

Resource Management Act 1991

Submission on Notified Proposed Plan Change to Central Otago District Plan

Clause 6 of Schedule 1, Resource Management Act 1991

(FORM 5)

To: The Chief Executive
Central Otago District Council
PO Box 122
Alexandra 9340

Details of submitter

Name: Wakefield Estates Limited

Postal address: 1 Perriam Place, RD3, Cromwell 9383
(Or alternative method of service under [section 352](#) of the Act)

Phone: 0274 872 371

Email: matt@chasurveyors.co.nz, bob.perriam@gmail.com

Contact person: Matt Suddaby, C/- C Hughes and Associates Ltd, Wanaka
(Name & designation, if applicable)

This is a submission on proposed Plan Change 19 to the Central Otago District Plan (the proposal).

I ~~am~~ am not* a trade competitor for the purposes of [section 308B](#) of the Resource Management Act 1991 (*select one)

~~*I / We am / am not (select one) directly affected by an effect of the subject matter of the submission that:~~

~~(a) adversely affects the environment; and~~

~~(b) does not relate to trade competition or the effects of trade competition.~~

~~*Delete this paragraph if you are not a trade competitor.~~

The specific provisions of the proposal that my submission relates to are:

(Give details, attach on separate page if necessary)

Plan Change 19 Zone Maps in the vicinity of Clark Road, Pisa Moorings. _____

This submission is:

(Attach on separate page if necessary) Include:

- whether you support or oppose the specific parts of the application or wish to have them amended; and
 - the reasons for your views.
-

As per attached submission _____

I / We seek the following decision from the consent authority:

(Give precise details, including the general nature of any conditions sought)

To extend the zone maps to include adjacent land ideally suited for Large Lot Residential use. ____

- ~~I support / oppose the application OR~~ **I support / oppose the application OR neither support nor oppose** (select one)
- ~~I wish / do not wish to be heard in support of this submission~~ **I wish / do not wish to be heard in support of this submission** (select one)
- ***I / We will consider presenting a joint case if others make a similar submission**
*Delete this paragraph if not applicable.

In lodging this submission, I understand that my submission, including contact details, are considered public information, and will be made available and published as part of this process.



_____(Agent) _____
Signature

2 September 2022
Date

Submissions close at 4pm on Friday 2 September 2022

Submissions can be emailed to districtplan@codc.govt.nz

Note to person making submission:

If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of Part 1 of Schedule 1 of the Resource Management Act 1991.

Please note that your submission (or part of your submission) may be struck out if the authority is satisfied that a least 1 of the following applies to the submission (or part of the submission):

- *it is frivolous or vexatious:*
- *it discloses no reasonable or relevant case:*
- *it would be an abuse of the hearing process to allow the submission (or the part) to be taken further:*
- *it contains offensive language:*
- *it is supported only by material that purports to be independent expert evidence but has been prepared by a person who is not independent or who does not have sufficient specialised knowledge or skill to give expert advice on the matter.*

Gail Harris
c/- gail@gstyle.co.nz

Dear Gail

Clark Road Property, Pisa Moorings Preliminary Geotechnical Assessment

1.0 Introduction

This letter details the results of a geotechnical inspection and desk top study completed by GeoSolve Limited for a property located on Clark Road, Pisa Moorings.

The work described in this letter has been completed in accordance with the terms and conditions outlined in GeoSolve Ltd.'s proposal dated 09 May 2016.

The opinions and conclusions presented in this report are based on the following sources of information:

- A walkover inspection and mapping of the site by an engineering geologist;
- A review of historic information currently held on the GeoSolve database for other sites in the local area;
- A review of the Central Otago District Council and Otago Regional Council Hazard Register Maps and ORC Borehole data, and;
- A review of the published geological map, 'Institute of Geological & Nuclear Sciences Ltd, Geology of the Wakatipu, 1:250,000 Geological Map 18'.

No Intrusive investigations have been completed for this report and all opinions and conclusions that are presented in this report are preliminary in nature. The geotechnical conditions will need to be confirmed by site-specific investigations, engineering assessment and inspections during construction by an appropriately qualified and experienced Geotechnical Engineer and/or Engineering Geologist.

2.0 Site Walkover Inspection

GeoSolve completed a walkover inspection and mapping of the site on 13 May 2016.

The subject property, legally described as Lot 100 DP 433991, is located on the south side of Clark Road at the intersection with the Luggate-Cromwell Road (SH6) opposite Pisa Moorings to the east. Within the lot boundary, the topography is typically moderately inclined on the edge of a glacial outwash terrace which flattens out at the base of the terrace slope towards the southeastern corner of the property (Figure 1 and Photo 1). A broad gully deeply incised into the edge of the glacial outwash terrace trends west-northwest through the centre of the property. Three much smaller

eroded channels or rills trend east-west down the terrace slope above and northwest of the proposed construction area. An old disused irrigation race trending north-south through the centre of the proposed construction area follows the base of the glacial outwash terrace on the eastern side of the property (Figure 1).

The vegetation cover primarily comprises short dry grass, scattered briar bushes and pine trees with rows of shelterbelt trees along the eastern boundaries of the property.

Extensive historic gold workings are concentrated along the entire length of the main gully running through the centre of the property. Immediately west and above the proposed construction area less extensive historic gold workings are located in the side of the terrace slope. The eroded sediments produced from these historic gold mining activities have been deposited as extensive tailings fans downslope of the workings. The tailings fans extend as far east as the disused water race and range in approximate thickness from 3-4 m at the northern extent of the proposed construction area and as much as 6-8 m at the southern extent (Figure 1, Photo 1 and 2).



Photo 1. Looking northwest across the proposed construction area towards the glacial outwash terrace in the background. Note the tailings fans and historic gold workings.



Photo 2. Looking west from the proposed construction area upslope across the tailings fan towards historic gold workings in the side of the outwash terrace slope.

3.0 Expected Geology and Ground Conditions

Published geological information (Institute of Geological and Nuclear Sciences (IGNS), 1:250,000 Geological Map 18, Geology of the Wakatipu) indicates glacial outwash gravel is present beneath the Clark Road property. Glacial outwash gravel is also exposed on the property within the historic gold workings immediately west of the proposed construction area (Figure 1, Photo 1 and 2).

No intrusive investigations have been completed for the purposes of this report; however, examination of local soil and rock exposures, and information contained on the GeoSolve database for nearby sites and ORC borehole data has been reviewed. The proposed development area is expected to comprise alluvial mine tailings overlying glacial outwash gravel with some boulders and variable topsoil cover. There is some fill material located at the southeast corner of the property (Figure 1).

No active fault traces are known to exist in the immediate vicinity of the site; however, a significant seismic risk exists in the region due to rupture of the Alpine Fault, which runs along the west coast of the South Island. A high probability exists that an earthquake of magnitude 8 or greater will occur on the Alpine Fault within the next 50 years. An earthquake of this magnitude is expected to result in strong and prolonged ground shaking in the Upper Clutha region.

4.0 Hazards

Slope Stability

No known existing slope stability hazards are present within the property boundaries. The three eroded channels (rills) above the proposed construction area (Figure 1) are only minor erosional features and pose no risk to the proposed development area.

Liquefaction

This site has no risk of liquefaction due to the extensive depth of outwash gravel indicated in water bore logs (G41/0275, G41/0273 and G41/0173) located nearby to the proposed development area and the considerable depth to the water table.

Flooding

An alluvial fan hazard is mapped on the ORC hazard planning maps immediately east of the proposed construction area either side of 5 Mile Creek. However, due to the elevated position of the proposed development area above Five Mile Creek it is unlikely to be effected by an alluvial fan hazard or flooding.

Seismic

A severe seismic risk is present in the region as discussed in Section 3.0 and appropriate allowance should be made for seismic loading during detailed design of the proposed building, foundations and retaining walls. Design should adopt Class D "deep" subsoil conditions in accordance with NZS 1170.5:2004.

5.0 Groundwater

The regional groundwater table is expected to lie approximately 10-20 m beneath the existing ground surface of the proposed construction area and well below any future excavation levels. Perched groundwater from overnight rain was observed on the sub-horizontal terrace surface at the south-eastern corner of the property through the main access way (Photo 1).

6.0 Future Development

Due to the presence of a thick sequence of alluvial mine tailings across a significant portion of the proposed development area it is recommended that a site-specific geotechnical investigation and assessment, which incorporates subsurface ground investigations, be completed before confirming construction is suitable on the proposed site. Test pit excavations and Heavy Duty Dynamic Cone Penetrometer (HDCP) testing will need to be carried out as part of the subsurface investigations to determine the nature, depth and suitability of the mine tailings as a construction subsoil. Alternatively, geological and geomorphological mapping could be undertaken to find areas of the lot suitable for construction, which have not be subject to mining activity.

The proposed construction area is moderately to gently inclined (5-20°) and it is expected that significant cut excavations, engineered fill platforms and/or retaining structures will be required to form a level building platform onsite.

Due to the severe seismic setting, it is recommended the engineering design of any future development on the site is completed by an appropriately qualified and experienced Chartered Professional Engineer.

During the earthworks operations all topsoil/buried topsoil, organic matter, uncontrolled fill, loess SILT and other unsuitable materials should be removed from the construction areas in accordance with the recommendations of NZS 4431:1989. It is expected that foundations will bear upon glacial outwash gravel materials or alluvial mine tailings which will need to be tested prior to any future development to confirm that the mine tailings can provide good bearing for standard building loads.

Exposure to the elements should be limited for all soils and covering the soils with polythene sheeting will reduce degradation due to wind, rain and surface run-off.

Water should not be allowed to pond or collect near or under a foundation slab or footing. Positive grading of the subgrade should be undertaken to prevent water ingress or ponding.

To minimise the effects of freeze-thaw cycles, all shallow foundations should be founded a minimum of 0.4 m below the adjacent finished ground surface.

All fill that is utilised as bearing for foundations should be placed and compacted in accordance with the recommendations of NZS 4431:1989 and certification provided to that effect.

We recommend topsoil and unsuitables stripping and subsequent earthworks be undertaken only when a suitable interval of fair weather is expected, or during the earthworks construction season.

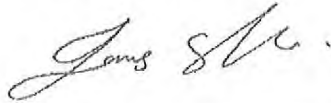
It is recommended that footing excavations are inspected and Scala penetrometer tested to confirm soil bearing capacity and continuity of the subsoils.

7.0 Report Closure

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

Please don't hesitate to contact us if you have any questions on the content of this letter.

Report Prepared By:



.....

James Stewart

Geologist

GeoSolve Ltd

Reviewed for GeoSolve Ltd by:



.....

Fraser Wilson

Senior Engineering Geologist

GeoSolve Ltd

Attachments:

- **Figure 1, Site Plan**

Figure 1, Site Plan.



Scale: 1:1000
 Original Sheet Size A3

Projection: NZGD 2000 / New Zealand Transverse Mercator
 Spheroid: 2000
 Datum: 1320439 8371516 5012542 -4316233
 1204117.6727556 3042310 2882204

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Key:
 = Outline of historic gold workings
 = Outline of tailings fans
 15° = slope angle and direction

= Old disused irrigation race
 = Outline of proposed area to construct a building platform



NOTES:

- 1) AREAS AND DIMENSIONS ARE SUBJECT TO FINAL SURVEY.
- 2) DARK BROWN OUTLINE INDICATIVE OF NEW AREA TO BE REZONED.

REVISION	DETAIL	DATE

C HUGHES & ASSOCIATES LTD
 Surveying and Resource Management • Central Otago

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Project
Wakefield Estates Limited

Title
**PROPOSED EXTENSION TO
 LARGE LOT ZONING
 FOR SUBMISSION**

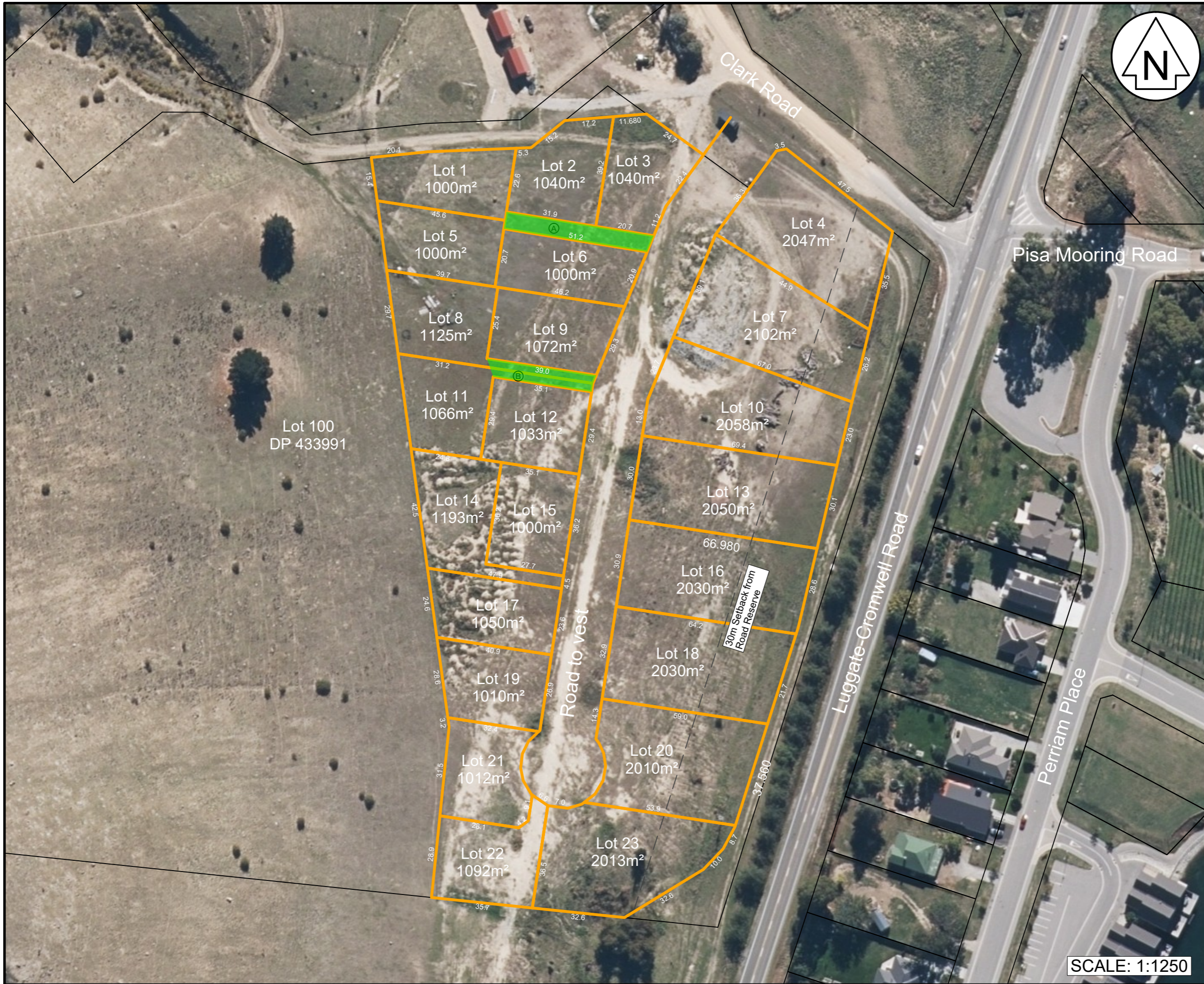
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Job No: 6237	Drawn By: HLR	Datum:
Drawing No: W1664	Sheet No: 1	Revision: A Date Created: AUG 2022

SCALE: 1:2000



NOTES:
1) AREAS AND DIMENSIONS SUBJECT TO FINAL SURVEY.

REVISION	DETAIL	DATE

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Project
Wakefield Estates Limited

Title
SUBDDIVISION CONCEPT FOR LOT 100 DP 433991
CONCEPT

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Job No: 6237	Drawn By: HLR	Datum:
Drawing No: W1664	Sheet No: 2	Revision: A Date Created: AUG 2022

SCALE: 1:1250

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Plan Change 19 Residential Zoning Submission Wakefield Estates Limited, Lot 100 DP 433991 Clarke Road, Pisa Moorings.

Application prepared by:
C Hughes & Associates Limited
Surveying and Resource Management

August 2022.

Introduction

1. This submission on Plan Change 19 – Residential Zoning is made on behalf of **Wakefield Estates Limited**.
2. Wakefield is the registered proprietor of land at Perriam Place, Clark Road and State Highway 6. (Refer Figure 1 below)



Figure 1. Land owned by Wakefield Estates Ltd

3. This submission specifically relates Plan Change 19 Zone Maps in the vicinity of Clark Road (Lot 100 DP 433991).
4. Wakefield Estates Limited owns Lot 100 DP 433991 which is directly to the west of land proposed to be zoned Large Lot (P1) as part of Plan Change 19.
5. The purpose of this submission is to recommend to Council that Lot 100 DP 433991 is also ideally suited for Large Lot Residential zoning.

Site description and history

6. Lot 100 DP 433991 is a 19.4515ha property located on the corner of State Highway 6 and Clarke Road. The property is severed by a Council owned parcel (Lot 8 DP 433991), which contains a Council tank farm and access track.
7. The land consists of a 100-120m wide gently sloping terrace adjacent to Clark Road and State Highway 6, before it rises steeply to the west.
8. The land to the north of Lot 8 DP 433991 contains a consented 60 person village which consists of 10 buildings for seasonal workers accommodation (RC160354). It also contains a large commercial building from which Broken Hive Mead operates.

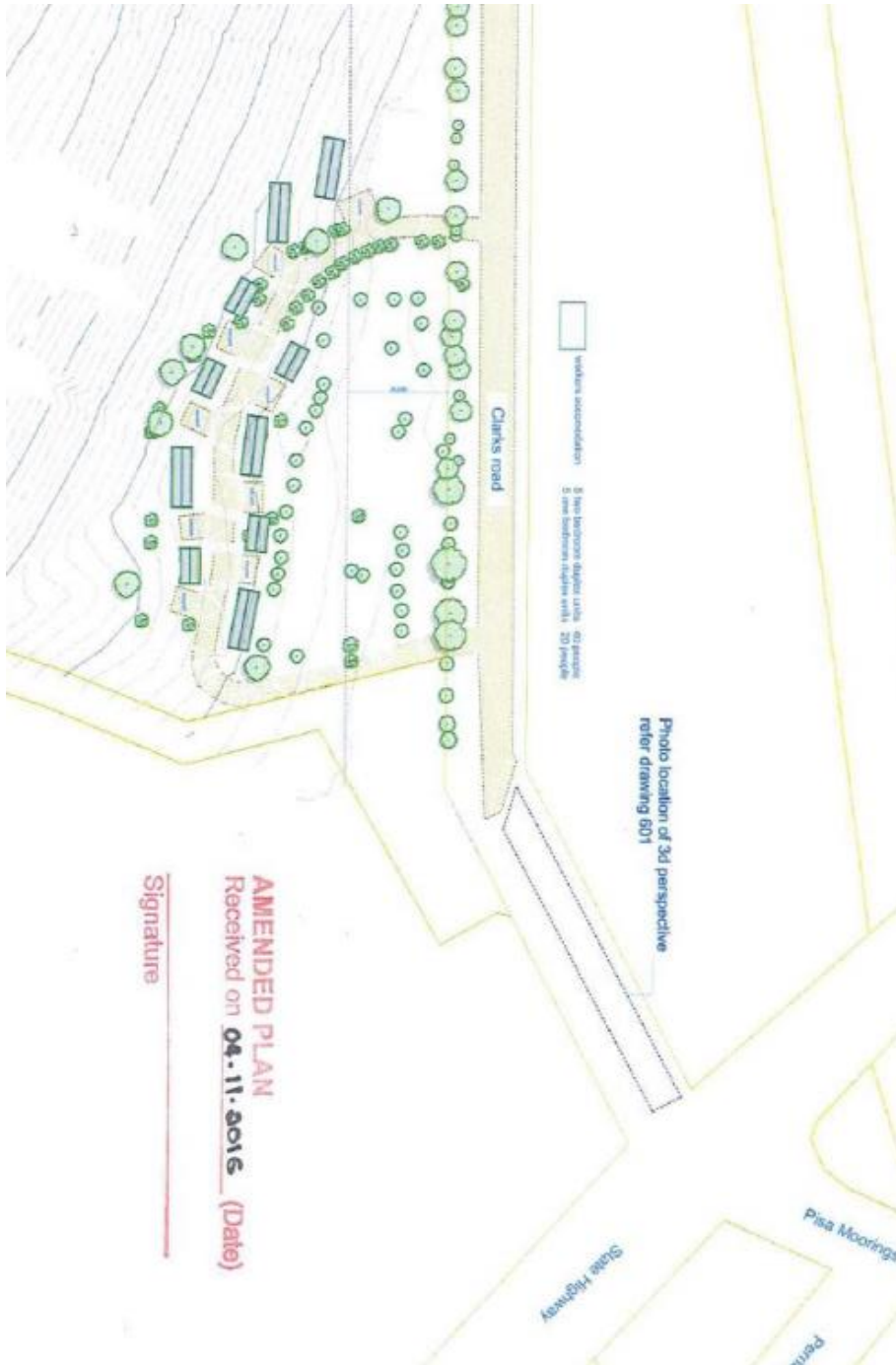


Figure 2 Approved plan for RC160354. 60 person Seasonal Workers Accommodation Village.

9. The land to the south of Lot 8 DP 433991 (bounded by State Highway 6 and Clark Road) is currently vacant. Placement of clean earth fill excavated from the Perriam Cove marina has occurred on a portion of the land.
10. A Preliminary Geotechnical Report prepared by Geosolve Limited is attached.
11. A 250mm Council owned water main is located along the property's eastern (State Highway 6) boundary.
12. A 200mm Council wastewater line is located on the eastern side of the State Highway 6 corridor.
13. Historic gold workings exist on the property. These are located higher, to the west of the land proposed for residential use. These workings consist of former sluiced

areas and tailings fans. As per the attached geotechnical report, these features would be unaffected by any development.

Proposal

14. Our submission is to recommend that this land could accommodate approximately 25-30 residential allotments. We propose the following large lot residential zoning as shown in the diagram below. Full plan attached to submission.



Figure 3. Proposed extension to District Plan Maps in vicinity of Clark Road, Pisa Moorings.

- 15. We propose a strip of Large Lot Residential (2000m²) land adjacent to the highway, with the balance of the land leading back to the base of the hill being zoned as Large Lot (P1) (1000m²). A single road to vest would be proposed to provide access to the new allotments.
- 16. Similar to the eastern side of State Highway 6, we propose a 30m building setback from the Highway boundary.
- 17. Once zoned, a detailed subdivision application would be submitted providing details for roading and services. The application would also provide details on the geotechnical requirements to remediate and certify the area of clean fill for residential use. A potential subdivision layout is attached as an appendix to this submission.

Access

- 18. A safe access point can be provided onto Clark Road in the location of the existing council property. This point is located 85m from the State Highway intersection. There is excellent visibility along Clark Road in both directions.
- 19. There is currently a right turn bay for vehicles turning off the highway into Pisa Moorings Road. The existing sealed Give Way intersection from Clark Road onto the highway has seal widening, but no right turn is currently provided. Land on

both sides of Clark Road is in the ownership of the applicant, and additional land for road widening could be provided if necessary.

20. A culdesac approximately 250m in length would be constructed to provide access to the lots. This road would be formed and sealed in accordance with CODC standards.

Services

21. The site can be serviced by a connection to the 250mm water main running along the property's eastern (Stage Highway 6) boundary.
22. A wastewater connection could be made to the 200mm wastewater line which is located within the State Highway 6 corridor. Informal discussions with Council staff have confirmed that sufficient additional capacity exists for a development of this size.
23. Informal discussions with Council staff have confirmed that sufficient additional capacity within the water and wastewater networks exists for a development of this size. Development contributions will be made to council for the additional connections.
24. Electricity services are available along the property's eastern (State Highway 6) boundary.

Other

25. All residential activity will be clear of the historic gold workings.
26. There will be no effect on the Lowburn Dog Trials courses as a buffer of Council owned land exists and there is no development proposed for the hillside.

Rationale for zone extension

27. The land is currently unproductive rural land. It is an unirrigated parcel with a soil type of "*Lochar very shallow sandy loam*". This is described by NZ DSIR as a very shallow veneer of sandy loam on sandy gravels which is of limited suitability for irrigation and is prone to wind erosion.¹
28. This parcel of land has excellent access to urban services. Electricity, fibre, water and wastewater are all readily available. This reduces development costs and improves land affordability.
29. The property has clear topographical boundaries which gives Council control in managing future zone expansion. To the west and north is a steeply rising hill side which is impractical for any form of built development. To the south is Council owned land, while to the east is Large Lot (P1) Residential zoned land.
30. The proposed zoning of this land would be part of a combined response to the community's demand for residential land, and the ready availability of services would ensure that these sections would have a relatively low development cost.
31. Development on western side of highway has already been considered by Council and consented. (RC160354) The effects of residential land use on the western side of the highway have been established and will be reinforced as further units in the workers village are constructed. Expansion of the residential zone would add confidence to extending a reticulated sewer line to the workers village.
32. Setback from the highway will ensure that future buildings are not dominant when viewed from the highway. It also provides a large buffer strip for landscape planting for visual and acoustic screening.
33. Protection of the hillside ensures that landscape and heritage effects are negligible.

¹ Soils and land use in the Upper Clutha Valley, Otago, NZ Department of Scientific and Industrial research, p54.

Section 32 Report

34. The Section 32 report states that the Large Lot Residential zone is located in some of the outer residential areas of the District. It is intended to provide for detached dwellings on large sites and maintaining a high open space to built form ratio. The densities suggested for this land are in keeping with this zone description and make effective use of the available land while still maintaining amenity.
35. The Section 32 report has identified three key issues that PC 19 is intended to address.
 - Issue 1: Demand for new residential development and housing affordability
 - Issue 2: Ensuring residential development results in high-quality urban environments
 - Issue 3: Adopting planning best practice and implementing the National Planning Standards
36. The proposal contained within this submission, clearly achieves Key issue 1. It is also consistent with Key issue 2 and 3. A high quality urban environment can be created from this land, and the PC19 rules provide the framework for this. The site is open and offers good solar advantage. There are no natural hazards associated with the land.
37. The lot sizes and layout align with the National Planning Standards and planning best practice. Again, the PC19 rules provide the framework for this.
38. This proposal does not constitute urban sprawl, rather it is a logical extension of residential development which would facilitate large lot residential living in an area of land which already has access to all municipal services and offers no productive rural benefit.
39. Incorporating this parcel into the areas identified as Large Lot Residential by Plan Change 19 is a logical and practical extension which will assist in meeting Key Objective 1 and is generally aligned with Key objectives 2 and 3.

Part 2 of the Resource Management Act

40. An assessment of the proposal to extend the large lot residential zoning westwards against Part 2 of the Resource Management Act 1991.

Sustainable Management

41. The proposal constitutes appropriate and sustainable development of this parcel of land. It will provide for social and economic wellbeing by enabling sites which are well located, and already well connected to existing urban infrastructure. Furthermore, the extension of the large lot residential zoning connects an already consented residential area with the well-established Pisa Moorings settlement.

Avoiding, remedying or mitigating adverse effects

42. The land is sited such that adverse visual effects will be avoided. The proposed zoning is located on the flat terrace, and not on the highly visible hillside. Residential effects have already been established. A building setback line, similar to the eastern side of the highway is proposed to mitigate any reverse sensitivity effects. Traffic effects have been considered, and these can be mitigated with careful design. Any land necessary for intersection widening is within the ownership of the submitter.

Matters of National Importance

43. The area proposed for the extension of the large lot residential zone does not contain significant indigenous vegetation or fauna. It is located on the terrace flats and is clear of outstanding natural features. Heritage features are located above the proposed zone boundary and will be unaffected by the proposal. As per the attached geotechnical report, there are no significant risks due to natural hazards on this site.

Other Matters

44. The proposal constitutes the efficient use of the natural and physical resources. The site has ready access to urban infrastructure and is quality flat open land with a favourable aspect to the sun.

Summary

45. The submitter's property is adjacent to land which is proposed to be zoned as Large Lot Residential (1) at Pisa Moorings. It is our submission that this land is equally well suited to similar zoning. This submission has provided clear explanation of the attributes of the land, the rationale behind the extension to the zoning, and the benefits to be gained by Large Lot Residential zoning.
46. Extending residential zoning westwards would not constitute urban sprawl, as RC160354 has already granted consent for residential living in this area. Instead, the extension of the residential zoning will provide additional opportunities for residential living and given the proximity of urban infrastructure should go some way toward enabling affordable housing.

Submission prepared by

C HUGHES AND ASSOCIATES LIMITED



Matthew Suddaby

Managing Director, Registered Professional Surveyor. (RP Surv.)