8 to have Very Low, Low or Moderate-Low capacity must be of a scale, nature and design that: a. is not inconsistent with any of the policies that serve to assist to achieve objective 24.2.1; and b. ensures that the landscape character and visual amenity values identified for each relevant Landscape Character Unit in Schedule 24.8 and the landscape character of the Wakatipu Basin as a whole are maintained or enhanced by ensuring that landscape capacity is not exceeded.
The proposal is not inconsistent with any policies that serve to assist to achieve objective 24.2.1. The site is located within LCU 11 which is identified as having *low* capacity. The scale, nature and design of the proposed development will ensure that the landscape character and visual amenity values of LCU 11 (as identified under policy 3.2.5.8) will be maintained and the landscape character of the Whakatipu Basin as a whole will be maintained.	
Policy 24.2.1.1XX	Subdivision or residential development in all areas of the Wakatipu Basin Rural Amenity Zone outside of the Precinct that are identified in Schedule 24.8 to have Moderate capacity must be of a scale, nature and design that: a. is not inconsistent with any of the policies that serve to assist to achieve objective 24.2.1; and b. ensures that the landscape character and visual amenity values of each relevant LCU as identified in Schedule 24.8 is maintained or enhanced by ensuring that landscape capacity is not exceeded.
N/A – The site is located within LCU 11 which is identified as having *low* capacity.	
Policy 24.2.1.1A	Within those areas identified as having a landscape capacity rating of Moderate, do not allow any new residential development and subdivision for residential activity that is not located and designed so as to: a. avoid sprawl along roads;

	b. maintain a defensible edge to and not encroach into to any area identified as having Moderate-Low, Low or Very Low landscape capacity rating; c. minimise incremental changes to landform and vegetation patterns associated with mitigation such as screen planting and earthworks which adversely affect important views of the landform and vegetation character identified for the relevant Landscape Character Units in Schedule 24.8; and d. not degrade openness when viewed from public places if that is identified in Schedule 24.8 as an important part of the landscape character of the relevant area, including as a result of any planting or screening along roads or boundaries.
N/A – The site is located within LCU 11 which is identified as having *low* capacity.	
Policy 24.2.1.1B (Grey highlighted text is subject to final determination through Topic 31)	Ensure the following outcomes in the consideration of any proposal for subdivision or residential development: a. in the part of LCU 3 described in Schedule 24.8 as 'Fitzpatrick Road South': i. avoid all development on the elevated knoll landform near Fitzpatrick Road and on the south facing elevated slopes along the southern margins of the area (above the Shotover River cliffs); and ii. minimise the visibility of development in views from Tucker Beach, the Queenstown Trail and Fitzpatrick Road. b. in the part of LCU 11 described in Schedule 24.8 as 'East of Lower Shotover Road' minimise the visibility of development in views from Lower Shotover Road, the Queenstown Trail and Slopehill Road; c. in the part of LCU 15 described in Schedule 24.8 as 'Hogans Gully' minimise the visibility of development from McDonnell Road, Centennial Avenue, Hogans Gully Road and the Queenstown Trail, and from elevated public places outside the Zone including from the Crown Range Road and Zig Zag lookout; d. in the part of LCU 22 described in Schedule 24.8 as 'Hills': i. minimise the visibility of development from McDonnell Road, Centennial Avenue, Hogans Gully Road and the Queenstown Trail; and ii. ensure development is visually recessive from elevated public places outside the Zone including from the Crown Range Road and Zig Zag lookout.

	e. in the part of LCU 23 described in Schedule 24.8 as 'Millbrook Malaghans Road South': i. ensure no development is visible from Malaghans Road; ii. confine development to the flat land on the south side of the roche moutonée near Malaghans Road; iii. ensure all access is only from the Millbrook Resort Zone; and iv. visually integrate any development with the Millbrook Resort Zone. f. in the part of LCU 23 described in Schedule 24.8 as 'Millbrook Arrowtown Lake Hayes East': i. avoid built development on the low-lying land adjacent to Butel Road and Arrowtown Lake Hayes Road; ii. confine development to locations where existing landform or vegetation features serve to limit visibility and provide for visual integration with the Millbrook Resort Zone.
N/A - The site is not located within any of these identified sub-areas.	
Policy 24.2.1.2	Ensure subdivision and development is designed (including accessways, services, utilities and building platforms) to minimise inappropriate modification to the natural landform.
The proposed development has been located in the least visually prominent part of the site, and within a relatively flat area of the site. While earthworks are required, these have been designed to ensure they appear as natural as possible and follow the existing topography of the site. The existing access has been used to reduce the requirement for an additional access, ensuring that the majority of the site is retained in its current state.	
Policy 24.2.1.3	Ensure that subdivision and development maintains or enhances the landscape character and visual amenity values identified in Schedule 24.8 - Landscape Character Units.
The subject site is located within *LUC 11 – Slope Hill 'Foothills'* [xviii], which is identified as having variable sense of openness and enclosure due to the complex landform and vegetation patterns. As discussed in Section 9.6 above, the proposal will maintain the landscape character and visual amenity values of LCU 11.	

[xviii] A copy of LCU 11 is appended to this application

Policy 24.2.1.4	Maintain or enhance the landscape character and visual amenity values associated with the Rural Amenity Zone including the Precinct and surrounding landscape context by: a. controlling the colour, scale, form, coverage, location (including setbacks from boundaries) and height of buildings and associated infrastructure, vegetation and landscape elements
Design Controls have been offered as part of this application to manage the height, size, and roof form of future buildings. Light reflectance values for roofs and cladding are proposed.	
Policy 24.2.1.5	Require all buildings to be located and designed so that they do not compromise the landscape and amenity values and the natural character of Outstanding Natural Features and Outstanding Natural Landscapes that are either adjacent to the building or where the building is in the foreground of views from a public road or reserve of the Outstanding Natural Landscape or Outstanding Natural Feature.
The proposal is adjacent to Slope Hill ONF. The future built form is situated below the ONF and will not encroach into the ONF. As outlined in Section 9.6 above, the values of the ONF will be maintained.	
Policy 24.2.1.9	Control earthworks and vegetation clearance to minimise adverse effects on landscape character and visual amenity values.
The activity will require earthworks for the construction of the access to the additional lot and to form a level building platform. The earthworks have been designed to follow the existing topography of the site as much as possible and will have less than minor adverse effects on landscape character and visual amenity values.	
Policy 24.2.1.11	Provide for activities that maintain a sense of spaciousness in which buildings are subservient to natural landscape elements.
The proposed building platform is considered to maintain a sense of spaciousness as it is located behind the existing residential development, and retains the front of the site, largely undeveloped (except for the access).	
Policy 24.2.1.12	Manage lighting so that it does not cause adverse glare to other properties, roads or public places or degrade views of the night sky.
The proposal will comply with district plan lighting standards. Glare will be appropriately managed and avoided and there is a design control to manage lighting.	

Policy 24.2.1.15	Require buildings, or building platforms identified through subdivision, to maintain views from roads to Outstanding Natural Features and the surrounding mountain Outstanding Natural Landscape context, where such views exist; including by: a. implementing road setback standards; and b. ensuring that earthworks and mounding, and vegetation planting within any road setback, particularly where these are for building mitigation and/or privacy, do not detract from views to Outstanding Natural Features or Outstanding Natural Landscapes; while c. recognising that for some sites, compliance with a prescribed road setback standard is not practicable due to the site size and dimensions, or the application of other setback requirements to the site.
The proposal will maintain any existing views from roads to the Slope Hill ONF and will not interfere with views to any other ONL or ONF. The proposed building platform is not located near any road, with the platform being located within the rear portion of the site. As such, no earthworks or landscaping are proposed within the road setback.	
Objective 24.2.4	**Objective – Subdivision and development, and use of land, maintains or enhances water quality, ecological quality, and recreation values while ensuring the efficient provision of infrastructure.**
As noted earlier the proposal will be provided with all necessary infrastructure, while ensuring the proposal maintains water quality, ecology quality and recreation values. The proposal is consistent with this policy.	
Policy 24.2.4.4	Provide adequate firefighting water and emergency vehicle access to ensure an efficient and effective emergency response.
Firefighting water supply provision will be made at the time a dwelling is constructed within the building platform. The proposal is consistent with this policy.	
Policy 24.2.4.5	Ensure development has regard to servicing and infrastructure costs that are not met by the developer.
The costs of infrastructure and servicing will be met by the developer.	

Chapter 25 – Earthworks	
Objective 25.2.1	**Objective – Earthworks are undertaken in a manner that minimises adverse effects on the environment, including through mitigation or remediation, and protects people and communities.**
Construction mitigation measures will be in place for the duration of the earthworks and will ensure that the works are undertaken in a manner that minimises adverse effects on the environment and people, as well as maintains landscape and visual amenity values.	
Policy 25.2.1.1	Ensure earthworks minimise erosion, land instability, and sediment generation and offsite discharge during construction activities associated with subdivision and development.
Construction mitigation measures will be in place to ensure the works minimise erosion, land instability and sediment generation and off-site discharge as outlined in the EMP.	
Policy 25.2.1.2	Manage the adverse effects of earthworks to avoid inappropriate adverse effects and minimise other adverse effects, in a way that: a. Protects the values of Outstanding Natural Features and Landscapes; b. Maintains the amenity values of Rural Character Landscapes; c. Protects the values of Significant Natural Areas and the margins of lakes, rivers and wetlands; d. Minimises the exposure of aquifers, in particular the Wakatipu Basin, Hāwea Basin, Wānaka Basin and Cardrona alluvial ribbon aquifers; Note: These aquifers are identified in the Otago Regional Plan: Water for Otago 2004. e. Protects Māori cultural values, including wāhi tapu and wāhi tūpuna and other sites of significance to Māori; f. Protects the values of heritage sites, precincts and landscape overlays from inappropriate subdivision, use and development; and g. Maintains public access to and along lakes and rivers
The subject site is located within an ONF. As outlined in Section 10, the proposal will protect the values of the ONF. The subject sites are not located within a RCL. The subject site is located a sufficient distance to ensure that the proposed development protects the significant values of lakes, rivers and wetlands. The proposal protects values of heritage sites, precincts and landscape overlays, aquifers and maori cultural values.	

The proposal will not affect any public access.	
Policy 25.2.1.3	Avoid, where practicable, or remedy or mitigate adverse visual effects of earthworks on visually prominent slopes, natural landforms and ridgelines.
The subject site is not located on a visually prominent slope, natural landform or ridgeline. Therefore, the proposal will not have visual effects on any of the landforms.	
Policy 25.2.1.4	Manage the scale and extent of earthworks to maintain the amenity values and quality of rural and urban areas.
The earthworks have been designed to maintain amenity values and the quality of the rural area.	
Policy 25.2.1.5	Design earthworks to recognise the constraints and opportunities of the site and environment.
The earthworks have been designed taking into account the constraints and opportunities of the site and environment.	
Policy 25.2.1.6	Ensure that earthworks are designed and undertaken in a manner that does not adversely affect infrastructure, buildings and the stability of adjoining sites.
The proposed earthworks will be undertaken in a manner that ensures there are no adverse effects on the stability of adjoining sites.	
Policy 25.2.1.7	Encourage limiting the area and volume of earthworks being undertaken on a site at any one time to minimise adverse effects on water bodies and nuisance effects of adverse construction noise, vibration, odour, dust and traffic effects.
The earthworks will be managed to ensure that any adverse construction noise, vibration, odour, dust and traffic effects are avoided as outlined in Section 5 above and in the EMP.	
Policy 25.2.1.10	Ensure that earthworks that generate traffic movements maintain the safety of roads and accesses, and do not degrade the amenity and quality of surrounding land.
The traffic movements as a result of the earthworks will be managed to ensure that the safety of roads and accesses do not degrade the amenity and quality of the surrounding land.	

Policy 25.2.1.11	Ensure that earthworks minimise natural hazard risk to people, communities and property, in particular earthworks undertaken to facilitate land development or natural hazard mitigation.
The proposed earthworks have been designed to ensure natural risk to people, communities and property is minimised as discussed in section 5 above.	
Chapter 27 – Subdivision and Development	
Objective 27.2.1	Subdivision that will enable quality environments to ensure the District is a desirable place to live, visit, work and play.
Policy 27.2.1.1	Require subdivision infrastructure to be constructed and designed so that it is fit for purpose, while recognising opportunities for innovative design.
Policy 27.2.1.3	Require that allotments are a suitable size and shape, and are able to be serviced and developed for the anticipated land use under the applicable zone provisions.
Policy 27.2.1.4	Discourage non-compliance with minimum allotment sizes. However, where minimum allotment sizes are not achieved in urban areas, consideration will be given to whether any adverse effects are mitigated or compensated by providing: a. desirable urban design outcomes; b. greater efficiency in the development and use of the land resource; c. affordable or community housing.
The proposed allotments are of an appropriate size for rural living and can be appropriately serviced. The proposal allotments are smaller than the minimum 80 hectare lot size for the WBRAZ, however are of a suitable size and shape to support rural living, and can be serviced.	
Objective 27.2.5	Infrastructure and services are provided to new subdivisions and developments.
Policy 27.2.5.6	All new lots shall be provided with connections to a reticulated water supply, stormwater disposal and/or sewage treatment and disposal system, where such systems are available or should be provided for.
Policy 27.2.5.7	Ensure water supplies are of a sufficient capacity, including fire fighting requirements, and of a potable standard, for the anticipated land uses on each lot or development.

Policy 27.2.5.8	Encourage the efficient and sustainable use of potable water by acknowledging that the Council's reticulated potable water supply may be restricted to provide primarily for households' living and sanitation needs and that water supply for activities such as irrigation and gardening may be expected to be obtained from other sources.
Policy 27.2.5.9	Encourage initiatives to reduce water demand and water use, such as roof rain water capture and use and greywater recycling.
Policy 27.2.5.10	Ensure appropriate water supply, design and installation by having regard to: a. the availability, quantity, quality and security of the supply of water to the lots being created; b. water supplies for fire fighting purposes; c. the standard of water supply systems installed in subdivisions, and the adequacy of existing supply systems outside the subdivision; d. any initiatives proposed to reduce water demand and water use.
Policy 27.2.5.11	Ensure appropriate stormwater design and management by having regard to: a. any viable alternative designs for stormwater management that minimise run-off and recognises stormwater as a resource through re-use in open space and landscape areas; b. the capacity of existing and proposed stormwater systems; c. the method, design and construction of the stormwater collection, reticulation and disposal systems, including connections to public reticulated stormwater systems; d. the location, scale and construction of stormwater infrastructure; e. the effectiveness of any methods proposed for the collection, reticulation and disposal of stormwater run-off, including opportunities to maintain and enhance water quality through the control of water-borne contaminants, litter and sediments, and the control of peak flow.
Policy 27.2.5.12	Encourage subdivision design that includes the joint use of stormwater and flood management networks with open spaces and pedestrian/cycling transport corridors and recreational opportunities where these opportunities arise and will maintain the natural character and ecological values of wetlands and waterways.
Policy 27.2.5.13	Treat and dispose of sewage in a manner that: a. maintain public health; b. avoids adverse effects on the environment in the first instance; and c. where adverse effects on the environment cannot be reasonably avoided, mitigates those effects to the extent practicable.
Policy 27.2.5.14	Ensure appropriate sewage treatment and disposal by having regard to: a. the method of sewage treatment and disposal;

	b. the capacity of, and impacts on, the existing reticulated sewage treatment and disposal system; c. the location, capacity, construction and environmental effects of the proposed sewage treatment and disposal system.
Policy 27.2.5.15	Ensure that the design and provision of any necessary infrastructure at the time of subdivision takes into account the requirements of future development on land in the vicinity.
Policy 27.2.5.16	Ensure adequate provision is made for the supply and installation of reticulated energy, including street lighting, and communication facilities for the anticipated land uses while: a. providing flexibility to cater for advances in telecommunication and computer media technology, particularly in remote locations; b. ensure the method of reticulation is appropriate for the visual amenity and landscape values of the area by generally requiring services are underground, and in the context of rural environments where this may not be practicable, infrastructure is sited in a manner that minimises visual effects on the receiving environment; c. generally require connections to electricity supply and telecommunications systems to the boundary of the net area of the lot, other than lots for access, roads, utilities and reserves.
As outlined in Section 10, the proposal can be appropriately serviced and accessed. Water will be supplied from the QLDC reticulated water supply. The Geotech Report outlines three options for stormwater management. At time a dwelling is constructed on the site, a wastewater disposal system will be designed for the site. The Geotech Report has confirmed that on site disposal for wastewater is feasible. I consider the proposal is consistent with objective 27.2.5 and associated policies 27.2.5.6-27.2.5.16.	
Policy 27.2.5.17	Ensure that services, shared access and public access is identified and managed by the appropriate easement provisions.
Policy 27.2.5.18	Ensure that easements are of an appropriate size, location and length for the intended use of both the land and easement.
Policies 27.2.5.17 and 27.2.5.18 seek services and access are provided for through the provision of appropriate easements. The proposal includes easements for Right of Way and Right to Convey Water. Any additional easements that may be required will be identified as the 224(c) stage. The proposal is consistent with these policies.	

[197] In summary, the proposal would be consistent, and not contrary to the objectives and policies in the Proposed District Plan.

11.0 S104D GATEWAY TEST

Despite any decision made for the purpose of notification in relation to adverse effects, a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either

- *(a) The adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii) applies) will be minor; or*
- *(b) The application is for an activity that will not be contrary to the objectives and policies of –*
  - *(i) The relevant plan, if there is a plan but no proposes plan in respect of the activity; or*
  - *(ii) The relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or*
  - *(iii) Both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.*

With respect to the assessment in section 5, the first gateway test for a non-complying activity required under section 104D(1)(a) has been met in that the application will not have an adverse effect on the environment which is more than minor.

With respect to the second gateway test under section 104D(1)(b), the application is, overall, not contrary to the relevant policies and objectives of the Operative District Plan or the Proposed District Plan. Accordingly, as the application has passed both of the gateway tests in s104D, consent can be granted for this non-complying activity.

12.0 THE MATTERS IN PART 2 OF THE RESOURCE MANAGEMENT ACT 1991

[198] In accordance with Clause 2(1)(f) of Schedule 4, an assessment of the activity against the matters set out in Part 2 is required for all resource consent applications. The relevant matters of Part 2 have been reproduced and assessed below:

5. Purpose

[1] The purpose of this Act is to promote the sustainable management of natural and physical resources.

[2] In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while –

[3] sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

[4] safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

[5] avoiding, remedying, or mitigating any adverse effects of activities on the environment.

[199] The proposal will provide for the social and economic well-being of the applicant and future owners of the allotment by providing a subdivision that will be appropriate within the context of the site.

[200] The proposed landscaping will assist in mitigating adverse effects of the proposal on the environment.

6. Matters of natural importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

[201] The subject site is located adjacent to an Outstanding Natural Feature. As discussed in Section 9 above, due to the location and topography of the site and the ONF, the proposal will ensure the protection of the ONF.

7. Other matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to –

c) the maintenance and enhancement of amenity values:

f) maintenance and enhancement of the quality of the environment.

[202] Section 7(c) is the most relevant section within the Part 2 considerations, and I consider that the proposal is consistent with Part 2 of the Resource Management Act as the proposal will maintain and not detract from the amenity values of the area, through the proposed subdivision layout, design controls and proposed landscaping.

[203] The proposed development includes building platforms designed and located to provide for future development in a manner that ensures the landscape character of the site is maintained. The visibility of the proposed development is at large viewing distances and will be seen in the context of the existing landscape. The proposal landscaping will ensure the integration of the development into the site through the continuation of planting patterns.

[204] Therefore, the development avoids adverse effects on the environment. Overall, the proposal is consistent with Part 2 of the Resource Management Act.

13.0 CONCLUSION

[205] The Applicant seeks resource consent to undertake a two-lot subdivision, to establish a residential building platform, and to construct a residential unit and accessory buildings at 160 Lower Shotover Road, Speargrass Flat. The application includes an associated curtilage area around the residential building platforms, earthworks, landscaping and water tanks.

[206] Overall, it is considered that the proposal will result in a less than minor effect upon the adjoining properties and a minor effect on the environment. The proposal is consistent with the strategic direction provided for in the Proposed District Plan.

[207] The Applicant seeks that the application be publicly notified.

LAND COVENANT

PARTIES

1. Reinhard Guenther **PLITSCH** and Tanya Eleonore **PLITSCH**

2. **QUEENSTOWN LAKES DISTRICT COUNCIL**

BACKGROUND

A. The Owner is the registered proprietor of the Land and has obtained the Consent to establish a building platform on the Land.

B. The Consent was granted subject to the Owner covenanting to perform certain obligations (described as the Covenants), such Covenants to be in favour of the Council.

C. The Owner intends that this Land Covenant shall be and remain registered against the title to the Land to give effect to the Covenants so that owners or occupiers for the time being of the Lots shall be bound by the provisions of this Land Covenant.

1. INTERPRETATION

In this Land Covenant unless the context otherwise requires:

"Consent"	means the land use consent granted by the Environment Court under ENVC0151/04 by Consent Order.
"Council"	means the Queenstown Lakes District Council (in its capacity as local authority).
"Land"	means the land which comprises approximately 4.1435 hectares more or less contained in Lot 4 Deposited Plan 22781 Certificate of Title OT14D/626.
"Land Covenant"	means this instrument.
"Owner"	means (initially) Reinhard Guenther Plitsch and Tanya Eleonore Plitsch and then ~~its~~ their successors in title who are the registered proprietors of the Land from time to time.

COVENANTS

1. This Land Covenant is entered into pursuant to Sections 108(2)(d) and 109 of the Resource Management Act 1991 and pursuant to condition 16 of the Consent.

2. The Owner covenants with the Council as follows:

   a. That any residential dwelling (including accessory buildings) must be located within the building platform identified as "A" on DP 373825 ("Building Platform").

b. The dwelling and external appearance of any building within the Building Platform shall incorporate and adhere to the following design controls:

i. Any dwelling or accessory building erected within the Building Platform shall have a maximum elevation height of 7 metres, and shall be constructed so as to achieve a height no greater than 410 metres above sea level (Otago Datum). Basements shall be permitted provided that they are wholly located below ground.

ii. Roof pitch shall be between 22.5 and 50 degrees. Flat roofs are only permitted as connections between structures and shall not exceed 20% of the total roof area.

iii. Roof claddings shall be limited to painted steel (of a dark colour), shingles, slate or other similar materials. The primary objective shall be to use a roofing material with a reflectivity level of 35% or less, and shall be in a range of natural colours of browns, greens and greys. Zincalume, unpainted galvanised steel and similar products shall not be permitted.

iv. Wall material shall be limited to timber, plaster or stone. Wall colours shall be natural and recessive, in a range of greens, browns or greys. If stone is to be used, it shall be local schist stone.

v. Joinery, flashings, guttering and details shall be painted a consistent and/or complementary colour to the principal colour of the dwelling.

vi. Any exterior lighting shall be designed and directed so that light spill is directed within the boundaries of the Land. No direct light spill from such exterior lighting shall be permitted to fall on sites adjoining the Land.

3. This Land Covenant binds the Owner's successors in title so that contemporaneously with the acquisition of any interest in the Land all such successors in title become bound to comply with this Land Covenant.

SIGNED by Reinhard Guenther **PLITSCH**)
and Tanya Eleonore **PLITSCH**)

in the presence of:

Witness

Signature: .....

Full name: .....**FRANK NATHAN LIBMAN**
285 Whitehorse Road, Balwyn Vic. 3103

Address: .....An Australian Legal Practitioner
within the meaning of the Legal

Occupation: .....Profession Act 2004

SIGNED for QUEENSTOWN LAKES DISTRICT COUNCIL)

in the presence of:

Witness

Signature: .....

Full name: Catherine Stewart

Address: 53B Hallenstein Street

Occupation: PA to Mayor & CEO.

Date: 20/7/06

Certified correct for the purposes of the Land Transfer Act 1952

Solicitor for the registered proprietor

Kerry Amanda O'Donnell
Solicitor
Queenstown

769961.5

769961.5 Y

DEED OF COVENANT

WATER SUPPLY SCHEME

DATED 12 MAY 1990

PARTIES

I. BRYAN BRUCE COLLIE of Queenstown, Chartered Accountant and JAMES BOULT of Queenstown, Company Director ("the Covenantor")

II. JEFFREY ROBERT WILLIAMS of Wellington, Businessman and NICOLA WENDY MARTIN of Wellington, Garment Manufacturer ("the Covenantee")

III. TREVOR MORTON STALKER of Dunedin, Company Director and VALMA BRENNON STALKER, his wife ("the Additional Covenantee")

INTERPRETATION

In this Deed the term "the Covenantor" includes all persons executing this Deed as Covenantor and jointly and severally if more than one and their executors, administrators, assigns and successors in title the successive owners of each piece of land described in Schedules A and B their tenants, licensees and invitees.

In this Deed the term "the Covenantee" includes all persons executing this Deed as Covenantee and jointly and severally if more than one and their executors, administrators, assigns and successors in title the successive owners of each piece of land described in Schedule C their tenants, licensees and invitees.

In this Deed the term "the Additional Covenantee" includes all persons executing this Deed as Additional Covenantee and jointly and severally if more than one and their executors, administrators, assigns and successors in title the successive owners of each piece of land described in Schedule D their tenants, licensees and invitees.

BACKGROUND

A. The Covenantor is the registered proprietor of the lands described in Schedule A.

B. As a result of a number of plans of subdivision in the course of preparation as at the date of this Deed the lands described in Schedule A are intended to be subdivided into those pieces of land described as P, Q, R, T, U and V in Schedule B.

C. It is intended that the separate pieces of land described as P, Q, R, T, U and V in Schedule B will in the future be owned by separate and different registered proprietors.

D. The Covenantee is the registered proprietor of the land described in Schedule C.

E. The Covenantor has installed a water supply scheme for the benefit of the lands described in Schedules A, B and C. The water supply scheme comprises a bore, a pump, a storage tank and a water supply network comprising pipelines and water supply easements installed and created or to be installed and created as more particularly detailed below.

F. The Covenantor and Covenantee have agreed to enter into this Deed of Covenant to create and record the rights and obligations of the registered proprietors of the lands intended to be served by and to obtain the benefit of the water supply scheme.

G. The Additional Covenantee is the registered proprietor of the land described in Schedule D.

H. It is intended that the Additional Covenantee be connected to and have the benefit of the water supply scheme. The Additional Covenantee has agreed to execute this Deed of Covenant and be bound by the rights and obligations set out herein.

I. It is intended that the water supply scheme be for the benefit of all of the lands described in Schedules A, B, C and D on the terms and conditions detailed below and that the covenants contained herein be mutually enforceable inter se by the registered proprietors of the lands described in Schedules A, B, C and D from time to time.

THIS DEED WITNESSETH:

1. The Covenantor HEREBY COVENANTS with the Covenantee to henceforth and for all time comply with the obligations of the Covenantor set out in this Deed and to henceforth and for all time permit the exercise of the rights of the Covenantee set out in this Deed AND HEREBY GRANTS to the Covenantee the right to require the Covenantor to do any thing necessary to carry out the Covenantor's obligations as set out in this Deed and to refrain from doing any thing which may prevent the Covenantee from exercising the Covenantee's rights as set out in this Deed.

2. The Covenantee HEREBY COVENANTS with the Covenantor to henceforth and for all time comply with the obligations of the Covenantee set out in this Deed and to henceforth and for all time permit the exercise of the rights of the Covenantor set out in this Deed AND HEREBY GRANTS to the Covenantor the right to require the Covenantee to do any thing necessary to carry out the Covenantee's obligations as set out in this Deed and to refrain from doing any thing which may prevent the Covenantor from exercising the Covenantor's rights as set out in this Deed.

3. The Covenantor HEREBY COVENANTS with the Additional Covenantee to henceforth and for all time comply with the obligations of the Covenantor set out in this Deed and to henceforth and for all time permit the exercise of the rights of the Additional Covenantee set out in this Deed AND HEREBY GRANTS to the Additional Covenantee the right to require the Covenantor to do any thing necessary to carry out the Covenantor's obligations as set out in this Deed and to refrain from doing any thing which may prevent the Additional Covenantee from exercising the Additional Covenantee's rights as set out in this Deed.

4. The Additional Covenantee HEREBY COVENANTS with the Covenantor to henceforth and for all time comply with the obligations of the Additional Covenantee set out in this Deed and to henceforth and for all time to permit the exercise of the rights of the Covenantor set out in this Deed AND HEREBY GRANTS to the Covenantor the right to require the Additional Covenantee to do any thing necessary to carry out the Additional Covenantee's obligations as set out in this Deed and to refrain from doing any thing which may prevent the Covenantor from exercising the Covenantor's rights as set out in this Deed.

5. The Covenantee HEREBY COVENANTS with the Additional Covenantee to henceforth and for all time comply with the obligations of the Covenantee set out in this Deed and to henceforth and for all time permit the exercise of the rights of the Additional Covenantee set out in this Deed AND HEREBY GRANTS to the Additional Covenantee the right to require the Covenantee to do any thing necessary to carry out the Covenantee's obligations as set out in this Deed and to refrain from doing any thing which may prevent the Additional Covenantee from exercising the Additional Covenantee's rights as set out in this Deed.

6. The Additional Covenantee HEREBY COVENANTS with the Covenantee to henceforth and for all time comply with the obligations of the Additional Covenantee set out in this Deed and to henceforth and for all time permit the exercise of the rights of the Covenantee set out

JRW NJM BJC

in this Deed AND HEREBY GRANTS to the Covenantee the right to require the Additional Covenantee to do any thing necessary to carry out the Additional Covenantee's obligations as set out in this Deed and to refrain from doing any thing which may prevent the Covenantee from exercising the Covenantee's rights as set out in this Deed.

INSTALLATION OF WATER SUPPLY SCHEME

7. The Covenantor has installed a water supply scheme which comprises the following:

   a. An artesian bore situated at the southern end of the water supply easement marked N on the attached plan.

   b. A Grundfos SP3A-36-3 SHP 3 phase pump situated at the site of the said artesian bore.

   c. A 4,500 litre storage tank shown as part of water supply easement A on the attached plan (to which water is to be pumped from the artesian bore).

   d. A water supply pipeline system along the water supply easements marked N, A, B, C, D, E, F, G, H, I, J, L, M and O on the attached plan.

8. The water scheme shall serve the eight separate pieces of land detailed in Schedule E.

9. The registered proprietor of each piece of land detailed in Schedule E shall only be entitled to draw water for that purpose or purposes described in Schedule E as pertaining to that piece of land.

10. The registered proprietor of each piece of land detailed in Schedule E shall only be entitled to draw water from the water supply scheme in an amount not exceeding the maximum supply described in Schedule E as pertaining to that piece of land.

11. The Covenantor as registered proprietor of the land described as V in Schedule B acknowledges that it is the Covenantor's responsibility to install necessary pipelines and water storage tanks to put in place the domestic and stock water supplies described in Schedule E as pertaining to the land described as V in Schedule B.

RIGHTS OF THE PARTIES

12. The registered proprietors of the lands subject to this Deed shall have the following rights:

a. The right to draw water from the said artesian bore as described and as limited pursuant to clauses 9 and 10 and Schedule E.

b. The right to service and maintain the said artesian bore and the pump or pump house or pump station situated at the site of the artesian bore for the purpose of pumping water to the water storage tank described in water supply easement A on the attached plan.

c. The full free uninterrupted and unrestricted right, liberty and privilege for themselves, their tenants, servants, agents, and workmen, with any tools, implements, machinery, vehicles, or equipment of whatsoever nature necessary for the purpose, to enter upon the Covenantor's land and to remain there for any reasonable time for the purpose of maintaining, servicing and/or renewing the artesian bore or any part thereof and the pump/pump house/pump station or any part thereof and of opening up the soil of that land to such extent as may be necessary and reasonable in that regard, subject to the condition that as little disturbance as possible is caused to the surface of the land of the Covenantor and that the surface is restored as nearly as possible to its original condition and any other damage done by reason of the aforesaid operations is repaired.

13. The parties acknowledge that such easements to convey water plus ancillary pipeline installation and maintenance rights as are necessary for the purposes of the water supply scheme have been created or shall be created pursuant to Easement Certificates and Memoranda of Transfer separate and distinct from this Deed.

OBLIGATIONS OF THE PARTIES

14. The registered proprietors of the lands subject to this Deed shall:

a. Restrict the amount of water drawn from the water supply scheme for the benefit of each separate piece of land detailed in Schedule E within the maximum permitted water supply limits detailed in Clause 10 and Schedule E, and for that purpose shall

install and/or maintain the necessary restrictor valves and related equipment necessary to ensure that such restrictions are maintained at all times.

b. Service and maintain the water supply scheme in accordance with the provisions of clause 15.

c. Pay upon demand a proportionate share of the costs of servicing, maintaining and operating the water supply scheme in accordance with the provisions of clauses 15, 16 and 19.

MAINTENANCE OF WATER SUPPLY SCHEME

15. Subject to clauses 17 and 18 the registered proprietor of each piece of land detailed in Schedule E shall be responsible for maintaining and servicing and for paying the costs of maintaining and servicing that part of the water supply scheme which serves the land owned by that registered proprietor. If part of the water supply scheme serves more than one piece of land then the registered proprietors of those pieces of land served by that part of the water supply scheme shall bear service and maintenance costs equally. For clarification purposes the details of those registered proprietors responsible for servicing and maintaining different parts of the water supply scheme are set out in Schedule F. For the purposes of this clause joint registered proprietors of one piece of land shall be deemed to be one registered proprietor.

OPERATING COSTS OF WATER SUPPLY SCHEME

16. Subject to clauses 17 and 18 the cost of electricity or any other means used to operate or fuel the operation of the pump or other mechanism serving the water supply scheme plus any other operating costs shall be divided equally amongst the registered proprietors of the pieces of land detailed in Schedule E. For the purposes of this clause joint registered proprietors of one piece of land shall be deemed to be one registered proprietor. ie: An equal share of the operating costs of the water supply scheme shall be charged to each piece of land detailed in Schedule E.

NO LIABILITY UNTIL CONNECTED

17. A registered proprietor shall only be liable pursuant to this Deed for any liabilities and/or costs arising during such period as the land owned by that registered proprietor is connected to and using the water

supply scheme. For the purposes of this clause if a residence or other building is erected on any piece of land detailed in Schedule E and such residence or other building is connected to the water supply scheme then that piece of land shall be deemed to be connected to and using the water supply scheme.

STOCK WATER SUPPLY USER INCURS ADDITIONAL SHARE OF COSTS

18. The Covenantor as registered proprietor of the land described V in Schedule B shall, due to having a domestic water supply and a stock water supply, pay a proportionate share of servicing, maintenance and running costs (pursuant to clauses 15 and 16) 100% greater than the proportionate share paid by the registered proprietor of any other piece of land detailed in Schedule E PROVIDED THAT this clause shall only apply when the said stock water supply is connected to the water supply scheme and is in use.

COVENANTOR RESPONSIBLE FOR OPERATION

19. a. In order to ensure the efficient and orderly operation and maintenance of the water supply scheme the Covenantor as registered proprietor of the land described as V in Schedule B shall:

i. carry out all necessary maintenance of and repairs to the artesian bore and the pump/pump house/pump station and be responsible for ensuring the continual proper operation of the water supply scheme from the artesian bore as far as and including the storage tank shown as part of water supply easement A on the attached plan;

ii. arrange for receipt and payment of all electricity charges and other payments necessary to ensure the continual pumping of water from the artesian bore to the said storage tank;

iii. maintain a separate bank account for all receipts and payments relating to the operation and maintenance of the water supply scheme;

iv. regularly invoice all registered proprietors liable pursuant to clauses 15 and 16 to contribute to the operating and maintenance costs of the water supply scheme for their proportionate share of such costs incurred.

b. For the purposes of this clause the Covenantor may require all those registered proprietors referred to in clauses 15 and 16 to pay by bank automatic payment or otherwise into the said bank account a regular payment on account of maintenance and operating costs to be incurred by those proprietors pursuant to clauses 15 and 16, all such moneys to be applied in payment of such costs. Any such requirement made pursuant to this subclause shall be an obligation of such registered proprietors for the purposes of this Deed.

c. The Covenantor may charge a fee for carrying out the Covenantor's duties pursuant to this clause, such fee to be based upon time spent at a reasonable hourly rate and to be charged to reimburse the Covenantor for such time spent. Such fee shall be deemed to be an operating cost pursuant to clause 16.

DEFAULT

20. No power is implied in respect of any covenant contained herein for any party to determine the covenant for any breach of any provision in this Deed (whether expressed or implied) or for any other cause, it being the intention of the parties that the provisions of this Deed of Covenant shall subsist for all time until surrendered.

21. If any party ("the defaulting party") neglects or refuses to perform or join with any other party in performing any obligation pursuant to this Deed the following provisions shall apply:

a. Any other party ("the affected party") may serve upon the defaulting party a written notice ("default notice") requiring the defaulting party to perform or to join in performing such obligation and stating that, after the expiry of not less than seven days from service of the default notice, the provisions of this default clause shall apply.

b. If at the expiry of the period stated in the default notice the defaulting party still neglects or refuses to perform or join in performing the obligation the affected party may do any or all of the following:

i. perform such obligation;

ii. take such reasonable steps as may be necessary to disconnect the land owned by the defaulting party from the water supply scheme;

iii. enter onto the land owned by the defaulting party or any other land subject to this Deed and carry out any work required to perform such obligation and/or disconnect the land owned by the defaulting party from the water supply scheme.

c. The defaulting party shall be liable to pay to the affected party:

i. all costs of and incidental to the preparation and service of the default notice;

ii. all costs of and incidental to any such disconnection;

iii. the proportion of all costs incurred in performing such obligation as is properly payable by the defaulting party pursuant to this Deed.

d. The affected party may recover from the defaulting party as a liquidated debt any moneys payable pursuant to this clause.

e. If the water supply to the land owned by the defaulting party is disconnected pursuant to this clause the defaulting party may not reconnect or have reconnected such water supply until the defaulting party has performed all outstanding obligations and has paid in full any moneys payable pursuant to this clause.

NO INTERFERENCE

22. No party shall do any act which impedes, interferes with or restricts the rights of any other party or other authorised persons in relation to this Deed.

THIS DEED SHALL ENURE FOR ALL TIME

23. The covenants, rights and obligations contained in this Deed shall enure for all time for the benefit and burden as appropriate of all the lands owned by the parties to this Deed and every part thereof.

SALE BY COVENANTOR

24. The Covenantor reserves the right to sell, lease or otherwise dispose of any part of the lands described in Schedule A either subject to or free from all or any of the stipulations, provisions, obligations or restrictions imposed herein PROVIDED THAT any piece of land thus sold shall not be entitled to connect to or use the water supply scheme unless the purchaser of same shall have first entered into a Deed of Covenant pursuant to clause 25.

25. The Covenantor reserves the right to sell, lease or otherwise dispose of any part of the lands described in Schedule A and to permit such land to be connected to and be served by the water supply scheme PROVIDED THAT:

a. Any purchaser of such land shall first enter into a Deed of Covenant (which shall be registered against such land) binding that purchaser to the rights and obligations of this Deed as if that purchaser were a party to this Deed in respect of that land.

b. The effect of such extra user served by the water supply scheme shall not reduce the water supply to any of the separate pieces of land detailed in Schedule E below a minimum amount of ~~xxxx~~ 1000 litres per day in respect of each of the first seven pieces of land detailed in Schedule E and ~~xxx~~ 2000 litres per day in respect of the eighth piece of land detailed in Schedule E.

LIABILITY ONLY INCURRED BY REGISTERED PROPRIETOR

26. a. A registered proprietor shall only be liable pursuant to this Deed for liabilities and/or costs arising pursuant to this Deed prior to the date that such registered proprietor ceases to be registered as proprietor of the land in respect of which the liabilities and/or costs arise.

b. The registration of a transfer of a registered proprietor's interest in any land subject to this Deed shall not operate to relieve the transferor from any liability arising pursuant to this Deed prior to the date of registration of such transfer.

LIMITATION OF LIABILITY OF TRUSTEES

27. a. Notwithstanding any provision contained in this Deed or otherwise implied by law the covenantors Bryan Bruce Collie and James Boult enter into and execute this Deed of Covenant solely as Trustees (and not further in their personal capacity or otherwise) and the liability and obligation of the said Bryan Bruce Collie and James Boult hereunder whether for payment of monies or performance or observance of any covenant herein contained or implied shall at all times be construed only as a liability or obligation to pay the said monies or perform and observe the said covenants out of and so far as the Trust assets held by the covenantors and such other trustee or trustees pursuant to a Deed of Trust dated 9 June, 1966 known as the Trevor Stalker Family Trust will extend.

b. The limitation of trustee liability contained in this clause shall extend and apply to any future additional or replacement trustee of the said Trevor Stalker Family Trust.

JRW
NWM
BBC

SCHEDULE A

LAND OWNED BY COVENANTOR

a. 24.4405 hectares being Sections 29 and 30 and part Section 31 Block III Shotover District.

b. 26.2535 hectares being Sections 22, 23, 24, 25, 26, 27 and 28 Block III Shotover District.

c. 9.1737 hectares being Sections 20, 21 and 144 Block III Shotover District.

d. 5.7566 hectares being Sections 11 and 145 Block III Shotover District.

e. 7.294 hectares being part Sections 9 and 10 Block III Shotover District.

f. 20.6971 hectares being Sections 4, 5, 6, 7 and 8 Block III Shotover District.

g. 14.0959 hectares being Sections 38, 39, 40 and part Sections 34, 35, 36 and 37 Block III Shotover District.

SCHEDULE B

PROPOSED SUBDIVISIONS OF LAND OWNED BY COVENANTOR

Land	Legal Description	Description on Attached Plan
P	Lot 6 DP 21444 being part Sections 4 and 5 Block III	Lot 6 DP 21444
Q	Lot 4 DP 21444 being part Sections 6 and 7 Block III	Lot 4 DP 21444
R	Lot 1 DP 21410 being part Sections 9 and 10 Block III	Lot 1 DP 21410
T	Part Lot 2 DP 21410 being part Sections 10 and 11 and Section 145 Block III	That part of Lot 2 DP 21410 west of dotted line marked "S"

U	Lot 5 DP 21440 being part Sections 23, 24 and 144 Block III	Lot 5 DP 21440
V	Part Sections 4, 5, 6, 7, Section 8, part Sections 9, 10, 11, Sections 20, 21, 22, part Sections 144, 23, 24, Sections 25, 26, 27, 28, 29, 30 part Sections 31, 34, 35, 36, 37, Sections 38, 39 and 40 Block III	

SCHEDULE C

13A/1138

LAND OWNED BY COVENANTEE

7997 m^2 being Lot 1 Deposited Plan 21360 and being part Sections 9 and 10 Block III Shotover District being that area of land marked Lot 1 DP 21360 on the attached plan.

SCHEDULE D

LAND OWNED BY ADDITIONAL COVENANTEE

9611 m^2 being Lot 1 Deposited PLan 20162 and being part Section 31 Block III Shotover District being that area of land marked Lot 1 DP 20162 on the attached plan.

12A/124

SCHEDULE E

SEPARATE AND PROPOSED SEPARATE PIECES OF LAND - PURPOSE OF WATER SUPPLY - MAXIMUM WATER SUPPLY

	Land	Purpose of Water Supply	Maximum Permitted Water Supply in Litres per hour
1.	Lot 6 DP 21444	Domestic water supply	425 litres/hour
2.	Lot 4 DP 21444	Domestic water supply	425 litres/hour
3.	Lot 1 DP 21410	Domestic water supply	425 litres/hour
4.	Lot 1 DP 21360 (Covenantee's land)	Domestic water supply	425 litres/hour
5.	That part of Lot 2 DP 21410 west of dotted line "S" on attached plan	Domestic water supply	425 litres/hour
6.	Lot 5 DP 21440	Domestic water supply	425 litres/hour
7.	Lot 1 DP 20162 (Additional Covenantee's land)	Domestic water supply	425 litres/hour
8.	Part Sections 4, 5, 6, 7, Section 8, part Sections 9, 10 and 11, Sections 20, 21, 22, part Sections 144, 23 and 24, Sections 25, 26, 27, 28, 29, 30, part Sections 31, 34, 35, 36, 37, Sections 38, 39 and 40 Block III Shotover District	Stock water supply PLUS Domestic water supply	425 litres/hour PLUS 425 litres/hour

SCHEDULE F

WATER SUPPLY SERVICING AND MAINTENANCE COSTS

Portion of Water Supply Scheme (letters as shown on attached plan)	**Property/Properties Responsible for Servicing and Maintenance Costs of that portion of Water Supply Scheme**
Water Supply Easement J	Lot 6 DP 21444
Water Supply Easement I	Lot 4 DP 21444
Water Supply Easements F, G, and H	1. Lot 6 DP 21444 2. Lot 4 DP 21444
Water Supply Easements D and E	~~1. Lot 1 DP 21410~~ 2. Lot 1 DP 21360
Water Supply Easements B, K and C	1. Lot 6 DP 21444 2. Lot 4 DP 21444 3. Lot 1 DP 21410 4. Lot 1 DP 21360 5. Part Lot 2 DP 21410 west of dotted line marked "S" on attached plan
Water Supply Easements L and M	Lot 5 DP 21440
Water Supply Easements N and A (which, for the purposes of clause 15 and of this Schedule, includes the water storage tank in Water Supply Easement A plus the artesian bore plus the pump/pump house/pump station sited at the artesian bore)	1. Lot 6 DP 21444 2. Lot 4 DP 21444 3. Lot 1 DP 21410 4. Lot 1 DP 21360 5. Part Lot 2 DP 21410 west of dotted line marked "S" on attached plan 6. Lot 5 DP 21440 7. Lot 1 DP 20162 8. Part Sections 4, 5, 6 and 7, Section 8, part Sections 9, 10 and 11, Sections 20, 21, 22, part Sections 144, 23 and 24, Sections 25, 26, 27, 28, 29, 30, part Sections 31, 35, 36, 37, Sections 38, 39 and 40 Block III Shotover District
Water Supply Easement O	Lot 1 DP 20162

ATTESTATION

EXECUTED by the Covenantor)
BRYAN BRUCE COLLIE in the presence of:)

Solicitor
Queenstown

EXECUTED by the Covenantor)
JAMES BOULT by his Attorney)
WALTER JOHN RUTHERFORD in the)
presence of:)

Solicitor
Queenstown

EXECUTED by the Covenantee)
JEFFREY ROBERT WILLIAMS and)
NICOLA WENDY MARTIN in the)
presence of:)

Solicitor
Queenstown

EXECUTED by the Additional Covenantee)
TREVOR MORTON STALKER and **VALMA BRENNON**)
STALKER in the presence of:)

Solicitor
Queenstown

CONSENT OF MORTGAGEES

TONKINSON & WOOD CLIENTS SECURITIES LIMITED as Mortgagee of the land described in Schedule D pursuant to mortgage 709500 HEREBY CONSENTS to the registration of the within Deed of Covenant.

EXECUTED by)
TONKINSON & WOOD CLIENTS SECURITIES)
LIMITED in the presence of:)

TONKINSON & WOOD CLIENTS SECURITIES LIMITED THE COMMON SEAL OF

Director

WESTPAC BANKING CORPORATION as Mortgagee of part of the land described in Schedule A pursuant to Mortgage 734745 HEREBY CONSENTS to the registration of the within Deed of Covenant.

SIGNED DATED: 21 JUNE 1990.

~~EXECUTED~~ by)
WESTPAC BANKING CORPORATION)
in the presence of: by its Attorney)

Westpac Banking Corporation
BY ITS ATTORNEY/S

LUDERITZ
D Bridges
Legal Assistant
Westpac Banking Corporation
Wellington

Signed Correct for the Purposes
of the Land Transfer Act

Solicitor for the Parties

Certificate of Non-Revocation of Power of Attorney

Form I

I, WALTER JOHN RUTHERFORD

of Queenstown in New Zealand, Solicitor

hereby certify:

1. That by deed dated 16 March 1990, JAMES BOULT

of Queenstown in New Zealand, Company Director

appointed me his attorney on the terms and subject to the conditions set out in the said deed, which was deposited in the Land Registry Office at OTAGO

as Number 753770

2. That at the date hereof I have not received any notice or information of the revocation of that appointment by the death of the said JAMES BOULT

or otherwise.

Signed at QUEENSTOWN this 12th day of MAY 1990

CERTIFICATE OF NON-REVOCATION OF POWER OF ATTORNEY

I LUBBERT BLOM of Wellington in New Zealand, Bank Officer

HEREBY CERTIFY -

1. **THAT** by Deed dated the 17 February 1989 copies of which are deposited in the Land Registry Offices at -

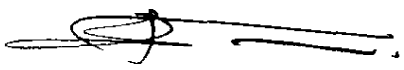
AUCKLAND (North Auckland Registry) and there numbered B.985734
BLENHEIM (Marlborough Registry) and there numbered 146152.2
CHRISTCHURCH (Canterbury Registry) and there numbered C.801572.2
DUNEDIN (Otago Registry) and there numbered 727481/2
GISBORNE (Poverty Bay Registry) and there numbered G174309.2
HAMILTON (South Auckland Registry) and there numbered 871964
HOKITIKA (Westland Registry) and there numbered 82119.2
INVERCARGILL (Southland Registry) and there numbered 161860.2
NAPIER (Hawkes Bay Registry) and there numbered 508942.2
NELSON (Nelson Registry) and there numbered 287686.2
NEW PLYMOUTH (Taranaki Registry) and there numbered 359920.2
WELLINGTON (Wellington Registry) and there numbered 994616.2

WESTPAC BANKING CORPORATION duly incorporated in the State of New South Wales in the Commonwealth of Australia and having its principal place of business in New Zealand at 318-324 Lambton Quay Wellington and carrying on the business of banking appointed me its Attorney on the terms and subject to the conditions set out in the said Deed.

2. **THAT** at the date hereof I was Manager Legal of the Said Bank.

3. **THAT** at the date hereof I have not received any notice or information of the revocation of that appointment by the winding up or dissolution of the said **WESTPAC BANKING CORPORATION** or otherwise.

SIGNED at Wellington)
this 21stday of June)
1990)



DATED 12 MAY 1990 1990

BRYAN BRUCE COLLIE

and

JAMES BOULT

"Covenantor"

JEFFREY ROBERT WILLIAMS

and

NICOLA WENDY MARTIN

"Covenantee"

TREVOR MORTON STALKER

and

VALMA BRENNON STALKER

"Additional Covenantee"

DEED OF COVENANT
WATER SUPPLY SCHEME

PARTICULARS ENTERED IN REGISTER
LAND REGISTRY OTAGO
9.51 18.DEC90 769611
ASST. LAND REGISTRAR

ANDERSON
SOLICI
QUEENS

g34.doc-g

829946.12
Y

CERTIFICATE OF NON-REVOCATION OF POWER OF ATTORNEY

I Guy Jordan HAYWARD
of Wellington in New Zealand, Bank Officer

HEREBY CERTIFY -

1. **THAT** by Deed dated the 20th July 1990 copies of which are deposited in the Land Registry Offices at -

   AUCKLAND (North Auckland Registry) and there numbered C.190265.2
   BLENHEIM (Marlborough Registry) and there numbered 154321
   CHRISTCHURCH (Canterbury Registry) and there numbered 897782
   DUNEDIN (Otago Registry) and there numbered 763508/1
   GISBORNE (Poverty Bay Registry) and there numbered G.180796.1
   HAMILTON (South Auckland Registry) and there numbered H.979266
   HOKITIKA (Westland Registry) and there numbered 086662.1
   INVERCARGILL (Southland Registry) and there numbered 179414.2
   NAPIER (Hawkes Bay Registry) and there numbered 535231.1
   NELSON (Nelson Registry) and there numbered 301615.1
   NEW PLYMOUTH (Taranaki Registry) and there numbered 374742.1
   WELLINGTON (Wellington Registry) and there numbered B.102391

   WESTPAC BANKING CORPORATION duly incorporated in the State of New South Wales of Commonwealth of Australia and having its principal place of business in New Zealand at 318-324 Lambton Quay Wellington and carrying on the business of banking appointed me its Attorney on the terms and subject to the conditions set out in the said Deed.

2. **THAT** at the date hereof I was Manager Legal of the said Bank.

3. **THAT** at the date hereof we have not received any notice or information of the revocation of that appointment by the winding up or dissolution of the said **WESTPAC BANKING CORPORATION** or otherwise.

SIGNED at Wellington)
this 11th day of)
January 19 93)

(1242)

10 DECEMBER 1992

RESOURCE LINKS LIMITED

and

BRYAN BRUCE COLLIE

WALTER JOHN RUTHERFORD

DEED OF COVENANT - WATER SUPPLY SCHEME

ANDERSON LLOYD
Solicitors
Queenstown and Dunedin

g127.doc-r

DEED OF COVENANT - WATER SUPPLY SCHEME

Dated 20 DECEMBER 1992

PARTIES:

I. **RESOURCE LINKS LIMITED** at Queenstown ("the Covenantor")

II. **BRYAN BRUCE COLLIE** of Queenstown, Chartered Accountant and **WALTER JOHN RUTHERFORD** of Queenstown, Solicitor ("the Covenantee")

INTERPRETATION:

In this Deed the term "the Covenantor" includes all parties executing this Deed as Covenantor and jointly and severally if more than one and their executors administrators assignees and successors in title the successive owners of the land described in Schedule "A" their tenants licensees and invitees.

In this Deed the term "the Covenantee" includes all parties executing this Deed as Covenantee and jointly and severally if more than one and their executors administrators assignees and successors in title the successive owners of each piece of land described in Schedule "B" their tenants licensees and invitees.

BACKGROUND:

A. The Covenantor is the registered proprietor of the land described in Schedule "A" ("the Covenantor's Land).

B. The Covenantee is the registered proprietor of the lands described in Schedule "B".

C. The Covenantor and Covenantee as registered proprietors of the lands described in Schedules "A" and "B" are parties to a water supply scheme detailed in Deed of Covenant registered number 769961/5 ("the Water Supply Deed").

D. Pursuant to the Water Supply Deed the Covenantor and Covenantee hold a joint water entitlement and have joint obligations. The purpose of this Deed is to establish as between the Covenantor and the Covenantee their rights and obligations pursuant to the Water Supply Deed.

BBC

THIS DEED RECORDS:

1. The Covenantor is entitled to a domestic water supply of not less than 1,000 litres per day for the benefit of the Covenantor's Land to be delivered to the Covenantor's Land through the water supply system detailed in the Water Supply Deed (it being acknowledged that the easements necessary for conveying such water have been created by easement certificates and memoranda of transfer separate from this Deed).

2. The Covenantee shall be entitled to restrict the amount of water delivered to the Covenantor's Land to the said level of 1,000 litres per day if the Covenantee requires for the Covenantee's use the remainder of the water entitlement specified in the Water Supply Deed as pertaining to the lands described in Schedules "A" and "B".

3. The Covenantor acknowledges that the Covenantor shall be (proportionately where appropriate) responsible and liable for maintaining and servicing and for paying the cost of maintaining and servicing that part of the water supply scheme which serves the Covenantor's Land, being those parts of the water supply scheme specified in Schedule "C", as if the Covenantor's Land were separately included in Schedule "F" of the Water Supply Deed as a separate property with such separate servicing and maintenance obligations.

4. The Covenantor acknowledges that the Covenantor is liable along with the other users of the water supply scheme to pay an equal share of the operating costs of the water supply scheme pursuant to clause 16 of the Water Supply Deed as if the Covenantor's Land were separately detailed in Schedule "E" of the Water Supply Deed as an individual property.

5. The Covenantee acknowledges:

   a. That the Covenantee is solely responsible for those matters detailed in clause 11 of the Water Supply Deed in so far as they relate to the Covenantee's land;

   b. That the additional liability for running costs relating to stock water supply referred to in clause 18 of the Water Supply Deed relates solely to the Covenantee;

   c. That the Covenantee is solely responsible for those matters detailed in clause 19 of the Water Supply Deed.

   The Covenantee shall indemnify and keep indemnified the Covenantor against any liability in respect of the matters detailed in this clause.

6. Subject to the limitations detailed above, the Covenantee acknowledges that the Covenantor is entitled to all the rights and entitlements arising pursuant to the Water Supply Deed as pertaining to the Covenantor's Land.

BRC

7. Subject to the limitations detailed above the Covenantor acknowledges that the Covenantor is subject to the rights and obligations detailed in the Water Supply Deed as pertaining to the Covenantor's Land as if the Covenantor were a separate party to the Water Supply Deed (such acknowledgement being made for the purposes of clause 25 of the Water Supply Deed).

8. Not withstanding any provision contained in this Deed or otherwise implied by law the Covenantees Bryan Bruce Collie and Walter John Rutherford enter into and execute this Deed of Covenant solely as trustees (and not further in their personal capacity or otherwise) and the liability and obligation of the said Bryan Bruce Collie and Walter John Rutherford hereunder whether for payment of monies or for performance or observance of any covenant herein contained or implied shall at all times be construed only as a liability or obligation to pay the said monies or perform and observe the said covenants out of and so far as the trust assets held by the Covenantees and such other trustee or trustees pursuant to a Deed of Trust dated 9 June 1966 known as the Trevor Stalker Family Trust will extend.

SCHEDULE A

(Covenantor's Land)

Area	Legal Description	Certificate of Title	Encumbrances
4.1435 ha	Lot 4 Deposited Plan 22781 Shotover Survey District	14D/626	1. X15652 Irrigation Agreement 2. Easements created by Transfers 418194, 449792, 769961/7 3. Land Covenants in Deed 769961/5 4. Easements specified in Easement Certificate No. 817634/3 5. Land covenants in Deeds dated 18 December 1992 and 19 December 1992 6. Benefit of Easement created by Transfer dated 7 April 1993 7. Benefit of Easements created by Transfer dated 17 December 1992

SCHEDULE B

(Covenantee's Land)

Area	Legal Description	Certificate of Title	Encumbrances
24.4405 ha	Sections 29 and 30 and part Section 31 Block III Shotover Survey District	12A/464	1. Section 308(4) Local Government Act 1974 2. Irrigation Agreement X16141 3. 462350/1 Fencing Provision 4. Mortgage 795905 5. Easement Certificate 754597/2 6. Easements created by Transfers 462350/1, 769961/4, 769961/6, 769961/7, 769961/10, 769961/12, 769962 7. Land Covenants in Deed 769961/5 8. Mortgage 812858 9. Easements created by Transfers dated 17 December 1992, 17 December 1992 and 17 December 1992 10. Land covenants in Deed dated 18 December 1992 and 19 December 1992
25.5849 ha	Sections 22, 25, 26 and 27 and part Sections 23, 24 and 28 Bock III Shotover Survey District	13C/138	1. Irrigation Agreement X14835 2. 416597 Compensation Certificate 3. 474208 Gazette Notice 4. 732124 Mortgage 5. Easement created by Transfer 769961/10 6. Land Covenants in Deed 769961/5 7. Mortgage 812858 8. Land covenants in Deeds dated 18 December 1992 and 19 December 1992

Area	Legal Description	Certificate of Title	Encumbrances
80.9830 ha	Lot 7 Deposited Plan 21583 and sections 12, 13, 33, 103 104 and 108 Block III Shotover Survey District	13B/867	1. Section 308(4)(5) Local Government Act 1974 2. 462350/1 Fencing Provision 3. Mortgage 812858 4. Reservations and conditions imposed by Section 59 Land Act 1948 5. Easements created by Transfer 769961/4, 769961/6, 769961/7 and 769962 6. Land Covenants in Deed 769961/5 7. Easements created by Transfer dated 17 December 1992, 17 December 1992 and 17 December 1992 8. Land covenants in Deeds dated 18 December 1992 and 19 December 1992
14.0959 ha	Sections 38, 39 and 40 and part sections 34, 35, 36 and 37 Block III Shotover Survey District	13B/200	1. 462350/1 Fencing Provision 2. 474208 Gazette Notice 3. Easements created by Transfers 462350/1, 692898, 769961/4, 769961/6, 769961/7, 769961/10, 769961/12 and 769962 4. Land Covenants in Deed 769961/5 5. Mortgage 812858 6. Easements created by Transfers dated 17 December 1992, 17 December 1992 and 17 December 1992 7. Land covenants in Deeds dated 18 December 1992 and 19 December 1992

Area	Legal Description	Certificate of Title	Encumbrances
8.9710 ha	Section 20 and 21 and part Section 144 Block III Shotover Survey District	13C/139	1. Reservations imposed by Section 59 of Land Act 1948 2. X14835 Irrigation Agreement 3. Land Covenants in Deed 769961/5 4. Mortgage 812858 5. Land covenants in Deeds dated 18 December 1992 and 19 December 1992
4.0005 ha	Lot 3 Deposited Plan 22781 Shotover Survey District	14D/627	1. X15652 Irrigation Agreement 2. Easements created by Transfers 418194, 449792, 769961/7 3. Land Covenants in Deed 769961/5 4. Easements specified in Easement Certificate No. 817634/3 5. Mortgage 812858 6. Land covenants in Deeds dated 18 December 1992 and 19 December 1992 7. Benefit of Easements created by Transfer dated 7 April 1993

SCHEDULE C

Those easements marked N, A, B, C, F, G and H in the diagram attached to the Water Supply Deed;

CONSENT OF MORTGAGEE

BANK OF NEW ZEALAND as mortgagee of the land described in Schedule B pursuant to Mortgage 812858 HEREBY CONSENTS to the registration of the within Deed of Covenant, such consent being given without prejudice to the bank's rights and remedies under the said Mortgage.

Dated 22 DECEMBER 1992

THE COMMON SEAL OF THE BANK OF NEW ZEALAND was hereto affixed pursuant to an order of the Board of Directors in the presence of:

MANAGER GROUP CREDIT

COMPANY SECRETARY

1/2

WESTPAC BANKING CORPORATION as mortgagee of part of the lands described in Schedule B pursuant to Mortgage 795905 HEREBY CONSENTS to the registration of the within Deed of Covenant, such consent being given without prejudice to the bank's rights and remedies pursuant to the said Mortgage.

Dated 14th January 1993

Signed by
Westpac Banking Corporation
By its Attorney/s GUY JORDAN HAYWARD
in the presence of:

Legal Secretary

Westpac Banking Corporation
BY ITS ATTORNEY/S

THE SOUTHLAND BUILDING AND INVESTMENT SOCIETY as mortgagee of part of the lands described in Schedule B pursuant to Mortgage 732124 HEREBY CONSENTS to the registration of with within Deed of Covenant, such consent being given without prejudice to the bank's rights and remedies pursuant to the said Mortgage.

Dated 14 January 1993

Executed by)
SOUTHLAND BUILDING)
AND INVESTMENT SOCIETY)
in the presence of:)

C.E.O.

MANAGER

Executed by)
RESOURCE LINKS LIMITED)
in the presence of)

RESOURCE LINKS LIMITED THE COMMON SEAL OF

3 DIRECTORS.

Executed by)
BRYAN BRUCE COLLIE)
in the presence of)

Solicitor
Queenstown

Executed by)
WALTER JOHN RUTHERFORD)
in the presence of)

Solicitor
Queenstown.

Signed correct for the purposes of
the Land Transfer Act

Solicitor for the Parties

9.26 18.MAY93 829946/12

PARTICULARS ENTERED IN REGISTER
LAND REGISTRY NELSON
ASST. LAND REGISTRAR

140/626 12A/764 13C/138
138/867 138/200 13C/139
140/627

829946.6
Y

CERTIFICATE OF NON-REVOCATION OF POWER OF ATTORNEY

I Guy Jordan HAYWARD
of Wellington in New Zealand, Bank Officer

HEREBY CERTIFY -

1. **THAT** by Deed dated the 20th July 1990 copies of which are deposited in the Land Registry Offices at -

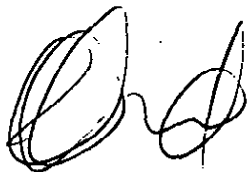
   AUCKLAND (North Auckland Registry) and there numbered C.190265.2
   BLENHEIM (Marlborough Registry) and there numbered 154321
   CHRISTCHURCH (Canterbury Registry) and there numbered 897782
   DUNEDIN (Otago Registry) and there numbered 763508/1
   GISBORNE (Poverty Bay Registry) and there numbered G.180796.1
   HAMILTON (South Auckland Registry) and there numbered H.979266
   HOKITIKA (Westland Registry) and there numbered 086662.1
   INVERCARGILL (Southland Registry) and there numbered 179414.2
   NAPIER (Hawkes Bay Registry) and there numbered 535231.1
   NELSON (Nelson Registry) and there numbered 301615.1
   NEW PLYMOUTH (Taranaki Registry) and there numbered 374742.1
   WELLINGTON (Wellington Registry) and there numbered B.102391

   WESTPAC BANKING CORPORATION duly incorporated in the State of New South Wales of Commonwealth of Australia and having its principal place of business in New Zealand at 318-324 Lambton Quay Wellington and carrying on the business of banking appointed me its Attorney on the terms and subject to the conditions set out in the said Deed.

2. **THAT** at the date hereof I was Manager Legal of the said Bank.

3. **THAT** at the date hereof we have not received any notice or information of the revocation of that appointment by the winding up or dissolution of the said **WESTPAC BANKING CORPORATION** or otherwise.

SIGNED at Wellington)
this 11th day of)
January 19 93)



(633)

18 DECEMBER 1992

RUSSELL GRAEME HAMILTON

PATRICIA JOAN HAMILTON

and

BRYAN BRUCE COLLIE

WALTER JOHN RUTHERFORD

DEED OF COVENANT - WATER SUPPLY SCHEME

ANDERSON LLOYD
Solicitors
Queenstown and Dunedin

g126.doc-r

DEED OF COVENANT - WATER SUPPLY SCHEME

Dated 18 DECEMBER 1992

PARTIES:

I. **RUSSELL GRAEME HAMILTON** and **PATRICIA JOAN HAMILTON** both of Queenstown, Farmers ("the Covenantor") and his wife

II. **BRYAN BRUCE COLLIE** of Queenstown, Chartered Accountant and **WALTER JOHN RUTHERFORD** of Queenstown, Solicitor ("the Covenantee")

INTERPRETATION:

In this Deed the term "the Covenantor" includes all parties executing this Deed as Covenantor and jointly and severally if more than one and their executors administrators assignees and successors in title the successive owners of the land described in Schedule "A" their tenants licensees and invitees.

In this Deed the term "the Covenantee" includes all parties executing this Deed as Covenantee and jointly and severally if more than one and their executors administrators assignees and successors in title the successive owners of each piece of land described in Schedule "B" their tenants licensees and invitees.

BACKGROUND:

A. The Covenantor is the registered proprietor of the land described in Schedule "A" ("the Covenantor's Land).

B. The Covenantee is the registered proprietor of the lands described in Schedule "B".

C. The Covenantor and Covenantee as registered proprietors of the lands described in Schedules "A" and "B" are parties to a water supply scheme detailed in Deed of Covenant registered number 769961/5 ("the Water Supply Deed").

D. Pursuant to the Water Supply Deed the Covenantor and Covenantee hold a joint water entitlement and have joint obligations. The purpose of this Deed is to establish as between the Covenantor and the Covenantee their rights and obligations pursuant to the Water Supply Deed.

THIS DEED RECORDS:

1. The Covenantor is entitled to a domestic water supply of not less than 1,000 litres per day for the benefit of the Covenantor's Land to be delivered to the Covenantor's Land through the water supply system detailed in the Water Supply Deed (it being acknowledged that the easements necessary for conveying such water have been created by easement certificates and memoranda of transfer separate from this Deed).

2. The Covenantee shall be entitled to restrict the amount of water delivered to the Covenantor's Land to the said level of 1,000 litres per day if the Covenantee requires for the Covenantee's use the remainder of the water entitlement specified in the Water Supply Deed as pertaining to the lands described in Schedules "A" and "B".

3. The Covenantor acknowledges that the Covenantor shall be (proportionately where appropriate) responsible and liable for maintaining and servicing and for paying the cost of maintaining and servicing that part of the water supply scheme which serves the Covenantor's Land, being those parts of the water supply scheme specified in Schedule "C", as if the Covenantor's Land were separately included in Schedule "F" of the Water Supply Deed as a separate property with such separate servicing and maintenance obligations.

4. The Covenantor acknowledges that the Covenantor is liable along with the other users of the water supply scheme to pay an equal share of the operating costs of the water supply scheme pursuant to clause 16 of the Water Supply Deed as if the Covenantor's Land were separately detailed in Schedule "E" of the Water Supply Deed as an individual property.

5. The Covenantee acknowledges:

   a. That the Covenantee is solely responsible for those matters detailed in clause 11 of the Water Supply Deed in so far as they relate to the Covenantee's land;

   b. That the additional liability for running costs relating to stock water supply referred to in clause 18 of the Water Supply Deed relates solely to the Covenantee;

   c. That the Covenantee is solely responsible for those matters detailed in clause 19 of the Water Supply Deed.

   The Covenantee shall indemnify and keep indemnified the Covenantor against any liability in respect of the matters detailed in this clause.

6. Subject to the limitations detailed above, the Covenantee acknowledges that the Covenantor is entitled to all the rights and entitlements arising pursuant to the Water Supply Deed as pertaining to the Covenantor's Land.

7. Subject to the limitations detailed above the Covenantor acknowledges that the Covenantor is subject to the rights and obligations detailed in the Water Supply Deed as pertaining to the Covenantor's Land as if the Covenantor were a separate party to the Water Supply Deed (such acknowledgement being made for the purposes of clause 25 of the Water Supply Deed).

8. Not withstanding any provision contained in this Deed or otherwise implied by law the Covenantees Bryan Bruce Collie and Walter John Rutherford enter into and execute this Deed of Covenant solely as trustees (and not further in their personal capacity or otherwise) and the liability and obligation of the said Bryan Bruce Collie and Walter John Rutherford hereunder whether for payment of monies or for performance or observance of any covenant herein contained or implied shall at all times be construed only as a liability or obligation to pay the said monies or perform and observe the said covenants out of and so far as the trust assets held by the Covenantees and such other trustee or trustees pursuant to a Deed of Trust dated 9 June 1966 known as the Trevor Stalker Family Trust will extend.

SCHEDULE A

(Covenantor's Land)

Area	Legal Description	Certificate of Title	Encumbrances
6.3017 ha	Lot 1 Deposited Plan 22781 Shotover Survey District	14D/625	1. X15652 Irrigation Agreement 2. Right to take and convey water created by Transfers 418194, 449792, 769961/7 3. Land Covenants in Deed 769961/5 4. Easements specified in Easement Certificate No. 817634/3 5. Benefit of easements created by Transfer dated 17 December 1992 6. Benefit of easement created by Transfer dated April 1993

SCHEDULE B

(Covenantee's Land)

Area	Legal Description	Certificate of Title	Encumbrances
24.4405 ha	Sections 29 and 30 and part Section 31 Block III Shotover Survey District	12A/464	1. Section 308(4) Local Government Act 1974 2. Irrigation Agreement X16141 3. 462350/1 Fencing Provision 4. Mortgage 795905 5. Easement Certificate 754597/2 6. Easements created by Transfers 462350/1, 769961/4, 769961/6, 769961/7, 769961/10, 769961/12, 769962 7. Land Covenants in Deed 769961/5 8. Mortgage 812858 9. Easements created by Transfer dated 17 December 1992
25.5849 ha	Sections 22, 25, 26 and 27 and part Sections 23, 24 and 28 Bock III Shotover Survey District	13C/138	1. Irrigation Agreement X14835 2. 416597 Compensation Certificate 3. 474208 Gazette Notice 4. 732124 Mortgage 5. Easements created by Transfer 769961/10 6. Land Covenants in Deed 769961/5 7. Mortgage 812858

Area	Legal Description	Certificate of Title	Encumbrances
80.9830 ha	Lot 7 Deposited Plan 21583 and sections 12, 13, 33, 103, 104 and 108 Block III Shotover Survey District	13B/867	1. Section 308(4)(5) Local Government Act 1974 2. 462350/1 Fencing Provision 3. Mortgage 812858 4. Reservations and conditions imposed by Section 59 Land Act 1948 5. Easements created by Transfer 769961/4, 769961/6, 769961/7 and 769962 6. Land Covenants in Deed 769961/5 7. Easements created by Transfers dated 17 December 1992
14.0959 ha	Sections 38, 39 and 40 and part sections 34, 35, 36 and 37 Block III Shotover Survey District	13B/200	1. 462350/1 Fencing Provision 2. 474208 Gazette Notice 3. Easements created by Transfers 462350/1, 692898, 769961/4, 769961/6, 769961/7, 769961/10, 769961/12 and 769962 4. Land Covenants in Deed 769961/5 5. Mortgage 812858 6. Easements created by Transfer dated 17 December 1992
8.9710 ha	Section 20 and 21 and part Section 144 Block III Shotover Survey District	13C/139	1. Reservations imposed by Section 59 of Land Act 1948 2. X14835 Irrigation Agreement 3. Land Covenants in Deed 769961/5 4. Mortgage 812858

Area	Legal Description	Certificate of Title	Encumbrances
4.0005 ha	Lot 3 Deposited Plan 22781 Shotover Survey District	14D/627	1. X15652 Irrigation Agreement 2. Easements created by Transfers 418194, 449792, 769961/7 3. Land Covenants in Deed 769961/5 4. Easements specified in Easement Certificate No. 817634/3 5. Mortgage 812858 6. Benefit of Easement created by Transfer dated 7 April 1993
4.0 ha	Lot 2 Deposited Plan 22781 Shotover Survey District	14D/628	1. X15652 Irrigation Agreement 2. Easements created by Transfers 418194 and 449792 3. Land Covenants in Deed 769961/5 4. Mortgage 812858 5 Easements specified in Easement Certificate No. 817634/3 6. Benefit of Easement created by Transfer dated 7 April 1993
4.1435 ha	Lot 4 Deposited Plan 22781 Shotover Survey District	14D/626	1. X15652 Irrigation Agreement 2. Easements created by Transfers 418194, 449792, 769961/7 3. Land Covenants in Deed 769961/5 4. Mortgage 812858 5. Easements specified in Easement Certificate No. 817634/3 6. Benefit of Easement created by Transfer dated 7 April 1993

SCHEDULE C

Those easements marked N, A, B, C, F, G, H and J in the diagram attached to the Water Supply Deed.

Executed by)
SOUTHLAND BUILDING)
AND INVESTMENT SOCIETY)
in the presence of:)

CEO.

MANAGER

Executed by)
RUSSELL GRAEME HAMILTON)
PATRICIA JOAN HAMILTON)
in the presence of)

R.G. Hamilton

P.J. Hamilton

Executed by)
BRYAN BRUCE COLLIE)
in the presence of)

B.B. Collie

Solicitor
Queenstown

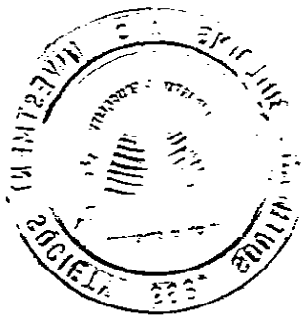
Executed by)
WALTER JOHN RUTHERFORD)
in the presence of)

W.J. Rutherford

Solicitor
Queenstown

Signed correct for the purposes of
the Land Transfer Act

Solicitor for the Parties



CONSENT OF MORTGAGEE

BANK OF NEW ZEALAND as mortgagee of the land described in Schedule B pursuant to Mortgage 812858 HEREBY CONSENTS to the registration of the within Deed of Covenant, such consent being given without prejudice to the bank's rights and remedies under the said Mortgage.

Dated 22 DECEMBER 1992

THE COMMON SEAL OF THE BANK OF NEW ZEALAND WAS HERETO AFFIXED PURSUANT TO AN ORDER OF THE BOARD OF DIRECTORS IN THE PRESENCE OF:

MANAGER GROUP CREDIT

COMPANY SECRETARY

2/2

WESTPAC BANKING CORPORATION as mortgagee of part of the lands described in Schedule B pursuant to Mortgage 795965 HEREBY CONSENTS to the registration of the within Deed of Covenant, such consent being given without prejudice to the bank's rights and remedies pursuant to the said Mortgage.

G0930013

Dated 11th January 1993

Signed by
Westpac Banking Corporation
By its Attorney/s GUY JORDAN HAYWARD
in the presence of:

Westpac Banking Corporation
BY ITS ATTORNEYS

THE SOUTHLAND BUILDING AND INVESTMENT SOCIETY as mortgagee of part of the lands described in Schedule B pursuant to Mortgage 732124 HEREBY CONSENTS to the registration of with within Deed of Covenant, such consent being given without prejudice to the bank's rights and remedies pursuant to the said Mortgage.

Dated 14 January 1993

6

9.26 18.MAY93 8299466

PARTICULARS ENTERED IN REGISTER
LAND REGISTRY OTAGO
ASST. LAND REGISTRAR

140/625 12A/464 13C/138
13B/867 13B/200 140/627
140/628 140/626

LAND REGISTRY

8299461/9 Y

CERTIFICATE OF NON-REVOCATION OF POWER OF ATTORNEY

I Guy Jordan HAYWARD
of Wellington in New Zealand, Bank Officer

HEREBY CERTIFY -

1. **THAT** by Deed dated the 20th July 1990 copies of which are deposited in the Land Registry Offices at -

   AUCKLAND (North Auckland Registry) and there numbered C.190265.2
   BLENHEIM (Marlborough Registry) and there numbered 154321
   CHRISTCHURCH (Canterbury Registry) and there numbered 897782
   DUNEDIN (Otago Registry) and there numbered 763508/1
   GISBORNE (Poverty Bay Registry) and there numbered G.180796.1
   HAMILTON (South Auckland Registry) and there numbered H.979266
   HOKITIKA (Westland Registry) and there numbered 086662.1
   INVERCARGILL (Southland Registry) and there numbered 179414.2
   NAPIER (Hawkes Bay Registry) and there numbered 535231.1
   NELSON (Nelson Registry) and there numbered 301615.1
   NEW PLYMOUTH (Taranaki Registry) and there numbered 374742.1
   WELLINGTON (Wellington Registry) and there numbered B.102391

   WESTPAC BANKING CORPORATION duly incorporated in the State of New South Wales of Commonwealth of Australia and having its principal place of business in New Zealand at 318-324 Lambton Quay Wellington and carrying on the business of banking appointed me its Attorney on the terms and subject to the conditions set out in the said Deed.

2. **THAT** at the date hereof I was Manager Legal of the said Bank.

3. **THAT** at the date hereof we have not received any notice or information of the revocation of that appointment by the winding up or dissolution of the said **WESTPAC BANKING CORPORATION** or otherwise.

SIGNED at Wellington)
this 11th day of)
January 19 93)

9x2

19 DECEMBER 1992

GRAEME ROBERT CARTER

and

BRYAN BRUCE COLLIE

WALTER JOHN RUTHERFORD

DEED OF COVENANT - WATER SUPPLY SCHEME

ANDERSON LLOYD
Solicitors
Queenstown and Dunedin

g125.doc-r

DEED OF COVENANT - WATER SUPPLY SCHEME

Dated 19 DECEMBER 1992

PARTIES:

I. **GRAEME ROBERT CARTER** of Invercargill, Chartered Accountant ("the Covenantor")

II. **BRYAN BRUCE COLLIE** of Queenstown, Chartered Accountant and **WALTER JOHN RUTHERFORD** of Queenstown, Solicitor ("the Covenantee")

INTERPRETATION:

In this Deed the term "the Covenantor" includes all parties executing this Deed as Covenantor and jointly and severally if more than one and their executors administrators assignees and successors in title the successive owners of the land described in Schedule "A" their tenants licensees and invitees.

In this Deed the term "the Covenantee" includes all parties executing this Deed as Covenantee and jointly and severally if more than one and their executors administrators assignees and successors in title the successive owners of each piece of land described in Schedule "B" their tenants licensees and invitees.

BACKGROUND:

A. The Covenantor is the registered proprietor of the land described in Schedule "A" ("the Covenantor's Land).

B. The Covenantee is the registered proprietor of the lands described in Schedule "B".

C. The Covenantor and Covenantee as registered proprietors of the lands described in Schedules "A" and "B" are parties to a water supply scheme detailed in Deed of Covenant registered number 769961/5 ("the Water Supply Deed").

D. Pursuant to the Water Supply Deed the Covenantor and Covenantee hold a joint water entitlement and have joint obligations. The purpose of this Deed is to establish as between the Covenantor and the Covenantee their rights and obligations pursuant to the Water Supply Deed.

THIS DEED RECORDS:

1. The Covenantor is entitled to a domestic water supply of not less than 1,000 litres per day for the benefit of the Covenantor's Land to be delivered to the Covenantor's Land through the water supply system detailed in the Water Supply Deed (it being acknowledged that the easements necessary for conveying such water have been created by easement certificates and memoranda of transfer separate from this Deed).

2. The Covenantee shall be entitled to restrict the amount of water delivered to the Covenantor's Land to the said level of 1,000 litres per day if the Covenantee requires for the Covenantee's use the remainder of the water entitlement specified in the Water Supply Deed as pertaining to the lands described in Schedules "A" and "B".

3. The Covenantor acknowledges that the Covenantor shall be (proportionately where appropriate) responsible and liable for maintaining and servicing and for paying the cost of maintaining and servicing that part of the water supply scheme which serves the Covenantor's Land, being those parts of the water supply scheme specified in Schedule "C", as if the Covenantor's Land were separately included in Schedule "F" of the Water Supply Deed as a separate property with such separate servicing and maintenance obligations.

4. The Covenantor acknowledges that the Covenantor is liable along with the other users of the water supply scheme to pay an equal share of the operating costs of the water supply scheme pursuant to clause 16 of the Water Supply Deed as if the Covenantor's Land were separately detailed in Schedule "E" of the Water Supply Deed as an individual property.

5. The Covenantee acknowledges:

   a. That the Covenantee is solely responsible for those matters detailed in clause 11 of the Water Supply Deed in so far as they relate to the Covenantee's land;

   b. That the additional liability for running costs relating to stock water supply referred to in clause 18 of the Water Supply Deed relates solely to the Covenantee;

   c. That the Covenantee is solely responsible for those matters detailed in clause 19 of the Water Supply Deed.

   The Covenantee shall indemnify and keep indemnified the Covenantor against any liability in respect of the matters detailed in this clause.

6. Subject to the limitations detailed above, the Covenantee acknowledges that the Covenantor is entitled to all the rights and entitlements arising pursuant to the Water Supply Deed as pertaining to the Covenantor's Land.

7. Subject to the limitations detailed above the Covenantor acknowledges that the Covenantor is subject to the rights and obligations detailed in the Water Supply Deed as pertaining to the Covenantor's Land as if the Covenantor were a separate party to the Water Supply Deed (such acknowledgement being made for the purposes of clause 25 of the Water Supply Deed).

8. Not withstanding any provision contained in this Deed or otherwise implied by law the Covenantees Bryan Bruce Collie and Walter John Rutherford enter into and execute this Deed of Covenant solely as trustees (and not further in their personal capacity or otherwise) and the liability and obligation of the said Bryan Bruce Collie and Walter John Rutherford hereunder whether for payment of monies or for performance or observance of any covenant herein contained or implied shall at all times be construed only as a liability or obligation to pay the said monies or perform and observe the said covenants out of and so far as the trust assets held by the Covenantees and such other trustee or trustees pursuant to a Deed of Trust dated 9 June 1966 known as the Trevor Stalker Family Trust will extend.

SCHEDULE A

(Covenantor's Land)

Area	Legal Description	Certificate of Title	Encumbrances
4.0 ha	Lot 2 Deposited Plan 22781 Shotover Survey District	14D/628	1. X15652 Irrigation Agreement 2. Easements created by Transfers 418194 and 449792 3. Land Covenants in Deed 769961/5 4. Easements specified in Easement Certificate No. 817634/3 5. Land covenants in Deed dated 18 December 1992 6. Benefit of Easement created by Transfer dated 7 April 1993 7. Benefit of Easements created by Transfer dated 17 December 1992

SCHEDULE B

(Covenantee's Land)

Area	Legal Description	Certificate of Title	Encumbrances
24.4405 ha	Sections 29 and 30 and part Section 31 Block III Shotover Survey District	12A/464	1. Section 308(4) Local Government Act 1974 2. Irrigation Agreement X16141 3. 462350/1 Fencing Provision 4. Mortgage 795905 5. Easement Certificate 754597/2 6. Easements created by Transfers 462350/1, 769961/4, 769961/6, 769961/7, 769961/10, 769961/12, 769962 7. Land Covenants in Deed 769961/5 8. Mortgage 812858 9. Easements created by Transfers dated 17 December 1992 and 17 December 1992 10. Land covenants in Deed dated 18 December 1992
25.5849 ha	Sections 22, 25, 26 and 27 and part Sections 23, 24 and 28 Bock III Shotover Survey District	13C/138	1. Irrigation Agreement X14835 2. 416597 Compensation Certificate 3. 474208 Gazette Notice 4. 732124 Mortgage 5. Easement created by Transfer 769961/10 6. Land Covenants in Deed 769961/5 7. Mortgage 812858 8. Land covenants in Deed dated 18 December 1992

Area	Legal Description	Certificate of Title	Encumbrances
80.9830 ha	Lot 7 Deposited Plan 21583 and sections 12, 13, 33, 103 104 and 108 Block III Shotover Survey District	13B/867	1. Section 308(4)(5) Local Government Act 1974 2. 462350/1 Fencing Provision 3. Mortgage 812858 4. Reservations and conditions imposed by Section 59 Land Act 1949 5. Easements created by Transfer 769961/4, 769961/6, 769961/7 and 769962 6. Land Covenants in Deed 769961/5 7. Easements created by Transfers dated 17 December 1992 and 17 December 1992 8. Land covenants in Deed dated 18 December 1992
14.0959 ha	Sections 38, 39 and 40 and part sections 34, 35,36 and 37 Block III Shotover Survey District	13B/200	1. 462350/1 Fencing Provision 2. 474208 Gazette Notice 3. Easements created by Transfers 462350/1, 692898, 769961/4, 769961/6, 769961/7, 769961/10, 769961/12 and 769962 4. Land Covenants in Deed 769961/5 5. Mortgage 812858 6. Easements created by Transfers dated 17 December 1992 and 17 December 1992 7. Land Covenants in Deed dated 18 December 1992

Area	Legal Description	Certificate of Title	Encumbrances
8.9710 ha	Section 20 and 21 and part Section 144 Block III Shotover Survey District	13C/139	1. Reservations imposed by Section 59 of Land Act 1948 2. X14835 Irrigation Agreement 3. Land Covenants in Deed 769961/5 4. Mortgage 812858 5. Land covenants in Deed dated 18 December 1992
4.0005 ha	Lot 3 Deposited Plan 22781 Shotover Survey District	14D/627	1. X15652 Irrigation Agreement 2. Easements created by Transfers 418194, 449792, 769961/7 3. Land Covenants in Deed 769961/5 4. Easements specified in Easement Certificate No. 817634/3 5. Mortgage 812858 6. Land covenants in Deed dated 18 December 1992 7. Benefit of Easement created by Transfer dated 7 April 1993
4.1435 ha	Lot 4 Deposited Plan 22781 Shotover Survey District	14D/626	1. X15652 Irrigation Agreement 2. Easements created by Transfers 418194, 449792, 769961/7 3. Land Covenants in Deed 769961/5 4. Mortgage 812858 5. Easements specified in Easement Certificate No. 817634/3 6. Land covenants in Deed dated 18 December 1992 7. Benefit of Easement created by Transfer dated 7 April 1993

SCHEDULE C

A. Those easements marked N, A, B, C, F, G, H and J in the diagram attached to the Water Supply Deed;

B. That easement marked "C" on Deposited Plan 22781.

CONSENT OF MORTGAGEE

BANK OF NEW ZEALAND as mortgagee of the land described in Schedule B pursuant to Mortgage 812858 HEREBY CONSENTS to the registration of the within Deed of Covenant, such consent being given without prejudice to the bank's rights and remedies under the said Mortgage.

Dated 22 DECEMBER 1992

THE COMMON SEAL OF THE BANK OF NEW ZEALAND WAS HEREUNTO AFFIXED PURSUANT TO AN ORDER OF THE BOARD OF DIRECTORS IN THE PRESENCE OF:

MANAGER GROUP CREDIT

COMPANY SECRETARY

WESTPAC BANKING CORPORATION as mortgagee of part of the lands described in Schedule B pursuant to Mortgage 795905 HEREBY CONSENTS to the registration of the within Deed of Covenant, such consent being given without prejudice to the bank's rights and remedies pursuant to the said Mortgage. 6093271.6

Dated 11th January 1993

Signed by
Westpac Banking Corporation
By its Attorney: GUY JORDAN HAYWARD
in the presence of:

Westpac Banking Corporation
BY ITS ATTORNEY

THE SOUTHLAND BUILDING AND INVESTMENT SOCIETY as mortgagee of part of the lands described in Schedule B pursuant to Mortgage 732124 HEREBY CONSENTS to the registration of with within Deed of Covenant, such consent being given without prejudice to the bank's rights and remedies pursuant to the said Mortgage.

Dated 14 January 1993

(Attestation clause over →)

Executed by)
SOUTHLAND BUILDING)
AND INVESTMENT SOCIETY)
in the presence of:)

CEO

MANAGER

Executed by)
GRAEME ROBERT CARTER)
in the presence of)

Executed by)
BRYAN BRUCE COLLIE)
in the presence of)

Solicitor
Queenstown

Executed by)
WALTER JOHN RUTHERFORD)
in the presence of)

Solicitor
Queenstown

Signed correct for the purposes of the Land Transfer Act

Solicitor for the Parties

9

9.26 18.MAY 93 829946

PARTICULARS ENTERED IN REGISTER
LAND REGISTRAR OTAGO

ASST. LAND REGISTRAR

140/628 138/464 138/138
138/867 138/200 138/139
140/627 140/626

View Instrument Details

Instrument No.	8899576.1
Status	Registered
Date & Time Lodged	03 Nov 2011 11:51
Lodged By	Stamers Smith, Simon Henry Nug
Instrument Type	Variation of Covenant

Affected Computer Registers	Land District
OT14D/626	Otago

Annexure Schedule: Contains 2 Pages.

Signature

Signed by Simon Henry Nugent Stamers Smith as Grantor/Grantee Representative on 03/11/2011 11:48 AM

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

DEED OF VARIATION OF LAND COVENANT 6969388.3

PARTIES

1. John Russell **WIKSTROM** and Maria Jan **WIKSTROM**
2. **QUEENSTOWN LAKES DISTRICT COUNCIL**

BACKGROUND

1. The Owners are the registered proprietors of the land.
2. The Covenant is registered against the title to the land.
3. Pursuant to Section 127 of the Resource Management Act 1991 Council has agreed that Condition 4 of the Consent may be varied.
4. Condition 4 of the Consent is numbered as Clause 2 (a) in the Covenant.
5. Consent to the variation of Condition 4 has been granted on the basis that the variation be registered against the title to the land.
6. The Owners intend that the Covenant as varied shall remain registered against the title to the land and be binding in the manner set out in the Covenant.

INTERPRETATION

Consent	means Consent RM030704 and the Environment Court Consent Order CO151/04 to establish a residential building platform on the Land.
Council	means Queenstown Lakes District Council.
Covenant	means Land Covenant 6969388.3
Land	means the land defined in the Covenant.
Owners	mean John Russell Wikstrom and Maria Jan Wikstrom and their successors in title.

COVENANT

Pursuant to s127 Resource Management Act the Parties agree

1. That Condition 4 of the Covenant shall be amended to read

"That any residential dwelling (including accessory buildings) must be located within the building platform marked "Area A" on DP 441599.

2. That in all other respects the Covenant shall remain binding on the Parties

Dated this 23rd day of August 2011

SIGNED by John Rusell Wikstrom and Maria Jan Wikstrom in the presence of)

M J Wikstrom

S. H. N. STAMERS-SMITH
Solicitor
Queenstown

SIGNED for Queenstown Lakes District Council in the presence of)

John Hunter, Chief Executive.
Vanessa van Uden Mayor

RECEIVED
25 AUG 2011
Environmental

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Guaranteed Search Copy issued under Section 60 of the Land Transfer Act 2017

R.W. Muir
Registrar-General of Land

Identifier **OT14D/626**

Land Registration District **Otago**

Date Issued 11 December 1992

Prior References
OT13C/140

Estate Fee Simple

Area 4.1435 hectares more or less

Legal Description Lot 4 Deposited Plan 22781

Registered Owners
John Russell Wikstrom and Maria Jan Wikstrom

Interests

418194 Transfer creating the following easements

Type	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
Take and convey water	Lot 4 Deposited Plan 22781 - herein	blue line Transfer 418194	Section 3 Block III Shotover Survey District - CT OT2C/952	

449792 Transfer creating the following easements

Type	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
Take and convey water	Lot 4 Deposited Plan 22781 - herein	Black Spring Transfer 449792	Section 3 Block III Shotover Survey District - CT OT2C/952	

Land Covenant relating to the supply of water contained in Deed 769961.5

769961.7 Transfer creating the following easements

Type	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
Convey water	Lot 4 Deposited Plan 22781 - herein	H DP 21444	Lot 4 Deposited Plan 21444 - CT OT13A/1362	Section 309(1)(a) Local Government Act 1974
Convey water	Lot 4 Deposited Plan 22781 - herein	H DP 21444	Lot 6 Deposited Plan 21444 - CT OT13A/1363	Section 309(1)(a) Local Government Act 1974
Convey water	Lot 4 Deposited Plan 22781 - herein	I DP 21444	Lot 4 Deposited Plan 21444 - CT OT13A/1362	Section 309(1)(a) Local Government Act 1974
Convey water	Lot 4 Deposited Plan 22781 - herein	J DP 21444	Lot 6 Deposited Plan 21444 - CT OT13A/1363	Section 309(1)(a) Local Government Act 1974

817634.3 Easement Certificate specifying the following easements - produced 9.11.1992 at 9.44 am and entered 11.12.1992 at 9.00 am

Type	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
Convey water	Lot 4 Deposited Plan 22781 - herein	A DP 22781	Lot 1 Deposited Plan 22781 - CT OT14D/625	
Convey water	Lot 4 Deposited Plan 22781 - herein	A DP 22781	Lot 2 Deposited Plan 22781 - CT OT14D/628	
Convey water	Lot 4 Deposited Plan 22781 - herein	A DP 22781	Lot 3 Deposited Plan 22781 - CT OT14D/627	

829946.3 Transfer creating the following easements - 18.5.1993 at 9.26 am

Type	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
Convey water	Lot 1 Deposited Plan 21410 - CT OT13A/1364	G DP 21761	Lot 4 Deposited Plan 22781 - herein	

Land Covenant in Deed 829946.6 - 18.5.1993 at 9.26 am

Land Covenant in Deed 829946.9 - 18.5.1993 at 9.26 am

829946.11 Transfer creating the following easements - 18.5.1993 at 9.26 am

Type	Servient Tenement	Easement Area	Dominant Tenement	Statutory Restriction
Convey water	Section 29-30 Block III Shotover Survey District - CT OT12A/464	A DP 21761	Lot 4 Deposited Plan 22781 - herein	
Convey water	Section 29 Block III Shotover Survey District - CT OT12A/464	B DP 21761	Lot 4 Deposited Plan 22781 - herein	
Convey water	Lot 7 Deposited Plan 21583 - CT OT13B/867	C DP 21761	Lot 4 Deposited Plan 22781 - herein	
Convey water	Lot 7 Deposited Plan 21583 - CT OT13B/867	F DP 21761	Lot 4 Deposited Plan 22781 - herein	
Convey water	Section 37 Block III Shotover Survey District - CT OT13B/200	N DP 21761	Lot 4 Deposited Plan 22781 - herein	

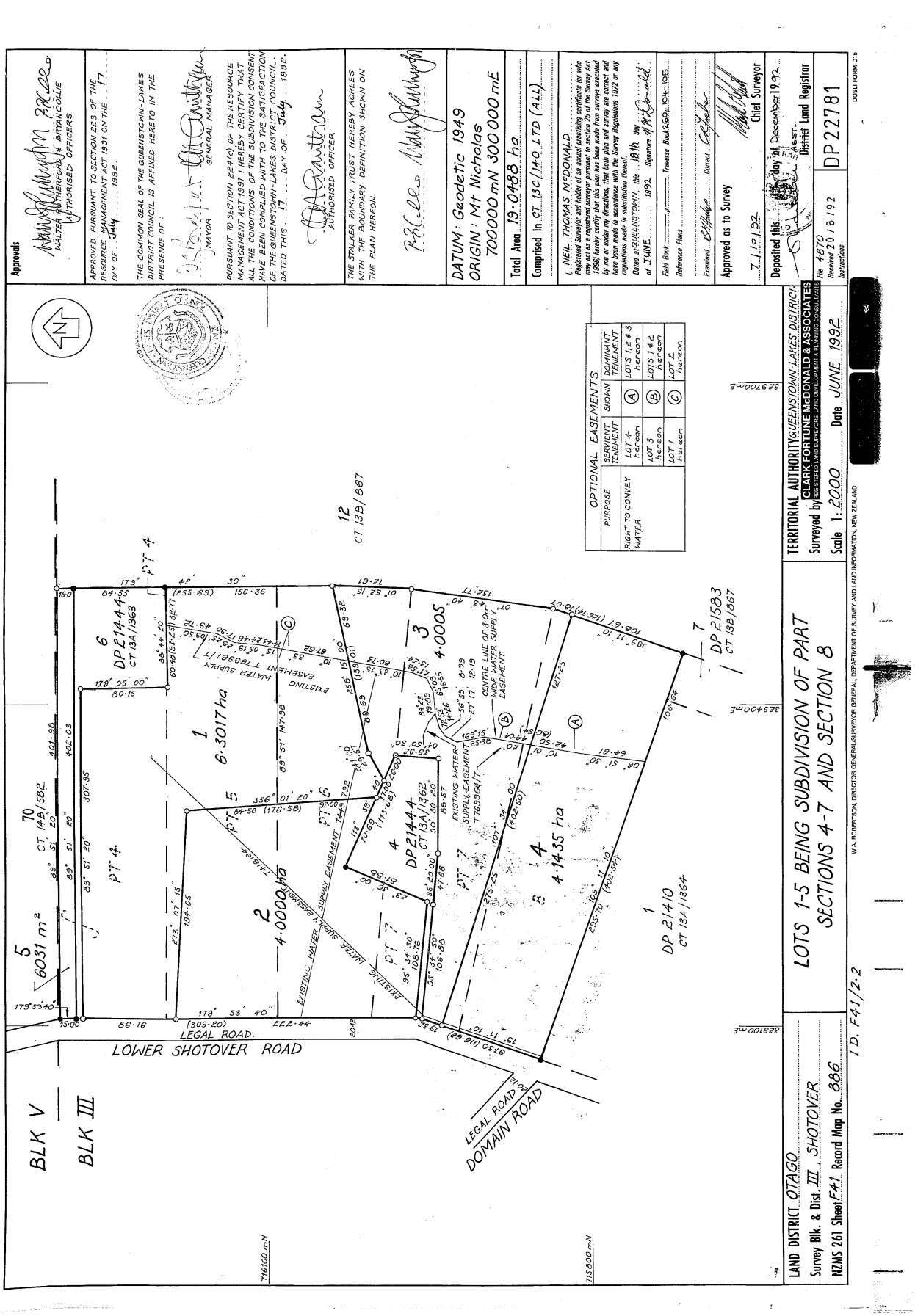
Land Covenant in Deed 829946.12 - 18.5.1993 at 9.26 am

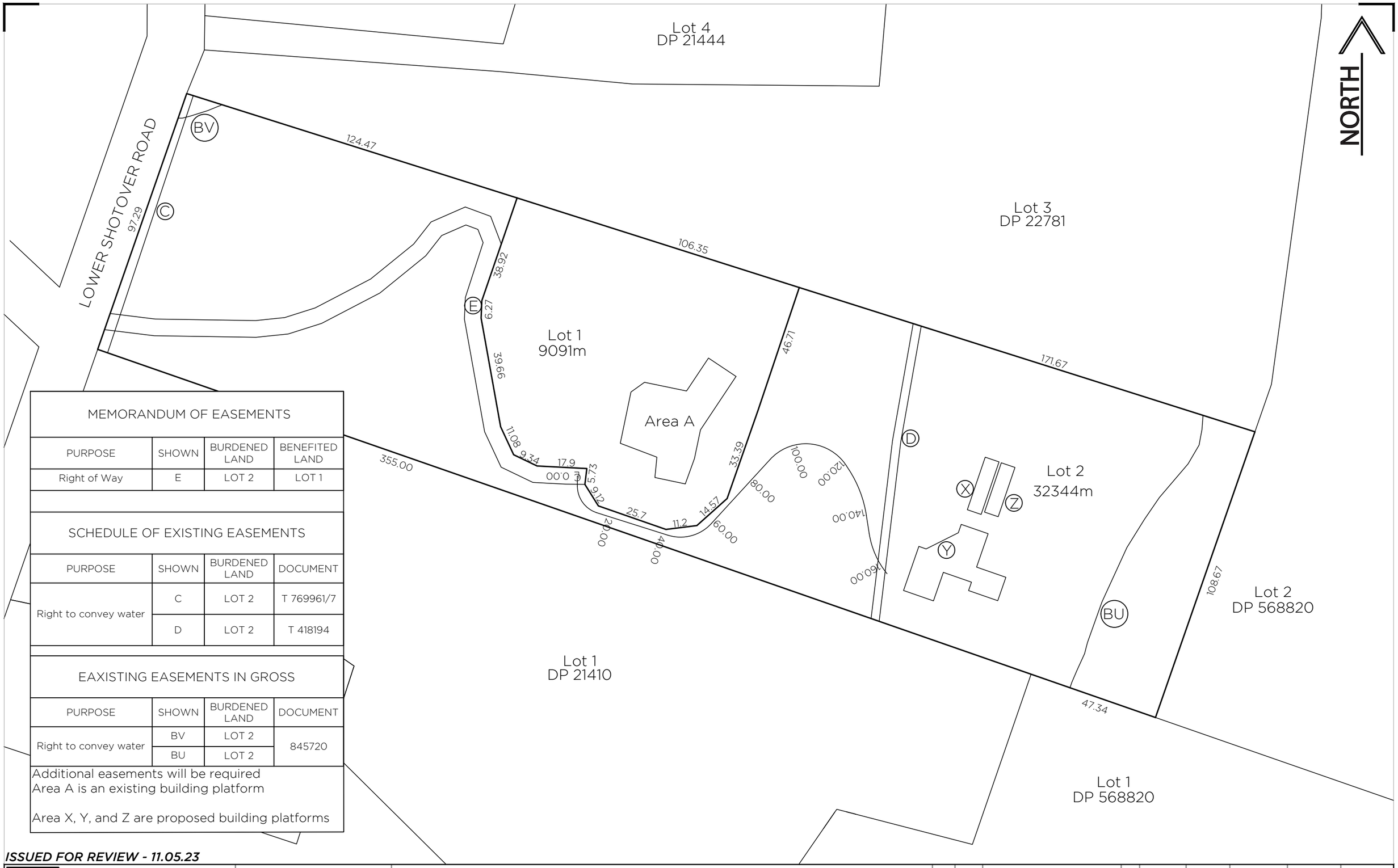
845720 Transfer creating the following easements in gross - 23.12.1993 at 9.20 am

Type	Servient Tenement	Easement Area	Grantee	Statutory Restriction
Convey water	Lot 4 Deposited Plan 22781 - herein	BU Transfer 845720	Arrow Irrigation Company Limited	
Convey water	Lot 4 Deposited Plan 22781 - herein	BV Transfer 845720	Arrow Irrigation Company Limited	

8899576.1 Variation of Covenant 6969388.3 - 3.11.2011 at 11:51 am

11637670.2 Mortgage to ASB Bank Limited - 14.1.2020 at 1:43 pm





MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of Way	E	LOT 2	LOT 1

SCHEDULE OF EXISTING EASEMENTS

PURPOSE	SHOWN	BURDENED LAND	DOCUMENT
Right to convey water	C	LOT 2	T 769961/7
	D	LOT 2	T 418194

EAXISTING EASEMENTS IN GROSS

PURPOSE	SHOWN	BURDENED LAND	DOCUMENT
Right to convey water	BV	LOT 2	845720
	BU	LOT 2	

Additional easements will be required
Area A is an existing building platform

Area X, Y, and Z are proposed building platforms

ISSUED FOR REVIEW - 11.05.23

JEA TOWN PLANNERS & SURVEYORS
Level 2, 38 Shotover Street
PO Box 95, Queenstown, 9300

CLIENT
WIKSTROM

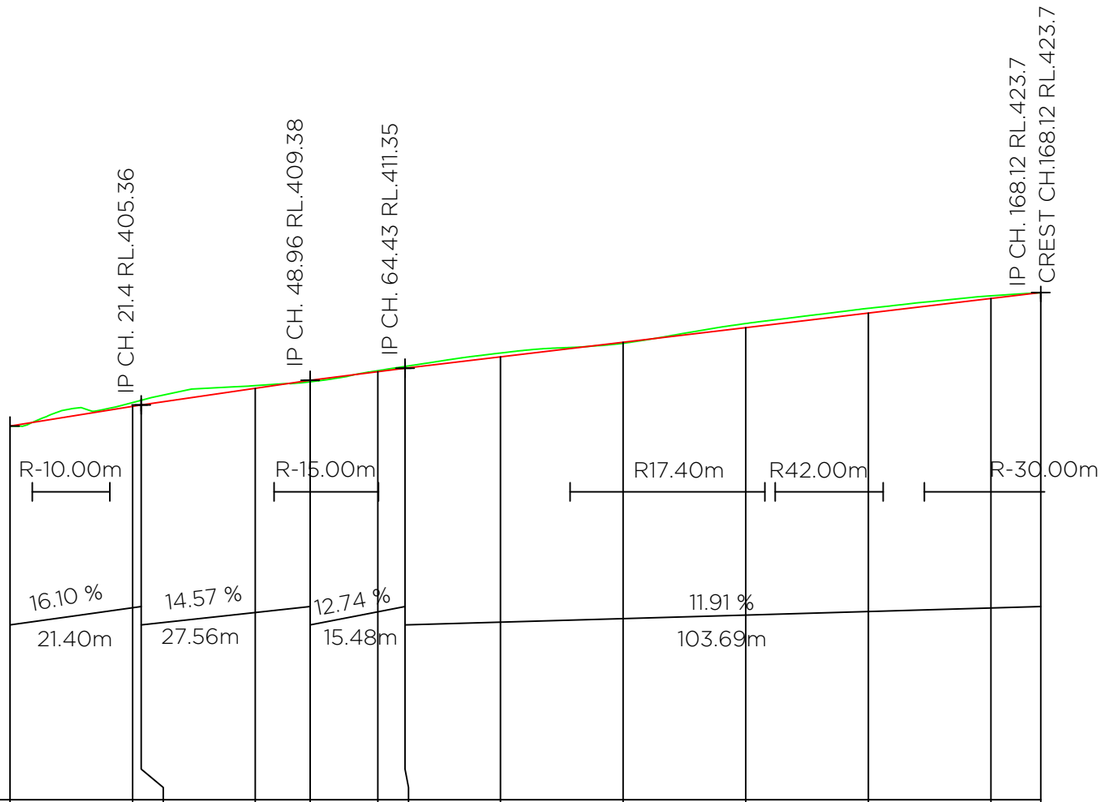
NOTES:
- *ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.*
- *CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.*
- *COPYRIGHT ON THIS DRAWING IS RESERVED.*
- *THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.*

LOTS 1 & 2 BEING A SUBDIVISION OF LOT 4 DP 22781 176 LOWER SHOTOVER ROAD

REV.	DATE	REVISION DETAILS	BY
B	28.04.23	AMENDED TO SHOW DW DETAILS	FC
C	24.05.23	AMENDED PROPOSED BOUNDARIES	CW
E	03.08.23	AMEND PLATFORM	CW

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
-	-	-	22221	06.01
DRAWN	CHECKED	DATE	SCALE	
MF	CW	11.05.23	1:1250m @ A3	
DATUM & LEVEL				REV.
MT NIC 2000 - NZVD16				E

C:\Users\JEA Craig\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 160 L Shotover Road - Subdivision\Survey\CAD\22221.06.01E - Scheme Plan.dwg Plotted: 03.08.2023



HORIZ CURVE DATA												
VERT GEOMETRY GRADE (%) VERT GRADE LENGTH (m)		16.10 % 21.40m		14.57 % 27.56m		12.74 % 15.48m		11.91 % 103.69m				
VERT CURVE LENGTH (m)												
DATUM R.L.341.00												
DEPTH	0.00	-0.61	-0.75	-0.44	0.23	-0.16	-0.29	-0.62	0.18	-0.67	-0.77	-0.43	0.04
C.L. FINISHED LEVEL	401.92	405.14	405.36	408.07	409.38	410.79	411.35	413.20	415.58	417.97	420.35	422.73	423.70
EXISTING G.L.	401.92	405.75	406.12	408.52	409.14	410.95	411.64	413.83	415.41	418.64	421.11	423.15	423.65
CHAINAGE	0.00	20.00	21.40	40.00	48.96	60.00	64.43	80.00	100.00	120.00	140.00	160.00	168.12

ISSUED FOR REVIEW - 5.3.21

JEA TOWN PLANNERS & SURVEYORS
Level 2, 36 Shotover Street
PO Box 95, Queenstown, 9300

CLIENT: WICKSTROM

NOTES:
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

LONG SECTION OF PROPOSED DRIVEWAY
LOT 4 DP 22781
176 LOWER SHOTOVER ROAD

REV.	DATE	REVISION DETAILS	BY
B	28.04.23	AMENDED TO SHOW DW DETAILS	FC

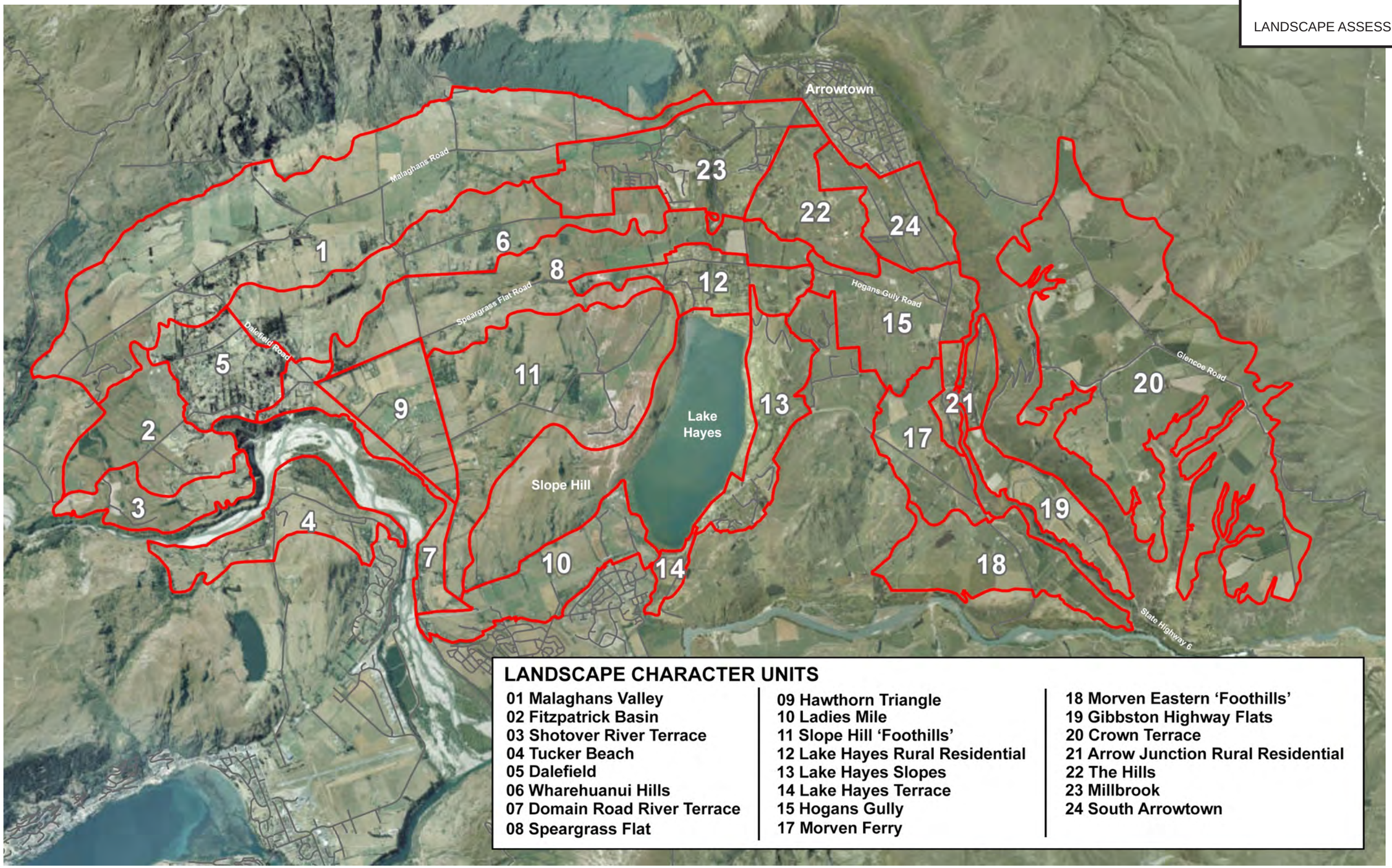
SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
-	-	-	22221	06.01
DRAWN	CHECKED	DATE	SCALE	
FC	CW	01.08.23	1:1000m @ A3	
DATUM & LEVEL				REV.
MT NIC 2000 - NZVD16				B

C:\Users\JEA Craig\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 160 L Shotover Road - Subdivision\Survey\CAD\22221.06.01E - Scheme Plan.dwg Plotted: 03.08.2023

24.8 Schedule 24.8 Landscape Character Units

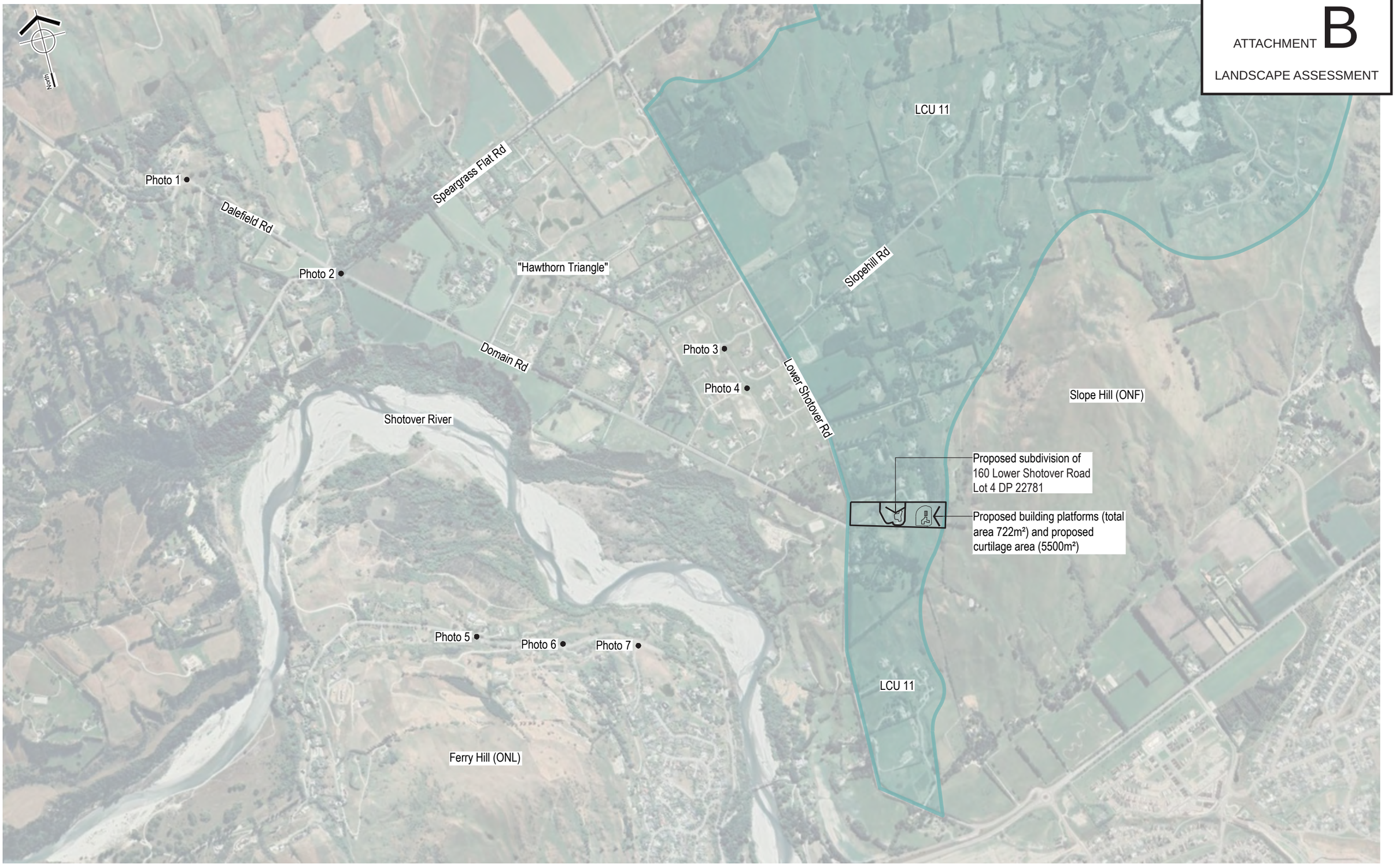
ATTACHMENT A

LANDSCAPE ASSESSMENT



ATTACHMENT B

LANDSCAPE ASSESSMENT



baxter design

REFERENCE 4443-SK05 - SCALE = 1:7500 AT A1 - 1:15000 AT A3 - 11 Aug 2023
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION
j:\4443 - wikstrom lower shotover road\cad\xref - 4443 - masterplan 2.dwg - 7500

CONTEXT AND PHOTO LOCATION PLAN
WIKSTROM - LOWER SHOTOVER ROAD

ATTACHMENT C

LANDSCAPE ASSESSMENT

North

Lower Shotover Rd

Domain Rd

LOT 2

LOT 1

Lot Boundary

LOT 2

R.O.W - 6m wide

Existing dwelling

Existing driveway

160 LOWER SHOTOVER ROAD
LOT 4 DP 22781, 4.14ha

Curtilage area, 5080m²

Building platform X (104m²)
building platfom Z (96m²) -
RL 420.5

Proposed building platform.
522m², RL 421.5.

Proposed gravel driveway, 3.5m wide.
Graded at 1:6 behind garage, max
grade of 1:8 everywhere else

Lot 1 (Exclusive of R.O.W)	0.90ha
Lot 2 (Inclusive of R.O.W)	3.24ha
ROW	1600m²
Existing Lot 4 DP 22781	4.14ha

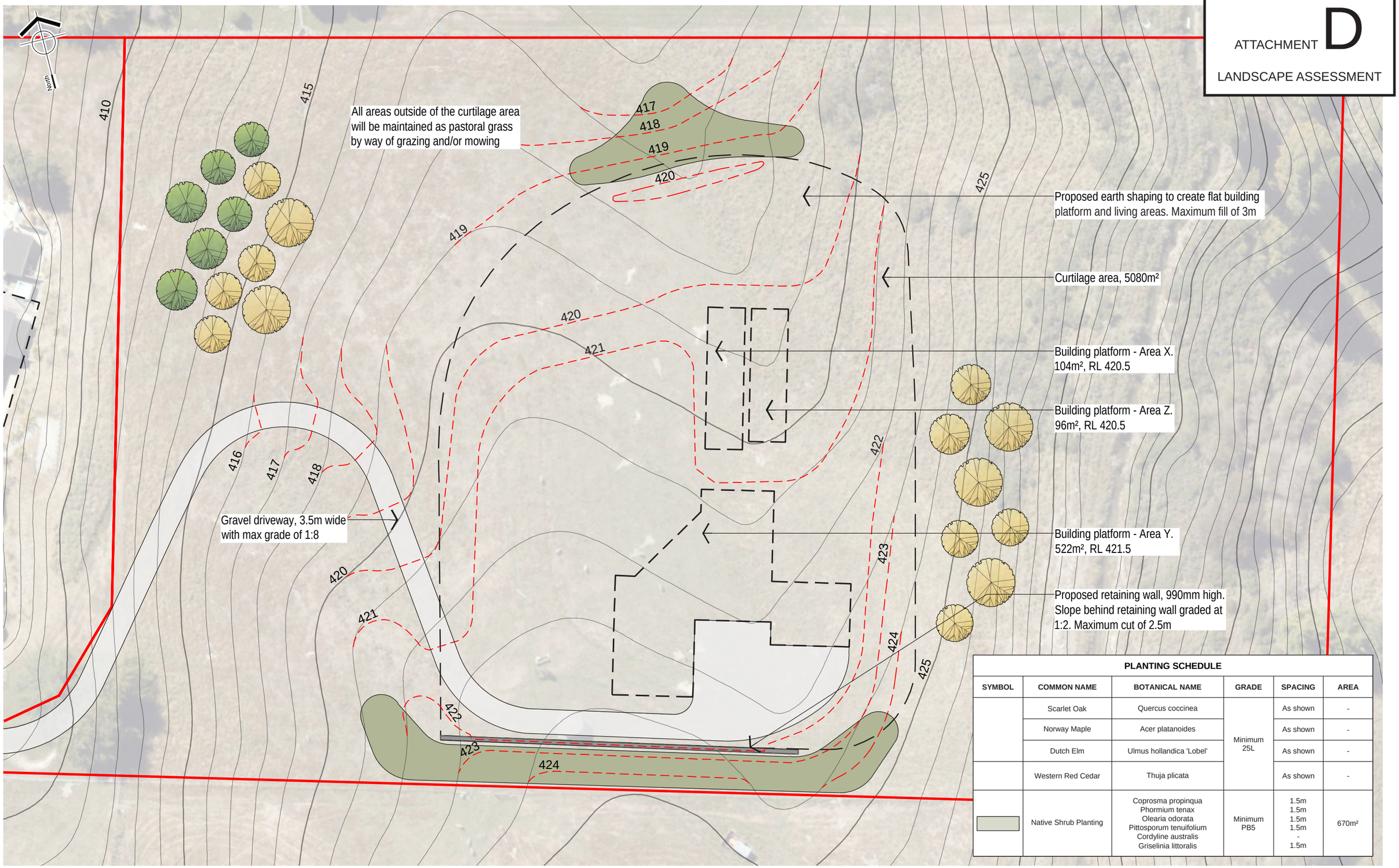
baxter design

REFERENCE 4443-SK04 - SCALE = 1:750 AT A1 - 1:1500 AT A3 - 11 Aug 2023
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION
j:\4443 - wikstrom lower shotover road\cad\xref - 4443 - masterplan 2.dwg - 750

FULL LOT PLAN
WIKSTROM - LOWER SHOTOVER ROAD

ATTACHMENT D

LANDSCAPE ASSESSMENT



PLANTING SCHEDULE

SYMBOL	COMMON NAME	BOTANICAL NAME	GRADE	SPACING	AREA
	Scarlet Oak	Quercus coccinea	Minimum 25L	As shown	-
	Norway Maple	Acer platanoides		As shown	-
	Dutch Elm	Ulmus hollandica 'Lobel'		As shown	-
	Western Red Cedar	Thuja plicata		As shown	-
	Native Shrub Planting	Coprosma propinqua Phormium tenax Olearia odorata Pittosporum tenuifolium Cordyline australis Griselinia littoralis	Minimum PB5	1.5m 1.5m 1.5m 1.5m - 1.5m	670m²

baxter design

0 2.5 5.0 12.5m

SCALE = 1:250 AT A1

REFERENCE 4443-SK03 - SCALE = 1:250 AT A1 - 1:500 AT A3 - 11 Aug 2023

DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION

j:\4443 - wikstrom lower shotover road\cad\xref - 4443 - masterplan 2.dwg - 250

SITE PLAN
WIKSTROM - LOWER SHOTOVER ROAD

ATTACHMENT E

LANDSCAPE ASSESSMENT

PHOTO 1 - 20 MAR 2023
REFERENCE: 4443-SK08 - LANDSCAPE ASSESMENT PHOTOS 1 + 2
IMAGE: PANORAMIC, MULTIPLE IMAGE STITCH, 50MM FOCAL LENGTH
DISTANCE: 3420M

PHOTO 2 - 20 MAR 2023
REFERENCE: 4424-SK08 - LANDSCAPE ASSESMENT PHOTOS 1 + 2
IMAGE: PANORAMIC, MULTIPLE IMAGE STITCH, 50MM FOCAL LENGTH
DISTANCE: 2670M

ATTACHMENT F

LANDSCAPE ASSESSMENT

PHOTO 3 - 20 MAR 2023
REFERENCE: 4443-SK09 - LANDSCAPE ASSESMENT PHOTOS 3 + 4
IMAGE: PANORAMIC, MULTIPLE IMAGE STITCH, 50MM FOCAL LENGTH
DISTANCE: 1110M

PHOTO 2 - 20 MAR 2023
REFERENCE: 4424-SK09 - LANDSCAPE ASSESMENT PHOTOS 3 + 4
IMAGE: PANORAMIC, MULTIPLE IMAGE STITCH, 50MM FOCAL LENGTH
DISTANCE: 920M

baxter design

REFERENCE : **4443-SK09 - 20 MAR 2023**
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION

LANDSCAPE ASSESMENT PHOTOS 3 + 4
WIKSTROM - LOWER SHOTOVER ROAD

ATTACHMENT G

LANDSCAPE ASSESSMENT

PHOTO 5 - 20 MAR 2023
REFERENCE: 4443-SK10 - LANDSCAPE ASSESMENT PHOTOS 5 + 6
IMAGE: PANORAMIC, MULTIPLE IMAGE STITCH, 50MM FOCAL LENGTH
DISTANCE: 1950M

PHOTO 6 - 20 MAR 2023
REFERENCE: 4424-SK10 - LANDSCAPE ASSESMENT PHOTOS 5 + 6
IMAGE: PANORAMIC, MULTIPLE IMAGE STITCH, 50MM FOCAL LENGTH
DISTANCE: 1600M

baxter design

REFERENCE : **4443-SK10 - 20 MAR 2023**
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION

LANDSCAPE ASSESMENT PHOTOS 5 + 6
WIKSTROM - LOWER SHOTOVER ROAD

ATTACHMENT H

LANDSCAPE ASSESSMENT

PHOTO 7 - 20 MAR 2023
REFERENCE: 4424-SK11 - LANDSCAPE ASSESMENT PHOTO 7
IMAGE: PANORAMIC, MULTIPLE IMAGE STITCH, 50MM FOCAL LENGTH
DISTANCE: 1310M

160 Lower Shotover Road
Landscape Assessment
11 August 2023

INTRODUCTION

1. This landscape assessment is prepared by Baxter Design to assess the potential landscape character and visual effects of a proposed subdivision and dwelling at 160 Lower Shotover Rd, of the land legally described as Lot 4 DP 22781.

2. The following report includes:

    - Landscape methodology,
    - Description of the existing landscape,
    - Description of the proposal,
    - Relevant statutory provisions,
    - Landscape assessment,
    - Conclusion.

3. The following Attachments are referred to in this report:

Attachment A:	Schedule 24.8 Landscape Character Units	QLDC PDP (June 2019)
Attachment B:	Context and Photo Location Plan	Baxter Design - 4443-SK05
Attachment C:	Full Lot Plan	Baxter Design - 4443-SK04
Attachment D:	Site Plan	Baxter Design - 4325-SK03
Attachment E:	Landscape Assessment Photos 1 + 2	Baxter Design - 4325-SK08
Attachment F:	Landscape Assessment Photos 3 + 4	Baxter Design - 4325-SK09
Attachment G:	Landscape Assessment Photos 5 + 6	Baxter Design - 4325-SK10
Attachment H:	Landscape Assessment Photo 7	Baxter Design - 4325-SK11

Appendix A:	Design Controls	Baxter Design
Appendix B:	Scale of Effects	
Appendix C:	Architect's Drawings	

LANDSCAPE METHODOLOGY

4. The general structure of this report is based on a 'proposal-based' assessment and will follow the concept and principles of the *Te Tangi A Te Manu – Aotearoa New Zealand Landscape Assessment Guidelines.*

5. The methodology is consistent with the above guidelines and includes the following tasks:

    - Identifying the proposal,
    - Desk-top research and site surveys,
    - Site visits to the site and surrounding public views
    - A review of the relevant QLDC Operative and Proposed District Plan assessment matters,
    - Consideration throughout the design process on measures to avoid, remedy and mitigate potential adverse effects, and promote positive effects.

6. The effects rating scale used in this assessment is a modification on the NZILA 7-point scale of effect and adopts the Guidelines for the Assessment of Landscape and Visual Effects, Supplementary Statement of Evidence of Bridget Mary Gilbert for Queenstown Lakes District Council, Topic 2 – Rural Landscapes, 29 April 2019. This includes the following 7-point scale:

    Very high, High, Moderate-High, Moderate, Moderate-Low, Low and Very Low.

    *(Note: Please refer to **Appendix B** of this report for the detailed effects rating scale and associated explanation).*

DESCRIPTION OF THE EXISTING SITE / RECEIVING ENVIRONMENT

7. The site is located in the southern portion of Landscape Character Unit 11 (LCU 11), within an established rural living landscape on the lower slopes of Slope Hill. That pattern of development extends west to Lower Shotover Rd and the area known as the '*Hawthorn Triangle*' (LCU 9), and also extends north towards Slopehill Rd. LCU 11 is described as a '*rural lifestyle zone*' with dwellings on lots of mixed sizes, with the balance between 4-10ha. The northern portion of LCU 11 displays a typical, open, pastoral landscape, set amongst *'a complex patterning of hills, ranging from moderate to steeply sloping in places*.'

8. In the south-western portion of LCU 11, the landform slopes moderately from Slope Hill towards Lower Shotover Road. These '*western slopes*' (as labelled in LCU 11) are characterised by loose groupings of established residential dwellings amongst clusters of mature, exotic vegetation, with all the trappings of a rural residential landscape, including established dwellings, gardens, gravel driveways, fences, sheds, shelterbelts, small paddocks and established trees. Compared to the northern portion of LCU 11, the vegetation of the '*western slopes*' of LCU 11 hold a greater density and species variety, mostly consisting of exotic, mature trees, amenity planting and occasional hedgerows lining properties

and driveways. The PDP describes the loose groupings of established dwellings in these areas as '*reasonably enclosed, despite their elevation'* – largely due to the vegetation.

9. Over 1km west of the site, across the Shotover River, is Tucker Beach Road, which is flanked by residential development. To the north-west of the site, on a flat river terrace, lies the rural-residential development known as the Hawthorn Triangle, a name derived from the extensive planting of hawthorn hedges along Domain Road, Lower Shotover Road, and Speargrass Flat Road. LCU 9 notes that '*generally, the Triangle displays a large-lot suburban parkland character,' with 'dwellings set into mounding and a planted, parkland character*.' The LCU 11 description notes the '*importance of the western slopes as a contrasting and highly attractive backdrop to the intensive patterning throughout the Hawthorn Triangle'*

10. East and adjacent to the site is Slope Hill, an open, rising pastoral hillside, classified as an outstanding natural feature (ONF). The western slopes of LCU 11, including the residential areas east of Lower Shotover Road, act as a transitional zone between the more intensive rural residential zone of the Hawthorn Triangle, and the Slope Hill ONF. The site lies within this zone at a similar elevation to other rural lifestyle blocks to the north.

11. The existing lot (Lot 4 DP22781) is situated on a moderately sloping landform which descends from Slope Hill down to Lower Shotover Road. The existing lot consists of an existing dwelling in the centre, a gravel driveway, amenity planting (primarily consisting of clusters of exotic trees), a tennis court, lawn areas and pastoral grass.

12. Behind the existing dwelling, the landform rises more steeply up to a pastoral plateau, where the proposed lot is located. The western edge of this plateau and steep slope below is visible from western areas including the Hawthorne Triangle, Dalefield Road and sections of Tuckers Beach Road. At the rear of this small plateau (to the east), the landform lowers slightly into a slight depression, before rising steeply once more to the water race which runs through the back of the property, and continues rising to Slope Hill.

13. The proposed residential unit and associated building platform (RBP) is situated within the slight depression, 100m east of the existing dwelling and 17m above the existing dwelling in elevation. The immediate site is largely open being predominantly covered in pasture grass, with a small cluster of exotic trees on the eastern edge, where the landform begins to rise steeply up Slope Hill. This openness is a result of land management and could be planted in tree species similar to that surrounding it without consent.

DESCRIPTION OF THE PROPOSAL

14. The application proposes to subdivide the land legally known as Lot 4 DP 22781 into two sections. For the purpose of this landscape assessment, the proposed lot containing the existing dwelling has been labelled as "Lot 1", with the proposed "Lot 2" containing the proposed RBP and associated works.

15. The existing lot (Lot 4 DP 22781) is currently 4.14ha. Lot 1 will be 0.90ha of this area and Lot 2 will be 3.24ha. Lot 2

includes a R.O.W to Lot 1, which has an area of 1600m². (Refer **Attachment C**).

16. The proposed RBP is located in the eastern portion of Lot 2, in a small depression. The proposed RBP is 522m² (Area Y), with the floor level of the future dwelling to be set at R.L. datum 421.5masl. Adjacent to the proposed RBP is a proposed pool platform (Area X, 104m²) and a proposed shed platform (Area Z, 96m²), set at an R.L. datum of 420.5masl. Together, the proposed platforms have a total area of 722m². Earthworks will be required to create the flat building platform, driveway and outdoor areas. (Refer Attachment D)

17. A proposed curtilage area of 5,080m^2 surrounds the proposed RBP. All domestic activity such as mown lawns, amenity gardens, garden structures, paved areas, play equipment, clothes lines and external lighting shall be contained within the curtilage area. All areas outside the curtilage area shall be maintained in pastoral grass by way of mowing and/or grazing.

18. Access to the proposed RBP will be from a proposed 3.5m wide gravel driveway which will connect to the existing driveway on Lot 1, as shown on **Attachments C and D.** Earthworks will be required to construct the driveway, which will have a maximum gradient of 1:6 to the south of the existing dwelling and a maximum gradient of 1:8 everywhere else.

19. The proposal includes mitigation tree planting, consisting of Scarlet Oak, Norway Maple, Dutch "Lobel" Elms and Western Red Cedar. 670m² of native shrub planting is also proposed to the north and south of the proposed RBP, consisting of Mingimingi, Swamp Flax, Scented Tree Daisy, Kohuhu, Cabbage Tree and Broadleaf.

20. Any future dwelling on the proposed RBP will be subject to design controls prepared by Baxter Design, outlined in **Appendix A**. A summary of the key design controls is outlined below:

    - Maximum building height of 4.5m for buildings (excluding chimneys) within platform Y, maximum height of 3.5m within platform Z.
    - Light reflectance value (LRV) of roofs to be no more than 20%
    - LRV of exterior cladding to be no more than 30%

21. It is understood that plans for a residential dwelling on the proposed RBP are in the conceptual stage (refer **Appendix C** for Architect's drawings). This design is in accordance with the above design controls.

MITIGATION MEASURES

22. In order to mitigate potential adverse visual effects and ensure an appropriate outcome within the existing landscape character, the following architectural and landscape design controls are recommended:

    - The proposed RBP will have a maximum building height of 4.5m above the specified FFL, ensuring that the scale of any future dwellings is visually appropriate within the existing landscape character,
    - Clustered tree planting including Norway Maple, Dutch "Lobel" Elms and Western Red Cedar, to mitigate potential visibility of the future dwellings from surrounding public views,

- Roof and exterior wall cladding to use a natural range of browns, greens, or greys with an LRV of no more than 20% for roof materials and no more than 30% for exterior materials,
- An appropriately chosen location for the proposed RBP on the site, set back from the small plateau on the site to reduce the visual catchment of a future dwelling on the proposed RBP.
- Establishment of planting prior to construction commencing
- Completion of all earthworks, driveway and mounding before construction commences

*Note: **Appendix A** provides full details on the proposed architectural and landscape design controls.*

RELEVANT STATUTORY PROVISIONS

23. Under the Operative District Plan (ODP), the subject site is located within the Rural Amenity Zone.

24. Under the Proposed District Plan (PDP), the proposed site is located the Wakatipu Basin Rural Amenity Zone, within LCU 11 – Slope Hill 'Foothills.' The south- eastern edge of this character unit borders Slope Hill, an Outstanding Natural Feature (ONF).

25. This landscape assessment will review the relevant matters set out in Chapter 24 and Chapter 27 of the PDP and refer to relevant landscape character and visual amenity values and matters in the LCU 11 description, assessing the alignment of the proposed development against those matters.

26. The effects scale used in this assessment is outlined in **Appendix B,** extracted from '*Guidelines for the Assessment of Landscape and Visual Effects, Supplementary Statement of Evidence of Bridget Mary Gilbert for Queenstown Lakes District Council, Topic 2 – Rural Landscapes, 29 April 2019.'*

27. This landscape assessment responds to the following District Plan assessment matters:

- **PDP:** Chapter 24.7.3 – Wakatipu Basin Rural Amenity Zone
  Chapter 24.8 – Schedule 24.8 Landscape Character Units
  Chapter 27.9.3.3 – Subdivision and Development

LANDSCAPE AND VISUAL ASSESSMENT

Proposed District Plan – Section 24.7.3 Assessment Matters for the construction of a building for residential activity

28. Under the PDP, the proposed site is located in the south-west of LCU 11 – Slope Hill Foothills

29. LCU 11 describes the elevated portions within this character unit as being '*at, or very near, its limit*,' with a '*low capacity*' to absorb future development. The location of the proposed RBP ensures that the proposed earthworks will be visually acceptable and will not adversely affect the landform or natural character of the lower slopes as viewed from western areas. When also taking into account the mitigation planting of this proposal (tree clusters which are in keeping with the surrounding landscape), the proposal in its entirety will contribute to the vegetation patterning and arcadian aesthetic of the western slopes of Slope Hill, with a residential pattern and density which is familiar to this locale. It is considered that the landscape in this portion of LCU 11 has the capacity to absorb rural-residential development of this nature, one which contributes to the visual amenity of Slope Hill and is reasonably difficult to see from public areas.

30. The vegetation patterns within the immediate vicinity include mixed clusters of exotic trees, occasional Macrocarpa shelter belts, Hawthorn hedging along Lower Shotover Road, and amenity planting in the proximity of existing residential dwellings.

31. The proposed mitigation tree planting includes clusters of Norway Maple, Dutch "Lobel" Elms, Western Red Cedar.

32. Similar to the pattern of existing residential dwellings and vegetation in the immediate vicinity of the site and beyond, the existing and proposed planting patterns will visually integrate a future dwelling, associated sheds and the trappings of rural-residential development into the existing patterning and textures of the landscape, mitigating any visual prominence within the landscape.

EFFECTS ON LANDSCAPE CHARACTER

33. The proposed development includes a proposed RBP (522m^2), a proposed pool platform (104m²), a proposed shed platform (96m²) within a proposed curtilage area (5,080m^2). A future dwelling and any sheds and other domestic elements (such as garden beds, hardscaping, washing lines), will all be contained within these areas and will be required to adhere to the proposed architectural and landscape design controls (refer **Appendix A**). This will ensure a consistency in the scale and nature of the future built forms in regards to colour claddings and scale, consistent with the existing landscape character of the surrounding pattern of rural development.
34. The proposal also includes clusters of trees for mitigation purposes, with a mix of exotic and deciduous species to maintain appropriate screening from western views all year round, whilst retaining the subtle transient values of the surrounding arcadian pastoral landscape. The scale and density of the tree clusters is in keeping with the surrounding pattern of tree clusters across the neighbouring rural properties, with the remaining land outside of the curtilage area (where mitigation planting is not proposed) will be retained as pasture grass.

35. To that end, the above measures (including the proposed design controls, mitigation planting and retained open space) will ensure that any adverse effects on the open and natural character of Slope Hill, arising from this proposal, will be Very Low.

VISIBILITY AMENITY

36. The extent of visibility is outlined below:

- Brief glimpses from the south-eastern areas of the Hawthorn Triangle, between 900m and 1200m from the site (**Attachment F**)
- Intermittently along Tucker Beach Road, between 1300m and 2100m of the site (**Attachment G + H**)
- For over 1km of Dalefield Road/Domain Road, between 2400m and 3500m from the site (**Attachment E**)
- The proposal will not be visible in any other areas on Domain Road due to the existing hedgerows adjacent to the road and the existing vegetation below the site.

37. The Context and Photo Location Plan (**Attachment B**) shows the locations of the Landscape Visual Assessment Photographs.

Hawthorn Triangle:

38. LCU 11 places particular emphasis on maintaining existing open views to Slope Hill from western areas, especially from within the Hawthorn Triangle. **Attachment F** displays the occasional areas where the proposal will be visible from within this area.

39. For the most part, a future dwelling on the proposed RBP will be obscured from these views, by the pattern of mounding and amenity planting within the Hawthorn Triangle and the existing vegetation on the western slopes below the site. In the absence of mitigation planting, only the top third of a future dwelling on the proposed RBP would be visible from occasional areas within the Hawthorn Triangle. When taking the mitigation planting into account, after five years, a future dwelling on the proposed RBP would likely not be visible from areas within the Hawthorn Triangle.

40. Although the proposal in its entirety (including earthworks and mitigation planting) will be visible in the short-term from western views within the Hawthorn Triangle, when observing the wider tree line at the base of Slope Hill, the proposed mitigation planting, earthworks and a future dwelling would all sit within the existing pattern of development and will not be discernible against the western slopes of Slope Hill.

41. The mitigation planting is considered to be in keeping with the vegetation patterns of the western slopes, which currently consists of maturing clusters of vegetation (primarily exotic), with denser patches and greater species variety than the rest of LCU 11. The proposed vegetation clusters will sit within the existing tree line of the western slopes of Slope Hill and contribute to the '*highly attractive backdrop to the intensive patterning throughout the Hawthorn Triangle.*'

42. The proposed mitigation planting will help screen any future dwelling from these views, without impeding views of Slope Hill, and without extending into the pastoral landscape of Slope Hill. The mitigation planting and a future dwelling on the proposed RBP will become part of this transitional landscape, characterised by loose groupings of rural dwellings,

enclosed by clusters of mixed, exotic vegetation.

43. The proposed native shrub planting on the north and south of the proposed dwelling follows the proposed contours and will sit low in the landscape (Refer **Attachment D**). The species chosen are fast growing and include grey shrubland species which are locally endemic to the area. The species are low growing, will not impede views of Slope Hill and will not become a prominent feature in the site or wider landscape.

44. To that end, existing open views of Slope Hill will be retained, with the proposal forming a minor component of the wider landscape, which will not be visually prominent on the western slopes of Slope Hill. Any potential adverse effects arising from this proposal on the natural and arcadian character of the landscape, when viewed from these locations, will be low.

Distant Views:

45. When viewing the site from areas beyond the Hawthorn Triangle (Tucker Beach Road and Dalefield Road specifically), the patterning of rural-residential developments, hedgerows, driveways and vegetation clusters of the western slopes of Slope Hill and the wider landscape is more apparent than from within the Hawthorn Triangle.

46. The proposal (consisting of earthworks, mitigation planting, a proposed RBP and a potential future dwelling) will be easily absorbed into this landscape, which will become part of this existing patterning. When viewing the site from Tucker Beach Road, the low native shrub planting to the south of the proposed RBP will also assist in screening a future dwelling on the proposed RBP from these views.

47. When taking into account the mitigating effects of distance, the proposal will be visually integrated into the setting of established trees and residential development, with existing views of Slope Hill maintained.

48. Any potential adverse visual effects arising from this proposal on the character of the landscape, when viewed from these locations, will be very low.

Impact on forms, patterns and lines of the existing landscape:

49. The proposed RBP has been carefully located in a level area with a slight depression, reducing its visual catchment and thereby reducing the potential visibility of a future dwelling on the proposed RBP. As such, a future dwelling which complies with the proposed design controls (**Appendix A**) will not break the line and form of Slope Hill and will be further absorbed into the landscape by the mitigation planting behind.

50. The proposed gravel driveway will follow the existing topography, maintaining a steady gradient throughout. The proposed earthworks to create the proposed RBP will be largely out of sight from western views, due to its positioning within the existing topography and the existing vegetation below the site. All proposed earthworks will have a maximum gradient of 1:3 (except to the south side of the 990mm high stone retaining wall where the landform will be graded at 1:2), ensuring that all slopes are mowable and integrate into the existing topography. When grassed, the earthworks

required to form the RBP will not be discernible from any views.

51. The proposed changes to the existing landform follow the natural lines of the existing topography and will not introduce elements which are inconsistent with the existing topography. Any adverse landscape effects on the naturalness of the existing landscape arising from the proposal, in respect to proposed roads, earthworks and landscaping, will be Very Low.

52. Existing fencing is present along the north and south boundaries of the proposed lot. The only additional boundary fencing which is likely to occur will be along the proposed western boundary, which follows the existing contours of the land. If constructed, this will be post and wire (as stated in **Appendix A**), ensuring consistency with the surrounding rural amenity landscape. The proposed mitigation planting, although planted adjacent to the lot boundary in places, will be planted in natural sweeping shapes (refer **Attachment D**) to ensure that the proposal does not give rise to any unnatural arbitrary lines or patterns, with the planting clusters forms being consistent with that in the surrounding rural general landscape.

Visibility of development conclusion:

53. The subject site is located within a VAL at the foothills of Slope Hill, which is an ONF. All public and private views of the proposal are from substantial distances west of the site, including occasional glimpses from within the Hawthorn Triangle (from distances ranging between 900m and 1200m), intermittently along Tucker Beach Road (from distances ranging between 1300m and 2100m) and from Dalefield Road/Domain Road (from distances ranging between 2400m and 3500m).

54. Due to the existing topography and vegetation, along with the proposed mitigation planting and proposed design controls on any future dwelling, any potential adverse effects arising from the proposal on the natural and arcadian pastoral character of the landscape, when viewed from surrounding public and private areas, will be Low. Small portions of the dwelling will be visible, however, that is consistent with the character of the surrounding rural amenity landscape.

55. The proposed mitigation planting and design controls ensure that a future dwelling on the proposed RBP will not break the line and form of any skylines, ridges, hills or prominent slopes, with the Slope Hill ONF remaining visually dominant.

56. The proposed accessways and earthworks will not change the line of the landscape or affect the existing natural topography. The proposed lot is considered to be of an appropriate scale to the existing landscape character; any associated fencing will be limited to 1m high post and wire or post and rail fencing. It is considered that any potential visibility of fencing will not give rise to any arbitrary lines and patterns on the landscape with respect to the existing character.

DESIGN AND DENSITY

57. The proposal utilises the existing topography to locate the proposed RBP in the most discrete location of the site, in a largely level area, reducing its visual catchment. As described above, a future dwelling in this location will not be highly visible from surrounding public areas and will be well integrated into this rural amenity landscape.

58. Opportunity has been taken to utilise the existing driveway to the existing dwelling on Lot 1 to access the proposed RBP on Lot 2.

59. As described above, the proposed RBP and associated development will be concentrated in the eastern portion of the site, where it is less visible with a higher potential to absorb development than the western portion of the proposed lot which is more visible to surrounding areas. The western portion of the site will be kept in pasture grass to retain the existing natural and arcadian values of the site and wider landscape.

60. The proposed lots (Lot 1 being 0.90ha and Lot 2 being 3.24ha) are collectively similar in size to surrounding subdivided lots in the southern portion of LCU 11, which include existing groupings of dwellings of a similar density and nature. Given its lack of visibility, the proposal will be of a similar character to the surrounding settlement patterns, consisting of loose groupings of dwellings amongst established clusters of planting, with the ability to be absorbed in this rural-residential landscape. The proposal will not introduce densities characteristic of urban areas.

61. The proposal maintains open pastoral space in the most visible portions of the site, maintaining adequate and appropriate visual access to these areas from western views, with views of Slope Hill also retained.

62. As outlined within the design controls **(refer Appendix A)**, all buildings and domesticated landscape features are to be contained within the identified curtilage area, with the land outside of the curtilage area retained as pasture grass. It is acknowledged that this does reduce the amount of land available for grazing or other agricultural activities on the site.

63. The proposed 3.5m wide gravel accessway is consistent with the existing rural development within the vicinity. The scale and nature of the development will not require infrastructure consistent with urban landscapes. All landscaping, fencing and entranceways will be consistent with traditional rural elements in the vicinity.

64. Overall, it is considered that the form and density of the proposed development is appropriate within the context of the surrounding rural amenity landscape.

CUMULATIVE EFFECTS OF DEVELOPMENT ON THE LANDSCAPE

65. As previously discussed, the nature and extent of established rural development within the vicinity is typified by mixed clusters of maturing exotic trees, areas of open pasture grass, driveways and farm fencing. Within this landscape, views of scattered farm buildings and residential dwellings with associated amenity planting are established and expected.

66. The nature and extent of the proposed development is considered to be appropriate with the existing landscape character identified above. The glimpse views of the future dwelling will not lead to further degradation or domestication of the

landscape such that the existing development and land use may represent a threshold with respect to the vicinity's ability to absorb further change.

67. As a result of the established vegetation and limited visibility from public places, it is considered that the proposed site is located within a visually contained landscape, with potential visibility limited to occasional views from within the Hawthorn Triangle (between 900-1200m of the site) and distant views from Tucker Beach Road and Dalefield Road. The proposed location of the RBP within the existing topography, along with the proposed mitigation planting, mitigates any potential cumulative effects of the built form, by significantly limiting the visual catchment.

Proposed District Plan – Chapter 27.9.3.3 – Subdivision and Development

68. The relevant assessment matters within Chapter 27.9.3.3 have already been discussed within this report.

CONCLUSION

69. The architectural and landscape design controls ensure that the scale and density of the proposed development is visually appropriate within existing landscape character, retaining pastoral land in the more visible western portion of the site, and maintaining open views of Slope Hill from western areas.

70. Potential visibility from surrounding public places is limited to occasional areas within the Hawthorn Triangle (between 900-1200m of the site) and distant views from Tucker Beach Road and Dalefield Road. From these views, the existing topography, vegetation and proposed mitigation planting will limit the visibility of the proposed development. When also taking into account the proposed design controls, a future dwelling om the proposed RBP will sit low in the landscape, being reasonably difficult to see and integrated into the surrounding rural amenity landscape.

71. To that end, the proposed development is considered to be visually coherent with the existing landscape character and any potential visibility will have a Low adverse visual effect on the character and quality of the existing landscape.

72. The proposed development sits comfortably within the framework of description and development capacity as contained in the LCU 11 notes.

APPENDIX A

Landscape and visual effects rating scales extracted from the Guidelines for the Assessment of Landscape and Visual Effects, Supplementary Statement of Evidence of Bridget Mary Gilbert for Queenstown Lakes District Council, Topic 2 – Rural Landscapes, 29 April 2019.

Adverse Visual Effects Rating Scale	
Effect Rating	**Use and Definition**
Very High	Total loss of key elements / features / characteristics, i.e. amounts to a very significant negative change in visual amenity.
High	Major modification or loss of most key elements / features / characteristics, i.e. little of the pre-development visual amenity remains and amounts to a significant negative change in visual amenity values. Concise Oxford English Dictionary Definition High: adjective - Great in amount, value, size, or intensity.
Moderate - High	Modifications of several key elements / features / characteristics, i.e. the pre-development visual amenity remains evident but materially changed.
Moderate	Partial loss of or modification to key elements / features / characteristics, i.e. the pre-development visual amenity remains evident but is changed. Concise Oxford English Dictionary Definition Moderate: adjective - average in amount, intensity, quality or degree
Moderate - Low	Small loss of or modification to one or more key elements / features / characteristics, i.e. new elements are not uncharacteristic within the visual environment and do not disturb the pre development visual amenity.
Low	Very little material loss of or modification to key elements / features / characteristics. i.e. new elements integrate seamlessly into the pre-development visual environment. Concise Oxford English Dictionary Definition Low: adjective- 1. Below average in amount, extent, or intensity.
Very Low	Negligible loss of or modification to key elements/ features/ characteristics of the baseline, i.e. visual influence of new elements is barely discernible.

Adverse Landscape Effects Rating Scale	
Effect Rating	**Use and Definition**
Very High	Total loss of key elements / features / characteristics / values, i.e. amounts to a very significant negative change in landscape character and / or landscape values.
High	Major modification or loss of most key elements / features / characteristics / values, i.e. little of the pre- development landscape character remains and amounts to a significant negative change in landscape character and / or landscape values. Concise Oxford English Dictionary Definition High: adjective - Great in amount, value, size, or intensity.
Moderate - High	Modifications of several key elements / features / characteristics / values, i.e. the pre-development landscape character and / or landscape values remains evident but materially changed.
Moderate	Partial loss of or modification to key elements / features / characteristics / values, i.e. the pre-development landscape character and / or landscape values remains evident but is changed. Concise Oxford English Dictionary Definition Moderate: adjective - average in amount, intensity, quality or degree
Moderate - Low	Small loss of or modification to one or more key elements / features / characteristics / values, i.e. new elements are not uncharacteristic within the receiving landscape and do not disturb the pre development

	landscape character and / or landscape values.
Low	Very little material loss of or modification to key elements / features / characteristics / values. i.e. new elements integrate seamlessly into the pre-development landscape character and / or landscape values. Concise Oxford English Dictionary Definition Low: adjective- 1. Below average in amount, extent, or intensity.
Very Low	Negligible loss of or modification to key elements/ features/ characteristics / values of the baseline, i.e. influence of new elements on landscape character and / or landscape values is barely discernible.

For the purposes of notification determination, an adverse effects rating of Moderate- Low corresponds to a 'minor' adverse effects rating. An adverse effects rating of 'Low' or 'Very Low' corresponds to a 'less than minor' adverse effects rating.
NB. These rating scales apply to adverse effects, not to positive effects.

APPENDIX A

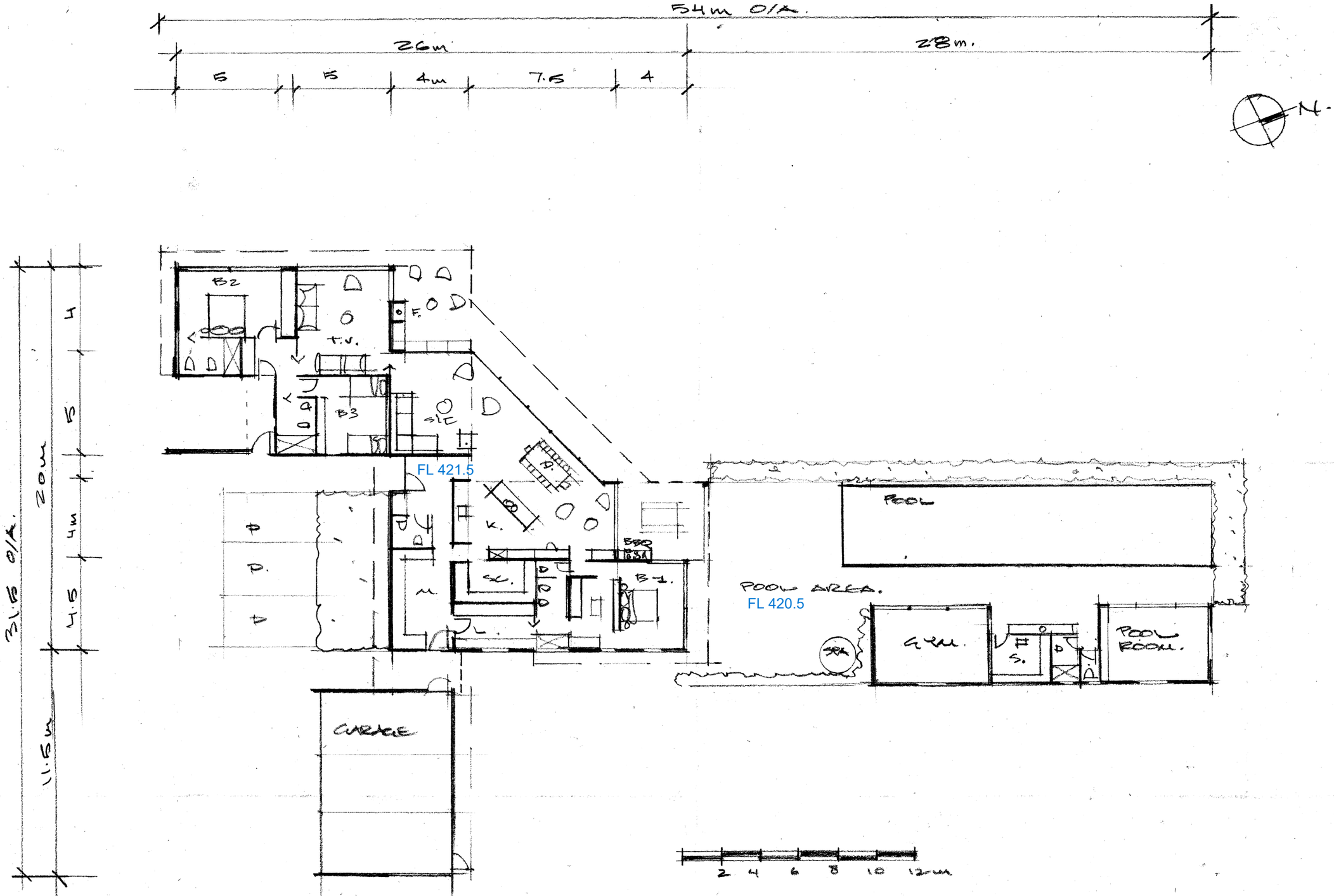
Landscape and visual effects rating scales extracted from the Guidelines for the Assessment of Landscape and Visual Effects, Supplementary Statement of Evidence of Bridget Mary Gilbert for Queenstown Lakes District Council, Topic 2 – Rural Landscapes, 29 April 2019.

Adverse Visual Effects Rating Scale	
Effect Rating	**Use and Definition**
Very High	Total loss of key elements / features / characteristics, i.e. amounts to a very significant negative change in visual amenity.
High	Major modification or loss of most key elements / features / characteristics, i.e. little of the pre-development visual amenity remains and amounts to a significant negative change in visual amenity values. Concise Oxford English Dictionary Definition High: adjective - Great in amount, value, size, or intensity.
Moderate - High	Modifications of several key elements / features / characteristics, i.e. the pre-development visual amenity remains evident but materially changed.
Moderate	Partial loss of or modification to key elements / features / characteristics, i.e. the pre-development visual amenity remains evident but is changed. Concise Oxford English Dictionary Definition Moderate: adjective - average in amount, intensity, quality or degree
Moderate - Low	Small loss of or modification to one or more key elements / features / characteristics, i.e. new elements are not uncharacteristic within the visual environment and do not disturb the pre development visual amenity.
Low	Very little material loss of or modification to key elements / features / characteristics. i.e. new elements integrate seamlessly into the pre-development visual environment. Concise Oxford English Dictionary Definition Low: adjective- 1. Below average in amount, extent, or intensity.
Very Low	Negligible loss of or modification to key elements/ features/ characteristics of the baseline, i.e. visual influence of new elements is barely discernible.

Adverse Landscape Effects Rating Scale	
Effect Rating	**Use and Definition**
Very High	Total loss of key elements / features / characteristics / values, i.e. amounts to a very significant negative change in landscape character and / or landscape values.
High	Major modification or loss of most key elements / features / characteristics / values, i.e. little of the pre-development landscape character remains and amounts to a significant negative change in landscape character and / or landscape values. Concise Oxford English Dictionary Definition High: adjective - Great in amount, value, size, or intensity.
Moderate - High	Modifications of several key elements / features / characteristics / values, i.e. the pre-development landscape character and / or landscape values remains evident but materially changed.
Moderate	Partial loss of or modification to key elements / features / characteristics / values, i.e. the pre-development landscape character and / or landscape values remains evident but is changed. Concise Oxford English Dictionary Definition Moderate: adjective - average in amount, intensity, quality or degree
Moderate - Low	Small loss of or modification to one or more key elements / features / characteristics / values, i.e. new elements are not uncharacteristic within the receiving landscape and do not disturb the pre development landscape character and / or landscape values.
Low	Very little material loss of or modification to key elements / features / characteristics / values. i.e. new elements integrate seamlessly into the pre-development landscape character and / or landscape values. Concise Oxford English Dictionary Definition Low: adjective- 1. Below average in amount, extent, or intensity.
Very Low	Negligible loss of or modification to key elements/ features/ characteristics / values of the baseline, i.e. influence of new elements on landscape character and / or landscape values is barely discernible.

For the purposes of notification determination, an adverse effects rating of Moderate- Low corresponds to a 'minor' adverse effects rating. An adverse effects rating of 'Low' or 'Very Low' corresponds to a 'less than minor' adverse effects rating.

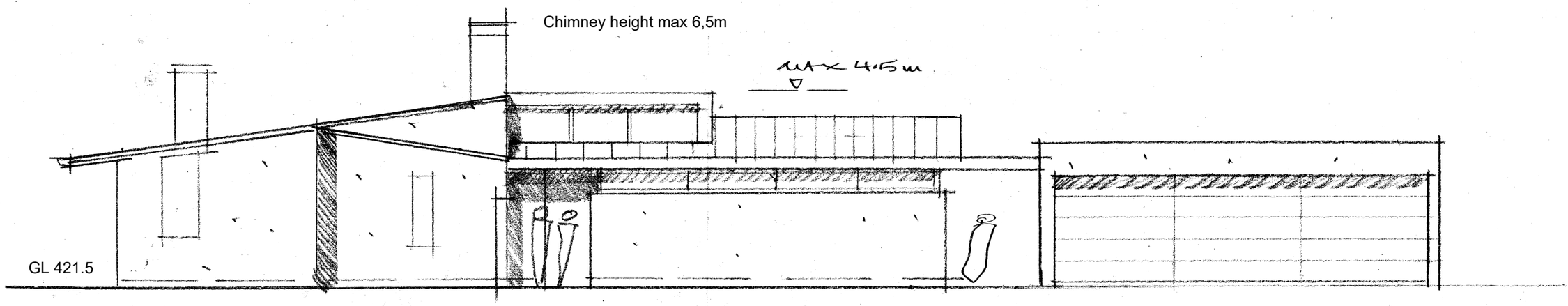
NB. These rating scales apply to adverse effects, not to positive effects.



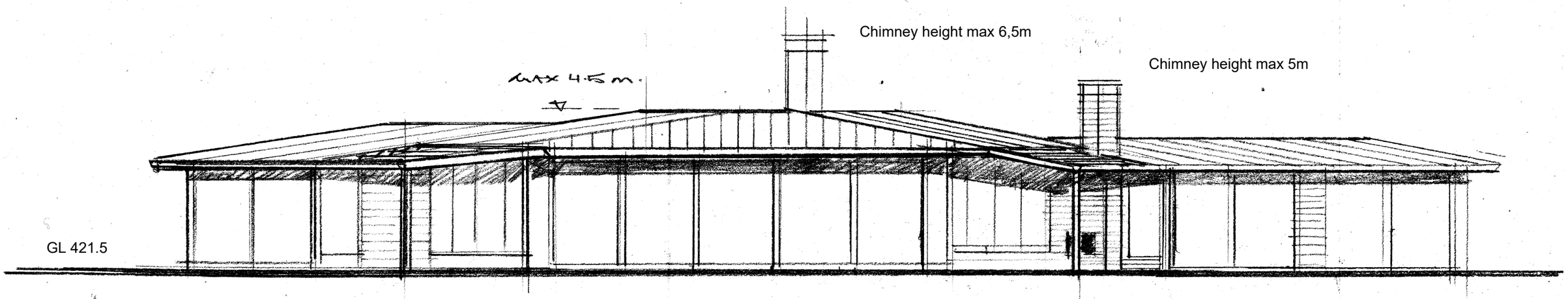
Floor Areas:
House: 295sqm
Garage: 60sqm
Pool bldg: 55sqm

WIKSTROM HOUSE
LOWER SHOTOVER
QUEENSTOWN

JULY 2023



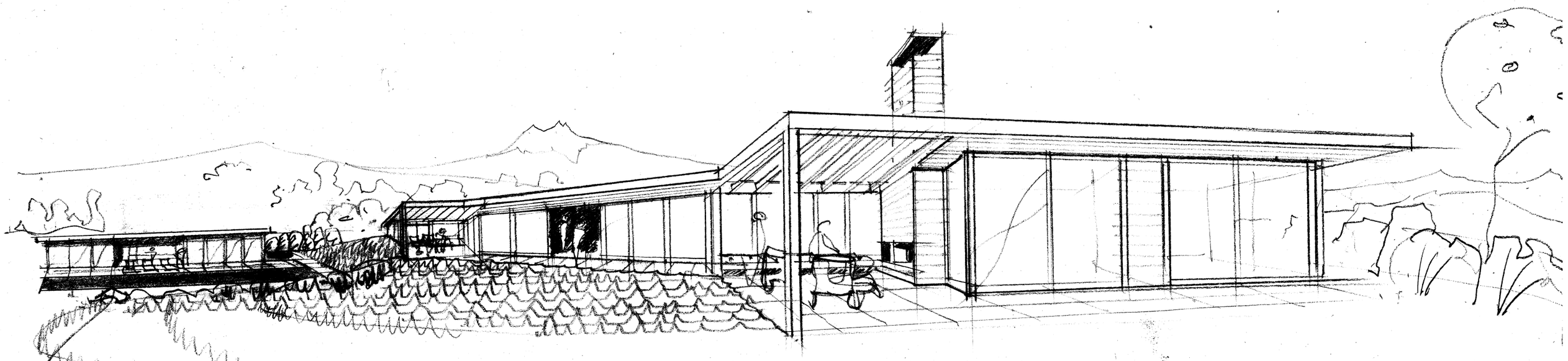
SOUTH ELEVATION



NORTH ELEVATION.

WIKSTROM HOUSE
LOWER SHOTOVER
QUEENSTOWN

JULY 2023

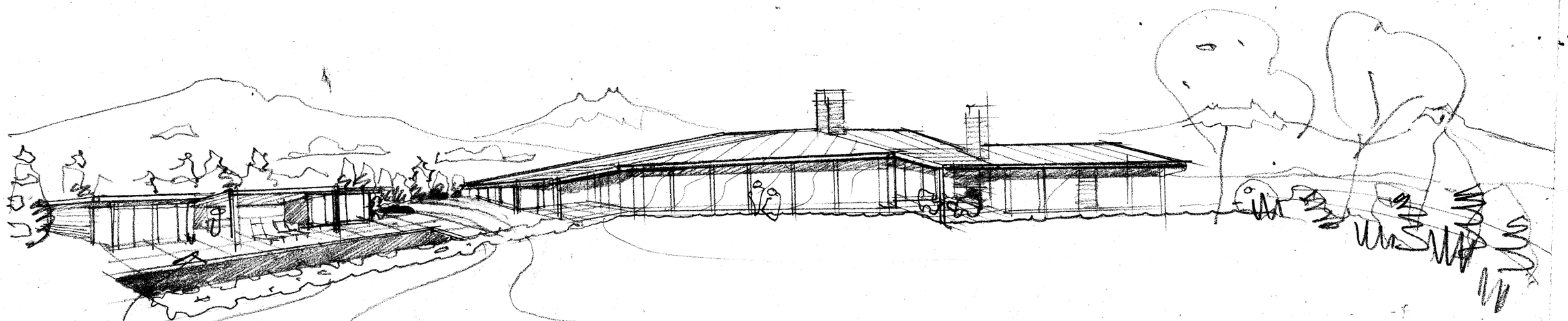


POOL & POOL BUILDING SET DOWN 1 M FROM HOUSE.

SKETCH FROM N-WEST

WIKSTROM HOUSE
LOWER SHOTOVER
QUEENSTOWN

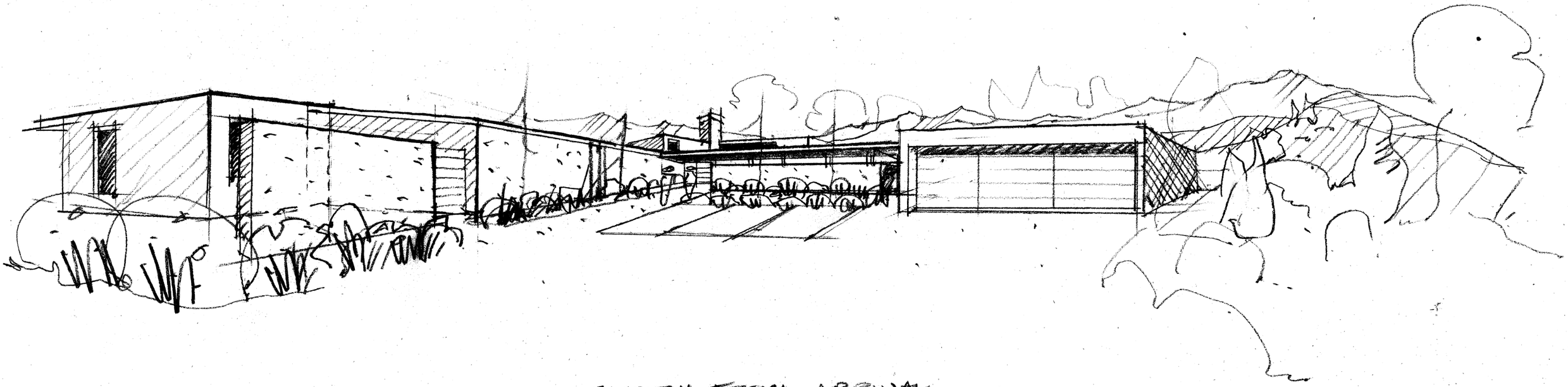
JULY 2023



POOL & POOL BUILDING SET-DOWN 1M LOWER THAN HOUSE.

SKETCH FROM NORTH-WEST SHOWING GENTLE HIPPED ROOF LINE.

WIKATEA HOUSE
FROM N-WEST
GB. AUG 2023.



SKETCH FROM ARRIVAL
(SOUTH)

LOW SOLID WALLS READ
LIKE GARDEN WALLS OF A
COURTYARD, WITH HIGHER
BUILDING ELEMENTS BEYOND.

WIKSTROM HOUSE
LOWER SHOTOVER
QUEENSTOWN

JULY 2023.

Wikstrom – Lower Shotover Road
Design Controls
11 August 2023

A. PURPOSE OF THE DESIGN CONTROLS

These design controls will set the character of the built form and designed landscape within the proposed Lot. The intention is to ensure a high quality architectural form, with materials and colours that are sympathetic to the landscape, minimise potential adverse visual effects whilst promoting design integration into the existing characteristics of the site.

B. ARCHITECTURAL DESIGN CONTROLS

B1. KEY OBJECTIVES

The following objectives of the architectural controls seek to achieve a high-quality architectural design complementary to the character of the site and surrounding built forms ensuring that all dwellings are:

- To continue the rural lifestyle character of the surrounding area into this lot with form and materiality,
- To enable the proposed development to be absorbed into the wider landscapes texture and pattern,
- To be complimentary in form, materiality, texture, and colour with the hue and saturation found naturally in the surrounding landscape.

The architectural design shall adhere to the following controls:

B2. SITE COVERAGE

Objectives:

- To ensure rural character is maintained by promoting an appropriate scale of open space in comparison to dwelling size.

Controls:

(a) The dwelling and garage shall be located within the building platforms

B3. BUILDING FORM, ROOF AND HEIGHT

Objectives:

- To promote a consistent design approach for the dwelling and garaging.

Controls:

(a) Two tiers of roof form controls include separate controls for monopitch ('flat') roof forms and hip roofs.

(b) Hip roofs are permitted.
(c) Monopitch ('flat') roof forms; monopitch roof forms are permitted up to 5-degree pitch roofs. The building height of monopitched forms shall not exceed 4.5m from slab to top of roof (excluding chimneys).
(d) The building height shall not exceed 4.5m from slab to top of roof (excluding chimneys).
(e) Roof colours are to be in the natural range of browns, greens and greys and have a light reflectancy value (LRV) of less than 20%. Roof materials shall be restricted to one material from the following materials only: Steel tray cladding, timber shingles left to weather or natural stain, corrugated iron, weathered steel (or corten) or concrete.
(f) No deck, porch, veranda or similar exterior-built surface, which is part of the building shall extend beyond 5m from the building. Note: verandah/porch etc to be included in the site coverage.
(g) Materiality and colour of deck, porch, veranda, or similar exterior-built surface, to be sympathetic to the surrounding colour palette of the area.
(h) Any building located on platforms X and Z shall have a maximum building height of 3.5m and shall comply with the above controls regarding roof form and materiality.

B4. WINDOW AND GLAZING

Objectives:
- To control glazing percentage of each elevation and mitigate potential reflectivity.

Controls:
(a) Glazing on the north and west elevations shall not exceed 75% of the wall area on each elevation.

B5. EXTERNAL WALL CLADDING

Objectives:
- To ensure an appropriate range of materials, which complement the natural characteristics of the environment and are recessive within the landscape.

Controls:
(a) All materials shall be resilient and durable in nature. External wall materials shall be limited to two materials on any single elevation, with an LRV of less than 30%. External wall materials shall be restricted to the following materials only in the natural range of browns, greens and greys:

- Natural timber cladding, left to weather, in either 'weatherboard', 'shiplap', 'tongue and groove', or vertical 'board and batten' styles.
- Stained timber cladding,
- Steel tray cladding
- Corten/mild steel
- Locally sourced schist stone, laid horizontally, 'mudded' or dry stacked
- Profiled metal: standing seam profile in dark colours, or pre-weathered zinc
- Concrete
- Plaster

(b) All window and door joinery, gutters and downpipes shall be coloured to match the roof and exterior wall cladding
(c) All reflectivity values for wall claddings not to exceed that stated for roof claddings

C. LANDSCAPE DESIGN CONTROLS

C1. KEY OBJECTIVES

The objectives of the following landscape controls are to ensure that the designed landscape will:

- Produce a contiguous design of planting across all lots, fitting back into the natural character of the area,

C2. FENCING AND ENTRY FEATURES

Controls:

(a) All boundary fencing and internal fencing shall be restricted to 1m high post and wire, with rabbit proofing mesh where required.

C3. EARTHWORKS, DRIVEWAY AND PARKING

Objectives:

- To ensure surface materials are contiguous and complimentary with the surrounding landscape.

Controls:

(a) The driveways and vehicle courtyard are permitted inside the building platform and curtilage area and shall be finished in compacted driveway specified gravels, exposed aggregate, asphalt, or similar.

C4. EXTERNAL LIGHTING

Objectives:

- Lighting will be used for the purpose of illuminating the dwelling entries, driveways and outdoor living areas only.

Controls:

(a) Any external lighting shall be restricted to down lighting only and no higher than 1.2m.
(b) Lighting should not create any light spill and shall be low lux level. Light sources are to be LED, incandescent, halogen or other 'white light'. Sodium vapour or other coloured lighting is not allowed.

C5. CURTILAGE AREA

All domestic activity such as mown lawns, amenity gardens, garden structures, paved areas, play equipment, clothes lines and external lighting shall be restricted to the curtilage area. All areas outside the curtilage area shall be maintained in pastoral grass by way of grazing and/or mowing.

INFRASTRUCTURE REPORT

Proposed 2 Lot Subdivision

160 Lower Shotover Road

April 2023

1.0 EXECUTIVE SUMMARY OF PROPOSAL

John and Maria Wikstrom seek subdivision consent for a 2-lot rural residential subdivision.

As a requirement for this application, we have investigated the existing infrastructure availability to confirm what is proposed can be serviced by this infrastructure.

This report will outline the following infrastructure availability;

1. Wastewater
2. Potable Water
3. Stormwater
4. Telecommunications and Electricity
5. Access

2.0 WASTEWATER

2.1 Wastewater Availability

QLDC reticulated does not exist within this area of the Wakatipu Basin.

The existing house is serviced by its own disposal field located west of the tennis court.

The new lot has sufficient land availability to located its own wastewater disposal field. This location and detailed design will be completed in association with the dwelling design.

Geotechnical investigations have confirmed the ground conditions are suitable for onsite disposal.

3.0 POTABALE WATER

3.1 Potable Water Availability

The existing supply is via the Glenpanel Water Scheme which was recently connected to the QLDC network via a 63mm rider main, replacing the bore supply.

Confirmation from QLDC P&I has been requested for an additional 2,100l/day connection, which will service the additional Lot.

4.0 STORMWATER

4.1 Stormwater Availability

There is no reticulated stormwater supply within this area of the Wakatipu Basin.

The current house disposes of stormwater to onsite soakpits.

As the case with the wastewater the new lot has sufficient land available to locate a suitably sized soakpit.

Geotechnical investigations have confirmed the ground conditions have a soakrate of 1mm per hour, initial calculations show a 4.5mx4.5mx2m soakpit can service a 500m² developed area. Alternatively, a dry pond could be utilised.

5.0 TELECOMMUNICATIONS & ELECTRICITY

5.1 Power and Telecommunications Supply

The appropriate service providers have confirmed power and telecommunication supply is available from the existing reticulation. Confirmation from Aurora and Chorus is attached to this document.

The proposed lot will be provided with a copper network connection or an alternative wireless (Cell) network connection.

6.0 ACCESS

6.1 Access

The site will be accessed via the existing driveway, this will become a shared Right of Way. Upgrades to this driveway will be required, in the way of appropriately placed passing bays.

A new portion of driveway will be constructed. The location of this driveway can be seen on the landscape drawings. This will be constructed to QLDC standards with a minimum pavement of 150mm AP40 on compacted subgrade which has achieved a CBR value of at least 7, with a maximum gradient of 1 in 6 or 16.66%.

A longsection of this driveway has been attached to the application, this shows the gradients comply with QLDC standards.

7.0 CONCLUSION

This infrastructure report demonstrates that the proposed residential dwelling can be serviced through the existing available services.

Should this consent be granted further investigations and detailed design will be required.

From: Craig Woodcock
To: Emma Ryder
Subject: Fwd: 160 Lower Shotover Road
Date: Wednesday, 3 May 2023 11:20:32 AM

Kind Regards

Craig
021982563

From: Richard Powell <richard.powell@qldc.govt.nz>
Sent: Wednesday, May 3, 2023 10:39:34 AM
To: Craig Woodcock <craig.woodcock@jea.co.nz>
Subject: RE: 160 Lower Shotover Road

Hi Craig,

Apologies for the delayed response.

Fundamentally we have no objections to another connection to the Glenpanel Water Scheme, however this is a private scheme so you will need to confirm with the owners of the scheme that it is capable of supplying a further connection with the pressure and flows that we provide from our network.

Your probably also aware but because the water comes from our network a DC charge will also apply for any new connection.

Let me know if you need anything further.

Thanks

Richard

From: Craig Woodcock <craig.woodcock@jea.co.nz>
Sent: Thursday, 20 April 2023 2:52 PM
To: Richard Powell <richard.powell@qldc.govt.nz>
Subject: RE: 160 Lower Shotover Road

Hi Richard,

Just following up on this one.

Cheers.

Kind Regards

Craig

CRAIG WOODCOCK
B. Surv, MNZIS
licensed cadastral surveyor - principal
021 982 563 | 03 409 0009
craig@jea.co.nz | www.jea.co.nz
Level 2, 36 Shotover Street, PO Box 95, Queenstown 9300

From: Craig Woodcock
Sent: Monday, February 20, 2023 2:04 PM
To: Richard Powell <richard.powell@qldc.govt.nz>
Subject: 160 Lower Shotover Road

Hi Richard,

Trust you are well.

We have a client looking at doing a 2 lot subdivision at 160 Lower Shotover Road. The existing house as a connection to the Glenpanel Water Scheme, which we understand has been connected to the QLDC mains.

Can you confirm our client would be able to get an additional supply of 2100l/day from the now QLDC fed Glenpanel Water Scheme.

Kind Regards

Craig

CRAIG WOODCOCK
B. Surv, MNZIS
licensed cadastral surveyor - principal
021 982 563 | 03 409 0009
craig@jea.co.nz | www.jea.co.nz
Level 2, 36 Shotover Street, PO Box 95, Queenstown 9300

The content of this email is confidential and may be legally privileged. If it is not intended for you, please email the sender immediately and destroy the original message.

KEY

- Fill Depth 0.0m to 0.5m
- Fill Depth 0.5m to 1.0m
- Fill Depth 1.0m to 1.5m
- Fill Depth 1.5m to 2.0m
- Fill Depth 2.0m to 2.5m
- Fill Depth 2.5m to 3.0m
- Fill Depth 3.0m to 3.5m
- Cut Depth 0.0m to 0.5m
- Cut Depth 0.5m to 1.0m
- Cut Depth 1.0m to 1.5m
- Cut Depth 1.5m to 2.0m
- Cut Depth 1.5m to 2.0m
- Cut Depth 1.5m to 2.0m

EARTHWORKS SUMMARY

Areas
Earthworks area 5,977m²

Volumes
Cut 2,566m³
Fill 2,495m³

NOTES

-Original ground surface is a combination of QLDC LIDAR and Survey data.
-No allowance for Bulking.
-No allowance for topsoil stripping.
-No allowance for site retaining.
-No allowance for pavement surfaces.
-Contour interval 0.5m

LOT 4
DP 22781

LOT 1
DP 21410

NORTH

LEGEND

MAJOR CONTOUR
MINOR CONTOUR

NOTE:
Contour interval 0.5m

ISSUED FOR REVIEW - 07.06.23

JEA TOWN PLANNERS & SURVEYORS
Level 2, 36 Shotover Street
PO Box 95, Queenstown, 9300

CLIENT: WIKSTROM

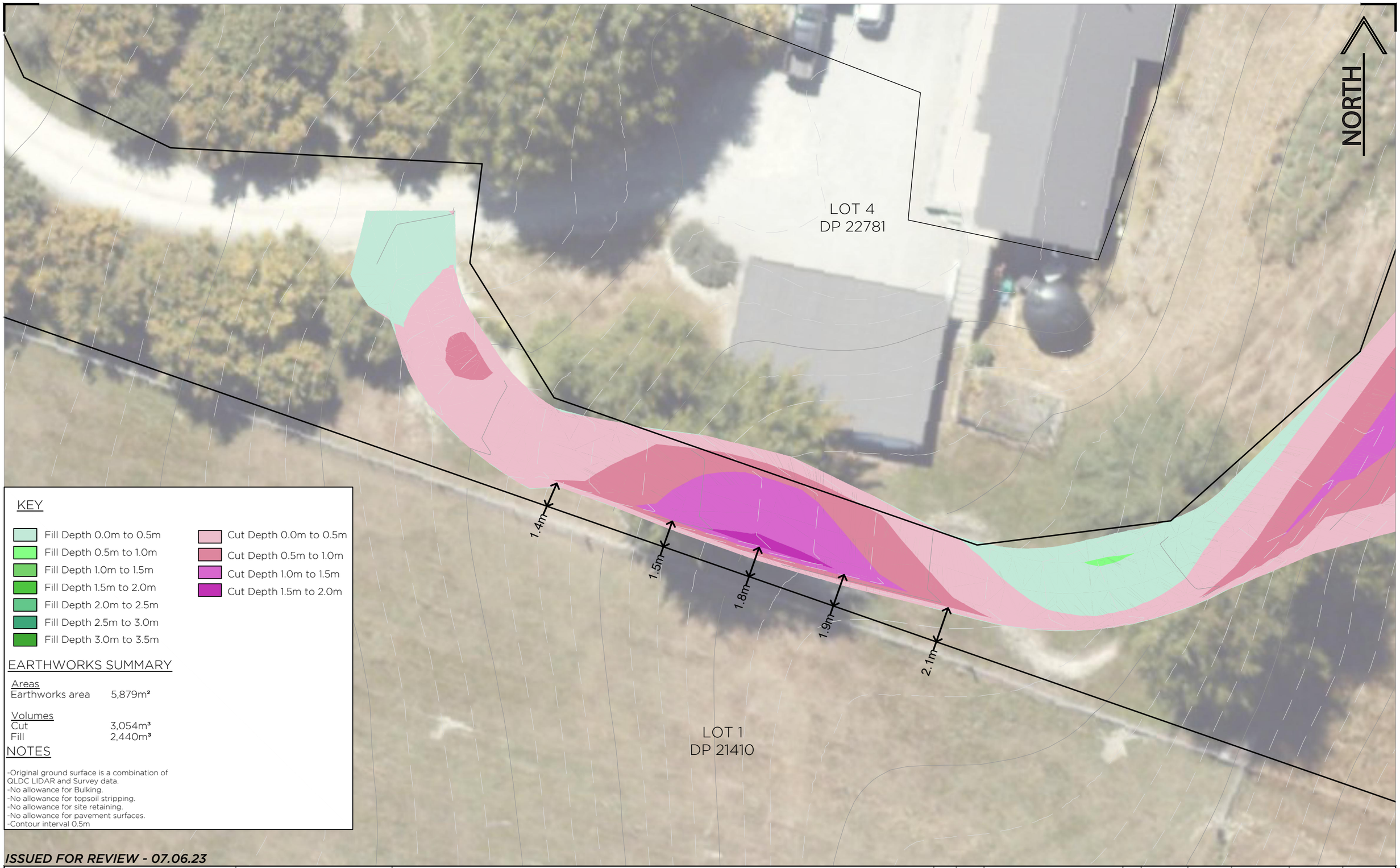
NOTES:
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

PROPOSED EARTHWORKS - 2 LOT SUBDIVISION
LOT 4 DP 22781, 160 LOWER SHOTOVER ROAD
SHEET 1 OF 2

REV.	DATE	REVISION DETAILS	BY
A	16.02.23	INITIAL	FC
B	21.03.23	AMENDED EARTHWORKS	FC
C	02.05.23	EW's DISTANCES FROM BOUNDARY	FC
D	24.05.23	AMEND EARTHWORKS	CW
E	07.06.23	AMEND EARTHWORKS	MF
F	03.08.23	AMEND EARTHWORKS	CW

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
FC	CW	14.02.23	22221	04.01
DRAWN	CHECKED	DATE	SCALE	
FC	CW	16.02.23	1:500m @ A3	
DATUM & LEVEL				REV.
MT NIC 2000 - NZVD16				F

C:\Users\JEA Craig\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 160 L Shotover Road - Subdivision\Survey\CAD\22221.04.01F - Proposed Earthworks.dwg Plotted: 03.08.2023



KEY

- Fill Depth 0.0m to 0.5m
- Fill Depth 0.5m to 1.0m
- Fill Depth 1.0m to 1.5m
- Fill Depth 1.5m to 2.0m
- Fill Depth 2.0m to 2.5m
- Fill Depth 2.5m to 3.0m
- Fill Depth 3.0m to 3.5m
- Cut Depth 0.0m to 0.5m
- Cut Depth 0.5m to 1.0m
- Cut Depth 1.0m to 1.5m
- Cut Depth 1.5m to 2.0m

EARTHWORKS SUMMARY

Areas
Earthworks area 5,879m²

Volumes
Cut 3,054m³
Fill 2,440m³

NOTES

-Original ground surface is a combination of QLDC LIDAR and Survey data.
-No allowance for Bulking.
-No allowance for topsoil stripping.
-No allowance for site retaining.
-No allowance for pavement surfaces.
-Contour interval 0.5m

ISSUED FOR REVIEW - 07.06.23

JEA TOWN PLANNERS & SURVEYORS
Level 2, 36 Shotover Street
PO Box 95, Queenstown, 9300

CLIENT: WIKSTROM

NOTES:
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

PROPOSED EARTHWORKS - 2 LOT SUBDIVISION
LOT 4 DP 22781, 160 LOWER SHOTOVER RD
SHEET 2 OF 2

REV.	DATE	REVISION DETAILS	BY
A	16.02.23	INITIAL	FC
B	21.03.23	AMENDED EARTHWORKS	FC
C	02.05.23	EW's DISTANCES FROM BOUNDARY	FC
D	24.05.23	EW AMENDMENTS	CW
E	07.06.23	AMEND EARTHWORKS	MF

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
FC	CW	14.02.23	22221	04.01
DRAWN	CHECKED	DATE	SCALE	
FC	CW	02.05.23	1:200m @ A3	
DATUM & LEVEL				REV.
MT NIC 2000 - NZVD16				E

C:\Users\JEA Craig\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 160 L Shotover Road - Subdivision\Survey\CAD\22221.04.01F - Proposed Earthworks.dwg Plotted: 03.08.2023

Geotechnical Report for Resource Consent

160 Lower Shotover Road, Queenstown

Report prepared for:

John Wikstrom

Report prepared by:

GeoSolve Limited

Distribution:

John Wikstrom

John Edmonds & Associates

GeoSolve Limited (File)

April 2023

GeoSolve Ref: 230131

Revision	Issue Date	Purpose	Author	Reviewed
0	27/04/2023	Client issue	MBS / NW	PGF

GEOTECHNICAL WATER RESOURCES PAVEMENTS

Table of Contents

1 Introduction

1.1 General

This report presents the results of geotechnical investigations and a surface water runoff assessment carried out by GeoSolve Ltd to determine subsoil conditions and provide geotechnical inputs and conceptual stormwater channel design for a proposed residential subdivision at 160 Lower Shotover Road, Queenstown.

Photo 1.1 – Proposed building site, 160 Lower Shotover Road

The investigations were undertaken for John Wikstrom in accordance with GeoSolve Ltd proposal reference 230131 dated 14 March 2023, which outlines the scope of work and conditions of engagement.

This report has been prepared to support a resource consent application.

1.2 Development

We understand it is proposed to subdivide the property into two lots. A draft plan of the proposed lot layout (provided by Baxter Design) is attached in Figure 2, Appendix A.

A new building platform will be formed on proposed Lot 2. An indicative dwelling footprint has been provided and is shown in Figures 1 and 2, Appendix A. Lot 1 will contain the existing dwelling.

A new gravel driveway will access the new building platform on Lot 2 and will be formed from the existing driveway passing between the existing dwelling and the southern boundary of the site.

A proposed earthworks plan provided by John Edmonds and Associates (JEA) indicates cut depths of up to approximately 2 m and fill depths of up to approximately 3-3.5 m are proposed on Lot 2. With the exception of the new access drive no development is proposed on Lot 1. The earthworks plan is attached in Figure 3, Appendix A.

2 Site Description

2.1 General

The subject site is located on the west-facing slope that forms the lower flank of Slope Hill, approximately 4 km northwest of Frankton, as shown in Figure 2.1 below.

Figure 2.1 – Site location plan

The eastern area of the site (proposed Lot 2) is currently undeveloped with a grass cover. An existing residential dwelling, garage, tennis court and pool are located in the central area the site (the proposed Lot 1).

The site is bordered by lower Shotover Road to the west and rural-residential properties in all other directions. The nearest building (residential) outside the development area is located approximately 20 m beyond the northern site boundary.

2.2 Topography and Surface Drainage

The site topography is shown in Figure 1, Appendix A.

The site is located on a west-facing hillside, approximately 45 m above Lower Shotover Road.

The site topography through the proposed new building platform location on Lot 2 is generally gently sloping to the north-northwest. The building platform is located in a shallow depression that will locally concentrate overland flow, however was dry at the time of our site investigation. This flow path is further described/assessed in Section 5 below.

Immediately beyond the eastern side of the building platform, the ground steepens and becomes moderately sloping (approximately 20-25°) as it climbs up towards Slope Hill.

The Arrow irrigation channel is located approximately 30 m east of the proposed building platform location, and topographically approximately 10 m higher.

Within proposed Lot 2 surface runoff will drain to the west and northwest through the overland flow path, as dictated by the site contours.

3 Geotechnical Investigations

An engineering geological site inspection has been undertaken with confirmatory subsurface investigations. The following site investigations were undertaken on the 13th and 14th of April 2023:

- 6 test pits (TP 1-6) which were advanced to a maximum depth of 2.7 m;
- Scala penetrometer tests at each of the test pit locations to ascertain the relative density of the soil;
- 1 soak pits (SP) and 1 soakage test (within SP 1) to assess the relative permeability and soakage potential of the subsoils. The permeability test was undertaken at 1.3 m depth.

Test pit location plans and logs are contained in Appendices A and B respectively.

Soakage pit location and logs are presented in Appendices A and B respectively.

4 Subsurface Conditions

4.1 Geological Setting

The site is located in the Wakatipu basin, a feature formed predominantly by glacial advances. Published references indicate the last glacial event occurred in the region between 10,000 and 20,000 years ago. Glaciations have left deposits of glacial till, glacial outwash and lake sediment over ice–scoured bedrock. Post glacial times have been dominated by the erosion of the bedrock and glacial sediment, with deposition of alluvial gravel by local watercourses and lacustrine sediment during periods of high lake levels.

Active fault traces were not observed at the site or in the immediate vicinity, and the closest major active fault is the Nevis-Cardrona Fault system, approximately 11 km to the east. However, significant seismic risk exists in this region from potentially strong ground shaking, associated with the rupture of the Alpine Fault, located 80 km northwest from Queenstown along the West Coast of the South Island. There is a high probability that an earthquake with an expected magnitude of over M_W 8 will occur along the Alpine Fault in the next 50 years.

4.2 Stratigraphy

The general ground model observed during the site investigations typically comprises:

- 0.2 - 0.3 m of topsoil, overlying;
- 0.5 – 1.3 m of alluvial sand, overlying;
- 0.4 - 1.8 m of glacial till, overlying;
- Schist bedrock.

Topsoil was observed at the surface of all test pits/soak pits to depths of between 0.2 and 0.3 m, and comprises soft, organic SILT with a trace of rootlets.

Alluvial sand was observed beneath the topsoil in all test pits/soak pits, to depths of between 0.8 and 1.5 m. The alluvial sand comprises loose, silty SAND and medium dense, gravelly SAND with minor silt.

Glacial till was observed beneath the alluvial sand in all test pits/soak pits, except from in SP 3, to depths of between 1.7 and 2.6 m. The glacial till comprises medium dense, silty gravelly SAND with trace cobbles.

Schist bedrock was observed at the base of all test pits/soak pits, except for SP 3, at depths of between 1.7 and 2.6 m. The schist bedrock comprises weak to moderately strong, slightly to moderately weathered, pelitic SCHIST. The schist is foliated and the foliation dips to the southwest.

Full details of the subsurface stratigraphy can be found within the test pit and soak pit logs contained in Appendix B.

4.3 Groundwater

The regional static groundwater table was not intercepted during test pit investigations and is expected to lie at depth beneath the site and any expected earthworks.

Perched groundwater seepages were encountered on top of the schist bedrock in TP 4, SP 2 and SP 3, from depths of between 0.8 and 2.6 m.

5 Catchment Analysis and Conceptual Channel Sizing

The proposed building platform is located within an existing overland flow path and therefore analysis of the catchment that feeds into that flow path has been undertaken. The purpose of that analysis is to determine:

- The expected flow rate within the flow path during a 1% AEP rainfall event
- How the runoff could conceptually be diverted around the building platform
- If/how the runoff may influence the required finished floor level of the dwelling
- Conceptual design of the diverted channel
- Whether diversion of the channel would increase runoff to downstream properties

An indicative schematic of the conceptual re-routing of the ephemeral overland flow path is shown below as Figure 3.1.

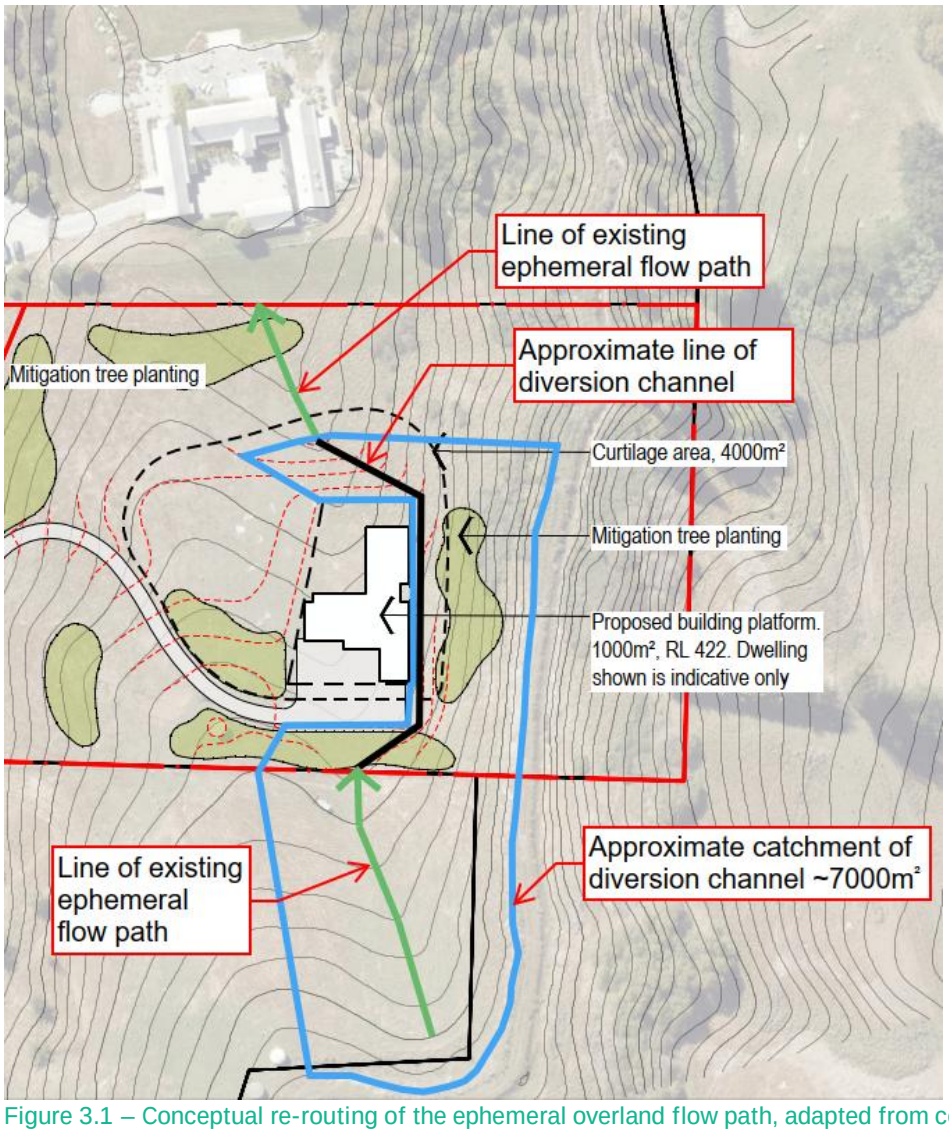


Figure 3.1 – Conceptual re-routing of the ephemeral overland flow path, adapted from conceptual layout plan

5.1 Anticipated Flow Rate

The catchment was assessed by both a site visit and a desktop study to inform the input parameters required to calculate the anticipated overland flow from a 1% AEP storm event. An allowance for RCP 8.5 climate change rainfall intensity increase has been applied. A photograph showing the approximate extent of the catchment leading to the proposed location of the building platform is shown below as Figure 5.1:

Figure 5.1 – Catchment leading towards proposed building platform location

In order to determine the applicable rainfall design intensity for the site the time of concentration for the catchment was calculated. Multiple calculation methods were employed using the following inputs (measured from 2021 1m LiDAR contours):

- Longest flow path = 130 m
- Elevation change = 11.5 m
- Average slope = 8.85% or 1 in 11.3
- Catchment area A = 7000 m^2 or 0.7 ha

Using these inputs with multiple time of concentration formulae resulted in the time of concentration being calculated as equal to or less than 10 minutes. This equates to the shortest/most intense rainfall values from NIWA's High Intensity Rainfall Design System V4 being appropriate.

This value was found to be 83.9 mm/hr for a 1% AEP RCP 8.5 rainfall event at the site.

Using the Rational Method with the above inputs, and below values (from the QLDC Land Development and Subdivision Code of Practice):

- Runoff Coefficient C = 0.6 (corresponding to a low permeability rolling pastural site)
- Rainfall intensity i = 83.9 mm/hr or $2.33*10^{-5}$ m/s
- Catchment area A = 7000 m^2 or 0.7 ha
- Q = CiA = 0.0979 m^3/s or 97.9 l/s

Therefore the design flow rate for a 1% AEP RCP 8.5 rainfall event at the site is 97.9 litres per second.

5.2 Conceptual Diversion Channel

Final design of the earthworks and building platform will need to consider the anticipated flow rate of 97.9 l/s. To address this flow construction of a diversion channel around the eastern margin of the building footprint is considered a practical option. Multiple channel configurations were trialled to establish suitability and provide options to suit the final development proposal.

5.2.1 Rock-lined Channel

Firstly a rock-lined flat bottomed channel with steep sides was assumed, with dimensions:

- Channel side slopes: 2H to 1V
- Channel bed slope: 8.85% or 1 in 11.3
- Channel bed width: 500 mm
- Channel Manning's n: 0.03 (from QLDC LDS COP for a 'Channel with rough stony bed or with weeds on earth bank and natural streams with clean straight banks')

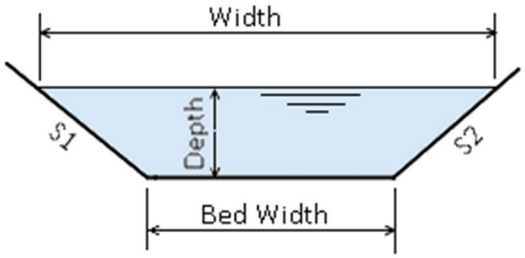


Figure 3.3 – Symbolic channel dimensions diagram

Using the above inputs with Mannings equation gave the following outputs:

- Velocity of 1.64 m/s
- Flow depth of 89 mm
- Flow width of 856 mm

The above values are considered acceptable, on the provision that thick grass cover and/or other durable vegetation is established on the side slopes and outlet of the channel in order to prevent scour during storm flows.

It is noted that a channel of this type would be narrower, and therefore require less landscaping space, but maintenance by hand would likely be required.

It is also noted that 500mm of freeboard would be required above the maximum calculated water surface height and the top of the channel/bottom of the building slab or floor joists.

5.2.2 Grass-lined channel

Secondly, a grass-lined triangular channel with less steep sides was assumed, with dimensions:

- Channel side slopes: 5H to 1V
- Channel bed slope: 8.85% or 1 in 11.3
- Channel bed width: 0 mm (no flat bottom as channel would be triangular)
- Channel Manning's n: 0.0225 (from QLDC LDS COP for a '(Straight uniform channel in earth and gravel in good condition')

Using the above inputs with Mannings equation gave the following outputs:

- Velocity of 1.82 m/s
- Flow depth of 104 mm
- Flow width of 1040 mm

The above velocity value may scour the channel during storm flows, and it is recommended the channel bed slope is checked at detailed design stage. If the bed slope is greater than approximately 5% (1 in 20) then check dams may be required in the channel, see Figure 3.6 of NZS 4404:2010 for a typical detail.

It is noted that a channel of this type would be wider, and therefore require more landscaping space, but vehicular access for maintenance would be possible, for example by a ride-on lawn mower.

It is also noted that 500mm of freeboard would be required above the maximum calculated water surface height and the top of the channel/bottom of the building slab or floor joists, and as the depth of a grass-lined channel would be less than of a rock-lined channel this may potentially result in a higher finished floor level requirement.

5.3 Potential Effect of Diversion on Downstream Properties

The distance from the termination of the proposed diversion of the flow path to the downstream property boundary is approximately 30 metres. This is considered ample length for the flow regime to regain its natural properties, and be flowing in the same location and at the same (or less) velocity as it would've during pre-development conditions.

Consideration should be given to this factor during detailed design once the location and dimensions of the building platform are confirmed, and if the building platform is moved to be significantly closer to the northern property boundary then a velocity reduction method such as a riprap basin may be required.

It is recommended that hard standing such as the driveway is not directed into the channel, and that it instead lead into the proposed accessway drainage, in order to not increase the peak flow post-development in the diversion channel. Alternatively an attenuation feature could be installed to capture and preferably provide primary treatment for this runoff, prior to it being released into the diversion channel at a controlled rate.

5.4 Summary

The proposed building platform lies within an ephemeral overland flow path. That flow path has a relatively small upstream catchment (~7000 m^2 / 0.7 ha) and has been calculated to create approximately 98 l/s of runoff during a 1% AEP storm event with allowance for RCP 8.5 climate change.

A channel could be constructed to re-route the ephemeral flow path around the proposed building platform. Multiple configuration options are possible, such as a deeper rock-lined channel with steeper sides, or a shallower and wider grass-lined channel. The preferable option will depend on the final proposed site layout and is to be confirmed at detailed design. Protection against scour/soil erosion during storm flows should be considered further at that stage.

The outflow from the ephemeral flow path at the northern property boundary should match the pre-development conditions post-development. This may require the proposed hardstanding of the development not to be directed into the catchment of the diversion channel, or alternatively for an attenuation/controlled release feature to be installed to capture the runoff from the hardstanding and provide primary treatment of it.

6 Engineering Considerations

6.1 General

The recommendations and opinions contained in this report are based upon ground investigation data obtained at discrete locations and historical information held on the GeoSolve database. The nature and continuity of subsoil conditions away from the investigation locations is inferred and cannot be guaranteed.

6.2 Geotechnical Parameters

Table 6.1 provides a summary of the recommended geotechnical design parameters for the soil materials expected to be encountered during construction of the proposed dwelling.

Table 6.1 – Recommended geotechnical design parameters

Unit	Thickness (m)	Bulk density γ (kN/m^3)	Effective cohesion c´ (kPa)	Effective friction ϕ´ (deg)	Elastic modulus **E** (kPa)	Poissons ratio ν
Topsoil	0.2-0.3	16-17	To be removed from the building platform			
Alluvial Sand (loose, silty SAND)	0.3-1.3	18	0	30	5,000	0.3
Alluvial Sand (medium dense, gravelly SAND)	0.0-0.5	18	0	34	10,000-20,000	0.3
Glacial till (medium dense, silty gravelly SAND with occasional cobbles.)	0.4-1.8	18	0	34	20,000	0.3
Schist bedrock (pelitic)	Not proven (> 100 m)	26	50	30	100,000	0.25
Schist Bedrock Defects (strength primarily controlled by defects)	N/A	N/A	0 (along defect)	25 (along defect)	N/A	0.2

6.3 Site Preparation

During the earthworks operations all topsoil, organic matter, uncontrolled fill and other unsuitable materials should be removed from the construction areas in accordance with the recommendations of NZS3604.

Robust, shallow graded sediment control measures should be instigated during construction where rainwater and drainage run-off over exposed soils is anticipated.

Exposure to the elements should be limited for all soils and covering the batter slopes with polythene sheeting and the footings with site concrete or engineered fill will reduce degradation due to wind, rain and surface run-off.

Water should not be allowed to pond or collect near or under a footing or foundation slab. Positive grading of the subgrade should be undertaken to prevent water ingress or ponding.

All engineered fill that is utilised as bearing for foundations should be placed and compacted in accordance with the recommendations of NZS 4431:2022 and certification provided to that effect.

We recommend topsoil stripping and subsequent earthworks be undertaken only when a suitable interval of fair weather is expected, or during the earthworks construction season.

6.4 Excavations

General

All slopes should be periodically monitored during construction for signs of instability and excessive erosion, and, where necessary, corrective measures should be implemented to the satisfaction of a Geotechnical Engineer or Engineering Geologist.

Recommendations for permanent and temporary batters in dry soil are described in Table 6.2 below. Slopes required to be steeper than those described below should be structurally retained or subject to specific engineering design.

Perched groundwater seepages were encountered on top of the schist bedrock in TP 4, SP 2 and SP 3, at depths of between 0.8 and 2.6 m.

If wet soils are encountered, we recommend they be inspected by Geosolve who will provide additional recommendations as required. Shallower batters, retaining and/or the installation of drainage, may be required to achieve stability if wet soils are encountered.

Table 6.2 – Recommended batters for cuts up to 3 m in height in dry soils.

Material Type	Recommended Maximum Batter for Temporary Cuts ≤ 3 m High (horizontal to vertical)	Recommended Maximum Batter for Permanent Cuts ≤ 3 m High (horizontal to vertical)
Alluvial Sand	1.5H : 1.0V	3.0H : 1.0V
Glacial Till	0.5H : 1.0V	2.0 H : 1.0 V

Review of Proposed Excavations

The earthworks plan provided by JEA indicates cut depths of up to approximately 2 m are proposed for the Lot 2 building platform. The excavations are expected to predominantly be formed in alluvial sand and glacial till. The steepest proposed cut batter is approximately 22-22° in the south eastern corner. This is steeper than the 3.0H:1.V

recommended in Table 6.2. Regrading to 3.0H:1.V is therefore recommended for this slope in the first instance. The proposed Steeper slopes may be acceptable based on inspection. If seepage is encountered a low (≤1m) retaining wall may be required to achieve long term stability. No impact on the ground above the earthworks is expected form the proposed cuts provided geotechnical inspection is undertaken during construction and any addition measures, e.g. drainage or retaining, are implemented.

Cuts are also proposed for the driveway. Retaining is expected to be required for the lower part of the drive where cuts are proposed in close proximity to the southern boundary. A timber pole wall or similar is expected to be suitable in this location. Elsewhere the cuts are general acceptable, however some local re-grading to shallower batters may be required based on final site inspection.

6.5 Ground Retention

The draft plans provided by Baxter Design Group do not indicate retention of the cuts, however retaining walls would be suitable modes of retention if wet slopes are encountered. Any retaining wall proposed should be designed by a chartered professional engineer.

All retaining walls should be designed using the geotechnical parameters recommended in Table 6.1 of this report. Due allowance should be made during the detailed design of all retaining walls for any additional loads upslope of the wall (i.e. surcharge due to backslope).

All temporary slopes for retaining wall construction should be battered in accordance with the recommendations of Table 6.2.

Perched groundwater seepages were encountered in TP 4, SP 2 and SP 3 and has the potential to develop following completion of the earthworks, in particular as a result of heavy or prolonged rainfall. To ensure potential groundwater seeps and flows are properly controlled behind the retaining walls, the following recommendations are provided:

- A minimum 0.3 m width of durable free draining granular material should be placed behind all retaining structures;
- A heavy duty non-woven geotextile cloth, such as Bidim A14, should be installed between the natural ground surface and the free draining granular material to prevent siltation and blockage of the drainage media; and
- A heavy-duty (TNZ F/2 Class 500) perforated pipe should be installed within the drainage material at the base of all retaining structures to minimise the risk of excessive groundwater pressures developing. This drainage pipe should be connected to the permanent piped storm water system, or outflow to an engineer approved location.

6.6 Engineered Fill Slopes

General

As general guideline all engineered fill slopes up to 3.5 m in height should not exceed a batter of 2:1 (horizontal to vertical), if well drained. Deeper or steeper fills slopes will require specific engineering assessment.

To minimise erosion, effective vegetation cover should be established on fill batters and no water flows should be directed towards slopes.

All engineered fill should be placed and compacted in accordance with the recommendations of NZS4431:2022 and Queenstown Lakes District Council Standards. All cut and fill earthworks should be inspected and tested as appropriate during construction and certified by a Chartered Professional Engineer.

For landscaping purposes (where building loads are not applied), certification is generally not required but we recommend that a compaction methodology should be specified to minimise future settlement and landslip risk in yard areas.

The subgrade of any proposed fills will need to be sub-horizontal (with benching of slopes as required) to promote stability.

The alluvial sand and glacial till are not ideally suited for use as engineered fill due to a high silt and sand content which can in some cases make compaction difficult. A detailed methodology will be required to enable use of this material. Importing a well graded granular material Engineered fill specification and certification to NZS 4431:2022 can be provided on request.

Review of Proposed Fill Slopes

The steepest proposed fill batter slopes of approximately 17° are shown on the northern side of the platform. Provided the fill is constructed in accordance with NZS4431, the northern fill slope will provide acceptable stability for residential development. A minimum building set-back of 0.6 m from the crest of the northern slope is recommended. Elsewhere proposed fill batters are less and no stability issues have been identified.

6.7 Groundwater Issues

Perched groundwater seepages were encountered on top of the schist bedrock in TP 4, SP 2 and SP 3, from depths of between 0.8 and 2.6 m. Therefore, perched ground water may be encountered, or develop during rainfall periods, in excavations completed for the building platform.

Reduced foundation bearing capacities and slope instability can result when soils become saturated.

A detailed review of the drainage requirements will need to be undertaken once development plans have been finalised. We recommended that allowances be made in the construction budget to provide groundwater control, such as subsoil drains, slope and contour drains.

All drainage should be constructed as per the recommendations of a geotechnical engineer/engineering geologist. The outlet of all sub-soil or horizontal drains should be connected to the permanent piped stormwater system or other suitable engineer approved location.

6.8 Foundations

No foundation plans have been provided to GeoSolve at this stage, however it is expected the building foundations will comprise a concrete slab on strip footings, or waffle raft.

Due to the sloping nature of the site and the proposed earthworks, the dwelling foundations will span 3 distinct units: engineered fill in the northern 2/3rd part of the building platform, alluvial sand (silty SAND) in the southern part and glacial till in the southern corner, depending on foundation depth. The foundation bearing capacity of these soil types will vary and Good Ground as outlined in NZS3604 will not be achieved in some areas. Specific engineering design with respect to foundations is therefore expected to be required at the detailed design phase. Final geotechnical inputs for foundation design can be provided following construction of the earthworks. An NZS3604 compliant platform can be constructed if preferred.

6.9 Site Subsoil Category

The following geotechnical information has been used to characterise the site subsoil class in respect of NZS 1170.5:2004 Structural Design Actions:

- Schist bedrock was observed at the base of all test pits from depths of between 1.7 and 2.6 m.
- Up to approximately 3 m of engineered fill is proposed beneath the northern part of the proposed dwelling.

Based on the above, the building platform is likely to transition from Class B (rock) in the southern part, to Class C (shallow soil) in the northern part.

7 Stormwater and Wastewater Soakage Assessment

7.1 General

Soakage testing was undertaken in SP 1 at 1.3 m depth in glacial till (refer to Appendix A, B and C for test location, log and results respectively).

Prior to undertaking soakage testing, a deep test pit was excavated adjacent to the soakage pit to log the subsoil conditions and determine if a suitable consistent layer for soakage testing was present. A shallower test pit/soak pit was then excavated adjacent to the deep pit. The dimensions of the soakage pits were recorded to calculate volumes and areas of soakage during testing.

Soakage testing was completed in the Glacial Till material, which comprises a silty, gravelly sand. From experience Geosolve expect the overlying alluvial sand, which is fine grained and has a high silt content (estimated 20-50%), will have a similar infiltration rate.

Before soakage testing was undertaken, the soakage pit was pre-soaked for 24 hours by introducing water from a garden hose. The change in water level during the pre-soak period was minor.

Soakage testing was performed by introducing water until the water level of the pit reached the designated testing level. Inflow was then stopped and the time it took for the water level to drop was recorded. Testing was completed until a representative number of test results had been achieved.

7.2 Permeability Analysis and Preliminary Soakage Design and Considerations

The results from field soakage testing are presented below in Table 7.1 and Appendix C.

Table 7.1 - Calculated permeability rates

Test	Depth (m)	Soil type at base of pit	Unfactored infiltration rate*	Factored infiltration rate**	Depth to Schist Bedrock from ground surface
SP 1	1.3	Silty gravelly SAND (Glacial Till)	2 mm/hr	1 mm/hr	2.6

*Does not include a reduction factor to account for loss of soakage performance over time.

** Includes a reduction factor of 0.5 to account for loss of soakage performance over time.

7.2.1 Discussion

The infiltration rates show that disposal to ground is unlikely to be feasible at the site with respect to a simple soak-pit solution. Further extensive investigations and testing around

the property may indicate some potential for soakage to ground, possibly in conjunction with landscape mounding, however, feasibility will be limited by issues such as:

- Downstream effects (existing buildings, neighbouring properties and earthworks),
- Perched groundwater,
- Low infiltration rates,
- Stormwater runoff pathways, and
- Thin and discontinuous soil materials.

Further assessment can be completed with respect to soakage to ground however we expect some form of onsite detention is likely to be required.

With respect to wastewater soakage to ground, in accordance with Table 5.1 AS/NZS1547:2012, the alluvial sand and glacial till soils observed to overlie the schist bedrock are classified as Class 6.

8 QLDC Land Development and Subdivision Code of Practice

Section 2.4.4 of the QLDC Land Development and Subdivision Code of Practice (QLDC CoP) requires the developer of any subdivision to appoint a geo-professional to carry out the following functions from the planning to construction phases of the subdivision:

a) Check regional and district plans, records, and requirements prior to commencement of geotechnical assessment;

b) Prior to the detailed planning of any development, to undertake a site inspection and such investigations of subsurface conditions as may be required, and to identify geotechnical hazards affecting the land, including any special conditions that may affect the design of any pipelines, underground structures, or other utility services;

c) Before construction commences, to review the drawings and specifications defining any earthworks or other construction and to submit a written report to the TA on the foundation and stability aspects of the project (if required);

d) Before and during construction, to determine the extent of further geo-professional services required (including geological investigation);

e) Any work necessary to manage the risk of geotechnical instability during the construction process;

f) Before and during construction, to determine the methods, location, and frequency of construction control tests to be carried out, determine the reliability of the testing, and to evaluate the significance of test results and field inspection reports in assessing the quality of the finished work;

g) During construction, to undertake regular inspection consistent with the extent and geotechnical issues associated with the project;

h) On completion, to submit a written report (i.e. Geotechnical Completion Report) to the Territorial Authority (TA) attesting to the compliance of the earthworks with the specifications and to the suitability of the development for its proposed use including natural ground within the development area. Where NZS 4431 is applicable, the reporting requirements of that Standard shall be used as a minimum requirement.

This resource consent level report can be considered to have completed items a) and b) from the above list. Once resource consent for the subdivision has been granted a geo-professional will need to be appointed by the developer to review the earthworks drawings and specifications prior to finalising the documentation for tendering and/or construction, and to oversee the construction phase of the project including certification of fill and provide a Geotechnical Completion Report (GCR) and Schedule 2A in accordance with the QLDC CoP.

The GCR and Schedule 2A should detail the results of site observations, testing and monitoring during earthworks construction, confirm the stability of the finished earthworks, and identify any specific geotechnical design requirements that must be addressed in order to construct a building on site. Any identified specific design requirements will then be registered on the subject lots' 'certificate of title' and will need to be addressed during the building consent process.

The geo-professional completing the GCR and Schedule 2A which includes the certification of fill should in all cases be engaged by the developer not the contractor. It is also advisable that the geo-professional review the earthworks contract to assist in managing the developers risk and ensuring that the contract is clear with respect to geotechnical risks and responsibilities during construction.

The use of this report and any of its findings or recommendations as part of the GCR and Schedule 2A may only be used with our prior review and written agreement.

9 Construction Hazards

Vibrations and distances to adjoining structures: The proposed subdivision is located in a rural setting. The nearest building outside the development area is located approximately 20 m beyond the northern boundary. Vibrations may cause annoyance to neighbouring occupants, but vibrations are unlikely to result in structural damage.

Aquifers: No aquifer resource will be adversely affected by the development. The site is located above the Wakatipu Basin Aquifer, and any requirement for boring, e.g. for ground source heat pumps, will require consent from the Otago Regional Council (ORC). Water extraction/bore construction will also require ORC consent.

Erosion and Sediment Control: The site presents some potential to generate silt runoff and this would naturally drain downslope. Only the least amount of subsoil should be exposed at any stage and surfacing established as soon as practical. Silt runoff should not be permitted to enter any watercourse.

Noise: The proposed building platform is located in a rural location. Standard excavation and compaction plant will be required. QLDC requirements should be met in regard to this issue.

Dust: Regular dampening of soil materials with sprinklers should be effective if required.

10 Conclusions and Recommendations

- The site is considered suitable for the proposed development from a geotechnical perspective, provided the recommendations of this report are followed;
- The stratigraphy at the site comprises topsoil overlying alluvial sand, glacial till and schist bedrock. Schist bedrock was observed at the base of all test pits from depths of between 1.7 and 2.6 m;
- Perched groundwater seepages were encountered on top of the schist bedrock in TP 4, SP 2 and SP 3, at depths of between 0.8 and 2.6 m, and may be encountered during future earthworks;
- The proposed building platform is located in an existing shallow depression that will concentrate overland flow. Diversion channels will be required around the proposed building platform location;
- The construction of the building platform will need to consider groundwater seepage, and ensure suitable drainage is installed to maintain a stable and dry platform.
- A review of the proposed excavation batters indicates no significant issues however local retaining and construction review will be required to confirm the final engineering requirements;
- Foundation bearing will vary across the platform and will not meet Good Ground as outlined in NZS3604. Specific engineering design will therefore be required;
- Any fill that is utilised as bearing for foundations should be placed and compacted in accordance with NZS 4431:2022 and certification provided to that effect;
- The building platform is likely to transition from Class B (rock) in the southern part, to Class C (shallow soil) in the northern part. Confirmation can be provided once earthworks plans have been finalised.
- Inspections of the earthworks batters, foundation sub-grade and engineered fills should be completed during construction by a suitably qualified Geotechnical Engineer or Engineering Geologist to confirm geotechnical conditions are in accordance with the recommendations of this report;
- Site soakage testing was completed to assess suitability of onsite stormwater and wastewater soakage. Soakage test results are provided in Section 7 and Appendix C. The site is not well suited for soakage to ground and recommendations are provided in Section 7.

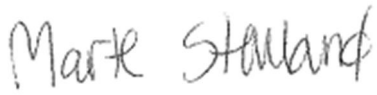
11 Applicability

This report has been prepared for the sole use of our client, John Wikstrom, with respect to the particular brief and on the terms and conditions agreed with our client. It may not be used or relied on (in whole or part) by anyone else, or for any other purpose or in any other contexts, without our prior review and written agreement.

Investigations have been undertaken at discrete locations in accordance with the brief provided. It must be appreciated that the nature and continuity of subsoil conditions away from the investigation locations cannot be guaranteed.

During construction, foundation excavations should be examined by a geotechnical engineer/Geo-professional competent to confirm that subsurface conditions encountered throughout are compatible with the findings of this report. It is important that we be contacted if there is any variation in subsoil conditions from those described in this report.

Report prepared by:



.....

Marte Stemland
Engineering Geologist

.....

Neil Williman
Senior Water Resources Engineer

Reviewed for GeoSolve Ltd by:

.....

Paul Faulkner
Senior Engineering Geologist

Appendices:

Appendix A – Site Plans - Figures 1, 2, 3 [3p]
Appendix B – Investigation Data - TP1-TP4, SP1-SP3 [7p]
Appendix C – Permeability Test Results
Appendix D – Rainfall, Runoff and Channel Sizing Calculations

Appendix A: Site Plan & Cross-section

Mitigation planting to screen a future dwelling from neighbouring dwellings to the north and from distant views to the west

Curtilage area, 4000m²

Proposed earth shaping to create flat building platform and living areas. Maximum fill of 3m at north corner of building platform

Proposed building platform. 1000m², RL 422

Water race - water flowing at time of site investigation

Backdrop tree planting

Gravel driveway, 3.5m wide graded at approx 1:8

Indicative dwelling

Schist Bedrock

Forecourt

Likely Area of Uncontrolled Fill

SP1

TP1

TP2

TP3

TP4

TP5

TP6

410 415 420 421 422 423 424 425 430 435

Key

TP1 = Test Pit

SP1 = Soak Pit

Scale 1:500

0 5 10 15 20 25 (m)

CADFILE:	Sketch 1.xar	DRAWN	MBS	04/2023
SCALE (AT A3 SIZE):	AS SHOWN	DRAFTING CHECKED	PGF	04/2023
PROJECT No:	230131	APPROVED	PGF	04/2023

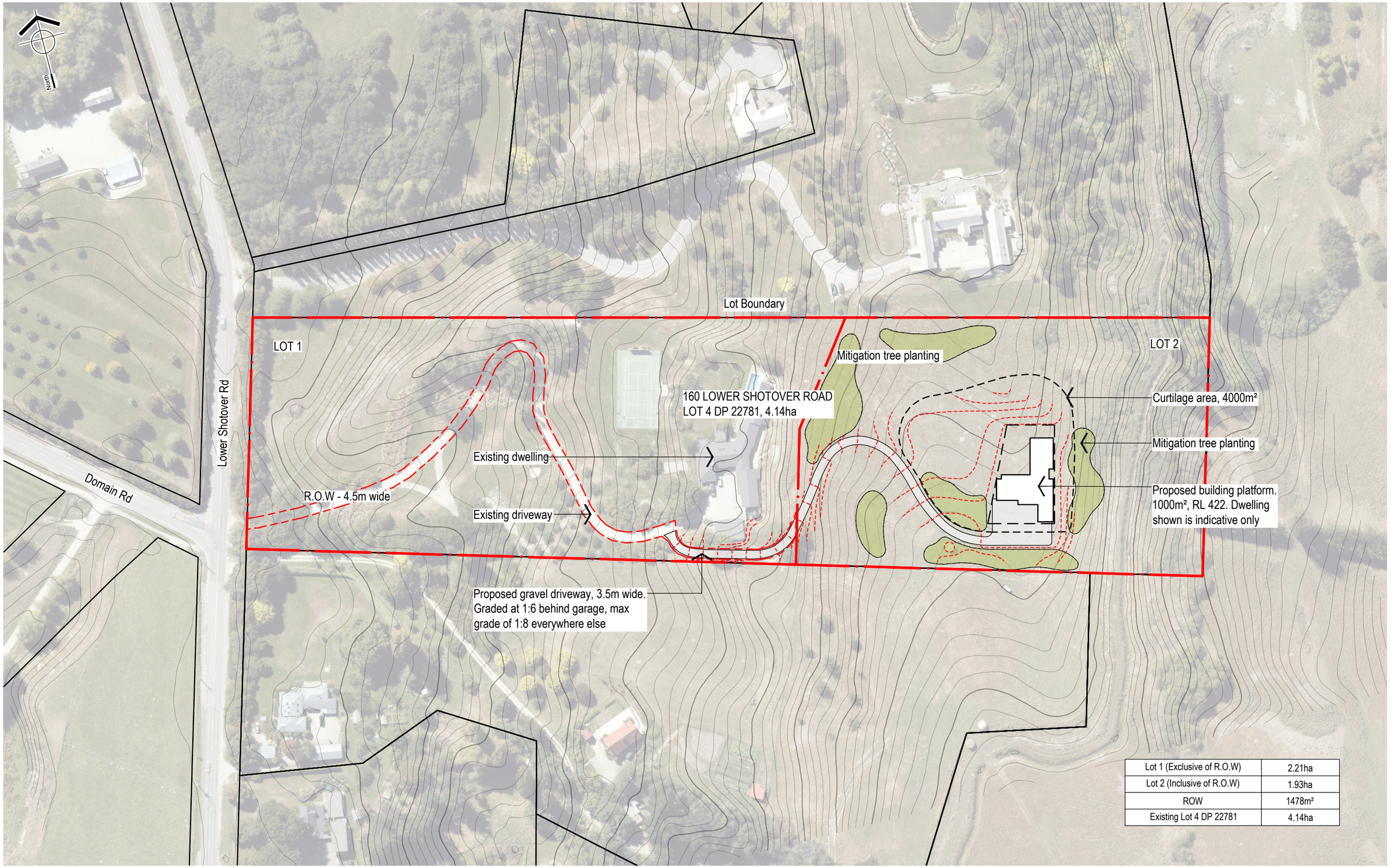
GEOSOLVE ENGINEERING CONSULTANTS

GEOTECHNICAL WATER RESOURCES PAVEMENTS

John Wikstrom
Geotechnical Assessmnet
160 Lower Shotover Road, Queenstown
Site Investigation Plan

FIG No: FIGURE 1

REV. 1



Lot 1 (Exclusive of R.O.W)	2.21ha
Lot 2 (Inclusive of R.O.W)	1.93ha
ROW	1478m²
Existing Lot 4 DP 22781	4.14ha

baxter design

0 7.5 15 37.5m
SCALE = 1:750 AT A1

REFERENCE **4443-SK04** - SCALE = 1:750.0001 AT A1 - 1:1500 AT A3 - **07 Feb 2023**
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION
j:\4443 - wikstrom lower shotover road\cad\4443-sk04 - wikstrom lower shotover rd - lot plan.dwg - 4443-SK04 - Wikstrom Lower Shotover Rd - Lot Plan

DRAFT

FULL LOT PLAN
WIKSTROM - LOWER SHOTOVER ROAD
Figure 2

ISSUED FOR REVIEW - 26.02.23

JEA TOWN PLANNERS & SURVEYORS
Level 2, 36 Shotover Street
PO Box 95, Queenstown, 9300

CLIENT
WICKSTROM

NOTES:
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

PROPOSED EARTHWORKS
LOT 4 DP 22781
160 LOWER SHOTOVER ROAD, QUEENSTOWN

REV.	DATE	REVISION DETAILS	BY
A	16.02.23	INITIAL	FC

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
FC	CW	14.02.23	22221	04.01
DRAWN	CHECKED	DATE	SCALE	
FC	CW	16.02.23	1:500m @ A3	
DATUM & LEVEL				REV.
MT NIC 2000 - NZVD16				A

C:\Users\JEA S2\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 176 L Shotover Road - Subdivision\Survey\CAD\22221.04.01A - Proposed Earthworks.dwg Plotted: 16.02.2023

Figure 3

Appendix B: Investigation Data

GEOSOLVE
ENGINEERING CONSULTANTS

TEST PIT LOG

EXCAVATION NUMBER: **TP 1**

PROJECT:	160 Lower Shotover Road			JOB NUMBER:	230131
LOCATION:		INCLINATION:			

EASTING:		EQUIPMENT:	5.5 Tonne Excavator	OPERATOR:	Pete
NORTHING:		COORD. SYSTEM:		COMPANY:	Forbes Earthworks
ELEVATION:		EXCAV. DATUM:	Ground Level	HOLE STARTED:	13/04/2023
METHOD:	Aerial Photography	ACCURACY:		HOLE FINISHED:	13/04/2023

Soil / Rock Type	Description	Graphic Log	Depth (m)	Groundwater / Seepage	Scala Penetrometer (Blows per 100mm)
TOPSOIL	Organic SILT with a trace of rootlets; dark brown. Soft; moist. 0m – 0.2m		0.0 – 0.2		
ALLUVIAL SAND	Silty fine SAND; light brown, massive. Loose; moist. 0.2m – 1.5m		0.2 – 1.5		
GLACIAL TILL	Silty gravelly fine to coarse SAND with a trace of cobbles; light grey brown. Medium dense; moist; gravel, fine to coarse; subrounded to subangular; cobbles, subrounded. 1.5m – 1.9m		1.5 – 1.9	NO SEEPAGE	
SCHIST BEDROCK	Semi-pelitic SCHIST; grey, foliated. Weak to moderately strong; slightly weathered. 1.9m – 2m		1.9 – 2.0		

Scala Penetrometer (Blows per 100mm): 0 5 10 15

Total Excavation Depth = 2.0 m

COMMENT:	Test pit dry. Walls remained stable during excavation. Unable to excavate further with 5.5 tonne excavator.	LOGGED BY:	MBS
		CHECKED DATE:	18/04/2023
		SHEET:	1 of 1

GEOSOLVE
ENGINEERING CONSULTANTS

TEST PIT LOG

EXCAVATION NUMBER: **TP 2**

PROJECT:	160 Lower Shotover Road			JOB NUMBER:	230131
LOCATION:		INCLINATION:			

EASTING:		EQUIPMENT:	5.5 Tonne Excavator	OPERATOR:	Pete
NORTHING:		COORD. SYSTEM:		COMPANY:	Forbes Earthworks
ELEVATION:		EXCAV. DATUM:	Ground Level	HOLE STARTED:	13/04/2023
METHOD:	Aerial Photography	ACCURACY:		HOLE FINISHED:	13/04/2023

Soil / Rock Type	Description	Graphic Log	Depth (m)	Groundwater / Seepage	Scala Penetrometer (Blows per 100mm)
TOPSOIL	Organic SILT with a trace of rootlets; dark brown. Soft; moist. 0m – 0.3m		0.0 – 0.3		
ALLUVIAL SAND	Silty fine SAND; light grey brown, massive. Loose; moist. 0.3m – 1m		0.3 – 1.0		
GLACIAL TILL	Silty gravelly fine to coarse SAND; grey. Medium dense; moist; gravel, fine to coarse; subrounded to subangular. 1m – 2.2m		1.0 – 2.2	NO SEEPAGE	
SCHIST BEDROCK	Semi-pelitic SCHIST; grey, foliated. Weak to moderately strong; slightly weathered. 2.2m – 2.3m		2.2 – 2.3		

Scala Penetrometer (Blows per 100mm): 0 5 10 15

Total Excavation Depth = 2.3 m

COMMENT:	Test pit dry. Walls remained stable during excavation. Unable to excavate further with 5.5 tonne excavator.	LOGGED BY:	MBS
		CHECKED DATE:	18/04/2023
		SHEET:	1 of 1

GEOSOLVE
ENGINEERING CONSULTANTS

TEST PIT LOG

EXCAVATION NUMBER: **TP 3**

PROJECT:	160 Lower Shotover Road			JOB NUMBER:	230131
LOCATION:		INCLINATION:			

EASTING:		EQUIPMENT:	5.5 Tonne Excavator	OPERATOR:	Pete
NORTHING:		COORD. SYSTEM:		COMPANY:	Forbes Earthworks
ELEVATION:		EXCAV. DATUM:	Ground Level	HOLE STARTED:	13/04/2023
METHOD:	Aerial Photography	ACCURACY:		HOLE FINISHED:	13/04/2023

Soil / Rock Type	Description	Graphic Log	Depth (m)	Groundwater / Seepage	Scala Penetrometer (Blows per 100mm)
TOPSOIL	Organic SILT with a trace of rootlets; dark brown. Soft; moist. 0m – 0.3m		0.0 – 0.3		
ALLUVIAL SAND	Silty fine SAND; light brown, massive. Loose; moist. 0.3m – 0.9m		0.3 – 0.9		
GLACIAL TILL	Silty gravelly fine to coarse SAND; brown grey. Medium dense; moist; gravel, fine to coarse; subrounded to subangular. 0.9m – 1.7m		0.9 – 1.7		
SCHIST BEDROCK	Pelitic SCHIST; grey, foliated, foliation dipping southwest. Weak to moderately strong; slightly to moderately weathered. 1.7m – 2m		1.7 – 2.0	NO SEEPAGE	

0 5 10 15

Total Excavation Depth = 2.0 m

COMMENT:	Test pit dry. Walls remained stable during excavation.	LOGGED BY:	MBS
		CHECKED DATE:	18/04/2023
		SHEET:	1 of 1

GEOSOLVE
ENGINEERING CONSULTANTS

TEST PIT LOG

EXCAVATION NUMBER: **TP 4**

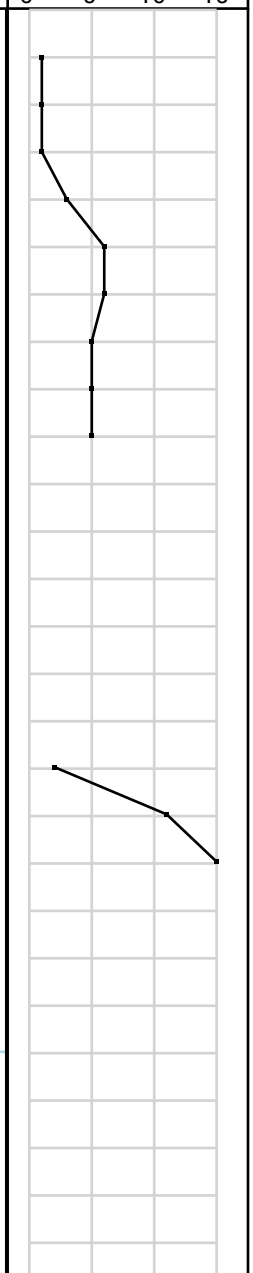
PROJECT:	160 Lower Shotover Road			JOB NUMBER:	230131
LOCATION:		INCLINATION:			

EASTING:		EQUIPMENT:	5.5 Tonne Excavator	OPERATOR:	Pete
NORTHING:		COORD. SYSTEM:		COMPANY:	Forbes Earthworks
ELEVATION:		EXCAV. DATUM:	Ground Level	HOLE STARTED:	13/04/2023
METHOD:	Aerial Photography	ACCURACY:		HOLE FINISHED:	13/04/2023

Soil / Rock Type	Description		Graphic Log	Depth (m)
TOPSOIL	Organic SILT with a trace of rootlets; dark brown. Soft; moist.	0m 0.2m		0.0
ALLUVIAL SAND	Silty fine SAND; light grey brown, massive. Loose; moist.	0.5m		0.5
ALLUVIAL SAND	Gravelly fine to coarse SAND with minor silt; grey. Medium dense; moist; gravel, fine to coarse; subangular.			1.0
GLACIAL TILL	Silty gravelly fine to coarse SAND; grey. Medium dense; moist to wet, saturated from 2.3 m; gravel, fine to coarse; subrounded to subangular.	1m 2.6m		2.6
SCHIST BEDROCK	Semi-pelitic SCHIST; grey, foliated. Weak to moderately strong; slightly weathered.	2.7m		2.7

Groundwater / Seepage: Seepage @ 2.2 m

Scala Penetrometer (Blows per 100mm)



Total Excavation Depth = 2.7 m

COMMENT:	Perched seepage on top of schist bedrock at 2.2 m depth. Minor collapse below perched seepage level.	LOGGED BY:	MBS
		CHECKED DATE:	18/04/2023
		SHEET:	1 of 1

GEOSOLVE
ENGINEERING CONSULTANTS

SOAKAGE PIT LOG

EXCAVATION NUMBER: **TP 5**

PROJECT: 160 Lower Shotover Road		JOB NUMBER: 230131			
LOCATION:		INCLINATION:			
EASTING:		EQUIPMENT:	5.5 Tonne Excavator	OPERATOR:	Pete
NORTHING:		COORD. SYSTEM:		COMPANY:	Forbes Earthworks
ELEVATION:		EXCAV. DATUM:	Ground Level	HOLE STARTED:	13/04/2023
METHOD:	Aerial Photography	ACCURACY:		HOLE FINISHED:	13/04/2023

Soil / Rock Type	Description	Graphic Log	Depth (m)	Groundwater / Seepage	Scala Penetrometer (Blows per 100mm) 0 5 10 15
TOPSOIL	Organic SILT with a trace of rootlets; dark brown. Soft; moist. 0m – 0.3m		0.0 – 0.3		
ALLUVIAL SAND	Silty fine SAND; light brown, massive. Loose; moist. 0.3m – 0.8m		0.3 – 0.8		
GLACIAL TILL	Silty gravelly fine to coarse SAND; grey. Medium dense; moist to wet; gravel, fine to coarse; subrounded to subangular. 0.8m – 2.6m		0.8 – 2.6	Seepage @ 2.6 m	
SCHIST BEDROCK	Semi-pelitic SCHIST; grey, foliated. Weak to moderately strong; slightly weathered. 2.6m – 2.7m		2.6 – 2.7		

Total Excavation Depth = 2.7 m

COMMENT:	Perched seepage on top of schist bedrock at 2.6 m depth. Minor collapse below perched seepage level.	LOGGED BY:	MBS
		CHECKED DATE:	18/04/2023
		SHEET:	1 of 1

GEOSOLVE
ENGINEERING CONSULTANTS

SOAKAGE PIT LOG

EXCAVATION NUMBER: **TP 6**

PROJECT:	160 Lower Shotover Road			JOB NUMBER:	230131
LOCATION:		INCLINATION:			

EASTING:		EQUIPMENT:	5.5 Tonne Excavator	OPERATOR:	Pete
NORTHING:		COORD. SYSTEM:		COMPANY:	Forbes Earthworks
ELEVATION:		EXCAV. DATUM:	Ground Level	HOLE STARTED:	13/04/2023
METHOD:	Aerial Photography	ACCURACY:		HOLE FINISHED:	13/04/2023

Soil / Rock Type	Description		Graphic Log	Depth (m)	Groundwater / Seepage	Scala Penetrometer (Blows per 100mm) 0 5 10 15
TOPSOIL	Organic SILT with a trace of rootlets; dark brown. Soft; moist.	0m 0.3m		0.0 0.1 0.2 0.3		
ALLUVIAL SAND	Silty fine SAND; light grey brown, massive. Loose; moist.	0.7m		0.4 0.5 0.6 0.7	Seepage @ 0.8 m	
ALLUVIAL SAND	Gravelly fine to coarse SAND with minor silt; grey. Loose to medium dense; wet, saturated from 0.8 m; gravel, fine to coarse; subangular.	1.1m		0.8 0.9 1.0 1.1		

Total Excavation Depth = 1.1 m

COMMENT:	Perched seepage at 0.8 m depth.	LOGGED BY:	MBS
		CHECKED DATE:	18/04/2023
		SHEET:	1 of 1

GEOSOLVE
ENGINEERING CONSULTANTS

SOAKAGE PIT LOG

EXCAVATION NUMBER: **SP 1**

PROJECT:	160 Lower Shotover Road			JOB NUMBER:	230131
LOCATION:		INCLINATION:			

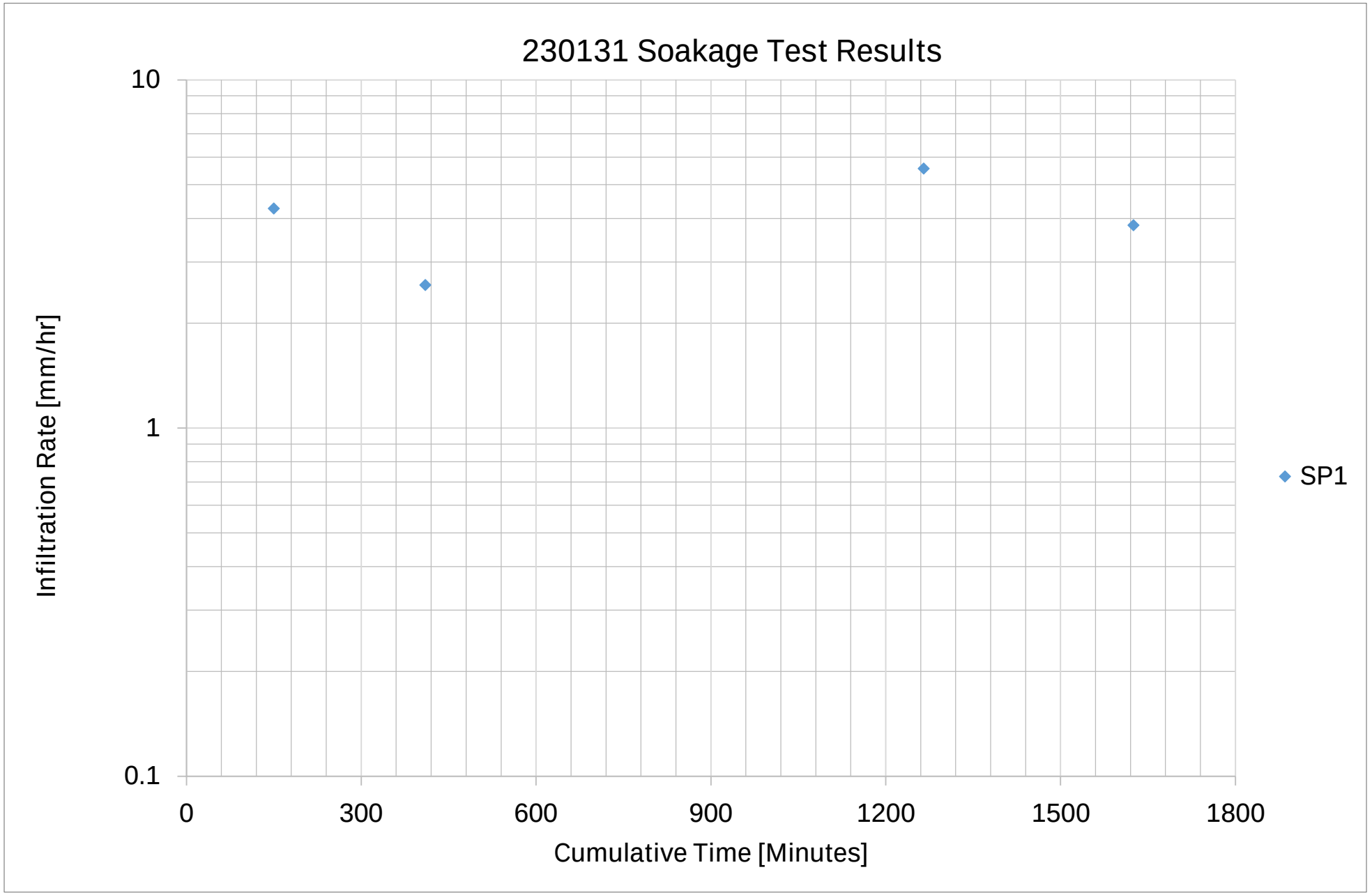
EASTING:		EQUIPMENT:	5.5 Tonne Excavator	OPERATOR:	Pete
NORTHING:		COORD. SYSTEM:		COMPANY:	Forbes Earthworks
ELEVATION:		EXCAV. DATUM:	Ground Level	HOLE STARTED:	13/04/2023
METHOD:	Aerial Photography	ACCURACY:		HOLE FINISHED:	13/04/2023

Soil / Rock Type	Description	Graphic Log	Depth (m)	Groundwater / Seepage	Scala Penetrometer (Blows per 100mm) 0 5 10 15
TOPSOIL	Organic SILT with a trace of rootlets; dark brown. Soft; moist. 0m – 0.3m		0.0 – 0.3		
ALLUVIAL SAND	Silty fine SAND; light grey brown, massive. Loose; moist. 0.3m – 0.8m		0.3 – 0.8		
GLACIAL TILL	Silty gravelly SAND; grey. Medium dense; moist; gravel, fine to coarse; subrounded to subangular. 0.8m – 1.3m		0.8 – 1.3	NO SEEPAGE	

Total Excavation Depth = 1.3 m

COMMENT:	Soak pit dry. Soakage test at 1.3 m depth.	LOGGED BY:	MBS
		CHECKED DATE:	18/04/2023
		SHEET:	1 of 1

Appendix C: Permeability Test Results



Document Set ID: 7691784
Version: 1, Version Date: 19/07/2023

Appendix D: Rainfall, Runoff and Channel Sizing Calculations

160 Lower Shotover road catchment calcs

Time of concentration:

ToC = 14.6 * L * (A^-0.1) * (S^-0.2) (from NIWA)

Time of concentration in minutes;

L is the longest flow path in km;

A is the catchment area in km²;

S is the channel slope in m/m

L=	130	m	all values measured from 2021 1m LiDAR contours
L=	0.13	km	
Highest point=	432	m	
Lowest point=	420.5	m	
Height diff=	11.5	m	
Height diff=	0.0115	km	
S=	8.85%		
S=	11.30	to 1	
ToC=	5.1	mins	
ToC rounded to=	10	mins	due to minimum ToC / max rainfall intensity value

Pre-development design flow:

Q=CiA i (and actually C) dependent on ToC

C=	0.6		from Table 4-2 from 2022 QLDC COP
i=	83.9	mm/hr	
i=	2.33E-05	m/s	
A=	7000	m²	meaured from 2021 1m LiDAR contours
A=	0.007	km²	
Q=	0.0979	m³/s	
Q=	97.9	l/s	

Table 4-2: Rational runoff Coefficients.

Land Type and Slope	Soil permeability		
	High	Medium	Low
Forests			
Flat (0–2%)	0.10	0.20	0.30
Rolling (2–10%)	0.10	0.30	0.40
Hilly (10–30%)	0.20	0.40	0.50
Tussock grassland			
Flat (0–2%)	0.15	0.30	0.40
Rolling (2–10%)	0.20	0.40	0.50
Hilly (10–30%)	0.30	0.50	0.60
Pastural (and brownfield development)			
Flat (0–2%)	0.20	0.40	0.50
Rolling (2–10%)	0.30	0.50	0.60
Hilly (10–30%)	0.40	0.60	0.70

Table 4-3: Soil Permeability Range (mm/hour)

High	Medium	Low
>50	5 – 50	<5

Sizing channel to convey flow around proposed dwelling:

Q = A/n * R^0.66 * S^0.5 Manning's formula

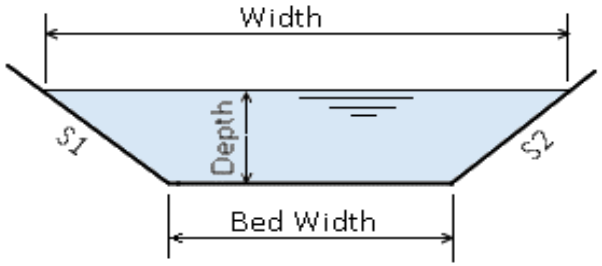
For a rock-lined flat bottomed channel with steep sides (narrower, but maintenance by hand required):

Assuming channel side slopes: 2 H to 1V

Assuming channel bed slope: 11.3 H to 1V

Assuming channel bed width: 500 mm

Assuming channel Manning's n: 0.03 (Channel with rough stony bed or with weeds on earth bank and C COP



V=	1.64	m/s	OK
Width=	856	mm	
Width=	0.856	m	OK
Depth=	89	mm	
Depth=	0.089	m	OK

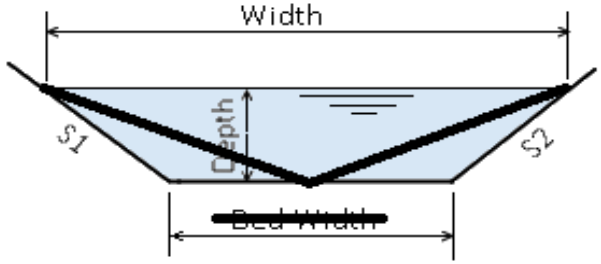
For a grass-lined triangular channel with less steep sides (wider, but can be maintained with a ride-on lawn mower or other vehicle):

Assuming channel side slopes: 5 H to 1V

Assuming channel bed slope: 11.3 H to 1V

Assuming bed channel width: 0 mm

Assuming channel Manning's n: 0.0225 (Straight uniform channel in earth and gravel in good condition) from QLDC COP



V=	1.82	m/s	OK
Width=	1040	mm	
Width=	1.04	m	OK
Depth=	104	mm	
Depth=	0.104	m	OK

Swale, check dam(s) will be required if site earthworks result in a gradient of >5%, see Figure 3.6 of NZS 4404:2010 for a typical detail, if required

JOHN EDMONDS & ASSOCIATES
03 450 0009 | info@jea.co.nz
www.jea.co.nz
Level 2, 36 Shotover Street, PO Box 95, Queenstown 9300

Environmental Management Plan

EMP

For, 160 Lower Shotover Road, Queenstown

Version 1.0 - June 2023

Author:

Anton Kirkbeck NZCE Civil

Senior Project Manager
John Edmonds & Associates Ltd.

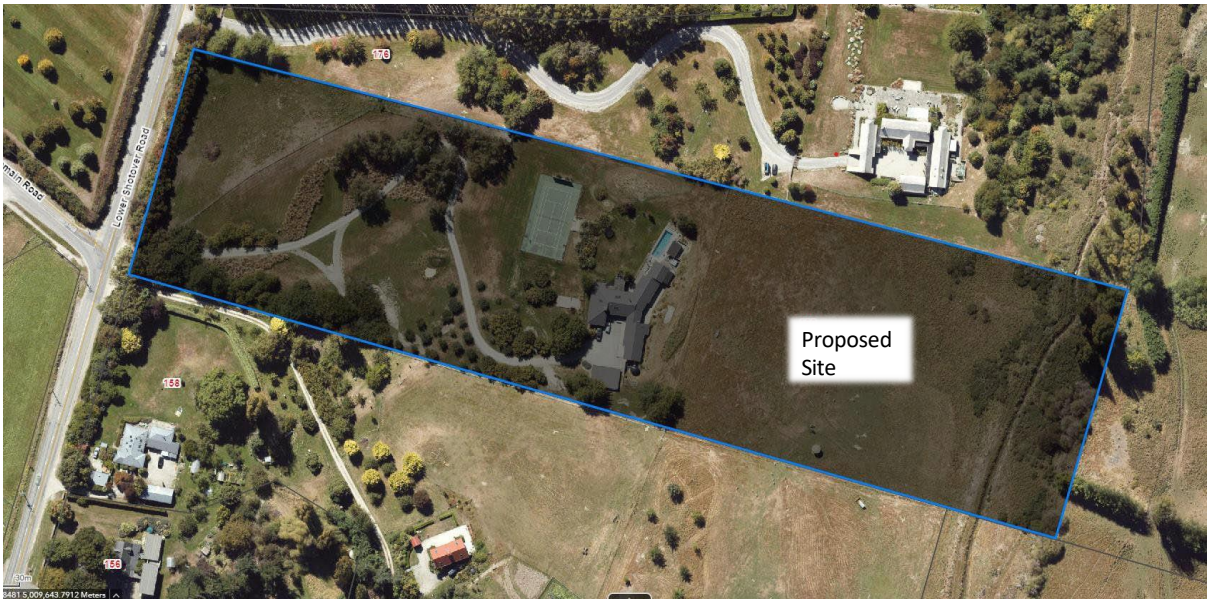
EMP - Table of Contents

Site Description

This Environmental Management Plan (EMP) covers works at 160 Lower Shotover Road, RD1, Queenstown.

In brief, the proposed development consists of earthworks for a new building platform and driveway within an existing established rural property. The existing dwelling will be unaffected by the proposed physical works.

The development site location shown below.



There are no natural water courses within this property, however the Arrow irrigation channel is located approximately 30 m east of the proposed building platform, and approximately 10 m higher, the race is periodically used for irrigation purposes and poses no issue for the proposed development, also given it is several metres above the work area, potential of contamination is highly unlikely and therefore does not require protection during the project.

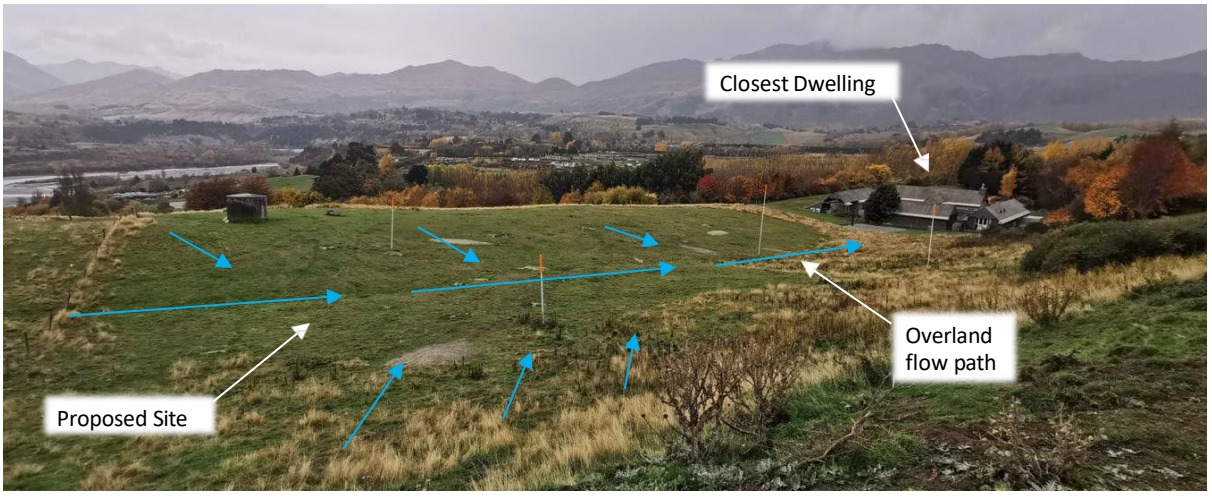
The proximity of the nearest significant water body, the Shotover River, is approximately 800m to the area of works via various potential overland flow paths but does not connect directly, therefore the site has a low to nil risk of sediment pollution to the Shotover River.

No ecological information is available for the property, with the current state and use of the development area being a stock grazed grass paddock.

It is noted that the development is located within an existing and established rural property, on the upper/ eastern portion of the site, with the site topography through the proposed new building location generally gently sloping to the north-northwest. The proposed building platform is located in a shallow depression that will locally concentrate overland flow, however the area appears to be normally dry.

The nearest building (rural residential) outside the development area, is located approximately 20m beyond the northern site boundary, along with rural neighbours on each adjoining boundary.

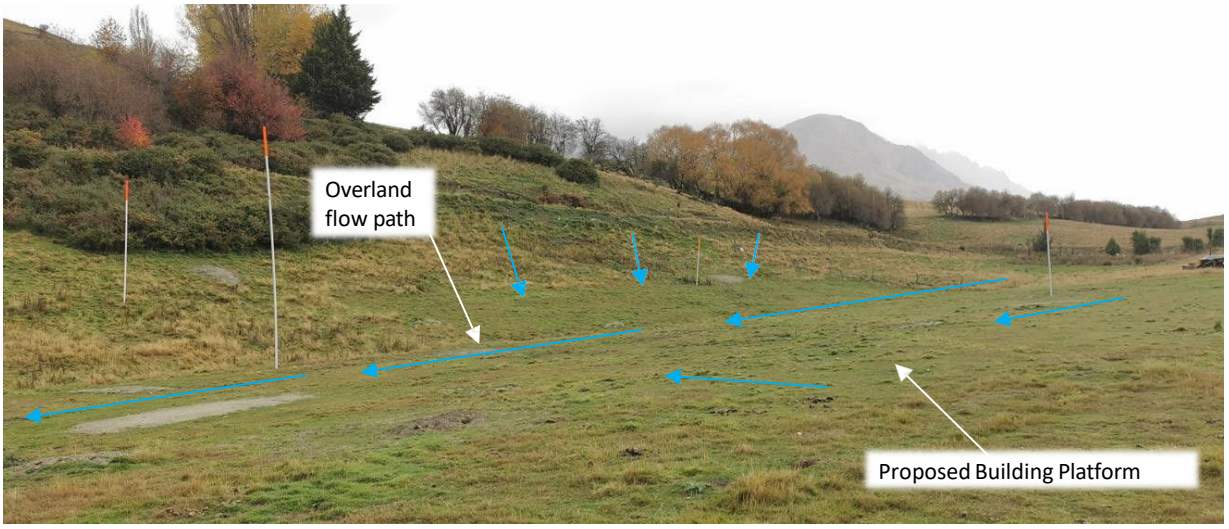
Site visit photos taken 8th May 2023, showing flow lines and key features.



1. Overall view of site, looking northwest, closest dwelling LHD side of image.

2. View looking north at Arrow Irrigation channel, site is LHD side of image.

3. View looking northeast of proposed building platform.



4. View looking southeast towards proposed building platform site.

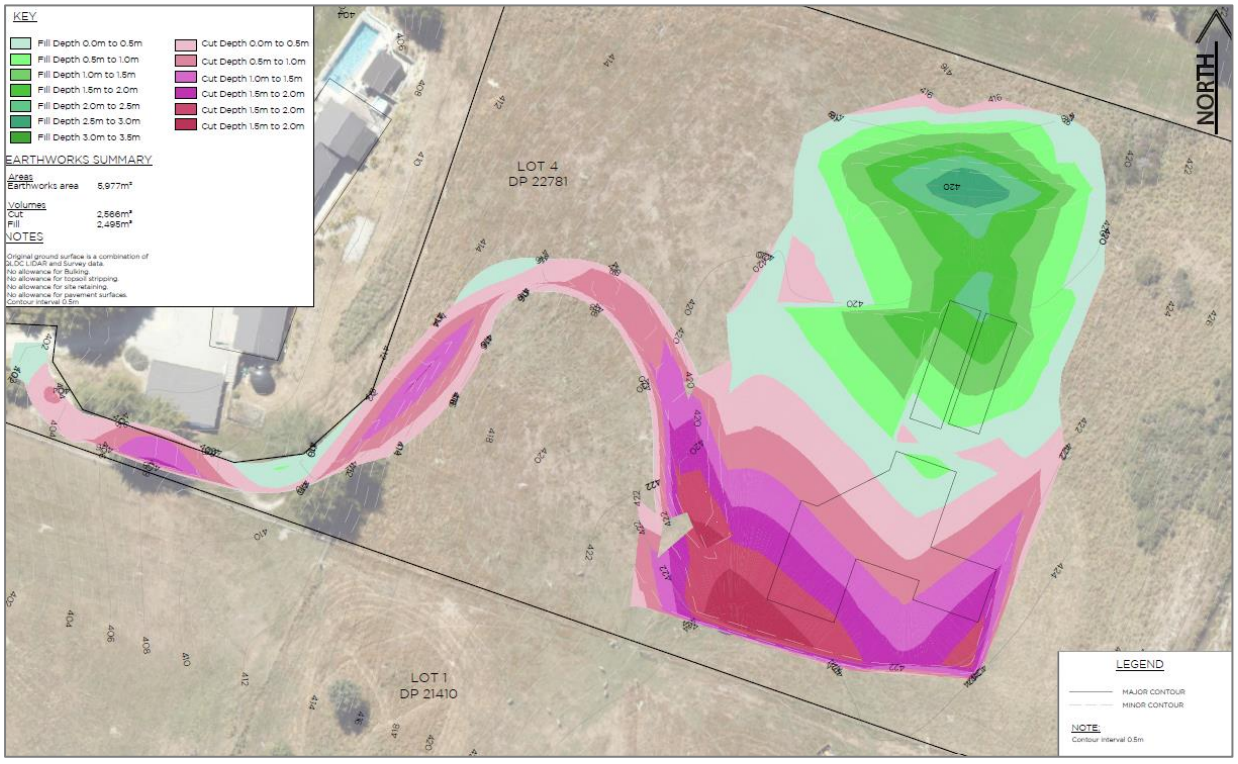
5. View looking east at adjoining property and common boundary, and the lowest point of site.

Earthworks Summary

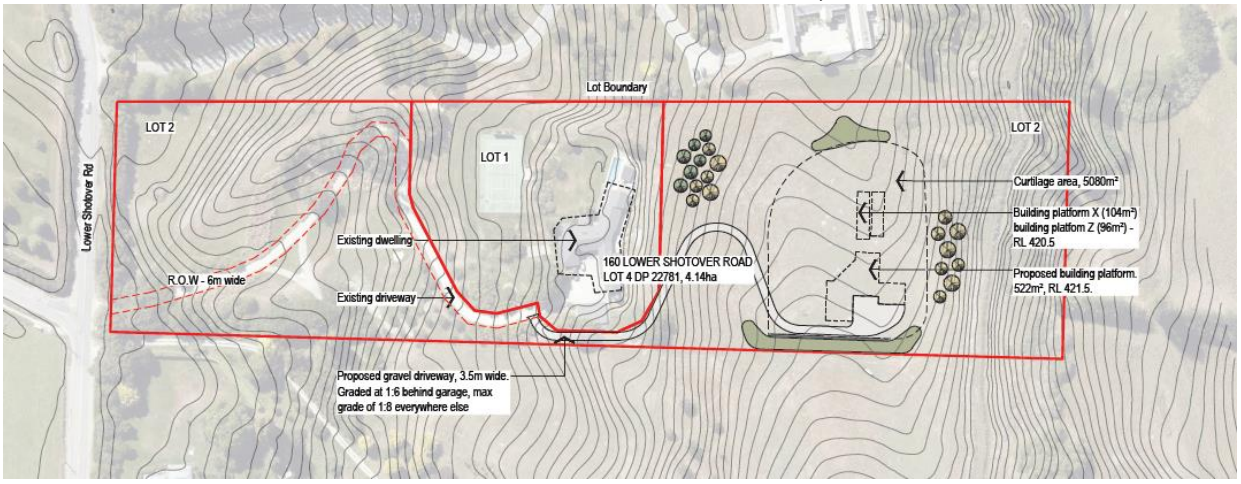
As per JEA's earthworks plan, the area of disturbance is over an area of 5,977m^2, where a total of 2,549m^3 will be excavated and 2,618m^3 of suitable material is to be placed as fill, with no waste material being removed from the site. The maximum cut depth is 2.5m, which occurs close to the southern boundary. The fill reaches a maximum depth of 3.0m and occurs mostly on the north portion of the site, to form the structures foundations.

Earthworks also includes a new access road/ driveway extending from the existing driveway.

JEA Survey, Earthworks Plan as follows:



JEA PLANS – PROPOSED EARTHWORKS - 2 LOT SUBDIVISION LOT 4 DP 22781, 160 LOWER SHOTOVER ROAD



BAXTER DESIGN PLANS – WIKSTROM LOWER SHOTOVER ROAD - FULL LOT LAYOUT – 11 August 2023

Environmental Risk Assessment

Per the QLDC guidelines, as this site is *'greater than 2,500m² disturbed surface area open at any one time'*, it then meets the criteria for a **"medium risk"** project, as defined by QLDC's Guidelines for the Preparation of Environmental Management Plans June 2019.

Subsequently this EMP document has been prepared for Medium Risk environmental management.

Cultural Heritage

This site is not a known cultural heritage site. However, all earthworks and ground disturbance works will be undertaken in accordance with the obligations of the Heritage New Zealand Pouhere Tāonga Act, 2014 (HNZPTA).

In the event of archaeological discovery, then **Appendix 6**, **Archaeological Discovery Protocol** document will be followed.

Health and Safety Comment

As per the Health and Safety at Work Act (HSW Act), the development PCBU and its nominated contractors must demonstrate appropriate HSW plans and measures are in place and are monitored closely.

This development work includes up to 3.0m cut batters, and a large fill area, on a site with steep access and above an existing dwelling, so attention is drawn to the recommendations from the Geosolve geotechnical report, dated April 2023, where HSW measures advised and are considered critical to manage cut slope stability risks during excavation.

Environmental Management Best Practice

Erosion and Sediment Controls (ESC) for this project are designed, installed, maintained, and decommissioned in accordance with the following policies and principles:

- ESC is in accordance with GD05 "Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region 2016" are integrated with construction planning.
- That the ESC also meets with the Otago Regional Council's (ORC) policies in Plan Change 8, specifically Topic 7: Part G: Sediment from earthworks for residential development.
- Effective ESC plans are site specific to the soils, topography, weather, construction conditions and the receiving environment.
- The extent and duration of soil exposure is minimised, with disturbed areas being promptly stabilised.
- All water movement through the site is controlled, where clean water is diverted around the works site, and 'dirty' and 'clean' water are separated, as far as practicably possible.
- Soil erosion is minimised as far as reasonable and practical, and to the satisfaction of the QLDC.
- Sediment retention on site is maximised and must meet the discharge criteria for suspended sediment.
- That ESC devices are maintained in proper working order, always.
- The site is monitored, and ESC practices adjusted as required to maintain the required performance standard, and avoidance of discharges, especially sediment off site.

EMP Updates and Reviews

This EMP document will be reviewed when any of the following occur:

- The construction program dictates changes by moving from one stage to another,
- Changes have been made to the construction methodology that's affects the original EMP,
- Onsite changes are made due to unforeseen factors during the physical works,
- There has been an Environmental Incident and investigation findings require updates,
- Directed by QLDC's Monitoring and Enforcement team.

Where undertaken, all updates to the EMP will be submitted to QLDC for acceptance at:
RCMonitoring@qldc.govt.nz

EMP Roles and Responsibilities

Project roles as they relate to the effective management of this EMP:

Project Manager – TBC

This role has the overall responsibility for the project environmental management, ensuring:

- EMP management and the implementation, and the EMP is updated as required,
- Staff have the required skillset for the EMP, and if not, that appropriate training is given,
- Provides the resources necessary to implement this plan,
- Attends to all EMP Incidents and Complaints, ensuring compliance is met.

Site Environmental Representative – TBC

This role is responsible for the daily implementation of environmental controls, administrative tasks, and ensuring that all activities comply with the EMP requirements, key tasks are:

- Implementation of environmental management
- Installation, maintenance, and removal of environmental controls as per the ESCP,
- Monitoring weather and ensuring site preparedness for potential weather events,
- To ensure environmental site inspections are completed at the required intervals,
- Complete environmental incident reporting as and when required,
- Assist project management with ensuring all staff, subcontractors and visitors are informed of procedures and required of the site EMP,
- Ensuring environmental inductions to all staff, subcontractors, and visitors,
- Assisting with incidents and complaints, and ensuring compliance is met.

SQEP Environmental Advisor – Anton Kirkbeck, of John Edmonds & Associates Ltd. (JEA)

Ph: 022 462 6494
Email: anton.kirkbeck@jea.co.nz

This role is to advise the project management team accordingly, while ensuring compliance with the EMP requirements, key tasks are:

- Technical advice regarding this EMP and implementation of the ESCP controls as required.
- Advising project management during incidents and complaints, and ensuring compliance is met.

Site Induction

For all project staff, subcontractors, an environmental specific site induction will be undertaken, to ensure they are aware of the project's environmental risks, as well as the actions and tasks required to help manage these risks. Prior to works, the Environmental Advisor will deliver the induction to key management staff.

An environmental specific site induction form and induction register is included in Appendix 2.

Site Inspections

The project's Environmental Representative will undertake and document Pre and Post-Rain Events site inspections for the purpose of the following:

- That this EMP is being followed, and
- Review that the erosion and sediment controls as detailed in the ESCP Appendix 1 (or its subsequent revision) are installed and working appropriately, while identifying any necessary maintenance or repairs required.
- Identifying and reporting any environmental incidents.
- Verifying the preparedness for adverse weather conditions where rain and/or wind is forecast.

During active works, the Environmental Representative will also undertake daily pre-start and post rain inspections, to ensure that no new environmental issues have arisen, or that mitigation measures have been compromised from the previous day's activities.

Refer site inspection form in Appendix 5.

Environmental Incident Notification and Management

An environmental incident is any time where the EMP, ESCP or control devices has failed leading to any adverse environmental effects offsite, this also includes nuisance effects, such as dust, noise, and vibration, as well as accidental spills of fuels and chemicals to ground onsite.

Should an environmental incident occur, then the Environmental Incident form in Appendix 4 will be used, and the incident be notified to QLDC within 12 hours of becoming aware of the incident.

Refer environmental incident form in Appendix 3.

Site Records and Registers

All Environmental Management records and registers are held onsite and can be made available to the QLDC, or it's representative upon request.

The site records and registers to be managed onsite shall include the following:

- Environmental Induction and Attendance register - Appendix 2.
- Environmental Incident reports and associated corrective actions - Appendix 3.
- Complaints Register and associated corrective actions undertaken - Appendix 4.
- Daily project diary entries, including pre-start and post rain inspection observations.
- Weekly Site Inspections - Appendix 5.

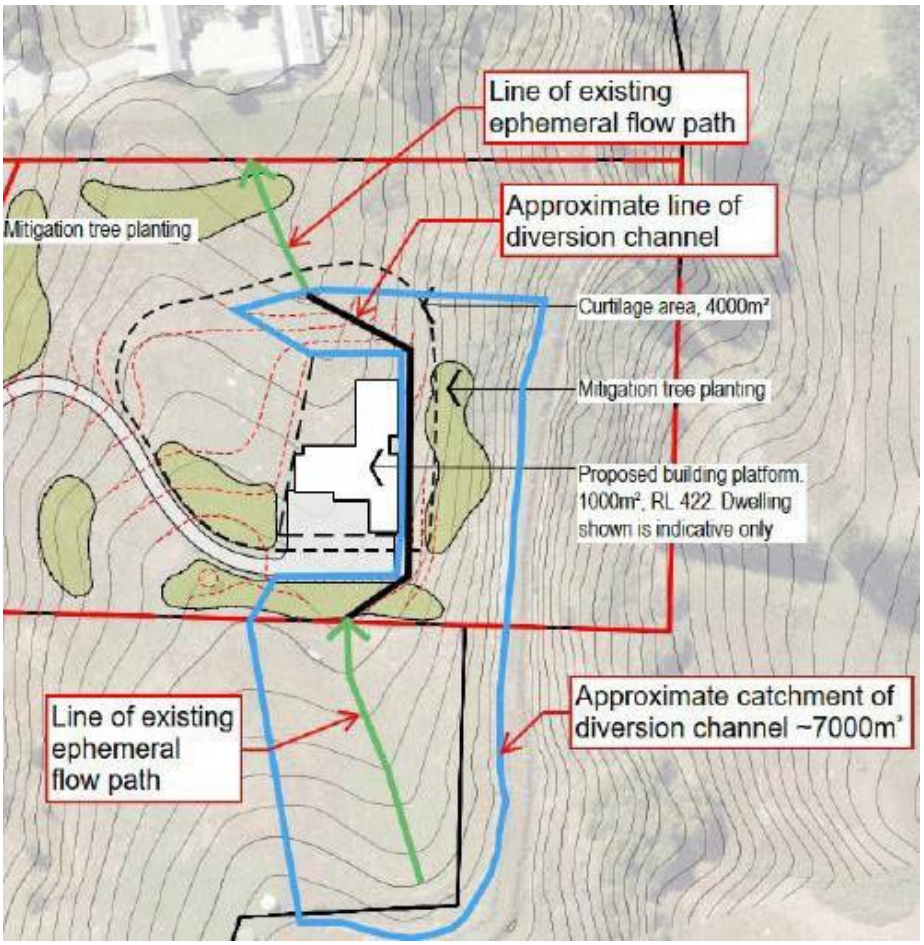
Note that EMP documentation, including site inspection records, and registers, shall be made available to QLDC within 48 hours of a request being made, noting digital copies supplied via email are acceptable practice.

Stormwater Flow and Catchments

The Arrow Irrigation channel, which is upslope from the earthworks area, acts as a greater and upper catchment cut off, and therefore diminishing the site catchment to the smaller area as shown below.

Reference is given to the stormwater assessment within the Geosolve geotechnical report, dated April 2023, *Section 5, Catchment Analysis and Conceptual Channel Sizing.*

Image below is Figure 3.1 – Conceptual re-routing of the ephemeral overland flow path, taken from the Geosolve report, as it indicates the developed site flow paths and relative catchment area.



Geosolve report key findings are referenced below from section *5.4 Summary*, as follows:

The proposed building platform lies within an ephemeral overland flow path. That flow path has a relatively small upstream catchment (~7000 m2 / 0.7 ha) and has been calculated to create approximately 98 l/s of runoff during a 1% AEP storm event with allowance for RCP.8.5 climate change.

Given the sites requirement for the permanent diversion channel, to accommodate the above flows, this channel will form an integral part of the sites ESCP devices and will be constructed as per Geosolve's Rock or Grassed lined channels, noting the final design is to be confirmed and approved prior to works commencing.

EMP Construction Methodology - Draft

This is a generalised and draft construction methodology, as it relates to the works needed for the EMP, it will form the basis of the contractor's final construction methodology, noting that steps described below also cover the general works for the development, also that steps can be done in parallel with others at the discretion of the contractor.

The construction methodology is as follows:

Site Preparation:

1. Conduct a prestart meeting onsite, with all management staff, environmental advisor, and local authorities in attendance, then undertake an initial site inspection to identify new potential hazards, such as unstable slopes, buried utilities, or new unforeseen environmental constraints, document findings and resolve any issues arising from the inspection.
2. Once the above task is completed, then EMP related site work can commence, beginning with
3. Installation of all silt fences in the locations shown on the ESCP, followed by first initial inspection once all devices are in place, and rectify any issues found.

Site Access Road and Clearing the site:

4. Formation of the new access road, with stripping of topsoil from the alignment area and moving the soil to a designated stockpile, as shown on the ESCP.
5. Dependent on the subsurface material, the access may be stabilised, for fine soils large aperture aggregate can be rolled in, noting the future final pavement will be constructed on top. Lined water tables and swales will be constructed and stabilised prior to further works.
6. Vegetation clearing will also be required along the new access road, and passed the existing dwelling, some mature trees may need removed, with safe removal by arborists is recommended. The green waste from vegetation clearing, debris, and other obstacles, can be stockpiled in an appropriate location, to be mulched, burnt, or carted offsite to approved refuse stations.
7. Debris and other obstacles will be removed manually or with the use of heavy equipment.
8. Any hazardous materials on the site will be identified and safely disposed of accordingly.

Establishing survey control points and benchmarks:

9. During site is clearance, project survey control points and benchmarks can be established to ensure accurate grading and set out, using a qualified surveyor.

Earthworks – Topsoil Strip:

10. Topsoil will be stripped over the area of earthworks, between the excavation and fill areas, and stockpiled in the designated locations, for future respreading over finished surfaces.
11. Temporary haul roads will be established between excavation, fill and stockpile areas, these roads and tracks will be well maintained for the life of the project.

Earthworks – Diversion Channel:

12. As noted above, and in the ESCP, the Geosolve diversion channel must be constructed prior to the main earthworks commencing, with the channel alignment cut in and established, and stabilised as specified.

Earthworks – Excavation:

13. As per JEA Survey Ltd. Earthworks Plan, the cut total for this project is 2,549 m^3.

14. The required grades, levels and slopes will be established based on the approved design plans.

15. Use of heavy equipment such as hydraulic excavators will be used to reshape the landform according to the site earthworks plan. Noting that all heavy equipment will be operated by skilled and licensed operators who are trained in the safe use of heavy machinery.

16. The appropriate excavation method will be determined by the contractor based on the site size, volume of material, site conditions and the nature of the excavated material. For example, if schist bedrock is encountered and is weathered and soft, then traditional mechanical excavation with digging buckets may be used. However, if the site is rock is too hard for traditional digging, then pneumatic rock breaking, or drilling and blasting techniques could be employed.

17. As this site is known to include some rock excavation (as per Geosolve report), a brief rock extraction methodology is as follows.

    a. For general excavation of gravels and other soft soil, traditional mechanical excavation will be sufficient, utilising hydraulic excavators of various sizes but not greater than 30T.

    b. Standard safety measures will be implemented during the excavation process to protect workers. This includes providing protective equipment such as hard hats, safety glasses, and gloves. In addition, workers will be trained to operate heavy machinery and equipment safely. Benching or shutters will be employed for vertical cuts and trenches in soft soils, and not permitting personnel into excavated confined spaces.

    c. All rock breaking and construction activities will adhere to Section 7 of the Queenstown Lakes Operative District Plan, reference table 2.2 NZS6803:1999.

    d. Note that all rock breaking techniques require one form of rock penetration, and in most cases using pneumatic tools to be successful. Therefore, vibration free, noiseless rock extraction is near impossible, however careful management of this activity, and following the recommendations in the noise and vibration management section of this report will reduce this nuisance for the neighbouring properties.

    e. Note that NZS6803:1999 states that best practicable options for noise avoidance or mitigation should be applied to construction activities on the site; however, if the best practicable options are applied and the noise limits are still not met, discretion is able to be applied.

Earthworks – Backfilling and Compaction:

18. As per JEA Survey Ltd. Earthworks Plan, the Fill total for this project is 2,618 m^3.

19. Filling areas with suitable tested and approved materials such as soil or rock fill, once the excavation is complete. The subgrade foundation area to be filled on will be tested first for its bearing strength, then only once confirmed as passed, can have certified fill placed, compacted, and shaped to the required level.

20. Landscape mounds are included within the scope of this project, filling here will be at the guidance of the Landscape Consultant, during this step additional ESC devices such as Silt Fences or Diversion channels may be required, these will need to be added to the EMP.

21. Using compaction rollers or other equipment to compact the soil to achieve the required density and stability, also involves using heavy equipment such as large vibrating rollers or compactors to compress the soil.

22. Note that in most cases, compacting of backfilled materials using vibrating rollers will create noticeable vibrations to close adjoining properties, so static rolling is recommended in the larger fill zones, and if this is employed to ensure the specified density and stability is achieved, the fill material will need to be placed in thinner layers and tested more regularly.

23. Smaller vibrating plate and foot compactors, that are typically used in construction, won't be a cause for concern, and can be used as normal.

24. All earthworks' surfaces must be shaped and controlled in a manner that creates positive drainage, into the ESC devices, and avoiding ponding within the work area.

25. In the event of adverse wet weather, earthworks areas should be track or tyre rolled, to seal the surface and minimise erosion and scour. Typically, site should be left in a stable and clean state at the end of each day, or before periods of no works, such as weekends, holidays, or unforeseen project delays.

Earthworks – Material Imported or Waste Material Sent Offsite:

26. As per JEA Ltd Earthworks Plans, with a near Cut and Fill balance, and including the landscape mounding, then significant waste offsite is unlikely, but imported material is a potential.

27. However, should waste material be taken offsite, it will be transported to appropriate locations, able to receive the specific material onboard, this activity will be the responsibility of the nominated contractor to arrange and manage, likewise if materials are imported from offsite sources, then it is considered that no additional onsite ESC wheel cleaning devices will be required, noting that the combined internal driveway and new access length is conducive to vehicle wheels self-cleaning.

Building Construction:

28. When earthworks for the building platform have been completed, contractors commence building construction, starting with formwork and pour concrete for the building foundations, during this time, designated hardstand areas will be needed for vehicle parking, materials storage, and other construction related heavy machinery. Compacted gravel to stabilise these areas is advised, noting that vehicles must kept off earthwork's areas, hence temporary fencing such areas is also advised.
29. Once the building's roof is constructed, gutter connections to the downpipes and discharge points to stormwater soak pit must be made as soon as possible. Should any delays occur, temporary pipes directed to sedimentation ponds are to be installed, and documented in the EMP.
30. During construction, any waste concrete must be disposed of accordingly, by means of either removal from site back to the depot, or a controlled dump location away from waterways, with the cured waste concrete being buried in approved landscape mounding or removed offsite.

Project End and ESC Decommissioning:

31. Respreading of topsoil will occur as areas are finished during the project, excess topsoil can be removed from site or added to landscape mounds at the direction of the Landscape consultant.
32. Topsoiled areas will be grassed, by means of seed spreading or hydroseeding, should works finish out of the growing season, coconut matting is to be laid and pinned over areas where grass is to grow.
33. All temporary haul roads and tracks will be decommissioned, stabilised, and replacing with topsoil and then grassed.
34. ESC decommission of silt fences is once 80% vegetative cover on exposed areas has been achieved, the Environmental Advisor will be requested to inspect the site at this time.
35. Waste materials from the ESC devices will be disposed of accordingly, and any devices that remain intact due to ongoing function will need to be revisited and inspected regularly.
36. Notification to be sent to the QLDC/ ORC on completion of works and decommissioning of the ESC.

ESC - Erosion and Sedimentation Controls

Erosion and sediment control will be generally undertaken in accordance with the Guidance Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05). The ESCP will be updated as and when required as the project progresses.

Refer to Appendix 1 for the ESCP.

Excavation area
The excavation for the project covers approximately 2,500m^2 and is shown on the ESCP, Appendix 1.

Stabilised Haul Routes
The site itself has an existing long sealed driveway, access to the works site is via the new driveway extending from the end of the current. Earthworks machinery will move between the excavation area and the fill area across the general earthworks area and is a reasonably short distance. There are also short haul routes required for landscaping bunds, and these will be formed as temporary tracks then stabilised as required.

Clean Water Diversion Channel Cutoff
The upslope catchment will be diverted around and uphill of the earthwork's areas, via a permanent diversion channel as documented in Geosolve report and shown on the ESCP, note that this will only flow during rain events and remain dry most of the time. The lower portion of new access will also require clean water diversion drain as the access design swale, the full length of swale will be lined with A13 bidim and covered with rip-rapped consisting of large diameter drainage aggregate, and be discharge to open ground adjacent the existing driveway.

Silt Fences
The main silt fences will delineate the earthworks extents/boundaries and ensure no sediment leaves the earthworks area, and be located to the west of the site, preventing potential sediment to the driveway below and the existing dwelling.

Another silt fence will be installed below the fill area, running parallel and offset from the existing fence, on the northern property boundary, to prevent any sediment reaching the neighbours property, and this will extend into the hill to the east, and to the west encapsulating the DEB.

Trafficable Swale and Dirty Water Diversion*
The trafficable swale will be located at the top of the new access road, picking up the dirty water off the site created by vehicle movement to and from the site. The adjacent silt fence will direct any flow that exceeds its capacity into this swale channel, all dirty water diversion channels will direct the discharge into the main DEB area. ** Note that the contractor may choose a pipe to convey water under the access road, in place of a swale. If so, the pipe must be adequately sized with enough cover to avoid damage from heavy traffic loads.*

Decanting Earth Bund (DEB) with T-Bar Decant Outlet
A DEB will be constructed on northwest corner of the site, as shown on the ESCP. Soakage rates are unknown at this stage, therefore clean water will be discharge to the grassed area below via a floating T-Bar decant system.

Capacity sizing of the DEB is based on area of works below the clean water diversion channel, approx. 0.6ha, and to contain the 20-year event, capacity of the DEB needs to achieve a minimum volume of 90m^3, and assuming no soakage, noting however if good soakage is evident the minimum storage volume can be reduced if approved by the SQEP.

Emergency Response Procedures

When a significant adverse rain event is forecast, the following emergency responses will be undertaken by the Environmental Representative.

1. Stop works in time to inspect and repair or modify any ESC devices.
2. Ensure the silt fences are in good order with full design capacity.
3. Observe weather and check all ESCP controls throughout the event.
4. Repair and attend to issues during the event, and post event.
5. Report the event and issues encountered, if needed adjust the ESCP and EMP to suit.

Site Water Quality

The Contractor will always undertake reasonable and practicable management measures to avoid adverse environmental effects within the site or to adjacent land into which the site discharges.

There is no evidence of any threatened biodiversity or ecologically sensitive environment however, the adjacent northern property has a man-made pond which is potentially a healthy habitat for flora and fauna and therefore is being treated as a sensitive receptor. As such all measures should be taken to prevent sediment reaching this pond a least up to a 1 in 20-year storm event.

Downslope to the west of the project earthworks area is moderately steep open grassy pasture for approximately 50 meters before reaching the existing dwelling. So, any sediment from the works area falling downslope in this direction, that did pass the silt fence would soon be trapped within the grass before reaching the dwelling.

Visual monitoring will occur during/following rain events to check silt fences and the diversion channel to the neighbour's property and pond to ensure no sediment is being generated and/or leaving the site.

Observations and any preventative measures taken are to be recorded in a daily job diary.

All water leaving the site must meet the relevant resource consent conditions and the following criteria as defined in the QLDC Guidelines for the Preparation of EMPs.

WATER QUALITY RISK	PARAMETER	DISCHARGE CRITERIA
MEDIUM AND HIGH WATER QUALITY RISK	SUSPENDED SOLIDS	<50 mg/L Total Suspended Solids (TSS); unless specified otherwise by resource consent conditions or agreed with QLDC. May utilise equivalent turbidity expressed as Nephelometric Turbidity Units (NTU) as determined by laboratory analysis by correlating turbidity with the suspended solid criteria for the specific site.
	PH	Stable pH reading and within 6.5 – 8.5
	HYDROCARBONS, TANNINS, PAINT	No visible trace
	WASTE	No waste or litter visible

Chemical and Fuel Management

All contractors will ensure spill response equipment is available onsite, for use in an emergency.

The spill response equipment will be of specific type and appropriately sized to the site location, topographical features, type and quantity of chemicals, and combustible liquids, fuels, and batteries being stored on site.

Should a spill kit be used, the incident must be reported, and the spill kit must be replaced as soon as practicable.

For refuelling of machinery, this will conform to the following requirements:

1. To be a minimum of 30m from a waterway, ESC sedimentation pond, or diversion channel,
2. Fuelling activity to be undertaken only by trained, authorised, and competent staff,
3. All fuel hoses to be fitted with a stop-valve at the nozzle end,
4. Any chemicals or fuels that exceeds 250 litres onsite at any one time are nil,
5. Diesel fuel trailers or Mini Tankers to be used only by trained, authorised, and competent staff.

Dust Control Management

Given the site is rural and located high on a hillside, during the construction phase there is potential for dust to be generated, with the site being exposed to winds from most directions.

The following mitigation measured are proposed:

- Temporary dust suppression be installed in the form of K-Line sprinklers or similar, these will be placed in close proximity to earthworks areas and roads. Careful management will be required of the sprinklers to not over water and create erosion or ponding issues.
- When visible amounts of dust are leaving the site, works must cease.
- In the case of excessive dust, further effort must be employed with additional surface spraying.
- During periods of the site being unattended, sprinklers can be on a timer system to keep the site damp.

Site Waste Management

Construction waste will be managed within the works area in a typical fashion with regularly emptied skip bins and covered as necessary to eliminate windblown rubbish.

Noise and Vibration Management

Based on the Geosolve Geotechnical report only minor bedrock is expected to be encountered, in small areas of the site. Hence some noise will be generated from the earthworks machinery and hours of work will be constrained in accordance with the resource consent conditions to be confirmed.

Table 2.2 – Noise limits for construction noise received in residential zones and dwellings in rural areas outlined in NZS6803:1999

Time of week	Time period	Duration of work					
		Typical duration (dB)		Short-term duration (dB)		Long-term duration (dB)	
		L_{Aeq}	L_{Amax}	L_{Aeq}	L_{Amax}	L_{Aeq}	L_{Amax}
Weekdays	0630-0730	60	75	65	75	55	75
	0730-1800	75	90	80	95	70	85
	1800-2000	70	85	75	90	65	80
	2000-0630	45	75	45	75	45	75
Saturdays	0630-0730	45	75	45	75	45	75
	0730-1800	75	90	80	95	70	85
	1800-2000	45	75	45	75	45	75
	2000-0630	45	75	45	75	45	75
Sundays and public holidays	0630-0730	45	75	45	75	45	75
	0730-1800	55	85	55	85	55	85
	1800-2000	45	75	45	75	45	75
	2000-0630	45	75	45	75	45	75

Noise and Vibration Mitigation (NVM):

The noise and vibration from rock extraction is considered the main issue to mitigate, and in general construction in the Queenstown area, by nature, has some form of rock extraction required. However, most developments both past and present have successfully completed this task, while adhering to the accepted level of noise and vibration.

For this size of this site, it requires a minor amount of rock to be extracted, with the rock extraction activity duration anticipated to take between 1 – 2 weeks, a programme is to be confirmed by the nominated contractor at time of engagement.

All rock extraction activities will strictly comply with the long-term noise limits from NZS 6803, and will employ accepted, tried, and tested, plus local methods, to keep the noise and vibration within the accepted levels.

Communication with Neighbours

Initial and regular communication by the development management, or its contractors will be implemented prior to works starting. Noting that there is one rural residential neighbour within in close enough proximity to be subject to nuisance effects from the works.

Prior to commencing on site, the contractor will contact these neighbours and share contact details so that there is a direct line of communication throughout the works.

While not compulsory, it is recommended Dilapidation Surveys (DS) be carried out on neighbouring dwellings or structures and landscaping, to record existing conditions, DS are to be used as reference for potential damage claims resulting from effects of the project.

Note that the Complaints Register in Appendix 4, will be used to record all complaints.

SQEP - Suitably Qualified and Experienced Person

SQEP Credentials

This EMP has been prepared by Anton Kirkbeck of John Edmonds & Associates Ltd., who meets the criteria for a SQEP as defined by QLDC's Guidelines for the Preparation of Environmental Management Plans June 2019.

Anton is a civil construction professional, who studied NZCE Civil and has worked both as a consultant and contractor since 1994. During his career, Anton has been involved with the ever-changing Environmental Management policies and direction within the construction industry, covering all aspects from Erosion Settlement Controls (ESC) including design, through to physical installation, management, and monitoring.

Also, as per requirements of a SQEP, Anton is actively working to further his standing with Environmental accreditation, and ongoing Environmental refresher and technical courses.

This EMP reflects Anton's both SQEP professional experience, and the QLDC EMP requirements, and overseeing the environmental aspects of this project.

SQEP Disclaimer

Anton Kirkbeck and John Edmonds & Associates Ltd. has exercised appropriate professional expertise, care, and diligence in preparing this EMP, of which is wholly based on their understanding of the subject site, through their own site visits, as well as information provided by the client and its consultants.

Both Anton Kirkbeck and John Edmonds & Associates Ltd. has no control over the physical actions, altered designs, type of equipment, level of services, and methodologies undertaken by the client or other third parties, tasked with implementing the instructions or recommendations contained in this EMP.

Anton Kirkbeck and John Edmonds & Associates Ltd. do not accept any liability for environmental incidents, defects of control measures, complaints or any matters arising from deviations or variance from the measures specified within this EMP, and any supplementary documents.

APPENDIX 1. ESCP – Erosion Sedimentation Control Plan

APPENDIX 2. Site Induction Form – Environmental

Induction Summary

The purpose of the site environmental induction is to ensure that all staff and subcontractors onsite are made aware of their environmental responsibilities, understand the tasks and processes required of the EMP.

Basic project roles and responsibilities for environmental management.

Key Role - Environmental Representative for this project. TBC

This role is main responsibility is for implementation of environmental management.

- Ensure installation of environmental controls as per this EMP.
- Undertake environmental site inspections of the project.
- Oversee the maintenance and improvement of defective environmental controls.
- Undertake Environmental Incident reporting.

Environmental Representative Communication

- Keep project leadership informed of environmental performance of the project
- Inform staff of procedures and constraints applicable to managing specific environmental issues
- Responsible for providing environmental inductions to all staff and sub-contractors
- Complaints and Incidents
- Attending to Environmental Incidents and Complaints

EMP Related Topics for Discussion

- Specific locations within the site of environmental significance or risks, including,
- Exclusion Zones and Sensitive Environmental Receptors, Fuelling areas, Stockpile areas.
- Importance of no sediment leaving the site.
- Scope and conditions of resource consents applicable to the works.
- Limit of clearing and earthworks for each Stage of works as outlined in the EMP.
- Earthworks plan and scope of works.
- Environmental management measures stipulated in the EMP.
- The key items in managing erosion and sediment on this project are listed below;
    1. The silt fence prevents any sediment from leaving the site over the lower northern boundary. Inspect this weekly, after a rain event, and prior to a forecast heavy rain event.
    2. Check for damage including rips, tears, bulges in the fabric, broken support wires, loose waratahs, overtopping, outflanking, undercutting, and leaking joins in fabric,
    3. Make any necessary repairs as soon as identified,
    4. As the Silt fence geotextile material becomes clogged with sediments, this will result in increased duration of ponding. Therefore, careful cleaning of the silt fence geotextile with a light broom or brush may be appropriate,
    5. Remove sediment when bulges occur or when sediment accumulation reaches 20% of the fabric height,

6. Remove sediment deposits as necessary (prior to 20% of fabric height) to continue to allow for adequate sediment storage and reduce pressure on the silt fence,
7. Dispose of sediment to a secure area to ensure that it does not discharge to the receiving environment.
8. Ensure the dirty water diversion is not blocked and has full capacity, and flow will enter the sediment basin.
9. Ensure the sediment basin does not have more than 10% of its capacity taken up by collected silt. If necessary, muck this out and dispose of offsite.

EMP Procedures of notifying of potential Environmental Incidents

An environmental incident is the occurrence of a reportable breach of the relevant legislation, District Plan or other planning documents, the resource consent, and the EMP.

A reportable breach is one that causes a significant environmental effect or nuisance offsite or to Sensitive Environmental Receptors within the site including waterways, aquifers, or groundwater onsite.

If an incident occurs undertake immediate remedial actions to mitigate adverse environmental effects. Immediate response actions should not be delayed.

Once the immediate risk from the Environmental Incident is alleviated, the Environmental Representative shall investigate the cause of the breach and/or adverse environmental effects, then identify and implement corrective actions as soon as practicable.

The Environmental Representative shall provide an Environmental Incident Report (see Appendix 3) to QLDC within 10 working days of the incident occurring. This report must detail:

1. The nature of the Environmental Incident
2. What management measures were in place to prevent the incident from occurring.
3. Probable causes of the incident
4. What corrective actions have been undertaken to prevent incidents reoccurring.
5. Procedures for managing storm events (wind and rain)

The site should always be suitably stabilised to limit erosion and sedimentation, any potential spills, discharges, and deposition of waste from site.

EMP Procedures for Managing Spills

If a chemical or fuel spill occurs immediately use the spill kit on site to contain the spill. Collect any contaminated soil or water in containers (or on a truck depending on volume) onsite and dispose of to the Vitoria Flats contaminated soils landfill facility.

Advise QLDC of the environmental incident within 12 hours using the form in Appendix 3.

Environmental Induction

Induction Attendance Register
Sheet of

DATE:	*NAME:*	*SIGNATURE:*

APPENDIX 3. Environmental Incident Form

Project Address:	QLDC Consent Number (if applicable): RM123456 BC123456
Brief Project Description:	

Instructions

Complete this form for all environmental incident that cause contaminants (including sediment) or environmental nuisance to leave the site. Please be succinct, stick to known facts and do not make assumptions.

Once completed submit to the Regulatory team at Queenstown Lakes District Council at RCMonitoring@qldc.govt.nz Call the Regulatory team immediately on 03 441 0499 for any serious or ongoing incidents that cannot be brought under control.

Incident details

Date and Time	Date: XX/XX/XX Time: XX:XX am ☐ pm ☐
Description Provide a brief and factual description of what happened during the incident, include relevant details such as: > The estimated distance to the nearest waterway (include storm water and dry courses) > The estimated distance to the nearest sensitive receiver > The activity being undertaken when the incident occurred Sketches/diagrams/photos may be reference and appended to this report to aid in the description of the incident	
EXACT location of the incident Include address, landmarks, features, nearest cross street, etc Maps and plans can be attached to the incident report if appropriate	
Quantity or volume of material escaped or causing incident (provide and estimate if quantity unknown)	
Who identified the incident?	☐ Contractor ☐ Council ☐ Community ☐ Other

What immediate actions/control measures were taken to rectify or contain the incident?

What initial corrective action will be taken to prevent similar incidents recurring in the near future?

Has the Otago Regional Council been notified? ☐ Yes ☐ No

Approvals:

Environmental Representative/Person making report

Name..... Signature.....

Organisation..... Date.....

Mobile phone number.....

Site Supervisor

Name..... Signature.....

Organisation..... Date.....

Mobile phone number.....

APPENDIX 4. Complaints Register

Name & Address of Complainant *Contact Details*	
Nature of the Complaint	
Location, Date and *Time of the Alleged Event*	
Weather Conditions at the time of Event *Include wind direction and speed if noise/dust related.*	
Recommendations for Rectification	
Actions to be Taken	
Confirmation that the Complainant has been Informed of Rectification	
Confirmation the Matter has been Closed Out	*Date:* *Name:* *Signature:*

APPENDIX 5. ESCP and Site Inspection Form

DATE.

ENVIRONEMTNAL REPRESENTATIVE.

WEATHER OBSERVATIONS.

ITEM:	*OBSERVATIONS:*	*CORRECTIVE ACTIONS:*	*ACTION TAKEN AND WHEN:*
Clean Water Diversion Channel		Check channel is in good condition, is not blocked, and will convey water through the site without sediment contamination	
Dirty Water Diversion Drains		Check all drains are in good condition, are not blocked, and will convey water through to the DEB pond.	
Decanting Earth Bund (DEB)		Check condition, bund able to hold sediment and water, the T Bar is functioning and discharging only clean water, outlet is unblocked and stabilised. Remove sediment when sediment accumulation reaches 20% of the bund capacity.	
Silt fences		Check for damage including rips, tears, bulges in the fabric, broken support wires, loose waratahs, overtopping, outflanking, undercutting, and leaking joins in the fabric. As the geotextile material becomes clogged with sediments, this will result in increased duration of ponding. Cleaning of the super silt fence geotextile with a light broom or brush may be appropriate. Remove sediment when bulges occur or when sediment accumulation reaches 20% of the fabric height. Remove sediment deposits as necessary (prior to 20% of fabric height) to continue to allow for adequate sediment storage and reduce pressure on the silt fence. Dispose of sediment to an area to ensure that it does not discharge to the receiving environment.	Note: Make any necessary repairs as soon as identified.
Access Road and Haul Roads		Check condition, surface is graded for positive drainage, no ponding or rutting, sufficient gravel coverage over subbase.	

APPENDIX 6. Archaeological Discovery Protocol

HERITAGE NEW ZEALAND
POUHERE TAONGA

Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol

Under the Heritage New Zealand Pouhere Taonga Act (2014) an archaeological site is defined as any place in New Zealand that was associated with human activity that occurred before 1900 and provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand. For pre-contact Maori sites this evidence may be in the form of bones, shells, charcoal, stones etc. In later sites of European/Chinese origin, artefacts such as bottle glass, crockery etc. may be found, or evidence of old foundations, wells, drains or similar structures. Burials/koiwi tangata may be found from any historic period.

In the event that an unidentified archaeological site is located during works, the following applies;

1. Work shall cease immediately at that place and within 20m around the site.
2. The contractor must shut down all machinery, secure the area, and advise the Site Manager.
3. The Site Manager shall secure the site and notify the Heritage New Zealand Regional Archaeologist. Further assessment by an archaeologist may be required.
4. If the site is of Maori origin, the Site Manager shall notify the Heritage New Zealand Regional Archaeologist and the appropriate iwi groups or kaitiaki representative of the discovery and ensure site access to enable appropriate cultural procedures and tikanga to be undertaken, as long as all statutory requirements under legislation are met (*Heritage New Zealand Pouhere Taonga Act*, *Protected Objects Act*).
5. If human remains (koiwi tangata) are uncovered the Site Manager shall advise the Heritage New Zealand Regional Archaeologist, NZ Police and the appropriate iwi groups or kaitiaki representative and the above process under 4 shall apply. Remains are not to be moved until such time as iwi and Heritage New Zealand have responded.
6. Works affecting the archaeological site and any human remains (koiwi tangata) shall not resume until Heritage New Zealand gives written approval for work to continue. Further assessment by an archaeologist may be required.
7. Where iwi so request, any information recorded as the result of the find such as a description of location and content, is to be provided for their records.
8. Heritage New Zealand will determine if an archaeological authority under the *Heritage New Zealand Pouhere Taonga Act* 2014 is required for works to continue.

It is an offence under S87 of the *Heritage New Zealand Pouhere Taonga Act 2014* to modify or destroy an archaeological site without an authority from Heritage New Zealand irrespective of

APPENDIX 7. Earthworks Plan JEA Survey

JOHN EDMONDS & ASSOCIATES
03 450 0009 | info@jea.co.nz
www.jea.co.nz
Level 2, 36 Shotover Street, PO Box 95, Queenstown 9300

Erosion and Sediment Control Plan

ESCP

For, 160 Lower Shotover Road, Queenstown

Version 1.0 - June 2023

Author:

Anton Kirkbeck NZCE Civil

Senior Project Manager
John Edmonds & Associates Ltd.

ESCP - Table of Contents:

JOHN EDMONDS & ASSOCIATES
03 450 0009 | info@jea.co.nz
www.jea.co.nz
Level 2, 36 Shotover Street, PO Box 95, Queenstown 9300

ESCP – Details and Specifications

ESC device specifications and details referenced from the Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region Guideline Document 2016/005

ESCP – Silt Fences

Definition
A silt fence is a temporary barrier of woven geotextile fabric that is used to capture mainly coarse sediments carried in sheet flow. Silt fences temporarily impound sediment-laden runoff, slowing down the flow rate and allowing sediment to settle out of the water.

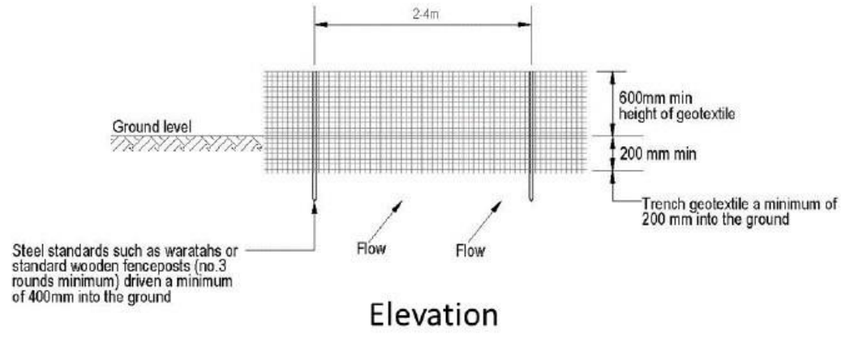
Purpose
Its purpose is to detain runoff flows so that deposition of transported sediment can occur through settlement.
They are not used to filter sediment out of runoff.

Key design criteria for silt fences are outlined below:

- Ensure silt fence height is 600 mm above ground level and 200 mm below ground level
- Maximum slope lengths, spacing of returns and angles for silt fences are shown in Table 13
- Locate supporting posts/waratahs for silt fences 2-4 m apart with support provided by a tensioned wire (2.5 mm HT) along the top of the silt fence
- Where a strong woven fabric is used in conjunction with a wire support, the distance between posts can be up to 4 m. Double the silt fence fabric over and fasten to the wire with silt fence clips at 500 mm spacings
- Ensure supporting posts/waratahs are embedded a minimum of 400 mm into the ground
- Always install silt fences along the contour (at a break in slope). Where this is not possible, or where there are long sections of silt fence, install short silt fence returns (refer Figure 82) projecting up-slope from the silt fence to minimise the concentration of flows. Silt fence returns should be a minimum 2 m in length and can incorporate a tie-back. They are generally constructed by continuing the silt fence around the return and doubling back, eliminating joins
- Join lengths of silt fence by doubling over fabric ends around a waratah or by stapling the fabric ends to a batten and butting the two battens together as shown in Figure 83
- Install silt fence returns at either end of the silt fence, projecting up-slope to a sufficient height to prevent outflanking
- In catchments of more than 0.3 ha, the use of silt fences requires careful consideration of specific site measures. Other control measures may be better, such as a super silt fence
- Where water may pond regularly behind the silt fence, provide extra support for the silt fence with tie-backs from the silt fence to a central stable point on the upward side. Extra support can also be provided by stringing wire between support stakes and connecting the filter fabric to this wire

Table 13: Silt fence design criteria

Slope steepness %	Slope length (m) (maximum)	Spacing of returns (m)	Silt fence length (m) (maximum)
Flatter than 2%	Unlimited	N/A	Unlimited
2 – 10%	40	60	300
10 – 20%	30	50	230
20 – 33%	20	40	150
33 – 50%	15	30	75
> 50%	6	20	40



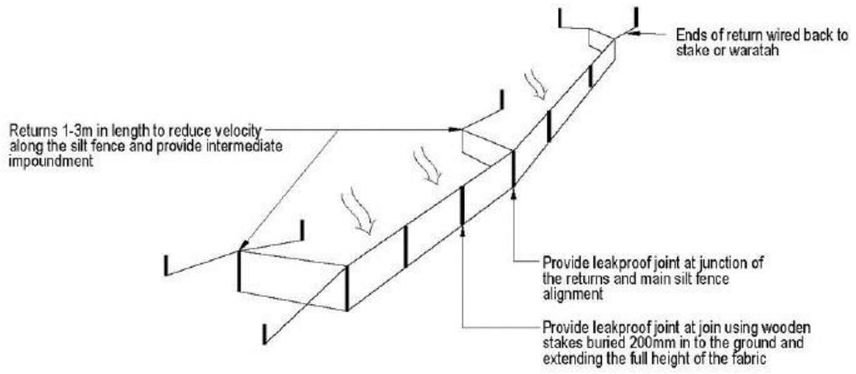
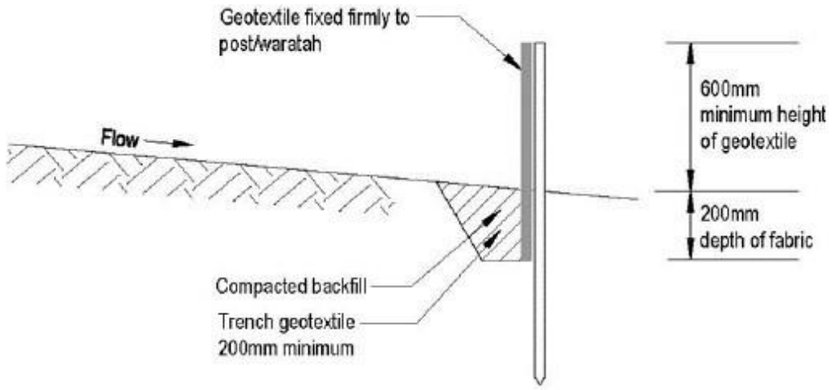
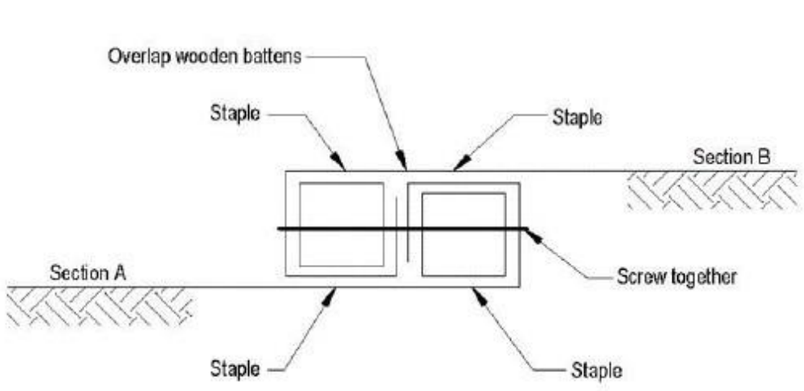


Figure 82: Schematic of a silt fence



Cross-section



Standard fabric joint

Figure 83: Silt fence cross-section

For constructing and/or operating silt fences, follow the following steps and refer to Figure 84 below:

STEP 1

Dig a 200mm deep trench

STEP 2

Hammer in 1m waratahs or wooden fence post 200mm into the trench, therefore 400mm below original ground level

STEP 3

Install single galvanised wire and tension it at 50m intervals

STEP 4

Install single layer of geotextile fabric hard against the side of the trench (800mm total height)

STEP 5

Back fill and compact well (critical)

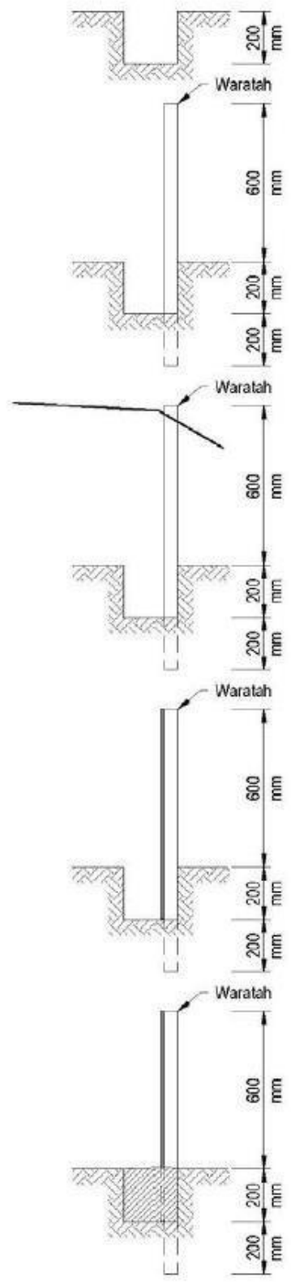


Figure 84: Step-by-step installation of a silt fence

Construction and operation

For constructing and/or operating silt fences, follow the following steps

- Use silt fence material appropriate to the site conditions and in accordance with the manufacturer's specifications
- Always install silt fences along the contour (refer Figure 85)
- Excavate a trench to a minimum practicable width (the narrower the better to avoid loosening of surrounding soils) and 200 mm deep along the proposed line of the silt fence
- Use waratahs at least 1.5 m in length
- Install the support waratahs on the down-slope edge of the trench and silt fence fabric on the up-slope side of the support waratahs to the full depth of the trench, then backfill the trench with compacted soil
- Install the waratahs so that they are as flat as possible against the silt fence. If the waratah edge is against the silt fence, it will rub and eventually rip against the waratah
- Use correct silt fence clips or silt fence pins (refer Figure 86) to secure the silt fence material to the top wire. Wire ties and staples rip the silt fence material when the weight of the impounded water pushes against the silt fence and are not to be used
- Reinforce the top of the silt fence fabric with a support made of high tensile 2.5 mm diameter galvanised wire. Tension the wire using permanent wire strainers attached to angled waratahs at the end of the silt fence
- Where ends of silt fence fabric come together, ensure they are overlapped, folded and stapled/ screwed to prevent sediment bypass.

Figure 85: Contours create the same effect as returns in this case

Figure 86: Use of silt fence clips

Maintenance

To maintain silt fences:

- Inspect silt fences at least once a week and after each rainfall
- Check for damage including rips, tears, bulges in the fabric, broken support wires, loose waratahs, overtopping, outflanking, undercutting, and leaking joins in fabric
- Make any necessary repairs as soon as identified
- As the geotextile material becomes clogged with sediments, this will result in increased duration of ponding. Therefore, careful cleaning of the silt fence geotextile with a light broom or brush may be appropriate
- Remove sediment when bulges occur or when sediment accumulation reaches 20% of the fabric height
- Remove sediment deposits as necessary (prior to 20% of fabric height) to continue to allow for adequate sediment storage and reduce pressure on the silt fence
- Dispose of sediment to a secure area to ensure that it does not discharge to the receiving environment.

Decommissioning

When decommissioning a silt fence:

- Do not remove silt fence and accumulated sediment until the catchment area has been appropriately stabilised
- Remove and correctly dispose of accumulated sediment
- Backfill trench, re-grade and stabilise the disturbed area.

ESCP - Decanting Earth Bunds (DEB)

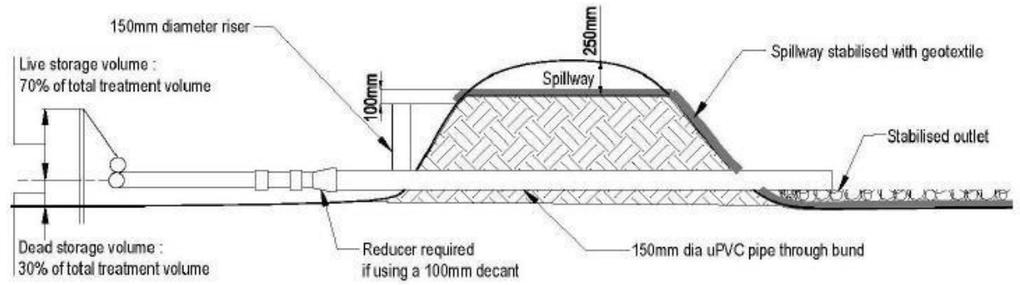
Definition

Decanting earth bunds (DEBs) are an impoundment area formed from a temporary bund or ridge of compacted earth (refer Figure 78 and Figure 79). They provide an area where ponding of runoff can occur, and suspended material can settle out before runoff is discharged.

Purpose

The purpose of a DEB is to detain runoff flows so that deposition of transported sediment can occur through settlement.

Figure 78: Decanting earth bund system and close up of T-bar dewatering device.



Cross - section

Figure 79: Decanting earth bund

Key design criteria

DEBs are often installed in challenging locations where achieving all of the following design criteria may be impractical. As these criteria are all interrelated, it is important that any compromise of these design criteria continues to achieve the following goals:

- To maximise the duration of settlement, maximise the volume of storage
- Reduce velocities through length-to-width ratios, and or baffles, to promote settlement
- Maintain an appropriate dead-water depth and volume to dissipate inflow energy, prevent re- suspension of settled sediment and provide storage of settled sediment
- Maintain an appropriate live-water depth and volume to promote settlement
- Ensure that the installed device is structurally sound and includes a stabilised spillway sized to accommodate the 1% AEP event without eroding.

Size

- DEB sizing is based on contributing catchment area
- Construct a DEB with a minimum volume of 2% of the contributing catchment area (20 m3 for each 1,000 m2 of contributing catchment)
- • The above calculation defines the total storage volume which is measured from the base of the DEB to the top of the primary spillway.

Shape

- To reduce the risk of short-circuiting and to promote quiescent (inactive) conditions, maximise the distance between the inlet and the outlet (including the emergency spillway)
- The base of a DEB should be a minimum of 2 m wide
- The length-to-width ratio of the DEB should be no less than 3:1 and no greater than 5:1
- The length-to-width ratio is measured at the height of the primary spillway
- The length of the DEB is measured as the distance between the inlet and the outlet (decant system). As a minimum, the inlet should be 5 m from the outlet
- Ensure that the DEB has a level invert to promote the even and gradual dissipation of the heavier inflow water across the full area of the DEB.

Depth of pond

- Limit the depth of DEBs to a maximum of 1 m embankment height. (Note: By excavating to form the dead-storage volume below existing ground level, the overall depth of DEB can be increased.)

Dead storage (permanent storage)

- Dead storage is the component of impoundment volume that does not decant and remains in the DEB. It is important for dissipating the energy of sediment-laden inflows
- Ensure dead storage is 30% of the total DEB storage by positioning the decant 0.30 – 0.40 m above the invert of the DEB.

Live storage (decant storage)

- Live storage is the volume between the decant outlet level and the crest of the DEB primary spillway
- Ensure that the live-storage volume capacity is 70% of the total DEB storage.

Decanting/outlet dewatering device

- Dewater the DEB to remove the water within the upper water column (live storage) without removing any of the settled sediment, and without removing any appreciable quantities of floating debris
- To dewater the DEB, use a floating T-bar dewatering device (as utilised in an SRP), which allows for the decanting of the cleaner surface water from the top of the water column. (Note: A 100 mm or 150 mm diameter T-bar device can be used. A standard T-bar design is detailed in Figure 67. There are also skimmers available (which float on the surface) or vertical upstands (traditional); however, the T-bar is the minimum standard.)
- The recommended decant rate from a DEB is 0.3 L/second/1,000 m2 (or 3 L/second/ha) of contributing catchment. This rate ensures that appropriate detention times are achieved.
- To calculate the number of holes (10 mm diameter) required to achieve the decant rate described above, allow 133 holes per 1 ha of contributing catchment (i.e. divide the number of ha of contributing catchment by 0.0075). The total number of holes is to be evenly divided among the number of decants
- The T-bar decant must be able to operate through the full live storage depth of the DEB
- Ensure that the T-bar decant float is securely fastened with steel strapping directly on top of the decant arm and weight it to keep the decant arm submerged just below the surface through all stages of the decant cycle. This will also minimise the potential for blockage of the decant holes by floating debris. The most successful method found to date is to weight the decant arm by strapping a 0.9 m long waratah between the float and the decant (approximately 2.0 kg of weight)
- Lay the 150 mm diameter discharge pipe at a 1 – 2% gradient, and compact the fill material around it using a machine compactor
- At the inlet end of the outlet pipe install a 90° Tee to accommodate the primary spillway. Install a 150 mm -100 mm reducer and short 100 mm section to provide a connection for the T-bar
- The decant should include a mechanism to allow outflows from the DEB to be temporarily stopped. This is to facilitate batch-dosed flocculant treatment and as a contingency in the event of spill or discharge of contaminants. It will allow contaminated runoff to be retained and prevent it from discharging from the site. A rope and pulley system, to lift the decant, is the preferred mechanism; however other options, such as plumbing bungs, valves or screw on end caps, can also be used subject to the specific details of each DEB.

Primary spillway

- All DEBs require a piped primary spillway
- Use a 150 mm upstand as a primary spillway
- The primary spillway should be a minimum 350 mm lower than the top of the DEB embankment and a minimum 100 mm lower than the emergency spillway crest. Ensure the riser and the discharge pipe connections are all completely watertight
- Geotextiles shall be fixed within the spillway structure in accordance with the manufacturer's specifications.

Emergency spillway

- An emergency spillway is essential for all DEBs
- Emergency spillways must be capable of accommodating the 1% AEP event without eroding
- Design the emergency spillway as a stabilised trapezoidal cross-section with a minimum bottom width of 1.5 m, unless specific design calculations have confirmed a smaller emergency spillway will accommodate the 1% AEP event
- Design the emergency spillway with a minimum of 100 mm freeboard height above the primary spillway
- Ensure that the emergency spillway has a minimum freeboard of 250 mm (between the invert of the spillway to the lowest point on the top of the bund).

Baffles

- As with SRPs, baffles can be used to increase the length-to-width ratio of a DEB; however additional care is needed due to the typically narrow nature of DEBs. In practice, the use of baffles is often limited
- Consider baffles in the DEB design where the recommended shape cannot be achieved. Extend baffles the full depth of the DEB and place them to maximise dissipation of flow energy
- Generally, baffles are in the form of a wing to direct inflows away from the outlet and maximise the stilling zone. A series of compartments within the pond can be used to achieve this; although care must be taken to avoid creating in-pond currents and re-suspension of light particulates.

Safety

DEBs can become a safety hazard if not appropriately fenced and if safety rules are not followed. Check the safety requirements of Worksafe NZ. Refer Section C.1.8.2 for further guidance on safety issues.

Construction and operation

For constructing and/or operating DEBs, follow the following steps

- Form clean-water diversion bunds or drains to isolate the DEB construction area
- Install a silt fence or other appropriate sediment control below the DEB construction area
- Clear areas under proposed fills of topsoil or other unsuitable material down to competent material
- Consider whether large fill embankments need to be keyed in. Ensure that the embankments, including the foundations, comply with appropriate engineering design standards
- Use only approved fill
- Place and compact fill in layers as per the engineering specifications
- Do not place pervious materials such as sand or gravel within the fill material
- Construct fill embankments approximately 10% higher than the design height to allow for settlement of the material. Install appropriate pipe work during embankment construction and compact around the pipes appropriately. Where possible, install the discharge pipe through the embankment once the embankment fill height provides sufficient cover over the pipe to continue filling once the discharge pipe has been installed. Ensure that the backfill around the outlet pipe is impermeable
- Install the emergency spillway. The outer emergency spillway crest and batter require a very high standard of stabilisation. The fill material of the spillway batter should be well compacted. Where possible, construct emergency spillways in well-vegetated, undisturbed ground (not fill) and discharge over long grass. If the emergency spillway is constructed on bare soil, provide complete erosion protection by means such as grouted rip-rap, asphalt, erosion matting/ geotextile or concrete. When using geotextile for emergency spillway stabilisation purposes, the batter face must be smooth, and all voids eliminated. If geotextile is used, a soft needle punch geotextile is laid first and then covered with a strong woven low permeability geotextile. Ensure the geotextile is pinned at 0.5 m centres over the full area of the emergency spillway
- Attach the decant system securely to the horizontal pipework. Position the T-bar decant at the correct height by tying a 5 mm nylon cord through the decant holes at either end of the decant arm and fastening it to waratahs driven in on either side of the decant. Use a flexible thick rubber coupling to provide a connection between the decant arm and discharge pipe. To provide sufficient flexibility, install two couplings. Fasten the flexible coupling using strap clamps and glue. Make all connections watertight
- Do not place pervious material such as sand or scoria around the discharge pipe
- Install baffles, if required
- Fully stabilise the external batter face, by vegetative or other means, immediately after construction in accordance with the site's approved ESC Plan. Ensure all bare areas associated with the DEB are stabilised with vegetation, if the DEB is to remain in place over winter
- Provide an all-weather access track for maintenance
- Install and commission any flocculant treatment devices
- Produce an as-built to confirm all design criteria have been met. Rectify any deficiencies, as required
- Install sediment-laden diversions to direct runoff to the DEB.

Maintenance

To maintain DEBs:

- Inspect DEBs daily and before and after each rainfall event
- Clean out DEBs before the volume of accumulated sediment reaches 20% of the total DEB volume. To assist in gauging sediment loads, consider installing a marker post
- Clean out DEBs with high capacity sludge pumps, or with excavators (long reach excavators if needed), loading onto sealed tip trucks or to a secure area
- The ESC Plan should identify disposal locations for the sediment removed from the DEB. Deposit the sediment in such a location so that it does not lead to a direct discharge to receiving environments. Stabilise all disposal sites as required and approved in the site's ESC Plan
- Immediately repair any damage to DEBs caused by erosion or construction equipment.

Decommissioning

DEB decommissioning occurs once the contributing catchment has been fully stabilised or alternative appropriate sediment retention devices have been installed.
The key steps for decommissioning comprise:

1) Dewater the DEB (refer Section G1.0)
2) Remove and correctly dispose of all accumulated sediment
3) Remove fabric, concrete, pipe and other construction materials
4) Backfill the DEB and compact soil, re-grade as required
5) Stabilise all exposed surfaces.

JOHN EDMONDS & ASSOCIATES
03 450 0009 | info@jea.co.nz
www.jea.co.nz
Level 2, 36 Shotover Street, PO Box 95, Queenstown 9300

ESCP – Clean Water Diversion Channel

Device specifications and details referenced from E2.1 section of the Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region Guideline Document 2016/005, and Geosolve Ltd, Geotechnical Report for Consent dated April 2023.

Definition
This practice comprises a non-erodible channel and/or bund constructed for a specific design storm to convey any clean water runoff. Earthworks bunds are constructed by forming an embankment to hold back the water.

Purpose
These measures are used primarily to intercept and convey runoff to stable outlets, ideally at non-erosive velocities. Clean water diversions intercept clean water away from the works area. Erosion damage potential is minimised by reducing the volume of water flowing over the site. This also then reduces the potential for sediment generation and the size of sediment-control device needed.

Location:
As per Geosolve Ltd, Geotechnical Report for Consent - GeoSolve Ref: 230131

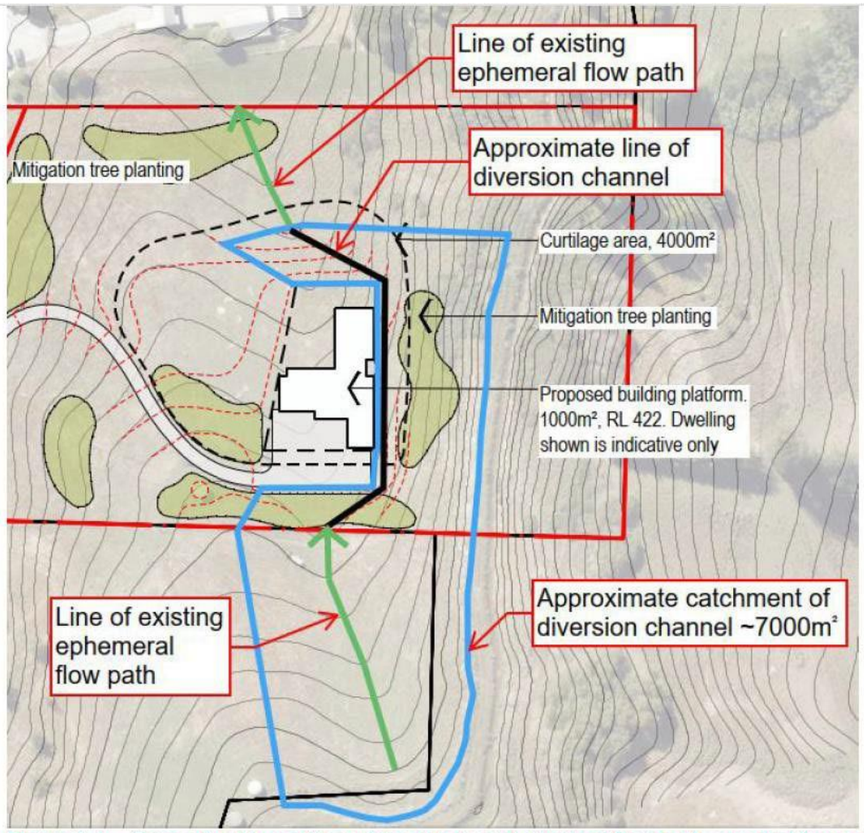


Figure 3.1 – Conceptual re-routing of the ephemeral overland flow path, adapted from conceptual layout plan

Key design criteria, Shape and Size:
As per Geosolve Ltd, Geotechnical Report for Consent- GeoSolve Ref: 230131, there are two options for this channel design.

5.2 Conceptual Diversion Channel

Final design of the earthworks and building platform will need to consider the anticipated flow rate of 97.9 l/s. To address this flow construction of a diversion channel around the eastern margin of the building footprint is considered a practical option. Multiple channel configurations were trialled to establish suitability and provide options to suit the final development proposal.

5.2.1 Rock-lined Channel

Firstly a rock-lined flat bottomed channel with steep sides was assumed, with dimensions:

- Channel side slopes: 2H to 1V
- Channel bed slope: 8.85% or 1 in 11.3
- Channel bed width: 500 mm
- Channel Manning's n: 0.03 (from QLDC LDS COP for a 'Channel with rough stony bed or with weeds on earth bank and natural streams with clean straight banks')

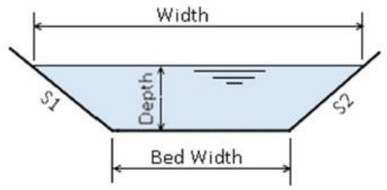


Figure 3.3 – Symbolic channel dimensions diagram

Using the above inputs with Mannings equation gave the following outputs:

- Velocity of 1.64 m/s
- Flow depth of 89 mm
- Flow width of 856 mm

The above values are considered acceptable, on the provision that thick grass cover and/or other durable vegetation is established on the side slopes and outlet of the channel in order to prevent scour during storm flows.

It is noted that a channel of this type would be narrower, and therefore require less landscaping space, but maintenance by hand would likely be required.

It is also noted that 500mm of freeboard would be required above the maximum calculated water surface height and the top of the channel/bottom of the building slab or floor joists.

5.2.2 Grass-lined channel

Secondly, a grass-lined triangular channel with less steep sides was assumed, with dimensions:

- Channel side slopes: 5H to 1V
- Channel bed slope: 8.85% or 1 in 11.3
- Channel bed width: 0 mm (no flat bottom as channel would be triangular)
- Channel Manning's n: 0.0225 (from QLDC LDS COP for a '(Straight uniform channel in earth and gravel in good condition')

Using the above inputs with Mannings equation gave the following outputs:

- Velocity of 1.82 m/s
- Flow depth of 104 mm
- Flow width of 1040 mm

The above velocity value may scour the channel during storm flows, and it is recommended the channel bed slope is checked at detailed design stage. If the bed slope is greater than approximately 5% (1 in 20) then check dams may be required in the channel, see Figure 3.6 of NZS 4404:2010 for a typical detail.

It is noted that a channel of this type would be wider, and therefore require more landscaping space, but vehicular access for maintenance would be possible, for example by a ride-on lawn mower.

It is also noted that 500mm of freeboard would be required above the maximum calculated water surface height and the top of the channel/bottom of the building slab or floor joists, and as the depth of a grass-lined channel would be less than of a rock-lined channel this may potentially result in a higher finished floor level requirement.

5.3 Potential Effect of Diversion on Downstream Properties

The distance from the termination of the proposed diversion of the flow path to the downstream property boundary is approximately 30 metres. This is considered ample length for the flow regime to regain its natural properties, and be flowing in the same location and at the same (or less) velocity as it would've during pre-development conditions.

Consideration should be given to this factor during detailed design once the location and dimensions of the building platform are confirmed, and if the building platform is moved to be significantly closer to the northern property boundary then a velocity reduction method such as a riprap basin may be required.

It is recommended that hard standing such as the driveway is not directed into the channel, and that it instead lead into the proposed accessway drainage, in order to not increase the peak flow post-development in the diversion channel. Alternatively an attenuation feature could be installed to capture and preferably provide primary treatment for this runoff, prior to it being released into the diversion channel at a controlled rate.

5.4 Summary

The proposed building platform lies within an ephemeral overland flow path. That flow path has a relatively small upstream catchment (~7000 m^2 / 0.7 ha) and has been calculated to create approximately 98 l/s of runoff during a 1% AEP storm event with allowance for RCP 8.5 climate change.

A channel could be constructed to re-route the ephemeral flow path around the proposed building platform. Multiple configuration options are possible, such as a deeper rock-lined channel with steeper sides, or a shallower and wider grass-lined channel. The preferable option will depend on the final proposed site layout and is to be confirmed at detailed design. Protection against scour/soil erosion during storm flows should be considered further at that stage.

The outflow from the ephemeral flow path at the northern property boundary should match the pre-development conditions post-development. This may require the proposed hardstanding of the development not to be directed into the catchment of the diversion channel, or alternatively for an attenuation/controlled release feature to be installed to capture the runoff from the hardstanding and provide primary treatment of it.

Construction and operation

For construction and operation of diversion channels and bunds:

- Plan and construct all perimeter diversion works as part of the initial site establishment / development activities
- Prioritise these works and install the most important up-slope control first
- Define the route and survey it to achieve the correct gradient
- Construct drains with a uniform grade along the invert, as sudden decreases may cause sediment to accumulate causing the bank to be overtopped
- Ensure bunds associated with diversions are well compacted, and stabilised. Assess the risk of failure. If the consequences are high, specific geotechnical design may be required to ensure the stability and integrity of the structure
- Stabilise all diversion areas. One method is to carefully set aside and replace existing grass and topsoil sods in the invert of the newly constructed drain, or over the newly constructed bund
- Monitor diversions for erosion. Subject to the soils on site, it is likely that erosion control will be needed where the gradients are greater than 2% or where the design velocities exceed 1 m/sec
- Ensure the finished cross-section meets all design requirements
- Provide an adequate outlet for each diversion. It may be a stable channel (e.g. rip-rap, geotextile), vegetated or paved area, stable watercourse or pipe outlet. In all cases, the outlet must convey runoff to a point where outflow will not cause damage (erosion, flooding). Vegetated outlets should be installed before diversion construction, to ensure establishment of vegetative cover in the outlet channel.

Maintenance

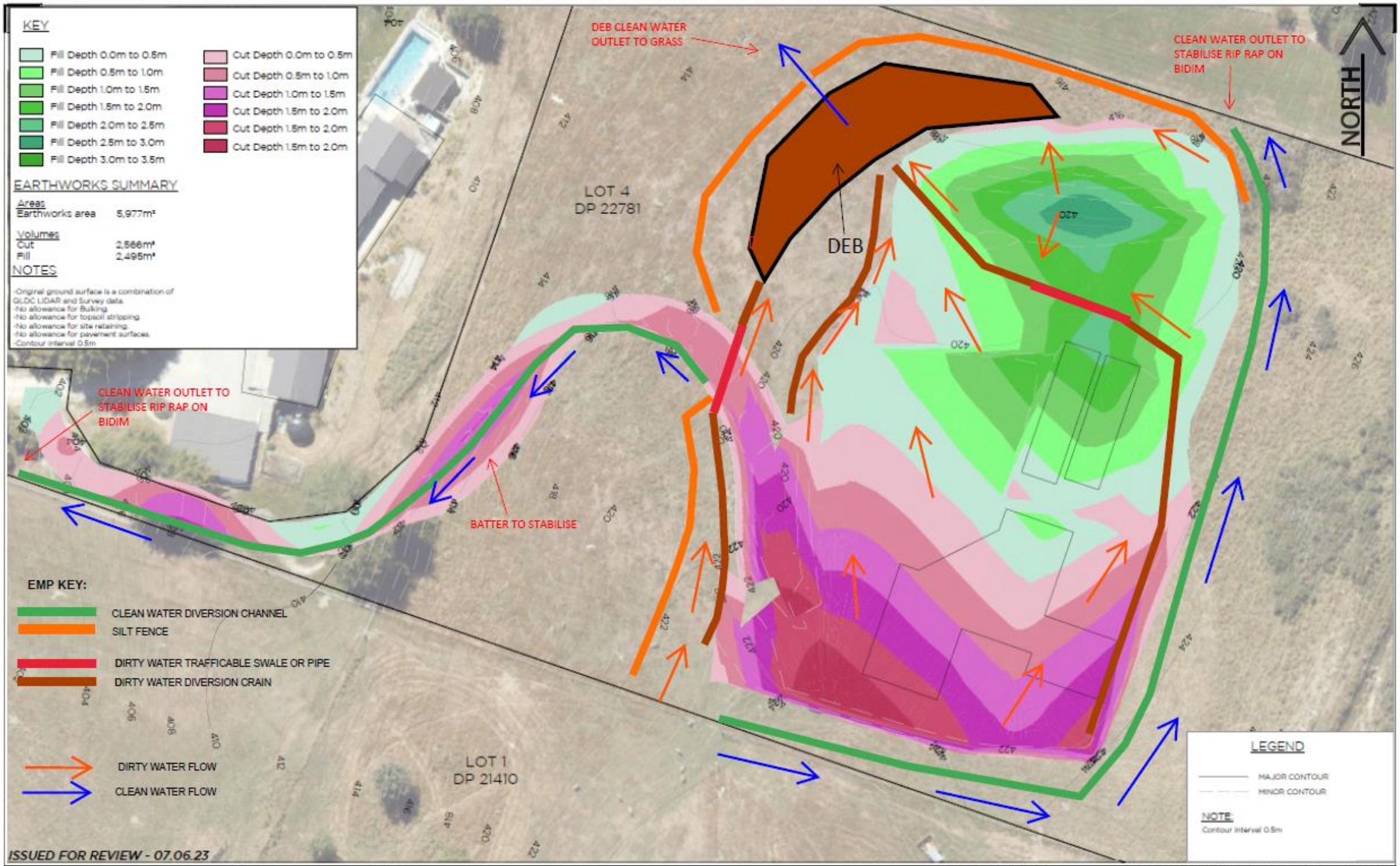
Perimeter diversions require regular maintenance to ensure they keep functioning throughout their life.

Maintenance requirements should include:

- Unless otherwise specified, inspect weekly and after every rainfall and during periods of prolonged rainfall for scour and areas where diversions may breach. Repair immediately, if required, to ensure that the design capacity is maintained
- Remove any accumulated sediment deposited in the diversion channel where there is a risk of overtopping due to a lack of freeboard
- Check invert and outlets to ensure that these remain free from scour and erosion. These points may require geotextile lining to avoid this effect
- Look for low spots, areas of water ponding, formation of tunnel gullies, sediment deposition and debris blockage
- Check for stabilisation cover and ensure full stabilisation cover remains where required
- Take particular care to protect against damage from earthmoving operations and reinstate the diversion if damaged.

Decommissioning

The clean water diversion channel is a permanent feature of this site, and won't be decomsissioned.



JEA TOWN PLANNERS & SURVEYORS
Level 5, 50 Shotover Street
PO Box 96, Queenstown, 9300

CLIENT: WIKSTROM

NOTES:
- ALL DIMENSIONS SHOWN ARE IN METRES UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

EROSION SEDIMENT CONTROL PLAN - ESCP

WIKSTROM - 160 LOWER SHOTOVER ROAD, QUEENSTOWN

REV.	DATE	REVISION DETAILS	BY
A	30.05.23	INITIAL	AK
B	30.06.23	UPDATED EARTHWORKS PLAN	AK
C	11.08.23	UPDATED EARTHWORKS PLAN	AK

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
			22221	
DRAWN	CHECKED	DATE	SCALE	
AK		11/08/2023	1:500 @ A3	
DATUM & LEVEL			REV.	
			C	

Drawing1.dwg Plotted: 28.06.2023

AURORA ENERGY LIMITED
PO Box 5140, Dunedin 9058
PH 0800 22 00 05
WEB www.auroraenergy.co.nz

1 May 2023

Emma Ryder
John Edmonds & Associates

Sent via email only: Emma.Ryder@jea.co.nz

Dear Emma,

ELECTRICITY SUPPLY AVAILABILITY FOR A PROPOSED TWO LOT SUBDIVISION.
160 LOWER SHOTOVER ROAD, QUEENSTOWN. LOT 4 DP 22781.

Thank you for your inquiry outlining the above proposed development.

Subject to technical, legal and commercial requirements, Aurora Energy can make a Point of Supply[1] (PoS) available for this development.

Disclaimer

This letter confirms that a PoS **can** be made available. This letter **does not** imply that a PoS is available now, or that Aurora Energy will make a PoS available at its cost.

Next Steps

To arrange an electricity connection to the Aurora Energy network, a connection application will be required. General and technical requirements for electricity connections are contained in Aurora Energy's Network Connection Standard. Connection application forms and the Network Connection Standard are available from www.auroraenergy.co.nz.

Yours sincerely

Niel Frear

CUSTOMER INITIATED WORKS MANAGER

[1] Point of Supply is defined in section 2(3) of the Electricity Act 1993.

Chorus New Zealand Limited

25 May 2023

Chorus reference: 10430801

Attention: Craig Woodcock

Quote: New Property Development

1 connections at Lot: 4, Deposited Plan: 22781, Otago

Your project reference: N/A

Thank you for your enquiry about having Chorus network provided for the above development.

Chorus is pleased to advise that, as at the date of this letter, we are able to provide reticulation for this property development based upon the information that has been provided:

Copper network	$1,600.00

The total contribution we would require from you is **$1,840.00 (including GST)**. This fee is a contribution towards the overall cost that Chorus incurs to link your development to our network. This quote is valid for 90 days from 03 May 2023. This quote is conditional on you accepting a New Property Development Contract with us for the above development.

If you choose to have Chorus provide reticulation for your property development, please log back into your account and finalise your details. If there are any changes to the information you have supplied, please amend them online and a new quote will be generated. This quote is based on information given by you and any errors or omissions are your responsibility. We reserve the right to withdraw this quote and requote should we become aware of additional information that would impact the scope of this letter.

Once you would like to proceed with this quote and have confirmed all your details, we will provide you with the full New Property Development Contract, and upon confirmation you have accepted the terms and paid the required contribution, we will start on the design and then build.

For more information on what's involved in getting your development connected, visit our website www.chorus.co.nz/develop-with-chorus

Kind Regards

Chorus New Property Development Team

APPROVAL

FORM 8A

QUEENSTOWN LAKES DISTRICT COUNCIL

Resource Management Act 1991 Section 95

RESOURCE CONSENT APPLICANT'S NAME AND/OR RM

John Russell Wikstrom and Maria Jan Wikstrom

AFFECTED PERSON'S DETAILS

I/We Julian Robert Brown and Julie Olive Evelyn Brown

Are the owners/occupiers of

176 Lower Shotover Road (Lot 3 DP 22781 BLK III Shotover SD - Easement DP 25635)

DETAILS OF PROPOSAL

I/We hereby give written approval for the proposal to:

To undertake a two-lot subdivision and to establish a residential building platform at 160 Lower Shotover Road, Speargrass Flat.

The application includes a curtilage area around the residential building platform and associated access and landscaping. The proposal requires resource consent for earthworks to establish the access and level building platform.

at the following subject site(s):

160 Lower Shotover Road (Lot 4 DP 22781)

☑ PLEASE TICK I/We understand that by signing this form Council, when considering this application, will not consider any effects of the proposal upon me/us.

☐ PLEASE TICK I/We understand that if the consent authority determines the activity is a deemed permitted boundary activity under sec of the Act, written approval cannot be withdrawn if this process is followed instead.

WHAT INFORMATION/PLANS HAVE YOU SIGHTED

☑ PLEASE TICK I/We have sighted and initialled ALL plans dated and approve them.

APPROVAL OF AFFECTED PERSON(S)

The written consent of all owners / occupiers who are affected. If the site that is affected is jointly owned, the written consent of all co-owners (names detailed on the title for the site) are required.

A

Name (PRINT)
Julian Robert Brown

Contact Phone / Email address
021790153 julianbrownnzsiva@gmail.com

Signature

Date 30/06/23

B

Name (PRINT)
Julie Olive Evelyn Brown

Contact Phone / Email address
0272922588 juliebrownnz@gmail.com

Signature

Date 30/06/23

C

Name (PRINT)

Contact Phone / Email address

Signature

Date

D

Name (PRINT)

Contact Phone / Email address

Signature

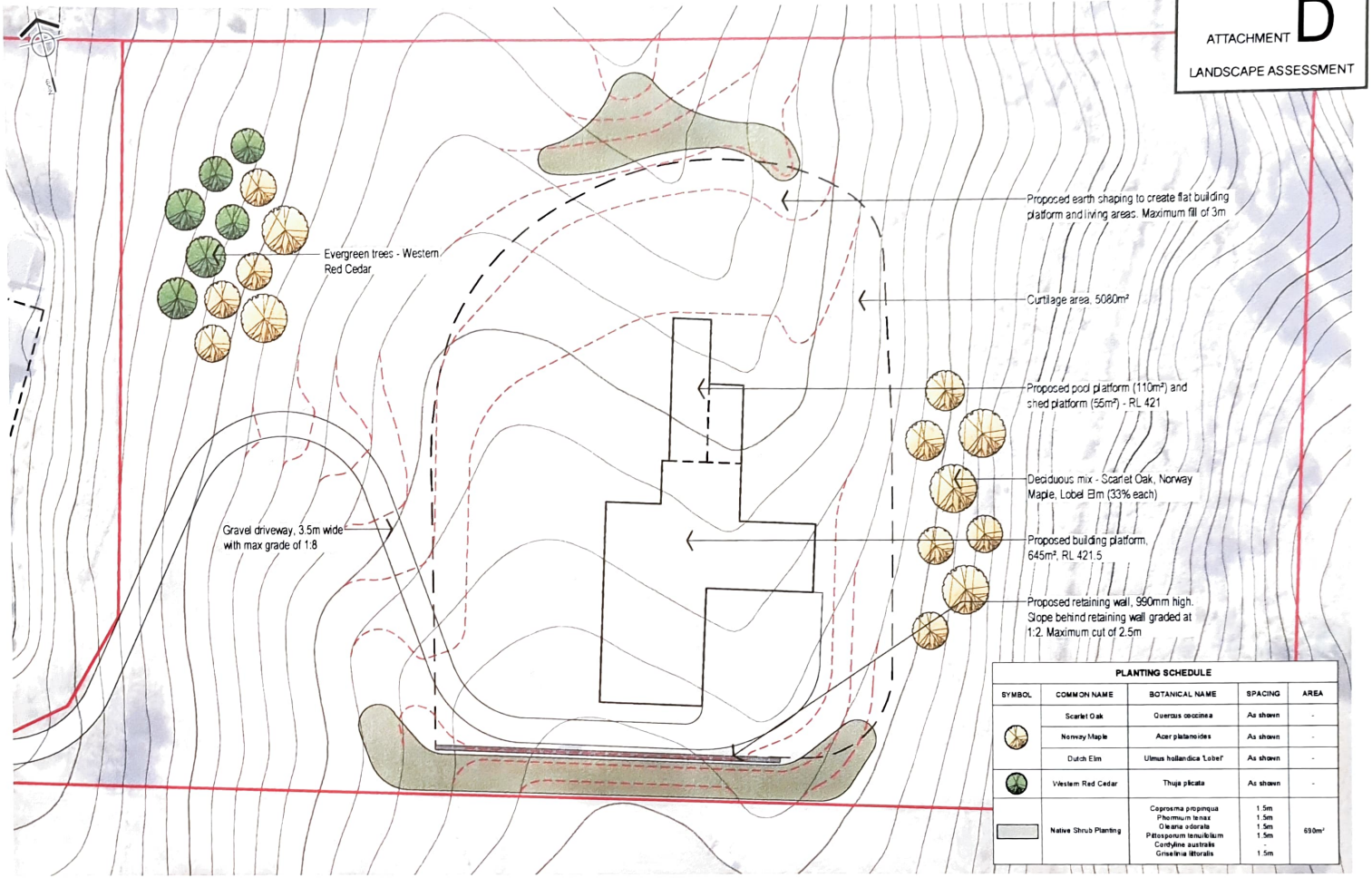
Date

Note to person signing written approval

Conditional written approvals cannot be accepted.
There is no obligation to sign this form, and no reasons need to be given.
If this form is not signed, the application may be notified with an opportunity for submissions.
If signing on behalf of a trust or company, please provide additional written evidence that you have signing authority.

ATTACHMENT D

LANDSCAPE ASSESSMENT



PLANTING SCHEDULE

SYMBOL	COMMON NAME	BOTANICAL NAME	SPACING	AREA
	Scarlet Oak	Quercus coccinea	As shown	-
	Norway Maple	Acer platanoides	As shown	-
	Dutch Elm	Ulmus hollandica 'Lobel'	As shown	-
	Western Red Cedar	Thuja plicata	As shown	-
	Native Shrub Planting	Coprosma propinqua Phormium tenax Olearia odorata Pittosporum tenuifolium Cordyline australis Griselinia littoralis	1.5m 1.5m 1.5m 1.5m - 1.5m	690m²

baxter design

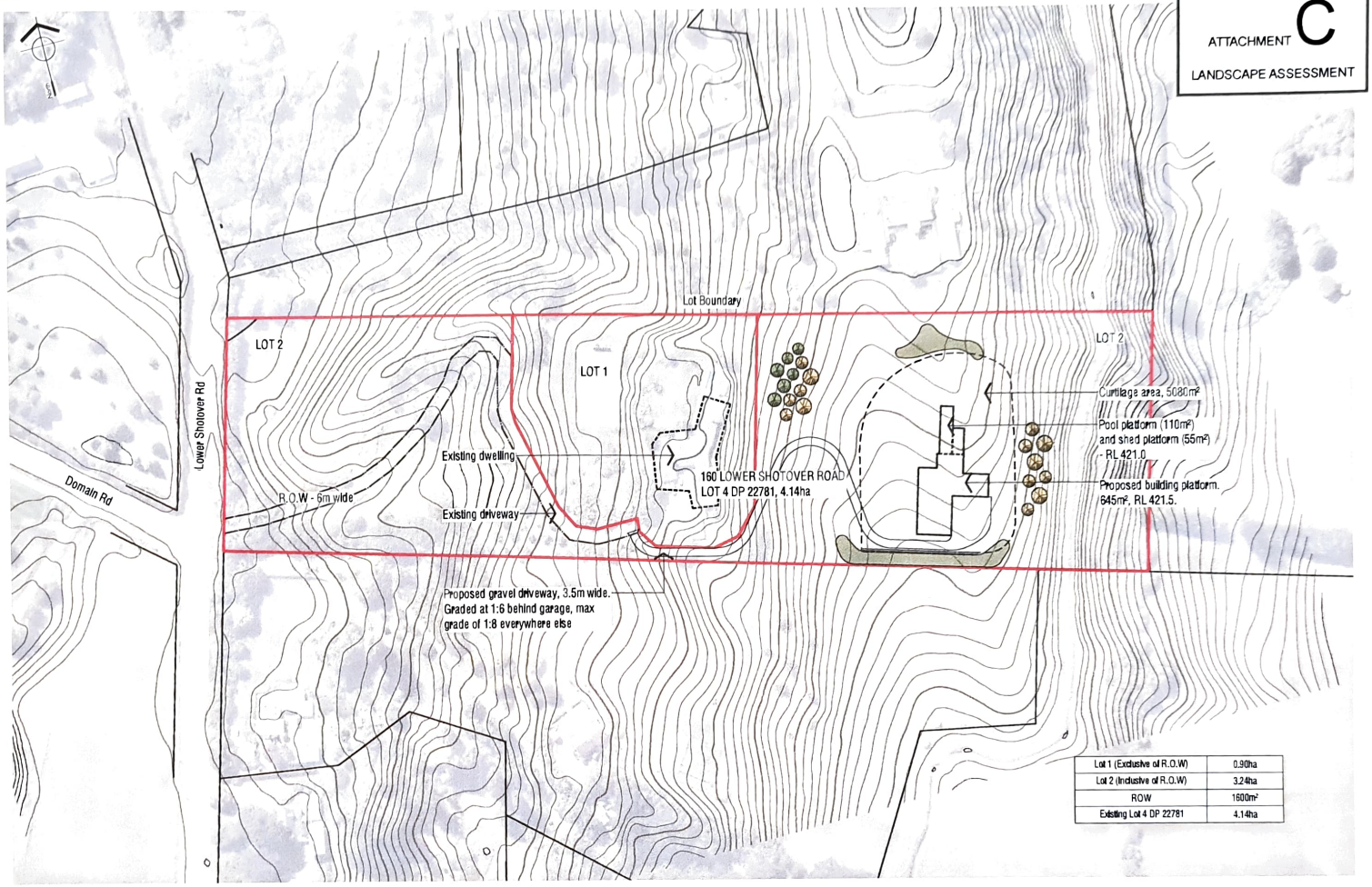
0 2.5 5.0 12.5m
SCALE = 1:250 AT A1

REFERENCE 4443-SK03 - SCALE = 1:250 AT A1 - 1:500 AT A3 - 06 Jul 2023
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION

SITE PLAN
WIKSTROM - LOWER SHOTOVER ROAD

ATTACHMENT C

LANDSCAPE ASSESSMENT

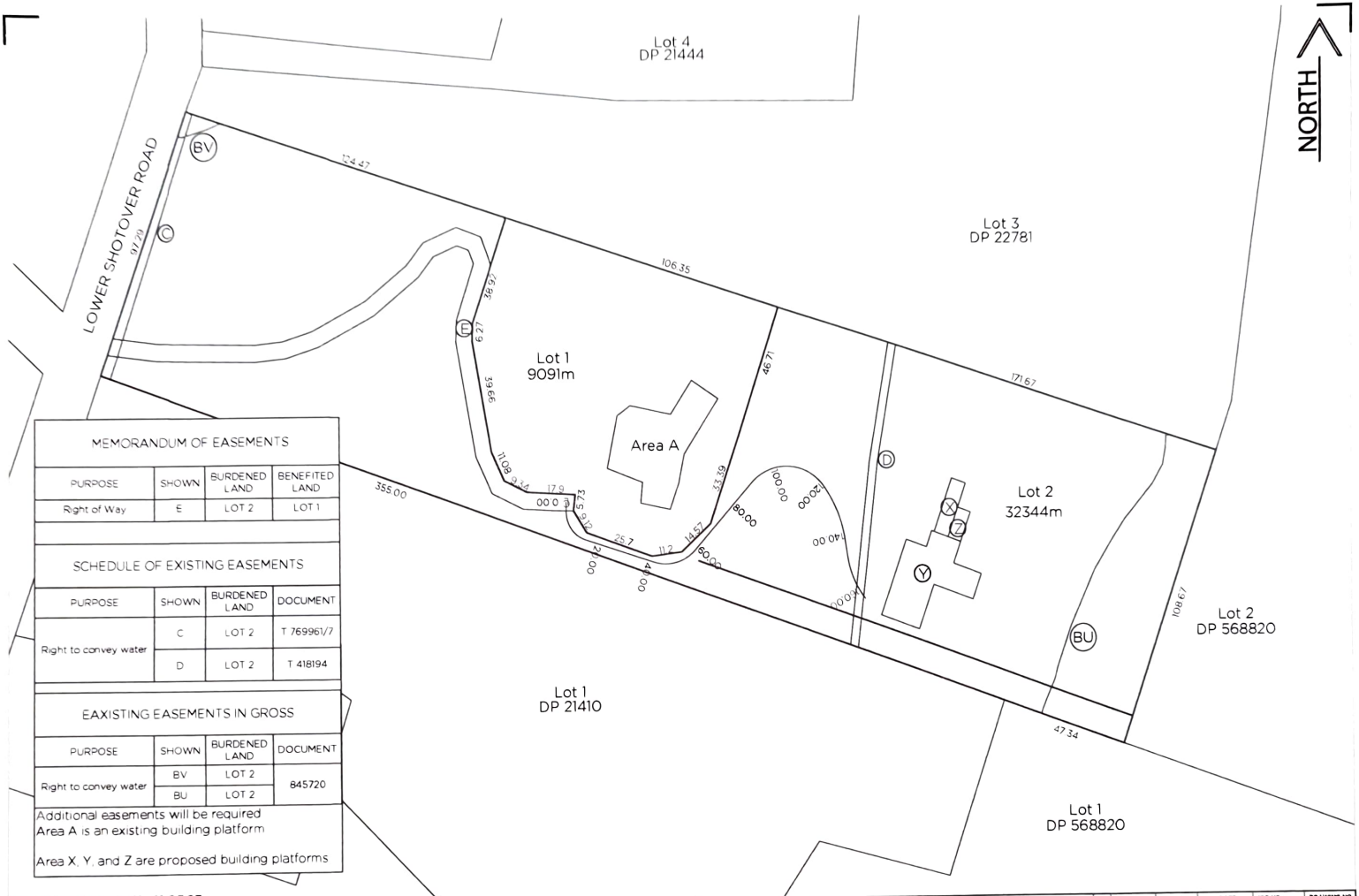


Lot 1 (Exclusive of R.O.W)	0.90ha
Lot 2 (Inclusive of R.O.W)	3.24ha
ROW	1600m²
Existing Lot 4 DP 22781	4.14ha

baxter design

REFERENCE 4443-SK04 - SCALE = 1:750 AT A1 - 1:1500 AT A3 - 05 Jul 2023
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION

FULL LOT PLAN
WIKSTROM - LOWER SHOTOVER ROAD



ISSUED FOR REVIEW - 11.05.23

JEA TOWN PLANNERS & SURVEYORS

CLIENT: WIKSTROM

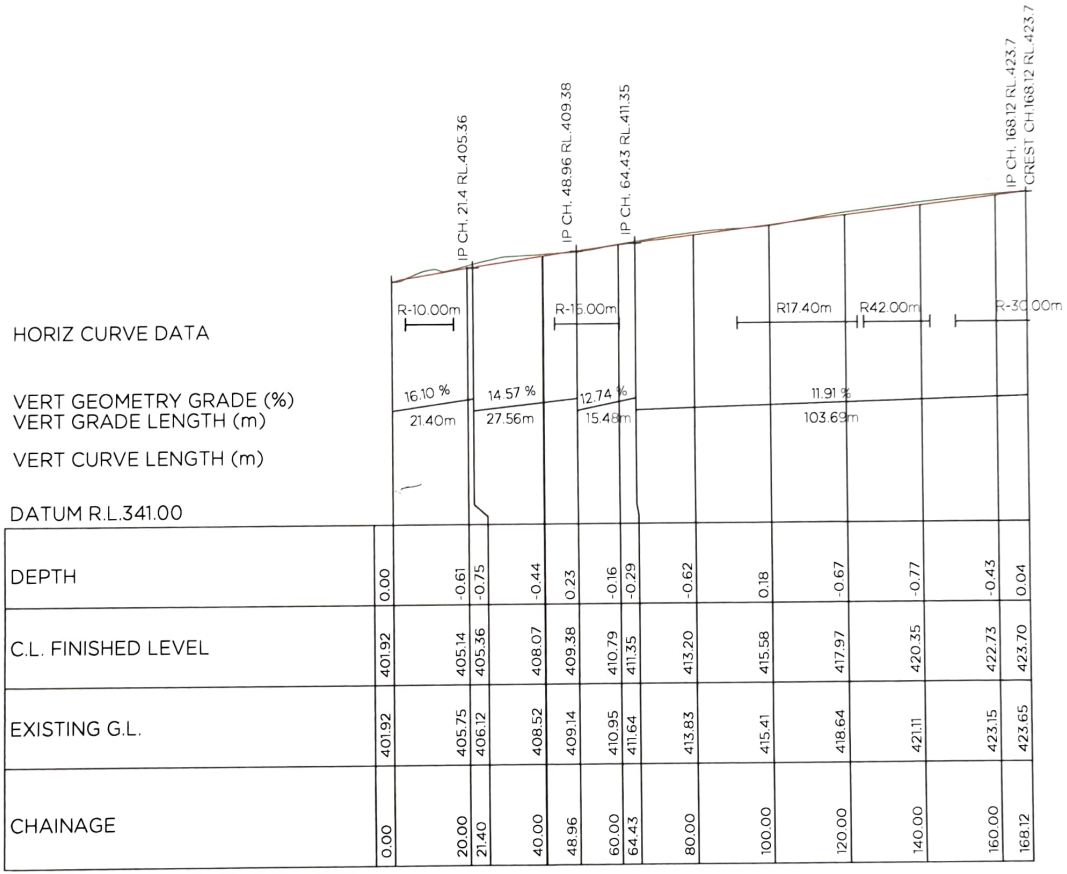
NOTES:
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

LOTS 1 & 2 BEING A SUBDIVISION OF LOT 4 DP 22781
176 LOWER SHOTOVER ROAD

REV.	DATE	REVISION DETAILS	BY
B	28.04.23	AMENDED TO SHOW DW DETAILS	FC
C	24.05.23	AMENDED PROPOSED BOUNDARIES	CW

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
-	-	-	22221	06.01
DRAWN	CHECKED	DATE	SCALE	
MF	CW	11.05.23	1:1250m @ A3	
DATUM & LEVEL				REV.
MT NIC 2000 - NZVD16				C

C:\Users\JEA Craig\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 160 L Shotover Road - Subdivision\Survey\CAD\22221.06.01D - Scheme Plan.dwg Plotted: 09.06.2023



ISSUED FOR REVIEW - 5.3.21

JEA TOWN PLANNERS & SURVEYORS
Level 2, 38 Shotover Street
PO Box 35, Queenstown, 9300

CLIENT: WICKSTROM

NOTES:
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

LONG SECTION OF PROPOSED DRIVEWAY
LOT 4 DP 22781
176 LOWER SHOTOVER ROAD

REV.	DATE	REVISION DETAILS	BY
B	28.04.23	AMENDED TO SHOW DW DETAILS	FC

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
-	-	-	22221	06.01
DRAWN	CHECKED	DATE	SCALE	
FC	CW	07.06.23	1:1000m @ A3	
DATUM & LEVEL			REV.	
MT NIC 2000 - NZVD16			B	

C:\Users\JEA Craig\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 160 L Shotover Road - Subdivision\Survey\CAD\22221.06.01D - Scheme Plan.dwg - Plotted: 09.06.2023

AFFECTED PERSON'S APPROVAL

FORM 8A

QUEENSTOWN LAKES DISTRICT COUNCIL

Resource Management Act 1991 Section 95

RESOURCE CONSENT APPLICANT'S NAME AND/OR RM

John Russell Wikstrom and Maria Jan Wikstrom

AFFECTED PERSON'S DETAILS

I/We Kristan Myles Stalker and Emma Jane Stalker

Are the owners/occupiers of

208B Lower Shotover Road (Lot 2 DP 568820)

DETAILS OF PROPOSAL

I/We hereby give written approval for the proposal to:

To undertake a two-lot subdivision and to establish a residential building platform at 160 Lower Shotover Road, Speargrass Flat.

The application includes a curtilage area around the residential building platform and associated access and landscaping. The proposal requires resource consent for earthworks to establish the access and level building platform.

at the following subject site(s):

160 Lower Shotover Road (Lot 4 DP 22781)

☑ PLEASE TICK I/We understand that by signing this form Council, when considering this application, will not consider any effects of the proposal upon me/us.

☐ PLEASE TICK I/We understand that if the consent authority determines the activity is a deemed permitted boundary activity under section 87BA of the Act, written approval cannot be withdrawn if this process is followed instead.

WHAT INFORMATION/PLANS HAVE YOU SIGHTED

☑ PLEASE TICK I/We have sighted and initialled ALL plans dated and approve them.

APPROVAL OF AFFECTED PERSON(S)

The written consent of all owners / occupiers who are affected. If the site that is affected is jointly owned, the written consent of all co-owners (names detailed on the title for the site) are required.

A

Name (PRINT)
Kristan Myles Stalker

Contact Phone / Email address
kristan_stalker@hotmail.com

Signature

Date
20/07/2023

B

Name (PRINT)
Emma Jane Stalker

Contact Phone / Email address
emma.stalker@hotmail.com

Signature

Date
20/07/2023

C

Name (PRINT)

Contact Phone / Email address

Signature

Date

D

Name (PRINT)

Contact Phone / Email address

Signature

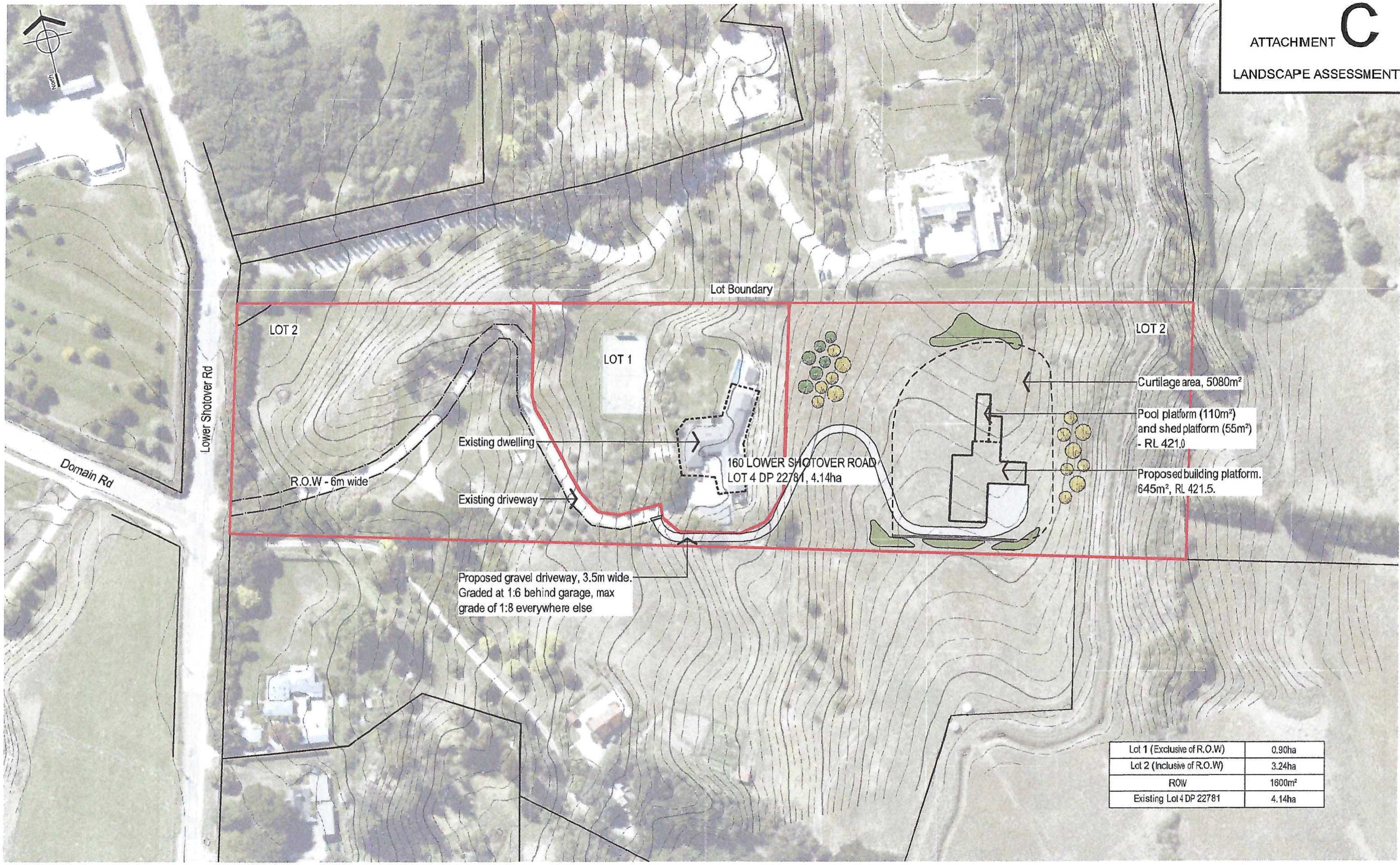
Date

Note to person signing written approval

Conditional written approvals cannot be accepted.
There is no obligation to sign this form, and no reasons need to be given.
If this form is not signed, the application may be notified with an opportunity for submissions.
If signing on behalf of a trust or company, please provide additional written evidence that you have signing authority.

ATTACHMENT C

LANDSCAPE ASSESSMENT



Lot 1 (Exclusive of R.O.W)	0.90ha
Lot 2 (Inclusive of R.O.W)	3.24ha
ROW	1600m²
Existing Lot 4 DP 22781	4.14ha

baxter design

REFERENCE **4443-SK04** - SCALE = 1:750 AT A1 - 1:1500 AT A3 - **03 Jul 2023**
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION

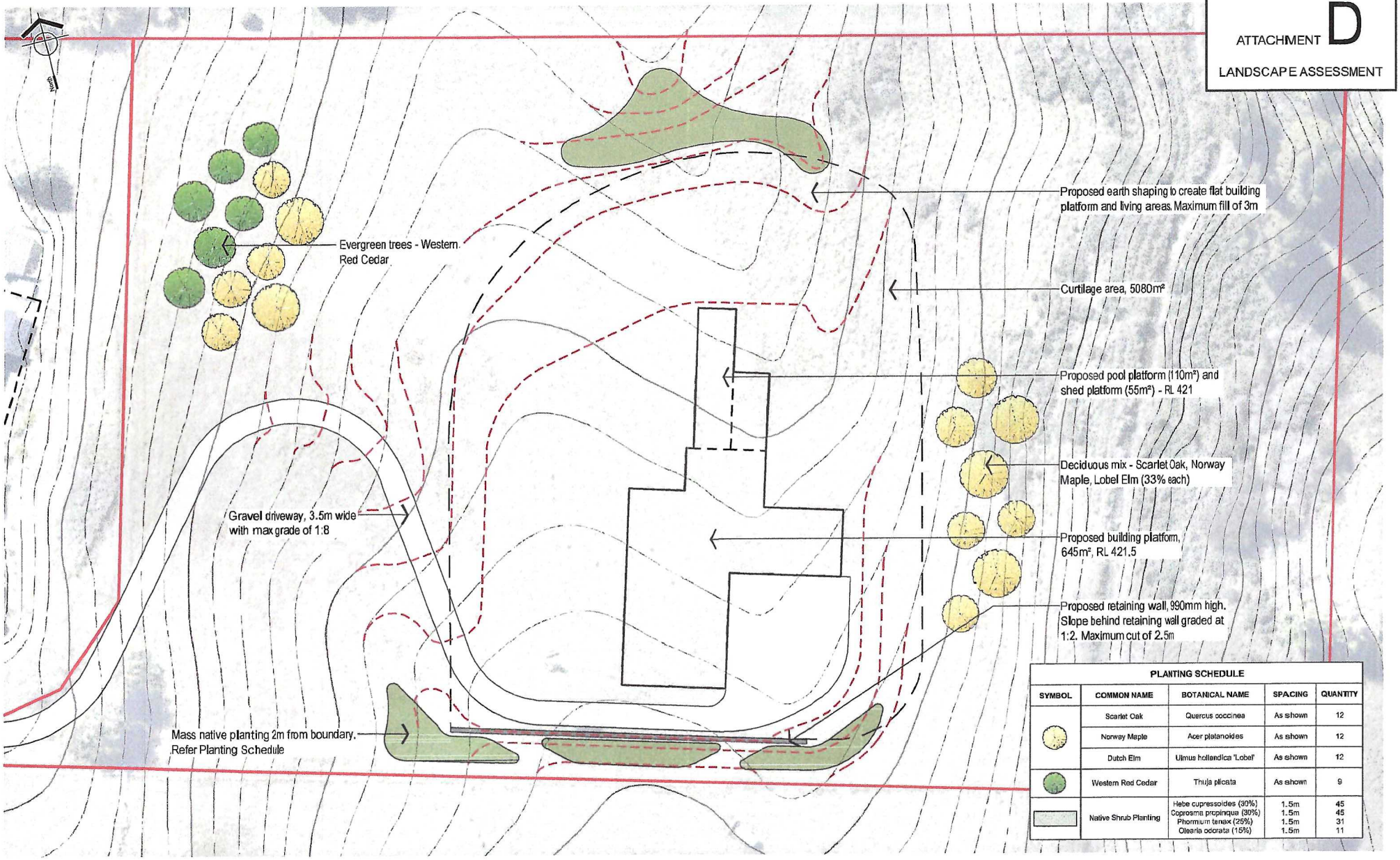
DRAFT

FULL LOT PLAN

WIKSTROM - LOWER SHOTOVER ROAD

ATTACHMENT D

LANDSCAPE ASSESSMENT



PLANTING SCHEDULE

SYMBOL	COMMON NAME	BOTANICAL NAME	SPACING	QUANTITY
	Scarlet Oak	Quercus coccinea	As shown	12
	Norway Maple	Acer platanoides	As shown	12
	Dutch Elm	Ulmus hollandica 'Lobel'	As shown	12
	Western Red Cedar	Thuja plicata	As shown	9
	Native Shrub Planting	Hebe cupressoides (30%) Coprosma propinqua (30%) Phormium tenax (25%) Olearia odorata (15%)	1.5m 1.5m 1.5m 1.5m	45 45 31 11

baxter design

0 2.5 5.0 12.5m

SCALE = 1:250 AT A1

REFERENCE **4443-SK03** - SCALE = 1:250 AT A1 - 1:500 AT A3 - **03 Jul 2023**

DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION

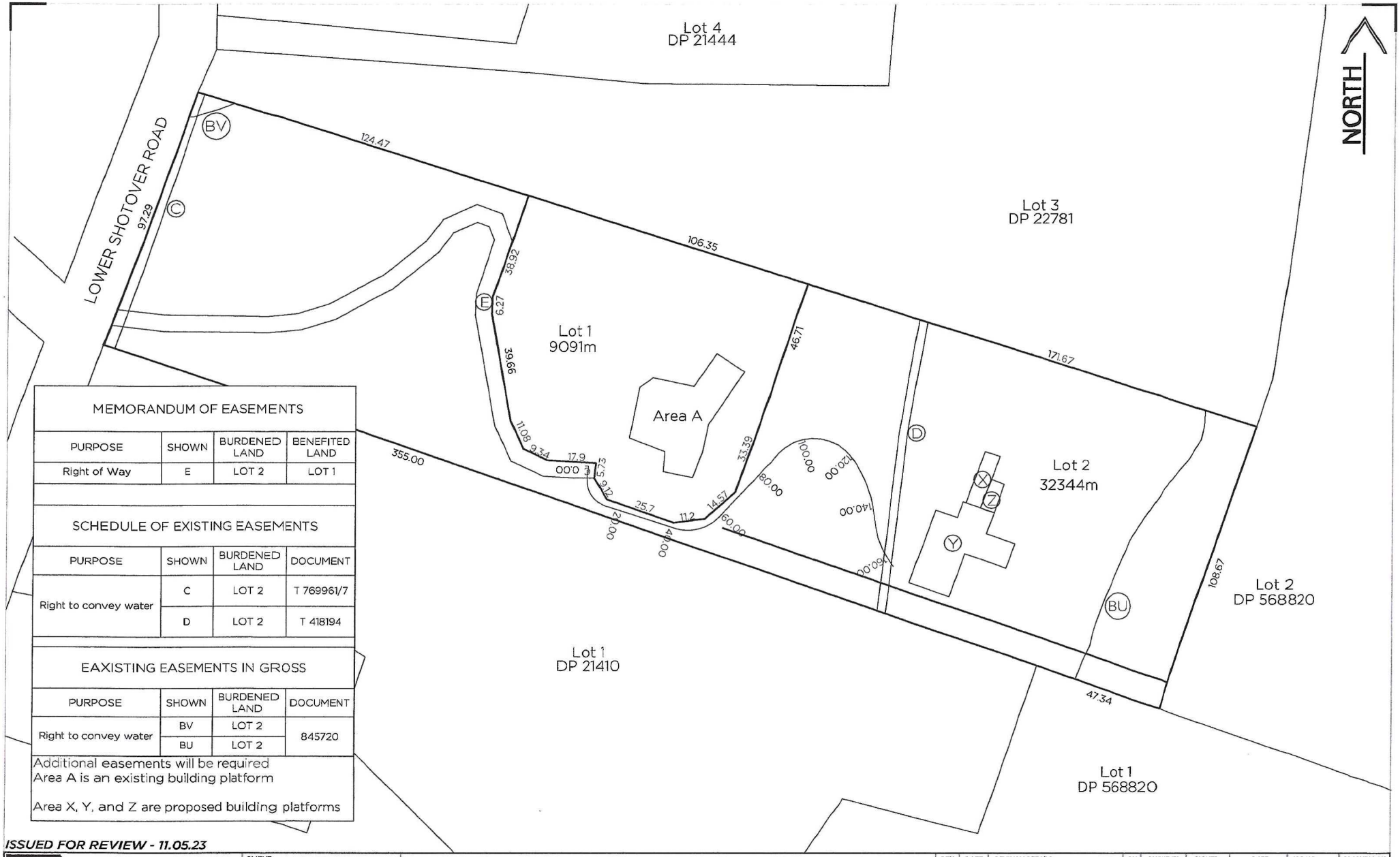
J:\4443 - wikstrom lower shotover road\cad\sheet - 4443 - masterplan 2.dwg - 250

DRAFT

SITE PLAN

WIKSTROM - LOWER SHOTOVER ROAD

68



MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of Way	E	LOT 2	LOT 1

SCHEDULE OF EXISTING EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	DOCUMENT
Right to convey water	C	LOT 2	T 769961/7
	D	LOT 2	T 418194

EAXISTING EASEMENTS IN GROSS			
PURPOSE	SHOWN	BURDENED LAND	DOCUMENT
Right to convey water	BV	LOT 2	845720
	BU	LOT 2	

Additional easements will be required
Area A is an existing building platform

Area X, Y, and Z are proposed building platforms

ISSUED FOR REVIEW - 11.05.23

JEA TOWN PLANNERS & SURVEYORS
Level 2, 38 Shotover Street
PO Box 96, Queenstown, 9300

CLIENT: **WIKSTROM**

NOTES:
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

LOTS 1 & 2 BEING A SUBDIVISION OF LOT 4 DP 22781
176 LOWER SHOTOVER ROAD

REV.	DATE	REVISION DETAILS	BY
B	28.04.23	AMENDED TO SHOW DW DETAILS	FC
C	24.05.23	AMENDED PROPOSED BOUNDARIES	CW

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
-	-	-	22221	06.01
DRAWN	CHECKED	DATE	SCALE	
MF	CW	11.05.23	1:1250m @ A3	
DATUM & LEVEL				REV.
MT NIC 2000 - NZVD16				C

C:\Users\JEA Craig\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 160 L Shotover Road - Subdivision\Survey\CAD\22221.06.01D - Scheme Plan.dwg Plotted: 09.06.2023

HORIZ CURVE DATA

VERT GEOMETRY GRADE (%)
VERT GRADE LENGTH (m)

VERT CURVE LENGTH (m)

DATUM R.L.341.00

DEPTH	0.00	-0.61	-0.75	-0.44	0.23	-0.16	-0.29	-0.62	0.18	-0.67	-0.77	-0.43	0.04
C.L. FINISHED LEVEL	401.92	405.14	405.36	408.07	409.38	410.79	411.35	413.20	415.58	417.97	420.35	422.73	423.70
EXISTING G.L.	401.92	405.75	406.12	408.52	409.14	410.95	411.64	413.83	415.41	418.64	421.11	423.15	423.65
CHAINAGE	0.00	20.00	21.40	40.00	48.96	60.00	64.43	80.00	100.00	120.00	140.00	160.00	168.12

ISSUED FOR REVIEW - 5.3.21

JEA TOWN PLANNERS & SURVEYORS
Level 2, 30 Shotover Street
PO Box 95, Queenstown, 9300

CLIENT: WICKSTROM

NOTES:
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

LONG SECTION OF PROPOSED DRIVEWAY
LOT 4 DP 22781
176 LOWER SHOTOVER ROAD

REV.	DATE	REVISION DETAILS	BY
B	28.04.23	AMENDED TO SHOW DW DETAILS	FC

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
-	-	-	22221	06.01
DRAWN	CHECKED	DATE	SCALE	
FC	CW	07.06.23	1:1000m @ A3	
DATUM & LEVEL			REV.	
MT NIC 2000 - NZVD16			B	

C:\Users\JEA Craig\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 160 L Shotover Road - Subdivision\Survey\CAD\22221.06.01D - Scheme Plan.dwg Plotted: 09.06.2023

AFFECTED PERSON'S APPROVAL

FORM 8A

QUEENSTOWN LAKES DISTRICT COUNCIL

Resource Management Act 1991 Section 95

RESOURCE CONSENT APPLICANT'S NAME AND/OR RM

John Russell Wikstrom and Maria Jan Wikstrom

AFFECTED PERSON'S DETAILS

I/We David Leslie Watts and Elizabeth Ann Wadworth

Are the owners/occupiers of

158 Lower Shotover Road (Lot 1 DP 21410 BLK III Shotover SD)

DETAILS OF PROPOSAL

I/We hereby give written approval for the proposal to:

To undertake a two-lot subdivision and to establish a residential building platform at 160 Lower Shotover Road, Speargrass Flat.

The application includes a curtilage area around the residential building platform and associated access and landscaping. The proposal requires resource consent for earthworks to establish the access and level building platform.

at the following subject site(s):

160 Lower Shotover Road (Lot 4 DP 22781)

☑ PLEASE TICK I/We understand that by signing this form Council, when considering this application, will not consider any effects of the proposal upon me/us.

☐ PLEASE TICK I/We understand that if the consent authority determines the activity is a deemed permitted boundary activity under section 87BA of the Act, written approval cannot be withdrawn if this process is followed instead.

WHAT INFORMATION/PLANS HAVE YOU SIGHTED

☑ PLEASE TICK I/We have sighted and initialled ALL plans dated and approve them.

APPROVAL OF AFFECTED PERSON(S)

The written consent of all owners / occupiers who are affected. If the site that is affected is jointly owned, the written consent of all co-owners (names detailed on the title for the site) are required.

A

Name (PRINT)
David Leslie Watts

Contact Phone / Email address
027421809 2 dallwatts@gmail.com

Signature

Date 20/07/23.

B

Name (PRINT)
Elizabeth Ann Wadworth

Contact Phone / Email address
springbankgm@gmail.com

Signature

Date 20/07/23.

C

Name (PRINT)

Contact Phone / Email address

Signature

Date

D

Name (PRINT)

Contact Phone / Email address

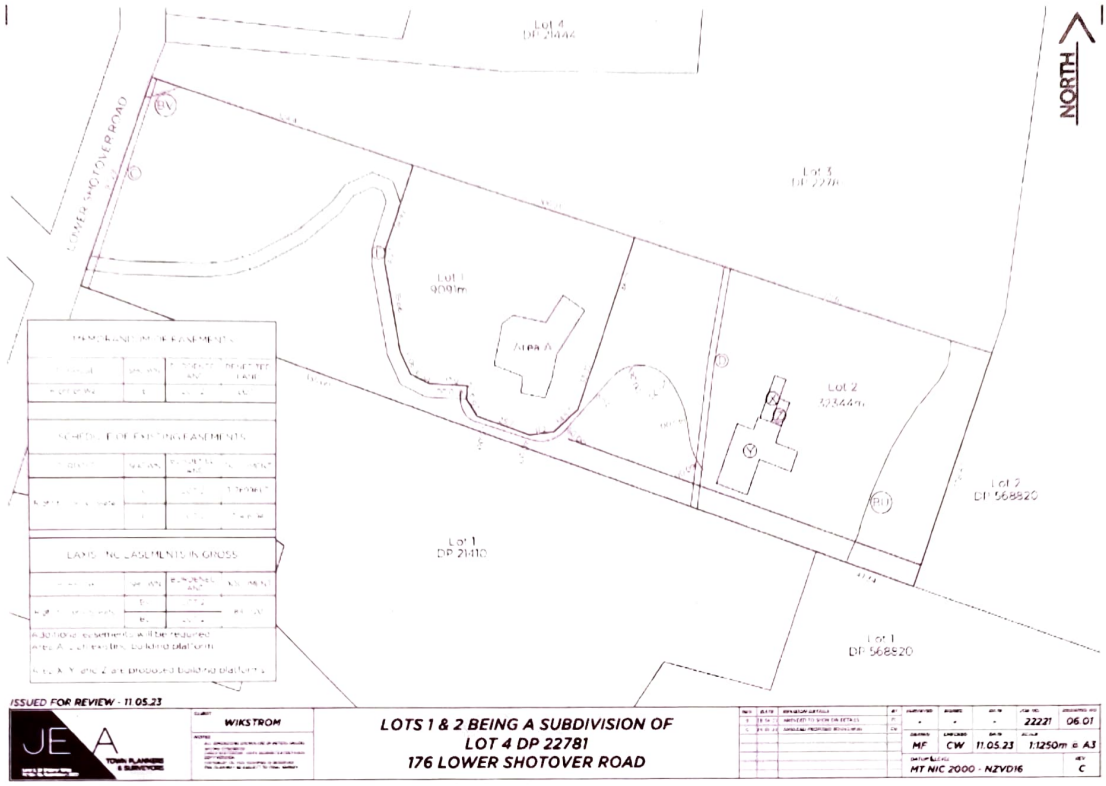
Signature

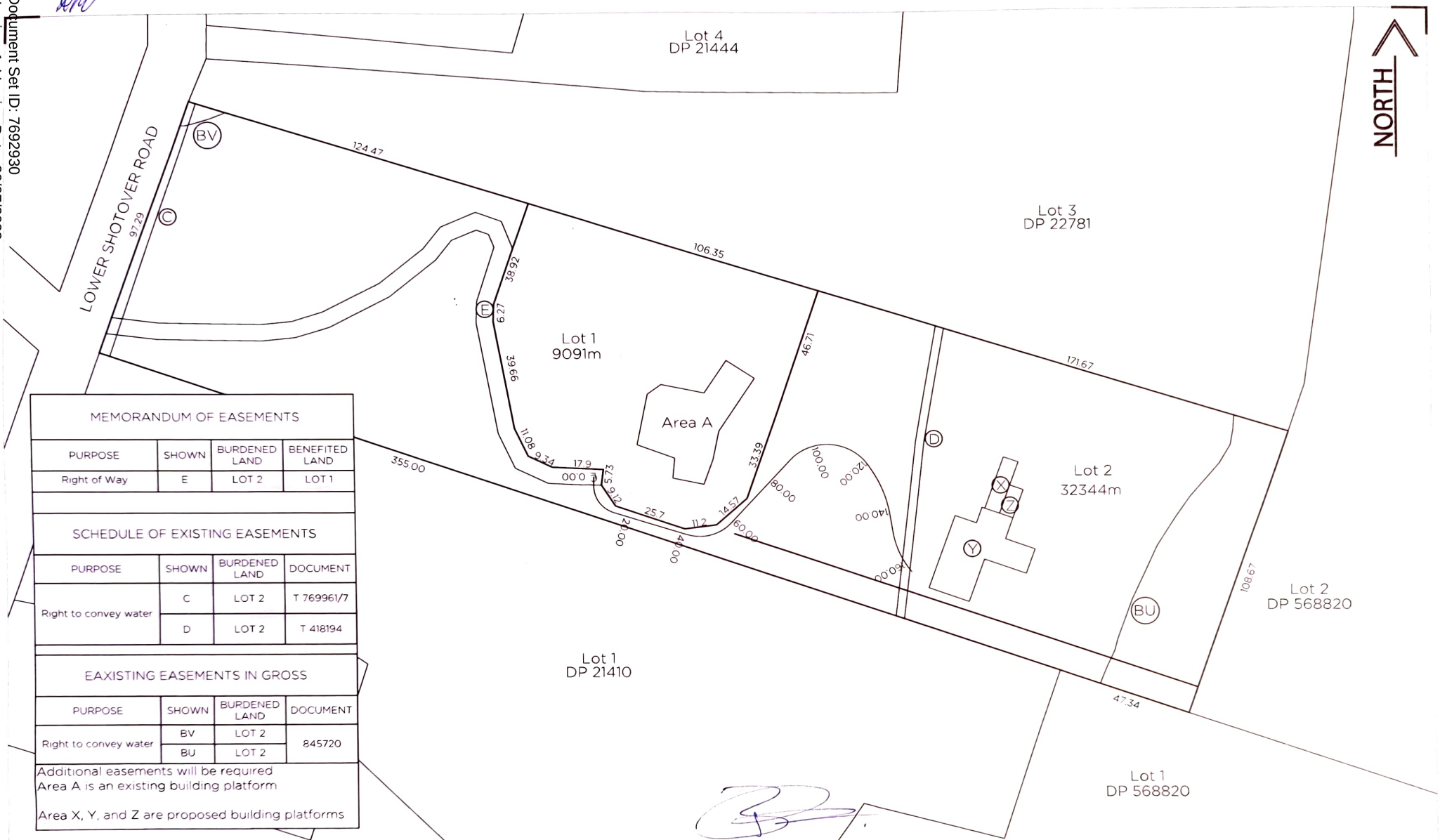
Date

Note to person signing written approval

Conditional written approvals cannot be accepted.
There is no obligation to sign this form, and no reasons need to be given.
If this form is not signed, the application may be notified with an opportunity for submissions.
If signing on behalf of a trust or company, please provide additional written evidence that you have signing authority.

Attachment A (Scheme Plan)





MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	BENEFITED LAND
Right of Way	E	LOT 2	LOT 1

SCHEDULE OF EXISTING EASEMENTS			
PURPOSE	SHOWN	BURDENED LAND	DOCUMENT
Right to convey water	C	LOT 2	T 769961/7
	D	LOT 2	T 418194

EAXISTING EASEMENTS IN GROSS			
PURPOSE	SHOWN	BURDENED LAND	DOCUMENT
Right to convey water	BV	LOT 2	845720
	BU	LOT 2	

Additional easements will be required
Area A is an existing building platform

Area X, Y, and Z are proposed building platforms

ISSUED FOR REVIEW - 11.05.23

JEA TOWN PLANNERS & SURVEYORS
Level 2, 36 Shotover Street
PO Box 96, Queenstown, 9300

CLIENT: **WIKSTROM**

NOTES:
- ALL DIMENSIONS SHOWN ARE IN METERS UNLESS SHOWN OTHERWISE.
- CHECK ELECTRONIC DATA AGAINST LATEST HARD COPY VERSION.
- COPYRIGHT ON THIS DRAWING IS RESERVED.
- THIS PLAN MAY BE SUBJECT TO FINAL SURVEY.

LOTS 1 & 2 BEING A SUBDIVISION OF LOT 4 DP 22781
176 LOWER SHOTOVER ROAD

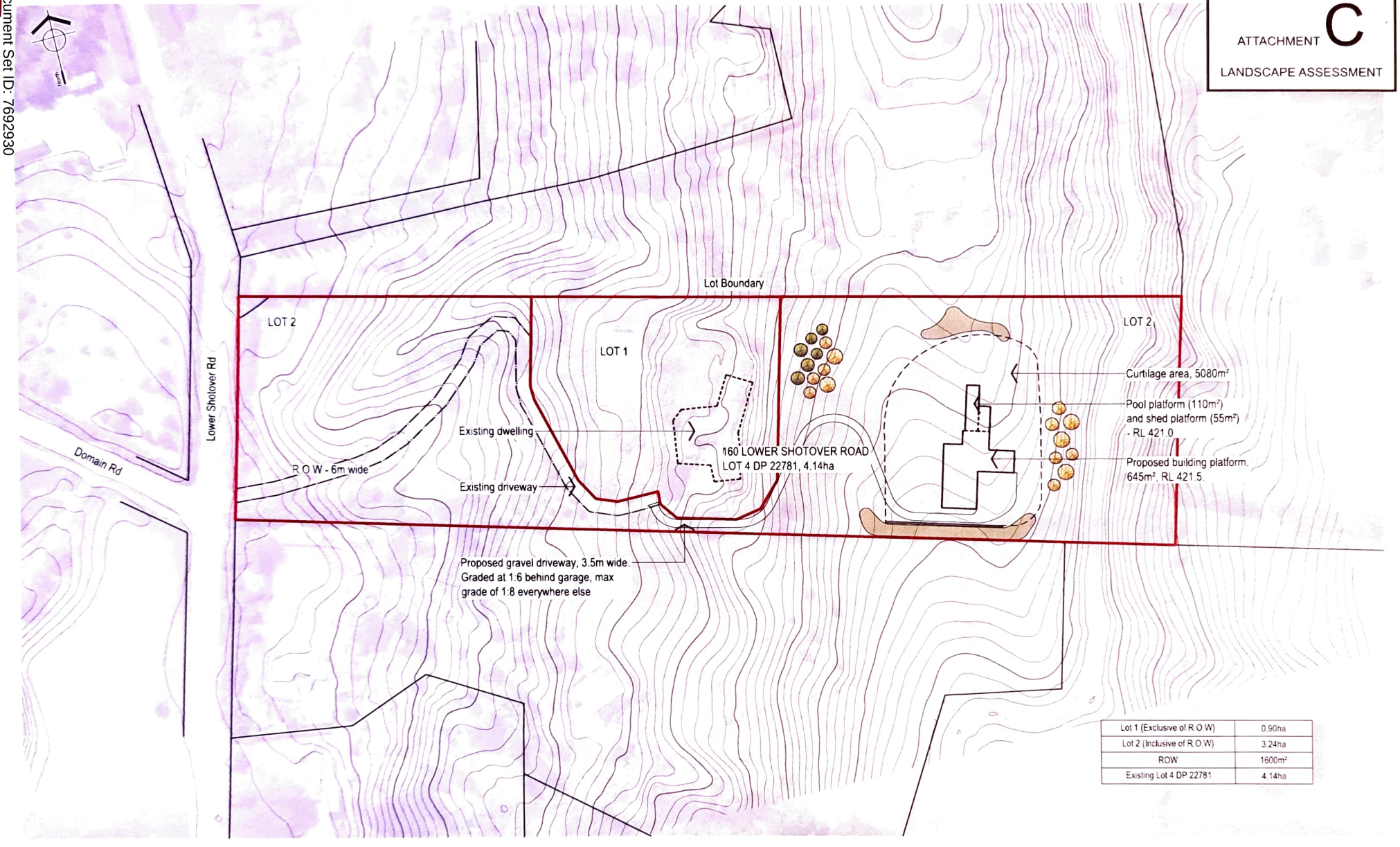
REV.	DATE	REVISION DETAILS	BY
B	28.04.23	AMENDED TO SHOW DW DETAILS	FC
C	24.05.23	AMENDED PROPOSED BOUNDARIES	CW

SURVEYED	SIGNED	DATE	JOB NO.	DRAWING NO.
-	-	-	22221	06.01
DRAWN	**CHECKED**	**DATE**	**SCALE**	
MF	CW	11.05.23	1:1250m @ A3	
DATUM & LEVEL				**REV.**
MT NIC 2000 - NZVD16				C

C:\Users\JEA Craig\John Edmonds and Associates\John Edmonds and Associates - Shared Documents\Clients\2022\22221 - Wikstrom - 160 L Shotover Road - Subdivision\Survey\CAD\22221.06.01D - Scheme Plan.dwg Plotted: 09.06.2023

ATTACHMENT C

LANDSCAPE ASSESSMENT



Lot 1 (Exclusive of R.O.W)	0.90ha
Lot 2 (Inclusive of R.O.W)	3.24ha
ROW	1600m²
Existing Lot 4 DP 22781	4.14ha

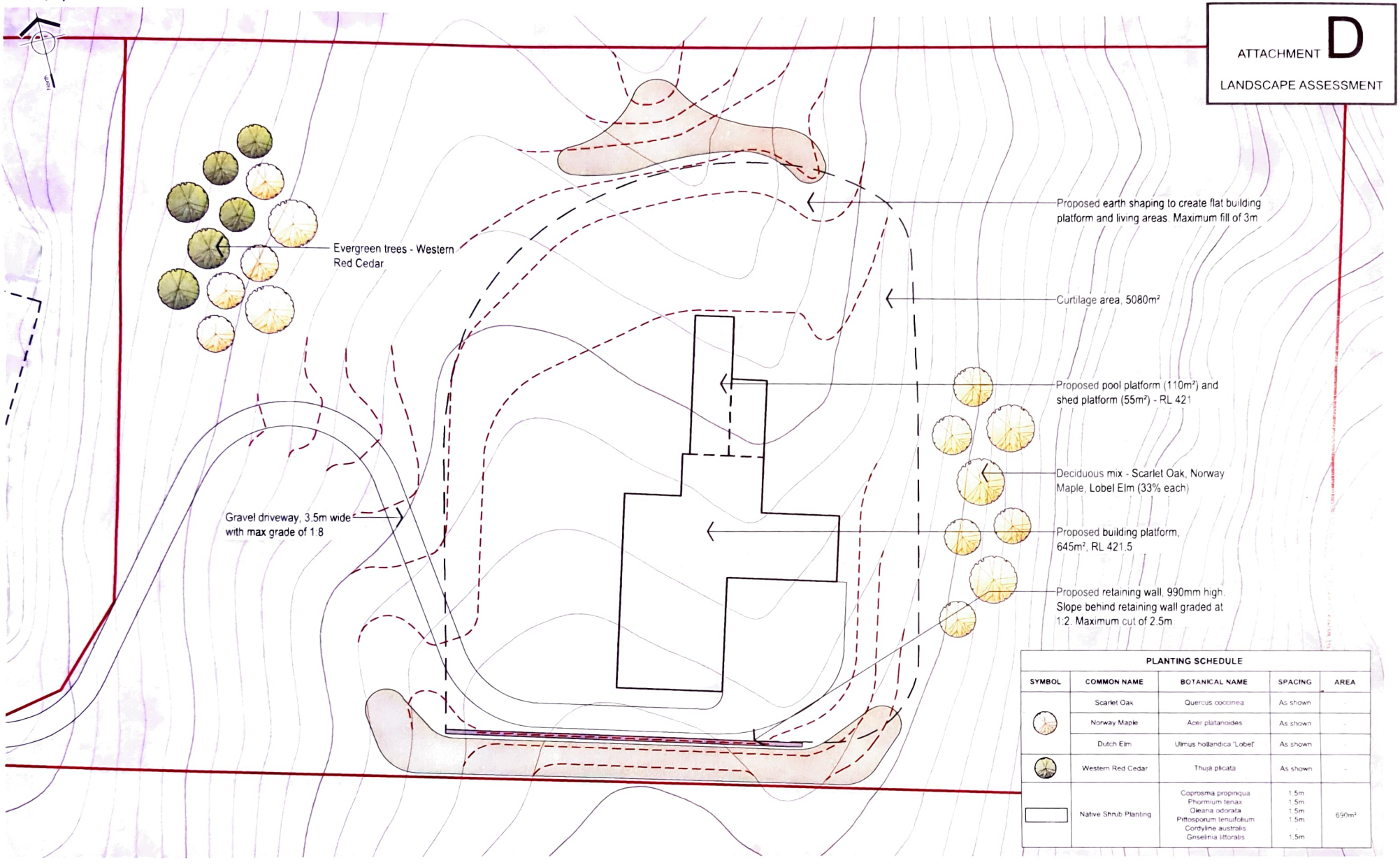
baxter design

REFERENCE **4443-SK04** - SCALE = 1:750 AT A1 - 1:1500 AT A3 - **05 Jul 2023**
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION

FULL LOT PLAN
WIKSTROM - LOWER SHOTOVER ROAD

ATTACHMENT **D**

LANDSCAPE ASSESSMENT



PLANTING SCHEDULE

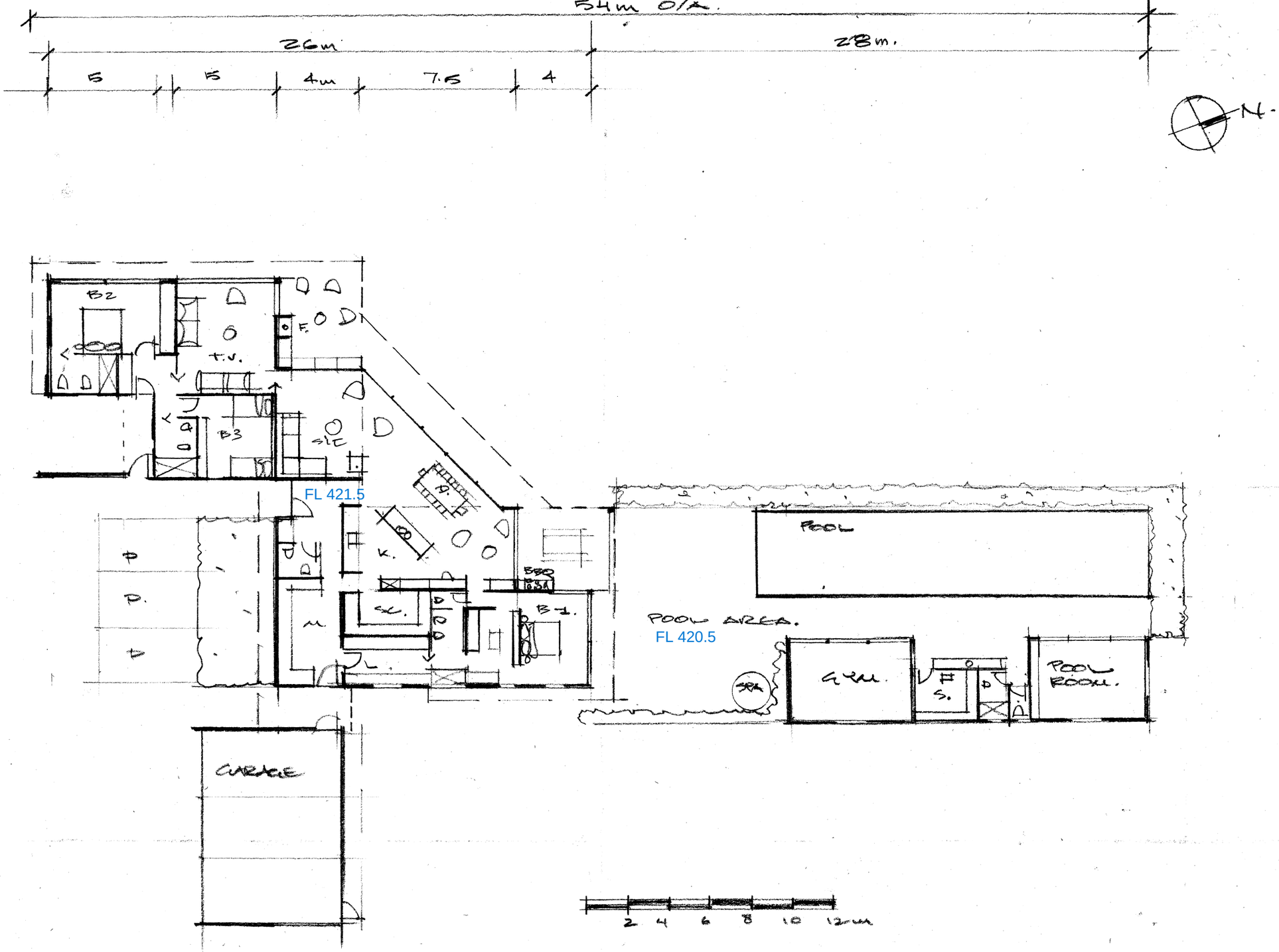
SYMBOL	COMMON NAME	BOTANICAL NAME	SPACING	AREA
	Scarlet Oak	Quercus coccinea	As shown	-
	Norway Maple	Acer platanoides	As shown	-
	Dutch Elm	Ulmus hollandica 'Lobel'	As shown	-
	Western Red Cedar	Thuja plicata	As shown	-
	Native Shrub Planting	Coprosma propinqua Phormium tenax Olearia odorata Pittosporum tenuifolium Cordyline australis Griselinia littoralis	1.5m 1.5m 1.5m 1.5m - 1.5m	690m²

baxter design

0 2.5 5.0 12.5m
SCALE = 1:250 AT A1

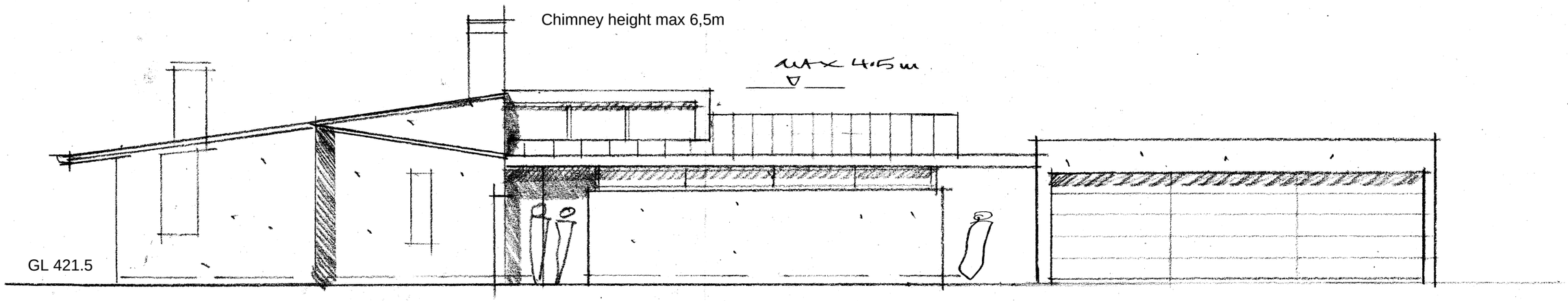
REFERENCE **4443-SK03** - SCALE = 1:250 AT A1 - 1:500 AT A3 - **06 Jul 2023**
DRAFT - NOT A WORKING DRAWING - NOT FOR CONSTRUCTION

SITE PLAN
WIKSTROM - LOWER SHOTOVER ROAD

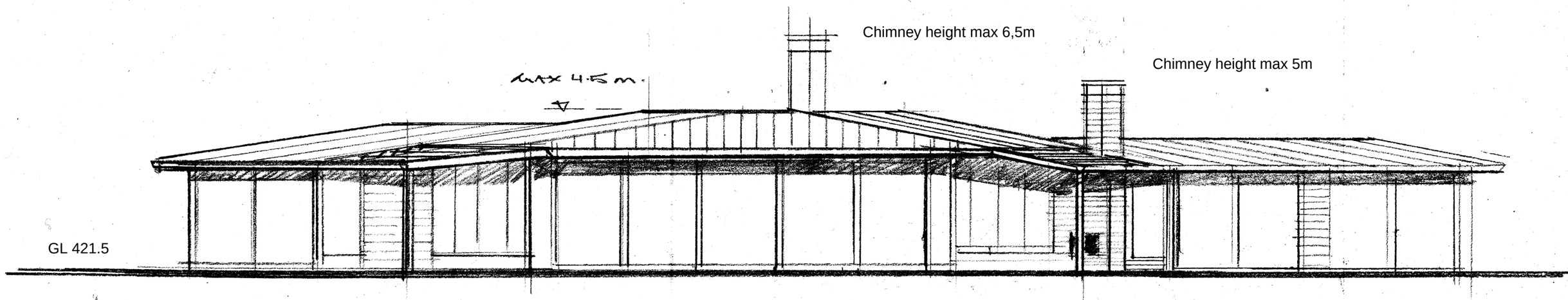


Floor Areas:
House: 295sqm
Garage: 60sqm
Pool bldg: 55sqm

WIKSTROM HOUSE
DOWER SHOTOVER
QUEENSTOWN
JULY 2023



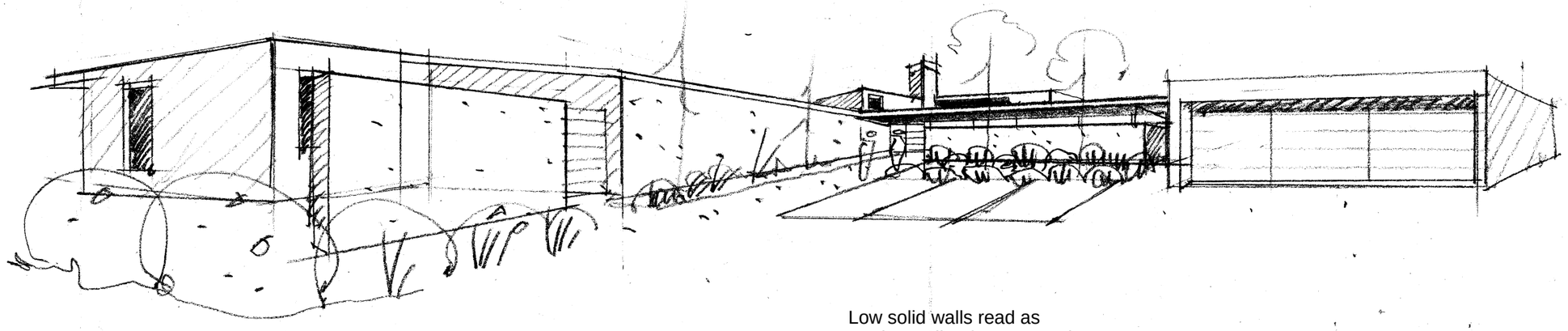
SOUTH ELEVATION



NORTH ELEVATION.

WIKSTROM HOUSE
LOWER SHOTOVER
QUEENSTOWN

JULY 2023

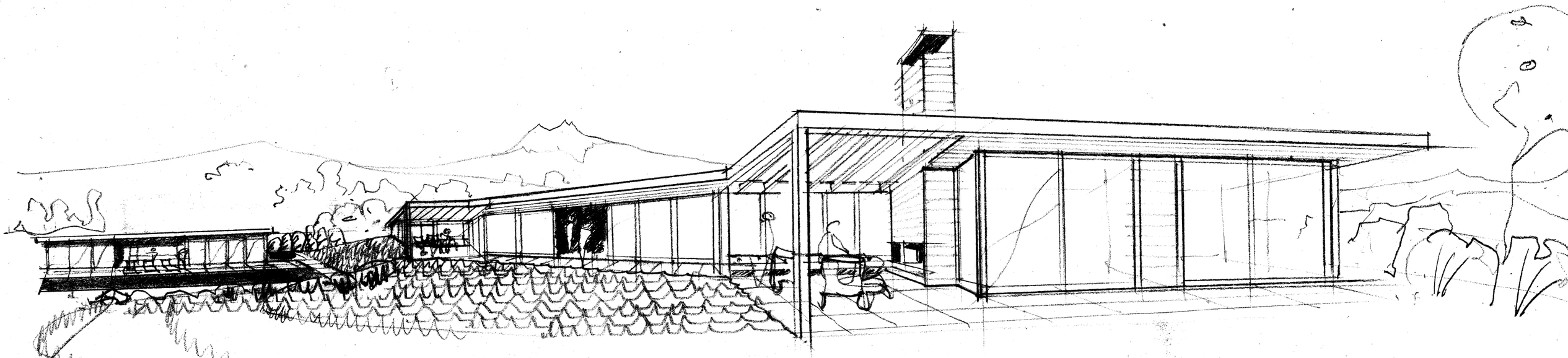


Low solid walls read as
garden walls of a courtyard
with higher building forms beyond

SKETCH FROM ARRIVAL.
(SOUTH)

WIKSTROM HOUSE
LOWER SHOTOVER
QUEENSTOWN

JULY 2023.

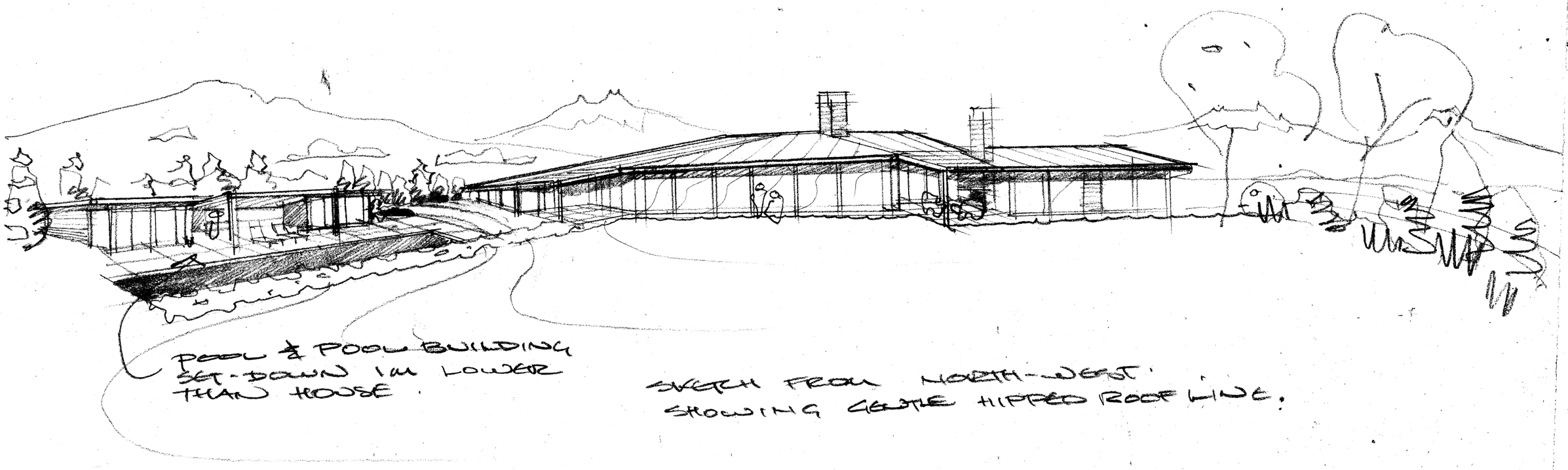


POOL & POOL BUILDING
SET DOWN 1M FROM
HOUSE.

SKETCH FROM N-WEST

WIKSTROM HOUSE
LOWER SHOTOVER
QUEENSTOWN

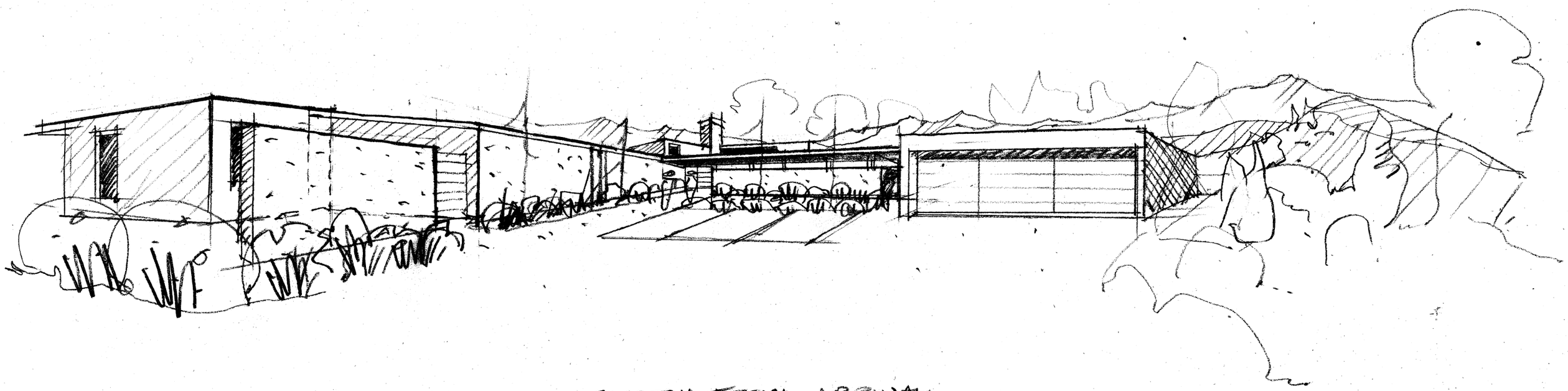
JULY 2023



POOL & POOL BUILDING SET-DOWN IN LOWER THAN HOUSE.

SKETCH FROM NORTH-WEST SHOWING GENTLE HIPPED ROOF LINE.

WIKATENE HOUSE
FROM N-WEST
GB. AUG 2023.

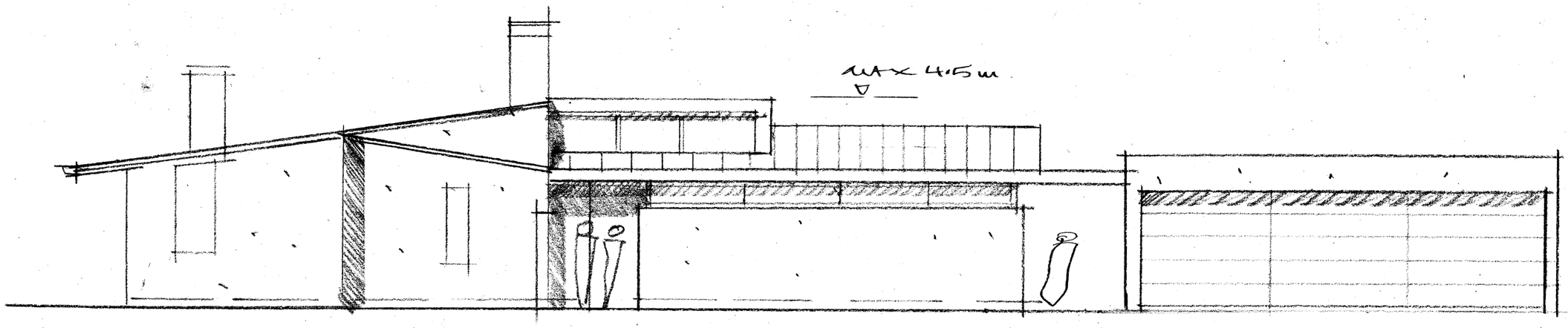


SKETCH FROM ARRIVAL
(SOUTH)

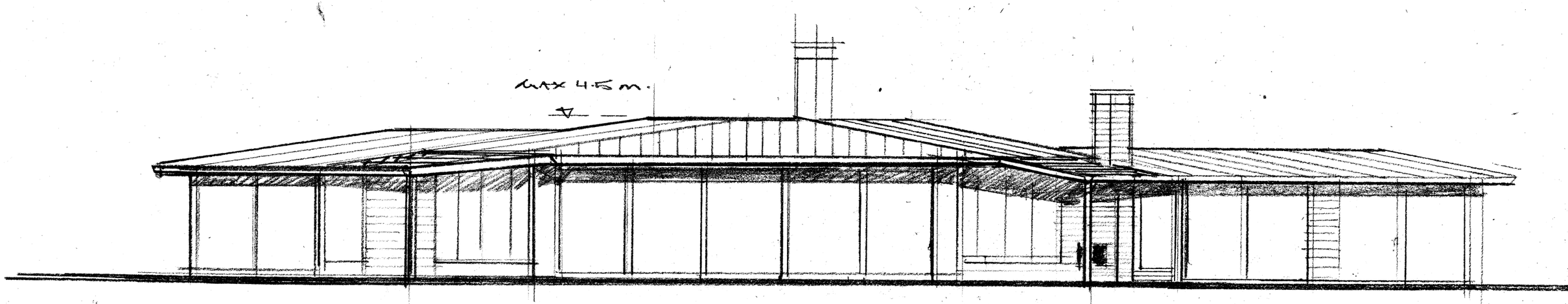
LOW SOLID WALLS READ
LIKE GARDEN WALLS OF A
COURTYARD, WITH HIGHER
BUILDING ELEMENTS BEYOND.

WIKSTROM HOUSE
LOWER SHOTOVER
QUEENSTOWN

AB JULY 2023.



SOUTH ELEVATION



NORTH-WEST ELEVATION.

WIKSTROM HOUSE
LOWER SHOTOVER
QUEENSTOWN

JULY 2023