

3 March 2020

Lisa Schweitzer
Manager, Altitude - The Lodge Smiggins
13 Plum Pine Rd
Smiggin Holes NSW 2624



POINTE ENGINEERING PTY LTD
ABN 34 613 639 740
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Planning,
Industry &
Environment

12 MAR 2020

RECEIVED - JINDABYNE

RE: Geotechnical Recommendations for Altitude Lodge minor alterations

Dear Ms. Schweitzer,

Pointe reviewed the proposed alterations at Altitude lodge and carried out a desktop assessment of existing conditions. Following our initial assessment, the proposed alterations were deemed to be minor and expected to cause minimal impacts from a geotechnical perspective. A site visit was subsequently carried out on January 29th 2020. At the time, the site was found to be gently sloping with no obvious signs of slope instability and/or structural distress on existing infrastructures.

As such, this letter provides geotechnical design and construction recommendations to be incorporated as part of your project.

GEOTECHNICAL RECOMMENDATIONS

The proposed minor building alterations with associated parking area is geotechnically appropriate and expected to cause only minimal impact, pending compliance with geotechnical recommendations provided herein.

Site Class

The site surrounding Altitude lodge is flat to gently sloping with bedrock exposure and boulder present. From the desktop assessment and the site observation, the site can be classified as Class A (non-reactive site) in accordance with AS2870-2011.

We recommend the design of footings and pavement to follow sound engineering practices and adhere to the geotechnical design criteria provided below.

Design and Construction

Foundation

The design of foundation, retaining wall, parking area and/or pedestrian path pavement should be carried out according to engineering principles, having regard to the site constraints. We further recommend that at a minimum, footings be founded on stiff natural deposits.

An allowable bearing capacity of 150 kPa can be used in foundation design for footing based on the stiff natural deposits.

Ref: PE-1934-01



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Excavation Support and Engineered Fill

Ground preparation should allow for the stripping of topsoil from foundation and parking area footprint. Stripped soil is not deemed to be suitable for structural fill. It might be used for landscape applications adjacent to the site.

Surplus excavated materials may need to be exported or disposed of away from the site. No filling, other than minor topdressing material, should be undertaken on the site without further assessment from a suitably qualified geotechnical engineer.

It is recommended that a batter angle of 1.0V:2.5H be used for permanent unsupported cut up to 0.5 metres maximum height. Permanent slopes greater than 0.5 m in height should be retained. Retaining structure are to be designed and verified during construction by a suitably qualified geotechnical engineer.

Erosion Protection

Surface water run-off should be intercepted and be directed away from any structure and open excavation or to storage tanks where possible. Swale drains might be used in the landscaping to avoid pooling of water and/or infiltration into slopes or behind retaining walls. Similarly, drainage should be installed behind any proposed retaining wall as designed by a suitably qualified geotechnical engineer.

Any exposed cut should be protected by providing surface vegetation (grass) and/or geotextile cover as soon as possible post exposure. Similarly, construction should be avoided during period of heavy rain.

Geotechnical Review

It is recommended that construction progress be reviewed by a suitably qualified geotechnical engineer should the conditions encountered varied from those detailed herein.

We trust the information presented meets your current requirements. Please contact the undersigned for any additional information you might require.

Yours faithfully,

POINTE ENGINEERING PTY LTD

Emilie LAPOINTE, MIEAust. CPEng.

Principal Geotechnical Engineer

Appendices: Appendix A – Geotechnical Policy Kosciuszko Alpine Resorts, Form 4 – Minimal Impact Certification

Distribution: Ivan Pasalich

Ref: PE-1934-01



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APPENDIX A - Geotechnical Policy Kosciuszko Alpine Resorts, Form 4 – Minimal Impact Certification



Form 4 – Minimal Impact Certification

DA Number: _____

This form may be used where minor construction works which present minimal or no geotechnical impact on the site or related land are proposed to be erected within the "G" line area of the geotechnical maps.

A geotechnical engineer or engineering geologist must inspect the site and/or review the proposed development documentation to determine if the proposed development requires a geotechnical report to be prepared to accompany the development application. Where the geotechnical engineer determines that such a report is not required then they must complete this form and attach design recommendations where required. A copy of Form 4 with design recommendation, if required, must be submitted with the development application.

Please contact the Alpine Resorts Team in Jindabyne for further information - phone 02 6456 1733.

To complete this form, please place a cross in the appropriate boxes and complete all sections.

1. Declaration made by geotechnical engineer or engineering geologist in relation to a nil or minimal geotechnical impact assessment and site classification

I, Mr Ms Mrs Dr Other

First Name Emilie Family Name Lapointe

OF
Company/organisation Pointe Engineering

certify that I am a geotechnical engineer /engineering geologist as defined by the "Policy" and I have inspected the site and reviewed the proposed development known as

Attitude Lodge minor alterations

As a result of my site inspection and review of the following documentation

(List of documentation reviewed)

- The lodge proposed work 2019-2020 drawings dated 5.09.2019:
 - A01 - Site Plan
 - A07 - proposed compaction
 - A08 - details 1-6
- Site inspection visit from January 29th 2020

I have determined that:

- the current load-bearing capacity of the existing building will not be exceeded or adversely impacted by the proposed development, and
- the proposed works are of such a minor nature that the requirement for geotechnical advice in the form of a geotechnical report, prepared in accordance with the "Policy", is considered unnecessary for the adequate and safe design of the structural elements to be incorporated into the new works, and
- in accordance with AS 2870.1 Residential Slabs and Footings, the site is to be classified as a type
(insert classification type)

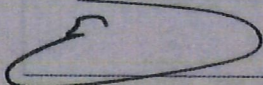
A

- I have attached design recommendations to be incorporated in the structural design in accordance with this site classification. *Letter PE1934-01 dated March 3rd 2020.*

I am aware that this declaration shall be used by the Department as an essential component in granting development consent for a structure to be erected within the "G" line area (as identified on the geotechnical maps) of Kosciuszko Alpine Resorts without requiring the submission of a geotechnical report in support of the development application.

2. Signatures

Signature



Name

Emilie Lapointe

Chartered professional status

Chartered Professional Engineer

Date

March 3rd 2020

3. Contact details

Alpine Resorts Team

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