

**BEFORE THE QUEENSTOWN LAKES  
DISTRICT COUNCIL**

**IN THE MATTER** of the Resource Management Act 1991  
(the "Act")

**AND**

**IN THE MATTER** of the Queenstown Lakes Proposed  
District Plan

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**Statement of Evidence of  
Duncan Lawrence White**

**For Sarah Burdon #282  
and Glen Dene Ltd #384**

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**4 April 2017**

## **1.0 Introduction**

- 1.1 My name is Duncan Lawrence White. I hold the qualifications of a Bachelor of Science in Geography, a Diploma for Graduates and a Post Graduate Diploma in Science. Both of the latter two qualifications are in Land Planning and Development. These qualifications are all from the University of Otago.
- 1.2 I have over 14 years experience as a planner. I have seven years planning experience with the Manukau City Council, including three years as a subdivision officer processing subdivision resource consent applications, followed by four years as an environmental policy planner undertaking district plan changes, policy development and the acquisition of reserves. For the past seven years I have lived in Wanaka and worked as a planner for Paterson Pitts Limited Partnership (Paterson Pitts). Paterson Pitts is a land development consultancy that undertakes a variety of rural and urban subdivision, resource consent applications and plan change work, primarily around Wanaka.
- 1.3 While this is a Council hearing, rather than an Environment Court process, I confirm I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014, and agree to comply with it. I can confirm that this evidence is within my area of expertise, except where I state that I have relied on material produced by other parties, and that I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

## **2.0 Scope of Evidence**

- 2.1 This evidence has been prepared in support of Proposed District Plan submissions #282 (Sarah Burdon) in relation to the underlying zoning of the Hawea Campground, and #254 (Glen Dene Ltd) in relation to the zoning of the land around the Glen Dene homestead.
- 2.2 Submission #282 seeks to have 22.7 hectares of the Hawea Campground including Pt Sec 2 Blk II - owned by Queenstown Lakes District Council (QLDC) and Lots 1 and 2 DP 418972 owned by Glen Dene Ltd, rezoned from Rural

(partially overlain by designation 175 – for Motor Park) to Rural Visitor Zone. The extent of the proposed Rural Visitor Zone is included as Appendix **A**.

- 2.3 Submission #384 seeks to have 13 hectares in the area of the Glen Dene Homestead rezoned from Rural zone to Rural Lifestyle zone. This area is shown on the plan in Appendix **D**.
- 2.4 In the Hawea Campground area this evidence examines the objectives from the Rural Visitor zone (Section 12.3 of the Proposed District Plan) and compares these to those from the proposed Rural chapter (section 21) to consider which of these represents the most appropriate way to achieve the sustainable management of natural and physical resources (the purpose of the Resource Management Act 1991) as required by Section 32(1)(a). In this evidence all references to the Act or the RMA are to the Resource Management Act 1991.
- 2.5 For the Glen Dene homestead area this evidence examines the objectives from the Rural Residential and Rural Lifestyle chapter (section 22) of the Proposed District Plan in comparison to those from the proposed Rural chapter (section 21) to consider which of these represents the most appropriate way to achieve the sustainable management of natural and physical resources (the purpose of the Resource Management Act 1991) as required by Section 32(1)(a).
- 2.6 This evidence then in relation to each of the submission areas considers whether the provisions (the policies and methods) are the most appropriate way to achieve the objectives (Section 32(1)(b)) by identifying other reasonably practicable options for achieving the objectives, and assessing the efficiency and effectiveness of the provisions in achieving the objectives.
- 2.7 This evidence has been prepared to provide the level of assessment required by Sections 32 and 32AA of the Act in relation to the provisions sought by the submissions (S32(3)) at a level of detail that corresponds to the significance of the anticipated effects from the proposed changes to zoning (S32(1)(c)).

2.8 In preparing this evidence I have reviewed (amongst other documentation) the following:

- The PDP planning maps, primarily Maps 8 and 17;
- The S32 Evaluation Report – Rural Residential Zone and Rural Lifestyle Zone;
- S42A Hearing Report - Chapter 21 Rural, including the S32AA evaluation of recommended changes;
- S42A Hearing Report - Chapter 22 Rural Residential and Rural Lifestyle, including the S32AA evaluation of recommended changes;
- S42A Hearing Report – Upper Clutha Mapping, Strategic Overview and Common Themes and Group 3 Rural including the S32AA evaluation of relevant recommended changes.

### **3.0 Submission #282 – Hawea Campground**

3.1 The area covered by submission #282 is shown on the plan in Appendix A. This area has been operating as a campground for approximately 40 years, and is partially designated (Designation #175) by Council as a motor camp. This area is defined by SH6 to the west and Glen Dene station to the north (I also note land administered by Contact Energy separates Lots 1 and 2 DP 418972 and is not included within the area sought to be rezoned). To the south the campground and the area sought to be rezoned is defined by the boat ramp just north of the Hawea Dam. Under the Proposed District Plan the submission area is proposed to retain its current Rural zoning. I also note that the Council has chosen not to extend the Motor Park designation over all the land it owns.

3.2 This submission sought to establish an integrated planning framework for the Hawea Campground that would enable expansion of campground activities and expand the camping season beyond the current summer season while ensuring that the effects of the campground were appropriately considered and avoided, remedied or mitigated. The submitter is one of the lessees and the operator of the Hawea Campground under a lease from Queenstown Lakes District Council. It is the lessee's intentions to upgrade the facilities and develop the campground into a tree-dominated lakeside campground and to provide

detached visitor accommodation units, camping, powered sites for motorhomes, permanent glamping sites and associated camp facilities such as events areas, kitchens and social spaces.

- 3.3 The submission point in relation to the location of the Outstanding Natural Landscape is no longer at issue.

#### **4.0 Hawea Campground – Rural Visitor Zone**

- 4.1 Since lodging the submission the relief sought has been modified and refined so that it is proposed to incorporate a new Rural Visitor Zone area – the Hawea Campground - within Chapter 12.3 of the Operative District Plan. These revised provisions have been specifically designed to address concerns about the type and scale of development provided for in the Rural Visitor zone and the lower density, open space and relaxed lakeside character of the Hawea Campground dominated by mature trees that is intended to be preserved.

- 4.2 The objective and policies of Rule 12.3.4 can remain unchanged.

- 4.3 The activity status of activities contained in Rule 14.4.3.1 (Permitted Activities), Rule 12.4.3.2 (Controlled Activities), 12.4.3.3 (Discretionary Activities) can remain unchanged. It is proposed to add a further note to 12.4.3.4 (vi) below the Windermere rule – **Hawea Campground only - all residential use shall be a non-complying activity** (additional text shown underlined).

- 4.4 For the site standards it is proposed to add a new site standard 12.4.5.1 (additional text shown underlined) Setback from Roads and Neighbours:

(c) Hawea Campground only – all buildings shall be setback greater than 20 m from the SH6 boundary. This 20 m setback shall be maintained as a vegetated buffer between the campground and the highway.

- 4.5 For the zone standards it is proposed to modify Rule 12.4.5.2 (i) Building Height as 12 metres is considered inappropriate for the Hawea Campground. To control heights it is proposed to include a height plan (Appendix **B**) at the end of section 12.4 of the Plan (Lake Hawea Holiday Park – Height Plan) and add the following:

(d) Hawea Campground Only – building heights shall be as shown on the Lake Hawea Holiday Park – Height Plan.

- Area 1 there shall be no buildings or structures
- Area 2 the maximum height of buildings shall be 8m
- Area 3 the maximum height of buildings shall be 5.5m

4.6 It is also proposed to add in a total building coverage limitation as a zone standard. Insert new:

**12.4.5.2 (viii) Total Building Coverage – Hawea Campground Only**

The maximum total building coverage for the Hawea Campground Rural Visitor Zone shall be 7%.

Any infringement to this provision would be a non-complying activity, therefore no assessment matters are proposed.

4.7 Other zone standards can remain unchanged.

4.8 It is not proposed to change or add to the assessment matters of Rule 12.5.

4.9 I note that this revised proposal is to insert a new section into the Operative District Plan and that this may result in complexities in the administration of the rules in relation to this land, but I consider this is a very minor issue given the limited number of resource consent applications likely in the campground area and that this is a temporary issue until such time as the operative Rural Visitor zone is reviewed.

**5.0 Matters Raised in the S42A Report**

5.1 The following section responds to matters raised in the Section 42A report. The submission point in relation to the location of the Outstanding Natural Landscape is no longer at issue.

5.2 The comments about the visibility of development (para 3.6 pp8-9) are noted as are the comments in paras 3.8 and 3.9 (p9). As the Council has chosen not to extend the designation and the Designation S42A report on the designations recommended that submission point (from Sarah Burdon's submission #282) be rejected the suggestion in para 3.8 about extending the designation regime

to provide more control is a matter outside the scope of this hearing. I do note however that QLDC is the owner of this land and so has control over the use of the land through conditions of the ground lease.

5.3 Instead of relying on the provisions of the designation the relief sought has been modified (seen preceding section) to include specific rules that demonstrate the type of activity proposed and to provide a development and assessment framework that will avoid, remedy or mitigate adverse environmental effects.

**6.0 Hawea Campground - Evaluation of Proposed Objectives – Section 32 (1)(a)**

6.1 The following table compares the relevant notified Rural objectives as modified by the Rural S42A report with the Rural Visitor Zone objectives in order to consider which of these represents the most appropriate way to achieve the sustainable management of natural and physical resources (the purpose of the Act) as required by Section 32(1)(a).

Rural Objective	Visitor	Rural Objectives	Comparison of Appropriateness in Relation to Submission Area
12.3.4 – Provision for the ongoing operation of the existing visitor areas recognising the operational needs and avoiding, remedying or mitigating adverse effects on landscape, water quality and natural value. Scope for extension of activities in the Rural Visitor Zones.		21.2.1 – Undertake a range of land uses including farming, permitted and established activities while protecting, maintaining and enhancing landscape, ecosystem services, nature conservation and rural amenity values.	I consider that the Rural Visitor objective is more suitable for the Hawea Campground than the generic Rural objective. The Hawea Campground is an existing facility operating with a planning regime not designed for visitor accommodation activities. Council's current approach to the designation is that the provisions of the designation are only available to the designating authority (not the lessee) and that the designation only covers part of the site used for the campground. This means that the lessee requires Discretionary Activity resource consent for all buildings under the provisions of the Rural zone. The RVZ objective better recognises existing visitor accommodation activities and makes provision for these to change over time provided that adverse effects on landscape, water quality and natural value

		<p>are avoided, remedied or mitigated.</p> <p>Mr Espie's landscape assessment at para 5.20 (p16) concludes that as a result of the level of human modification of the campground and its position nearby to Hawea Township and SH6, existing visitor accommodation activities, and that scattered buildings in conjunction with greenspace and vegetation will not adversely change views and visual amenity to the east to any significant degree.</p> <p>Mr Espie's landscape assessment generally concurs with that of Ms Melsop for the Council. Ms Melsop considers the site to have the ability to absorb additional campground buildings without degrading natural character, coherence, legibility or visual qualities (paras 8.8 – 8.16).</p>
No similar objective	21.2.2 - Sustain the life supporting capacity of soils.	This objective is not of particular relevance for the existing campground and so is no more appropriate than no objective.
No similar objective	21.2.3 - Safeguard the life supporting capacity of water through the integrated management of the effects of activities.	Water quality (particularly from onsite wastewater disposal) and quantity (the effects of water extraction for domestic and irrigation supply) are administered through the Regional Plan: Water. It is therefore considered that 21.2.3 is no more appropriate than no objective. I also note that objective 12.3.4 already provides for the avoidance, remediation or mitigation of adverse effects on water quality.
No similar objective	21.2.8 – Subdivision, use and development is avoided, remedied or mitigated in areas that are unsuitable due to identified constraints	This objective is not of particular relevance as the campground is already used for visitor accommodation and the geotechnical hazard report contained in Appendix C considers that the site is suitable for Rural Visitor land use, but does note that site specific assessments and localised mitigation measures may be required (section 4 p8).



No similar objective	21.2.4 - Situations where sensitive activities conflict with existing and anticipated activities are managed.	The Hawea Campground is already operational and isolated from other land uses by the highway and the lake to the extent that this objective is considered to be unnecessary on this site.
No similar objective	21.2.13 - Rural industrial activities within the Rural Industrial Sub Zones, will support farming and rural productive activities, while protecting, maintaining and enhancing rural character, amenity and landscape values.	Not relevant.
No similar objective	21.2.5 - Mineral extraction opportunities are provided for on the basis the location, scale and effects would not degrade amenity, water, wetlands, landscape and indigenous biodiversity values.	Not relevant.
No similar objective	21.2.6 - The future growth, development and consolidation of Skiing Activities is encouraged within identified Ski Area Sub Zones, while avoiding, remedying or mitigating adverse effects on the environment.	Not relevant as the sites do not include Ski Areas.
No similar objective	21.2.7 - Retention of an area containing activities that are not sensitive to aircraft noise, within an airport's Outer Control Boundary, to act as a buffer between airports and Activities Sensitive to Aircraft Noise.	Not relevant as the site is not adjacent to significant airports.
No similar objective	21.2.11 - Manage the location, scale and intensity of informal airports.	Not relevant as the subject sites do not include informal airports and therefore the objective is not necessary.
No similar objective	21.2.9 - A range of activities are undertaken on the basis they do not degrade landscape values, rural amenity, or impinge on farming and established activities.	Adequately covered by Objective 12.3.4.

No similar objective	21.2.10 - Diversification of farming and other rural activities that supports the sustainability of natural and physical resources.	Not relevant as the site is already a campground and not farmed.
No similar objective	21.2.12 - The surface of lakes and rivers and their margins are protected, maintained or enhanced.	This objective is relevant as the site is close to the margins of Lake Hawea. In this case I note that the objective is already provided for by 12.3.4 remedying or mitigating adverse effects on landscape, water quality and natural value

6.3 The proposed Rural Visitor Zone has been assessed against the higher level provisions of the PDP as demonstrated in following paragraphs. The rezoning would be in accordance with Objective 3.2.14 as it would specifically recognise and provide for the socioeconomic benefits of tourism activities, and in accordance with policy 3.2.1.4.1 as it would enable the use and development of the site for tourism activity in an area where adverse effects could be avoided remedied or mitigated. The development of the campground can be undertaken without adversely affecting the remaining natural character of the margins of the lake (Objective 3.2.4.4 and Policy 3.2.4.5.1), Rule 12.4.5.1(i)(b) achieves this by requiring that building for visitor accommodation are setback 20m from boundaries (including the property boundary) around the lake margin. The campground is acknowledged to be in an ONL area but it is noted that both Mr Espie and Ms Melsop consider that the site can absorb further buildings and that additional design controls have been proposed to ensure that development proposed is within the capacity of the site to absorb change. As a publicly owned campground the site is part of a network of public spaces and as such achieves Objective 3.2.6.3 and Policies 3.2.6.3.1 and 3.2.6.3.2 indeed the rules have been designed to enable the upgrade of camp facilities to ensure these are accessible, safe and desirable spaces.

6.4 As noted in the preceding paragraph the site is considered to have capacity for further appropriate development, and as the site is already a campground the circumstances are unusual such that development per se is not considered inappropriate (Objective 6.3.1 and Policy 6.3.1.2). In relation to Objective 6.3.4 and Policies 6.3.4.1 and 6.3.4.3 and as discussed above the site is considered by the landscape architect to have some potential to absorb some development and the zone provisions have been modified to ensure that development is

within these limits. The proposed rezoning as therefore considered to be consistent with these objectives and policies.

## **7.0 Assessment Against Provisions of Regional Policy Statements**

7.1 The proposal has been assessed against the Otago Regional Policy Statement (RPS) and the Proposed Otago Regional Policy Statement (PRPS). With the changes made to the proposal during the drafting of evidence it is considered that the proposal is consistent with the provisions of the RPS and PRPS.

## **8.0 Evaluation of Proposed Provisions – Section 32(1)(b)**

8.1 The following section considers whether the proposed Rural Visitor provisions are the most appropriate way to achieve the relevant objectives in relation to the campground area. This section also considers the costs and benefits of the proposed provisions.

8.2 The effects on landscape and amenity values that would arise from the rezoning are considered in the landscape evidence of Mr Espie. This report (para 5.23 p 17) considers that the *“additional restrictions now proposed (in relation to building coverage, building height and residential activity, deal with any potential issues. As discussed above, I consider the RVZ [Rural Visitor zone] as now proposed will not lead to significant adverse effects in terms of landscape character or visual amenity.”*

8.3 I consider that there will be no reverse sensitivity issues as the Rural Lifestyle zone makes provision for the continuation of productive rural activities as does the Rural zone. I note that the Rural zone does not have a minimum lot size and as a result there is no certainty of outcome in relation to the density of development, although I note that such development requires resource consent as a Discretionary Activity and as such requires an assessment against relevant objectives and policies including those that protect rural landscapes from inappropriate development and cumulative effects.

8.4 The geotech report in Appendix C includes discussion of the area's susceptibility to natural hazards. That assessment considers that there are no

natural hazard issues in the submission area that would preclude the site being rezoned to Rural Visitor but site specific assessment and possibly mitigation would be required in places. In relation to this I note that the site is already an operational campground.

8.5 As a result of the above factors the submission area is considered able to accommodate change and would be suitable for appropriate development and would be consistent with the relevant objectives and policies of the Strategic Direction (Chapter 3) and Landscapes (Chapter 6) sections of the PDP.

8.6 Section 32(2)(c) requires an assessment of the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions. In the case of the proposed Rural Visitor zone in the submission area there is very limited uncertainty and sufficient information in order to make a decision on the submissions. The risk associated with the zoning sought is very low as it is an existing zoning, in an area where the same activity already occurs. The level of risk associated with the rezoning is considered very low.

## **9.0 Efficiency and Effectiveness of Provisions**

9.1 The Rural Visitor zone is an operative zone. These provisions of this zone have been modified to recognise the specific circumstances of the Hawea Campground, consequently the provisions are considered to be efficient and effective.

## **10.0 Hawea Campground Conclusions**

10.1 Submission #282 (Sarah Burdon) seeks to rezone the existing Hawea Campground and adjacent land owned by Glen Dene Station (the lessees of the campground) from Rural to Rural Visitor zone. The campground is an existing activity and campground operations extend beyond the leased areas into land owned by Glen Dene Station. The submission seeks to rezone this land to recognise the existing use and to enable suitable development of the campsite to upgrade the communal camp facilities and to provide a wider range of built visitor accommodation facilities so as to extend the camp season

beyond the summer period and to provide economic benefits for Council as the landowner of the majority of the land and to the businesses of Hawea.

- 10.2 Since lodging the submission the relief sought has been modified and refined so that it is proposed to incorporate a new Rural Visitor Zone area – the Hawea Campground - within Chapter 12.3 of the Operative District Plan. These revised provisions have been specifically designed to address concerns about the type and scale of development provided for in the Rural Visitor zone and the lower density, open space and relaxed lakeside character of the Hawea Campground dominated by mature trees that is intended to be preserved.
- 10.3 This evidence considers the proposed rezoning against the requirements of Sections 32 and 32AA of the Act. It is considered that the Rural Visitor zone objective and policies are more appropriate to achieve the sustainable management of natural and physical resources in the submission area than those of the proposed Rural chapter and would be efficient and effective in achieving sustainable management.
- 10.4 The proposed provisions avoid inappropriate development within the ONL and on the margins of Lake Hawea and are considered to appropriately avoid, remedy, or mitigate against adverse landscape effects, landscape character and visual amenity. It is considered that there will be limited adverse environmental effects, no cultural effects and some social and economic benefit benefits arising from the proposal.
- 10.5 The risks of acting or not acting have also been considered. It is considered that there is very limited uncertainty and sufficient information in order to make a decision on the submissions. The risk associated with the zoning sought is very low as it is an existing zoning modified to suit particular site characteristics and desired outcomes in an area where this activity already occurs and has for some decades.
- 10.6 As a result of the above it is sought that the submission and the modified Rural Visitor zone provisions be adopted for the subject site.

**11.0 Glen Dene Homestead (Submission #384) - Evaluation of Proposed Objectives – Section 32 (1)(a)**

11.1 Submission #384 seeks to have 13 hectares in the area of the Glen Dene Homestead rezoned from Rural zone to Rural Lifestyle zone. This area is shown on the plan in Appendix D.

11.2 I note that Ms Melsop's landscape assessment has recommended that the no build area be extended south to cover the open slopes adjacent to Lake Hawea, I further note Mr Espie's assessment at para 4.19 (pp 9 and 10 adopts this recommendation).

11.3 For the Glen Dene homestead area the evidence below examines the objectives from the Rural Residential and Rural Lifestyle chapter (section 22) of the Proposed District Plan in comparison to those from the proposed Rural chapter (section 21) to consider which of these represents the most appropriate way to achieve the sustainable management of natural and physical resources (the purpose of the Resource Management Act 1991) as required by Section 32(1)(a).

11.4 The following table compares the relevant notified Rural objectives as modified the Rural S42A report. The S32 and S32AA assessments for the proposed rural living chapter have considered the appropriateness of the proposed objectives in the District-wide context and considered these to be an appropriate way of achieving sustainable management (see the S32 report for the Act's definition of sustainable management). The above submissions have sought to apply existing proposed objectives to a different and discrete area of the District, therefore this assessment focuses on the location specific assessment rather than an overall assessment of the appropriateness of the objectives as this has been undertaken in the Section 32 and 32AA assessments already completed.

11.5 Three alternative zoning scenarios were considered in preparing submission #384: the status quo (Rural); Rural Lifestyle; and Rural Residential. Rural Residential provides for lot sizes to 4,000m<sup>2</sup> and this would mean approximately

32 lots within the submission area. This level of density was considered inappropriate and so was not assessed further. The following table therefore compares the Rural objectives against the rural living objectives in order to consider which is most appropriate for the submission area. The objectives listed below are those as modified by the S42A reports:

Rural Residential and Rural Living Objectives	Rural Objectives	Comparison of Appropriateness in Relation to Submission Area
<p>22.2.1 - The district's landscape quality, character and visual amenity values are maintained and enhanced while enabling rural living opportunities in areas that can absorb development</p>	<p>21.2.1 – Undertake a range of land uses including farming, permitted and established activities while protecting, maintaining and enhancing landscape, ecosystem services, nature conservation and rural amenity values.</p>	<p>Both objectives provide for the maintenance and enhancement of landscape quality, character and amenity values.</p> <p>The landscape evidence of Mr Espie (para 4.13 (p7) considers <i>“that a total of 6 dwellings and associated rural lifestyle land uses in this location will alter the character of the immediate vicinity but I do not see that this would degrade the characteristics of the landscape overall. I consider that a green, treed, visually soft rural living node can sit comfortably in this location without diminishing the character of the Lake Hawea ONL.”</i> I also note at para 4.15 his conclusion that the submission area has the capacity to absorb change without degrading the visual amenity. At para 4.15 he notes the visual effects of those on the surface of the lake within approximately 3km will be relatively slight and that buildings are likely to be relatively unscreened, but that development will be within the current node of farm activity and building form will be balanced by the considerable open space between buildings, although the surrounding open and natural surrounding landscape will dominate.</p>
<p>22.2.2 - Within the Rural Residential and Rural Lifestyle Zones predominant land uses are rural, residential and where appropriate, visitor and community activities.</p>	<p>21.2.2 - Sustain the life supporting capacity of soils.</p>	<p>The rural living objective is considered appropriate as it recognises the predominant uses and provides for current rural use. Rural Lifestyle with a minimum lot size of 1 hectare and an average of 2 hectares will still sustain the life supporting capacity of soils.</p>

No similar objective	21.2.3 - Safeguard the life supporting capacity of water through the integrated management of the effects of activities.	Water quality (particularly from onsite wastewater disposal) and quantity (the effects of water extraction for domestic and irrigation supply) are administered through the Regional Plan: Water, no objective is therefore considered necessary.
22.2.3 - New development adequately manages natural hazard risks.	21.2.8 - Subdivision, use and development is avoided, remedied or mitigated in areas that are unsuitable due to identified constraints	The rural living objective is considered more appropriate as it directs consideration of new development and natural hazards, whereas the rural objectives are not explicit, especially in relation to natural hazards.
22.2.4 - New development does not exceed available capacities for servicing and infrastructure.	No similar objective	The rural living objective would be appropriate if further development is anticipated by the zoning, although I note that the S42A report raises no concerns about infrastructure as all services would be provided on site.
22.2.5 - Sensitive activities conflicting with existing and anticipated rural activities are managed.	21.2.4 - Situations where sensitive activities conflict with existing and anticipated activities are managed.	The wording of the objectives is very similar and therefore both objectives are equally appropriate.
No similar objective	21.2.13 - Rural industrial activities within the Rural Industrial Sub Zones, will support farming and rural productive activities, while protecting, maintaining and enhancing rural character, amenity and landscape values.	Not relevant and adequately covered by Objective 22.2.2
No similar objective	21.2.5 - Mineral extraction opportunities are provided for on the basis the location, scale and effects would not degrade amenity, water, wetlands, landscape and indigenous biodiversity values.	Not relevant.
No similar objective	21.2.6 - The future growth, development and consolidation of Skiing Activities is encouraged within identified Ski Area Sub Zones, while avoiding, remedying or mitigating adverse effects on the environment.	Not relevant as the site does not include Ski Areas.
No similar objective	21.2.7 - Retention of an area containing activities	Not relevant as the sites are not adjacent to significant airports.



	that are not sensitive to aircraft noise, within an airport's Outer Control Boundary, to act as a buffer between airports and Activities Sensitive to Aircraft Noise.	
No similar objective	21.2.11 - Manage the location, scale and intensity of informal airports.	Not relevant as the subject sites do not include informal airports and therefore the objective is not necessary.
No similar objective	21.2.9 – A range of activities are undertaken on the basis they do not degrade landscape values, rural amenity, or impinge on farming and established activities.	Adequately covered by Objective 22.2.2.
No similar objective	21.2.10 - Diversification of farming and other rural activities that supports the sustainability of natural and physical resources.	Not relevant as holdings are already smaller than could be considered economically sustainable and the Rural Lifestyle zone provides for Farming as a permitted activity and this provides scope for land use diversification. No objective to provide for this is therefore considered necessary.
No similar objective	21.2.12 - The surface of lakes and rivers and their margins are protected, maintained or enhanced.	The extension of the Building Restriction Area to cover the lake margin would achieve Objective 21.2.12 and mean that no objective was required were the site to be rezoned to Rural Lifestyle.

11.6 The proposed Rural Visitor Zone has been assessed against the higher level provisions of the PDP as demonstrated in following paragraphs. The rezoning would be in accordance with Objective 3.2.4.4 and Policy 3.2.4.5.1 as the wider Building Restriction Area would ensure that development can be undertaken without adversely affecting the remaining natural character of the margins of the lake. The site is acknowledged to be in an ONL area but it is noted that both Mr Espie and Ms Melsop consider that the site can absorb some further development, although I note there is disagreement between the two landscape architects on the capacity of the site to absorb change. I have considered Objective 3.2.5.1 in light of comments made in para 3.22 of the S42A report and note that Mr Espie in paras 4.10 - 4.13 (p6-7) of his evidence considers that development of the form proposed would not diminish the character of the Lake Hawea ONL. On this basis I consider that the proposal can satisfy Objective 3.2.5.1.

- 11.7 I have also considered the comments in para 3.25 (p12) of the S42A report relating to Objective 22.2.5 and Policy 22.5.2.1 relating to reverse sensitivity and incompatible uses. I note that both the Rural and Rural Lifestyle zones provide for farming as a permitted activity so I see no difference on this issue between the two zones. I also note that it is common for development within rural areas to be subject to reverse sensitivity covenants to protect existing rural activities from complaints by more recent rural living lots.
- 11.8 The proposed rural living objectives themselves have already been considered through the S32 and S32AA assessments, and will be considered again during deliberations and so are considered to be appropriate and an appropriate way overall of achieving sustainable management. These provisions have also been assessed against the higher level strategic resource management plans and policies including national policy statements and the Regional Policy Strategy and the Proposed Regional Policy Statement.
- 11.9 The rural living objectives are considered appropriate to achieve sustainable resource management in the submission area.

## **12.0 Evaluation of Proposed Provisions – Section 32(1)(b)**

- 12.1 The following section considers whether the proposed Rural Lifestyle provisions are the most appropriate way to achieve the relevant objectives in relation to the submission area. This section also considers the costs and benefits of the proposed provisions.
- 12.2 The effects on landscape and amenity values that would arise from the rezoning to Rural Lifestyle are considered in the landscape evidence of Mr Espie as has been described above.
- 12.3 No specific adverse cultural or social effects are expected to arise from the rezoning. The rezoning will provide additional opportunities for rural living in and provide some lifestyle and housing choices and some economic benefits.
- 12.4 As a result of the above factors the submission area is considered able to accommodate change and would be suitable for appropriate subdivision and

would be consistent with the relevant objectives and policies of the Strategic Direction (Chapter 3) and Landscapes (Chapter 6) sections of the PDP.

- 12.5 Section 32(2)(c) requires an assessment of the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions. In the case of the proposed Rural Lifestyle zone in the submission area there is very limited uncertainty and sufficient information in order to make a decision on the submissions. The risk associated with the zoning sought is very low as it is an existing zoning, with provisions that are similar to the Operative District Plan. The likely outcome of the Rural Lifestyle zoning sought would be a maximum of 6 more houses/lots is already known and the environmental conditions are already well understood to the extent that the level of risk associated with the rezoning is very low.

### **13.0 Efficiency and Effectiveness of Provisions**

- 13.1 The provisions have already been considered through the S32 and S32AA assessments and commissioners' deliberations to be efficient and effective in relation to the areas that are currently proposed to be zoned Rural Lifestyle. The area proposed to be zoned Rural Lifestyle has similar characteristics to the existing Rural Lifestyle zoned areas along Riverbank Road and at Hawea Flat and so the provisions are considered to be efficient and effective.

- 13.2 The Rural Lifestyle provisions provides certainty of outcome for both landowners and Council as they provide a minimum lot size and maximum development density. This is compared with the proposed Rural provisions that do not provide a minimum lot size or maximum density as almost all subdivision and building platform applications require resource consent application as a Discretionary Activity. Consequently the Rural Lifestyle provisions are considered more efficient and effective than the proposed Rural provisions.

### **14.0 Assessment Against Provisions of Regional Policy Statements**

- 14.1 The proposal has been assessed against the Otago Regional Policy Statement (RPS) and the Proposed Otago Regional Policy Statement (PRPS). With the changes made to the proposal during the drafting of

evidence it is considered that the proposal is consistent with the provisions of the RPS and PRPS.

## **15.0 Glen Dene Homestead Conclusions**

- 15.1 It is considered that the objectives from the Rural Residential and Rural Lifestyle chapter (section 22) of the Proposed District Plan are appropriate to achieve the sustainable management of natural and physical resources in the submission area around the Glen Dene homestead and would be efficient and effective in achieving the Strategic Direction and Landscape objectives of the Proposed District Plan.
- 15.2 The risks of acting or not acting have also been considered. It is considered that there is very limited uncertainty and sufficient information in order to make a decision on the submissions. The risk associated with the zoning sought is very low as it is an existing zoning.
- 15.3 As a result of the above it is sought that the submission be adopted and the land within the submission area be zoned Rural Lifestyle with the lake margin of the submission be protected by a building restriction area.

## **Appendix A – Proposed Rural Visitor Zone – Hawea Campground**



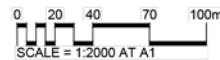
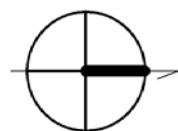
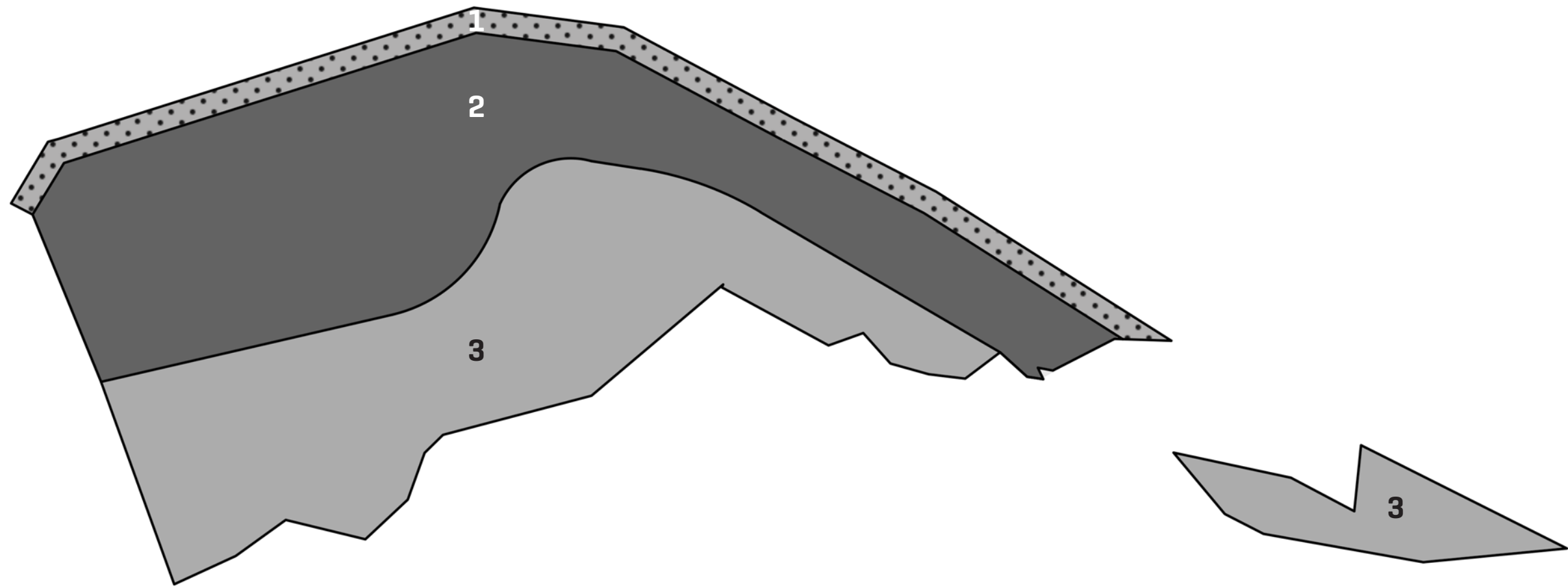


APPENDIX 4: Proposed Rural Visitor Zone sought by the submission.



## Appendix B – Height Plan – Hawea Campground

- 1** - 20m vegetation buffer
- 2** - 8m height limit
- 3** - 5.5m height limit





## **Appendix C – Geotech Report – Hawea Campground**



# Geotechnical Hazards – Preliminary Assessment Hawea Campground Area

**Report prepared for:**  
Paterson Pitts Group

**Report prepared by:**  
GeoSolve Ltd

**Distribution:**  
Paterson Pitts Group  
GeoSolve Limited (File)

**August 2015**  
GeoSolve Ref: 150139



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# 1 Introduction

## 1.1 General

This report presents the results of preliminary investigations carried out by GeoSolve Ltd in the context of a proposed District Plan change. The objective is to assess the suitability of the subject area, in terms of geotechnical hazards, for Rural Visitor zoning and development.

# 2 Site Description

The subject property is located between State Highway 6 and the south-western shore of Lake Hawea, as shown in Figure 1 below.



Figure 1: Locality Plan

The site itself is undulating and gently sloping with average gradients of around 5-10° and is currently occupied by a campground surrounded by reserve. The eastern side of the site lies on the Lake Hawea shoreline, and to the west the terrain rises steeply at an average gradient of about 30°, toward Mt. Maude some 2km beyond the site extents. The mean annual rainfall at the site is about 800mm, but significantly higher in the contributing hill catchments.

The site is vegetated with grass and trees, and is traversed by the campground tracks and buildings.

## 3 Natural Hazard Assessment

### 3.1 Existing hazard mapping

QLDC and ORC mapping indicate that the only identified hazards directly affecting the area are associated with the presence of alluvial fans. Landsliding in the upper catchment is indicated as extensive but unverified – this is beyond the proposed development area but may contribute material for debris events within the site.

Regional scale alluvial fan mapping (Opus, Mar. 2009) suggested small active fans at the base of the three significant watercourses on the site. However subsequent area-specific assessment by GNS Science (Barrell, Cox, Greene, & Townsend., Apr. 2009) revised the fan mapping to a single area, larger in size but with 'less recently active' classification. The GNS mapping is of higher resolution and supersedes the Opus work, and is therefore referenced in this report. Figure 2 below shows the extent of the mapped fan area (the northern half has been inferred by extrapolation, as the GNS mapping was truncated at the central line).

We have also considered the potential for liquefaction and lateral spreading under seismic action, although these hazards are not identified on Council mapping.

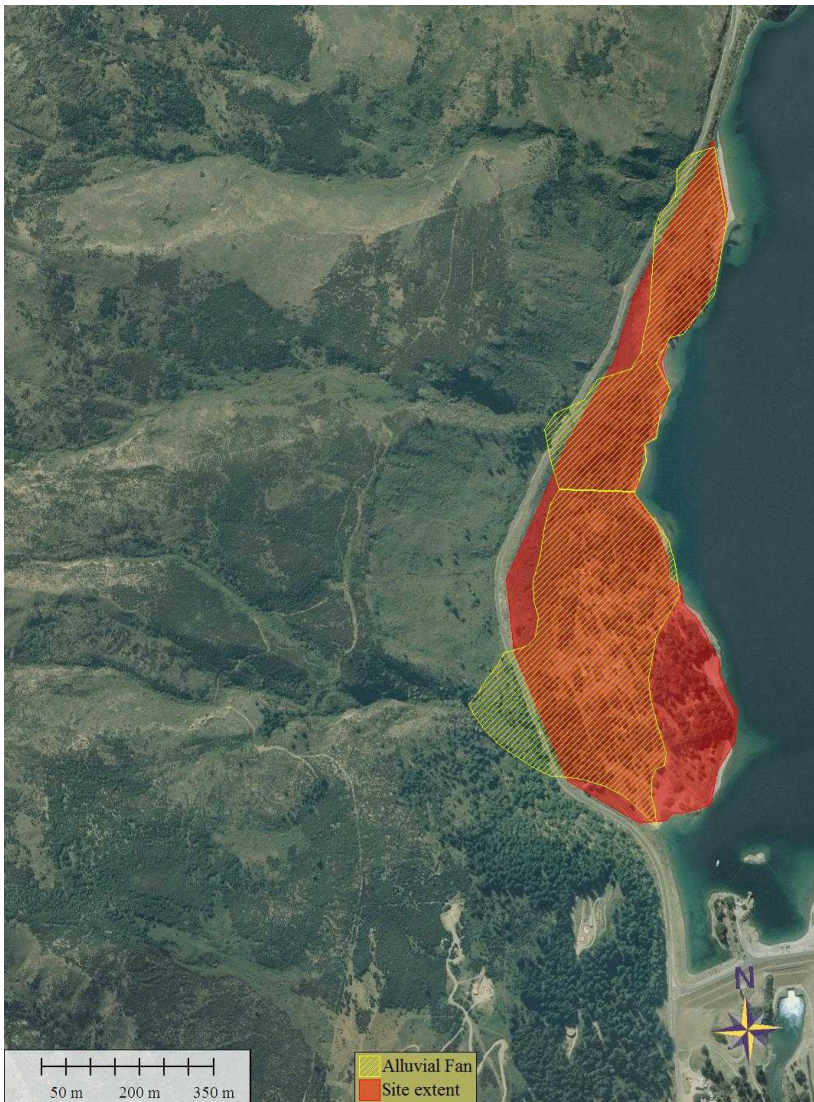


Figure 2: Site extent and mapped alluvial fan



### 3.2 Geotechnical hazard assessment

A site inspection was undertaken with relevant features observed and mapped (Figure 3):

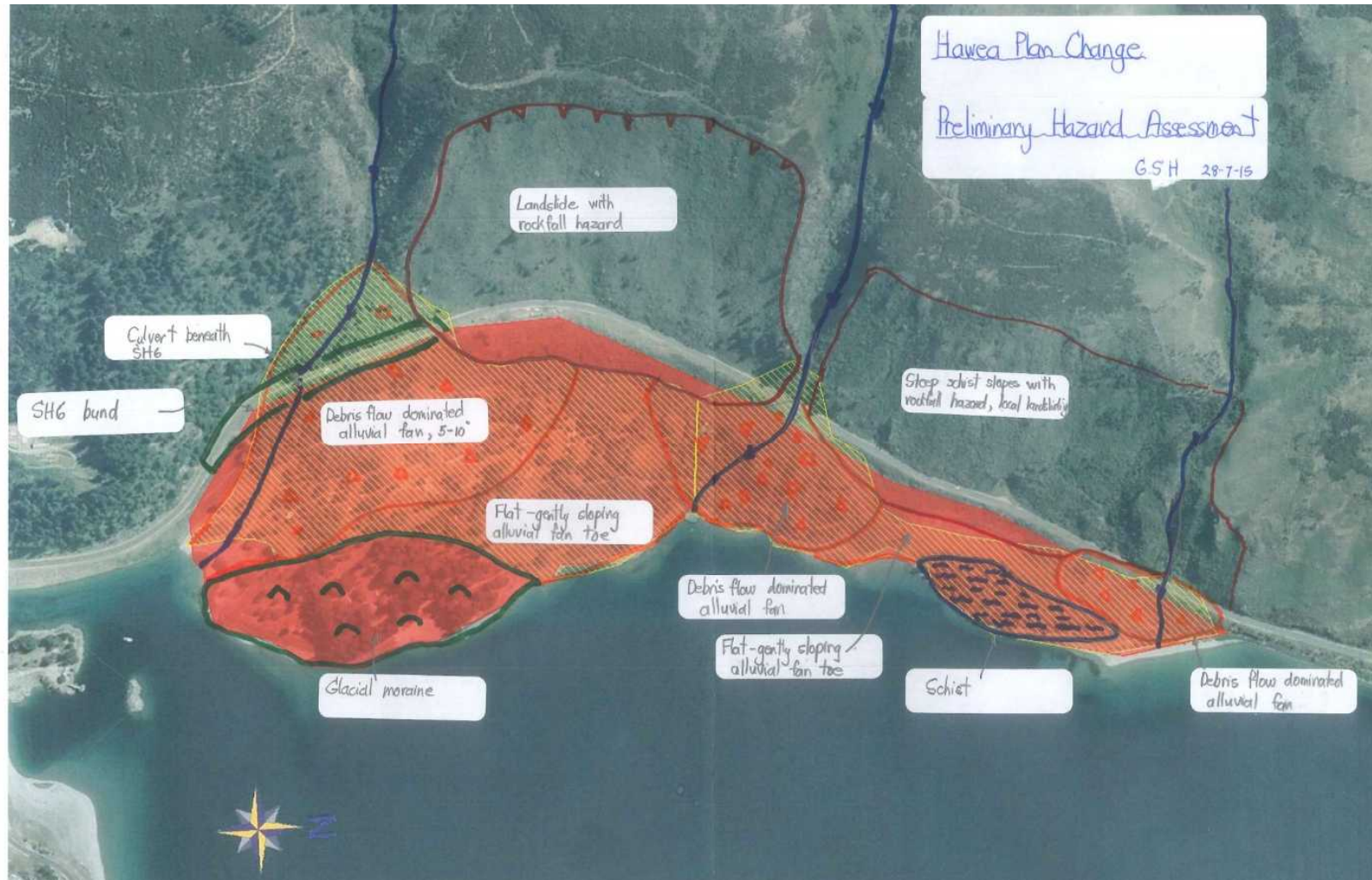


Figure 3: Geotechnical features

### 3.2.1 Flooding

The individual contributing catchment areas of the three significant gullies above the site are quite small, between 80 and 90 hectares. As such the watercourses are normally dry, and within the site most runoff can be expected to be absorbed by the alluvium with little or no surface flow. Accordingly the natural drainage courses within the site are not well defined.

In an extreme major flood event, the prevailing terrain at the southern end of the site would tend to direct floodwater toward the southern site boundary as indicated by the watercourse shown in Figure 1 above, thus avoiding the interior of the development area. However, particularly if accompanied by substantial sediment movement, potential exists for the watercourses to avulse upstream and flow unpredictably through the site. Such an event would be of extremely low probability.

Any flood risks will be minor and able to be mitigated by avoiding structures on locally low ground, slight elevation of floor levels, or low landscaped bunding.

### 3.2.2 Debris flow

Much of the site comprises various deposits of fan alluvium. On the steeper western side, undulating terrain and bouldery deposits suggest historic debris flows. Towards the lake on the eastern side of the site, the fan gradients reduce and the alluvium becomes flatter and less bouldery, suggesting a mechanism of shallow sheet debris flooding rather than concentrated high energy flows. Distal from the hillslopes, exposures of glacial moraine and schist mark areas that have not been affected at all by debris flows.

The fan alluvium is overlain by well-developed soils, supporting the 'fan less recently active' classification. However an extreme rainfall, particularly if preceded by a seismic event such as Alpine Fault movement, could potentially mobilise landsliding in the catchments and initiate debris events. In a major debris event the highway embankment will offer some protection but there remains a risk of some debris incursion into parts of the site. This risk will obviously be greater close to the western site boundary and will reduce to minimal levels toward the lake (eastern boundary).

As for flooding, any debris flow risks will be minor and able to be mitigated by avoiding structures on locally low ground, slight elevation of floor levels, or low landscaped bunding.

### 3.2.3 Liquefaction and lateral spreading

Seismic liquefaction occurs when excess pore pressures are generated in loose, saturated, generally cohesionless soil during earthquake shaking, causing the soil to undergo a partial to complete loss of shear strength. Such a loss of shear strength can result in settlement and/or horizontal movement (lateral spreading) of the soil mass. The occurrence of liquefaction is dependent on several factors, including the intensity and duration of ground shaking, soil density, particle size distribution, and elevation of the groundwater table.

At this location, the potential for liquefaction under seismic shaking is considered minimal. The vulnerable combination of fine sandy/silty soils with a shallow groundwater table is unlikely to be extensive within the site area, except possibly for margins near the lakeshore where structures could readily be avoided or if necessary provided with appropriate foundation solutions.

Likewise lateral spreading potential, if any, is likely to be confined to lakeside margins where a specific combination of vulnerable soils, shallow groundwater, and significant surface gradients all lie

within the same area. Again, at vulnerable locations structures could be avoided or mitigated with appropriate foundation solutions.

Investigations to confirm soil type and groundwater depths will be required at detailed design phase to assess any potential liquefaction induced settlement and foundation mitigation options.

#### 3.2.4 Landslide and Rockfall hazard

Significant landslide and rockfall hazards may exist near the base of steep cliffs along the western margin of the site. However, very few fallen boulders are evident in this area. It is considered that a substantial seismic event would be required to trigger destructive rock slides/falls, and the highway platform could be expected to catch much of any debris. A landslide/rockfall hazard zone can be identified by further investigation and model studies; any such zone would be confined to narrow strips along the western site boundary which could be protected by no-build restrictions, structural barriers or earthfill bunds.



## 4 Conclusions and Recommendations

A level of geotechnical hazard is present within the proposed development area, and site-specific investigation will be required to assess specific building platform locations. However we consider that the extent and degree of such hazards will be limited, such that they can be acceptably mitigated by standard planning and engineering measures.

Small areas within the overall site are likely to have a high exposure to rockfall or debris flow hazards, however these can be readily identified and avoided or mitigated. The great majority of the overall site is considered to be acceptably safe for Rural Visitor development or can easily be rendered safe with remedial measures.

We conclude that, from a natural hazards perspective, the area is suitable for Rural Visitor land use; noting that site-specific assessments will be required and localised mitigation measures may be necessary.

## 5 Applicability

This report has been prepared for the benefit of Paterson Pitts Group with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.

Further geotechnical investigations and reporting will be required at the detailed design phase after development plans are completed.

Report prepared by:



.....  
Hank Stocker  
Senior Engineer

Reviewed for GeoSolve Ltd by:



.....  
Fraser Wilson  
Senior Engineering Geologist

## 6 References



Barrell, D., Cox, S., Greene, S., & Townsend., D. (Apr. 2009). *Otago Alluvial Fans Project: Supplementary maps and information on fans in selected areas of Otago*. GNS Science.

Opus. (Mar. 2009). *Otago Alluvial Fans Project (Regional Review)*.

**Appendix D - Proposed Rural Lifestyle Zone – Glen Dene Homestead**



**LEGEND**

-  Proposed Rural Lifestyle Zone.
-  Proposed No Build Areas.

**APPENDIX 3:** Proposed Rural Lifestyle Zone sought by the submission.