

1 Introduction

1.1 General

This report presents the results of a geotechnical investigation undertaken by GeoSolve Ltd for the proposed Subdivision Development, Alec Robins Road, Lake Hayes Queenstown.



Photograph 1 – Photo looking east across the northern area of the site.

This assessment has been undertaken for the Hays Creek Trust in accordance with GeoSolve Ltd proposal dated 3 June 2021, which outlines the scope of work and conditions of engagement.

1.2 Development

A scheme plan has been provided by Aurum Survey Consultants, which outlines the extent and layout of the proposed development. The development comprises 20 residential building lots and 3 right-of-way access roads. A plan of the proposed subdivision is shown on Figure 1, Appendix A.

1.3 Purpose

The purpose of this report is to support a resource consent for the sub-division and provide recommendations for engineering design. This report aims to summarise the geotechnical conditions present at the site and provide recommendations as considered appropriate.

With respect to confirmation of the foundation design requirements, preliminary comment is provided with respect to "Good Ground" or "Specific Engineering Design" requirements. Final confirmation will be provided in the Geotechnical Completion report and accompanying Schedule 2A. The completion document will comply with the Queenstown Lakes District Council Land Development and Subdivision Code of Practice.

Version: 1, Version Date: 15/09/2022

GeoSolve ref: 210362 January 2022



2 Site Description

2.1 General

The subject property is accessed via Alec Robins Road from the Lake Hayes-Arrow Junction Highway and is located south of Lake Hayes and east of Lake Hayes Estate. The legal description of the property is Part Section 28 Block IX Shotover SD. The site location is shown on Figure 2.1 below.



Figure 2.1: Site Location Plan (yellow outline)

The site is bound by the Hayes Creek to the west and south, Lake Hayes-Arrow Junction Highway to the north and Alec Robins Road together with existing rural residential properties to the east. An existing residential building currently occupies the centre of the site. There is also a shed in the southern are of the property. The remainder of the site comprises farmland.

Topography and Surface Drainage 2.2

A topographic plan has been created using LiDar contour data at 1.0 m intervals sourced from the QLDC (Wakatipu, 2016). The contour data is shown in Figure 1, Appendix A.

The ground surface across the northern portion of the site is generally sub-horizontal to gently sloping. The southern portion of the site has three individual terrace levels, with 8 to 10 m high moderately sloping terrace slopes separating them. The western and southern boundaries of the site are bound by the channel of Hayes Creek. The terrace slopes between the site and the creek are 10 to 25 m in vertical height and slope at angles generally between 30° and, locally 55°.

January 2022

GeoSolve ref: 210362

3

The site is naturally free draining and no seepages or active flow paths were evident within the site boundaries. Some run off towards the site from the southwestern slopes of Morven Hill should be expected. This run-off would be intercepted by existing properties and Alec Robins Road prior to reaching the eastern boundary of the site.

Currently most surface drainage is expected to flow towards the terrace slopes and into Hayes Creek that runs along the western and southern boundaries of the site. At the northern end of the property the slopes fall north towards the highway.

Geotechnical Investigations 3

An engineering geological site appraisal has been undertaken with confirmatory subsurface investigations during August 2021. The following investigations have been completed:

- 14 excavator test pits to depths of up to 4.0 m;
- Scala penetrometer testing at each test pit location to a maximum depth of 2.1 m bgl to assess the relative density of the subsoils;
- 4 Dynamic Probe Heavy (DPH) tests to depths between 7 and 12 m.

Investigation locations are shown on Figure 1, Appendix A.

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 and glacial outwash 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. The site is located on the historic Shotover River Delta.

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. 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 of Queenstown along the west coast of the South Island. There is a high probability that an earthquake with an expected magnitude of over M8 will occur along the Alpine Fault in the next 50 years.

4.2 Stratigraphy

The subsurface soils observed during site investigation typically comprised:

- 0.2 to 0.5 m of Topsoil, overlying;
- 0.3 to 0.7 m of Loess and/or;
- 0.3 to 3.5 m of Alluvial deposits, overlying;

January 2022

GeoSolve ref: 210362



4

Schist bedrock.

Topsoil was observed at the surface of all test pits to depths of between 0.2 and 0.5 m.

Loess was present beneath the topsoil layer in TPs 5 - 10 to depths between 0.3 - 0.7 m. The loess comprised loose, silty fine SAND and firm to stiff, sandy SILT.

Alluvial deposits have been identified at all the test locations. The base of the alluvial deposits were encountered in TP 11 only. These soils generally comprise three distinct individual units and are inferred to be interbedded across the site. The three individual units are:

- Alluvial Silt was observed in TPs 11 to 14. This unit generally consists of firm, SILT.
- Alluvial Sand was the most common of the three deposits and was encountered within TPs 1 to 10. These soils typically comprised loose to medium dense fine SAND with minor to some silt and fine to medium SAND.
- Alluvial Gravel was encountered in TPs 10 to 14 and comprise of loose to medium dense, sandy GRAVEL. This layer is inferred to be encountered in DPH tests 1, 2 and 4 at depths between 5.5 and 8 m.

Schist bedrock was encountered beneath the alluvial deposits within TP 11 only, at a depth of 1.4 m. The depth to schist bedrock is inferred to be present at a depth of 2.3 m within DPH4. The schist bedrock is described as grey, moderately strong, slightly weathered, psammitic SCHIST.

Note, historically farmland areas have isolated pockets of disturbed ground, uncontrolled fill or other non-natural material. These pockets can be many years in age and not discernible until excavations are completed.

Full details of the observed subsurface stratigraphy can be found in the test pit and DPH logs contained in Appendices B and C respectively.

4.3 Groundwater

No groundwater was encountered in any of the test pits or DPH tests (completed to 15 m depth). The regional groundwater level is expected to coincide with the level of Lake Hayes and Hayes Creek, approximately at RL 325 m, and may rise gently in an easterly direction.

Geotechnical Report — Robins Subdivision
Alec Robins Road, Queenstown
Document Set ID: 7359077

Version: 1, Version Date: 15/09/2022

GeoSolve ref: 210362 January 2022



5 Natural Hazards

5.1 Slope Stability

There are no mapped or known slope instability issues in the site area, an non are shown on available local authority hazard maps.

Geomorphological indications of slope instability were observed along the terrace slope present between the western boundary and Hayes Creek. Relatively steep failure scarps were noted in several locations, approximately as shown on Figure 1, Appendix A. The features were confined to the slope face and immediate crest area.

A detailed assessment on slope stability has been undertaken and the results are presented in Section 6.7 below.

5.2 Seismic

A risk of seismic activity has been identified for the region, as a whole, see Section 4.1 above, and appropriate allowance should be made for seismic loading during detailed design of the proposed buildings, foundations and associated earthworks.

5.3 Liquefaction

Hazard mapping indicates that site is "A Domain and B Domain", as per the Seismic Liquefaction Otago 2019 assessment (GNS Science Consultancy Report 2018/67). Domain B is located around the Creek and lower lying areas and is termed a "liquefaction awareness area", where earthquakes "may possibly cause land damage from liquefaction." Domain A areas are considered to be areas where land damage is unlikely to be caused.

Liquefaction is not considered to be a risk for the development due to the depth to ground water (15 m+) and in southern areas, the shallow depth to rock.

5.4 Other

No other natural hazards have been identified.

January 2022

GeoSolve ref: 210362



Engineering Considerations 6

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.

The actual sub-surface may show some variation and all design recommendations contained in this report are subject to confirmation by inspection during construction.

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 development.

Table 6.1 Recommended Geotechnical Design Parameters

Unit	Thickness (m)	Bulk Density γ (kN/m³)	Effective Cohesion c´ (kPa)	Effective Friction \$\phi\$ (deg)	Elastic Modulus E (kPa)	Poissons Ratio V
Topsoil	0.2 to 0.5	17	0	28	5,000	0.3
Loess (firm to stiff SILT with trace to minor sand)	0.5 to 1.3	18	0	30	5,000	0.3
Alluvial Silt (firm, SILT)		18	0	30	5,000-7,500	0.3
Alluvial Sand (loose to medium dense, fine SAND)	Unknown	18	0	31	10,000	0.3
Alluvial Gravel (loose to medium dense, sandy GRAVEL)		19	0	34	15,000- 20,000	0.3
Schist Bedrock	Unproven	26	50	30	100,000	0.25

6.3 Site Preparation

During the earthworks operations, all topsoil, organic matter, and other unsuitable materials should be removed from the construction areas in accordance with engineering best practice.

Geotechnical Report – Robins Subdivision Alec Robins Road, Queenstown Document Set ID: 7359077

GeoSolve ref: 210362 January 2022



7

Owing to the moderately erodible nature of some of the soils present across the site, sediment control measures should be instigated during earthworks construction.

Exposure to the elements should be limited for all soils. Excavations in soils should be left proud of the finished subgrade by 200 to 300 mm if a delay prior to construction is expected. The final footing excavation should be performed immediately prior to construction.

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

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 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

6.4.1 General

No earthworks plans have been provided. However, earthworks are expected to be completed to establish level building platforms, roads and associated services at the site and manage stormwater run-off. We recommend once earthworks plans are available they are subject to geotechnical review.

Recommendations for temporary and permanent soil batter slope angles are described below in Table 6.2 for excavations that are 4 m or less in height. Slopes that are required to be steeper or deeper than those described below should be structurally retained or subject to specific geotechnical design.

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.

No seepages were encountered during test pitting. A geotechnical practitioner should inspect any seepage should it be encountered during construction.

6.4.2 Cut Slopes in Soil Materials

Table 6.2 summarises the recommended batter angles for temporary and permanent soil slopes.

January 2022

GeoSolve ref: 210362



Table 6.2 Recommended Batter for Cuts in Soils

Material Type	Recommended I Angles for <u>Tempor</u> 3 m (horizontal	ary Cuts Less than	Recommended Maximum Batter for <u>Permanent</u> Cuts Less than 3 m High in Dry Ground
	Dry Ground	Wet Ground	(horizontal to vertical)
Topsoil, loess, alluvial silt and alluvial sand	2.0H:1.0V	3.0H:1.0V	3.0H:1.0V
Alluvial gravel	1.5H:1.0V	2.5H:1.0V	2.5H: 1.0V

6.5 **Engineered Fill Slopes**

All engineered fills should be placed and compacted in accordance with the recommendations of NZS4431: 1989 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.

All un-retained fill slopes which are less than 2 m in height should be constructed with a batter slope angle of 2.0H: 1.0V (horizontal to vertical) or flatter and be benched into sloping ground. If the slopes directly support a building then preliminary batter angles of 3.0H: 1.0V are recommended with an appropriate building set-back, however, this should be assessed on a case by case basis at the detailed design stage.

Geogrid reinforced slopes or retaining can be considered if engineered fill batters need to be steeper than the above guidelines.

6.6 Ground Retention

No known retaining walls are present at the site, however, if required, the following recommendations below are provided.

All retaining walls should be designed by a Chartered Professional Engineer 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, traffic, buildings and seismic forces).

All temporary slopes for retaining wall construction should be battered in accordance with Table 6.2.

Groundwater was not identified in the test pits but 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;

January 2022

GeoSolve ref: 210362



- A heavy duty non-woven geotextile cloth, such as Bidim A14, should be installed 0 between the natural ground surface and the free draining granular material to prevent siltation and blockage of the drainage media;
- A heavy-duty (TNZ F/2 Class 500) perforated pipe should be installed within the 0 drainage material at the base of all retaining structures to stop the risk of excessive groundwater pressures developing. This drainage pipe should be connected to the permanent piped storm water system;
- Comprehensive waterproofing measures should be provided to the back face of 0 all basement retaining walls to minimise groundwater seepage into the finished buildings.

Horizontal drains should be installed to collect and control groundwater flows if excessive groundwater seepages are encountered during construction, but this is considered unlikely. The location and design of all horizontal drains should be confirmed on site by a Geotechnical Engineer or Engineering Geologist. The outlet of all sub-soil or horizontal drains should be connected to the permanent piped storm water system.

6.7 Slope Stability Review

Residential lots will be located close to the crest of terrace slopes that are present along the western boundary of the proposed subdivision. The slopes are generally 10 to 25 m high and slope at angles between 30 and 55°. Crescent shaped slope failures are present in some areas of the slope, see Photo 2 below. The locations of the slope failures are shown on Figure 1, Appendix A.



Photograph 2 – Site photo showing slope failure present on the steeply dipping western boundary slope.

January 2022

GeoSolve ref: 210362



A slope stability assessment using the software package Slope/W has been completed by GeoSolve in representative areas to determine appropriate building set-back guidelines for foundations constructed in accordance with NZS3604:2011.

Table 6.3 below presents the results of the assessments based on the proposed building platform locations provided by Aurum Survey Consultants which are also presented on Figure 1, Appendix A.

Table 6.3 – Slope/W analysis results based on proposed building platform locations

Loading Case	Minimum Factor of safety Requirements	Results
Static	1.5	Factor of safety satisfied at
Seismic Serviceability Limit State (SLS)	1.2	proposed building platform setbacks from slope crest
Seismic Ultimate Limit State (ULS)	No target FOS - estimated lateral stretch to be restricted to less than 20 mm	Lateral stretch predicted to be less than 30 mm for the proposed building platform setbacks

The results indicate that the slope crest setback distances for the proposed building platforms meet the requirements of the building code with respect to the static and SLS cases. For the ULS case up to 30 mm of displacement is calculated to occur within the building platforms.

To address lateral stretch foundations will require to be specifically designed by a suitably qualified and experienced structural engineer. TC2 style foundations are expected to be applicable in these areas. If desired specific investigations and slope stability assessments could be undertaken by individual lot owners. Further assessment can also be completed to refine the above recommendations as part of the Geotechnical Completion report which will provide final lot specific requirements.

6.8 **Foundations**

Preliminary review of future building foundations are provided below. Final foundation recommendations for individual building lots will be provided in the Geotechnical Completion Report. Due to the soil materials present at typical shallow foundation depths Specific Engineering Design (SED) is expected to be required for most lots.

Topsoil and loess deposits are up to 1.0 m depth, and beneath these materials alluvial silt and sand soils are expected to be present at typical shallow foundation depths.

6.8.1 Shallow Foundations on Loess, Alluvial Silt and Alluvial Sand

The loess and alluvial silt/sand which underlie most of the site at typical shallow foundation depths do not provide "good ground" in accordance with NZS3604. Specific engineered design (SED) will be required for these soil types to confirm the most appropriate foundation solution. Standard engineering solutions are available and comprise:

January 2022

GeoSolve ref: 210362



- Increased footing widths to allow for lower strength bearing capacity and/or,
- Improving bearing capacity by excavating materials from beneath foundation areas and replacing with engineered fill compacted in accordance with NZS4431 Earth Fill for Residential Construction.

6.8.1 Shallow Foundations on Alluvial Gravel and Schist Bedrock

These materials are assessed to comprise good ground, as outlined in NZS3604. Note, where encountered (TPs 10 to 14) these materials are frequently at depths greater than 1.0 m and so directly bearing on them with a standard foundation excavation will not be practical in most cases.

6.9 Site Subsoil Category

For detailed design purposes, it is recommended the magnitude of seismic acceleration be estimated in accordance with the recommendations provided in NZS 1170.5:2004.

Areas in the South of the site, 18 and 19 adjacent to TP 11 are Class B (rock site) in accordance with NZS 1170.5:2004 seismic provisions. The remainder of the site is considered likely to be Class C (shallow soil site), however class D conditions may be present in some locations.

6.10 Pavements

Several roads are included in the scheme. Soils in road subgrade areas are expected to comprise SILT (loess) and silty SAND & sandy SILT (deltaic silt/sand) materials. A 3.5% CBR will be available in these materials, however, careful construction methods, testing, staging due to weather and additional undercut as and when needed will be required if this value is used for design.

A reduction in design CBR to 2% will occur in if the silt and sand are subject to saturation, frost or disturbance (trafficking) resulting in loss of strength. Using a 2% CBR value will allow for less issues during construction and is recommended as a more robust design value.

The subgrade materials are not free draining and maintaining a dry subgrade will be required to ensure CBR values remain as per the design value.

Care should be taken to stage all pavement construction to enable undisturbed silt materials to be protected as soon as practical following excavation to subgrade levels. A geotextile separation cloth between the loess and deltaic silt/sand subgrade and the overlying granular pavement layers is recommended as part of future detailed pavement design.

January 2022

GeoSolve ref: 210362



7 Neighbouring Structures/Hazards

Distances to adjoining structures: The site is bounded by SH6 to the north, the Lake Hayes subdivision to the east and rural residential properties to the west accessed via Alec Robins Road. No adverse geotechnical implications apply for neighbouring developments during construction provided appropriate measures are taken during the construction of the proposed development.

Aquifers: The regional ground water table is expected to lie at significant depth beneath the proposed foundation level and no aquifer resource is expected to be adversely affected by the proposed development. Note, the site is located above the Wakatipu aquifer and ORC consent will be required for any drilling/boring undertaken, e.g. for geothermal heating.

Erosion and Sediment Control: The site has potential to generate silt runoff and this would naturally drain downslope. Effective systems for erosion control are runoff diversion drains and contour drains, while for sediment control, options are earth bunds, silt fences, vegetation buffer strips and sediment ponds. Only the least amount of subsoil should be exposed at any stage and surfacing established as soon as practical. Environmental control for constructions should be in accordance with the QLDC EMP guidelines.

Noise: Standard excavation and compaction plant will be required. QLDC requirements should be met in regard to this issue.

Dust: The soil materials at the site have potential to generate dust. Regular dampening of soil materials with sprinklers should be effective if required.

Vibration: No vibration induced settlement is expected in these soils.

Version: 1, Version Date: 15/09/2022

GeoSolve ref: 210362 January 2022



8 Conclusions and Recommendations

- The stratigraphy across the site typically comprises topsoil, loess overlying alluvial deposits, overlying schist bedrock;
- No groundwater was observed during site investigations. The regional groundwater table is expected to coincide with Lake Hayes at approximately RL 325 m;
- Recommendations for temporary and permanent batter slope angles are described in Section 6.4;
- Soil materials across the site at typical foundation depths are not "Good Ground" as defined in NZS 3604. Recommendations for shallow foundations are provided in Section 6.8.
- For detailed design purposes, it is recommended the magnitude of seismic acceleration be estimated in accordance with recommendations of NZS 1170.5:2004 using Class B subsoil conditions for Lots 18 and 19 and Class C for Lots 1 to 17 and 20:
- The potential for slope instability affecting residential lots located at the crest of the slope along the western boundary of the sub-division has been assessed. Further details are presented in Section 6.7. If desired, specific investigations and slope stability assessments could be undertaken by individual lot owners to reduce building setback distances;
- Pavement and access road subgrades are expected to comprise loess and alluvial silt/sand. CBR values of 2 to 3.5% are provided for pavement design. 2% is recommended to address the materials susceptibility to weakening during construction:
- Construction works should be staged accordingly to ensure the soil materials are covered/protected shortly as soon as practical following exposure. Undercutting and/or protection with a granular fill layer may be appropriate in some cases;
- Following completion of the sub-division earthworks a geotechnical completion report should be provided as per QLDC requirements.
- Earthworks guidance is provided in this report, however, it is recommended that once earthworks plans are finalised they be reviewed by the geotechnical engineer.

January 2022

GeoSolve ref: 210362



9 Applicability

This report has been prepared for the benefit of the Hays Creek Trust 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.

It is important that we be contacted if there is any variation in subsoil conditions from those described in this report.

Report prepared by:

Reviewed for GeoSolve Ltd by:

Josh Moir Paul Faulkner

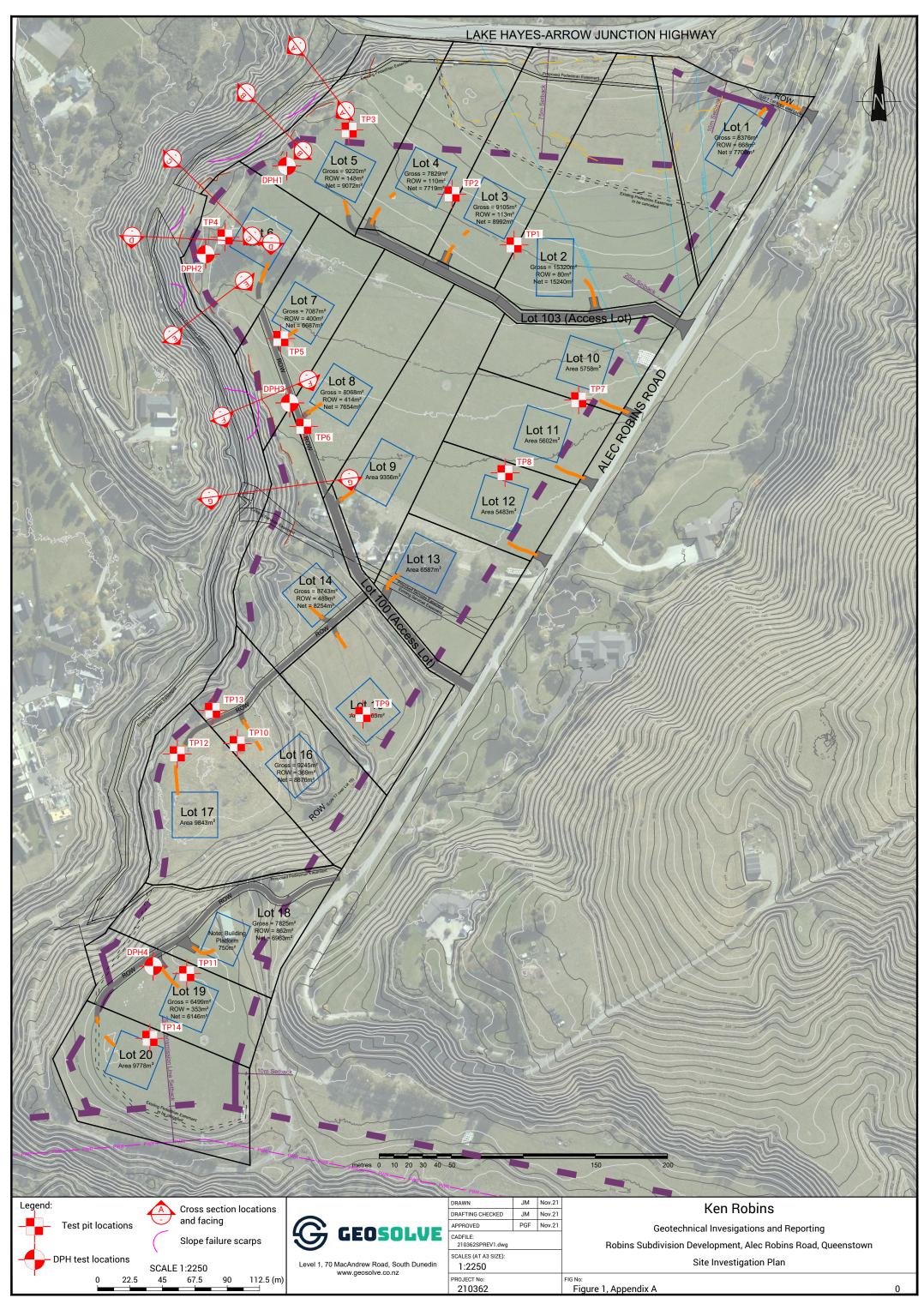
Engineering Geologist Senior Engineering Geologist

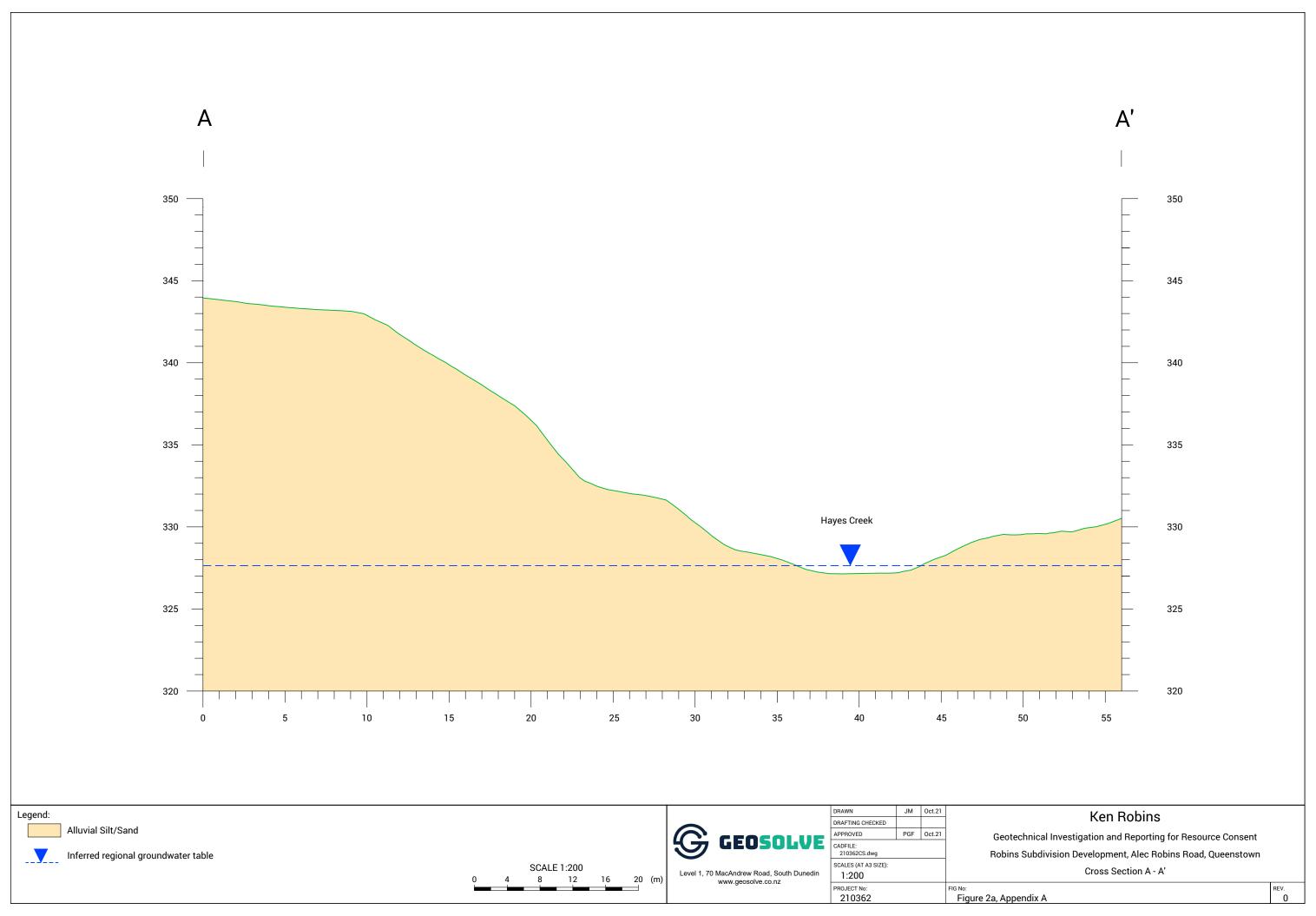
Version: 1, Version Date: 15/09/2022

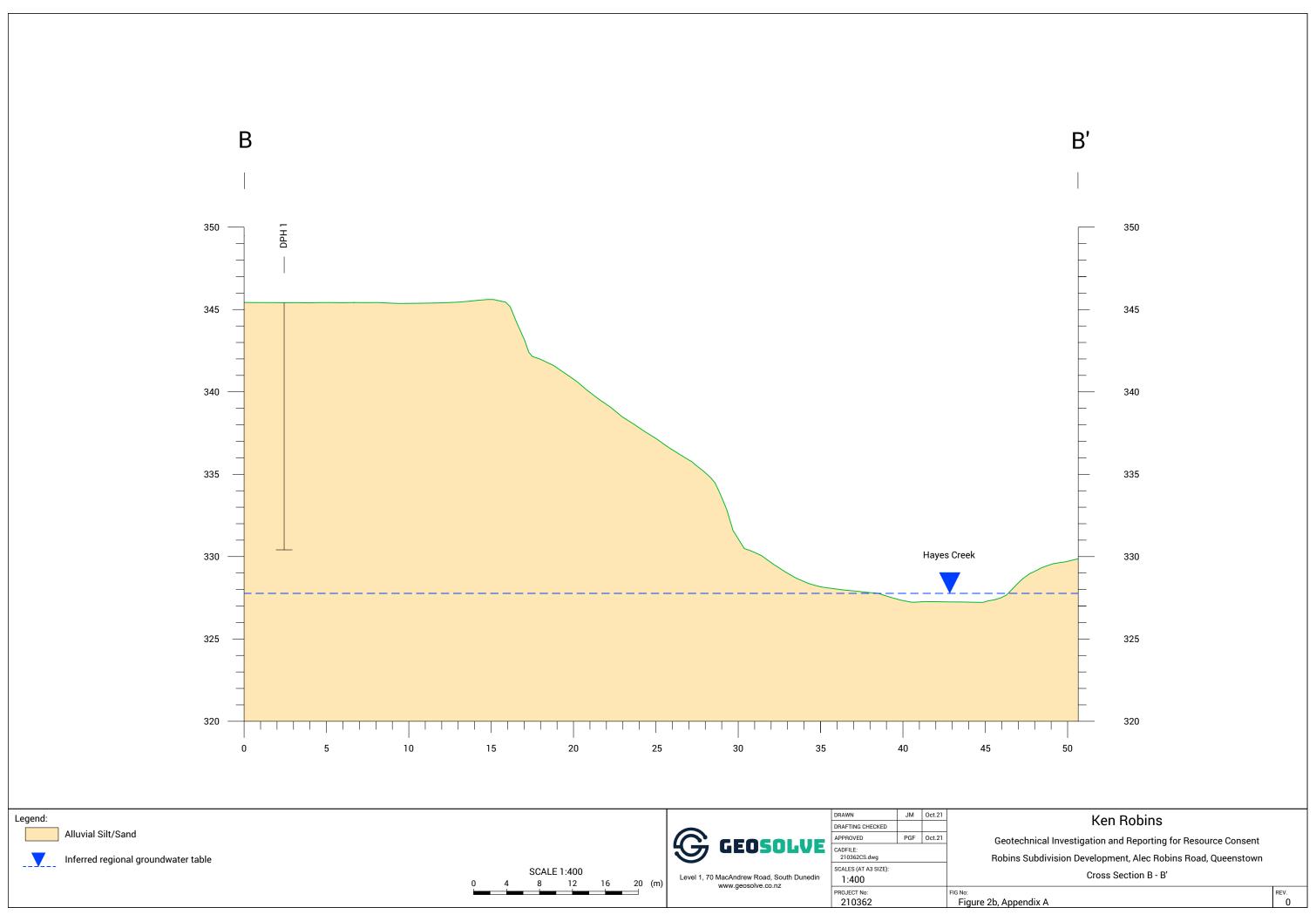
GeoSolve ref: 210362 January 2022

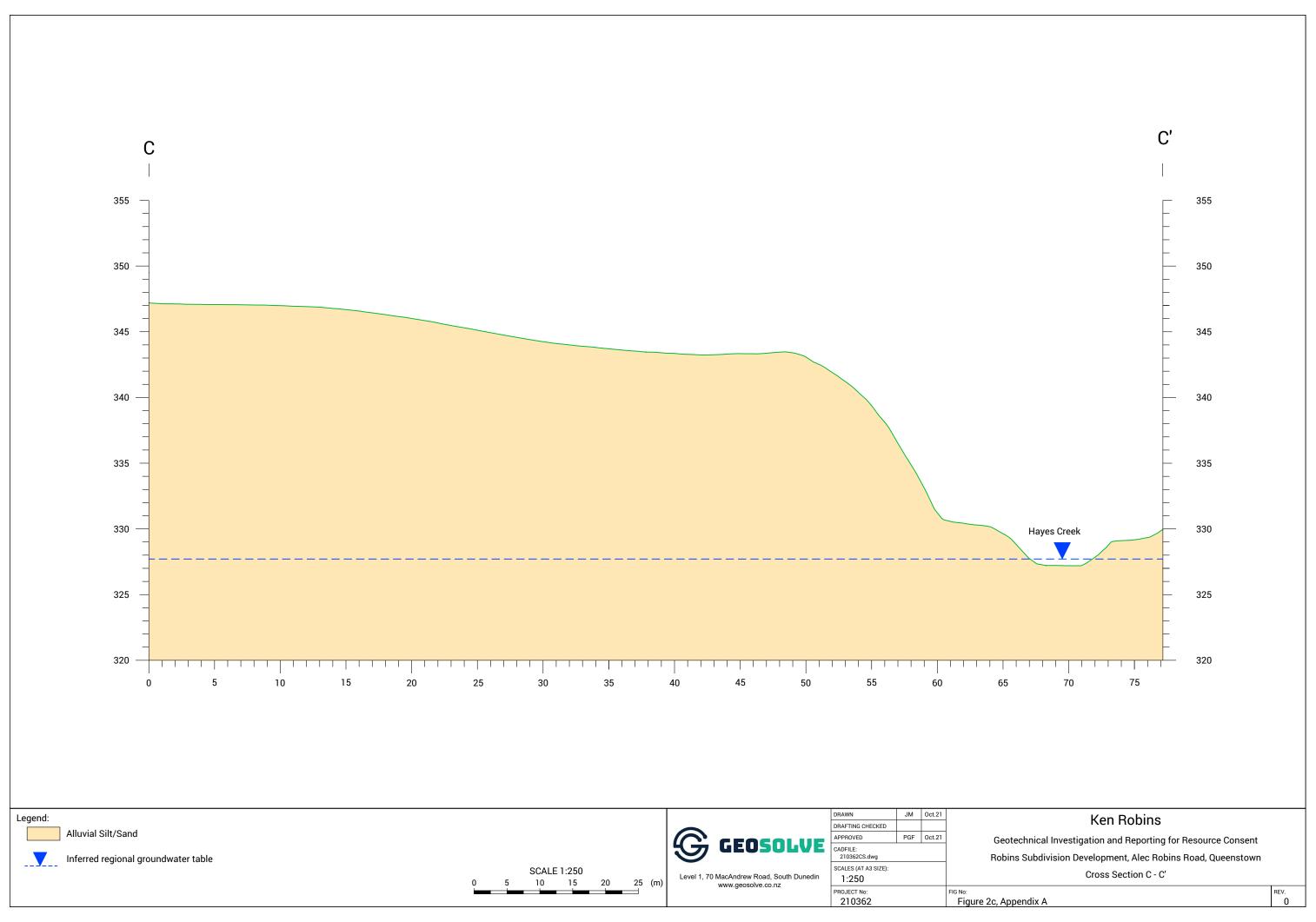
Appendix A: Site Plan and Cross Sections

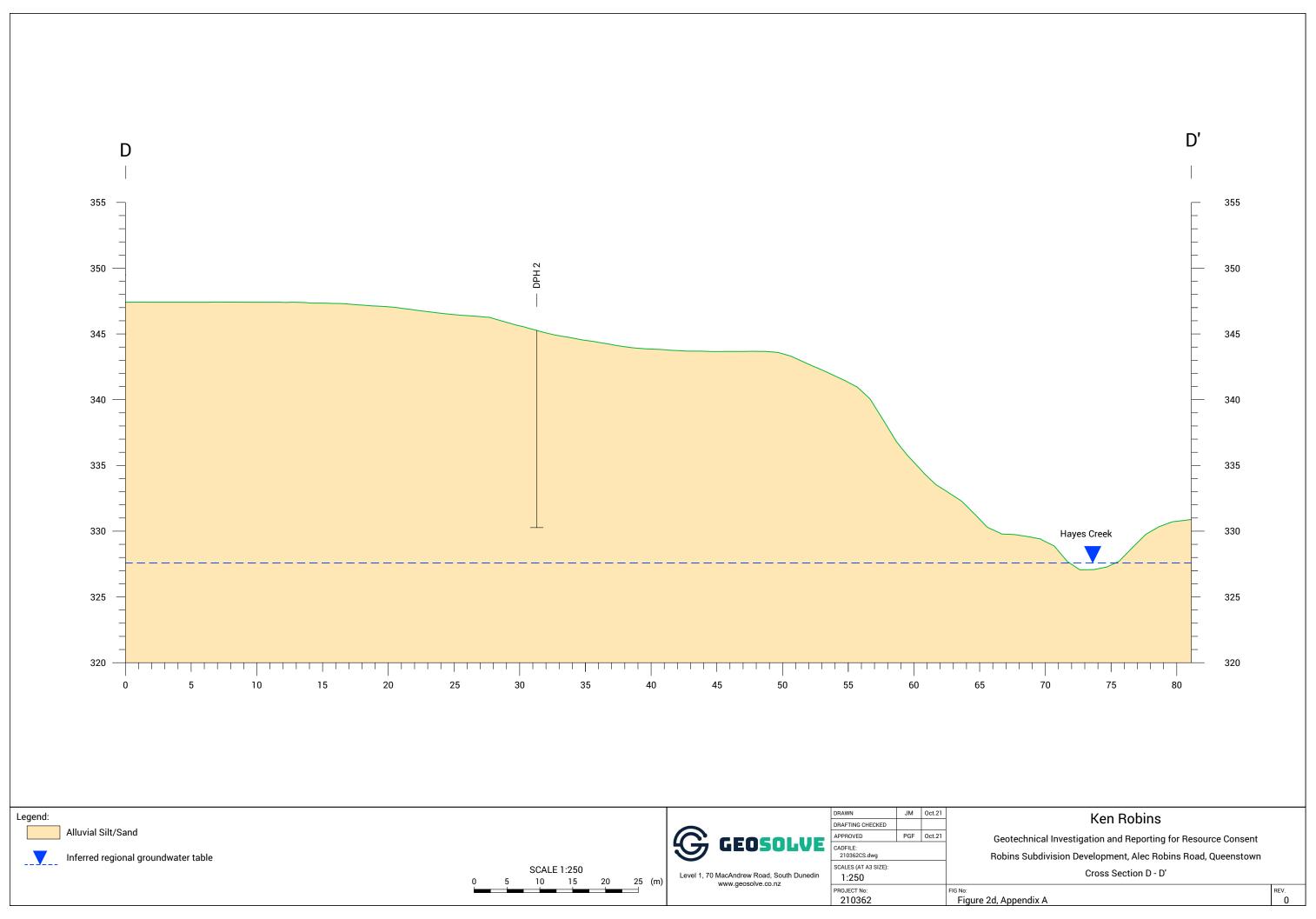
Document Set ID: 7359077 Version: 1, Version Date: 15/09/2022

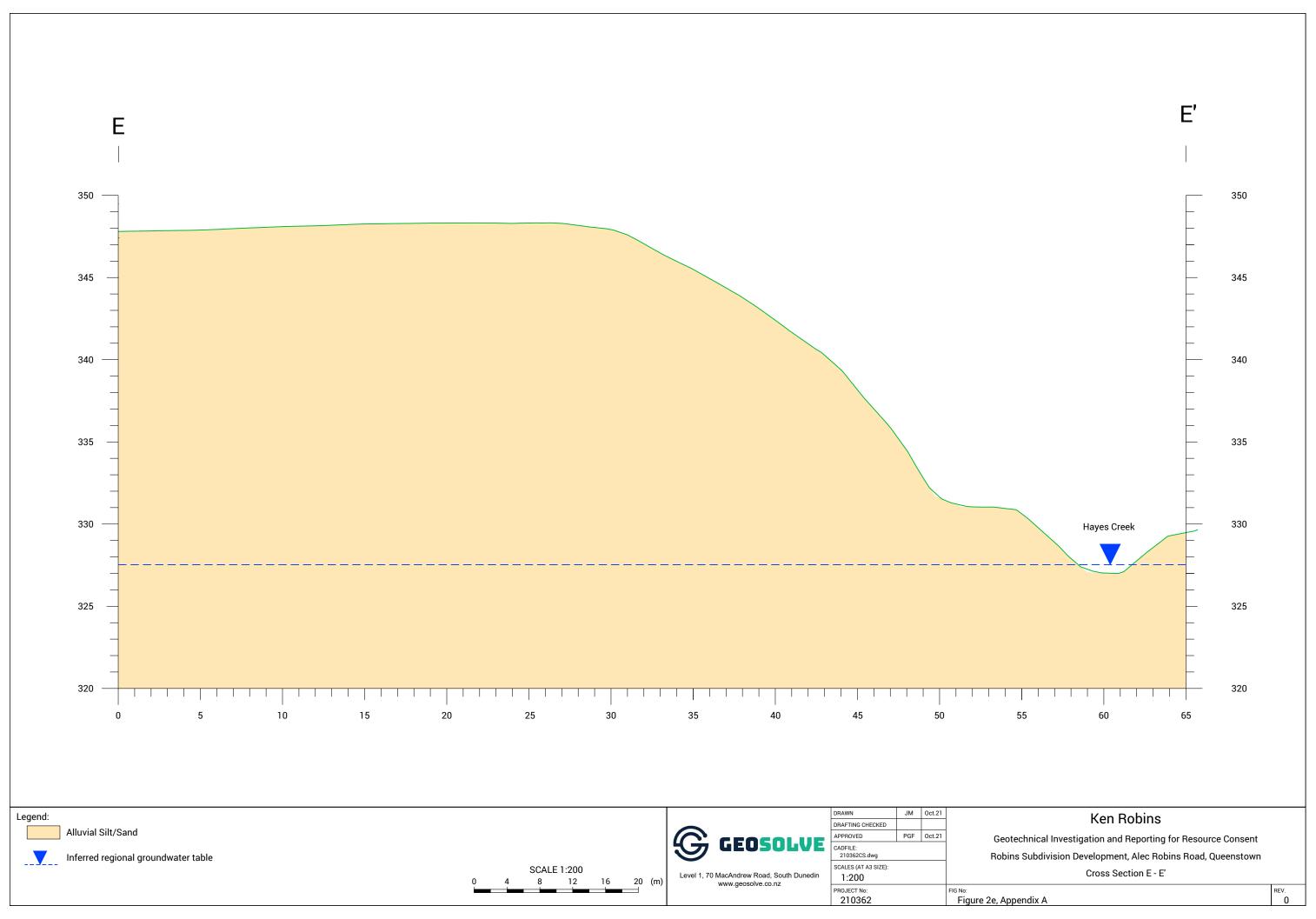


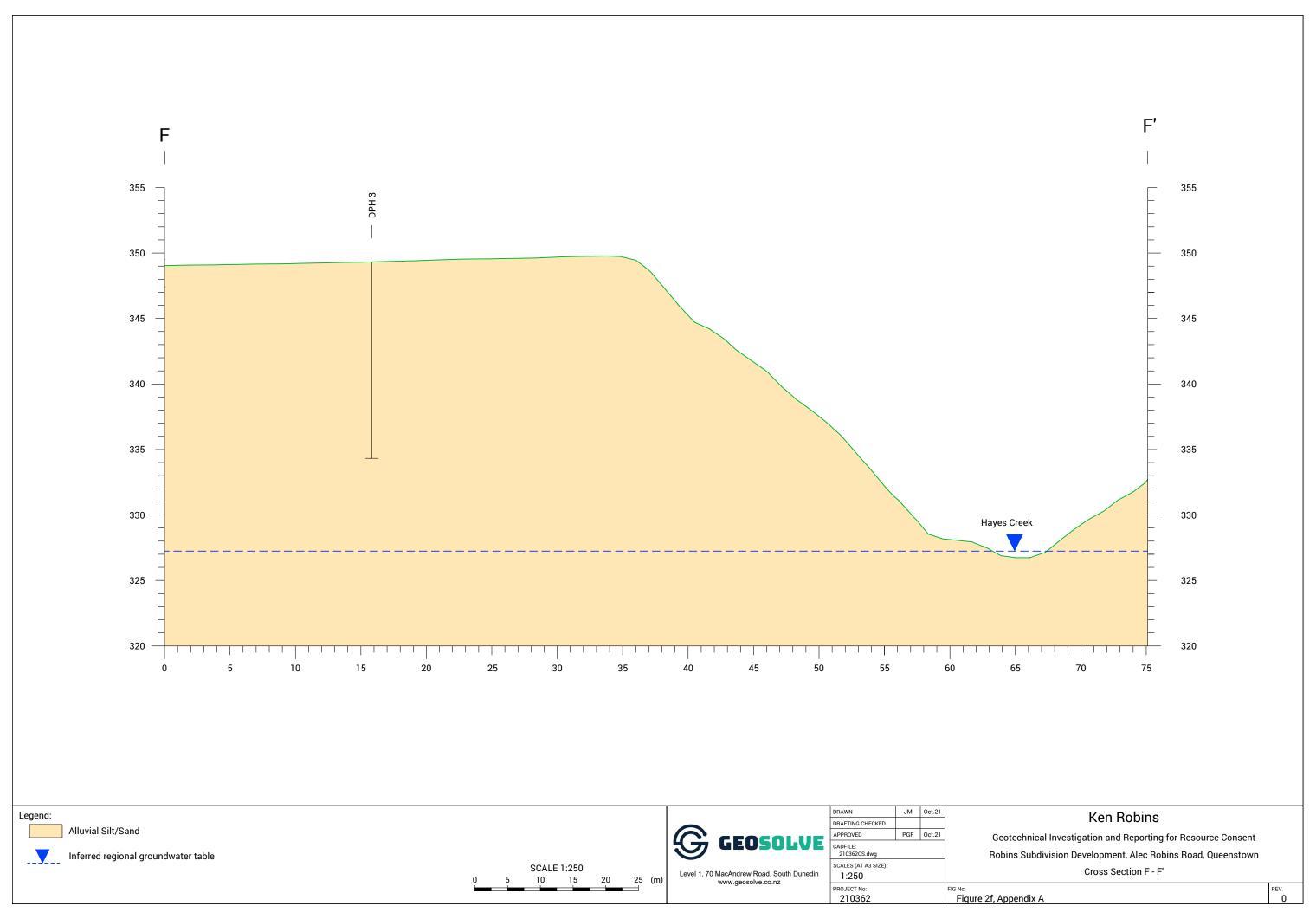


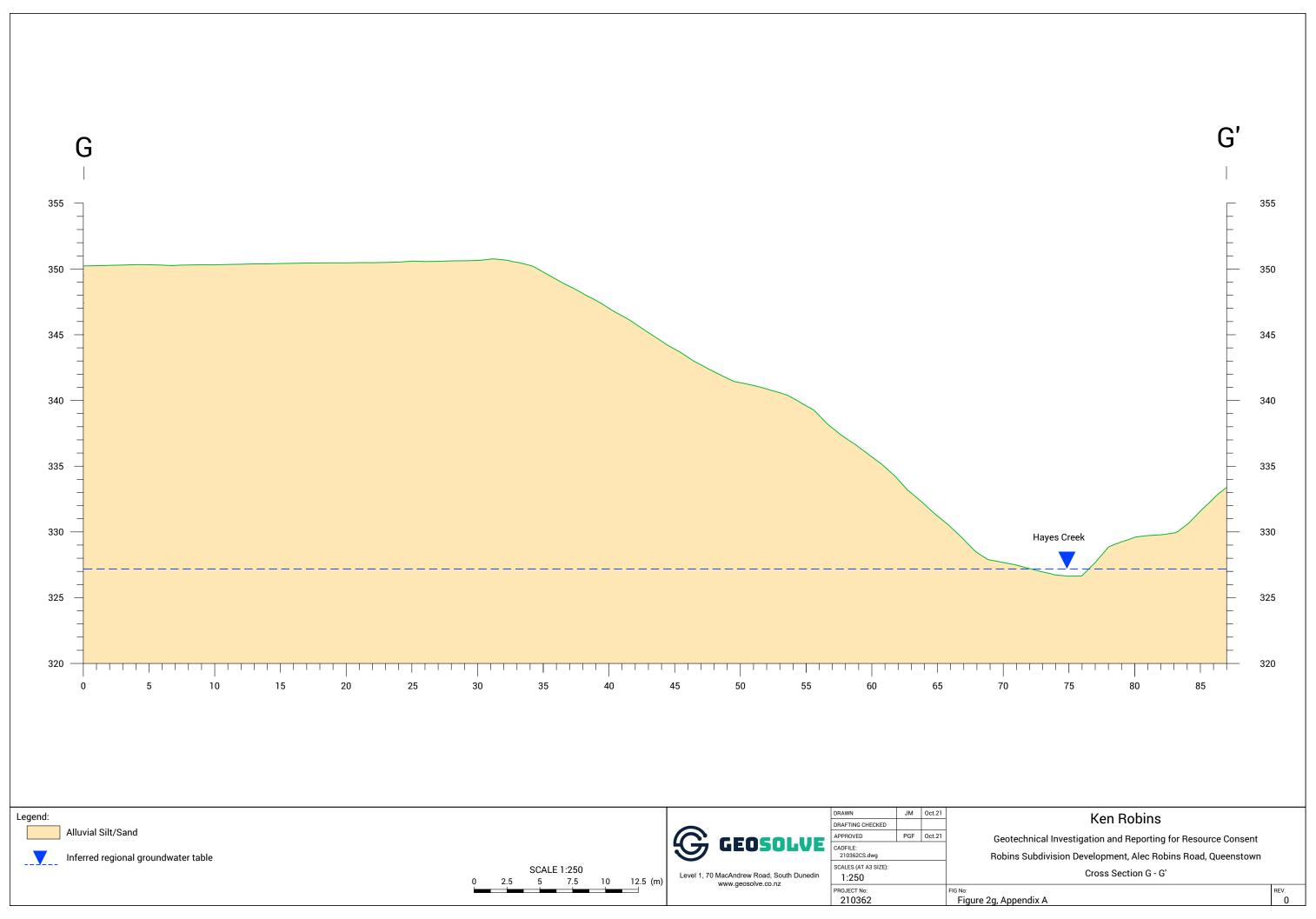












Appendix B: Investigation Data

Document Set ID: 7359077 Version: 1, Version Date: 15/09/2022



EXCAVATION NUMBER:

TP₁

CHECKED DATE: 22/09/2021

1 of 1

SHEET:

_														
L	PROJECT: Alec Robins Rd, Queenstown LOCATION: See Site Plan INCLINATION: Vertical EASTING: EQUIPMENT: 14T wheeled excess							JOB	NUME	BER:	 210	362		
Ļ	LOCATION:	ASTING: EQUIPMENT: 14T wheeled excava												
L	EASTING:				14T wheeled excavato		OPERA		Scot					
L	NORTHING:						COMPA		+			vorks		
L	ELEVATION:			EXCAV. DATUM:	Existing ground level	_	OLE STA		+					
L	METHOD:	Aeria	l Photography	ACCURACY:	± 5 m	Н	OLE FIN	IISHED:	03/0	8/2	021			
	Soil / Rock Ty	pe		Description			Graph Log	_ Dep	Ground			Penetr per 10	00mn	
H	TOPSOIL		Organic SILT; dark bro	own. Soft; moist; a	trace of rootlets.	0m	1	₩ _0.0		-				-
Н							\mathbb{L}^{\times}	√ -0.2		-				-
I						0.4m	X	0.3						
H	ALLUVIAL SAI	ND			ey mottled white, thin o medium dense; moist;			0.5			+			-
			lime rich. Light grey n					- 0.6 - 0.7			1			
Н								0.8			-H			-
H								0.9						1
П								1.0 1.1						
Н								1.2	-	-				-
H								1.3 1.4						
Н								— 1.5			\rangle			
Н								1.6			$\left(\cdot \right)$			-
l								1.7 1.8						
Ц								1.0						
								2.0	4		1			-
H								2.1						1
								— 2.2 — 2.3						
Н							-04874- 59674	-2.4						-
Н								2.5	┨					-
Ħ								2.6 2.7						
Ц								2.8						
Н								2.9	4					-
H							3.0							
Ø							-3.1 -3.2							
Н	-							3.3	PAG		-			-
								3.4	l S		\dashv			+
	3.6m							- 3.5 3.6	\neg					
Г	1	Total Excavation Depth = 3.6 m					ı	LOGG	,ED 5:	, I	145	S/ IM		
1		l						11111111	.⊢!)K\	,· I	N/IH			

Document Set ID: 7359077 Version: 1, Version Date: 15/09/2022

COMMENT:

Pit walls stable during excavation. .



EXCAVATION NUMBER:

TP 2

22/09/2021

1 of 1

CHECKED DATE: SHEET:

Г	PROJECT:	Δlec	Robins Rd, Queensto	nwn									
	LOCATION:		Site Plan			JOB N	IUMBE	R: 21	0362				
Γ	EASTING:			EQUIPMENT:	14T wheeled excavato	r C	PERA	TOR:	Scott				
Г	NORTHING:			COORD. SYSTEM:		(COMPA	NY:	Monk	Earth	works		
	ELEVATION:			EXCAV. DATUM:	Existing ground level	НС	OLE STA	ARTED:	03/08	3/2021			
	METHOD:	Aeria	l Photography	ACCURACY:	± 5 m	НС	DLE FIN	ISHED:	03/08	3/2021			
	Soil / Rock Ty	pe		Description			Graph Log		Groundwater / Seepage	(Blow	Penetro s per 10	0mm	
П	TOPSOIL		Organic SILT; dark br	own. Soft; moist; a	trace of rootlets.	0m	w,	0.0 -0.1					
Н							×	0.2	-	4			-
H							\~×	- 0.3	1				-
Ҵ						0.5m	X	X 0.4					
H	ALLUVIAL SANI	D		-	vnish grey mottled white,			- 0.6	-				-
H			white lime inclusions	/bands. Loose; mo	oist.	0.8m		— 0.7 –	1 1				-
I	ALLUVIAL SAND)	Fine SAND with mino	r silt; light grey mo	ottled white, white lime	0.0111		0.8					
inclusions/bands. Loose; moist.						1.0	- 1				-		
Н								1.1 -	-				-
Ħ								1.2 - - 1.3 -		1			
Ц								1.4-	4	Δ			
Н						1.6		— 1.5 –	1				-
H	ALLUVIAL SAND)	Fine SAND with a trac	ce of silt; white, wh	nite lime bands. Loose;	1.6m		1.6					1
П			moist.		·			— 1.7 - — 1.8 -]
Н								1.9-	-				-
H								2.0	1				
₽	ALLUVIAL SANI	<u> </u>	Fine SAND with mine	r cilt: arey thin wh	ite lime bands. Loose;	2.15m	300000 300000	-2.1 - -2.2 -]				1
Н	ALLOVIAL SAIN	,	moist; micaceous.	i siit, grey, tiiiii wii	ite iiiile balius. Loose,			2.3	- 1				-
H								2.4	1				1
I								2.5 - 2.6 -]				
Н								2.7	- 1				-
Н								2.8	1 1				-
I								2.9 - - 3.0 -	1				
Н								3.1 -	-				-
								3.2					-
I								3.3	AGE				
H								3.5	SEEPAGE				-
H						3.7m		-3.6 - 3.7	NO S				-
_			Total Excavation Dep	th = 3.7 m		V. 1111							
Γ								LOGG	ED BY:	МВ	S/JM		

Document Set ID: 7359077 Version: 1, Version Date: 15/09/2022

Pit walls stable during excavation. .



EXCAVATION NUMBER:

TP 3

SHEET:

1 of 1

PROJECT: LOCATION:		Robins Rd, Queenst Site Plan	own INCLINATIO	ON: Vertical			JOB N	NUMBER	R: 21036	52	
EASTING:	I	- Tan	1	14T wheeled excavator	. (DPERA	TOD:	Scott			
NORTHING:			EQUIPMENT: COORD. SYSTEM:	141 wheeled excavator	_	COMPA			Earthwoi	rko.	
ELEVATION:			EXCAV. DATUM:	Existing ground level	_	OLE STA		03/08/		κ5	
METHOD:	Δeria	l Photography	ACCURACY:	± 5 m	_	OLE FIN		03/08/			
WETTIOD.	Aciia	T Hotography I	ACCONACT.	1 2 111	110	T	T	1 1	2021		
Soil / Rock Ty	/pe		Description			Graph Log	deQ	Groundwater / Seepage	Scala Per (Blows pe) 5		
TOPSOIL		Organic SILT; dark br rootlets.	own. Very soft to s	soft; moist; a trace of	0m 0.3m	×	0.0 -0.1 -0.2				
ALLUVIAL SAND Fine SAND with minor silt; brown grey, a trace of lime bands. Loose; moist; micaceous. A trace of silt from 1.0 m. ALLUVIAL SAND Fine SAND with a trace of silt; light grey, thin weak lamination loose; moist; micaceous. Slightly iron stained.							-0.30.40.50.60.70.80.91.01.11.21.31.41.51.61.71.81.92.02.12.22.32.42.52.62.72.82				
ALLUVIAL SAND Fine SAND with a trace of silt; light grey, thin weak laminations Loose; moist; micaceous. Slightly iron stained.							- 2.9 - 3.0 - 3.1 - 3.2 - 3.3 -	- - -			
							-3.4 -3.5 -3.6 -3.7 -3.8	l o			
		Total Excavation Dep	oth = 3.8 m						1		
						ļ		ED BY:	MBS/		
COMMENT:	Pit w	alls stable during ex	cavation				CHECKI	ED DATE:	22/09	/2021	



EXCAVATION NUMBER:

TP 4

22/09/2021

1 of 1

CHECKED DATE: SHEET:

PROJECT: LOCATION:	_	Robins Rd, Queensto Site Plan	own INCLINATIO	ON: Vertical			JOB N	NUMBE	R: 210	362	
EASTING:			EQUIPMENT:	14T wheeled excavator	. 0)PERA	TOR:	Scott			
NORTHING:			COORD. SYSTEM:		_	COMPA		Monk	Earthw	orks	
ELEVATION:			EXCAV. DATUM:	Existing ground level	НС	DLE STA	ARTED:	03/08/	2021		
METHOD:	Aeria	l Photography	ACCURACY:	± 5 m	НС	DLE FIN	IISHED:	03/08/	2021		
Soil / Rock Ty	/pe		Description		0m	Graph Log	Dep	Sroundwat		Penetror per 100i	
TOPSOIL		Organic SILT; dark bro	own. Soft; moist; a	trace of rootlets.		\sim	₩ _0.0 -0.1	-			
ALLUVIAL SA	ND	Fine to medium SAND Loose; moist; micace rootlets and roots to	ous. Slightly iron s	It; light grey, massive. stained with a trace of ce of lime from 3.3 m.	0.2m		- 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7	PAGE			
		Total Excavation Dept	th = 3.7 m								
	I					- 1	1000	ED BV:	LMR	2/18/	

Pit walls stable during excavation. .



EXCAVATION NUMBER:

TP 5

CHECKED DATE:

SHEET:

22/09/2021

1 of 1

-	PROJECT:		Robins Rd, Queenst Site Plan	own INCLINATIO	DN: Vertical			JOB N	NUMBE	:R: 210	362		
_	EASTING: EQUIPMENT: 14T wheeled excavator COORD. SYSTEM: EXCAV. DATUM: Existing ground level							TOD:	Castt	<u> </u>			_
_				•	141 wheeled excavato		OPERA COMPA		Scott	Earthw	ıorks		-
-					Existing around level		IOLE STA		03/08		6710		-
_	METHOD:	Aeria	l Photography	ACCURACY:	± 5 m		OLE FIN		03/08				-
	WILTHOD.	7 terra	Ппосодгарну	7.00017.01.	1 2 0 111		T	Т	<u> </u>	72021			뒥
	Soil / Rock Ty	pe		Description		0m	Graph Log	Dep	Groundwater / Seepage	Scala F (Blows	per 100	Omm)	
Н	TOPSOIL		Organic SILT; dark br	own. Soft; moist; a	trace of rootlets.	0.2m		₩ ^{0.0} _	1	1			
厂	LOESS		Silty fine SAND; light	brown, massive. L	oose; moist.	0.2111	Ŷ	0.2					
Н							X	X - 0.4	4	I L			
Н								0.5	1				
╠	ALLUVIAL SA	ND	Fine CAND with a tra	oo of oilt: light gro	r manaiya Langer majati	0.65n	<u>n X</u>	- 0.6 - - 0.7 -					
ш	ALLUVIAL SA	טא	micaceous. Slightly in		, massive. Loose; moist;			0.8	-				
- - - - - - -								0.9	1	-			
Ĭ								— 1.0 - — 1.1 -	1				
H								1.2	4				
Н								1.3	1	1			
Ц								1.4					
								— 1.5 - — 1.6 -					
H								1.7	-				
H								1.8	1				
							-040V- 1270V	- 1.9 - - 2.0 -]				
Н								2.1 -	-				
H								2.2	1				
								- 2.3 - - 2.4 -					
Н								2.5	-				
Н								-2.6	1				
Ŭ								- 2.7 - - 2.8 -					
Ц								2.9	4				
Н								3.0	-				
H								3.1 -	1				
П								-3.2 - -3.3 -					
H								3.4					
H								3.5					
								-3.6 - -3.7 -	AGE				
								3.8	SEEPAGE			_	
Н						4m		- 3.9 - 4.0	NO S				
_			Total Excavation Dep	th = 4.0 m									
								LOGG	ED BY:	MBS	S/JM		

Document Set ID: 7359077 Version: 1, Version Date: 15/09/2022

Pit walls stable during excavation. .



EXCAVATION NUMBER:

TP 6

CHECKED DATE: 22/09/2021

1 of 1

SHEET:

								JOB	NUMBE	R: 21	0362		
Γ				<u>_</u>	14T wheeled excavator	. T	OPERA	TOR.	Scott				_
F	NORTHING:			COORD. SYSTEM:	141 Wheeled excavator	+	COMPA		Monk	Farth	works		
H	ELEVATION:			EXCAV. DATUM:	Existing ground level	⊢	OLE ST		03/08				
r	METHOD:	Aeria	l Photography	ACCURACY:	± 5 m		IOLE FIN		03/08				
	Soil / Rock Ty	pe		Description			Graph Log		sroundwat	(Blow	Penetr vs per 10	00mm	
Н	TOPSOIL		Organic SILT; dark bro	own. Soft; moist; a	trace of rootlets.	0m	-	₩ _0.0	4	1			
H						0.3m		√ -0.2	1	1			
I	LOESS		Silty fine SAND; brow	n grey, massive. L			X	0.3]	\perp			
							×	-0.5 -0.6 -0.7	-				
					0.9m	X	0.8		7				
	ALLUVIAL SAI	ND	Loose; moist; sand be	ecomes fine from :		3.5m			SEEPAGE				
Г			Total Excavation Dept	th = 3.5 m			ı	1000	ED DV	1,45	0/11/		_
1								LUGG	ED BY:	JMB	S/JM		

Pit walls stable during excavation. .



EXCAVATION NUMBER:

CHECKED DATE: 22/09/2021

1 of 1

SHEET:

TP 7

L	PROJECT:		Robins Rd, Queenst				JOB N	IUMBEF	R: 210	362		
Ļ	LOCATION:	See S	Site Plan	INCLINATIO						<u> </u>		
L	EASTING:			EQUIPMENT:	14T wheeled excavator	+	PERAT		Scott			
L	NORTHING:			COORD. SYSTEM:		-	OMPA		Monk E		orks/	
L	ELEVATION:			EXCAV. DATUM:	Existing ground level	+			03/08/			
L	METHOD:	Aeria	l Photography	ACCURACY:	± 5 m	HOL	E FINI	ISHED:	03/08/	2021		
	Soil / Rock Ty	pe		Description			Graphi Log	Dep	Groundwater / Seepage	(Blows	Penetro s per 100	0mm)
Н	TOPSOIL		Organic SILT; dark bro	own. Soft; moist; a	trace of rootlets.	n	\ /		1	1		
H					0.	3m \	$\sqrt{}$	0.2	1			
H	LOESS		Silty fine SAND; light	grey brown, massi			X	0.3]			
Н						Š	× >	0.5	1 1	-	-	
l						:	×	0.6 -	1			
Н	ALLUVIAL SAI		Fine SAND with mino			8m		0.8	4			
			micaceous. Slightly in		e of silt from 1.3 m.	6m			PAGE			
_			Total Excavation Dep	th = 3.6 m						1.		
١								LOGGI	ED BY:	MBS	S/JM	

Pit walls stable during excavation. .



EXCAVATION NUMBER:

TP 8

CHECKED DATE: 22/09/2021

1 of 1

SHEET:

	ROJECT: CATION:		Robins Rd, Queensto Site Plan	own INCLINATIO	ON: Vertical			JOB N	NUMBE	ER: 21)362		
E/	ASTING:	<u> </u>		EQUIPMENT:	14T wheeled excavator	r (OPERA	TOR:	Scott	•			_
	RTHING:			COORD. SYSTEM:		_	COMPA		-	Earth	works		
ELE	EVATION:			EXCAV. DATUM:	Existing ground level	Н	OLE STA	ARTED:	03/08	3/2021			
М	ETHOD:	Aeria	l Photography	ACCURACY:	± 5 m	Н	OLE FIN	ISHED:	03/08	3/2021			
S	oil / Rock Ty	/pe		Description			Graph Log		Groundwater / Seepage	(Blow	Penetro s per 10 5 10	0mm	
Т	OPSOIL		Organic SILT; dark bro	own. Soft; moist; a	trace of rootlets.	0m	1 🗤	₩ _0.0 _0.1		-			
+						0.3m	lw [×] ,	-0.2	1 1	-			-
L	.OESS		Silty fine SAND; light	grey brown, massi	ive. Loose; moist.	0.01	X	0.3		1			
4							X X	0.5	-	+			-
							×	0.6		\rightarrow			
								0.7]				
H						1m	X	X _ 0.9 -	-	<u> </u>			-
- - - - - - -	ILLUVIAL SA		slightly iron stained.	e of only light groy	, massive. Loose; moist;			-1.11.21.31.41.51.61.71.81.9-	- - - - -				-
								2.1 -	1				-
								-2.2 - -2.3 -					
								2.4					-
								- 2.5 - - 2.6 -					
								2.7					-
H								2.8					-
								-2.9 - -3.0 -					
H								3.1	┨ ╚ ┣				-
								-3.2 - -3.3 -	1 🖭 1				
H								3.4	NO SE				-
Ц			I Total Excavation Dept	th = 3.5 m		3.5m	(2074)	3.5	<u> </u>				
			·					LOGG	ED BY:	МВ	S/JM		

COMMENT:

Pit walls stable during excavation. .



EXCAVATION NUMBER:

TP 9

CHECKED DATE: 22/09/2021

1 of 1

SHEET:

	PROJECT: Alec Robins Rd, Queenstown LOCATION: See Site Plan INCLINATION: Vertical EASTING: EQUIPMENT: 14T wheeled expressions and the second systems: COORD. SYSTEM:							JOB N	IUMBEI	R: 210	362		
	EASTING:			EQUIPMENT:	14T wheeled excavato	r ()PERA	TOR:	Scott				
							COMPA		Monk I	Earthw	orks		
l	ELEVATION:			EXCAV. DATUM:	Existing ground level	Н	DLE STA	ARTED:	03/08/	2021			
	METHOD:	Aeria	l Photography	ACCURACY:	± 5 m	Н	DLE FIN	ISHED:	03/08/	2021			
	Soil / Rock Ty	pe		Description			Graph Log	Dep	sroundwat		Penetroi per 100)mm	
	TOPSOIL		Organic SILT; dark bro	own. Soft; moist; a	trace of rootlets.	0m 0.3m	w '	0.0 -0.1 -0.2	-	Į į			-
	LOESS		Sandy SILT; brown gre	ey, massive. Firm	to stiff; moist; sand, fine.	0.6m	×	0.3-					-
	ALLUVIAL SAND Fine SAND with a trace of silt; light grey, weak sub-horizontal laminations. Loose; moist.					3.5m			PAGE				
_			Total Excavation Dept	n = 3.5 m				1000		1			
		1						TOGGI	ED BY:	TMBS	i/JM		

COMMENT:

Pit walls stable during excavation. .



EXCAVATION NUMBER:

TP 10

PROJECT:	Alec Robins Rd, Queenstown						JOB NUMBER		210362		
LOCATION:	See S	See Site Plan INCLINATION: Vertical						<u> </u>			
EASTING:			EQUIPMENT:	14T wheeled excavator	_	OPERATOR:		Scott			
NORTHING:			COORD. SYSTEM:		_	COMPANY:		Monk Earthworks			
ELEVATION:			EXCAV. DATUM:	Existing ground level		OLE STARTED:					
METHOD:	Aerial Photography		ACCURACY:	± 5 m	Н	DLE FIN	ISHED:	03/08/2021			
Soil / Rock Ty	rpe		Description			Graph Log		1 = 1	cala Pene (Blows per 5	100mi	
TOPSOIL		Organic SILT; dark bro	own. Soft; moist; a	trace of rootlets.	0m	w _X	₩ 0.0_				
H		0.3m					0.2	1 -			-
LOESS		Sandy SILT; grey brov	vn, massive. Firm	to stiff; moist; sand, fine.		X	0.3 - 0.4		Į .		
H		A trace of rootlets.				X	0.5	- -	$\rightarrow \vdash$		_
H						$ ^{\sim}$	0.6-	1 -	-		
ALLUVIAL SA	ND	Fine CAND with a tree	o of oilt: light grou	v oub horizontal	0.75m	33000	0.7 -		7		
H ALLOVIAL SA	ND	Fine SAND with a trace of silt; light grey, sub-horizontal laminations. Loose; moist; micaceous.					0.9	4			_
H		,	,				1.0	1			-
ALLUVIAL SA		Fine to coarse SAND grey, bedded. Loose to medium. Fine SAND with some	o medium dense; I		1.15m		-1.11.21.31.41.51.61.71.81.9 -				
		Loose to medium dense; moist; micaceous.					-2.0 - -2.1 - -2.2 -				
ALLUVIAL GRAVEL		Sandy fine to coarse (bedded. Loose to med gravel, subrounded to	lium dense; moist subangular.	ce of silt; light grey, ; sand, fine to medium;	3.5m		23 - 24 - 25 - 26 - 27 - 28 - 29 - 30 - 31 - 32 - 33 - 34 - 3.5	NO SEEPAGE			
		TOTAL EXCAVATION DEP	3.3 111				1000	ED BV:	MRC/ IN	1	
COMMENT:	Di+	Dit wells collegeing in grovel levers				}		ED BY: ED DATE:	MBS/JN 22/09/2		-
CONTINENT.		Pit walls collapsing in gravel layers.						EET:	1 of 1	υ∠I	
	L						3111	<u></u>	1 01 1		



EXCAVATION NUMBER:

TP 11

PROJECT:	Alec	Alec Robins Rd, Queenstown						II INADEE	0. 010262	
LOCATION:	See S	Site Plan	INCLINATION	TION: Vertical			JOB NUMBE		1. 210302	
EASTING:			EQUIPMENT:	UIPMENT: 14T wheeled excavator		OPERATOR:		Scott		
NORTHING:		COORD. SYSTEM:		С	COMPANY:		Monk Earthworks			
ELEVATION:	EVATION:		EXCAV. DATUM:	AV. DATUM: Existing ground level HOLE		OLE STARTED:		04/08/2021		
METHOD:	Aerial Photography		ACCURACY:	± 5 m	НО	HOLE FINISHED:		04/08/	2021	
Soil / Rock Type			Description			Graphi Log	Depth (m)	Groundwater / Seepage	Scala Penetrometer (Blows per 100mm) 5 10 15	
TOPSOIL Organic SILT; dark bro			own. Soft; moist; a	trace of rootlets.	0m 0.2m	3>	~!0.0 0.1 _	-		
ALLUVIAL SIL		SILT; grey, massive. F		,	1.1m	× × × × × × × × × × × × × × × × × × ×	0.2 - -0.3 - -0.4 - -0.5 - -0.6 - -0.7 - -0.8 - -0.9 - -1.0 -	-		
ALLUVIAL GRAVEL		Sandy fine to coarse (dense; moist; sand, fi subrounded.	• .			0.0	<i>0</i> _1.2-	AGE		
SCHIST BEDROCK		Slightly weathered, grey, psammitic SCHIST; Moderately strong. 1.4m					-1.5 - -1.6 - 1.7	NO SEEPAGE		
Total Excavation Depth = 1.7 m										
							LOGGED BY: MBS/JM			
COMMENT:	Exca	Excavator refusal on schist rock.					CHECKED DATE: 22/09/2021 SHEET: 1 of 1			



EXCAVATION NUMBER:

TP 12

PROJECT:	Alec	ec Robins Rd, Queenstown					IUMBER:	210362	
LOCATION:	See Site Plan		INCLINATION: Vertical			3001	OWIDEN.	210302	
EASTING:			EQUIPMENT:	T: 14T wheeled excavator		TOR:	Scott		
NORTHING:			COORD. SYSTEM:	EM:		ANY:	Monk Earthworks		
ELEVATION:	ELEVATION:		EXCAV. DATUM: Existing ground level He			ARTED:	04/08/2021		
METHOD:	Aerial Photography		ACCURACY:	± 5 m		OLE FINISHED:		04/08/2021	
Soil / Rock Type		Description			Grapi Log	1 0	=	cala Penetrometer Blows per 100mm) 5 10 15	
TOPSOIL		Organic SILT; dark bro	own. Soft; moist; a			₩ 0.0 - 0.1 -	- -		
ALLUVIAL SIL	т	SILT; grey, massive. F	irm: moist: low nla		2m X	X 0.2	- -		
7,2207,,72,012	•	o.E.r, grey, maoorre. r	min, moiot, ion pie	actionty.	(X	0.3] [
-					⊢ × _∨	X	-		
				0.7	_{7m} X	X 0.6-			
I -		Sandy fine to coarse (0.0	0.7	-		
-		moist; sand, fine to co bands.	parse; gravel, subr	ounded. Iron stained	0.0	0.9-	1 -		
					400	1.0 - 1.1 -			
+					္နီလီ <u>့</u>	ر 1.2-	-		
					000	- 1.3 – اوق - 1.4 – اوق			
					0.00°	- 1.4 - 1.5 -			
+					O_{σ}	<i>O</i> -1.6-	- -		
					.00	1.7-			
4					400	1.9 –	_ _		
1					ိုင္တဲ့	-2.0 -	-		
]					200	2.1 - 2.2 -			
4					8,00	-2.3	-		
-					0.0	2.4-	1 -		
					:20	2.5			
4					400 200	27-	- -		
1					ွင့္	2.8-	1 -		
					*0°	2.9 - 3.0 -] [
4					800	3.1 -	SEEPAGE		
]					0.0	3.2	SEE		
		Takal Everyord' D. 1	h = 0 4 ···	3.4	4m 55°	3.3	9		
		Total Excavation Dept	ın = 3.4 M			LOCC	ED BY:	MBS/JM	
						22/09/2021			
COMMITTEE .	'*''''	. Grainping of pit wa						1 of 1	



EXCAVATION NUMBER:

TP 13

CHECKED DATE: 22/09/2021

1 of 1

SHEET:

PROJECT: Alec Robins Rd, Queenstows LOCATION: See Site Plan INCLINATION: Vertical 210362 EQUIPMENT: 14T wheeled excavator OPERATOR: Scott COMPANY: Monk Earthworks LEVATION: EXCAV. DATUM: Existing ground level HOLE STARTED: O4/08/2021 METHOD: Aerial Photography ACCURACY: ± 5 m HOLE FINISHED: O4/08/2021 Soil / Rock Type Description Description Organic SILT; dark brown. Soft; moist; a trace of rootlets. Organic SILT; dark brown. Soft; moist; a trace of rootlets. Organic SILT; dark brown. Soft; moist; a trace of rootlets. Organic SILT; grey, massive. Firm; moist; low plasticity. Organic SILT; dark brown. Soft; moist; a trace of rootlets. Organic SILT; dark brown. Soft; moist; a trace of rootlets. Organic SILT; grey, massive. Firm; moist; low plasticity. Organic SILT; grey, massive. Firm; moist; low plasticity. Organic SILT; grey, massive. Firm; moist; low plasticity. Organic SILT; grey, massive. Firm; moist; a trace of rootlets. Organic SILT; grey, massive. Firm; moist; low plasticity. Organic SILT; grey, p														
NORTHING: COORD. SYSTEM: ELEVATION: EXCAV. DATUM: Existing ground level HOLE STARTED. 04/08/2021 METHOD: Aerial Photography ACCURACY: ± 5 m						ON: Vertical			JOB N	IUMBEF	R: 210)362		
NORTHING: COORD. SYSTEM: ELEVATION: EXCAV. DATUM: Existing ground level HOLE STARTED. 04/08/2021 METHOD: Aerial Photography ACCURACY: ± 5 m		FASTING:			FOUIPMENT:	14T wheeled excavator	OPF	-RAT	OR:	Scott	•			_
ELEVATION: METHOD: Aerial Photography ACCURACY: ± 5 m HOLE FINISHED: 04/08/2021 Soil / Rock Type Description Descriptio						TTT WITCEICU CXCUTUTOT					arthy	vorks		
Soil / Rock Type Description Description Organic SILT; dark brown. Soft; moist; a trace of rootlets. ALLUVIAL SILT SILT; grey, massive. Firm; moist; low plasticity. ALLUVIAL GRAVEL Sandy fine to coarse: GRAVEL; grey, bedded. Medium dense; moist; sand, fine to coarse; gravel, subangular to subrounded. In or stained bands. Total Excavation Depth = 3.5 m					EXCAV. DATUM:	Existing ground level	+							
TOPSOIL Organic SILT; dark brown. Soft; moist; a trace of rootlets. ALLUVIAL SILT SILT; grey, massive. Firm; moist; low plasticity. ALLUVIAL GRAVEL ALLUVIAL GRAVEL Sandy fine to coarse GRAVEL; grey, bedded. Medium dense; moist; sand, fine to coarse; gravel, subangular to subrounded. lron stained bands. ALLUVIAL GRAVEL Total Excavation Depth = 3.5 m			Aeria	l Photography	ACCURACY:		HOLE	FINI						
ALLUVIAL SILT SILT; grey, massive. Firm; moist; low plasticity. ALLUVIAL GRAVEL Sandy fine to coarse GRAVEL; grey, bedded. Medium dense; moist; sand, fine to coarse; gravel, subangular to subrounded. lron stained bands. ALLUVIAL GRAVEL Total Excavation Depth = 3.5 m		Soil / Rock Ty	pe					Log		Groundwater / Seepage	(Blows	s per 10	0mm	1)
ALLUVIAL SILT SILT; grey, massive. Firm; moist; low plasticity. ALLUVIAL GRAVEL Sandy fine to coarse GRAVEL; grey, bedded. Medium dense; moist; sand, fine to coarse; gravel, subangular to subrounded. Iron stained bands. ALLUVIAL GRAVEL Total Excavation Depth = 3.5 m		TOPSOIL		Organic SILT; dark bro	own. Soft; moist; a	trace of rootlets.		Λ,	~	1	1			-
LOGGED BY: MBS/JM				Sandy fine to coarse (moist; sand, fine to collron stained bands.	GRAVEL; grey, bed parse; gravel, suba	asticity. Ided. Medium dense; angular to subrounded.			- 0.3 - 0.4 - 0.5 - 0.6 - 0.7 - 0.8 - 0.9 - 1.0 - 1.1 - 0.5 - 1.5	SEEPAG				
	Г			<u> </u>					LOGGI	ED BY:	МВ	S/JM		

Document Set ID: 7359077 Version: 1, Version Date: 15/09/2022

Minor slumping of pit walls.

COMMENT:



TEST PIT LOG

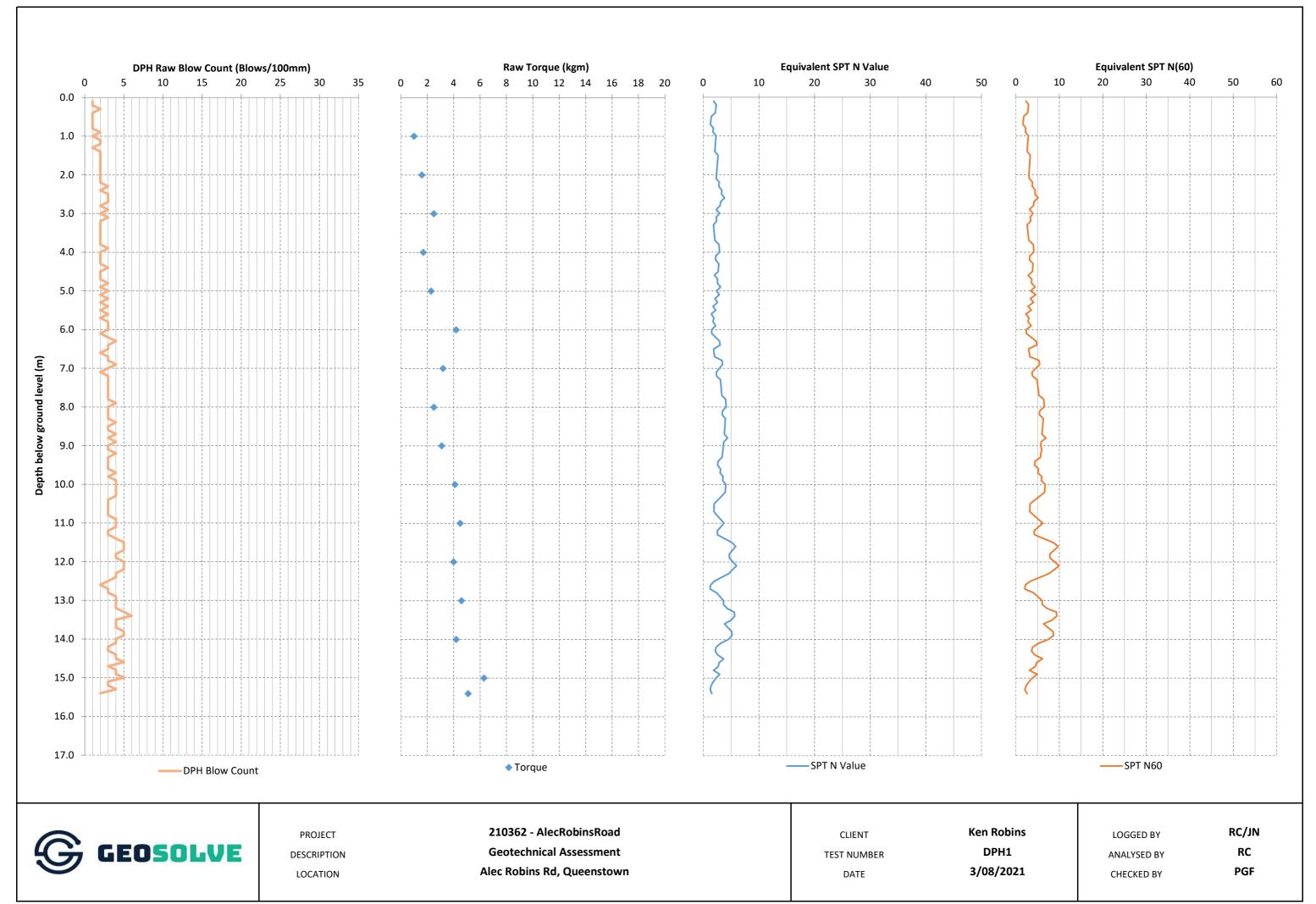
EXCAVATION NUMBER:

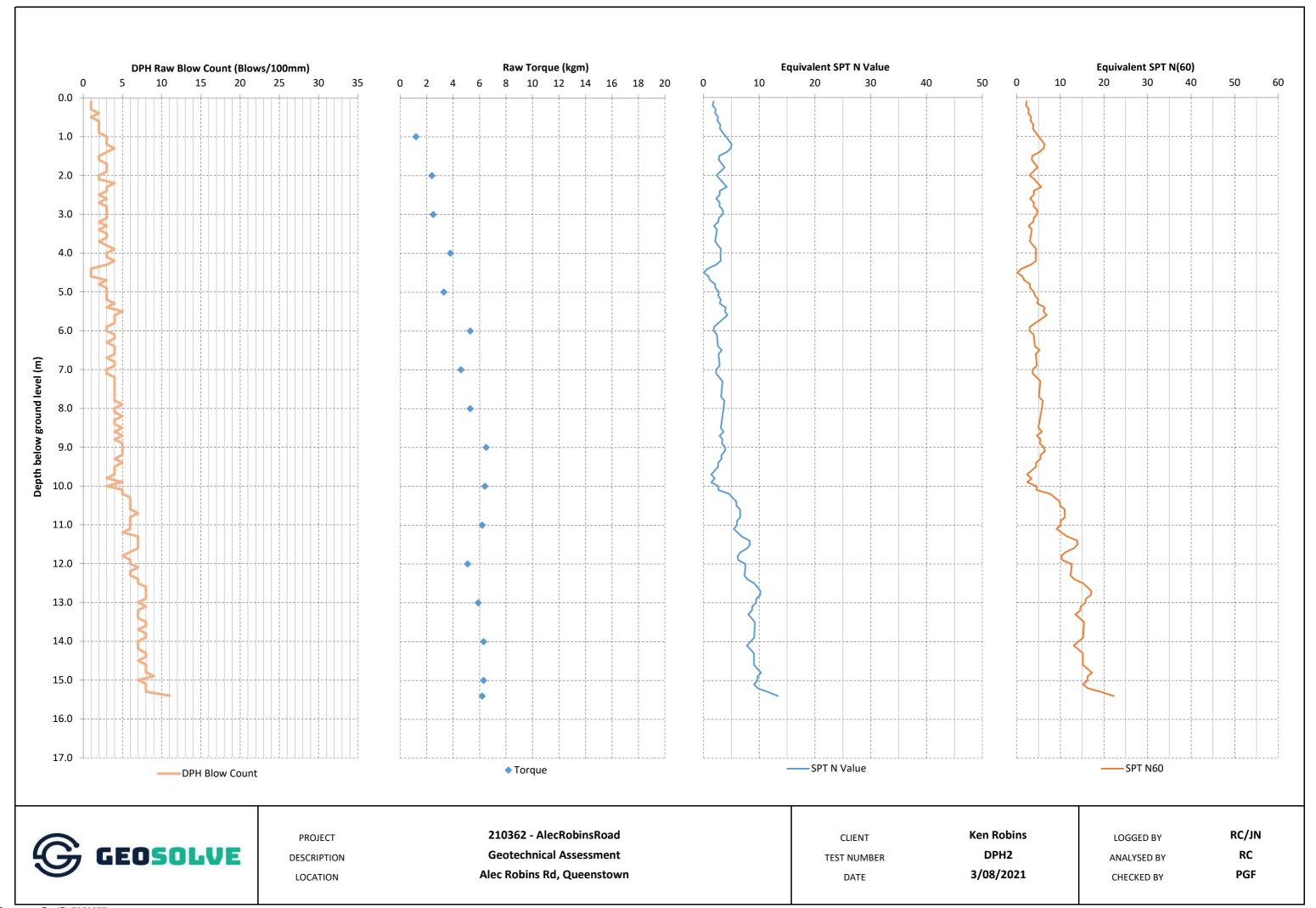
TP 14

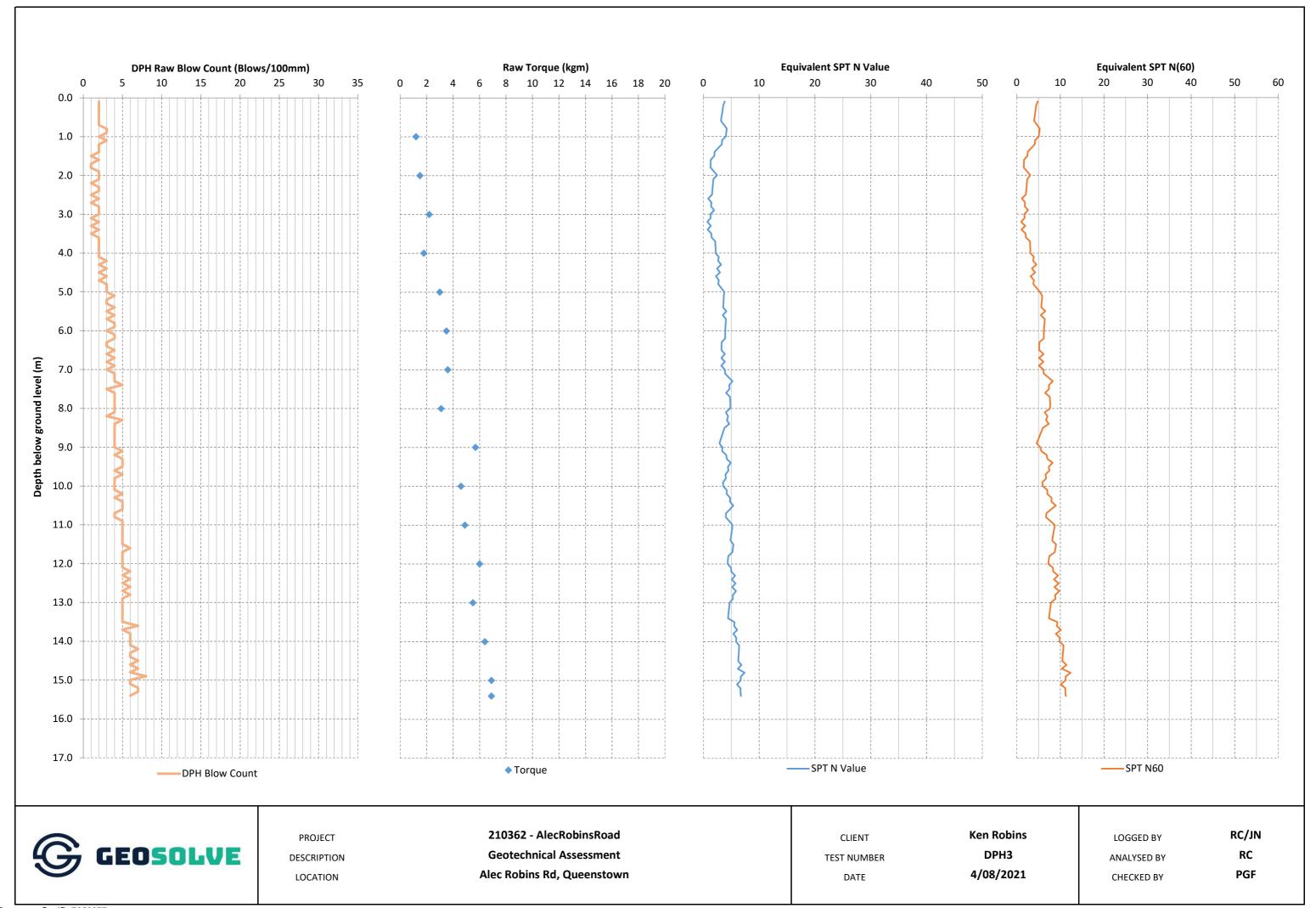
-	PROJECT: LOCATION:	_	Robins Rd, Queensto Site Plan	own INCLINATIO	ON: Vertical			JOB N	IUMBER	: 210362	
	EASTING:			EQUIPMENT:	14T wheeled excavator	0	PERA	TOR:	Scott	-	
ı	NORTHING:			COORD. SYSTEM:		С	OMPA	ANY:	Monk E	arthworks	
E	LEVATION:			EXCAV. DATUM:	Existing ground level	НО	LE STA	ARTED:	04/08/2	2021	
	METHOD:	Aeria	l Photography	ACCURACY:	± 5 m	НО	LE FIN	ISHED:	04/08/2	2021	
	Soil / Rock Ty	pe		Description			Graph Log	1 0	1 - 1	cala Penetro (Blows per 10 5 10	Omm)
I	TOPSOIL		Organic SILT; dark bro	own. Soft; moist; a	trace of rootlets.	0m	\sim	₩ 0.0 - 0.1 -	1 [
	ALLUVIAL GR.		Sandy fine to coarse of moist; sand, fine to co	GRAVEL; grey, bed	lded. Medium dense; ounded.	0.2m 1m	$\times \times $	0.2 - 0.3 - 0.4 - 0.5 - 0.6 - 0.7 - 0.8 - 0.9 - 0.9 - 0.5 - 0.5 - 0.6 - 0.7 - 0.8 - 0.9 -	NO SEEPAGE		
_		1	Total Excavation Dep	th = 3.3 m						1	
									ED BY:	MBS/JM	
(COMMENT:	Pit w	alls collapsing.				L		D DATE:	22/09/202	21
L								SHE	EI:	1 of 1	

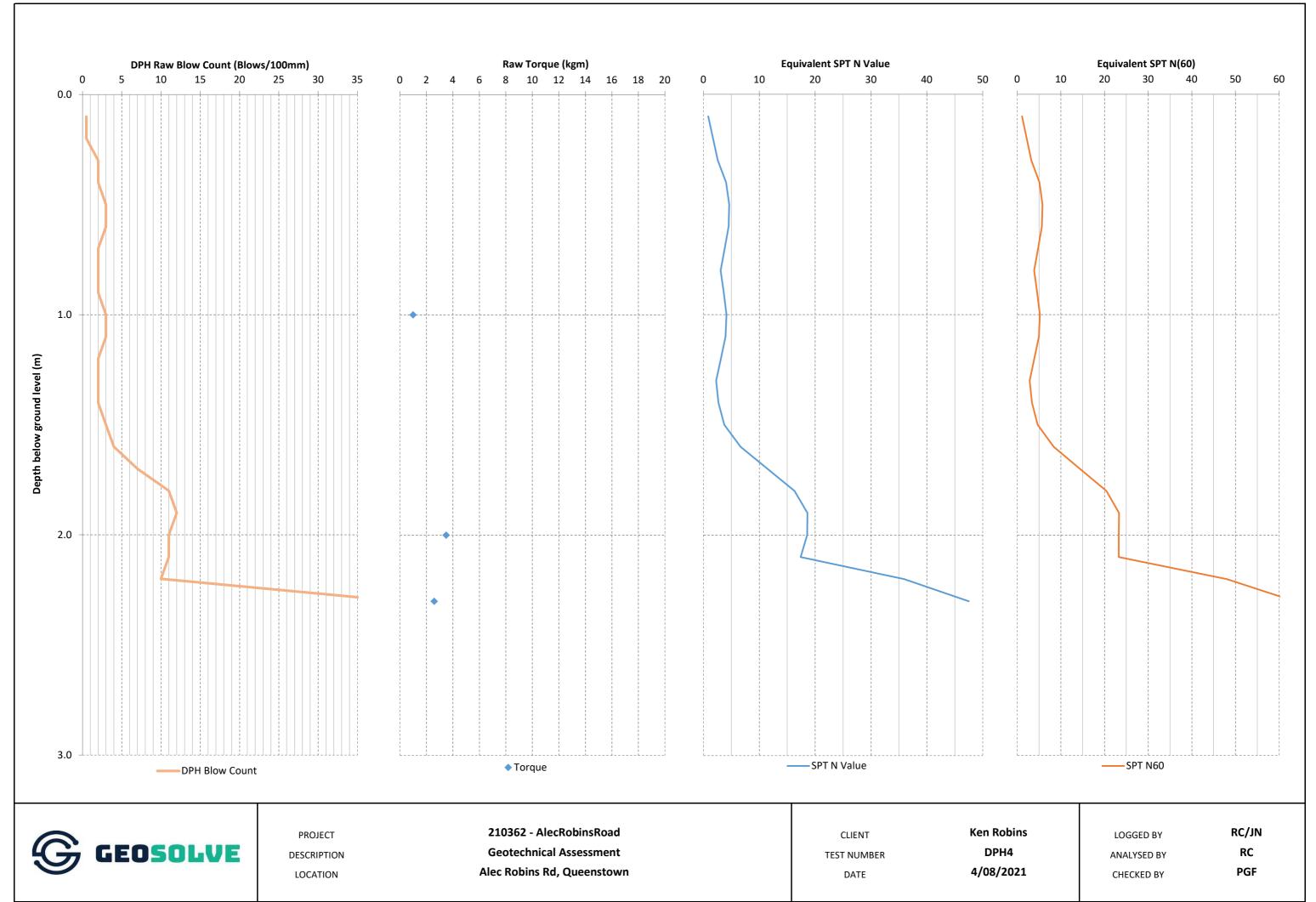
Appendix C: DPH Data

Document Set ID: 7359077 Version: 1, Version Date: 15/09/2022











24 August 2022

Ken Robins
C/- Southern Planning Group
PO Box 1081
Queenstown, 9348

Attention: Alex Dunn

Dear Alex,

Robins Subdivision, 64 Alec Robins Road Transport Assessment

The purpose of this letter is to provide a transport assessment for a proposed subdivision of 64 Alec Robins Road, Lake Hayes.

1 Background

The Site (64 Alex Robins Road) is accessed from Alec Robins Road. The site is currently developed for pastural farming with a single rural residential dwelling unit.

Under the QLDC Proposed District Plan (PDP) the site is predominantly within the Wakatipu Basin Lifestyle Precinct although small portions around the periphery of the site are located within the Rural zone and Rural Lifestyle zone.

2 Transport Network

2.1 Local Road Network

The Site is accessed from Alec Robin Road which is a local road within the PDP road hierarchy¹. Alec Robins Road has a current (estimated) traffic flow of 31vpd² serving roadside rural and lifestyle type properties including the farming and residential activities at the site.

At the site, Alec Robins Road is formed as a single lane road with a 4.0m sealed carriageway width. The formation of Alec Robins Road generally aligns with the requirements of a Figure E1 road type³. However, no formal passing bays are provided so opposing vehicles are required to slow down and use the roadside verges to pass. The road is generally flat and straight which means there is good visibility of oncoming vehicles, drivers are able to identify other oncoming vehicles and manoeuvre within the carriageway and road verges to avoid a conflict. Alec Robins Road has a speed limit of 80km/hr posted on SH6 at Lake Hayes, the narrow sealed carriageway is likely to result in an operating speed of 50km/hr or less as drives need to be prepared to move to the side of the road to allow oncoming traffic to pass.

=

¹ Refer QLDC Proposed District Plan (Decision Version), Section 29.14 Schedule 1 – Road Classification.

² From Mobile Road (mobileroad.org) estimated traffic flow of 31vpd with 20% heavy vehicles dated 23/8/2019.

³ From QLDC Land Development and Subdivision Code of Practice, Table 3.3 – Road design standards.



The site also has a frontage onto Lake Hayes-Arrow Junction Highway (SH6) which is an arterial road and a regional state highway providing a major inland transport route. This road is managed by Waka Kotahi (NZTA) and is a Limited Access Road (LAR). The current traffic flow on SH6 is likely to be approximately 15,000vpd⁴. The site has no direct accesses from SH6.

2.2 Public Transport

Local bus services are operated by Otago Reginal Council (ORC) and Orbus, the nearest bus service to the site is Route 2, Arthurs Point – Arrowtown. This route passes along Lake Hayes-Arrow Junction Highway (SH6) and through the intersection of Alec Robins Road with SH6. Although there are no formal bus stops on this route near to the site. The service operates an hourly service between 6am and 10pm increasing to a half hour frequency 6am to 9am and 3pm to 7pm. This bus services provides a service between Arrowtown and Queenstown with an interchange in Frankton allowing changes to other services and destinations within the Wakatipu region.

2.3 Walking and Cycling

The nearest walking and cycling trail to the site are:

- Lake Hayes Trail, a leisure route for pedestrians and cyclists around Lake Hayes with connection to Millbrook, Arrowtown and Lake Hayes Estate via the Queenstown Trails network,
- Twin Rivers Trail providing a leisure route for pedestrians and cyclists along the edge of the Kawarau River between Frankton/Lake Hayes Estate and Arrow Junction, and
- Lake Hayes Estate trails along the western edge of Mill Creek as leisure paths around Lake Hayes Estate (Bridesdale Farm).

These trails are all located near to the site but there are no direct routes to these trails from the site or from Alec Robins Road.

3 Proposed Development

It is proposed to subdivide the site to create 20 lifestyle residential lots (Lots 1-20) with allowance for access (Lots 100 & 103) and esplanade reserve (Lots 101 & 102). It is expected that each residential lot would be developed as a single residential dwelling unit. The development will also include ROW easements for vehicle access and trails for pedestrians and cyclists.

3.1 Traffic Generation

The proposed subdivision will create 20 lifestyle residential lots, an increase of 19 possible residential dwellings within the site. The proposed development may generate up to 202 vehicles per day (vpd) with a peak hour traffic flow of up to 28 vehicles per hour (vph)⁵.

These vehicle trips will be distributed across the various, proposed, site accesses as follows:

⁴ From Mobile Road (mobileroad.org) estimated traffic flow of 15068vpd with 4% heavy vehicles dated 24/12/2020.

⁵ Base on NZTA Research Report (RR453) Trips and Parking Related to Land Use, Table 7.4 Summary of design trips and parking demand in NZ in 2010. Residential Dwelling (rural) 1.4vph/unit, 10.1vpd/unit. Calculations are based on 20 total residential dwellings.



- Lot 1, existing direct access from Alec Robins Road. This access currently serves 642
 Lake Hayes-Arrow Junction Highway (SH6) and will serve 1 new residential dwelling unit.
- Access Lot 103, a shared access lane serving 6 residential dwelling units at Lots 2-7. This
 access will have a traffic generation of 61vpd with a peak traffic flow of 8vph.
- Lots 10, 11 & 12 each will have a direct access from Alec Robins Road. The lot 12 access approximately aligns with the existing access serving the onsite residential dwelling.
- Access Lot 100, a shared access lane serving 7 residential dwellings at Lots 8, 9 & 13-17.
 This access will have a traffic generation of 71vpd with a peak traffic flow of 10vph.
- Lot 18, a shared access Right of Way ROW serving 3 residential dwelling units at Lots 18-20. This access will have a traffic generation of 30vpd with a peak traffic flow of 4vph.

3.2 Site Access

All site accesses and vehicle crossings are to be formed at the time of subdivision. This will include the shared accesses (Lots 100 & 103), access ROW and vehicle crossings. The design of these vehicle crossings and onsite vehicle accesses would be guided by the requirements of the PDP and the Land Development and Subdivision Code of Practice⁶. The drawings provide an outline access design and vehicle crossings will be design based on the anticipate traffic flows, including the vehicle crossings to Access Lots 100 & 103.

The proposed development will not make any changes to Alec Robins Road which, with the exception of passing bays, generally meets the requirements of a Figure E1 road type.

4 District Plan

The PDP, Transport Chapter (Chapter 29) provides rules to manage potential transport effects within the rural zones. The access rules (29.5.13 to 29.5.24), as applicable, provide a framework for advice relating to the site access from Alec Robins Road. Based on the PDP rules the following advice is provided:

- Access and Road Design (29.5.13 part a), any onsite access (access lane or ROW) should comply with the appropriate design requirements of the Land Development and Subdivision Code of Practice, Table 3.3 Road design standards. Access Lot 100 will meet the minimum requirements of a Figure E2 road type whilst Access Lot 103 and other ROW vehicle accesses will meet the minimum requirements of a Figure E1 road type. This includes a maximum access gradient of 16% (1 in 6.25). However, access to the site is reliant on the existing formation of Alec Robins Road which does not meet the minimum requirements of the Land Development and Subdivision Code of Practice for the potential number of dwellings, or activities, served which will breach rule 29.5.13 part a.
- Design of Vehicle Crossings (29.5.15), as a rural zone the design of vehicle crossings is to be based on the anticipated traffic flow. This means Access Lots 100 & 103 would have a Diagram 9 access whilst other lots will require a Diagram 8 access types⁷.
- Minimum Sight Distances from Vehicle Accesses (29.5.17), based on the 80km/hr speed limit all vehicle accesses are to have a sight distance greater than 115m for residential activities or 175m for any other activities. The accesses for Lot 1 and Lot 18 (serving Lots 18-20) will breach rule 29.5.17.

-

 $^{^{\}rm 6}$ From QLDC Land Development and Subdivision Code of Practice, Table 3.3 – Road design standards.

⁷ Based on rule 29.5.15, Diagram 8 & 9 access types are provided in the QLDC Proposed District Plan, Chapter 29 Transport, Schedule 29.2 - Interpretive Diagrams.



 Maximum Number of Vehicle Crossings (29.5.19), the site has a frontage length of approximately 710m onto a local road, Alec Robins Road which allows a maximum of 3 vehicle crossings. The proposed development will result in 7 vehicle crossings which will breach rule 29.5.19. Once subdivided each resulting lot will have a single vehicle crossing and comply with this rule.

The breaches of the PDP transport rules will result in a restricted discretionary activity status, the potential transport effects of the proposed development are discussed in the following section.

5 Transport Effects

The greatest transport effect is likely to be a result of increased traffic in the local road network be a result of the proposed 20 residential lots (residential dwelling units).

5.1 Off-Site Transport Effects

5.1.1 State Highway Intersection

Alec Robins Road is accessed from Lake Hayes-Arrow Junction Highway (SH6). This intersection has been formed with:

- A rural basic left (BAL) turn treatment which is a simple left turn from SH6 to Alec Robins Road with the inclusion of some carriageway widening, and
- A rural channelised right (CHR) turn treatment which includes a right turn bay from SH6 to Alec Robins Road.

Overall, the traffic volume (current and proposed) using Alec Robin Road (including Jean Robins Drive) is very low. It is expected that this existing state highway intersection is appropriate to serve the increased traffic generation of the proposed subdivision.

5.1.2 Local Road Network, Alec Robins Road

It is possible that Alec Robins Road has the potential to serve in excess of 20 dwelling units (including the site) within the adjacent Rural Zone and Wakatipu Basin Lifestyle Precinct. The proposed subdivision will increase the number of dwelling units served by Alec Robins Road by 19 dwelling units, total 20 dwellings onsite. To meet the current new road standards Alec Robins Road would be a Figure E3 road type⁸ able to serve 150 dwelling units. This would include with a 6.5m minimum sealed carriageway width providing two traffic lanes (1 in each direction). The current construction of Alec Robins Road, adjacent to the site does not meet this current new road standard set out in the QLDC Land Development and Subdivision Code of Practice`.

Alec Robins Road, adjacent to the site, generally meets the requirements of a Figure E1 road type although no formal passing bays are provided. The road has been formed carriageway width of 4.0m with a chipseal surface. This carriageway width is essentially a (wide) single lane where oncoming vehicles will have to move onto the unsealed shoulder to pass, this is possible along the full length of the road where the road shoulder and verge area is essentially a flat extension of the sealed carriageway. Being generally straight and flat in alignment the there is good forward visibility along Alec Robins Road meaning that drivers can easily identify oncoming vehicles and manage their speed to slow and move over onto the shoulder/verge area to pass. This narrow single lane road is likely to result in an operating speed of approximately 50km/hr and below the posted speed limit. Drivers will be prepared to slow down if an oncoming vehicle is visible as drivers will slow to less than 20km/hr to utilise the

٠

⁸ From QLDC Land Development and Subdivision Code of Practice, Table 3.3 – Road design standards.



shoulder/verge area of the road for passing. The proposed development will not change the overall formation or alignment of Alec Robins Road. This is a possible breach of the PDP (rule 29.5.13) in that development access, via Alec Robins Road, does not meet the QLDC Land Development and Subdivision Code of Practice based on the potential number of dwellings and activities served.

Research from the United Kingdom for single track roads and single lane roads with limited passing opportunities⁹ suggests a two-way operating capacity of between 100 to 200 vehicles per hour (vph), and that significant delays and reduced level of service may occur as traffic flows approach 300vph. This suggests that Alec Robins Road would have an operating capacity of at least 200vph which is significantly greater than the existing and proposed traffic flow on this road during the peak hour (less than 30vph).

It is expected that the proposed development will result in a noticeably increase the traffic flow on Alex Robins Road. The existing single lane formation of Alex Robins Road is able to accommodate this increase traffic within its operational capacity.

Given the overall forward visibility allowed by the alignment of Alex Robins Road the increased traffic is unlikely to result in a noticeable adverse effect in the overall road safety. However, as passing is enabled by the use of the road shoulder and verge area it is recommended that roadside marker posts are installed to identify any constraints within the road verges. This may mean that any culverts or structures (gullies, culvert headwalls etc) should be identified, with appropriate markers so that these may be avoided when drivers utilise the roadside verges for passing. To manage this recommendation the following consent condition is suggested.

That prior to any occupation of the site roadside markers are to be installed on each side of Alec Robins Road. The roadside markers are to identify the extent of the road shoulder and verge area which may be used for parking and must identify all roadside hazards such as culvert headwalls, gullies etc which may restrict the area available for passing. The roadside marker posts should meet the requirements of the Waka Kotahi (NZTA) Manual of Traffic Signs and Markings (MOTSAM), Part 2 Markings, Section 5: Delineation and Hazard Markers.

5.2 Onsite Transport Effects

5.2.1 Internal Roads

The onsite traffic effects can be managed through the design process. The QLDC Land Development and Subdivision Code of Practice identifies the minimum design requirements for new road. The development drawings provide a structure and context for the provision of new internal access roads and identify the position of vehicle crossings.

The internal road network is to be designed and constructed in accordance with the Code of Practice, Table 1 below provides an overview of the proposed internal access road network.

-

⁹ Richard Sweet Capacity of single-track rural lanes: An initial investigation (TRICS Transport and Development Conference, 2012).



Table 1 – Compliance with QLDC Land Development and Subdivision Code of Practice

Subdivision Access Road	QLDC Requirement	Specific Details
Access Lot 100, lane. Provides access to 7 onsite lots, Lots 8, 9 & 13-17.	Figure E2, up to 20 dwellings.	Legal road width will be 9m minimum with T-turning provided at the Lot 9/14 ROW intersection.
		Sealed carriageway of width of 5.5m to 5.7m (movement lane) with sealed shoulders of 0.5m each side (6.5m total).
Access Lot 103, lane. Provides access to 6 onsite	Figure E1, up to 6 dwellings.	Legal road width will be 6m minimum with cul-de-sac turning.
lots, Lots 2-7.		Sealed carriageway of width of 2.5m (movement lane) with sealed shoulders of 0.5m each side (3.5m total).
		Passing bays provided at 50m spacing, or at 100m spacing with visibility between them, passing bays would therefore to be provided on curves in the horizontal alignment.
Lot 6 ROW.	Figure E1, up to 6	ROW width will be 6m minimum.
Provides access to 2 onsite lots, Lots 5 & 6.	dwellings.	Sealed carriageway of width of 2.5m (movement lane) with sealed shoulders of 0.5m each side (3.5m total).
		No passing bays provided.
Lot 9 ROW.	Figure E1, up to 6 dwellings.	ROW width will be 6m minimum.
Provides access to 2 onsite lots, Lots 8 & 9.		Sealed carriageway of width of 2.5m (movement lane) with sealed shoulders of 0.5m each side (3.5m total).
		Passing provided at 50m spacing, or at 100m if visibility is available from bay to bay.
Lots 14,15 & 16 ROW.	Figure E1, up to 6	ROW width will be 6m minimum.
Provides access to 4 onsite	dwellings.	T-turning provided at Lots 14/15.
lots, Lots 14-17.		Sealed carriageway of width of 2.5m (movement lane) with sealed shoulders of 0.5m each side (3.5m total).
		Passing provided at 50m spacing, or at 100m if visibility is available from bay to bay.
Lots 18 & 19 ROW.	Figure E1, up to 6	ROW width will be 6m minimum.
Provides access to 3 onsite	dwellings.	T-turning provided at Lot 18.
lots, Lots 18-20.		Sealed carriageway of width of 2.5m (movement lane) with sealed shoulders of 0.5m each side (3.5m total).
		Passing provided at 50m spacing, or at 100m if visibility is available from bay to bay.

These roads can be constructed to comply with the requirements of the QLDC Land Development and Subdivision Code of Practice providing appropriate internal transport links for vehicles. Pedestrians and cyclists will be accommodated within this road network being



shared within the movement lane. It is noted that a separate footpath network is provided within the esplanade reserve (Lots 101 & 102) with links to Alec Robins Road via Lots 1-5 & 18-20 as a ROW.

The proposed subdivision, being within the rural environment (Rural Zone and Wakatipu Basin Lifestyle Precinct) does not provide any street lighting.

The proposed onsite road network is considered to be appropriate for the number of lots and the rural environment to be served.

5.2.2 Vehicle Crossings

The subdivision design identifies the location of all proposed vehicle crossings, although, at this stage their detailed design is not provided. It is expected that the design of each vehicle crossing, either from Alec Robins Road or one of the onsite access/ROW will be based on the appropriate access design from the PDP. This will result in the following vehicle crossing requirements.

- Access Lots 100 & 106 Construct new vehicle crossings from Alec Robins Road as a Diagram 9 access type.
- Lot 1 Upgrade the existing vehicle crossing from Alec Robins Road to a Diagram 8 access type.
- Lots 2-4, 7 & 6 ROW Construct new vehicle crossings from Access Lot 103 as a Diagram 8 access type.
- Lot 5 Construct a new vehicle crossing from Lot 6 ROW as a Diagram 8 access type.
- Lot 9 Construct a new vehicle crossing from Lot 9 ROW as a Diagram 8 access type.
- Lots 10-12 Construct new vehicle crossings from Alec Robins Road as a Diagram 8 access type.
- Lot 13 Construct a new vehicle crossing from Access Lot 100 as a Diagram 8 access type.
- Lots 14-16 Construct a new vehicle crossing from Lot 14-16 ROW as a Diagram 8 access type.
- Lots 18 & 19 Construct a new vehicle crossing from Lot 18 & 16 ROW as a Diagram 8 access type.

It is noted that the access to Lots 6, 8, 17 & 20 is the extension of the ROW onto these sites and there is no vehicle crossing.

Technically, Alec Robins Road has an 80km/hr speed limit based on the posted speed limit on SH6. In reality, the reduced width of Alec Robins Road will result in a reduced operating speed of approximately 50km/hr. Each proposed vehicle crossing is considered as a low volume driveway with less than 200vpd and therefore it is possible to consider the sight distance requirements of the National Guidance; Land Transport Safety Authority (now Waka Kotahi, NZTA) Guidelines for visibility at driveways (RTS 6). For local roads this document requires that the access sight distance is equivalent to the absolute minimum stopping sight distance (SSD)¹⁰ based on the road design speed. This would suggest that for a road with a 50km/hr operating speed (Alec Robins Road) the required sight distance would be 40m at each vehicle crossing. This can be achieved at all the proposed vehicle crossings from Alec Robins Road.

¹⁰ Refer Austroads Guide to Road Design, Part 3: Geometric Design, Section 5.3.1 Car Stopping Sight Distance.



Overall, it is expected that all vehicle crossings to lots and shared access can be appropriate constructed within the proposed subdivision plan. Overall, the breaches of the minimum sight distance requirements, 29.5.17, at existing Lot 1 access and the proposed Lot 18 access (serving Lots 18-20) is acceptable for the road operating speed and environment. The sight distance breaches will not result any adverse transport effects on the safety or efficiency of the adjacent Alec Robins Road or the local pedestrian and cycling environment.

The proposed subdivision will result a breach of the Maximum Number of Vehicle Crossings rule, 29.5.19. The PDP limits the number of vehicle crossings from the site to 3 which is based on frontage length. The proposed development will have 7 vehicle crossings from Alec Robins Road, following subdivision this will result in no more that a single vehicle crossing per lot. These vehicle crossings are appropriately separated along the generally straight alignment of Alec Robins Road. The increased number of vehicle crossing will therefore not result in any adverse transport effects on the safety or efficiency of the adjacent Alec Robins Road or the local pedestrian and cycling environment.

6 Summary

It is proposed to subdivide 64 Alex Robins Road, the site, to create 20 lifestyle residential lots (Lots 1-20) with allowance for access (Lots 100 & 103) and esplanade reserve (Lots 101 & 102). It is expected that each residential lot would be developed as a single residential dwelling unit.

The onsite traffic effects can be managed through the design process. The onside access road networks will be designed in accordance with the QLDC Land Development and Subdivision Code of Practice. Access Lot 100 will be a Figure E2 road type, Access Lot 103 & ROW accesses will be Figure E1 road types. Pedestrians and cyclists will share these access roads. There will also be a separate footpath network utilising the esplanade reserve (Lots 101 & 102) with links to Alec Robins Road.

Vehicle crossings can be designed in accordance with the PDP based on the anticipated traffic generation. This will mean that Access Lots 100 & 103 will have a Diagram 9 access type whilst all others ROW and property access will have a Diagram 8 access type.

The proposed subdivision relies on access from Alec Robins Road, a local road within the QLDC road hierarchy. This road is formed as a single lane road with a 4m carriageway width. Passing on this road is enabled by drivers having to slow down and move over partially onto the road verge to allow oncoming traffic to pass. The proposed development will result in a noticeably increase the traffic flow on Alex Robins Road. Although narrow this road has sufficient capacity to accommodate the additional traffic generation. However, to improve road safety it is recommended that roadside marker posts are installed to identify the width available for oncoming vehicles to pass.

Overall, with the proposed consent conditions, or similar, it is considered that the proposed subdivision will not have any adverse transport effects on the safety or efficiency of the adjacent transport network including the local pedestrian and cycling environment.

Should you require any further information please contact me.

Yours sincerely

Jason Bartlett
CEng MICE, MEngNZ
Transport Engineer

SCHEDULE 1 - APA TO BE SIGNED BY MACDONALD



AFFECTED PERSON'S APPROVAL



FORM 8A

Resource Management Act 1991 Section 95



RESOURCE CONSENT APPLICANT'S NAME AND/OR RM #

Hayes Creek Developments Co.



AFFECTED PERSON'S DETAILS

I/We Martin Stuart Macdonald

Are the owners/occupiers of LOT 2 DP 457573 located at 51 WALNUT LANE, RD 1, QUEENSTOWN 9371



DETAILS OF PROPOSAL

I/We hereby give written approval for the proposal to:

Subdivide their site (described below) into twenty rural livings lots, including the identification of twenty residential building platforms, design controls, earthworks and landscaping.

at the following subject site(s):

PT SEC 28 BLK IX SHOTOVER SD SECS 1-2 SO 383440 located at 64 ALEC ROBINS ROAD, RD 1, QUEENSTOWN 9371





I/We understand that by signing this form Council, when considering this application, will not consider any effects of the proposal upon me/us.



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





I/We have sighted and initialled ALL plans dated and approve them,

Attached.

100

HCDL/MACDONALD/HASTIE AGREEMENT PAGE 4 OF 9

co-owners (names detailed on the title for the site) are required.

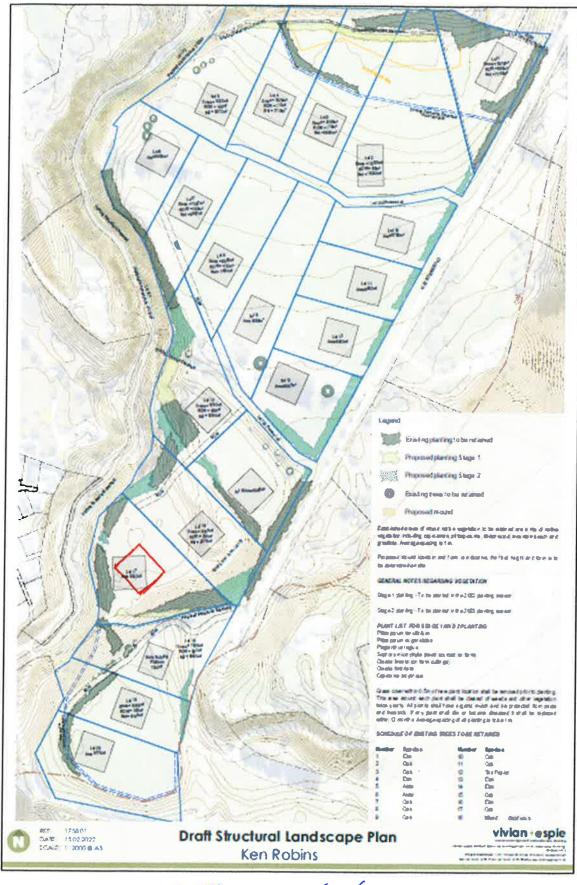
1 3	Name (PRINT)	
	Martin Macdonald	
A	Contact Phone / Email address 021338163 marty@dvws.co.nz	
	Signature Mall	Date 29/8/22
	Name (PRINT)	
B	Contact Phone / Email address	
	Signature	Date
	Name (PRINT)	
c -	Contact Phone / Email address	
	Signature	Date
	Name (PRINT)	
	Contact Phone / Email address	
	Signature	Date
	Note to person against written approval Conditional written approvals cannot be accepted. There is no obligation to sign this form, and no reasons need to be given.	





Queenstown Lakes District Council Private Bag 50072, Queenstown 9348 Gorge Road, Queenstown 9300

P: 03 441 6499 E: resourcecomient Daldc.govt.nz www.qldc.govt.nz PAR II Clearline 2017



mmhlett 29/9/22

SCHEDULE 2 - APA TO BE SIGNED BY HASTIE



AFFECTED PERSON'S APPROVAL



FORM 8A

Resource Management Act 1991 Section 95



RESOURCE CONSENT APPLICANT'S NAME AND/OR RM :

Hayes Creek Developments Co.



AFFECTED PERSON'S DETAILS

I/We MATTHEW DOUGLAS HASTIE

Are the owners/occupiers of

Lot 1 DP 442220 located at 49 WALNUT LANE, RD 1, QUEENSTOWN 9371



DETAILS OF PROPOSAL

I/We hereby give written approval for the proposal to:

Subdivide their site (described below) into twenty rural livings lots, including the identification of twenty residential building platforms, design controls, earthworks and landscaping.

at the following subject site(s):

PT SEC 28 BLK IX SHOTOVER SD SECS 1-2 SO 383440 located at 64 ALEC ROBINS ROAD, RD 1, QUEENSTOWN 9371





I/We understand that by signing this form Council, when considering this application, will not consider any effects of the proposal upon me/us.



I/We understand that if the consent authority determines the activity is a deemed permitted boundary activity under section 878A of the Act, written approval cannot be withdrawn if this process is followed instead.



WHAT INFORMATION/FLANS HAVE YOU SIGHTED





I/We have sighted and initialled ALL plans dated and approve them.

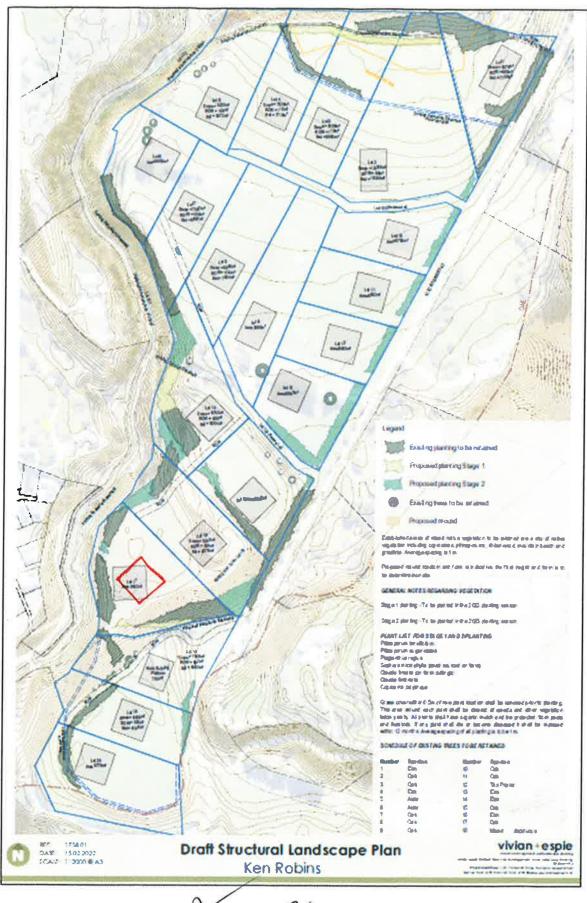
Attached.

age 1/2 // October)





Queenstown Lakes District Council Private Bag \$8072, Queenstown 9348 Gorge Road, Queenstown 9380 P: 03 441 0499 E: resourceconsent@qidc.govt.nz www.qidc.govt.nz F.D.D. October 2017



no l

MA SULAN

HCDL/MACDONALD/HASTIE AGREEMENT PAGE 9 OF 9

1.









Resource Management Act 1991 Section 95

RESOURCE CONSENT APPLICANT'S NAME AND/OR RM #

KEN ROBINS

CREEK DEVERNENT Co. SEC. 28. BIKIX S.D.

I/We

Are the owners/occupiers of

whers/occupiers of WATBENHO.

51 ALEC ROBINS RD

LAKE HAYES. QT.

I/We hereby give written approval for the proposal to:

ROBINS DEVELOPMENT ALEC ROBINS RD LAKE HAYES.

at the following subject site(s):

1.0TI TO LOT 20



I/We understand that by signing this form Council, when considering this application, will not consider any effects of the proposal upon me/us.



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



I/We have sighted and initialled ALL plans dated and approve them.

PROPOSED SUBDIVISION Plan

Conditional written approvals cannot be accepted.

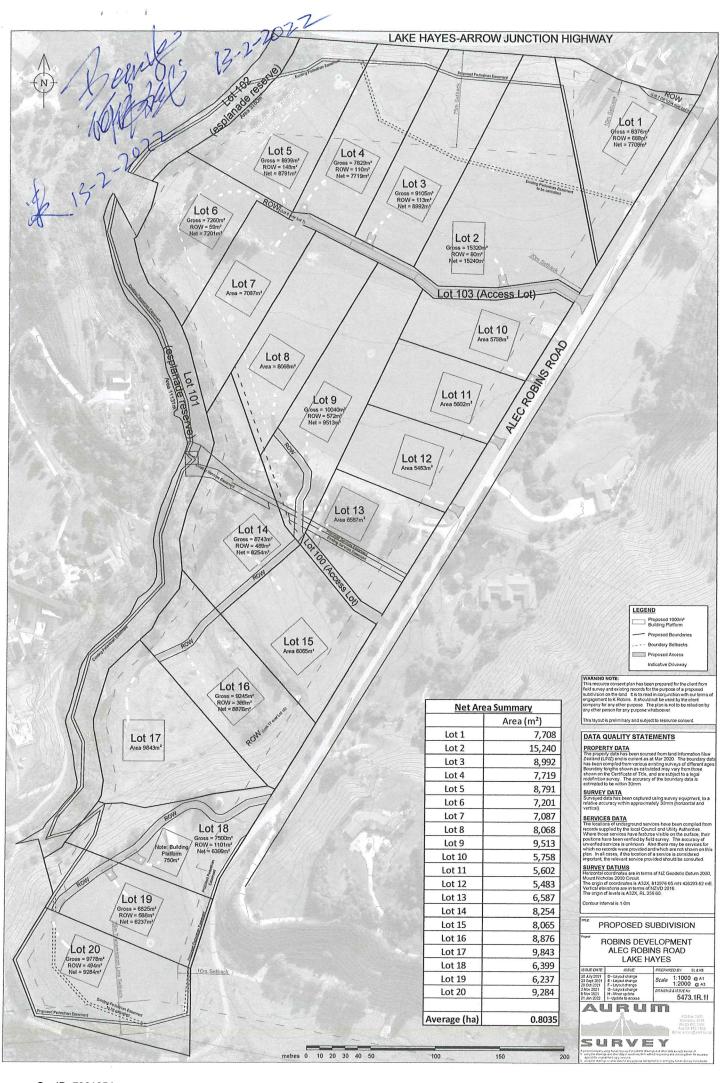
There is no obligation to sign this form, and no reasons need to be given.

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.







Document Set ID: 7361054 Version: 1, Version Date: 16/09/2022

PERSONS FORM 8A



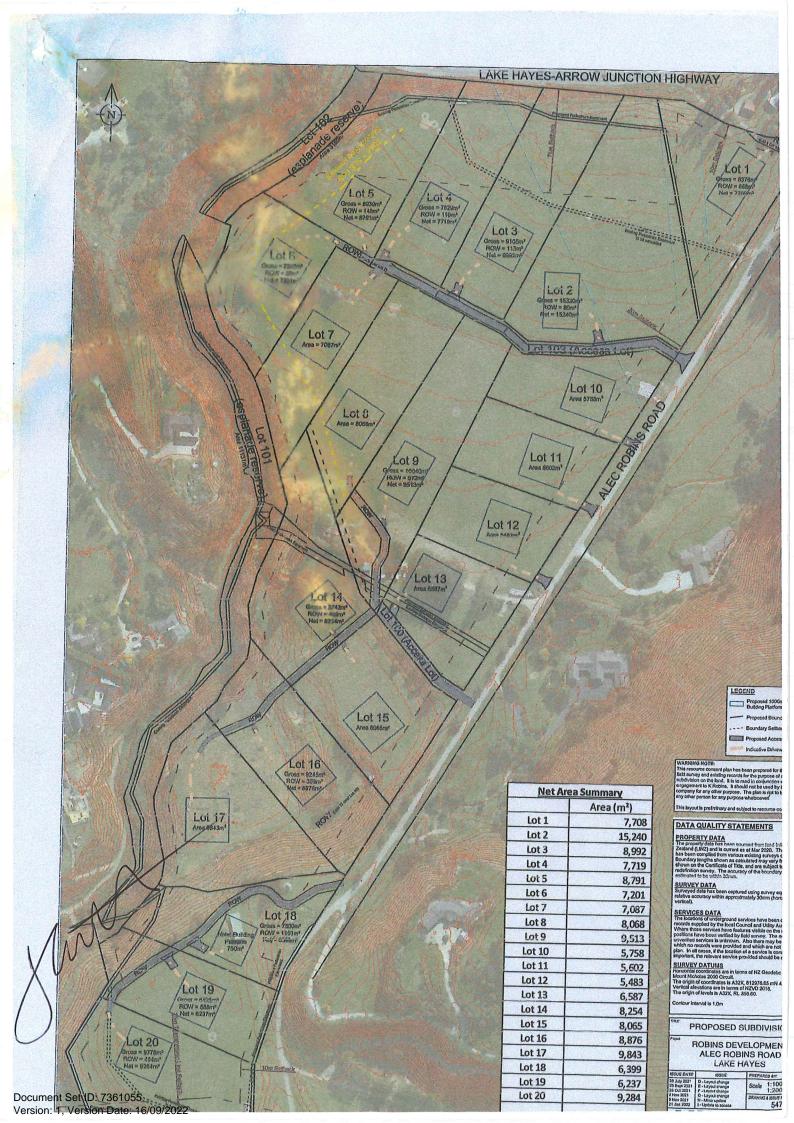
Resource Management Act 1991 Section 95

RESOURCE CONSENT APPLICANT'S NAME AND/OR RM #
HAYS CREEK DEVELOPMENT CO HAYS CREEK TRUST.
SEC 28 BIK IX Shotovers S.D. + Sec 1+250.371226
AFFECTED PERSON'S DETAILS
INVE JOHN MALCOLM BROOKS & JUDITH MARIA SIM
Are the owners/occupiers of
73 ALEC ROBINS ROAD,
LAKE HAYES .
OU EEN STOWN
DETAILS OF PROPOSAL
I/We hereby give written approval for the proposal to:
CRIATE A 2010T CO.
CREATE A 20 LOT SUBDIVISION ON LAND WORTH-WEST
OF ALEC ROBINS RD AS DESCRIBED ABOVE
at the following subject site(s):
SEC 28 BLK IX SHOTOUER SD + SEC 1 · 2.50
371226
I/We understand that by signing this form Council, when considering this application, will not consider any effects of the proposal upon me/us.
I/We understand that if the concent authority data with data with a second authority data with a second
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
Provided
I/We have sighted and initialled ALL plans dated N/A*.

and approve them.







APPROVAL

FORM 8A



Resource Management Act 1991 Section 95 OURCE CONSENT APPLICANT'S NAME AND/OR RM # CREEK DEVILLOPMENT CO 14945 CREEK TRUST SEC 28 SHOTOKERS.D. CTED PERSON'S DETAILS Belinda gathrie e owners/occupiers of LOT 1 DP 22024 reby give written approval for the proposal to: As above owing subject site(s): See accompanied plan. We understand that by signing this form Council, when considering this application, ill not consider any effects of the proposal upon me/us. We understand that if the consent authority determines the activity is a deemed permitted boundary activity under section 87BA the Act, written approval cannot be withdrawn if this process is followed instead. IFORMATION/PLANS HAVE YOU SIGHTED e have sighted and initialled ALL plans dated 7 4 2022 approve them.

Document Set ID: 7361056 Version: 1, Version Date: 16/09/2022

There is no obligation to sign this form, and no reasons need to be given.

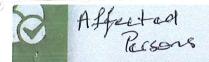
If this form is not signed, the application may be notified with an opportunity for submissions.

If signing on behalf of a trust or company, please provide additional written evidence that you have signing authority.









APPROVAL

FORM 8A



Resource Management Act 1991 Section 95

RESOURCE CONSENT APPLICANT'S NAME AND/OR RM	RESOURCE	CONSENT	APPLICANT	'S NAME	AND/OR	RM
---	----------	---------	-----------	---------	--------	----

HAYS CREEK DEVELOPMENT GOD - HAYS CREEK TRUST SEC 28 BIK 14 Shower S.D. + Sec. 1+2 50.371226 .

AFFECTED	PERSON'S	DETAILS
----------	----------	---------

111 Alec Robins Rd

DETAILS OF PROPOSAL

I/We hereby give written approval for the proposal to:

attched plan

subahuision of 20 lots as per

at the following subject site(s):



I/We understand that by signing this form Council, when considering this application, will not consider any effects of the proposal upon me/us.



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.



I/We have sighted and initialled ALL plans dated

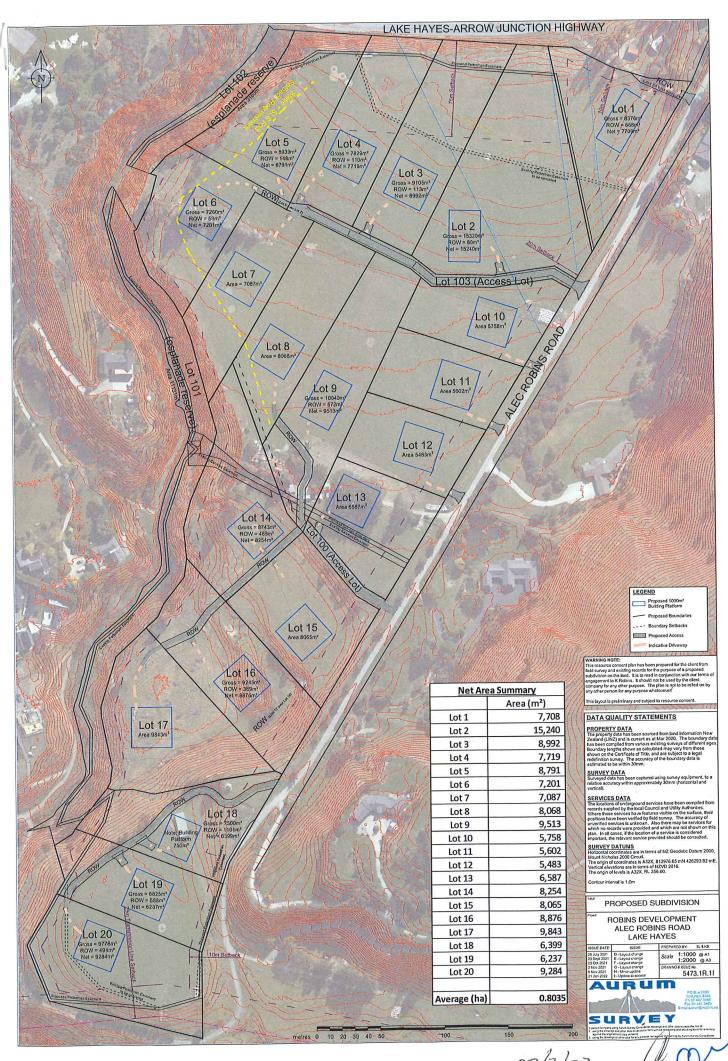
27/2/22

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.

Contact Phone / Email address Name (PRINT) Carlyn Topp. Contact Phone / Email address O21 1900 BO2. Carlyn@highriewapartments.co.nz. Signature Date Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date		Name (PRINT)	
Signature Name (PRINT) Carlyn Topp Contact Phone / Email address O21 1900 802 . Carlyn@highviewapavtments . co.n2 . Signature Date Date Date Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Date			
Signature Name (PRINT) Contact Phone / Email address O21 1900 B02. Carlyn@highviewapartments.co.nz. Signature Date Date 27 February 2022 Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date Note to person signing written approvel		Contact Phone / Email address	
Name (PRINT) Carlyn Topp. Contact Phone / Email address O21 1900 802. Carlyn@highviewapavtments.co.nz. Signature Date 27 February 2032 Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Name (PRINT)	А	linder & trinet	77
Name (PRINT) Carlyn Topp. Contact Phone / Email address O21 19DD 802. Carlyn@highviewapavtments.co.nz. Signature Date 27 Febvuary 2022 Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date			
Carlyn Topp. Contact Phone / Email address O21 1900 BO2. Carlyn@highviewapavtments.co.nz. Signature Date 27 February 2000 Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Date			Date
Carlyn Topp. Contact Phone / Email address O21 1900 BD2. Carlyn@highviewapavtments.co.nz. Signature Date 27 February 2002 Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date			
Contact Phone / Email address O21 1900 802. Car lyn@highriewapartments.co.nz. Signature Date 27 February 2022 Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date		Name (PRINT)	
Name (PRINT) Contact Phone / Email address Signature Date 27 February 2033 Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Date		Carlyn Topp.	
Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Date Name (PRINT) Contact Phone / Email address Date Note to person signing written approval	В	Contact Phone / Email address	
Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date		021 1900 802. Carlyn@highvien	rapartments.co.nz.
Name (PRINT) Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date		Signature	
Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date			27 rebruary 2002
Contact Phone / Email address Signature Date Name (PRINT) Contact Phone / Email address Signature Date		Name (DIMT)	
Signature Name (PRINT) Contact Phone / Email address Signature Date		(Valific (Fraint))	
Name (PRINT) Contact Phone / Email address Signature Date Note to person signing written approval		Contact Phone / Email address	
Name (PRINT) Contact Phone / Email address Signature Date			
Name (PRINT) Contact Phone / Email address Signature Date		Signature	Date
Contact Phone / Email address Signature Date Note to person signing written approval			
Contact Phone / Email address Signature Date Note to person signing written approval			
Signature Date Note to person signing written approval		Name (PRINT)	
Signature Date Note to person signing written approval			
Note to person signing written approval	D	Contact Phone / Email address	
Note to person signing written approval		Signature	
			Date
Conditional written approvals cannot be accepted.		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.		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 this form is not signed, the application may be notified with an opportunity for submi- If signing on behalf of a trust or company, please provide additional written evidence th	at you have signing authority
If signing on behalf of a trust or company places provide a distant		or a trust or company, please provide additional written evidence th	at you have signing authority.







Document Set ID: 7361057 Version: 1, Version Date: 16/09/2022 27/2/22

40



Robins Development Alec Robins Road Preliminary Site Investigation

Hays Creek Trust

October 2021



Arrow Lane Arrowtown 9302

Document Set ID: 7359089 Version: 1, Version Date: 15/09/2022

Robins Development Alec Robins Road Preliminary Site Investigation

Document Status

Version	Purpose of Document	Prepared By	Reviewer	Review Date
0.1	Draft for internal review	J. Lindsay	S. Beardmore	12/10/21
1.0	FINAL	J. Lindsay	G.Davis	20/10/21

Robins Development Alec Robins Road Preliminary Site Investigation Document ID: 21098

Document Set ID: 7359089 Version: 1, Version Date: 15/09/2022

TABLE OF CONTENTS

1		Introduction	1
	1.1	Purpose	1
	1.2	Scope of Work	1
	1.3	Limitations	2
2		Site Location and Description	3
	2.1	Site Location	3
	2.2	Geology	4
	2.3	Hydrogeology	4
	2.4	Hydrology	5
3		Site History	7
	3.1	Historical Certificates of Title, Maps and Surveys	7
	3.2	Historic Aerial Photography	7
	3.3	Historical Newspaper Articles	9
	3.4	Site History Information Provided by Client	10
	3.5	Queenstown Lakes District Council Information	11
	3.6	Otago Regional Council Information	13
	3.7	Previous Investigation Reports	13
4		Site Inspection	14
5		Summary of HAIL Activities	18
	5.1	Identified HAIL Activities	18
	5.2	Integrity Assessment	22
6		Preliminary Conceptual Site Model	23
7		Activity Status under the NESCS	24
8		Summary and Conclusions	25
9		Report Certification	26
10		References	27



LIST OF FIGURES

-igure 1: Site Location (topographic)	3
Figure 2: Site location (aerial)	4
Figure 3: Site Layout	17
Figure 4: Sheep spray dip identified from Retrolens imagery 1978	19
Figure 5. Shed holding small quantities of chemicals.	21
IST OF TABLES	
Table 1: Details of bores within 1 km of the subject site.	5
Fable 2: Summary of Site Location and Description	6
Fable 3: Summary of Aerial Images and Maps	8

LIST OF APPENDICES

Appendix A: e3Scientific Limited Contaminated Land Experience

Appendix B: Proposed Subdivision Plan Appendix C: Historic Certificates of Title

Appendix D: Historic Aerials

Appendix E: QLDC Supporting Information

Appendix F: Otago Regional Council Bore Search

Appendix G: Site Photos

Appendix H: Lime Quarry Fill Material



Executive Summary

Hays Creek Trust is applying for subdivision consent to develop 16 rural residential allotments at 64 Alec Robins Road, Queenstown.

To assist Hays Creek Trust in managing the risks associated with contaminants in soil, as well as satisfy requirement of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (the NESCS), e3Scientific had undertaken a Preliminary Site Investigation (PSI) to identify areas of potential contamination within the site, consider the risks to human health associated with the proposed development, determine the need for further investigation, and identify the status of the development under the NESCS.

The proposed subdivision is located across the land parcel Section 1-2 Survey Office Plan 371226 and Part Section 28 Block IX Shotover Survey District. A detailed review of site history information and site walkover has not identified sources of potential contamination that would result in contaminants present in soil at concentrations that would pose a risk to human health. It is therefore highly unlikely there is a risk to human health from the proposed rural residential subdivision or associated earthworks.

The land use change and soil disturbance required to complete the development are both activities listed in Regulation 5 of the NESCS. However, the NESCS only applies to a piece of land where:

- a) an activity or industry described in the Hazardous Activities and Industries List (HAIL) is being undertaken on it;
- b) an activity or industry described in the HAIL has been undertaken on it;
- c) it is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it.

The conclusion of this Preliminary Site Investigation is that it is more likely than not that activities or industries described in the HAIL have not been undertaken on the site under investigation. As such, the NESCS does not apply.

1 Introduction

1.1 Purpose

Hays Creek Trust is applying for subdivision consent to develop 16 rural residential allotments at 64 Alec Robins Road, Queenstown. A copy of the proposed subdivision is provided in Appendix B.

The development will require a change of land use, subdivision and earthworks. These activities are subject to the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) if they occur on land that is or has the potential to be contaminated with hazardous substances. Activities with the potential to contaminate land are described in the Ministry for the Environment's Hazardous Activities and Industries List (HAIL). The HAIL is a compilation of 52 activities and industries that are considered capable of causing land contamination from hazardous substance use, storage or disposal.

To assist the Hays Creek Trust in satisfying the requirements of the NESCS, e3Scientific has undertaken a Preliminary Site Investigation (PSI) to identify areas of potential contamination within the site, consider the risks to human health associated with the proposed subdivision, determine the need for further investigation, and identify the status of the development under the NESCS.

e3Scientific's experience in the provision of contaminated land services is provided in Appendix A.

1.2 Scope of Work

The scope of work completed during the investigation included the following:

- Review of land use history from historic aerial photographs, certificates of title,
 Queenstown Lakes District Council (QLDC) property files, and information available from the Otago Regional Council (ORC).
- Completion of a site inspection.
- Review of existing physical environment.

 Development of a conceptual site model identifying potential contaminant sources, the possible routes of exposure to contaminants that may be present in soils on the site, and critical receptors.

 Consideration of risks to human health, the need for any further investigation, and the status of the development under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (the NESCS).

 Preparation of a Preliminary Site Investigation report in accordance with the requirements of the Contaminated Land Management Guidelines (CLMG) No. 1: Reporting on Contaminated Sites in New Zealand (Ministry for the Environment, 2021).

1.3 Limitations

The findings of this report are based on the Scope of Work outlined above. e3Scientific Limited (e3s) performed the services in a manner consistent with the normal level of care and expertise exercised by members of the environmental science profession. No warranties, express or implied, are made. Subject to the Scope of Work, e3s's assessment is limited strictly to identifying the risk to human health based on the historical activities on the site. The confidence in the findings is limited by the Scope of Work.

The results of this assessment are based upon site inspections conducted by e3s personnel, information from interviews with people who have knowledge of site conditions and information provided in previous reports. All conclusions and recommendations regarding the properties are the professional opinions of e3s personnel involved with the project, subject to the qualifications made above. While normal assessments of data reliability have been made, e3s assumes no responsibility or liability for errors in any data obtained from regulatory agencies, statements from sources outside e3s, or developments resulting from situations outside the scope of this project.

Observations and assessments of the site are relevant to the time of inspection and the scope of this assessment. Investigations were limited to the site investigation area.

2 Site Location and Description

2.1 Site Location

The area under investigation (the site) is located south of Lake Hayes on State Highway 6 and east of Lake Hayes Estate (Figure 1 & 2). The site is predominantly surrounded by agricultural land to the east and a rural residential area to the west. The land is currently zoned as rural general under the Operative District Plan (Queenstown Lakes District Council, 2021).

Central Coordinates for the site are: E: 1269049 N: 500865 (NZTM 2000)

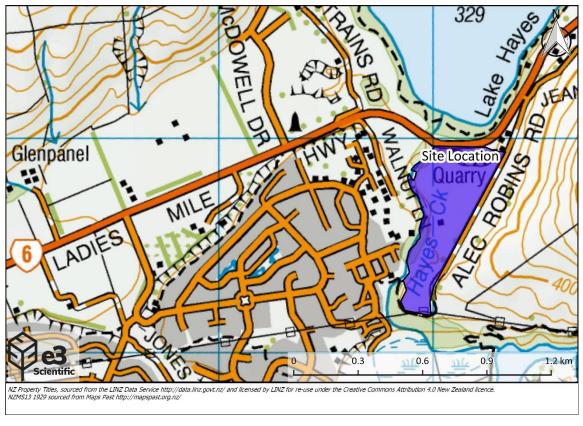


Figure 1: Site Location (topographic)





Figure 2: Site location (aerial)

2.2 Geology

The site sits on a plateau sloping down to the southwest. Based on the 1:250,000 Geological Map of New Zealand, the northern portion of the site is situated on Holocene lake deposits containing laminated micaceous silt, mud, and sand in old lake deposits. The balance of the site is situated on Holocene river deposits, containing loose, angular boulders, gravel sand and silt, forming alluvial fans (GNS Science, 2021).

2.3 Hydrogeology

The site investigation did not include a detailed groundwater assessment; however, according to the Otago Regional Council mapping resource Otago Maps, there are two registered bores within a 1 km radius of the site (Otago Regional Council 2021). Bore F41/0121 is used for domestic supply and bore F41/0369 is used for small community supply (see Table 1 and Appendix F)

Table 1: Details of bores within 1 km of the subject site.

	F41/0121	F41/0369
Depth	13.13 m bgl	6.5 m bgl
Depth to Water	1.3 m bgl	2.23 m bgl
Elevation	327.08 m	-
Owner	Allan W	Sardis Nominees (No 2)
		Limited
Aquifer	Windermeer	Kawarau Alluvial Ribbon
Use	Domestic	Community Supply
Groundwater Basin	Wakatipu Basin	Wakatipu Basin

According to the ORC Otago Maps water allocation, the site is above the Ladies Mile Aquifer which is described as unconfined (ORC, 2021).

2.4 Hydrology

Lake Hayes lies approximately 100 m to the north of the site and Hayes Creek flows from the south of Lake Hayes, along the west side of the Alec Robins development and into the Kawarau from the southern side of the site.

拿

Table 2: Summary of Site Location and Description

Address	64 Alec Robins Rd RD 1 QUEENSTOWN 9371
Legal Descriptions	Section 1-2 Survey Office Plan 371226 and Part Section 28 Block IX Shotover Survey District
Location	Lake Hayes
NZTM Coordinates	E: 1269049 N: 500865 (NZTM 2000)
Owners	Alexander Kenneth Robins, Robert Barry Robins and Anderson Lloyd Trustee Company Limited
Site area	18.3 ha
Surrounding Land Uses	North: Quarry, State highway 6, Lake Hayes East: Hilly farmland South: Kawarau River West: Low density residential area with some protected features
Regulatory Authorities	Regional Authority: Otago Regional Council Local Authority: Queenstown Lakes District Council
Zoning	Rural General
Topography	River Terraces
Geology	Holocene river deposits
Hydrogeology	Two bores located within 1 km of site, one for domestic supply and one for community supply
Nearest Surface water	Hayes Creek
Current Land Use	Used for grazing stock and general farming purposes'
Future Land Use	Rural residential



3 Site History

3.1 Historical Certificates of Title, Maps and Surveys

The historical Certificates of Title search records the original owners for Section 1-2 Survey Office Plan 371226 as Queenstown Lakes District Council. The site was then transferred in 2009 to Alexander Kenneth Robins, Robert Barry Robins and Anderson Lloyd Trustee Company Limited (420797, 420798). For Part Section 28 Block IX Shotover Survey District, historic ownership details only date back to 1992 when ownership was transferred to Alexander Kenneth Robins who is described as a farmer and then later transferred in 2009 to Alexander Kenneth Robins, Robert Barry Robins and Anderson Lloyd Trustee Company Limited (504035, OT14B/176, OT13A/840).

A search of property records from Archives New Zealand was conducted on 19th October 2021. Two property records for Part Section 28 Block IX Shotover Survey District were found for the years 1971-1974 and 1974-1978. Both records attributed A S Robins as the owner. No further details of these property titles could be accessed due to the restricted access placed on the files by Archives New Zealand.

Online available historical maps were accessed from MapsPast.org.nz on 3rd August 2021. Historical topographical maps from 1989, 1999, 2009 and 2019 present a quarry at the northern end of the site. Survey maps from 1929 and 1939 show the property boundaries remain unchanged from their present extent.

Historic surveys and Certificates of Title are provided in Appendix C.

3.2 Historic Aerial Photography

Aerial images sourced from retrolens.nz, the National Library, and from Google Earth Pro have been reviewed. A summary of notable observations is presented in Table 3. Selected images are included in Appendix D.

The review of aerial photographs was completed using digital copies of the images, which provide higher resolution than those provided in the appendix.

Table 3: Summary of Aerial Images and Maps

Date	Source	Site Observations
1956	Retrolens	Majority of the site appears to be pastoral land with the site separated into paddocks. There are no visible buildings or structures on the site. A small portion of the northern end appears to be used for quarry activity. Residential dwellings and stock yards are located outside of the site to the west and another set of stock yards are located just outside the northeast corner of the site. Surrounding land use is agricultural.
1958	Retrolens	The aerial is consistent with the previous image.
1964	Retrolens	The aerial is consistent with the previous image. A storage shed is now located outside of the eastern boundary. A woolshed has been constructed adjacent the northeast stockyards (outside the site boundary).
1966	Retrolens	Image quality is poor; however, the aerial appears to be consistent with the previous image.
1976	Retrolens	The aerial is consistent with the previous image. The quarry at the northern end of the site has been extended. Some additional residential buildings are located just north of the site.
1978	Retrolens	Majority of the site is still used as pastoral land. A small structure is located in the centre of the site. Additional buildings are located outside of the northern boundary. A sheep dip can be seen on a neighbouring property to the northeast of the site.
1984	Retrolens	Tracks have been formed through the centre of the site and outside the eastern boundary. The northeast stockyards have been altered.
2001	Retrolens	Quarry at the north end of the site appears to have grassed and is no longer in operation. Small structures at the centre of the property are visible.
2004	Google Earth (c)	Quarry appears to be active with piles of material visible. A residential property and auxiliary buildings are visible centre of the site. The northeast stockyards have been removed. Residential properties are now present outside of the eastern boundary and outside of the western boundary.



Table 3 Continued

Date	Source	Site Observations
2010	Google Earth (c)	The quarry appears to no longer be active and has potentially been backfilled. Wrapped bailage is present of the northeast boundary.
2011	Google Earth (c)	The aerial is consistent with the previous image. In the centre of the site there appears to be some quarry activity. A small set of sheep yards are present within the southern portion of the site.
2012	Google Earth (c)	The aerial is consistent with the previous image.
2013	Google Earth (c)	The aerial is consistent with the previous image.
2015	Google Earth (c)	The aerial is consistent with the previous image. A storage building has been constructed within the southern portion of the site.
2016	Google Earth (c)	An area southwest of the site is cleared for development. The aerial is consistent with the previous image.
2018	Google Earth (c)	The aerial is consistent with the previous image.
2019	Google Earth (c)	The aerial is consistent with the previous image. Some storage activity is present within the northwest portion of the site adjacent some trees.
2021	Google Earth (c)	The aerial is consistent with the previous image. There are some stockpiles of material in the northeast corner

3.3 Historical Newspaper Articles

A search for historical newspaper articles and advertisements, primarily from the Lake County Mail, Lake County Press, Otago Daily Times and Lake Wakatipu Mail,

Page | 10

was completed on paperspast.natlib.govt.nz. No relevant articles relating to the

property were found.

3.4 Site History Information Provided by Client

e3Scientific contacted Mr Ken Robins who is the owner of the site. Enquiries were

made into the general history of the site, quarry operations, backfilling, stock

management and the use and storage of hazardous substances on site.

Mr Robins has lived and worked on the site for over 60 years and is comfortable

that he has a good knowledge of the farming practices over this time. The farm is

currently leased out and is used to run Angus stud cattle and young bulls in the

summertime. Mr Robins estimates the site has 50-70 sheep on site at any given

time.

Mr Robins confirmed the quarry at the northern end of the property was active

from 1940 until the 1980's. Limestone sand was extracted and used for agricultural

purposes as a lime supplement. The quarry was backfilled by a contractor who

used hard fill from various jobs from around the district with the bulk of the material

coming from excavation works for the Rees Hotel. A resource consent was

granted for this work (detailed below in section 3.1.6). Mr Robins said that he

observed the material as it was being deposited and it consisted of sub soils and

rock. He said there was one occasion that waste items were found; however, this

was a result of fly tipping, and the contractor removed the waste.

Mr Robins stated the small area of disturbance in the centre of the site identified

in the 2011 Google Earth imagery was a small farm gravel pit that likely had the

surface skimmed off the top for farm purposes.

Mr Robins confirmed that the small shed located in the centre of the site visible in

the 1978 imagery was a grain silo for feeding stock and was constructed using red

pine framing and second-hand galvanised roofing iron. The large shed identified

in the 2013 Google Earth imagery is a farm machinery shed. No waste oils are

present in the shed but there may be small quantities of standard oil needed for

machinery such as tractors.

Mr Robins stated that there has never been a sheep dip on site. When the sheep

needed dipping, they were taken to the other family farm located in the Shotover

Robins Development Alec Robins Road Preliminary Site Investigation Document ID: 21098

Document Set ID: 7359089 Version: 1, Version Date: 15/09/2022 Q.

Page | 11

area. Neighbouring properties were also used to dip sheep. It was noted by Mr Robins that for the last 25 years, pour-on methods were used instead on sheep dipping. There was never a stock footbath on site and if sheep had use for a stock footbath they were culled from the flock.

Mr Robins confirmed that there were no historic or current landfills on site; however, there were a small number of offal pits located on the northern part of the property. The offal pits were filled in 20 years ago and contained only sheep. Some organic waste such as small trees and leafy green vegetation has been buried around the property. No buildings or vegetation has been burned on site. Stockpiles of soil located in current aerial imagery in the northeast of the property was topsoil from a neighbour's house site. The topsoil is currently being used for planting trees.

To the best of Mr Robin's knowledge, DDT has not been applied to the site over the last 50 years. Mr Robins remembers his father discussing the potential application of DDT on the hill east of the site, but DDT was never applied to the flats of the farm. The only fertilizers applied to the farm were generic fertilizers such as sulphur super which Mr Robins believed had a 20% concentration of sulphur. The only agrichemicals stored on site are sheep drenches. There was limited application of agrichemical on the site with Mr Robins confirming small amounts of Roundup was used to spray weeds and around young trees. Pour-on gorse killer (Tordon) was used but Mr Robins thought the amount was negligible, as there is very little gorse on site.

3.5 Queenstown Lakes District Council Information

Queenstown Lakes District Council (QLDC) online mapping information, including HAIL sites were examined on the 30th June 2021 via https://www.qldc.govt.nz/doit-online/maps. The QLDC online map did not identify any HAIL sites or dangerous goods licences within the property.

Digital property file information available from QLDC via the eDocs website was examined on the 30th June 2021.

The following information was found:

 RM130148 was granted to construct a four-bay farm shed for the purpose of storing farm machinery and equipment on the 8 April 2013.

Robins Development Alec Robins Road Preliminary Site Investigation Document ID: 21098

- Building consent BC130253 for new farm buildings was approved 15 November 2013.
- RM031122 was granted 2 February 2004 for Horrel Contracting Limited to undertake earthworks at Alec Robins Road to fill in the old lime quarry. The filling of the quarry initially took place without a consent. Compliance was made aware of the issue in 2003 and filling operations ceased until the resource consent was granted. The consent authorised the disposal of approximately 25,000 m³ of clean fill, hard fill, and additional topsoil. The origin of the fill was from 643 Frankton Road a site owned by Bruce Hulyer, which was excavated for commercial development. Material from 643 Frankton Road was transported to the quarry by Horrel Contracting Limited and was listed as non-certified fill. Material excavated included an organic material layer with old reed beds and a layer containing lake silts. As of 15 October 2021, the QLDC HAIL register shows 643 Frankton Road is not considered a HAIL site. Details of RM021107, which authorised the development at 643 Frankton Road, describing the excavated material are included in Appendix H.

A compliance inspection noted the site contained rubbish such as metal objects and plastic containers. An engineer's report from 24 January 2004 stated that:

'An advice note or other device should be applied to the land to prevent any development and to highlight that the site has substantial volume of non-certified fill and is not suitable for development'

Compliance monitoring inspections took place on a yearly basis. A visit on 15 November 2007 found large amounts of debris including broken concrete and waste materials included in the fill material. This was not considered suitable for the grazing of stock, and it was stipulated all waste items were to be removed and the area re-topped with soil. A further site visit on 4 April 2008 found that pasture had established and that it was suitable for stock.

Supporting documentation from the QLDC is provided Appendix E and information regarding the fill material for the quarry is provided in Appendix H.

3.6 Otago Regional Council Information

The Otago Regional Council (ORC) maintains a database where information is held regarding current or past land-uses that have the potential to contaminate land based on the Hazardous Activities and Industries List (HAIL). The database was accessed via the ORC Mapping Resource Hazardous Activities, Industries and Bores Search on the 30 June 2021. The site was not listed in the database. However, the ORC notes that the database is continually under development and should not be regarded as a complete record of all properties in Otago. The absence of available information does not necessarily mean that the property is uncontaminated; rather no information exists on the database.

3.7 Previous Investigation Reports

No records of previous investigations on this site were found.

4 Site Inspection

e3s staff conducted a site walkover on the 14 September 2021.

The site inspection was conducted in accordance with the Contaminated Land Management Guidelines No. 5: Site investigation and analysis of soils (revised 2011) (Ministry for the Environment, 2004).

Information gathered during site inspections included:

- General site condition, current use, local topography, and surrounding environmental setting.
- The condition of the buildings.
- The nature of the ground surface across the site.
- The location and condition of surface watercourses, drainage systems, and any groundwater wells.
- Visible signs of contamination or potential contamination, such as evidence of spills or leaks, surface staining, absent or stressed vegetation, and odours.
- Visible signs of areas of fill, stockpiled material, waste, ground disturbance, burnt areas, and former building foundations.
- The location of any chemical storage and transfer areas, bunding, waste storage areas, and discharges.
- The land use of neighbouring properties that have the potential to have an impact on the site or be affected by contamination from the site.
- The location of former buildings, processes or activities undertaken on the site.

The site layout is shown in Figure 3. Site photographs and observations are provided in Appendix G.

e3Scientific staff completed a site inspection accompanied by site owner Ken Robin. At the time of the site inspection, the property was being used for grazing cattle, horses and equestrian activities. The majority of the property is grassed and overall appeared to be well maintained and kept tidy. No stains, evidence of spills or leaks, stressed vegetation and odours were noted duing the inspection. The property stretches across river terraces with steep banks leading down to Hayes Creek. Surrounding environment was observed to be both rural and residential. Buildings found across the site included a residential dwelling and auxilary storage, farm machinery shed and a shed used as a former grain store. Adjacent

Page | 15

the residential dwelling was a small wooden structure with a hazchem sign

'HAZCHEM 2WE Agrichemicals'. There were no odours or obvious stains. This is kept

by the current lease holder who occasionally hosts childcare groups at the property and is therefore mindful of storing hazardous substances appropriately.

Chemicals stored in the shed include Magtoxin used for rabbit control, sheep and

cattle drench, copper, selenium and colbolt animal injections and small amounts

of glyphosate and pour on gorse killer. Adjacent the chemical store is a shed used

to store motorbikes, lawn mowers, general maintenance tools. Two shipping

containers used by the lease holder for general residential storage are also

located within this area. Bee hives, wood, horsefloat, general trailer, plastic

drainage pipe, sheets of iron, tractor implements and woodchip were also stored

in this area.

A small corrugated iron shed was located on the site and Mr Robins said that it

was constructed to store grain. At the time of the inspection, the shed was being

used to store firewood. The shed was not painted and there were no odors or

staining observed.

The farm machinery shed located within the southern portion of the site is a four

bay colour steel shed. Contents included wool storage, tractor, tractor

implements, fencing materials, irrigation hose, wool in fadges, wool press,

bamboo stakes and an old BBQ. There was no storage of hazardous substances

at the time of the inspection.

A group of bee hives and a storage area was located within the northern end of

the property. This included a kennel, fencing materials, tractor implements, old

wagon wheels and firewood. No hazardous substances were found within this

storage area.

Surface water bodies were not observed within the property. Two shallow drains

were observed; however, there was no standing water in them at the time of the

inspection. Large puddles were present as a result of a recent high rainfall event.

Imported soil was located at the northern end of the site. The bulk of the soil was

used as a planting site adjacent Alec Robin Road with <10m³ of material

remaining in a stockpile above the former quarry. The soil appeard to be free of

waste items and staining.

Robins Development Alec Robins Road Preliminary Site Investigation Document ID: 21098

Document Set ID: 7359089 Version: 1, Version Date: 15/09/2022

The location of the former offal pits was viewed and the pits had been backfilled. Some organic waste, mostly small trees, was located in a pit near the southern end of the site. The farm gravel pit was observed and had not been backfilled. There were occasional areas of ground disturbance; however, this was from the completed geotechical investigation.



Figure 3: Site Layout



5 Summary of HAIL Activities

5.1 Identified HAIL Activities

The Ministry for the Environment's Hazardous Activities and Industries List (HAIL) is a compilation of activities and industries that have the potential to cause land contamination resulting from hazardous substance use, storage, or disposal. The HAIL is intended to identify most situations in New Zealand where use and storage of hazardous substances could cause, and in some cases have caused, land contamination.

Based on a detailed review of site history information, site inspection, and interviews with the site owner, no HAIL activities occurring within the site have been identified. As such, it is more likely than not that no activities or industries described in the HAIL have been undertaken on the site.

Migration of contaminants from adjacent sites is considered a HAIL activity under category H: Any land that has been subject to the migration of hazardous substances from adjacent land in sufficient quantity that it could be a risk to human health or the environment. Although a sheep dip near the site boundary was identified from the 1978 Retrolens aerial imagery (Figure 3), we consider it highly unlikely that contaminants in soil could have migrated in sufficient quantity to pose a risk to human health. The sheep dip was located across the road on a neigbouring property to the northeast of the site. During the sheep dip's use, a water race was also present between the dip and the subject site. The distance between the sheep dip and the subject site is approximately 17 m.



Figure 4: Sheep spray dip identified from Retrolens imagery 1978

Mr Robins confirmed this was a spray dip and that once sheep were sprayed, they were let out to the paddock south of the dip to dry off. It was confirmed by Mr Robins that the dip solution was recycled and when it was drained, the chemicals would drain to the south. It was estimated chemicals traveled no more than 2 m from the sheep spray dip.

The sheep spray dip was disestablished in approximately 1996, when the property was sold to an earth works company. The company removed soil from the side of the hill to bury and level the site of the sheep spray dip. The water race and gravel track has since been filled and leveled for a sealed road.

It is unlikely that contaminants could have migrated from this location onto the subject site due to the initial drainage direction of the chemicals and the water race ditch along the boundary of the subject site, which forms a natural barrier.

Bores located in the surrounding area suggest groundwater depth is approximately 2.5-3 m b.g.l. While it is unlikely contaminants could have migrated through the soil in sufficient quantity to cause a risk to human health, if the Lot 1 section for the new subsivision opposite the old sheep spray dip will be accessing

Page | 20

bore water instead of town supply, it is recommended that the bore is tested for contaminants. However, Mr Robins has confirmed that the entire subdivision will

be using town supply water, posing no risk to human health.

The lime quarry on site was active between 1940's and 1980's. Although HAIL category E3 includes cement and lime manufacture using a kiln and the storage of waste from the manufacturing process, no lime processing took place on site and no storage of hazardous wastes, including waste dumps or dam tailings were present on site. Similarly, HAIL category E7 includes mining industries, including exposure of faces or releases of groundwater containing hazardous substances. This is highly unlikely at a lime quarry. As such, we do not consider the lime quarry

to be associated with HAIL categories E3 or E7.

Subsequently, the quarry was reclaimed with soil from the local area, the majority of which came from a single development on Frankton Road, which is not identified as a HAIL site. Although some unsuitable fill material was brought to site, council records indicate that the site was routinely inspected, and non-complying material was removed. We therefore do not consider the deposition of fill, in this

case, to be HAIL activity.

The proposed plans for the subject site show that while parts of the filled lime quarry will be part of four sections, the uncontrolled fill boundary is outlined in the proposed plans and no building development will take place in this area. Part of

the filled in quarry has also been planted out in natives.

During the site visit a shed labelled HAZCHEM 2WE was observed, the shed was no more than 1 m x 1m shown in Figure 5. The storage shed contained small quantities of Magtoxin, drench, glyphosate, animal injections and small quantities of Pouron gorse killer (Tordon). These chemicals are stored for non-commercial use.



Figure 5. Shed holding small quantities of chemicals.

Given small, domestic, volumes of Magtoxin (rabbit poison), fuel, and herbicides have been stored, we do not consider this activity would have been of sufficient scale to meet the Ministry for the Environment definition of HAIL category A11: Pest control, A17: Storage tanks or drums for fuel, chemicals, or liquid wastes, or A1: Agrichemicals including commercial premises used by spray contractors for filling, storing or washing out tanks for agrichemical application.

An area of ~230 m² was identified as filled in offal pits. The owner Mr Robins said only sheep were put into the offal pits. Given the small scale of the offal pit area, any landfill gas generated would be small in scale and likely to have dissipated.

The scale of this activity is not sufficient to meet the Ministry for the Environment definition of HAIL category G5: Waste disposal to land.

5.2 Integrity Assessment

Overall, the established site history spans a period of approximately 82 years. Information obtained from the historic certificates of title, 1990 historic aerial images (with a maximum interval of 65 years between 1956 and 2021), local authorities, and a site walkover with Mr Robins who has lived and worked on the site for over 60 years has provided an adequate understanding of the site history.



Robins Development Alec Robins Road Preliminary Site Investigation Document ID: 21098

6 Preliminary Conceptual Site Model

A conceptual site model (CSM) for assessing site contamination provides an overview of the interaction between contaminants on site and potential receptors. Also referred to as the pollutant linkage model, the conceptual site model consists of three components (source-pathway-receptor), which if linked, indicate a risk may be present.

In this case, a detailed review of the site history information and site walkover has not identified sources of potential contamination that would result in contaminants present in soil at concentrations that would pose a risk to human health. It is therefore highly unlikely there is a risk to human health from the proposed subdivision.

Robins Development Alec Robins Road Preliminary Site Investigation Document ID: 21098

7 Activity Status under the NESCS

The land use change and soil disturbance required to complete the development are both activities listed in Regulation 5 of the NESCS. However, the NESCS only applies to a piece of land where:

- a) An activity or industry described in the HAIL is being undertaken on it;
- b) An activity or industry described in the HAIL has been undertaken on it;
- c) It is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it.

The conclusion of the Preliminary Site Investigation is that it is more likely than not that activities or industries described in the HAIL have not been undertaken on the piece of land where the proposed subdivision development and associated earthworks will occur as part of the current proposal. As such, the NESCS does not apply.



8 Summary and Conclusions

Hays Creek Trust is applying for subdivision consent develop 16 rural residential allotments at 64 Alec Robins Road, Queenstown.

To assist Hays Creek Trust in managing the risks associated with contaminants in soil, as well as satisfy requirement of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (the NESCS), e3Scientific has undertaken a Preliminary Site Investigation (PSI) to identify areas of potential contamination within the site, consider the risks to human health associated with the proposed development, determine the need for further investigation, and identify the status of the development under the National Environmental Standard for Assessing and Managing Contaminant in Soil to Protect Human Health (the NESCS).

The proposed subdivision is located across the land parcel Section 1-2 Survey Office Plan 371226 and Part Section 28 Block IX Shotover Survey District. A detailed review of site history information and site walkover has not identified sources of potential contamination that would result in contaminants present in soil at concentrations that would pose a risk to human health. It is therefore highly unlikely there is a risk to human health from the proposed subdivision development or associated earthworks.

The land use change and soil disturbance required to complete the development are both activities listed in Regulation 5 of the NESCS. However, the NESCS only applies to a piece of land where:

- a) An activity or industry described in the HAIL is being undertaken on it;
- b) An activity or industry described in the HAIL has been undertaken on it;
- c) It is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it.

The conclusion of this Preliminary Site Investigation is that it is more likely than not that activities or industries described in the HAIL have not been undertaken on the site under investigation, including the pieces of land where the subdivision development and associated earthworks will occur as part of the current proposal. As such, the NESCS does not apply.

9 Report Certification

- I, Simon Beardmore, of e3Scientific, certify that:
 - 1. This preliminary site investigation meets the requirements of the Resource Management (National Environmental Standard for assessing and managing contaminants in soil to protect human health) Regulations 2011 because it has been:
 - a. done by a suitably qualified and experienced practitioner, and
 - b. reported on in accordance with the current edition of Contaminated land management guidelines No 1 – Reporting on contaminated sites in New Zealand, and
 - c. certified by a suitably qualified and experienced practitioner.
 - 2. This preliminary site investigation concludes:
 - a. It is more likely than not that no activities or industries listed on the HAIL have occurred within the site.

Evidence of the qualifications and experience of the suitably qualified and experienced practitioner(s) who have done this investigation and have certified this report is included in Appendix A.

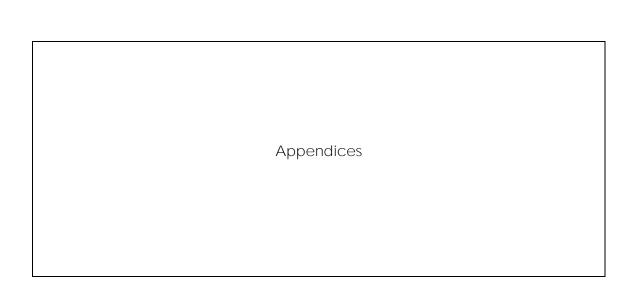
Signed and dated:	<u> </u>
oightea aria aarea	

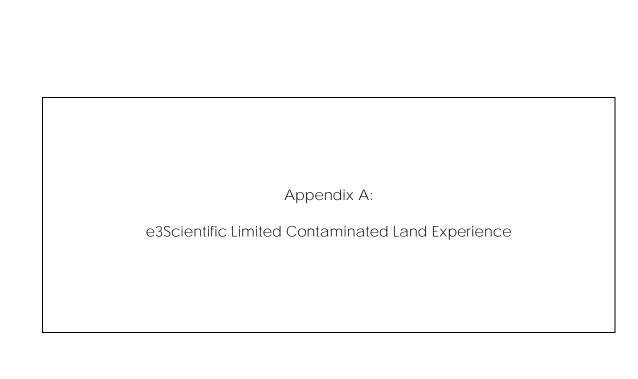


10 References

- GNS Science. (2021, August). New Zealand Geology Web Map. Retrieved from http://data.gns.cri.nz/geology/
- Ministry for the Environment. (2004). Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils (Revised 2011).
- Ministry for the Environment. (2021). Contaminated Land Management Guidelines No. 1: Reporting on Contaminated Sites in New Zealand. Wellington: Ministry for the Environment.
- ORC. (2021, August 16th). *Otago Maps 2.1 Water Allocation*. Retrieved from Otago Regional Council: https://maps.orc.govt.nz/OtagoMaps/









Contaminated Land Services

e3Scientific Limited (e3Scientific) is a New Zealand owned and operated environmental science consultancy. Our team delivers technical, innovative science; practical solutions; and expert advice to assist our clients in the smart management of the environment.

e3Scientific provides a range contaminated land services, including:

- Due Diligence Investigations.
- Preliminary Site Investigations.
- Detailed Site Investigations.
- Soil and groundwater remedial advice and management.
- Peer review and regulator support.

Our Contaminated Land team has a sound understanding of New Zealand's regulatory environment with respect to the assessment and management of contaminated land and has been a major supplier of contaminated land services in Otago and Southland since 2012.

Simon Beardmore is the Technical Director of the Contaminated Land team at e3Scientific. Simon has over 12 years post graduate experience working as an Environmental Scientist, specialising in the investigation and management of contaminated land. Simon developed contaminated land management strategy and standard operating procedures at the Otago Regional Council and has completed and supervised the delivery of preliminary and detailed site investigations, and site remediation projects throughout Otago and Southland. Simon is responsible for technical oversight of projects and certifying contaminated land investigations as a suitably qualified and experienced practitioner. Simon is supported by Team Leader Fiona Rowley, Senior Environmental Scientists Carrie Pritchard, Jodi Halleux and Simon Bloomberg, and Environmental Scientist and Geospatial Specialist Jessie Lindsay.

The e3Scientific team has completed many Preliminary Site Investigations, Detailed Site Investigations and remedial projects across New Zealand and regularly provides peer review of site investigations for district and regional councils. Projects have involved investigations into the impact on soil quality associated with operational and historic timber treatment plants, fuel storage and distribution facilities, substations, sheep dips and yards, orchards, vineyards, agricultural activities, gasworks, service stations, and operational and closed landfills.

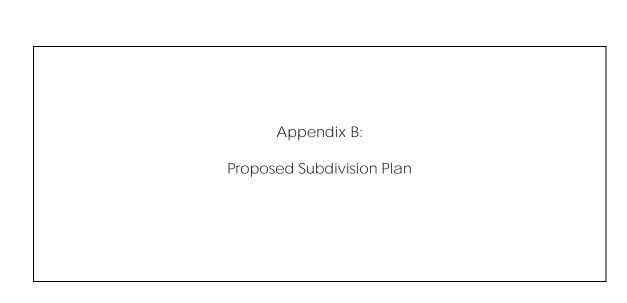


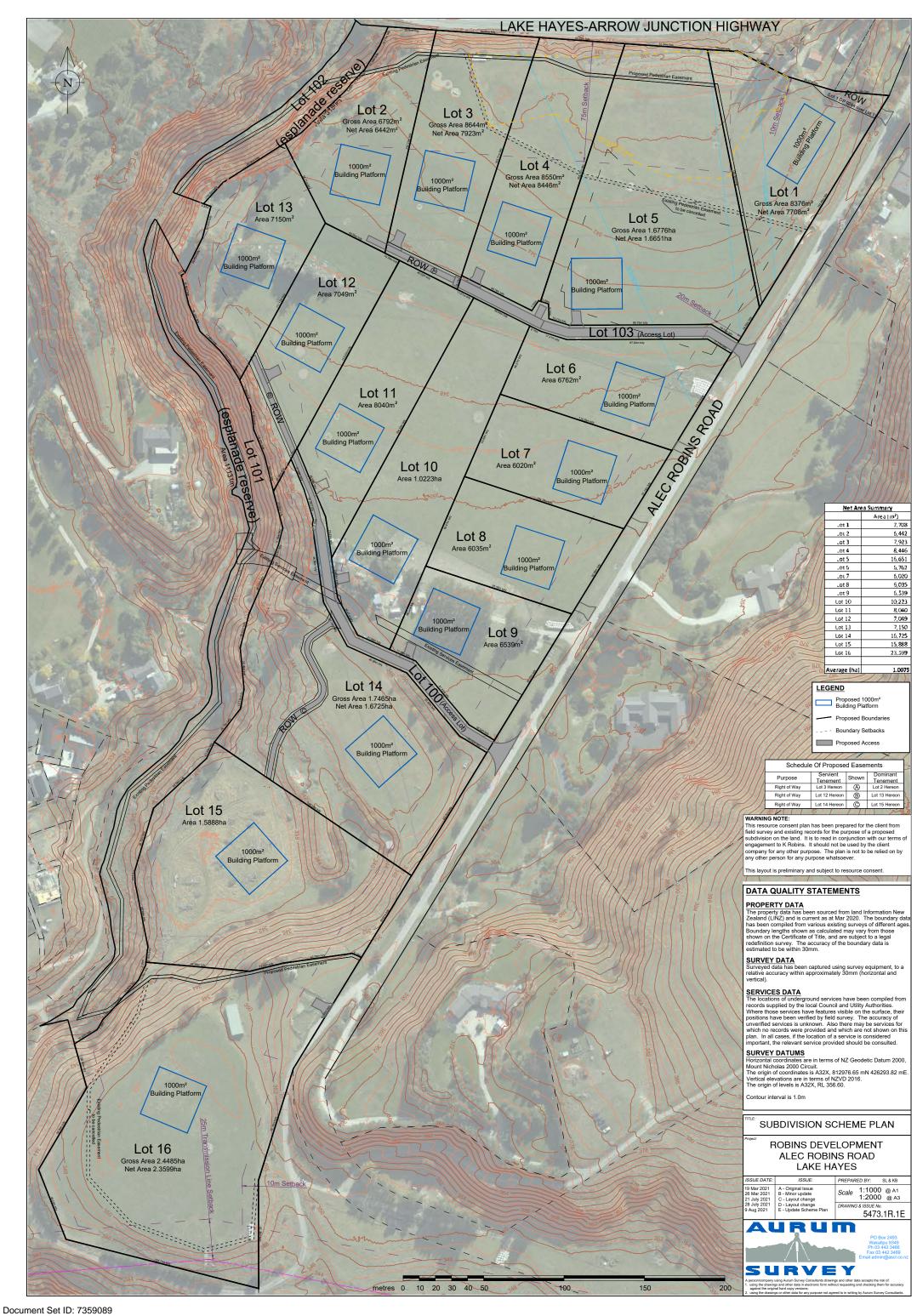
The following provides a summary of key contaminated land work e3Scientific is involved in or has completed:

- Hundreds of Preliminary Site Investigations and Detailed Site Investigations to support subdivision, landuse change and earthworks consent applications.
- Support Environment Southland's Selected Landuse Register including the identification of Hazardous Activities on properties across Southland and the registration of HAIL sites.
- Review of groundwater contamination associated with the former Invercargill gasworks site
 including the completion of a groundwater investigations and an environmental risk
 assessment to support a discharge consent application.
- Large scale remedial works of former timber treatment plants and sheep dips including the
 completion of detailed investigations to delineate the extent of contaminated soils, design of
 remedial action plans, project management of remedial works and completion of site
 validation and council close out reports.
- Investigations into an area of arsenic impacted soils in Frankton including the completion of detailed investigations to delineate the horizontal extent, consideration of the source of the arsenic, liaison with property owners and council.
- Project management of a bioavailability study of arsenic impacted soils in Gibbston Valley to support a Tier 2 risk assessment associated with a residential development.
- Oversight of the removal of multiple underground fuel storage systems for private residences, schools and oil and gas clients.

The e3Scientific team is committed to professional development, and employing new technologies in the prevention, assessment and remediation of contaminated land. e3Scientific is an active member of the Australasian Land & Groundwater Association and WasteMINZ.











COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Historical Search Copy



Identifier 420797 Cancelled

Land Registration District Otago

Date Issued 06 May 2008

Prior References SR 7806077.1

Estate Fee Simple

Area 8095 square metres more or less
Legal Description Section 1 Survey Office Plan 371226

Original Proprietors

Queenstown Lakes District Council

Interests

8255284.1 Transfer to Alexander Kenneth Robins, Robert Barry Robins and Anderson Lloyd Trustee Company Limited - 17.11.2009 at 9:02 am

8255284.2 CT 504035 issued - 17.11.2009 at 9:02 am.

CANCELLED

Transaction ID 65953758

Document Psen 10: 9359089 001

Version: 1, Version Date: 15/09/2022



COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Historical Search Copy



Identifier 420798 Cancelled

Land Registration District Otago

Date Issued 06 May 2008

Prior References SR 7806077.1

Estate Fee Simple

Area 1.0520 hectares more or less

Legal Description Section 2 Survey Office Plan 371226

Original Proprietors

Queenstown Lakes District Council

Interests

8255284.1 Transfer to Alexander Kenneth Robins, Robert Barry Robins and Anderson Lloyd Trustee Company Limited - 17.11.2009 at 9:02 am

8255284.2 CT 504035 issued - 17.11.2009 at 9:02 am.

CANCELLED

Transaction ID 65954097

Document Psen 10: 9359089 001

Version: 1, Version Date: 15/09/2022



RECORD OF TITLE UNDER LAND TRANSFER ACT 2017 FREEHOLD

Historical Search Copy



Constituted as a Record of Title pursuant to Sections 7 and 12 of the Land Transfer Act 2017 - 12 November 2018

Identifier 504035

Land Registration District Otago

Date Issued 17 November 2009

Prior References

420797 420798 OT14B/176

Estate Fee Simple

Area 17.9207 hectares more or less

Legal Description Section 1-2 Survey Office Plan 371226 and

Part Section 28 Block IX Shotover Survey

District

Original Registered Owners

Alexander Kenneth Robins, Robert Barry Robins and Anderson Lloyd Trustee Company Limited

Interests

5002654.1 Gazette Notice declaring adjoining road (S.H.No 6) to be limited access road - 26.5.2000 at 2:26 pm (affects Part Section 28 Block IX Shotover Survey District)

Subject to a right to convey water and telecommunications over part marked G, H, I, J, take and pump water marked J and convey electricity marked I, J on DP 304263 created by Transfer 5191027.5 - 16.4.2002 at 9:00 am

The easements created by Transfer 5191027.5 are subject to Section 243 (a) Resource Management Act 1991

Subject to rights in gross to convey water and telecommunications over part marked G, H, I, J, take and pump water marked J and convey electricity marked I, J on DP 304263 in favour of Effkay Properties Limited created by Transfer 5191027.6 - 16.4.2002 at 9:00 am

Subject to a right to convey electricity in gross over part marked G, H on DP 304263 in favour of Dunedin Electricity Limited created by Transfer 5191027.9 - 16.4.2002 at 9:00 am

The easement created by Transfer 5191027.9 is subject to Section 243 (a) Resource Management Act 1991

Subject to a right of way (pedestrian) (in gross) to over parts marked A, B, C, D, E and F on DP 376233 in favour of Queenstown Lakes District Council created by Easement Instrument 8255284.3 - 17.11.2009 at 9:02 am

Land Covenant in Easement Instrument 8403650.1 - 16.3.2010 at 1:24 pm

Transaction ID 65784926

Document Ser 109:9359089

Version: 1, Version Date: 15/09/2022

딦 \triangleright

Iransfer No. N/C. Order No 748488/3

REGISTER

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 22nd day of February one thousand nine hundred and ninety under the seal of the District Land Registrat of the Land Registration District of O T A G O

WITNESSETH that ALEXANDER KENNETH ROBINS of Lake Hayes, Farmer

is seised of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land heremafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say. All that parcel of land containing 16.4127 hectares more or less being part Section 28 Block IX SHOTOVER DISTRICT



799073/1) New CT 14B/175 issued for Lot

26.2.1992) 1 DP 22024

799073/2) Cancelled and new CT 14B/176 26.2.1992) issued for the balance

herein

A.L.R.

AREA = 16.4127 ha

DP11444 Measurements are Metric SCALE 1:9000 approx

Lot 2

SO 6400

Lot 1 DP 21087

New Plan 22024

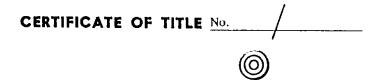
GORG

22943

ROAD [

PT 28

Register cops for 1 & D 69, 71 72



88382A-50,000/9/82MK

Document Set ID: 7359089 Version: 1, Version Date: 15/09/2022



COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Historical Search Copy



Identifier OT14B/176 Cancelled

Land Registration District Otago

Date Issued 26 February 1992

Prior References OT13A/840

Estate Fee Simple

Area 16.0592 hectares more or less

Legal Description Part Section 28 Block IX Shotover Survey

District

Original Proprietors

Alexander Kenneth Robins

Interests

5002654.1 Gazette Notice declaring adjoining road (S.H.No 6) to be limited access road - 26.5.2000 at 2:26 pm 5004483.1 Transfer to Alexander Kenneth Robins, Robert Barry Robins and Anderson Lloyd Trustee Company Limited - 27.6.2000 at 11:19 am

Subject to a right to convey water and telecommunications over part marked G, H, I, J, take and pump water marked J and convey electricity marked I, J on DP 304263 created by Transfer 5191027.5 - 16.4.2002 at 9:00 am

The easements created by Transfer 5191027.5 are subject to Section 243 (a) Resource Management Act 1991

Subject to rights in gross to convey water and telecommunications over part marked G, H, I, J, take and pump water marked J and convey electricity marked I, J on DP 304263 in favour of Effkay Properties Limited created by Transfer 5191027.6 - 16.4.2002 at 9:00 am

Subject to a right to convey electricity in gross over part marked G, H on DP 304263 in favour of Dunedin Electricity Limited created by Transfer 5191027.9 - 16.4.2002 at 9:00 am

The easement created by Transfer 5191027.9 is subject to Section 243 (a) Resource Management Act 1991 8255284.2 CT 504035 issued - 17.11.2009 at 9:02 am.

CANCELLED

Transaction ID 65953328

Document Serror 9359089⁰⁰¹

Version: 1, Version Date: 15/09/2022

References

Prior C/T 13A/840

Transfer No

N/C Order No. 799073/2



Land and Deeds 69

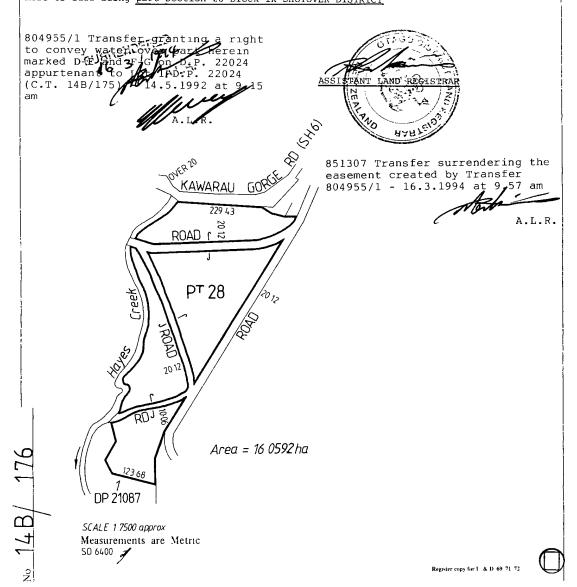
REGISTER

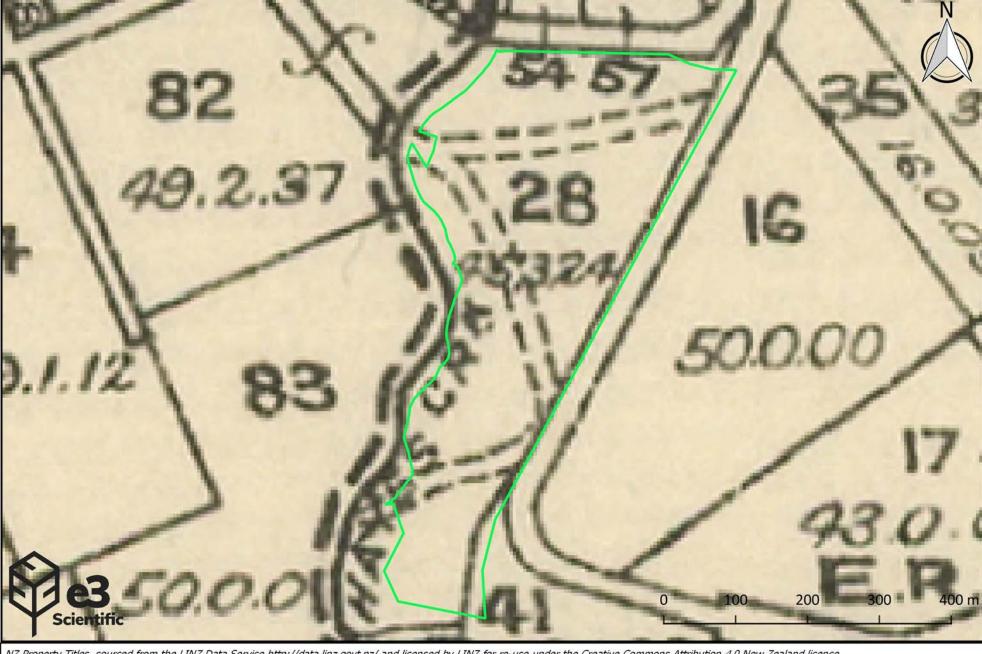
CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 26th day of February one thousand nine hundred and ninety two under the seal of the District Land Registrar of the Land Registration District of OTAGOO

WITNESSETH that ALEXANDER KENNETH ROBINS of Lake Hayes, Farmer

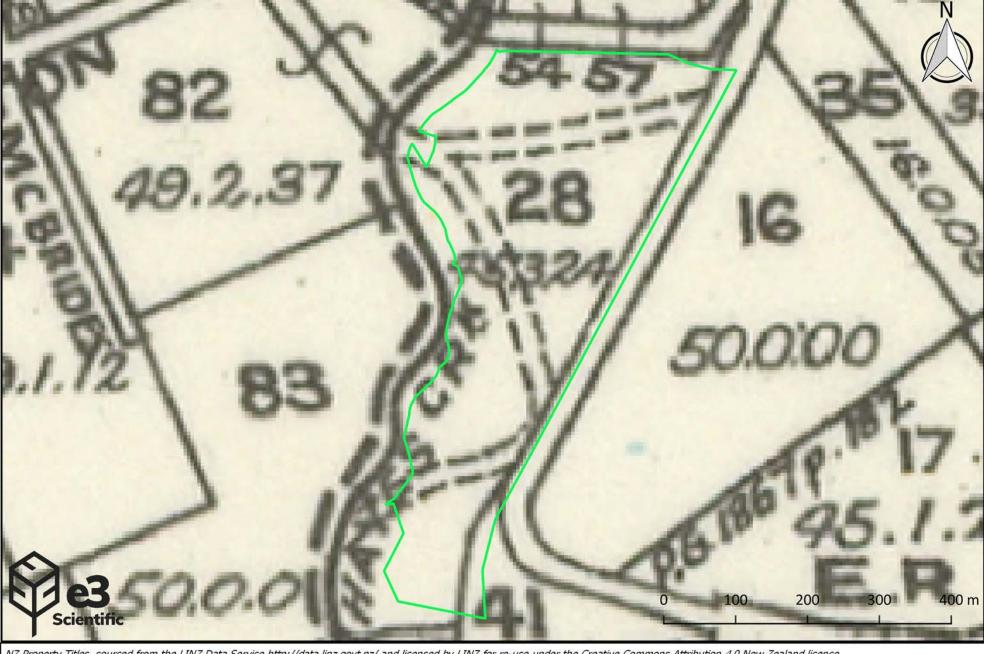
is seised of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say All that parcel of land containing 16.0592 hectares more or less being part Section 28 Block IX SHOTOVER DISTRICT





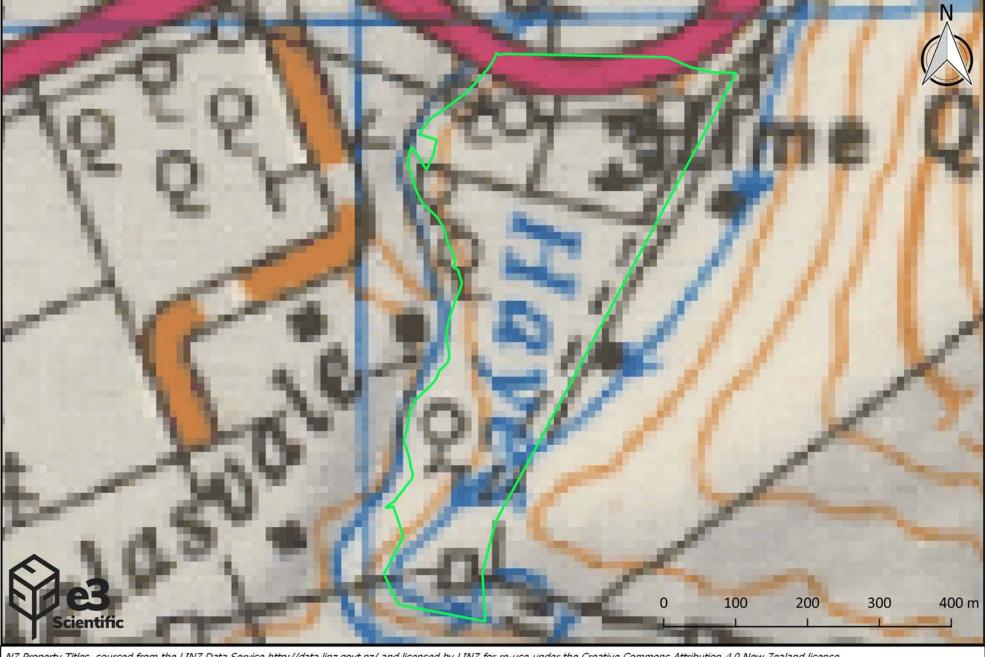
NZ Property Titles, sourced from the LINZ Data Service http://data.linz.govt.nz/ and licensed by LINZ for re-use under the Creative Commons Attribution 4.0 New Zealand licence.

NZMS13 1978 spurced from Maps Past http://mapspast.org.nz/
Document Set ID: 7359889

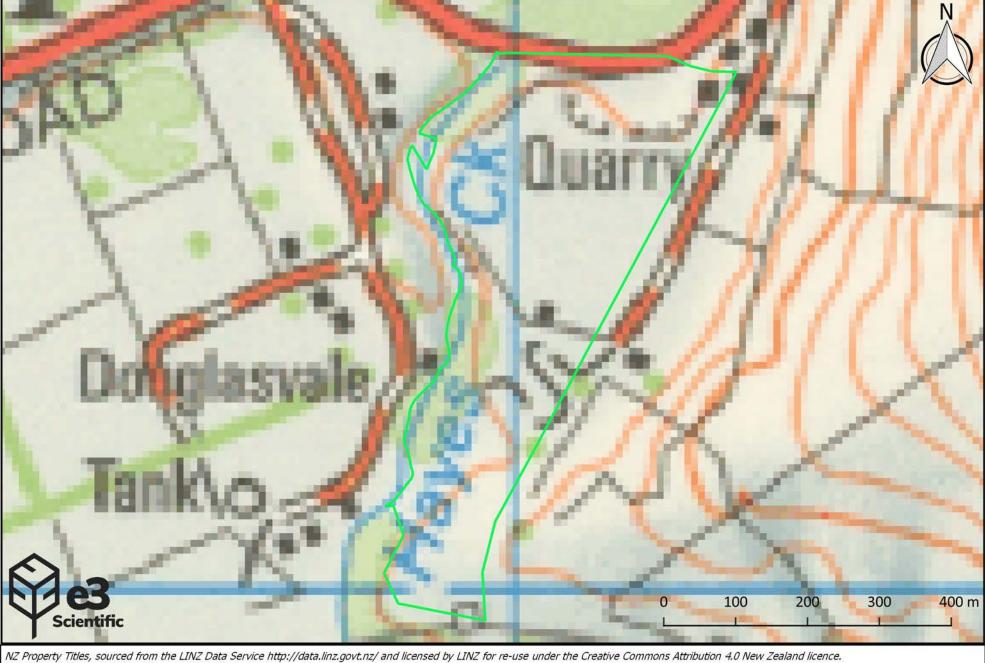


NZ Property Titles, sourced from the LINZ Data Service http://data.linz.govt.nz/ and licensed by LINZ for re-use under the Creative Commons Attribution 4.0 New Zealand licence.

NZMS13 1939 sourced from Maps Past http://mapspast.org.nz/
Document Set ID: 7359089

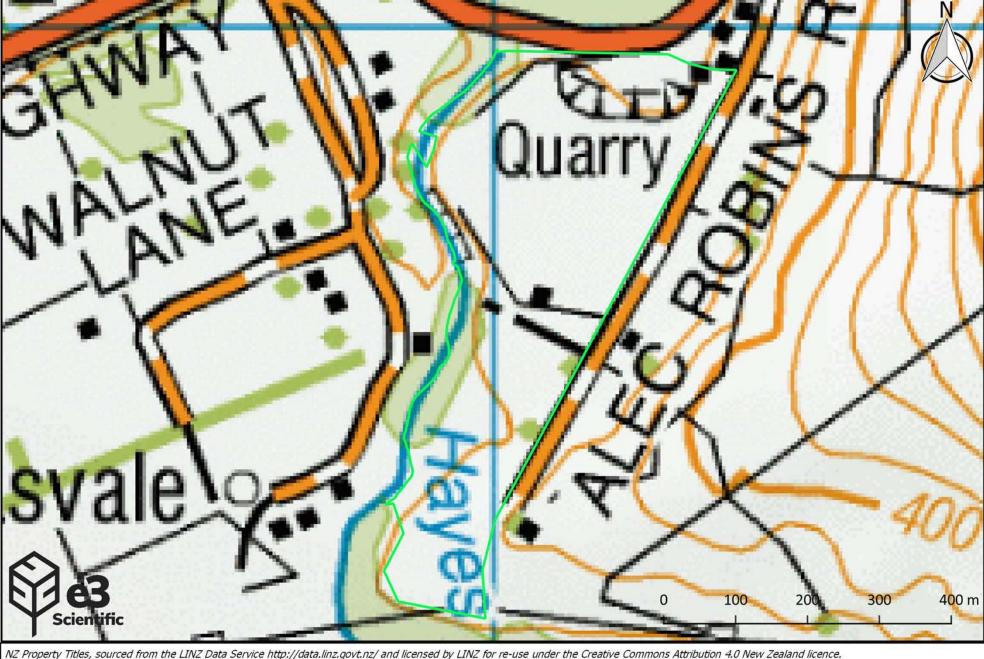


NZ Property Titles, sourced from the LINZ Data Service http://data.linz.govt.nz/ and licensed by LINZ for re-use under the Creative Commons Attribution 4.0 New Zealand licence. NZMS 260, 1989 Surged from Maps Past http://mapspast.org.nz/



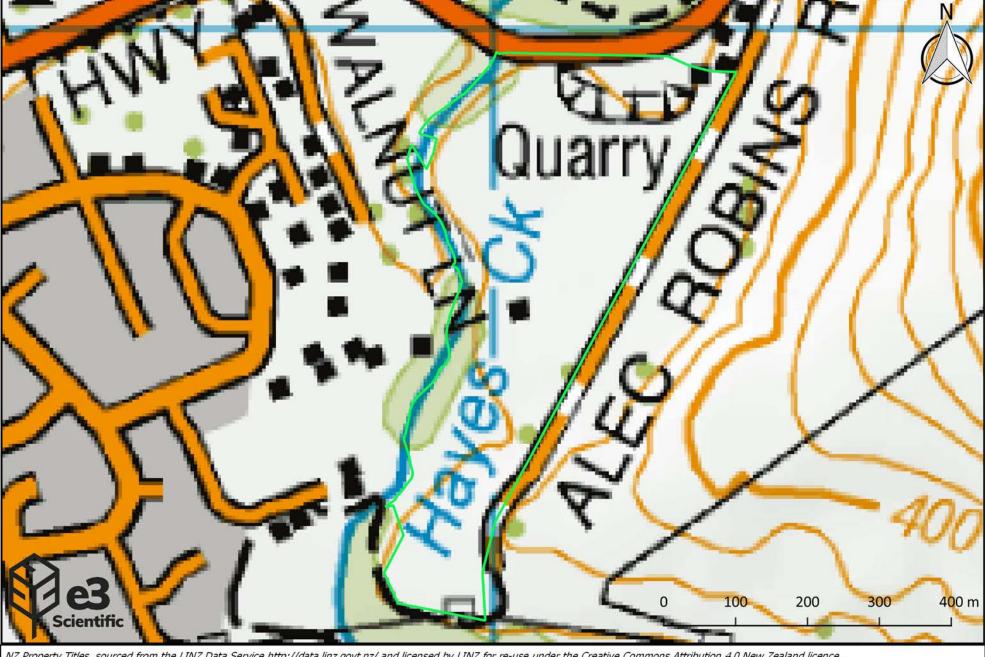
NZ Property Titles, sourced from the LINZ Data Service http://data.linz.govt.nz/ and licensed by LINZ for re-use under the Creative Commons Attribution 4.0 New Zealand licence.

NZMS 260 1999 sourced from Maps Past http://mapspast.org.nz/
Document Set ID: 7359088



NZ Property Titles, sourced from the LINZ Data Service http://data.linz.govt.nz/ and licensed by LINZ for re-use under the Creative Commons Attribution 4.0 New Zealand licence.

NZTM Topo 2009 sourced from Maps Past http://mapspast.org.nz/
Document Set 1D: 7359089



NZ Property Titles, sourced from the LINZ Data Service http://data.linz.govt.nz/ and licensed by LINZ for re-use under the Creative Commons Attribution 4.0 New Zealand licence. NZTM Document Ser ID: 017359089 Maps Past http://mapspast.org.nz/



Document Set ID: 7359089 Version: 1, Version Date: 15/09/2022

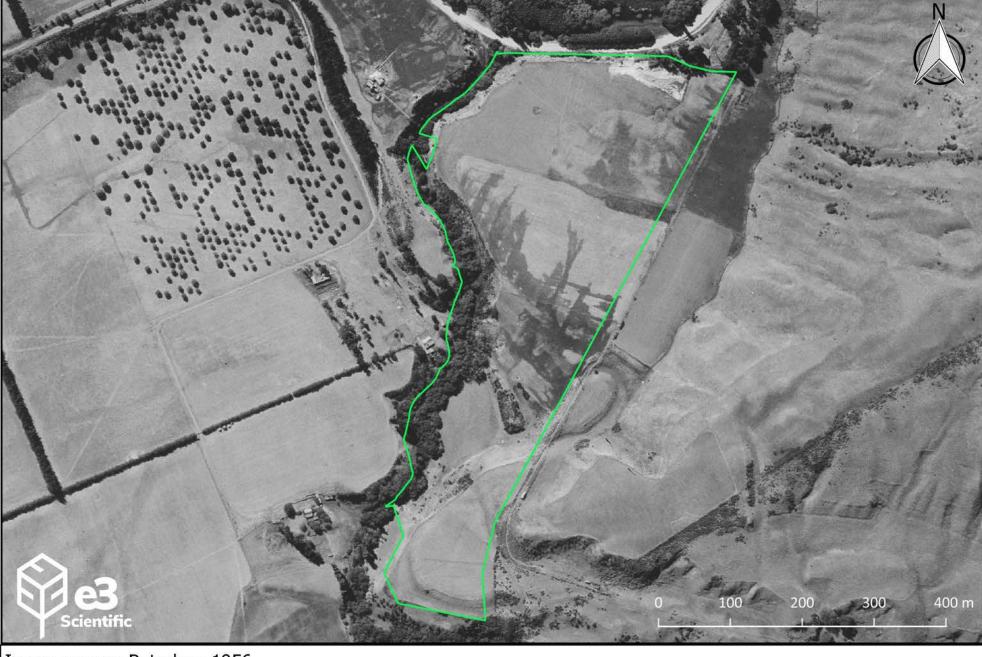


Image source: Retrolens 1956
Document Set ID: 7359089
Version: 1, Version Date: 15/09/2022



Image source: Retrolens 1958
Document Set ID: 7359089
Version: 1, Version Date: 15/09/2022

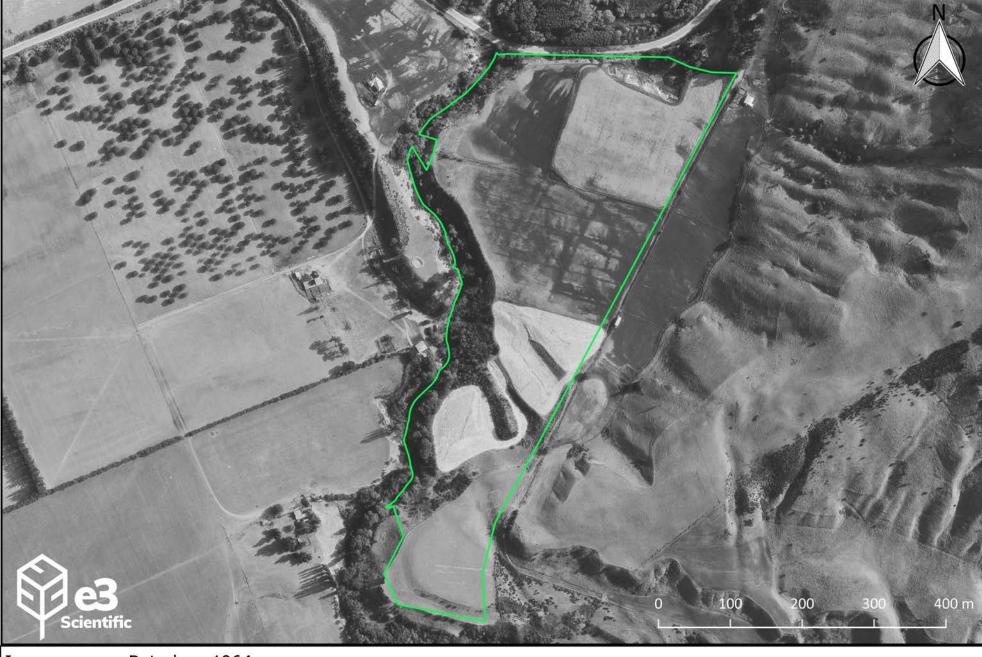


Image source: Retrolens 1964
Document Set ID: 7359089
Version: 1, Version Date: 15/09/2022



Image source: Retrolens 1966
Document Set ID: 7359089
Version: 1, Version Date: 15/09/2022

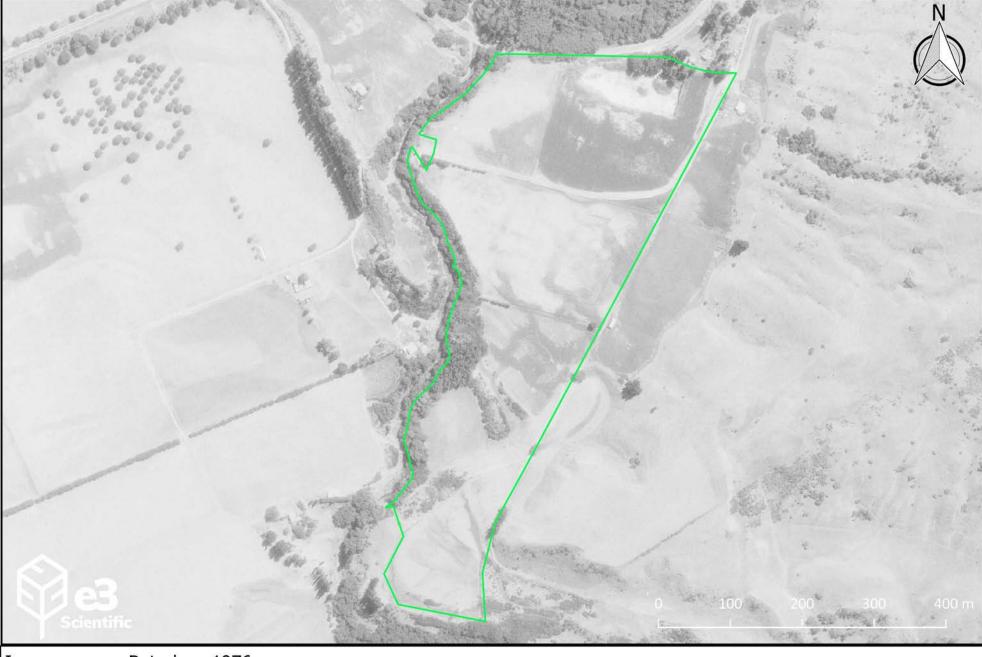


Image source: Retrolens 1976
Document Set ID: 7359089
Version: 1, Version Date: 15/09/2022



Image source: Retrolens 1978
Document Set ID: 7359089
Version: 1, Version Date: 15/09/2022



Image source: Retrolens 1984
Document Set ID: 7359089
Version: 1, Version Date: 15/09/2022



Image source: Retrolens 2001
Document Set ID: 7359089
Version: 1, Version Date: 15/09/2022



Image source: Google Earth Historical Imagery 2004

Document Set ID: 7359089

Version: 1, Version Date: 15/09/2022

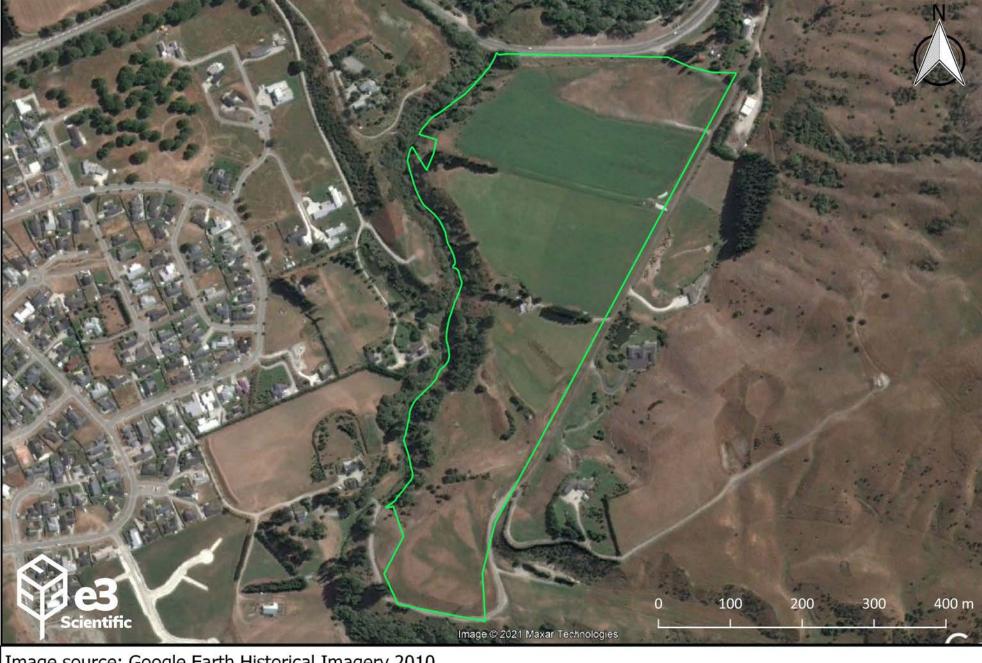


Image source: Google Earth Historical Imagery 2010

Document Set ID: 7359089

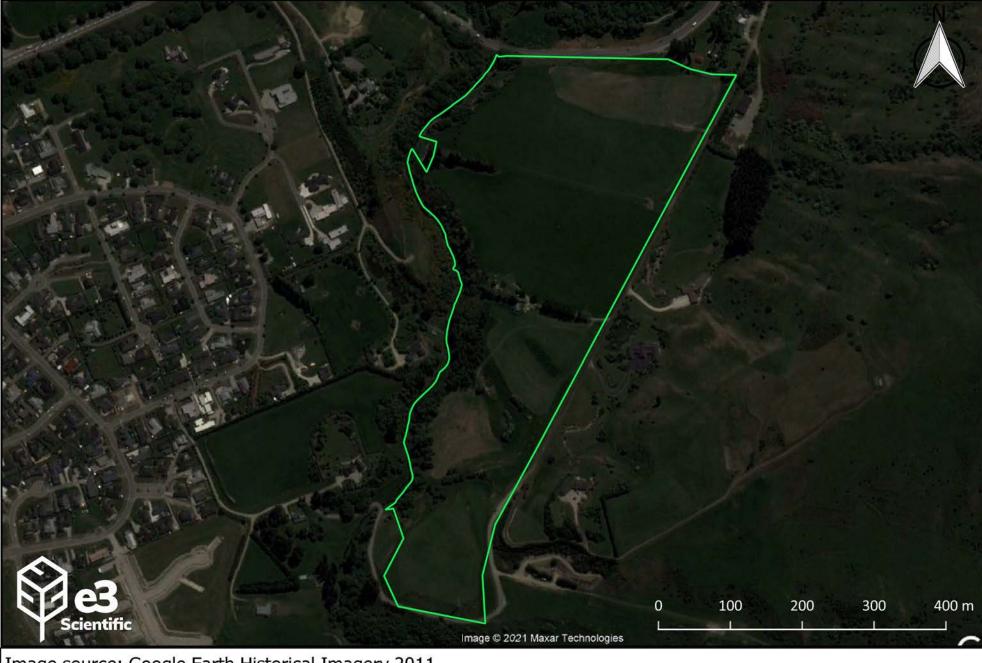


Image source: Google Earth Historical Imagery 2011

Document Set ID: 7359089

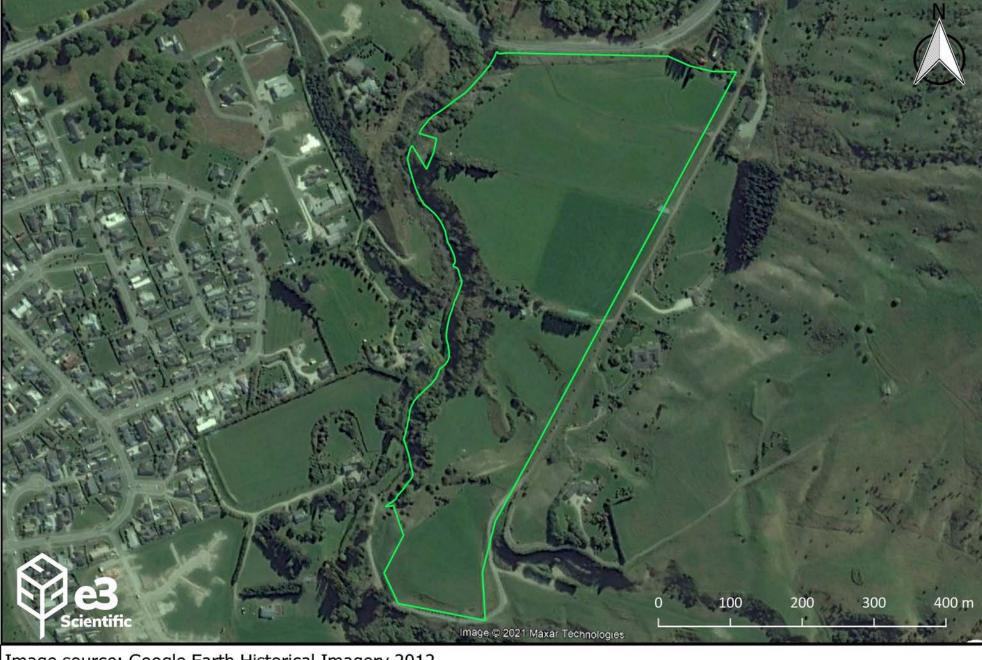


Image source: Google Earth Historical Imagery 2012

Document Set ID: 7359089

Version: 1, Version Date: 15/09/2022



Image source: Google Earth Historical Imagery 2013

Document Set ID: 7359089

Version: 1, Version Date: 15/09/2022



Image source: Google Earth Historical Imagery 2015

Document Set ID: 7359089

Version: 1, Version Date: 15/09/2022



Image source: Google Earth Historical Imagery 2016

Document Set ID: 7359089

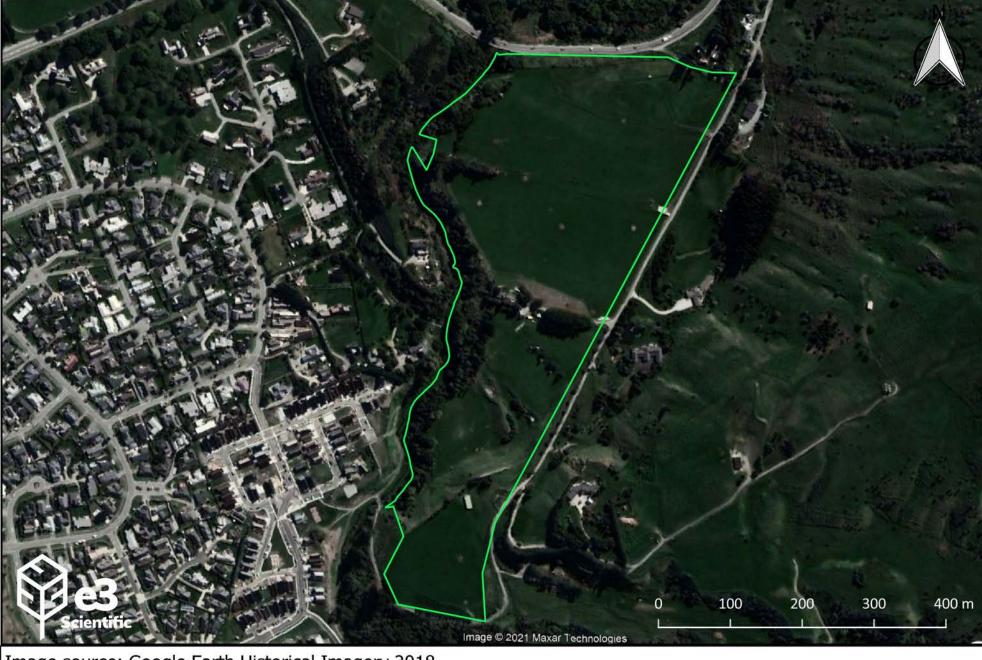


Image source: Google Earth Historical Imagery 2018

Document Set ID: 7359089

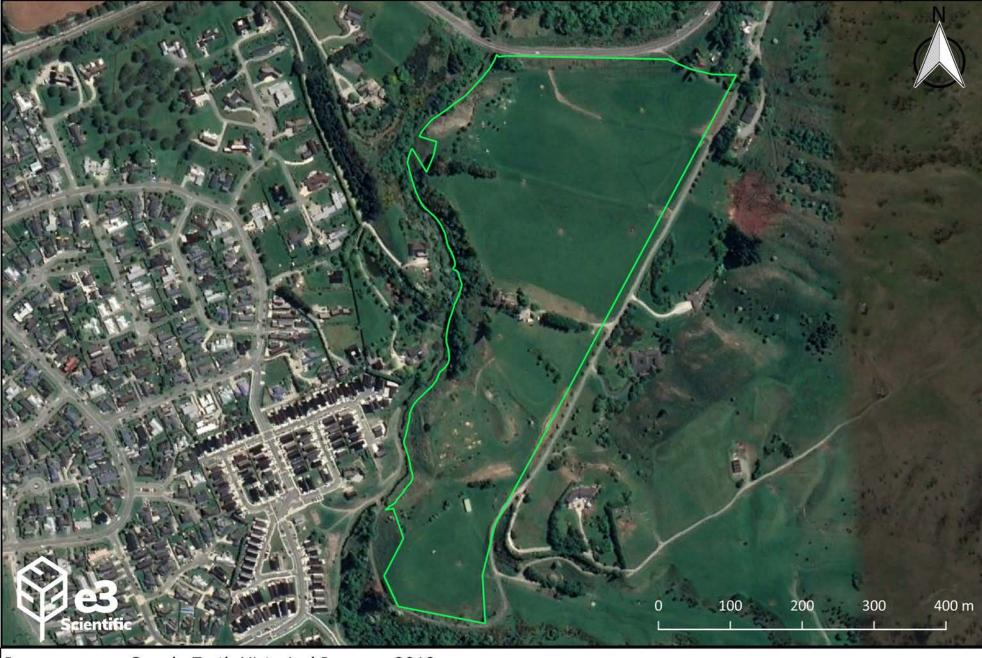
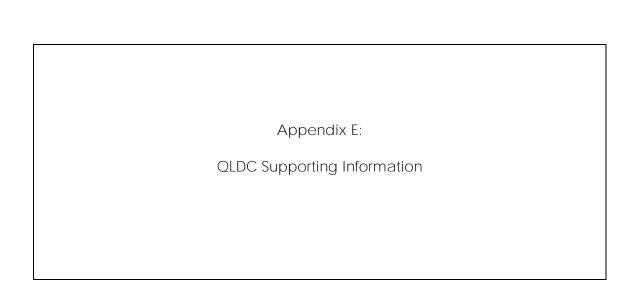


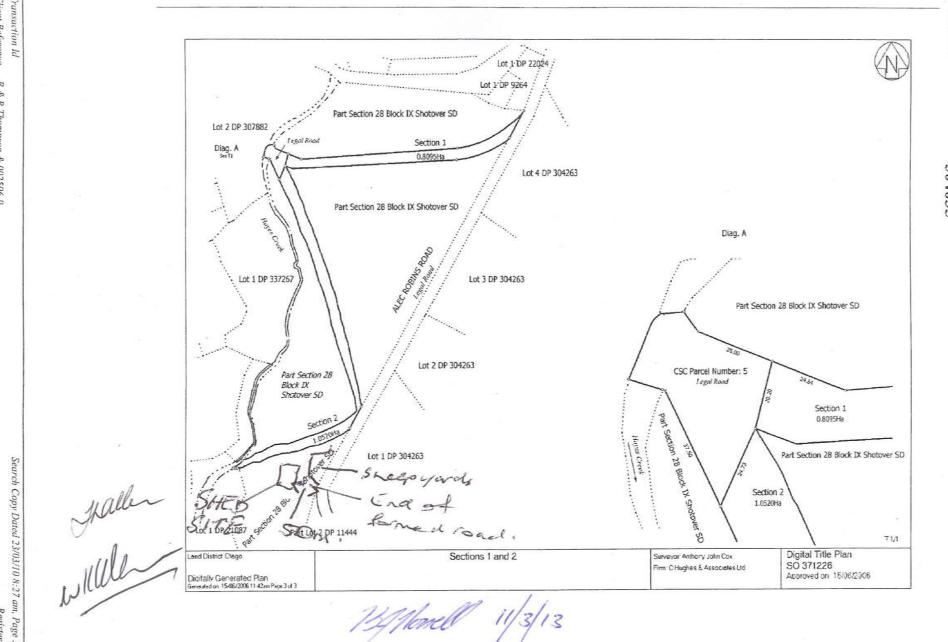
Image source: Google Earth Historical Imagery 2018

Document Set ID: 7359089

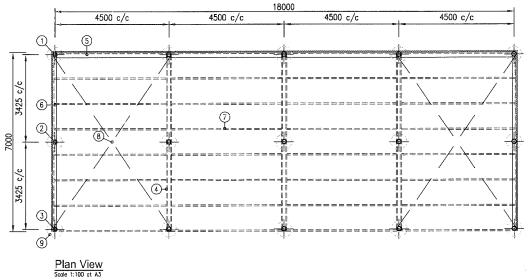
Version: 1, Version Date: 15/09/2022



Document Set ID: 7359089 Version: 1, Version Date: 15/09/2022











No:	Item	Size	No:	Item	Size
1	Reor poles	ø150 SED	7	Purlins	200x50
2	Centre poles	ø150 SED	8	Roof plane bracing	Ref. note
3	Front poles	ø150 SED	9	Concrete footings	ø600
4	Rafters	2/250x50			
5	Reor girts	200x50			
6	Side girts	150x50			

Notes:

- 1. Purlins @ 1000 crs max. Girts @ 1100 crs max.
- Single rafters to each end.
- Roof plane bracing: Lumberlok Multi Brace or Pryda Maxi Strap fixed to purlins and rafters with 12/30x3.15ø nails each end and two nails to each intermediate purlin.
- 4. All framing timber VSG8 unless otherwise specified.

Copyright These plans may not be copied or reproduced in any form.





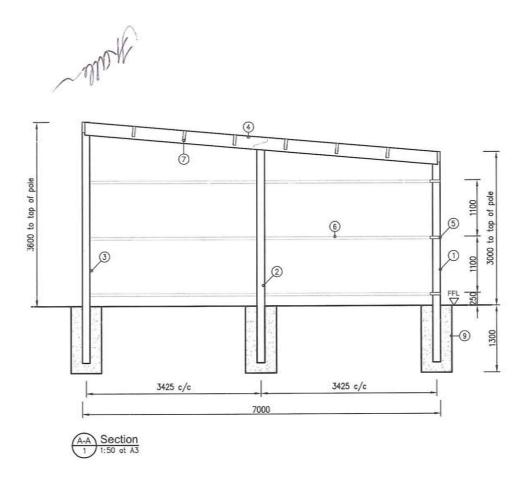
Standard Lean-To Plan Layout

4B036300RW7DVH

LHTDESIGN ,

Sheet 1 of 6

ME Wille



Copyright These plans may not be copied or reproduced in any form





Standard Lean-To Section A-A

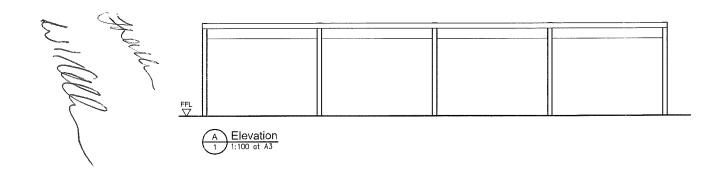
4B036300RW7DVH

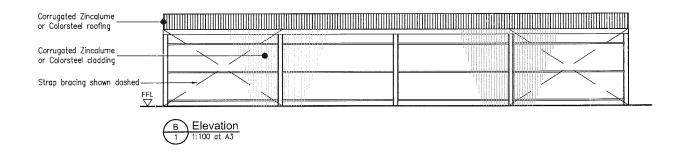
MODEL INTO

LHTDESIGN

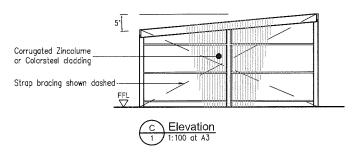
Sheet 3 of 6







exercit and



Note:

- Wall Bracing: Lumberlok Strip Brace or Pryda Strap Brace fixed to girts with 12/30x3.15ø nails each end and two nails to each intermediate girt.
- 2. All cladding/roofing to be fixed in accordance with manufacturers specifications.

Copyright These plans may not be copied or reproduced in any form





Standard Lean-To Elevations

LHT DESIGN

Sheet 2 of 6

Document Set ID: 7359089 Version: 1, Version Date: 15/09/2022

HORRELL CONTRACTING

EARTHWORKS CONSENT APPLICATION

Includes:

A. Assessment of Effects

B. Further Information

Also attached:

Plan of Proposal Plan of Locality

Prepared by:

B. McLeod

Our Ref: 2024 18 December 2003 Nº 46432 RECEIPT
Date TOTAL \$500.00

A.) Assessment of Effects in Accordance with Section 88, and the Fourth Schedule of the Resource Management Act 1991

A.1. Description of the Proposal

A.1.1. Site & Location

The site is located at the old lime put at the southern end of Lake Hayes and is legally described as Section 28 Blk IX, Shotover SD.

A.1.2. The Proposal

The applicant seeks consent undertake earthworks to fill and reinstate original ground levels at the old lime pit site. The ground shall be reinstated to a level to match the surrounding pasture land, and is to be topsoiled and sown with grass with the intent of being used for stock grazing.

A.1.3. Zoning and Activity Status

A.1.3.1 Transitional District Plan

Pursuant to Section 88A of the Resource Management Act, it is anticipated the application will be assessed in terms of the Proposed District Plan, and little weight be given to the Transitional District Plan.

A.1.3.2 Proposed District Plan

Under the Queenstown Lakes District Council Proposed District Plan the site is in the Rural General zone.

The earthworks required to not meet the standards as specified in variation 21 in relation to earthworks.

Application is made to import 25000m³ of clean fill on to the site to fill in the old lime pit hole.

Once the clean fill import has been completed additional topsoil will be imported to complete the finishing of the area.

The finished level of the site is to match the surrounding pasture land. The surface is to be topsoiled and sown with grass.

A.2. Where it is likely that an activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:

The proposal will have a positive effect on the environment. At present the excavated area of the old lime pit is both unsightly and could be classified as wasteland which is only a breeding ground for noxious weeds and the like.

The proposal seeks to fill in the unsightly old quarry and tidy the area so it can be used for pastoral grazing.

A.3. An assessment of the actual or potential effect on the environment of the proposed activity:

Short term effects

- Dust being blown from the site to neighbouring properties.
- Silt being washed from the exposed soil areas during wet periods.

Long term effects

- The site is improved by filling an unsightly pit and wasteland.
- A.4. Where the activity includes the use of hazardous substances and installations, an assessment of the risks to the environment which are likely to arise from such use:

Not applicable

- A.5. Where the activity includes the discharge of any contaminant, a description of:
 - (i) The nature of the discharge and the sensitivity of the proposed receiving environment to adverse effects; and
 - (ii) Any possible alternative methods of discharge, including discharge into any other receiving environment:

There is no discharge.

A.6. A description of the mitigation measures (safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect:

In order to reduce the effect of dust several methods of control are proposed, as follows.

- Water is available to the site and dust areas can be periodically wetted using sprinklers during dry periods.
- The surface of haulage and access tracks is to be oiled.
- Areas that have been brought up to finished level are to be topsoiled and sown with grass at the earliest convenience.

Presently during wet periods any runoff is contained within the site by a hollow in the lime pit. Any water that accumulates naturally drains into the soils.

The proposed finished level of the site creates a batter that emulates a natural river terrace. Should runoff accumulate at the toe of this batter (on the existing access), then a soak hole can be constructed on site to trap any runoff.

A.7. An identification of those persons interested in or affected by the proposal, the consultation undertaken, and any response to the views of those consulted:

No consultation has been undertaken.

A.8. Where the scale or significance of the activity's effect are such that monitoring is required, a description of how, once the proposal is approved, effects will be monitored and by whom:

Other than Civic Corporation's normal monitoring, no additional monitoring is proposed.

4

B.) Further Information

B.1. Access

The main site access into the site is via Alec Robins Road.

Attachments

Please find attached to this application the following items

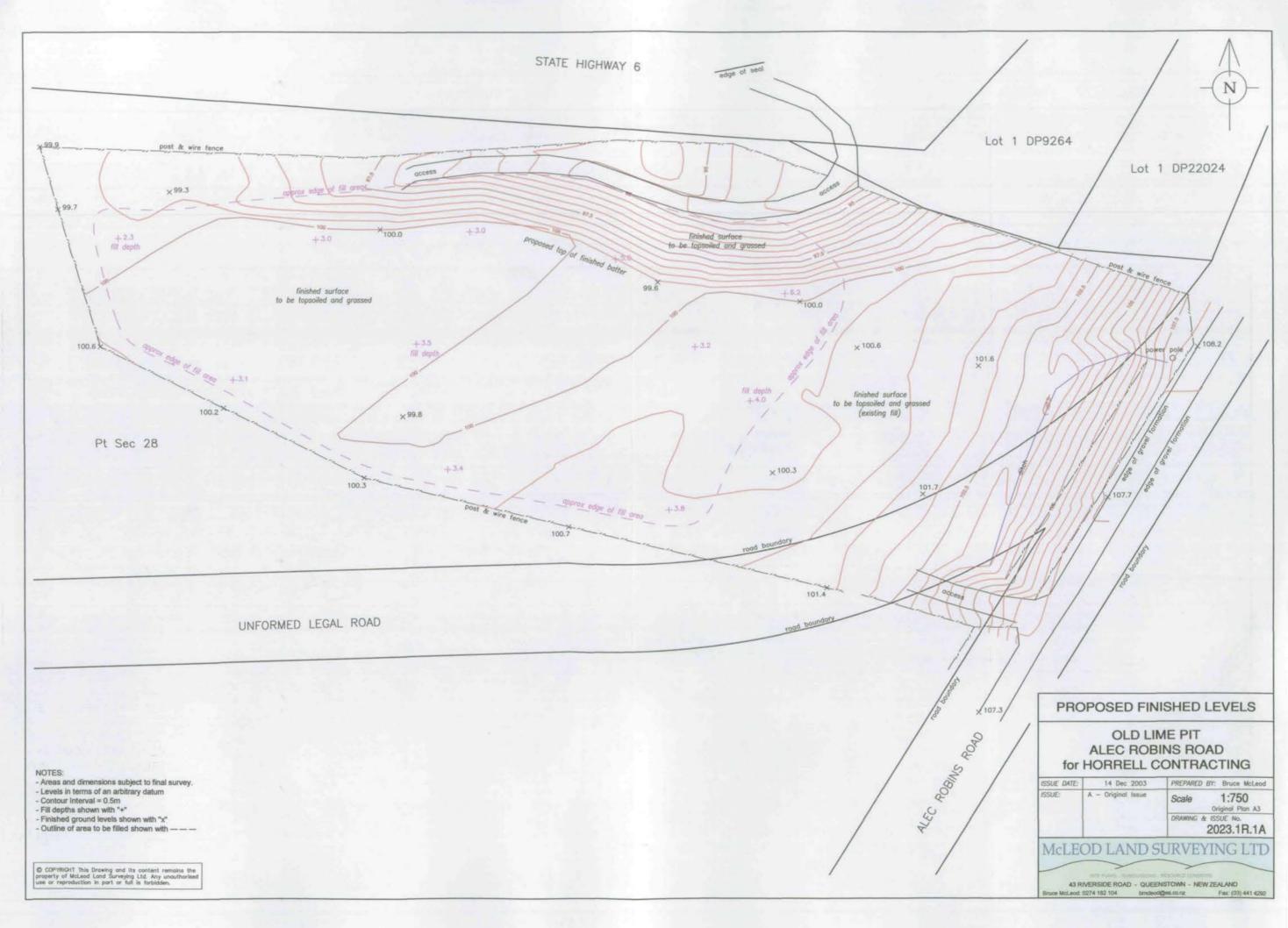
- Plan of Proposed Subdivision (Two copies, A2 & A3)
- A general plan of the location of the proposal

Signed

Bruce McLeodRegistered Surveyor

McLeod Land Surveying Ltd 43 Riverside Road Queenstown 0274 182 104 bmcleod@es.co.nz





Resource Management

Application for Resource Consent

Resource Management Act 1991 Section 88 (Form 5)

I/We (Mr/Mrs/Ms):	VN LAKES DISTRI		λ	
1/ VV E (1-11/1-11/5/1-15)	-0.7-00	b victing Er		
Apply for the resource	consent(s) as desc	ibed below:		
CORRESPONDENCE	DETAILS			
Postal Address for corre	espondence: 🔑	0 80% 20	70	
	O	centon	<u>.</u>	···
Phone Number: (Work)	03 44239	7 <i>9</i> (Hoi	me)	
Fax: <u>73 4423</u>	3980	E-	mail : <u>hossell.c</u>	ontracting Dxtra.co
INVOICING DETAILS	5			
Postal Address for invo	icing: Po g	ox 2070		
	Quee	uton		
Phone Number: (Work)	23 1111 239	7 0		
Fax:	423980		mail ://otrell:	contracting Dates.
Fax: 03 @ APPLICATION DETAIN Name/Address of the C	ILS Owner/Occupier (if Robins Fo	E-	mail :/w/rella	nd to which the
	TLS Owner/Occupier (if Robins For Company of Company o	different from the Mily Trush bins, Ki lication relates: (ntification, eg, street rence, location may relate, proximity to	mail: //ofrelland	nd to which the Roxbwoh ion, as it is commonly ober, name of locality, evant stream, river or ondmark):

Please all make cheques payable to CivicCorp

Contact Details:

CivicCorp House, 74 Shotover Street, Queenstown

Private Bag 50077, Queenstown

Phone: 03-442 4777

Fax: 03-442 4778

APPLICATION DETAILS (CONT'D)			
The type of resource consent(s) sough	nt is/are (tick more than one if necessary):	
Landuse Consent	Ø	Change/Cancellation of consent conditions	
Determination of existing use rights		Application to extend life of consent	
SUBDIVISION			
Subdivision		Right of way	
Alteration or removal of a building line restriction		Change/cancellation of consent conditions	
Application to extend life of consent			
Do you require a water permit		Do you require a Discharge permit	
The following additional resource conshave/have not been applied for:	sents are	required in relation to this proposal and	
			
	<u></u>		
A brief description of the proposal (See Application to undertake		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	- A
the old line oit hole			1
	od lace		e 0f
fill required is approxim	1,7	3 / 11 / 11 / 11	is up
to 6.2m deep. The	Alnis	hed surface is to be topo	0:62
and show sown with a	Mass	for start grazing.	
	<u> </u>	9 0	
Contact Details: CivicCorp House, 74 Shotover Street Private Bag 50077, Queenstown	t, Queens	Phone: 03-442 4777 stown Fax: 03-442 4778 E-mail: enquiries@civiccorp.co.	nz:

ATTACHED ITEMS

- / I attach an assessment of any effects that the proposed activity may have on the environment in accordance with Section 88 of, and the Fourth Schedule to, the Act:
 - a. A detailed description of the proposal.
 - b. Where it is likely that an activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity.
 - c. An assessment of the actual or potential effect on the environment of the proposed activity.
 - d. Where the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment which are likely to arise from such use.
 - A description of the mitigation measures (safety and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect.
 - f. An identification of those person interested in or affected by the proposal, the consultation undertaken, and any response to the views of those consulted.
 - g. Where the scale of significance of the activity's effect are such that monitoring is required, a description of how, once the proposal is approved, effects will be monitored and by whom.

Where the application is for a *Subdivision* I attach information in accordance with Section 219 of the Act sufficient to adequately define:

- a. The position of all new boundaries.
- b. The areas of all new allotments (not required for cross leases, company leases or unit plan)
- c. The location and areas of new reserves to be created, including any esplanade reserves to be set aside on a survey plan under Section 230 of the Act.
- The location and areas of any esplanade strips to be created under Section 232 of the Act.
- e. The location and areas of any existing esplanade reserves, esplanade strips or access strips.
- f. The location and areas of land below mean high water springs of the sea or any part of the bed of a river or lake which is vested in the Crown or local authority under Section 237A of the Act.
- g. The location and areas of land to be set aside as new road.



I attach other information (if any), required to be included in the application by the Transitional District Plan, the Proposed District Plan, the Regional Plan, or regulations:



I attach the written approval of every person who, in the opinion of the Queenstown Lakes District Council, may be adversely affected by the granting of the resource consent (Section 94(c)).

FEES INFORMATION

A deposit fee for processing this application will be charged in accordance with the fee schedule. This deposit fee must accompany your application for processing to commence. Further charges may be levied pursuant to Section 36 of the Resource Management Act 1991.

<u>Monitoring Fee</u> - Please note that if your application 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.

Contact Details:

CivicCorp House, 74 Shotover Street, Queenstown

Private Bag 50077, Queenstown

Phone: 03-442 4777

Fax: 03-442 4778

E-mail: enquiries@civiccorp.co.nz

SUMMARY

Have you remembered to?



Provide a plan or map showing the locality, location of the activity, topographical features, buildings etc.

Obtain written approval from any affected parties (eg, adjoining neighbours).

Include the application fee. Please make all cheques payable to CivicCorp.

Complete the assessment of effects.

Include two sets of plans for which an application is being made (site and elevation plans). At least one plan to be at either A3 or A4 size.

Provide an up to date certificate of title.

Please note your application will not be processed until all of the required information has been supplied to CivicCorp.

DECLARATION

I accept that should I default I agree to pay all costs of collection, including agency fees, court costs and disbursements made in the collection of debt and reasonable solicitors fees regardless of judgement.

I hereby certify that, to the best of my knowledge and belief, the information given in this application is complete, true and correct. I undertake to pay all actual and reasonable costs incurred by CivicCorp.

Signed:

Dated:

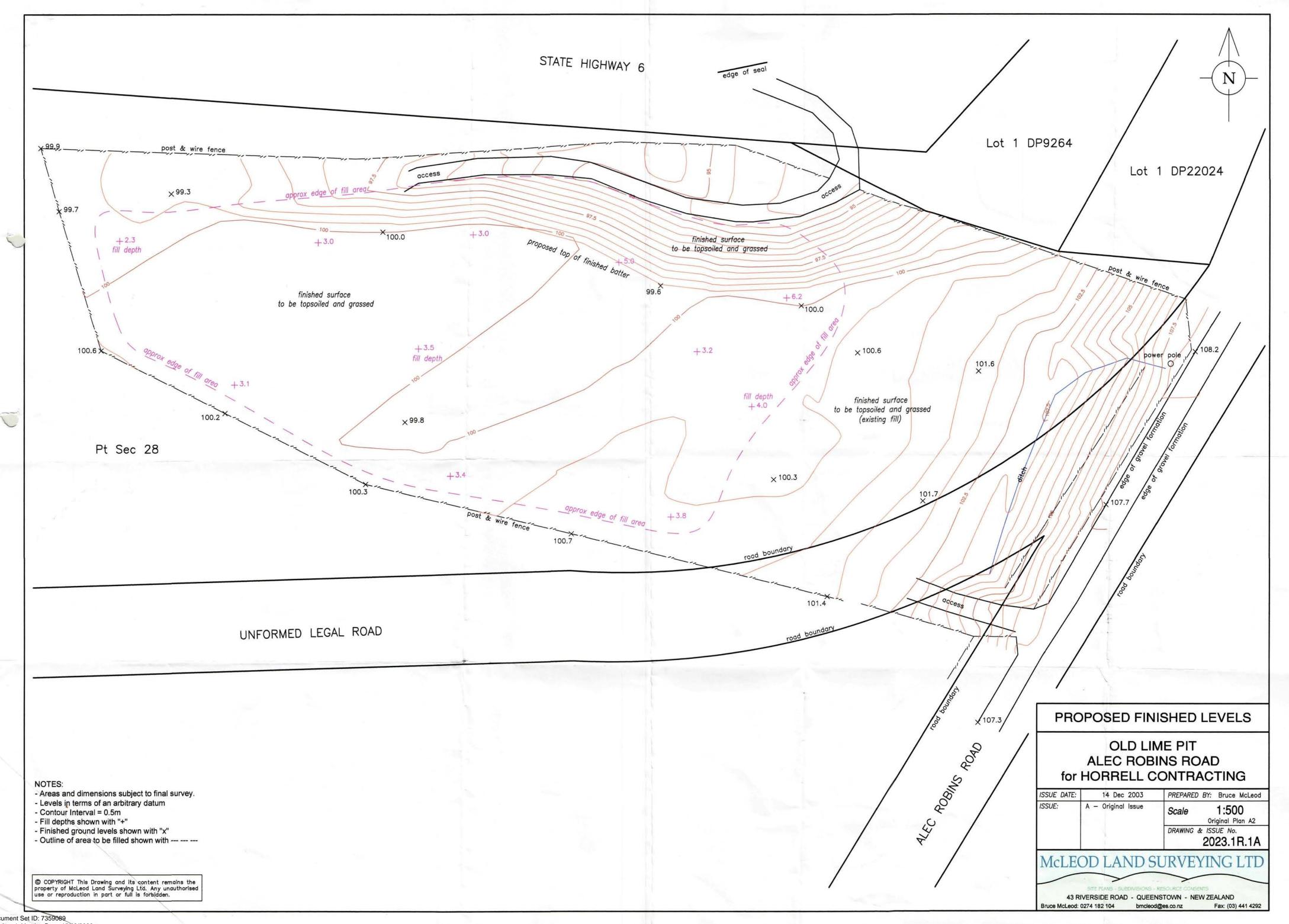
Contact Details:

CivicCorp House, 74 Shotover Street, Queenstown

Fax: 03-442 4778

Phone: 03-442:4777

Private Bag 50077, Queenstown





File: RM031122 Valuation Number: 2907126603

2 February 2004

Horrell Contracting Limited C/- Mcleod Land Surveying Limited 43 Riverside Road QUEENSTOWN

Attention: Paul Horrell

Dear Sir

DECISION OF THE QUEENSTOWN LAKES DISTRICT COUNCIL RESOURCE MANAGEMENT ACT 1991 HORRELL CONTRACTING LIMITED – RM031122

I refer to your application for land use consent under Section 88 of the Resource Management Act 1991 to undertake earthworks. The application was considered under delegated authority pursuant to Section 34 of the Resource Management Act 1991 on 2 February 2004. The issue of this decision was made and is authorised by Mr Duncan Field, Chief Executive Officer as delegate for the Council.

The subject site is located at 64 Alec Robins Road, Wakatipu basin and is legally described as Part Section 28 Block IX Shotover Survey District.

The site is zoned Rural B in the Transitional District Plan and the proposal requires a non-complying activity consent pursuant to Section 374(4) of the Resource Management Act 1991 as this activity was not expressly provided for or anticipated in that plan.

Between 31 August and 14 September 1998 the decisions on submissions to the Proposed District Plan were progressively released. Section 88A of the Resource Management Act 1991 requires all applications received after notification of decisions to be assessed in terms of these decisions and any amendment thereto. Under these decisions the site is zoned Rural General and the proposed activity requires resource consent for the following reasons:

CivicCorp, Private Bag 50077, Queenstown, Tel 03-442 4777, Fax 03-442 4778.

1. A discretionary consent pursuant to Rule 5 as the volume of earthworks exceeds the 1,000 cubic metre limit as specified in Site Standard 5.3.5.1 (viii).

The application was considered on a non-notified basis in terms of Sections 93 & 94-of the Act because the adverse effect on the environment of the activity for which consent is sought was considered to be minor, and that the written approval of all those persons who may be adversely affected by the granting of the resource consent was obtained.

Decision

Consent is granted pursuant to Sections 104 and 105 of the Act, subject to the following conditions imposed pursuant to Section 108 of the Act:

General Conditions

- That the development be carried out in accordance with the plans (Mcleod Land Surveying Ltd, Surveyors: Drawing No.1 Proposed Finished Levels Old Lime Pit Alec Robins Road for Horrell Contracting, #2023.1R.1A, 02/02/04, stamped as approved) and the application as submitted, with the exception of the amendments required by the following conditions of consent.
- That unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement is imposed by this consent shall be at the consent holder's own expense.
- That the consent holder shall pay to Civic Corporation Limited all required administration charges fixed by the Council pursuant to Section 36 of the Act in relation to:
 - a) the administration, monitoring and supervision of this consent; and
 - b) charges authorised by regulations.
- The consent holder shall pay to Civic Corporation Limited an initial fee of \$240 for the costs associated with the monitoring of this resource consent in accordance with Section 35 of the Act.
- That upon completion of the proposed activity, the consent holder shall contact the Monitoring Section at Civic Corporation Limited to arrange a time for an inspection of the proposed work to ensure all conditions have been complied with.
- NO work shall be undertaken until the dust mitigation procedure and silt and sedimentation control system is installed and approved by CivicCorp's Principal: Monitoring. All work on the site is to be completely contained within the site boundaries.
- 7 The consent holder shall ensure that if the vehicle crossing to the site is damaged during the construction of the dwelling, it shall be reinstated to comply with Council Standards at the end of the construction phase. If the

هم احتوار

- 57

existing access is not to be utilised then a temporary metalled crossing shall be installed to service the site. This crossing is to be removed at the end of the contract and the area reinstated.

- The consent holder shall remedy any damage to all existing road surfaces and berms that result from work carried out for this consent.
- Any material that is deposited on Public roads is to be removed immediately, not at the end of the day, this shall be at the consent holders expense. Safe carriageway conditions must be maintained at all times.

Reasons for the Decision

Proposal

The applicant proposes to import non-certified fill onto the subject site, with the intention of filling an existing depression as a result of past quarrying activity. The applicant intends to create a finished level that matches surrounding paddocks and use the land for stock grazing.

The applicant has stated that the quarry operated for some forty years, between 1940 to 1980, and that during this time some reinstatement of the site has been undertaken. To rehabilitate the site to match surrounding farm paddocks, approximately 25,000 cubic metres of fill will be imported into the site.

The applicant proposes to use the entire five-year period given by the granted resource consent to undertake the rehabilitation of the site. Topsoil and seeding will be undertaken to correspond with the volume of earthworks undertaken at any given time during this timeframe.

Effects on the Environment

The existing topography of the site is not a result of natural processes. Rather, it is the result of past mining. The proposal will have a positive effect on landscape and visual amenity values, in that it will reproduce a replication of natural topography. The finished levels will appear consistent with surrounding landform.

Also, the application includes mitigation for dust, sprinkling with water, the access tracks are to be oiled and areas that have reached finished level will be topsoiled and seeded as soon as is practicable. The site has been assessed by Civic Corp's Engineer, and showed no obvious signs of instability.

Overall, the effects on the environment will be positive.

Written Approvals

Written approvals were obtained from Catherine McKinnel, ow Deposited Plan 9262; Hays Creek Trust, owners/occupiers of

Shotover Survey District; and, Yvonne Gulliot, owner/occupier of Lot 1 Deposited Plan 22024.

RM031122

حم الد

Policies and Objectives - Rural Zone

Objective 1 – Character and Landscape Value – to protect the character and landscape value of the rural area by promoting sustainable management of natural and physical resources and the control of adverse effects caused through inappropriate activities.

Policy 1.3 aims to ensure that land with potential value for rural productive activities is not compromised by the inappropriate location of other developments and buildings.

The purpose of the earthworks are to remedy current unusable land so that stock can graze the land. No building of any sort is anticipated on the subject site. This reflects the way that surrounding land is used. In this respect, the above objective and policies are met.

Objective 2 – Life Supporting Capacity of Soils – retention of the life supporting capacity of soils and/or vegetation in the rural area so that they are safeguarded to meet the reasonably foreseeable needs of future generations.

Policy 2.4 aims to encourage land management practices and activities which avoid, remedy, or mitigate adverse effects on soil and vegetation.

Policy 2.5 aims to encourage land users to monitor the condition of vegetation on their land by providing information and assistance, where practicable.

The rehabilitation of the subject site will allow the site to be used for productive purposes, namely the grazing of stock. The land will mirror the surrounding landscape and is anticipated to remain productive. The objective and policies are fulfilled in this regard.

Objective 3 – Rural Amenity – avoiding, remedying, or mitigating the adverse effects of activities on rural amenity.

Policy 3.2 aims to ensure that a wide range of rural land uses and land management practices can be undertaken in the rural areas without increased potential for the loss of rural amenity values.

Policy 3.3 will avoid, remedy, or mitigate adverse effects of activities located in rural areas.

At present, the subject site is best described as "waste land", and not in keeping with the surrounding area. As a result, it has had a detrimental effect on the amenity of the area. However, the proposed activity will facilitate the rehabilitation of both the site, and the rural amenity of the area, thereby fulfilling the objectives and polices of the zone.

Assessment Matters - Rural Zone

- 2. Effects on landscape and visual amenity values
 - (a) Whether the scale and location of any cut of fill will adversely affect:
 - the visual quality and amenity values of the landscape;
 - the natural landform of any ridgeline or visually prominent areas;
 - the visual amenity of surrounding sites.

عتد •عد•

- (b) Whether the earthworks take into account the sensitivity of the landscape.
- (c) The potential for cumulative effects on the natural form of existing-landscapes.
- (c) The proposed rehabilitation of the site.
- (e) The earthworks do not create an area that is inconsistent with the character of the surrounding landscape.

The proposed activity involves substantial rehabilitation of the subject site. It will have positive effects on landscape and visual amenity values, ultimately replicating natural topography.

4. General Amenity Values

- (a) Whether the removal of soil to or from the site will affect the surrounding roads and neighbourhood through the deposition of sediment, particularly where access to the site is gained through residential activities.
- (b) Whether the activity will generate noise, vibration and dust effects, which could detract from the amenity values of the surrounding area.
- (c) Whether natural ground levels will be altered.

The applicant states that the time frame for rehabilitating the site will reflect the time frame of a granted resource consent (ie, 5 years). As fill in imported into the site, topsoil and grass seeds will be planted in a commensurate fashion. The conditions of consent will ensure that the site management plan is adhered to, which include measures to minimise dust. It is anticipated that work will be undertaken when fill is made available.

Conditions

In order to ensure that engineering-related activities are undertaken to the appropriate New Zealand Standards, conditions 6 through 9 are imposed.

Other Matters

The costs of processing the application are currently being assessed and you will be advised under separate cover whether further money is required.

Should you not be satisfied with the decision of the Council, or certain conditions, an objection may be lodged in writing to the Council setting out the reasons for the objection under Section 357 of the Resource Management Act 1991 not later than 15 working days from the date this decision is received.

RM031122

-

The conditions of this consent include the payment of an initial fee of \$240 to cover the cost of CivicCorp's statutory requirement to monitor the conditions of your resource consent. The initial \$240 is for the first two and a half hours of monitoring. Should your consent require more monitoring you will-be charged for the additional time.

To minimise your monitoring costs it is strongly recommended that you contact the Monitoring Section of CivicCorp when the conditions have been met or with any changes you have to the programmed completion of your consent.

This resource consent is not a consent to build under the Building Act 1991. A consent under this Act must be obtained before construction can begin.

Please contact the Principal: Monitoring (Civic Corporation Limited) when the conditions have been met or if you have any queries with regard to the monitoring of your consent.

This resource consent must be exercised within two years from the date of this decision subject to the provisions of Section 125 of the Resource Management Act 1991.

If you have any enquiries please contact Jonathan Kidd on phone (03) 442-6854.

Prepared by **CIVICCORP**

Reviewed and Approved by CIVICCORP

J Kidd

PLANNER

Andrew Henderson

ACTING PRINCIPAL: RESOURCE MANAGEMENT



In reply please quote
File Ref: Alleged unlawful earthworks

Civic Corporation Limited
Private Bag 50077,
CivicCorp House, 74 Shotover Street
Queenstown, New Zealand
Iel. 64-3-442 4777
Fax. 64-3-442 4778
e-mail: enquiries@civiccorp.co.nz
site: http://www.civiccorp.co.nz

16th December 2003

Paul Horrell Horrell Contracting P. O. Box 2070 QUEENSTOWN

FAX: (03) 442 3980

Dear Mr Horrell,

RE: ALLEGED UNLAWFUL EARTH WORKS ON OLD HAYES LIME WORKS QUARRY - PT SEC 28 BLK IX SHOTOVER SD - 64 ALEC ROBINS ROAD, WHAKATIPU BASIN

On the 12th December 2003 I formally advised you and Kelvin James Horrell that I have reasonable grounds to believe that the any continued earth works on the aforementioned site would be in contravention of the Resource Management Act 1991.

I also noted in this letter that you had agreed after discussion with Mr Dunning of this office you would desist all work on the aforementioned site until such time, if any, a resource consent was granted.

On the 16th December at 9.00am I observed two of your trucks, ZJ1035 and TI 2234 leaving the site loaded with top soil. On this basis I have reasonable grounds to believe that you are continuing to undertake or cause to undertake earth works in contravention of the Resource Management Act 1991 on the aforementioned site.

In respect of this observation, I understand you have replied to Mr Dunning with the following:

- The site will note be used for depositing further clean fill until resource consent is obtained.
- Resource consent will be applied for early next year, as soon as possible.
- Some small amounts of soil may be deposited on the top of the site for regressing purposes, dust mitigation etc.
- One to two trucks per week may enter the site to remove an existing stock pile of screened soil on the site.

I appreciate the mitigating points of dust control etc have merit, however, I am bound to confirm that subject to evidence to the contrary, any further earth works on this site, including those you identified to Mr Dunning and stated above constitute continued alleged unlawful earth works.

It is apparent you believe you have some authority to undertake the works you have identified above; in the full knowledge the writer has advised and confirmed the reasonable basis to the allegation that any continued earth works on this site is in contravention of the Resource Management Act 1991.

Accordingly, I would appreciate by 9.00am on the 18th December 2003 being made aware of the authority you rely upon to continue to undertake the earth works on the Hayes lime works quarry site.

If further earth works on this site are found after 9.00 am on the 18th December 2003 and you have not established the authority to continue to undertake or caused to be undertaken earth works on this site, immediate application without further notice will be made to Queenstown Lakes District Council to approve enforcement action for the alleged contravention of the Resource Management Act 1991.

If you are unclear on any aspect of this advice, please do not hesitate to contact the writer on cell phone: 027 293 1041.

Yours faithfully CIVICCORP

Tim Francis

PRINCIPAL: MONITORING

CC: Kelvin James Horrell

Horrell Contracting P. O. Box 2070 QUEENSTOWN

FAX: 442 3980

CC: Mr Russell Ibbotson

Preston Russell Law

P. O. Box 355 INVERCARGILL

FAX: (03) 218 9536

Tim Francis

From:

Janan Dunning

Sent:

Tuesday, 16 December 2003 10:19 a.m.

To: Subject: Tim Francis **Horrell Contracting**

Tim

Having spoken to Paul Horrel this morning, please note the following:

- The site will not be used for depositing further clean fill until resource consent is obtained.
- Resource consent will be applied for early next year, as soon as possible.
- Some small amounts of soil may be deposited on the top of the site for re-grassing purposes, dust mitigation etc.
- One to two trucks per week may enter the site to REMOVE an existing stock pile of screened soil on the site.

Regards

Janan Dunning Planner Civic Corp Ltd Private Bag 50077 ueenstown

h: (03) 442 4777 Fax: (03) 442 4778 Of Scho Hoys are

Observed two Horrells Truck in old genomy

located with Soil and leaving. Truck Registration.

23 1075.

T1 2234

Both Trucks were marked Horrell Contacting



In reply please quote
File Ref: Horrell - Unlawful earth works

Civic Corporation Limited
Private Bag 50077,
CivicCorp House, 74 Shotover Street
Queenstown, New Zealand
Tel. 64-3-442 4777
Fax. 64-3-442 4778
e-mail: enquiries@civiccorp.co.nz
site: http://www.civiccorp.co.nz

12th December 2003

Kelvin James Horrell Horrell Contracting P. O. Box 2070 QUEENSTOWN

FAX: (03) 442 3980

Dear Mr Horrell.

RE: ALLEGED UNLAWFUL EARTH WORKS ON OLD HAYES LIME WORKS QUARRY - PT SEC 28 BLK IX SHOTOVER SD - 64 ALEC ROBINS ROAD, WAKATIPU BASIN

The writer acknowledges that Paul Horrell has been in communication with our office regarding the use of the aforementioned site for the depositing of fill. We are also aware through your lawyer Mr lbbotson that you have begun to use this site for depositing of clean fill, hard fill and topsoil from various contracts you undertake, either privately or for Queenstown Lakes District Council.

We are also aware from our own observations of your companies activities on this site on the 12th December 2003 that you are continuing to deposit fill on this site, remove fill from this site and using the site as dump for rubbish i.e. metal objects, plastic containers etc.

On the basis of this evidence and subject to evidence to the contrary I have reasonable grounds to believe that the continued earth works you are undertaking or causing to undertake on this site are in contravention of Rule 5.3.5.1.viii. (d) for earth works undertaken prior to 22nd March 2003 - No earthworks (other than the formation of tracks and earthworks within Ski Area Sub-Zones) shall exceed 100m³ in total volume or 2500m² in total area. And Rule 5.3.5.1.viii – Earth works variation 21 for earth works undertaken from the 22nd March 2003 i.e. –

viii Earthworks - Variation 21

The following limitations apply to all earthworks except within the Ski Area Sub-Zone (as defined in this Plan), except for earthworks associated with subdivision that has both resource consent and engineering approval.

1. Earthworks

- (a) Where the gradient exceeds 10° (1 in 6) the maximum area of bare soil exposed from any earthworks on any one site shall not exceed 1000m², in any 12 month period.
- (b) Where the gradient is less than 10° (1 in 6) the maximum area of bare soil exposed from any earthworks on any one site shall not exceed 2500m², in any 12 month period.
- (c) Where any earthworks are undertaken within 7m of a Water body the total volume shall not exceed 20m³ (notwithstanding provision 17.2.2). 5.3.5.1viii (c) All impervious surfaces are to be vegetated

- (d) Where the gradient exceeds 20° (measured as an average slope angle over any 100m length of the slope on which the earthworks are to be carried out), the maximum area of bare soil from earthworks on any one site shall not exceed 200m², in any 12 month period. 5.3.5.1 viii (d) No earthworks (other than the formation of tracks and earthworks within Ski Area Sub-Zones) shall exceed 1000 m² in total volume or 2500 m² in total area".
- (e) The maximum volume of clean fill transported by public road either to or from the area subject to earthworks shall not exceed 300m³ for any given earthworks activity. The 300m³ volume is expressed in solid measure or can be equated to 30 truckloads).

NB: for the purpose of Rule 5.3.5.1 (viii) gradient is measured as an average slope angle over any 100m length of the slope angle on which the earthworks are to be carried out.

2. Height of cut and fill and slope

- (a) No cut or batter (other than routine repair and maintenance of operational tracks, the Arrow Irrigation Scheme and flood protection works) shall exceed 2m in vertical height, with the exception that 10% of the length may be 3m in vertical height. except that such cut or batter shall not exceed 3m in vertical height for more than 10% of its length, replaces 5.3.5.1viii (a)
- (b) All cuts and batters shall be laid back such that their angle from the horizontal is no more than 65 45 degrees <u>unless previously determined</u>. replaces 5.3.5.1viii (b)
- (c) The maximum height of any cut shall not exceed 2.4 metres.
- (d) The maximum height of any fill shall not exceed 2 metres.

On this basis the writer advises the use of this site for the earth works you are currently undertaking requires the granting of land use resource consent and to continue to use this site otherwise in accordance with a resource consent is in contravention of the Resource Management Act 1991.

The writer understands that Mr Dunning of our office Paul Horrell of the requirement for resource consent for further earth works activity in this area and I understand you have acknowledged the requirement for resource consent to continue to undertake or cause to undertake earth works on the site.

Accordingly, we do not expect to find any earth works activity on this site until such time, if any, the appropriate resource consent is granted. Failure to comply with this understanding will result in the matter being recommended to the Queenstown Lakes District Council for immediate enforcement action.

If you are unclear of your liability of obligations in this matter, please do not hesitate to contact the writer.

Yours faithfully CIVICCORP

Tim Francis

PRINCIPAL: MONITORING



In reply please quote
File Ref: Horrell - Unlawful earth works

Civic Corporation Limited
Private Bag 50077,
CivicCorp House, 74 Shotover Street
Queenstown, New Zealand
Tel. 64-3-442 4777
Fax. 64-3-442 4778
e-mail: enquirles@civiccorp.co.nz
site: http://www.civiccorp.co.nz

12th December 2003

Paul Horrell Horrell Contracting P. O. Box 2070 QUEENSTOWN

FAX: (03) 442 3980

Dear Mr Horrell,

RE: ALLEGED UNLAWFUL EARTH WORKS ON OLD HAYES LIME WORKS QUARRY - PT SEC 28 BLK IX SHOTOVER SD - 64 ALEC ROBINS ROAD, WAKATIPU BASIN

The writer acknowledges that you have been in communication with our office regarding the use of the aforementioned site for the depositing of fill. We are also aware through your lawyer Mr Ibbotson that you have begun to use this site for depositing of clean fill, hard fill and topsoil from various contracts you undertake, either privately or for Queenstown Lakes District Council.

We are also aware from our own observations of your companies activities on this site on the 12th December 2003 that you are continuing to deposit fill on this site, remove fill from this site and using the site as dump for rubbish i.e. metal objects, plastic containers etc.

On the basis of this evidence and subject to evidence to the contrary I have reasonable grounds to believe that the continued earth works you are undertaking or causing to undertake on this site are in contravention of Rule 5.3.5.1.viii. (d) for earth works undertaken prior to 22nd March 2003 - No earthworks (other than the formation of tracks and earthworks within Ski Area Sub-Zones) shall exceed 100m³ in total volume or 2500m² in total area. And Rule 5.3.5.1.viii – Earth works variation 21 for earth works undertaken from the 22nd March 2003 i.e. –

viii Earthworks – Variation 21

The following limitations apply to all earthworks except within the Ski Area Sub-Zone (as defined in this Plan), except for earthworks associated with subdivision that has both resource consent and engineering approval.

1. Earthworks

- (a) Where the gradient exceeds 10° (1 in 6) the maximum area of bare soil exposed from any earthworks on any one site shall not exceed **1000m**², in any 12 month period.
- (b) Where the gradient is less than 10° (1 in 6) the maximum area of bare soil exposed from any earthworks on any one site shall not exceed 2500m², in any 12 month period.
- (c) Where any earthworks are undertaken within 7m of a Water body the total volume shall not exceed 20m³ (notwithstanding provision 17.2.2). 5.3.5.1viii (c) All impervious surfaces are to be vegetated

- (d) Where the gradient exceeds 20° (measured as an average slope angle over any 100m length of the slope on which the earthworks are to be carried out), the maximum area of bare soil from earthworks on any one site shall not exceed 200m², in any 12 month period. 5.3.5.1 viii (d) No earthworks (other than the formation of tracks and earthworks within Ski Area Sub-Zones) shall exceed 1000 m³ in total volume or 2500 m² in total area".
- (e) The maximum volume of clean fill transported by public road either to or from the area subject to earthworks shall not exceed 300m³ for any given earthworks activity. The 300m³ volume is expressed in solid measure or can be equated to 30 truckloads).

NB: for the purpose of Rule 5.3.5.1 (viii) gradient is measured as an average slope angle over any 100m length of the slope angle on which the earthworks are to be carried out.

2. Height of cut and fill and slope

- (a) No cut or batter (other than routine repair and maintenance of operational tracks, the Arrow Irrigation Scheme and flood protection works) shall exceed 2m in vertical height, with the exception that 10% of the length may be 3m in vertical height. except that such cut or batter shall not exceed 3m in vertical height for more than 10% of its length. replaces 5.3.5.1viii (a)
- (b) All cuts and batters shall be laid back such that their angle from the horizontal is no more than 65 45 degrees unless previously determined, replaces 5.3.5.1viii (b)
- (c) The maximum height of any cut shall not exceed 2.4 metres.
- (d) The maximum height of any fill shall not exceed 2 metres.

On this basis the writer advises the use of this site for the earth works you are currently undertaking requires the granting of land use resource consent and to continue to use this site otherwise in accordance with a resource consent is in contravention of the Resource Management Act 1991.

The writer understands that Mr Dunning of our office informed you of the requirement for resource consent for further earth works activity in this area and I understand you have acknowledged the requirement for resource consent to continue to undertake or cause to undertake earth works on the site.

Accordingly, we do not expect to find any earth works activity on this site until such time, if any, the appropriate resource consent is granted. Failure to comply with this understanding will result in the matter being recommended to the Queenstown Lakes District Council for immediate enforcement action.

To assist you in this matter we attach herewith an application for resource consent.

If you are unclear of your liability of obligations in this matter, please do not hesitate to contact the writer.

Yours faithfully CIVICCORP

Tim Francis

PRINCIPAL: MONITORING

Resource Management

Application for Resource Consent

Resource Management Act 1991 Section 88 (Form 5)

IICT COUNCIL:
cribed below:
(Home)
E-mail :
(Home)
E-mail :
different from the above) of any land to which the
plication relates: (Describe the location, as it is commonly entification, eg, street address and number, name of locality, erence, location map, name of any relevant stream, river or y relate, proximity to any well known landmark):
your rates notice - lot, DP, section, block, and/or valuation

Please make all cheques payable to CivicCorp

CivicCorp House, 24 Shotover Street, Queenstown

Private Rag 50077, Queenstown

Phone: 03-442 4777 Fax: 03-442 4778

APPLICATION DETAILS (CONT'D)				
The type of resource consent(s) sought is/are (tick more than one if necessary): LANDUSE				
	Landuse Consent		Change/Cancellation of consent conditions	
	Determination of existing use rights		Application to extend life of consent	
SUBDI	IVISION			
	Subdivision		Right of way	
	Alteration or removal of a building line restriction		Change/cancellation of consent conditions	
	Application to extend life of consent			
Do you	require a water permit	□ Do yo	ou require a Discharge permit	
Note: If an application for a water permit or discharge permit is or may be required but is not the subject of a concurrent application to the Otago Regional Council you must outline the systems to be adopted, the discussion you have had with that organisation, and its acceptance of this situation. Failure to do this may lead to a delay in processing. The following additional resource consents are required in relation to this proposal and have/have not been applied for:				
				
A brief description of the proposal (See below for additional information required):				
				

Contact Details:

CivicCorp House, 74 Shotover Street, Queenstown Private Bag 50077, Queenstown

Phone: 03-442-4777 Fax: 03-442-4778

ATTACHED ITEMS

I attach an assessment of any effects that the proposed activity may have on the environment in accordance with Section 88 of, and the Fourth Schedule to, the Act:

- a. A detailed description of the proposal.
- b. Where it is likely that an activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity.
- c. An assessment of the actual or potential effect on the environment of the proposed activity.
- d. Where the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment which are likely to arise from such use.
- e. A description of the mitigation measures (safety and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect.
- An identification of those person interested in or affected by the proposal, the consultation undertaken, and any response to the views of those consulted.
- g. Where the scale of significance of the activity's effect are such that monitoring is required, a description of how, once the proposal is approved, effects will be monitored and by whom.

Where the application is for a Subdivision I attach information in accordance with Section 219 of the Act sufficient to adequately define:

- The position of all new boundaries.
- The areas of all new allotrnents (not required for cross leases, company leases or unit plan)
- The location and areas of new reserves to be created, including any esplanade reserves to be set aside on a survey plan under Section 230 of the Act.
- The location and areas of any esplanade strips to be created under Section 232 of the
- e. The location and areas of any existing esplanade reserves, esplanade strips or access strips.
- The location and areas of land below mean high water springs of the sea or any part of the bed of a river or lake which is vested in the Crown or local authority under Section 237A of the Act.
- The location and areas of land to be set aside as new road.

I attach other information (if any), required to be included in the application by the Transitional District Plan, the Proposed District Plan, the Regional Plan, or regulations:
I attach the written approval of every person who, in the opinion of the Queenstown Lakes District Council, may be adversely affected by the granting of the resource consent (Section 94(c)).

FEES INFORMATION

A deposit fee for processing this application will be charged in accordance with the fee schedule. This deposit fee must accompany your application for processing to commence. Further charges may be levied pursuant to Section 36 of the Resource Management Act 1991.

Monitoring Fee - Please note that if your application 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.

Contact Details:

CivicCorp House, 74 Shotover Street, Queenstown

Private Bag 50077, Queenstown

Phone: 03-442 4777 Fax: 03-442 4778

SUMM	ARY
Have y	ou remembered to?
	Provide a plan or map showing the locality, location of the activity, topographical features, buildings etc. Obtain written approval from any affected parties (eg, adjoining neighbours). Include the application fee. Please make all cheques payable to CivicCorp. Complete the assessment of effects. Include two sets of plans for which an application is being made (site and elevation plans). At least one plan to be at either A3 or A4 size. Provide an up to date certificate of title.
	Please note your application will not be processed until all of the required information has been supplied to CivicCorp.
DECLA	RATION
court o	of that should I default I agree to pay all costs of collection, including agency fees, costs and disbursements made in the collection of debt and reasonable solicitors gardless of judgement.
applicat	by certify that, to the best of my knowledge and belief, the information given in this tion is complete, true and correct. I undertake to pay all actual and reasonable costs of by CivicCorp.

Contact Details: Phone: 03-442-4777
CivicCorp House, 74 Shotover Street, Queenstown Fax: 03-442-477
Private Bag 50077, Queenstown E-mail: enguirles@g

Fax: 03-442 4778



Civic Corporation Limited Private Bag 50077,

In reply please quote File Ref: Horrell - Unlawful earth works

12th December 2003

Queenstown, New Zealand Tel. 64-3-442 4777 Fax. 64-3-442 4778 e-mail: engulries@civiccorp.co.nz site: http://www.civiccorp.co.nz

CivicCorp House, 74 Shotover Street

Alexander Robins et el Anderson Lloyd Trustee Company Limited C/- Mr R. B. Robins The Key 1RD **TE ANAU**

Dear Sir.

RE: ALLEGED UNLAWFUL EARTH WORKS ON OLD HAYES LIME WORKS QUARRY - PT SEC 28 BLK IX SHOTOVER SD - 64 ALEC ROBINS ROAD, WAKATIPU BASIN

The writer understands that you have approved the use of the aforementioned land by Horrell Contracting to undertake earth works. We are aware through Horrell Contracting's lawyer, Mr Ibbotson that Horrell Contracting have begun to use this site for depositing of clean fill, hard fill and topsoil from various contracts they undertake, either privately or for Queenstown Lakes District Council.

We are also aware from our own observations of Horrell Contracting activities on this site on the 12th December 2003 they are continuing to deposit fill on this site, remove fill from this site and using the site as dump for rubbish i.e. metal objects, plastic containers etc.

On the basis of this evidence and subject to evidence to the contrary I have reasonable grounds to believe that the continued earth works you are undertaking or causing to undertake on this site are in contravention of Rule 5.3.5.1.viii. (d) for earth works undertaken prior to 22nd March 2003 - No earthworks (other than the formation of tracks and earthworks within Ski Area Sub-Zones) shall exceed 100m3 in total volume or 2500m2 in total area. And Rule 5.3.5.1.viii - Earth works variation 21 for earth works undertaken from the 22nd March 2003 i.e. -

viii Earthworks - Variation 21

The following limitations apply to all earthworks except within the Ski Area Sub-Zone (as defined in this Plan), except for earthworks associated with subdivision that has both resource consent and engineering approval.

Earthworks

- Where the gradient exceeds 10° (1 in 6) the maximum area of bare soil exposed from (a) any earthworks on any one site shall not exceed 1000m², in any 12 month period.
- Where the gradient is less than 10° (1 in 6) the maximum area of bare soil exposed (b) from any earthworks on any one site shall not exceed 2500m², in any 12 month period.
- Where any earthworks are undertaken within 7m of a Water body the total volume shall not exceed 20m3 (notwithstanding provision 17.2.2). 5.3.5.1viii (c) All impervious surfaces are to be vegetated

Version: 1, Version Date: 15/09/2022

Document Set ID: 7359089

- (d) Where the gradient exceeds 20° (measured as an average slope angle over any 100m length of the slope on which the earthworks are to be carried out), the maximum area of bare soil from earthworks on any one site shall not exceed 200m², in any 12 month period. 5.3.5.1 viii (d) No earthworks (other than the formation of tracks and earthworks within Ski Area Sub Zones) shall exceed 1000 m² in total volume or 2500 m² in total area".
- (e) The maximum volume of clean fill transported by public road either to or from the area subject to earthworks shall not exceed 300m³ for any given earthworks activity. The 300m³ volume is expressed in solid measure or can be equated to 30 truckloads).

NB: for the purpose of Rule 5.3.5.1 (viii) gradient is measured as an average slope angle over any 100m length of the slope angle on which the earthworks are to be carried out.

2. Height of cut and fill and slope

- (a) No cut or batter (other than routine repair and maintenance of operational tracks, the Arrow Irrigation Scheme and flood protection works) shall exceed 2m in vertical height, with the exception that 10% of the length may be 3m in vertical height. except that such cut or batter shall not exceed 3m in vertical height for more than 10% of its length. replaces 5.3.5.1viii (a)
- (b) All cuts and batters shall be laid back such that their angle from the horizontal is no more than 65 45 degrees unless previously determined, replaces 5.3.5.1viii (b)
- (c) The maximum height of any cut shall not exceed 2.4 metres.
- (d) The maximum height of any fill shall not exceed 2 metres.

On this basis the writer advises the use of this site for the earth works you are currently undertaking or causing to undertake requires the granting of land use resource consent and to continue to use this site otherwise in accordance with resource consent is in contravention of the Resource Management Act 1991.

The writer is aware that Mr Dunning of our office has advised Paul Horrell of the requirement for resource consent for further earth works activity in this area and I understand this has been acknowledged by Mr Horrell i.e. the requirement for resource consent to continue to undertake or cause to undertake earth works on the site.

Accordingly, we do not expect to find any earth works activity on this site until such time, if any, the appropriate resource consent is granted. Failure to comply with this understanding will result in the matter being recommended to the Queenstown Lakes District Council for immediate enforcement action.

To assist you in this matter we attach herewith an application for resource consent.

If you are unclear of your liability of obligations in this matter, please do not hesitate to contact the writer.

Yours faithfully CIVICCORP

Tipa Francis

PRINCIPAL: MONITORING

Resource Management

Application for Resource Consent

Resource Management Act 1991 Section 88 (Form 5)

TO THE QUEENSTOWN LAKES DISTI	RICT COUNCIL:
I/We (Mr/Mrs/Ms):	
Apply for the resource consent(s) as des	scribed below:
CORRESPONDENCE DETAILS	
Postal Address for correspondence:	
Phone Number: (Work)	(Home)
Fax:	
Destal Address for involving	
N 1 (W 1)	
_	(Home)
-ax:	E-mail :
APPLICATION DETAILS	and the second s
Name/Address of the Owner/Occupier (Application relates:	if different from the above) of any land to which the
known, in a manner which will allow ready id road, RD number, rapid number, or grid ref	oplication relates: (Describe the location, as it is commonly lentification, eg, street address and number, name of locality, ference, location map, name of any relevant stream, river or ay relate, proximity to any well known landmark):
·	
Legal description of the property is (from numbers and survey district):	your rates notice - lot, DP, section, block, and/or valuation

Please make all cheques payable to CivicCorp

Contact Details:

CivicCorp House, 74 Shotover Street, Queenstown Private Bag 50077, Queenstown

Phone: 03-442 4777

Fax: 03-442 4778

APPLICATION DETAILS (CONT'D)				
The typ	e of resource consent(s) sought	is/are (tick more	than one if necessary):	
	Landuse Consent		Change/Cancellation of consent conditions	
	Determination of existing use rights		Application to extend life of consent	
SUBDI	VISION			
	Subdivision		Right of way	
	Alteration or removal of a building line restriction		Change/cancellation of consent conditions	
	Application to extend life of consent			
Do you	require a water permit	□ Do you	u require a Discharge permit	
Note: If an application for a water permit or discharge permit is or may be required but is not the subject of a concurrent application to the Otago Regional Council you must outline the systems to be adopted, the discussion you have had with that organisation, and its acceptance of this situation. Failure to do this may lead to a delay in processing. The following additional resource consents are required in relation to this proposal and have/have not been applied for:				
Trave/Nave not been applied for.				
A brief description of the proposal (See below for additional information required):				
				
				
				· · · · · ·
				

Contact Details:

CivicCorp House, 74 Shotover Street, Queenstown

Document Set ID: 735908

Private Bag 50077, Queenstown

Version: 1, Version Date: 15/09/2022

Phone: 03-442-4777 Fax: 03-442 4778

ATTACHED ITEMS

I attach an assessment of any effects that the proposed activity may have on the environment in accordance with Section 88 of, and the Fourth Schedule to, the Act:

- a. A detailed description of the proposal.
- b. Where it is likely that an activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity.
- c. An assessment of the actual or potential effect on the environment of the proposed activity.
- d. Where the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment which are likely to arise from such use.
- e. A description of the mitigation measures (safety and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect.
- f. An identification of those person interested in or affected by the proposal, the consultation undertaken, and any response to the views of those consulted.
- g. Where the scale of significance of the activity's effect are such that monitoring is required, a description of how, once the proposal is approved, effects will be monitored and by whom.

Where the application is for a Subdivision I attach information in accordance with Section 219 of the Act sufficient to adequately define:

- a. The position of all new boundaries.
- b. The areas of all new allotments (not required for cross leases, company leases or unit plan)
- c. The location and areas of new reserves to be created, including any esplanade reserves to be set aside on a survey plan under Section 230 of the Act.
- The location and areas of any esplanade strips to be created under Section 232 of the Act.
- The location and areas of any existing esplanade reserves, esplanade strips or access strips.
- f. The location and areas of land below mean high water springs of the sea or any part of the bed of a river or lake which is vested in the Crown or local authority under Section 237A of the Act.
- g. The location and areas of land to be set aside as new road.

I attach other information (if any), required to be included in the application by the Transitional District Plan, the Proposed District Plan, the Regional Plan, or regulations:
I attach the written approval of every person who, in the opinion of the Queenstown Lakes District Council, may be adversely affected by the granting of the resource consent (Section 94(c)).

FEES INFORMATION

A deposit fee for processing this application will be charged in accordance with the fee schedule. This deposit fee must accompany your application for processing to commence. Further charges may be levied pursuant to Section 36 of the Resource Management Act 1991.

Monitoring Fee - Please note that if your application 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.

Contact Details:

CivicCorp House, 74 Shotover Street, Queenstown

Private Bag 50077, Queenstown

Phone: 03-442 4777 Fax: 03-442 4778

E-mail: enquines@civiccorp.co.nz

SUMM	ÁRÝ
Have y	ou remembered to?
	Provide a plan or map showing the locality, location of the activity, topographical features, buildings etc. Obtain written approval from any affected parties (eg, adjoining neighbours). Include the application fee. Please make all cheques payable to CivicCorp. Complete the assessment of effects. Include two sets of plans for which an application is being made (site and elevation plans). At least one plan to be at either A3 or A4 size. Provide an up to date certificate of title.
	Please note your application will not be processed until all of the required information has been supplied to CivicCorp.
DECLA	RATION
court (of that should I default I agree to pay all costs of collection, including agency fees, costs and disbursements made in the collection of debt and reasonable solicitors gardless of judgement.
applica	by certify that, to the best of my knowledge and belief, the information given in this tion is complete, true and correct. I undertake to pay all actual and reasonable costs d by CivicCorp.
Signed	· Dated:

Contact Details: Phone:
CivicCorp House, 74 Shotover Street, Queenstown
Private Bag 50077, Oueenstown Phone: 03-442 4777 Dwn: Fax: 03-442 4778

E-mail: enquiries@civiccorp.co.nz

Version: 1, Version Date: 15/09/2022



(Cadastral Database) Last updated 18/09/03. PROPOSED DISTRICT PLAN MAPS include data after Council issued its decisions on sions (September 1998). All final decisions of the Environment Court are added as received. For information on the Transitional District Plan, appeals to the Proposed District Plan, and the detailed provisions relating to each zone please contact CivicCorp, at Level 1 CivicCorp House, Shotover Street, Queenstown, or (03) 442 4777. WATER BORE INFORMATION has been collected and compiled from a variety of sources. In many instances the information may not reflect what is currently happening. It should be used as a guide only and you are advised to make your own investigations if you require substantial accuracy. The Otago Regional Council therefore does not guarantee the accuracy of the data and will not be responsible to any party for any loss or damage whatsoever caused by reliance on this information.

Anthony Hanson
(07) U438028

Anthony photo. not. nz.

QUEENSTOWN-LAKES DISTRICT **General Property Information**

Property

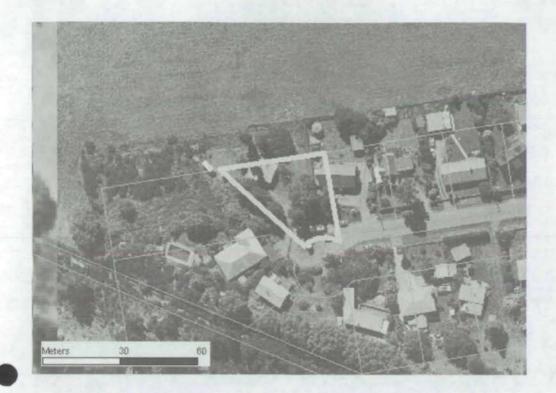
Valuation No.	<u>2906307109</u> : (GIS)
Location	WANAKA-LUGGATE HIGHWAY, WANAKA RURAL
Legal Description	LOTS 2-3 300025
Owner	PITTAWAY NORMAN WILLIAM : PITTAWAY DOROTHY JOSEPHINE & ORS
Owner Address	9 BOTTING PL : WANAKA :
Area (hectares)	4.6140

Rates

Government Valuation			
Land	\$ 170,00		
Improvements	\$ 5,00		
Capital Value	\$ 175,00		
Current Rates Year 2003	3 to 2004		
nnual Rates			
Current Instalment			
Outstanding Balance			
Arrears for Previous Years			
Next Instalment Date	23/01/04		

* * MUST SET SKEY MAIN REC = 2906307109

	Planning/Resource Management
No information located	
	Building
No information located	
	Licences
No information located	
	Sewer & Drainage
No information located	
	Land and Building Classifications
No information located	
	Transport
No information located	
	Special Land Features
No information located	
	Swimming Pools
No information located	
	Other
No information located	
	** End of enquiry **



QUEENSTOWN-LAKES DISTRICT General Property Information

Property

Valuation No.	<u>2907126603</u> : (GIS)
Location	64 ALEC ROBINS ROAD, WAKATIPU BASIN
Legal Description	PT SEC 28 BLK IX SHOTOVER SD
Owner	ROBINS ALEXANDER K ROBINS ROBERT B : ANDERSON LLOYD TRUSTEE COMPANY LTD
Owner Address	C/- MR R B ROBINS : THE KEY 1 R D : TE ANAU
Area (hectares)	16.0592

Rates

Government Valuation			
Land	\$1,375,000		
Improvements	\$ 100,000		
Capital Value	\$1,475,000		
Current Rates Year 2003 to 2004			
Annual Rates	\$ 3,451.91		
Current Instalment	\$ 905.09		
Outstanding Balance	\$ 1,810.19-		
Arrears for Previous Years			
Next Instalment Date	23/01/04		

Planning/Resource Management			
No inform	No information located		
	Building		
30/10/02	BUILDING CONSENT <u>021308</u> : INSTALL A NEW FIREPLACE: Code Compliance Certificate issued 11/11/02		
8/10/01	BUILDING CONSENT <u>011066</u> : NEW DWELLING		
	Licences		
No inform	mation located		
Sewer & Drainage			
No inform	No information located		
	Land and Building Classifications		
No inform	mation located		
Transport			
No information located			
Special Land Features			
No information located			

Version: 1, Version Date: 15/09/2022
http://dtown/cgi_kin/reg/rglim?lim&K 1& 2007126603



Tim Francis

From:

Tim Francis

Sent:

Wednesday, 10 December 2003 5:33 p.m.

To:

Janan Dunning

Subject:

RE: Horrell Contracting - Alec Robbins Road

Hi Janan,

Yes I agree with everything you say, my only concern is that there is <u>no further depositing of fill on the site until a resource consent is granted</u>. Are you confident this is the case. If not we need to have this confidence i.e. acknowledgement from Horrell that this is the case.

Thanks.

Tim Francis

PRINCIPAL: MONITORING CIVICCORP - QUEENSTOWN

Cell: 027 2931041 DDI: (03) 4090882

----Original Message----From: Janan Dunning

Sent: Wednesday, 10 December 2003 5:29 p.m.

To: Tim Francis

Subject: FW: Horrell Contracting - Alec Robbins Road

Tim

Please find following the email recently forwarded to Russel Ibotson. I believe the applicant is making an effort to comply with the process as necessary and that we should work to facilitate an appropriate outcome accordingly. Had the applicant NOT come to us voluntarily, it is likely that the works would have continued without our knowledge as they have for the last six years. I feel it is appropriate to acknowledge the fact that the applicant is actively working to legalise the situation, and we need to recognise this and facilitate an appropriate and legal end result.

Regards

Janan

----Original Message----From: Janan Dunning

Sent: Monday, 8 December 2003 13:18 **To:** 'russell.ibotson@prlaw.co.nz'

Cc: Tim Francis

Subject: Horrell Contracting - Alec Robbins Road

Good afternoon Russell

Further to our conversation on Friday afternoon, I have now had an opportunity to look at the rules of Variation 21 in greater detail in relation to the work being undertaken.

I feel the work may not comply with Rule 5.3.5.1(Viii)(1)(e) in respect of the volume of clean fill transported to the site in excess of 300m3, and may also fall down in respect of (2)(d) in respect of the maximum height of the fill in excess of 2.0m. This would make the activity a discretionary activity under these rules, and it may therefore be better to proceed directly towards an application for resource consent. Your thoughts?

I realise you are tied up in a hearing for the next couple of weeks. I look forward to hearing from you in due course on this matter

Janan Dunning Planner Civic Corp Ltd Private Bag 50077 Queenstown

Tim Francis

From: Tim Francis

Sent: Wednesday, 10 December 2003 11:16 a.m.

To: Janan Dunning
Subject: Horrell Contracting

Hi Janan,

I have reviewed the letter from Mr Ibbotson and advise the following matters need to be confirmed and notice provided to Mr Ibbotson.

- 1. Paragraphs 8 & 9 of the letter provide evidence that a substantial amount of fill has already gone on this site and likely to in excess of the permitted limits.
- 2. Accordingly a retrospective resource consent is likely to be needed, PRIOR TO ANY MORE FILL BE PLACED ON THE SITE. This however will depend on when the fill went on, and quantity. Notwithstanding this, I would suggest we do have reasonable grounds to believe an offence has been committed and the matter should be dealt with on that basis.
- 3. Also, we need to advise Mr Ibbotson and the Horrells with urgency of our reasonable belief and clearly state that there is to continue to deposit fill on the site would be a further contravention of the RMA.

Mr Ibbotson weaves a nice story for his client, however, it is my suggestion and subject to evidence or your view to the contrary the historical use of the land has no relevance to the use that has been made of the land in recent times i.e. this is not about a restoration process under some old approval or existing user right. Therefore, the matters can only be considered in reliance of variation 21 or the previous earth works rule for rural general and as I have indicated above based on Mr Ibbotsons evidence the earth works undertaken have already exceeded the permitted limits.

I would suggest it may be more appropriate if I reply to the parties?

Please discuss urgently.

Tim Francis
PRINCIPAL: MONITORING
CIVICCORP - QUEENSTOWN

Cell: 027 2931041 DDI: (03) 4090882







Preston Russell Barristers, Solicitors, Crown Solicitors Office and Notary Public

Invercargill: 92 Spey Street PO Box 355, Invercargill YA90011 ĽΧ Phone 03-214 4626 Fax 03-218 9536 Email admin@prlaw.co.nz Website www.prlaw.co.nz

Please refer to:

Russell Ibbotson

8 December 2003

Janan Dunning Civic Corporation Limited Private Bag 50077 **QUEENSTOWN**

FAX: 03 442 4778

Dear Janan

HORRELL CONTRACTING: HAYES LIMEWORKS QUARRY

- 1. Following our meeting on 5 December last, we write to confirm our discussions, the understandings reached, and a course of action to be undertaken on behalf of Horrell Contracting Limited.
- As you know, we act for Horrell Contracting, and the writer now provides 2. advice to the Horrell family on resource consent issues and matters which might be related to the provisions of the Proposed, and recently Part Operative District Plan.
- We are assisted by David Whitney, Consultant Planner of Alexandra and 3. Don Miskell, Landscape Architect of Boffa Miskell, Christchurch.
- On Friday last, we met on the site of the old Hayes limeworks quarry on 4. Those present were Paul Horrell, Alex Robbins Road at Lake Hayes. Ferne Horrell, David Whitney, the writer and yourself.
- 5. We discussed the present use of this old quarry pit. We understand the Hayes family in the late 1940s obtained a quarry licence and began quarrying limestone on the land then (and still) owned by the Robbins family. The land was pasture, and gradually quite a large pit was excavated for the very high grade limestone it could produce.
- 6. It seems the guarrying ceased in the mid 1980s and the pit abandoned.

Partners: Alistair Carland (Crown Sulicitor) LL.B. Warwick Cambridge LL.B. Nouvy Public, Russell Ibbotson LL.B. Affil. N.Z.R.I. John Young R.A., I.J.B. Dave Gibson B.A. I.J.A. John Flaus I.J.B. Mary-Jane Thomas I.J.B (Huns), Anna Elder I.J.A. B. Com-Consultant: James Lawelock 11. A. Associates: Sarah McKenzie 14. D. B. Com, Sarah Pauerson 1. J. B. B.A. Registored Legal Executives: Ron Egan Jr, Trever Oliver Jr, John Bonn.



- 7. Routinely, the old quarry licences required as a condition or term, the reinstatement of the quarried area. Although those older requirements were not as sophisticated as the more modern conditions of a resource consent relating to reinstatement and/or landscaping; nevertheless they did require the works to be reinstated rather than abandoned.
- 8. Our clients have the opportunity of returning this pit to the surrounding contours to reinstate a pastoral landscape, as it was before. They have begun to do this with cleanfill, hardfill and topsoil taken from various contracts they undertake, either privately or for the Council.
- 9. Already, the head of the pit has been filled, compacted and is being regrassed at present. Once grass is sown, irrigation will be provided using a K line system to achieve the quickest possible germination and growth.
- 10. The Robbins family have invited only Horrell Contracting on to the property for the purpose of both control of the site, and responsibility/accountability. We are instructed that no other contractor, will be allowed access to the old quarry pit.
- 11. Horrell Contracting is happy to continue to take to the quarry, all the cleanfill and hardfill from its contracts in the district, so as to reinstate the original land contours by the filling of the quarry pit area. The working face will continue to be kept to a minimum, and as soon as possible, areas back from the face will be levelled with soil and sown in grass. Dust will continue to be suppressed, and the area kept tidy.
- 12. Given that the original terms of the quarry licence would have required reinstatement, rather than an abandoned quarry pit, we are inclined to the view that reinstatement could continue without further consent.
- 13. However, the purpose of our meeting on Friday last was to bring the issue to the attention of Civic Corporation Limited, as our clients have no wish to transgress, or to avoid any obligation they may have under the present provisions of the District Plan.
- 14. In that regard, there are no rules that we can see, which relate directly to landfill, and accordingly we, as agreed at our meeting, will forward as soon as we can, an application for a Certificate of Compliance in respect of the quarry pit reinstatement.
- 15. As indicated, Horrell Contracting will provide a topographical survey of the area of the pit, a plan for the reinstatement, and an estimate of the quantities of cleanfill and hardfill that could be involved.
- 16 If there is any other information you consider relevant, then we will endeavour to provide whatever is necessary.
- 17. We trust that having visited the site and met with our clients, you now have an appreciation of the situation and the outcome our clients seek.

- 18. We will provide an application as soon as we have all the necessary information. In the meantime, if you have any queries please do not hesitate to contact either the writer, David Whitney or Paul Horrell.
- 19. Thank you for your time and assistance last Friday.

Yours faithfully PRESTON RUSSELL LAW

Russell libhoteon

Partner

Mobile: 0274 358 359

E-mail: russell.lbbotson@prlaw.co.nz

COPY TO:

Paul Horrell Horrell Contracting Box/2070

QUEENSTOWN

FAX: 03 442 3980

David Whitney Johnston Whitney Box 175

ALEKANDRA

FAX: 03 448 6329

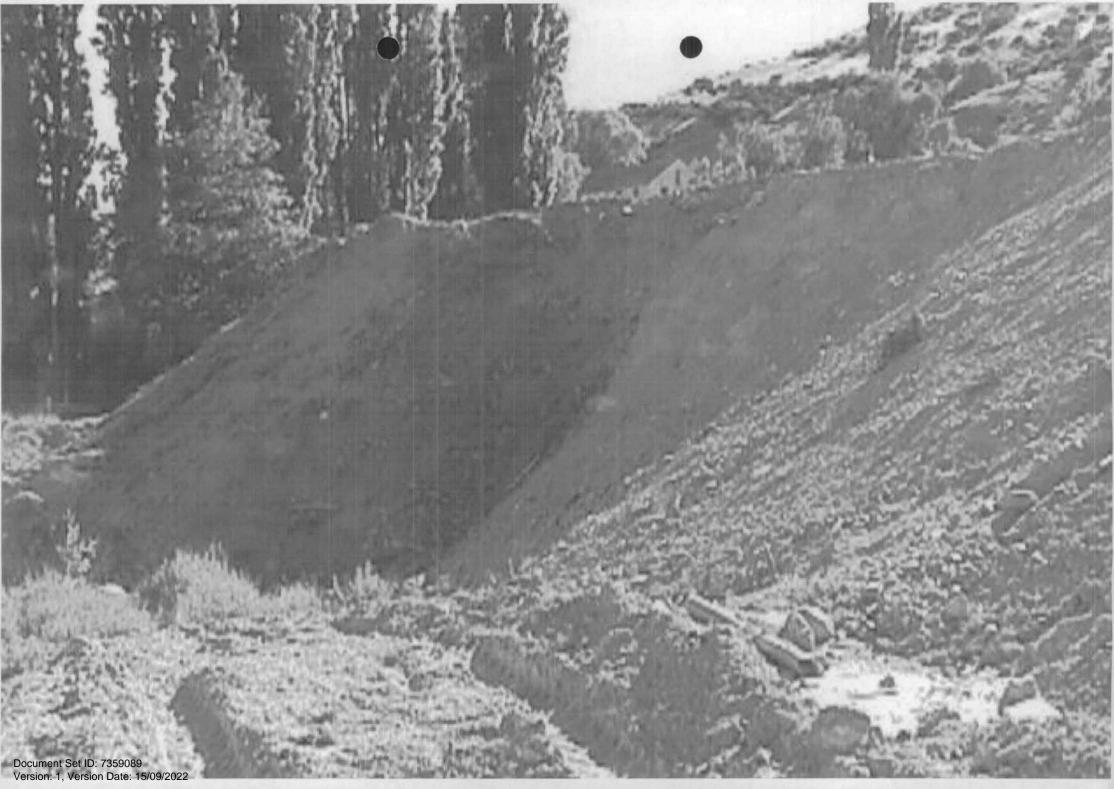














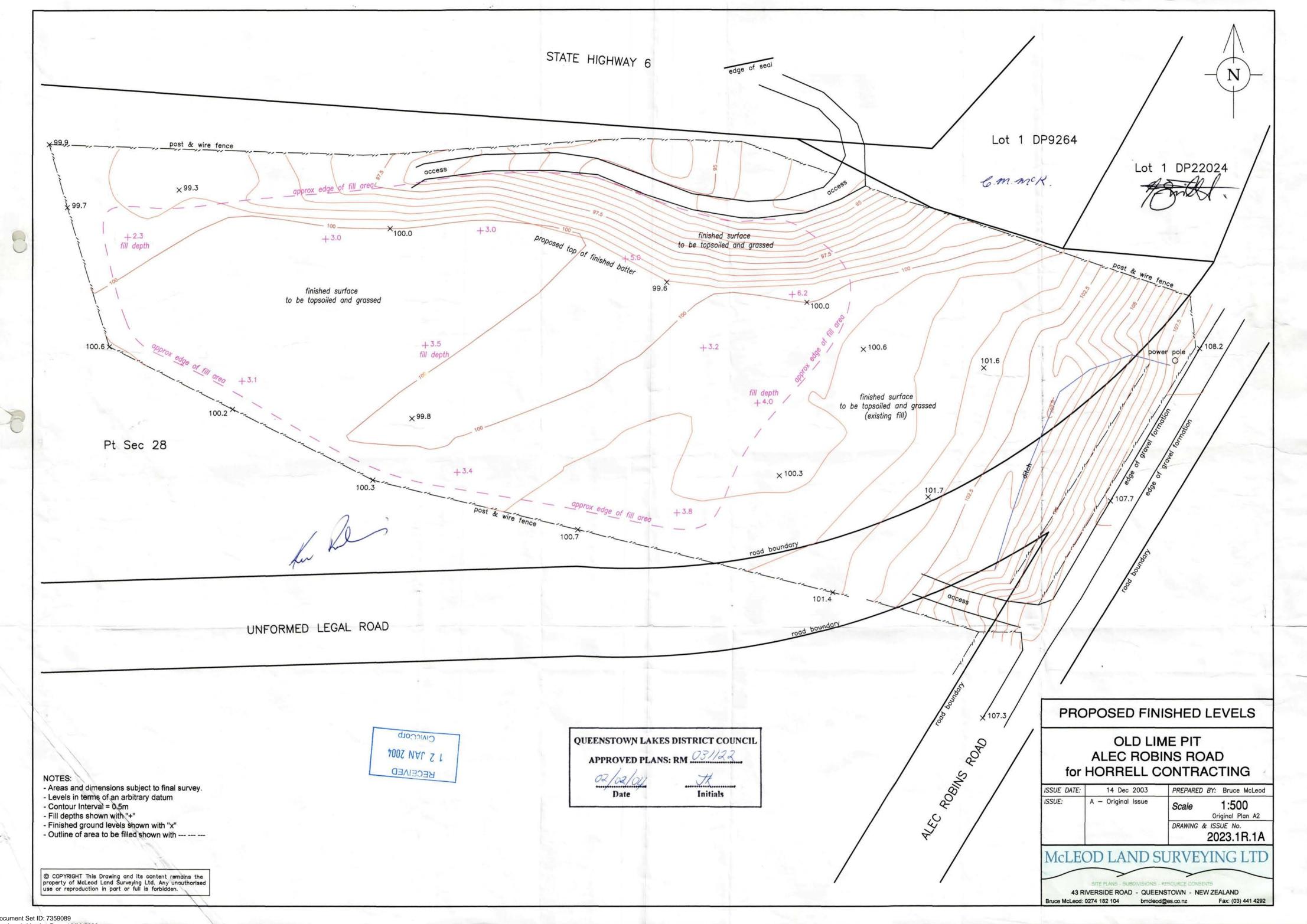












FILE NOTE

FILE REF:

RM031122

DATE:

15/04/2009

SUBJECT:

Top soiling and re-contouring complaint

NB:

Discussion with Brett as representative for Horrell contracting. From his clients point of view they believe they have complied with consent as Lucy sent letter 4 April 2008 stating that all conditions have been met.

Ken Robbins believes they have not met requirements. However, he is underlying property owner and we can only take enforcement action upon him. Ken does not have evidence of a contract with Horrells therefore from our point of view our hands are tied and matter closed at this time. Unless of course we take enforcement action against ken??

100g/ጋ/**ር**መል

Leigh-Anne Whittingham

From:

Brett Giddens [brett@townplanning.co.nz]

Sent:

Wednesday, 18 March 2009 3:09 p.m.

To:

Leigh-Anne Whittingham

Subject:

RM031122, Alec Robins Road Earthworks

Follow Up Flag: Follow up

Flag Status:

Red

Hi Leigh-Anne,

Thanks for your call earlier.

In regard to your letter dated 5 February 2009 noting non-compliance issues with RM03112, I have discussed the matter with the consent holder. It is their opinion that the works have been completed in accordance with the resource consent requirements.

As we have discussed previously, the photographs provided with your letter have been taken some time ago and do not portray the site as it presently exists. Additional top soil has been placed on the site since these photographs were taken and the earth recontoured.

It is appreciated if you can please close this file as additional monitoring is unnecessary.

Regards, Brett



resource management & development planning

Brett Giddens

021 365 513

Phone: 03 442 3396 Fax: 03 442 3390 Email: brett@townplanning.co.nz Postal: PO Box 2559, Queenstown

Queenstown Office: Unit 10, Shotover Ridge Business Park, 183 Glenda Drive Wanaka Office: Level 1, 3 Cliff-Wilson Street

This message contains information, which is confidential and may be subject to legal privilege. If you are not the intended recipient, you must not peruse, use, disseminate, distribute or copy this message. If you have received this message in error, please notify us immediately and destroy the original message. Lakes Consulting Group Ltd accepts no responsibility for changes to this email, or for any attachments, after its transmission from us.

Document Set [15/02/92899] Version: 1, Version Date: 15/09/2022



Lakes Environmental Limited
Private Bag 50077
Queenstown, 9348, New Zealand
Email: enquiries@lakesenv.co.nz
www.lakesenvironmental.co.nz

Queenstown
 Tel: 64-3-450 0300
 Fax:64-3-442 4778
 74 Shotover Street, Queenstown

■ Wanaka

Tel: 64-3-443 0006 Fax:64-3-443 9956 33-35 Reece Crescent, Wanaka, 9305

In reply please quote File Ref: RM031122

5 February 2009

Horrell Contracting Limited C/- Lakes Consulting Group Limited PO Box 2559 QUEENSTOWN 9348

Dear Sir/Madam,

RE: MONITORING OF RESOURCE CONSENT RM031122

Please find enclosed a copy of our recent site inspection report. This inspection was carried out at Alec Robins Road on 26 January 2009 as part of the monitoring requirements of your resource consent.

This site inspection note/compliance update is for your information and can be used to assist in the explanation of any invoices that you may receive with regards to the compliance monitoring costs.

Whilst on site I observed that the development has not been undertaken in accordance with the approved plans as per condition 1; specifically topsoil and grass has not been applied to the majority of the site and the finished contours do not correspond with the Proposed Finished Levels dated 14 December 2003 (please see attached Comparison of Fill dated 9 October 2008).

Please be advised that the finished contours and lack of topsoil are creating adverse environmental effects whereby in periods of heavy rainfall water is collecting in areas of the site; which is causing water to flow in a northerly direction down the embankment and towards State Highway 6 (please see attached photographs).

You are required to comply with resource consent RM031122 within **21 days of the date of this letter**. Please advice when these works have been undertaken in order arrange for a final site visit.

To assist you in minimising your resource consent monitoring costs, we advise that the more proactive you are in ensuring compliance with all the conditions of your resource consent, the less time will be required to monitor compliance of your resource consent.

Should you wish to discuss this matter, please do not hesitate to contact me at our Queenstown office on (03) 450 0363 or email me at lw@lakesenv.co.nz.

Yours faithfully LAKES ENVIRONMENTAL

Leigh-Anne Whittingham
PLANNER: MONITORING & COMPLIANCE

Non-compliance letter 05.02.09

Document Set ID: 7359089

Version: 1-, -Version Date: 15/09/2022-----





