

Before Queenstown Lakes District Council

In the Matter of
the Resource Management Act 1991

And

In the Matter of
Hearing Stream 13 - Queenstown Mapping

Submission 131 / Further Submission 1293

Statement of Joanna Taverner
Dated 09 August 2017

INTRODUCTION

1. My name is Joanna Taverner. I live at 79 Jacks Point Rise, Jacks Point with my husband and two children.
2. I have a BA and Postgraduate Diploma in Landscape Architecture and I am a Registered member of the New Zealand Institute of Landscape Architects. I am Senior Landscape Architect at Queenstown based LAND Landscape Architects where I have been employed for the past 15 years under my maiden name of Joanna Dey.
3. My statement today is provided on behalf of my family as residents of Jacks Point, as a response to submission 715, Homestead Bay.
4. I have read the evidence of Jacks Point residents Tim and Paula Williams, and Mike Coburn and Chris Ferguson on behalf of the JPROA and I support these in their entirety.

CONEBURN AREA RESOURCE STUDY

5. In my further submission I objected to the extension of the Jacks Point Zone and Urban Growth Boundary at Homestead Bay, stating (among other items) that the proposed extension was contrary to the Coneburn Area Resource Study (CARS), a landscape assessment undertaken when the Jacks Point Zone (JPZ) was established in 2002. In 2015 this study was updated, undertaking a re-examination of its outcomes to ensure that it remained relevant to present and future needs. I attach this as Appendix 1. To my knowledge it is to date the only comprehensive landscape study undertaken for the zone, informing the Operative District Plan including the JPZ structure plan, the PC44 process and the Proposed District Plan Jacks Point Zone. It is therefore a valid and important document and one that should be referred to in this decision making process. I am unsure why I cannot find any reference to it in this application besides from further submissions¹.

¹ 561, 1073, 1103, 1114, 1116, 1192, 1218, 1225, 1227, 1237, 1247, 1250, 1293, 1299, 1321

6. The CARS Figure 12 ranks areas within the catchment on a five point scale with 1 having the highest and 5 having the lowest ability to absorb change. Figure 14 provides the conclusion to the study², identifying future Landuse and Landscape Management Strategies. I have overlaid figure 14 onto the applicant's proposed Structure Plan³ attached as Appendix 2. Areas R(HB-SH) A and C, part of B and part of the extended OSR fall within an area designated as 4 on the scale on Figure 12, with a 'medium-low potential to absorb change', and on Future Landuse figure 14 as "SH6 Visual Corridor - area to be managed to preserve and enhance open rural character, continued pastoral farming and conservation land uses". The transition line between the recommended landuse zones (shown in red) is a response to visibility and topographical changes, with the higher gently sloping paddocks close to the road considered inappropriate for development. The study recognises and places importance on the presence of rural farming land adjacent to SH6 on the transition into and out of Queenstown.
7. Development of the Homestead Bay extension in the manner proposed by submitter 715 is contrary to the recommendations of this study, the conclusions of which have been based on a thorough, layered and comprehensive analysis of the landscape.

ANTICIPATED AMENITY TO JACKS POINT RESIDENTS IN THE OPERATIVE DISTRICT PLAN

8. Tim Williams makes an important point⁴ that '*Rural outlook particularly to those neighbourhoods on the periphery of Jacks Point is an important characteristic to these areas. Residents within Jacks Point understand there is a structure plan controlling the location of development and the structure plan also directs where future development would occur in Homestead Bay. Therefore they have a legitimate expectation that there would be very limited or any visibility of dwellings to the south of the Jacks Point neighbourhoods given the structure plan for Homestead Bay largely restricted development to the contained basin near the lake*'.
9. Properties on the southern part of the Jacks Point Zone including Jacks Point Rise would see significant areas of the proposed development where there would previously have expected to see '*preserved and enhanced open rural character, continued pastoral farming and conservation land uses*' as recommended in the CARS⁵ and as per the rural zoning in the ODP.

LANDSCAPE ANALYSIS

10. As a Jacks Point resident and member of the JPROA, my primary concern is with the effects of the development as experienced from Jacks Point. As a member of the public I also have concerns with the appropriateness of the development as viewed from the State Highway.
11. I agree with Dr Read's analysis of the proposal and the landscape character⁶ and note that her opinion aligns with the CARS study. Dr Read considers that the open rural outwash plain paddocks of the proposed Homestead Bay extension have a different characteristic to the naturally hilly land dotted with existing pockets of indigenous vegetation alongside SH6 at Jacks Point.

² Duane Te Paa evidence, Hearing Stream 9, February 2017, para 18

³ Appendix 1, Ben Espie evidence, Hearing Stream 13, 9th June 2017

⁴ Statement of Tim and Paula Williams, Hearing Stream 13, 09 June 2017, para 2.1

⁵ Coneburn Area Resource Study, Figure 14

⁶ Rebuttal Evidence, Dr Read, para 7.6-7.14, 7 July 2017

12. Dr Read considers that introducing mounding to screen the development is inappropriate in this location. Mr Espie considers⁷ that mounding and vegetation at Jacks Point is extensively introduced, has been successful, and therefore should be replicated at the Homestead Bay extension. I agree with Mr Espie's first two points, but disagree that it should necessarily be replicated, as the mounding and vegetation within the Jacks Point part of the zone originated from natural patterns which can be observed on site, following the existing character, rather than introducing a new one.
13. There are two prominent natural existing landforms which I consider form the basis for the SH6 mounding in the Jacks Point Zone. I have marked these landforms on Mr Espie's attachment 1 and 2 to his statement as 'escarpment A' and 'hill B', with escarpment A continuing to the north beyond the page, included as appendix 4. I note that at hill B the ground rises by approximately 10m and by approximately 5 – 10m at escarpment A in locations near to the road. The area in between these landforms is on a natural rise in the landscape, which gradually drops down to the west in a series of large bumps and hollows where the residential development has largely been located.
14. Introduced mounding occurs in areas between escarpment A and hill B as viewed from the State Highway. I am not sure exactly to what extent without access to contours surveyed prior to the development, however I do not consider that the presence of 'pasture' on Mr Espie's attachment 1 is an indication that natural variations in the landform did not already exist, particularly when reviewing the topographical feature of hill B which has an elevation at least 25m higher than the paddock that runs to the south, yet is shown as pasture on this graphic. I consider that the presence of these natural topographical 'starting points' (in combination with native vegetation stands also present on these landforms) has been instrumental in the success of the introduced mounding and planting. The character is naturally undulating, and therefore the introduced mounding does not feel at odds with this. Once fully established, the new vegetation will complement the existing grey shrubland stands in a similar subtle manner. Applying the same approach to the Homestead Bay extension landscape character is not appropriate in Dr Read's opinion as it is a completely introduced landform within a gently sloping paddock in this location, and I agree. This is illustrated when observing the land surrounding the profile poles in Mr Espie's attachment photographs 3 and 4.
15. I agree with Dr Read's opinion that screening the development will compromise the long sweeping views to the surface of the lake which are possible from SH6 in this area, and that this would be a negative outcome. The existing landforms described above are located close to the road adjacent to Jacks Point, enclosing the road to a degree and dominating the foreground views in that area. This is in contrast to the long range rural views currently available across the Homestead Bay extension to the lake and mountains beyond.
16. Mr Espie's photographic attachments 1-4 showed the approximate mounding height (although I note the second mounding further away by Area D is not based on any profile poles, so is a rough estimate). He notes that the lake can still be visible, however these images only show the earthworks mounding height, not the proposed mitigation planting on top of the mounds which I consider will screen more of the lake surface.

⁷ Ben Espie Statement, 8th August 2017, para 6-8

17. Dr Read observes⁸ that the proposal essentially digs a hole into an open paddock, locates the proposed buildings, then uses the excavated material to build an earthworks 'wall' around the majority of the development to screen it from view, with potentially large quantities of cut and fill required and significant changes to the landform. From a landscape architectural perspective, constructing a development which needs to be completely screened by artificial means is a second choice to locating development in an area with pre-existing potential to absorb the proposed change.
18. I attempted to draw a cross section from the State Highway to the lake using Appendix 1 and Appendix 9 to Mr Espie's evidence showing mounding locations and contours, and mounding and building height cross sections respectively to better understand the proposal. In doing this I discovered the following:
- a. The Structure Plan⁹ shows proposed contours rather than existing contours, therefore I cannot use this information to compare the modified nature of the topography with the existing landform. This is also true of the cross sections.
 - b. The cross sections have a vertical scale five times larger than the horizontal scale (not noted on the plans), giving a skewed interpretation of the proposed mounding and extent of developed area. Although Mr Espie notes these cross sections are 'crude' he states that the vertical height is correct.
 - c. When scaling vertically from the cross sections, building height is shown at approximately 3.2m high on Sections G and E, approximately 3.5m high on Section A and C, and under 5.0m high on section D, attached as Appendix 3 to this evidence. At best a 5m high building height is difficult to achieve, with most single level houses having ridgelines of 5.5 - 6m on a flat site. A 3.2m high building is not practical so I assume this is incorrect. See Attachment 3.
 - d. I cannot find a proposed building height limit for the extension areas in the evidence, only an assurance that the screening would be sufficient to completely hide the houses by including rule 41.5.12.2(l)¹⁰. However I consider that the building height would need to increase, certainly where it is shown as only 3.2m, and therefore the mounding will need to be increased to screen this. This further compounds the negative effects of unnatural landforms imposed on a gently sloping topography, and further restricts any views across the site. Essentially the earthworks 'walls' built around the development will need to be increased.
 - e. Further clarification will be required regarding the viewshed analysis included as an attachment to the original submission. I assume this shows visibility after the mounding has been constructed, but is this of the ground or the proposed houses, and if so at what height?
19. Mr Espie states that the development will only be visible from parts of Jacks Point. However due to the unknown building heights in the application and with the potential that these may increase as per the cross sections I consider that it may be visible from more areas than Mr Espie concludes.

⁸ Rebuttal evidence, Dr Marion Read, Hearing Stream 13, para 7.12

⁹ Appendix 1, Ben Espie evidence, Hearing Stream 13, 9th June 2017

¹⁰ Evidence of Nick Geddes, para 4.17, Hearing Stream 13, Submitter 715, 5th June 2017

20. Mr Espie considers¹¹ that Dr Read's landscape concerns have been addressed; however Dr Read¹² disagrees.

PROPOSED PLANTING MITIGATION

21. The submission maintains that the established planting mitigation will give a similar visual experience to that at Jacks Point. Notwithstanding the differing landscape character between the Homestead Bay extension and Jacks Point outlined in paras 12-14 and in Dr Read's rebuttal evidence, I have concerns about the implementation and ongoing management of the proposed planting, if it is approved.
22. A large contributor to the success of the Jacks Point planting is that it is installed and maintained by the JPROA on JRPOA land. The proposed mounding and vegetation in the Homestead Bay extension falls across boundaries of OSA, OSL, and part of R(HB)-D¹³. In the event that this proposal was approved, extreme care should be exercised to ensure continued maintenance and ongoing growth of this planting, and that it is consistent across any fencelines or boundaries. In reality it can be a difficult scenario to ensure successfully, particularly where the planting becomes the responsibility of several different owners or custodians. The planting can become forgotten, or cut down by subsequent lot owners who are not familiar with their covenants (should any be applied), or damaged by grazing stock. The design of the planting as shown flows across the mounding in large drifts, however if these drifts were owned or managed in parts by different parties the planting may result in having gaps or 'stripes' of good care vs no care. If this planting were the responsibility of a communal lot owners association in its entirety it is more likely to result in successful establishment and ongoing mitigation effectiveness. I understand however that no residents association is proposed for the development at Homestead Bay and no proposal has been made for the owners to become members of the JPROA, therefore I have concerns that the planting will achieve a similar success to that at Jacks Point.

URBAN GROWTH BOUNDARY

23. In my further submission I stated my concerns over the possibility of infill development and over-domestication of the landscape, and resultant urban sprawl by allowing the extension of Homestead Bay. This is because by creating these additional pockets of urban development surrounded by mounding a precedent is set, and I have concerns that the same argument can be applied to the open space areas between these pockets, with pressure increasing for inappropriate development of these 'infill' areas.
24. If the Urban Growth Boundary line is extended towards Lakeside Estates then it would be important for the JPZ Structure Plan to identify those areas of open space which are valuable for amenity (by formally defining them as shown in Scenario B¹⁴), in order that these locations can be protected from inappropriate development. This way the Urban Growth Boundary line is not seen as a 'target', with urban development possible right up to the boundary. This approach is in line with QLDC policies¹⁵ concerning the UGB around the Jacks Point Zone which recognise the

¹¹ Ben Espie evidence, Hearing Stream 13, 9th June 2017, para 7.9

¹² Rebuttal evidence, Dr Marion Read, para 7.4

¹³ Ben Espie evidence, Hearing Stream 13, 9th June 2017, appendix 1 (structure plan) and appendix 2 (earthworks)

¹⁴ S42a report, Vicki Jones, 24 May 2017

¹⁵ QLDC legal submissions, Hearing Stream 9, 24th February 2017, para 3.13 and 3.14, policies 4.2.2.4 and 4.2.3.7

important function of rural areas on the edge of UGBs to provide a sensitive transition to rural areas beyond the boundary, and recommend addressing this within the UGB.

GENERAL COMMENTS

25. I agree with Chris Ferguson's comments regarding visibility of the proposed reservoir on Jacks Point, an ONL. Further detail and / or controls will be required from the applicant before an informed decision can be made on this. If a reservoir of sufficient size cannot be located on this ONL feature, then the submitter has no stated alternative to make the water supply scheme work. By contrast I understand the development enabled by the Operative Plan was intended to be supplied from the JPROA water supply infrastructure.
26. I do not object to intensification of the existing areas within the Homestead Bay zone if they are executed well and with appropriate consideration of landscape and visual amenity values. However to fully integrate with the surrounding settlements of Jacks Point and Lakeside Estates, in the spirit of the Jacks Point Zone I agree with Tim Williams and Vicki Jones, that public trails should be provided. A minimum of a lakeside connection through to Lakeside Estates and through the Homestead Bay area to Jacks Point would help to offset removal of the original ecological conditions and the intensification of the zone.

Attachments:

- 1 Coneburn Area Resource Study
- 2 Overlay of Homestead Bay Structure Plan and CARS figure 14
- 3 Adapted Cross Sections (appendix 9 to Ben Espie's Evidence)
- 4 Markup of Ben Espie's Appendix, aerial images 1 and 2 to his statement dated 08/08/17
- 5 Ben Espie image 4, Appendix 2

Coneburn Resource Study

2015 Update

Introduction

The Coneburn Area Resource Study was commissioned by the Queenstown Lakes District Council in October 2002 with specialist input from ecologists, landscape architects, hydrologists and planners. The study informed the then variation to the District Plan relating to Jacks Point over a wider catchment. The forthcoming review of the Queenstown Lakes District Plan and private plan change 44 have been the catalyst for a re-examination of the outcomes of the Coneburn study to ensure that it remains relevant to present and future needs.

The purpose of this document is to record what elements of the environment (natural and physical) have been modified since the original study, how that has impacted on the findings and analysis of the Coneburn study and to present updated plans so that the study continues to provide the type of high level guidance relating to the management of change within this area.

This update reviews the Coneburn Study and is presented in a format that summarises the most significant changes that have occurred or that are proposed to occur within this environment. This update will support the evidence and changes to the Jacks Point area through Plan Change 44.

The original Coneburn Study outlined a detailed methodology for its formulation, involving the mapping of natural and cultural elements in the landscape, visibility, vegetation and the identification of landscape character areas and their ability to absorb change.

Since this study was formulated, the zoning of the area has been confirmed through the operative district plan and over a decade of residential development has occurred. That development has resulted in the construction of approximately 170 houses, together with the Jacks Point golf course, club house, reserves, open space and the installation of private infrastructure and road access throughout the Jacks Point area. For the most part, development has generally followed the outcomes anticipated through the Coneburn study. The two parts of the Jacks Point area included within the original Coneburn study that have yet to undergo any significant development are the areas of Homestead Bay and Hanley Downs.

This update to the Coneburn study is presented in three parts, as follows:

- Change within the Coneburn area
 - Resource Analysis
 - Updated Plans
- ## Landscape Change and Existing Development within the Coneburn Area
- In the decade since the development of the original Coneburn study, Jacks Point and the Queenstown Lakes District have undergone significant change in terms of population growth, the distribution of development and associated infrastructure.
- In physical terms, Jacks Point has transformed from a working rural landscape to a significant community containing approximately 170 houses (constructed), an 18 hole championship golf course, club house and other recreation amenities and open space. Development has modified the physical environment through the addition of road corridors and land modification to accommodate housing. This has included subtle changes to enhance natural landforms to reduce the visibility of development within Jacks Point, particularly when viewed from the State Highway.

Within the development significant areas of new native planting have been implemented which helps to establish screening vegetation (State Highway) as well as enhancing areas throughout the settlement where planting builds on natural patterns such as streams, gullies and terrace escarpments.

In addition, Jacks Point has created a manmade lake (Lake Tewa) at the centre of the settlement that provides the setting for waterfront development within a backdrop of surrounding open space and recreation activities.

The planning provisions for Jacks Point in this time have also changed to provide a focus on the containment of growth to within identified urban areas. The Council has driven the formulation of studies for Queenstown which has included Tomorrow's Queenstown 2002 and the Growth Management Strategy 2007. These have resulted in a move towards policies of containment of urban growth through changes and updates to the District Plan. Jacks Point now fits within the broader Queenstown urban area and is subject to the policies which seek to manage change within that area.

Many aspects of the physical environment have not changed and the following plans are unchanged through this update:

- Figure 5 – Hydrology and Overland Flow Paths
- Lake Tewa is not shown but is a new manmade feature that contributes towards the management of stormwater and overland water flows.
- Figure 6 – Geology
- Figure 7 – Soils Map
- Figure 8 – Slope Analysis
- Figure 9 – Land Tenure (Figure 3)
- A more detailed description of the resource analysis and plans updated as part of this study are described below.
- Landownership with the Coneburn area has changed considerably with the transformation of improved pasture and arable farmland converted into an urban area. This has resulted in a corresponding increase to residential and commercial land uses as well as the introduction of new areas of recreation (golf) activity. Land tenure outside of the new urban areas have changed little.
- Within the period from 2001 to 2013, the usually resident population of the Queenstown Lakes District has grown from 17,043 to 28,224¹. Over the same period Jacks Point has grown from 57 people to 287, experiencing a 54.7% rate of growth. That rate of growth is predicted to continue as available land capacity is taken up.
- District Plan Zoning (Figure 4)
- The operative Queenstown Lakes District Plan identifies the area of the Jacks Point Resort Zone over most of the Coneburn area, west of State Highway 6, with all of the surrounding rural land remaining a part of the rural general zone. For the purposes of this study, the location of individual structure plan areas have been excluded.
- Ecology and Vegetation (Figure 8)
- The ecology and vegetation within parts of the Jacks Point settlement has been affected through the addition of large areas of native planting along the interface with the State Highway 6 corridor to assist screening of development as well as through the current main vehicle access into the Zone at Maori Jack Road and with the areas of open space throughout the zone.
- Based on our examination of this change, we have considered it necessary to update the following base plans describing the natural and physical resources within the Coneburn Area:

¹ Statistics New Zealand, Census data

Resource Analysis

Landscape Character (Figure 11)

Based on the nature of the changes to the natural and physical environment within the Coneburn Area described above, aspects of the resource analysis have also been affected. The landscape character areas described within Figure 11 remain as a relevant part of the historic record of the landscape prior to development, but with the development and growth of Jacks Point, large areas of the landscape are now urbanised.

The landscape character in Figure 11 identifies the Hummocks/Township as a distinct area.

Visibility (Figure 10)

The visibility analysis shown within Figure 10 was originally formulated on the basis of landform only (i.e. without planning) and identifies categories of visibility. For the purposes of this plan, visibility was mapped from the State Highway 6 corridor and Lake Wakatipu.

The outcomes of this analysis remain relevant to this study because it provides an unaltered assessment of visibility prior to development and mitigation and is based solely on the landform. The addition of mitigation has, however, altered visibility of development and the ability of the landscape to absorb change. This is discussed further below.

The potential of a landscape to absorb change depends on two key factors:

- (a) Its landscape character sensitivity; and
- (b) Its visibility.

During the preparation of the original Coneburn Study the areas with lower landscape sensitivity (VAL areas) were assessed in detail regarding their visibility from the Lake or from State Highway 6 to determine the most suitable areas for development of Jacks Point Township. Due to the higher landscape sensitivity of the identified Peninsula Hill ONF, this area had not been analysed in more detail in the Study regarding the landform's ability to absorb change based on visibility. For PC44 a more detailed assessment has been carried out on site on Peninsula Hill, which allowed for a visibility analysis at a localised scale, taking the broader-scale findings from the Coneburn Study into account. This site-based assessment highlighted that two distinctive folds in the roche moutonnee landform provide a significantly higher capacity to absorb development than the remainder of the landform with its generally highly visible slopes.

Landuse and Landscape Management Strategy (Figure 14)

Changes include:

- Refinement of the SH6 Visual Corridor allowing for proposed visual mitigation treatment on the flat land at the north of Hanley Downs, while retaining the open rural landscape characteristics and views to distant mountain peaks; and
- Inclusion of areas with potential for rural living opportunities along the bases of Peninsula Hill and enabling custodian protection and enhancement of areas with high natural value.

State Highway Mitigation

Because of the role that mitigation provides on absorption of development in the landscape, this update to the Coneburn Study seeks to identify further the factors that can assist in the successful integration of change into the landscape, including:

- i. The extent of landscape planting which has occurred through development to date (Figure 8);
- ii. The nature of the State Highway mitigation developed through implementation of the Jacks Point Residential Areas ODP; and
- iii. The addition of further landscape mitigation towards the northern edge of the zone alongside the Wootshed Road and the State Highway that would be implemented through PC44.

The State Highway mitigation is now shown on a new Figure 10.1.

The State Highway mitigation that has been incorporated into the outline development plans approved in relation to the residential activity areas are a key element of mitigation protected through resource consent conditions. The spatial planning for PC 44 also seeks to implement State Highway mitigation through the structure plan and related provisions seeking to implement those outcomes. On this basis, the State Highway mitigation described

above can be relied on in a regulatory sense to mitigate development and influence the ability of the landscape to absorb change.

Peninsula Hill

This part of the existing landscape has remained relatively unmodified since the original study but has been impacted on through the development that has occurred around it as well as through the ongoing demands for farming management of this landscape.

Figure 10 identifies areas of this landform with no visibility from the Lake or State Highway 6 and this has not changed. Further analysis of the underlying landform has occurred to take into account:

- i. The demands for ongoing land management through farming;
- ii. The context of growth around the landform including the home sites located within the Tablelands and on the valley floor; and
- iii. A further detailed desktop and on-site analysis of the small-scale terrain on the Peninsula Hill landform to assess its change absorption capacity.

The potential of a landscape to absorb change depends on two key factors:

- (a) Its landscape character sensitivity; and
- (b) Its visibility.

During the preparation of the original Coneburn Study the areas with lower landscape sensitivity (VAL areas) were assessed in detail regarding their visibility from the Lake or from State Highway 6 to determine the most suitable areas for development of Jacks Point Township. Due to the higher landscape sensitivity of the identified Peninsula Hill ONF, this area had not been analysed in more detail in the Study regarding the landform's ability to absorb change based on visibility. For PC44 a more detailed assessment has been carried out on site on Peninsula Hill, which allowed for a visibility analysis at a localised scale, taking the broader-scale findings from the Coneburn Study into account. This site-based assessment highlighted that two distinctive folds in the roche moutonnee landform provide a significantly higher capacity to absorb development than the remainder of the landform with its generally highly visible slopes.

Landuse and Landscape Management Strategy (Figure 14)

Changes include:

- Refinement of the SH6 Visual Corridor allowing for proposed visual mitigation treatment on the flat land at the north of Hanley Downs, while retaining the open rural landscape characteristics and views to distant mountain peaks; and
- Inclusion of areas with potential for rural living opportunities along the bases of Peninsula Hill and enabling custodian protection and enhancement of areas with high natural value.

New and Updated Plans

- Figure 3 – Cadastral, Tenure and existing land use
- Figure 4 – District Plan Zoning
- Figure 8 – Ecology/Vegetation
- Figure 10 – Visibility Analysis
- Figure 10.1 – State Highway Mitigation
- Figure 11 – Landscape Character
- Figure 12 – Potential to Absorb Change
- Figure 14 – Landuse Landscape and Management Strategy

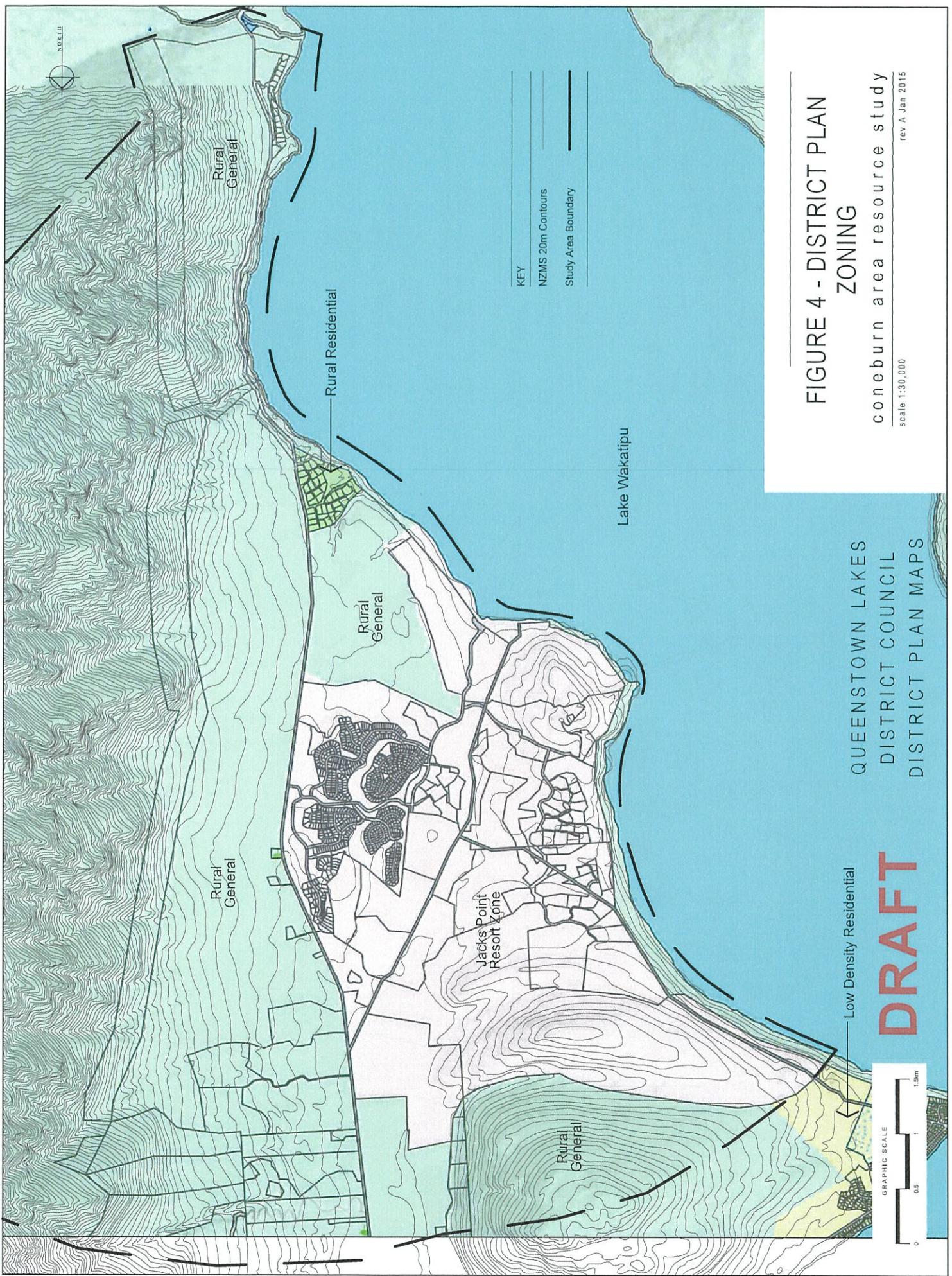
DRAFT

**FIGURE 3 - CADASTRAL,
TENURE & EXISTING LANDUSE
cone burn area resource study**

Rev A, Jan 2015

scale 1:30,000





**FIGURE 4 - DISTRICT PLAN
ZONING**

Coneburn area resource study

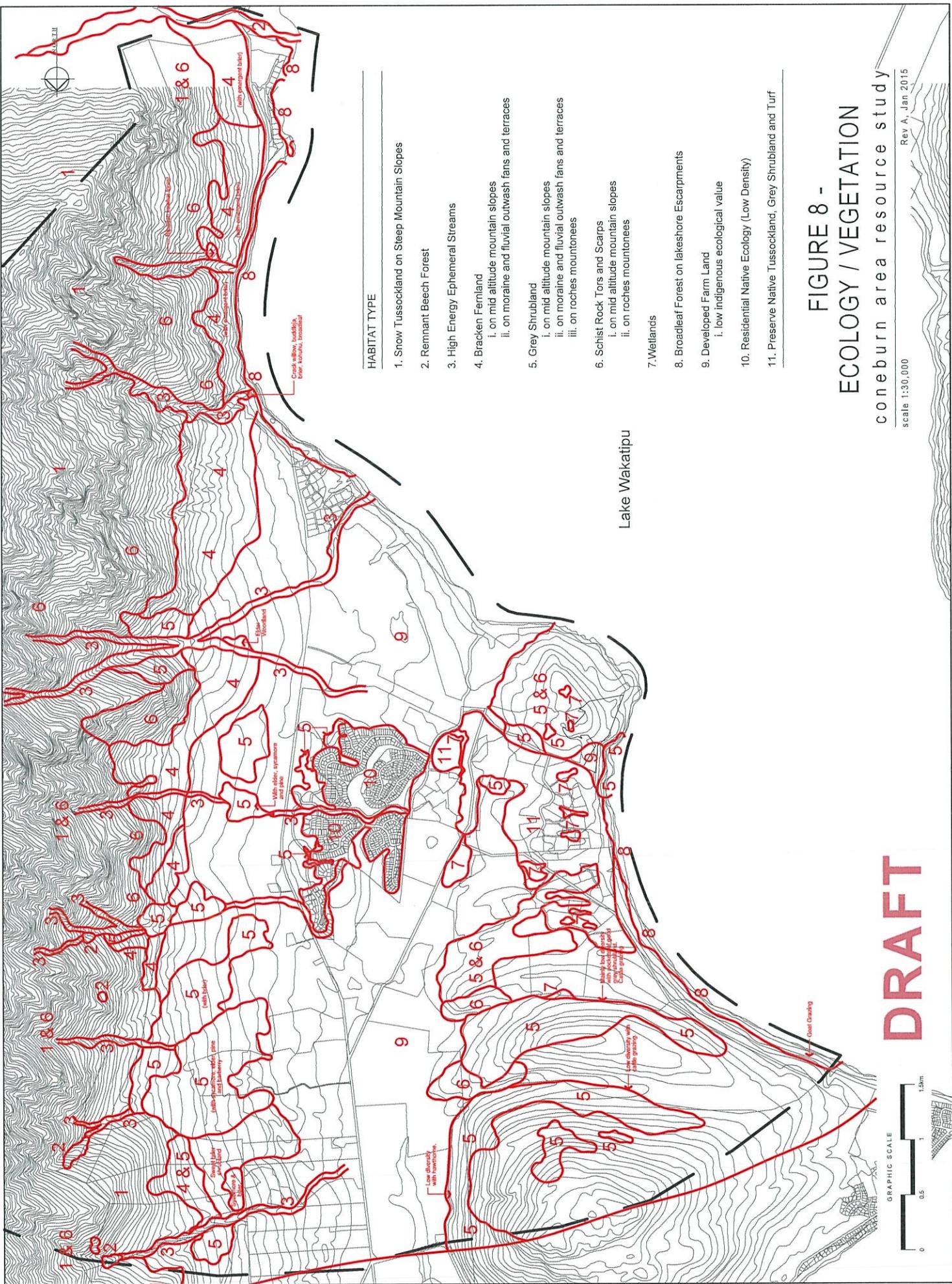
DRAFT

FIGURE 8 - ECOLOGY / VEGETATION

Coneburn area resource study

Rev A, Jan 2015

scale 1:30,000



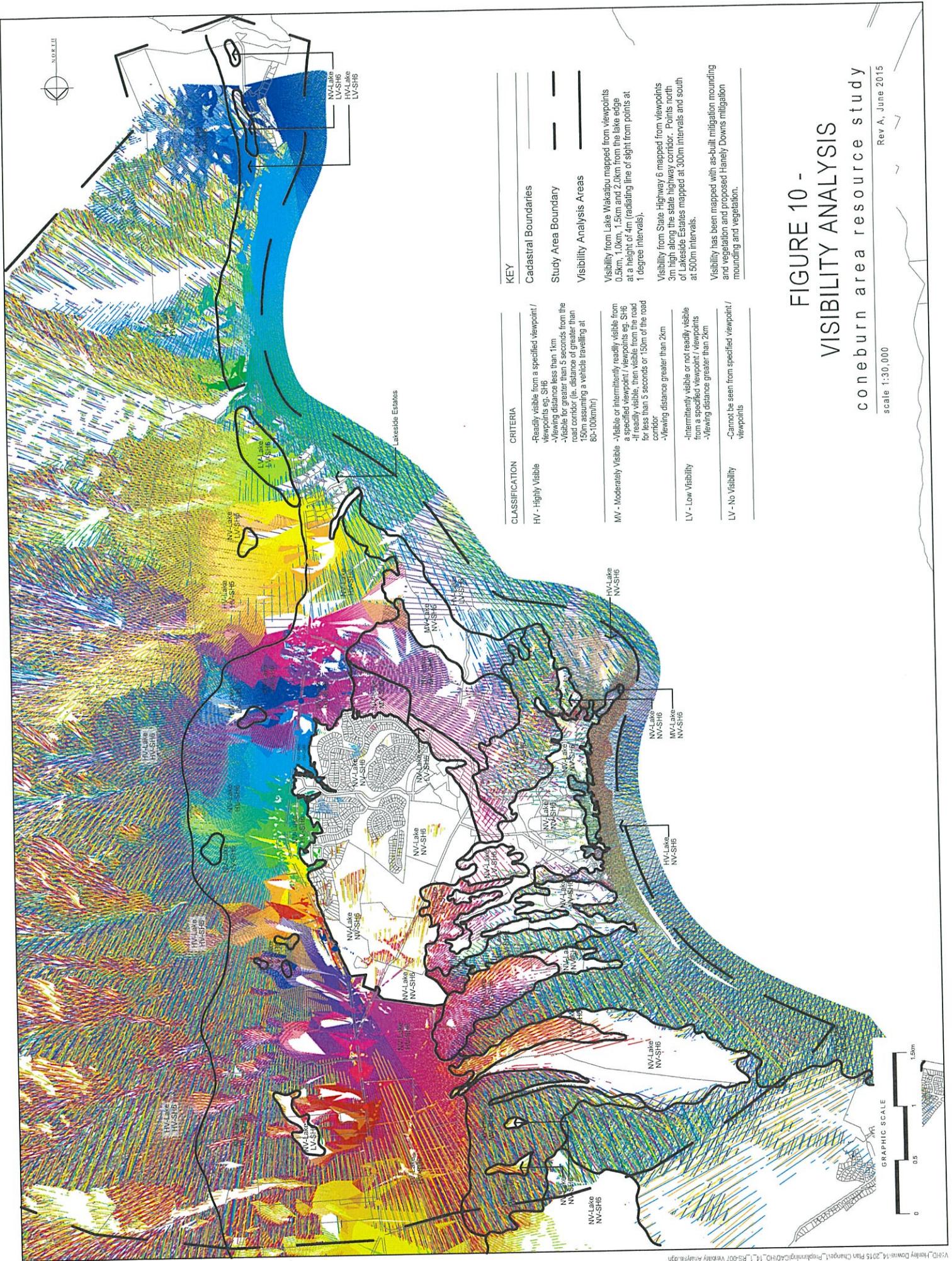


FIGURE 10 -
VISIBILITY ANALYSIS

cone burn area resources study

V:\HDL\Energy\Domestic\1\2015 Plan Change\11 - Proposed Mitigation (Add'l) - L1_R03-C06 State Highway 1 Realign Study

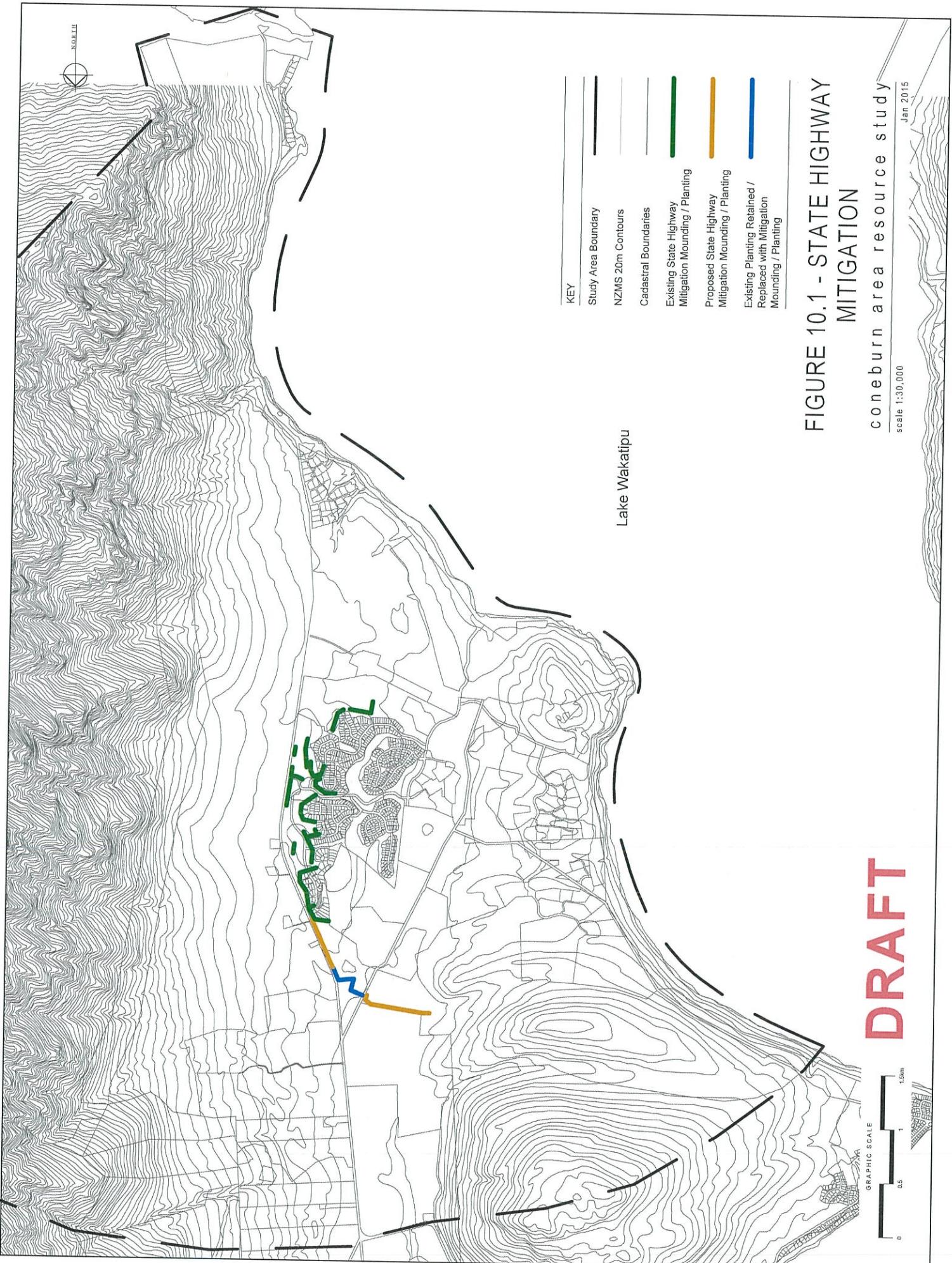
Scale 1:30,000

Graphic Scale
0 0.5 1 1.5km

DRAFT

FIGURE 10.1 - STATE HIGHWAY
MITIGATION

cone burn area resource study
Jan 2015



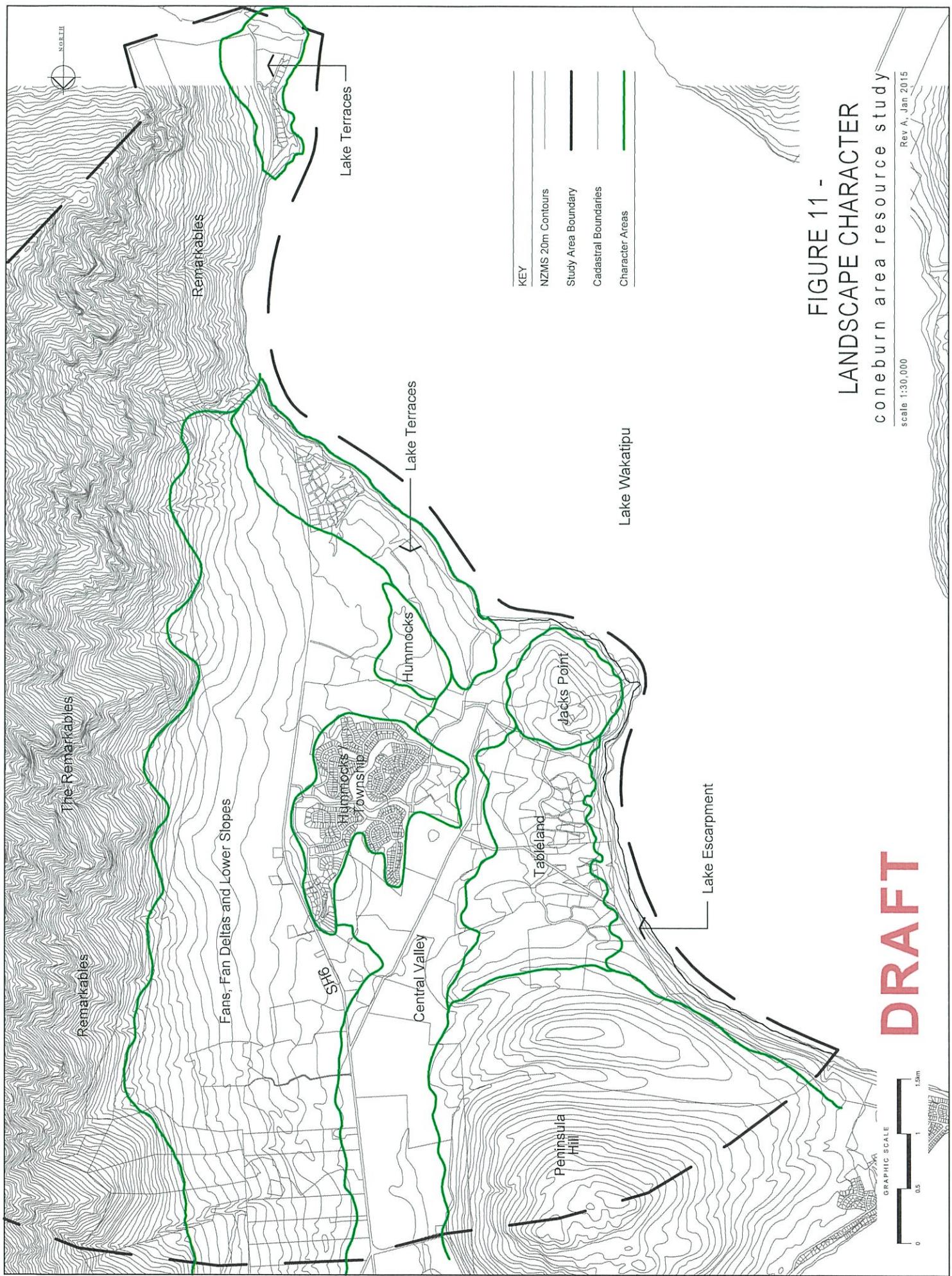
DRAFT

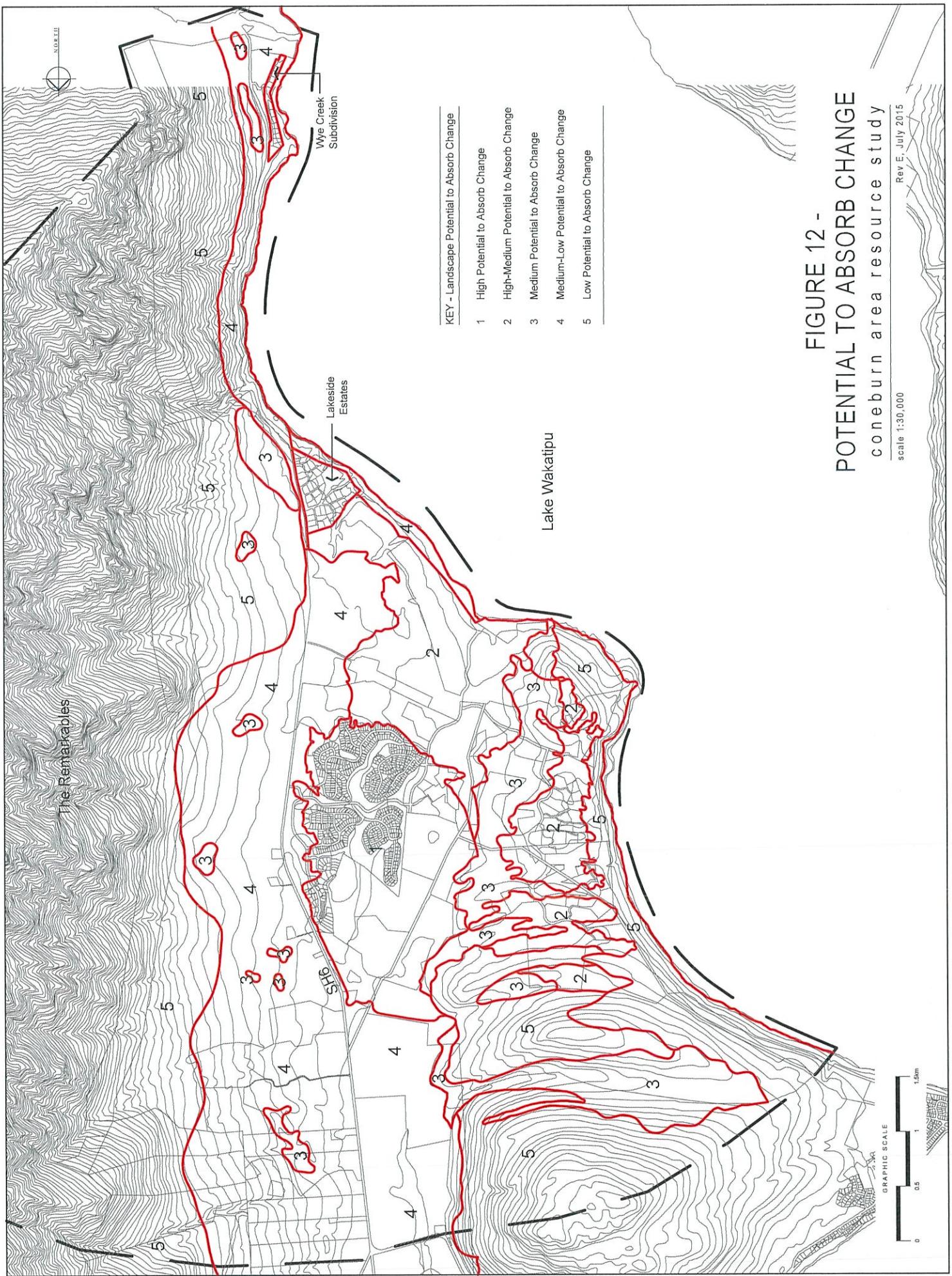
FIGURE 11 -
LANDSCAPE CHARACTER

Coneburn area resource study

Rev A, Jan 2015

scale 1:30,000



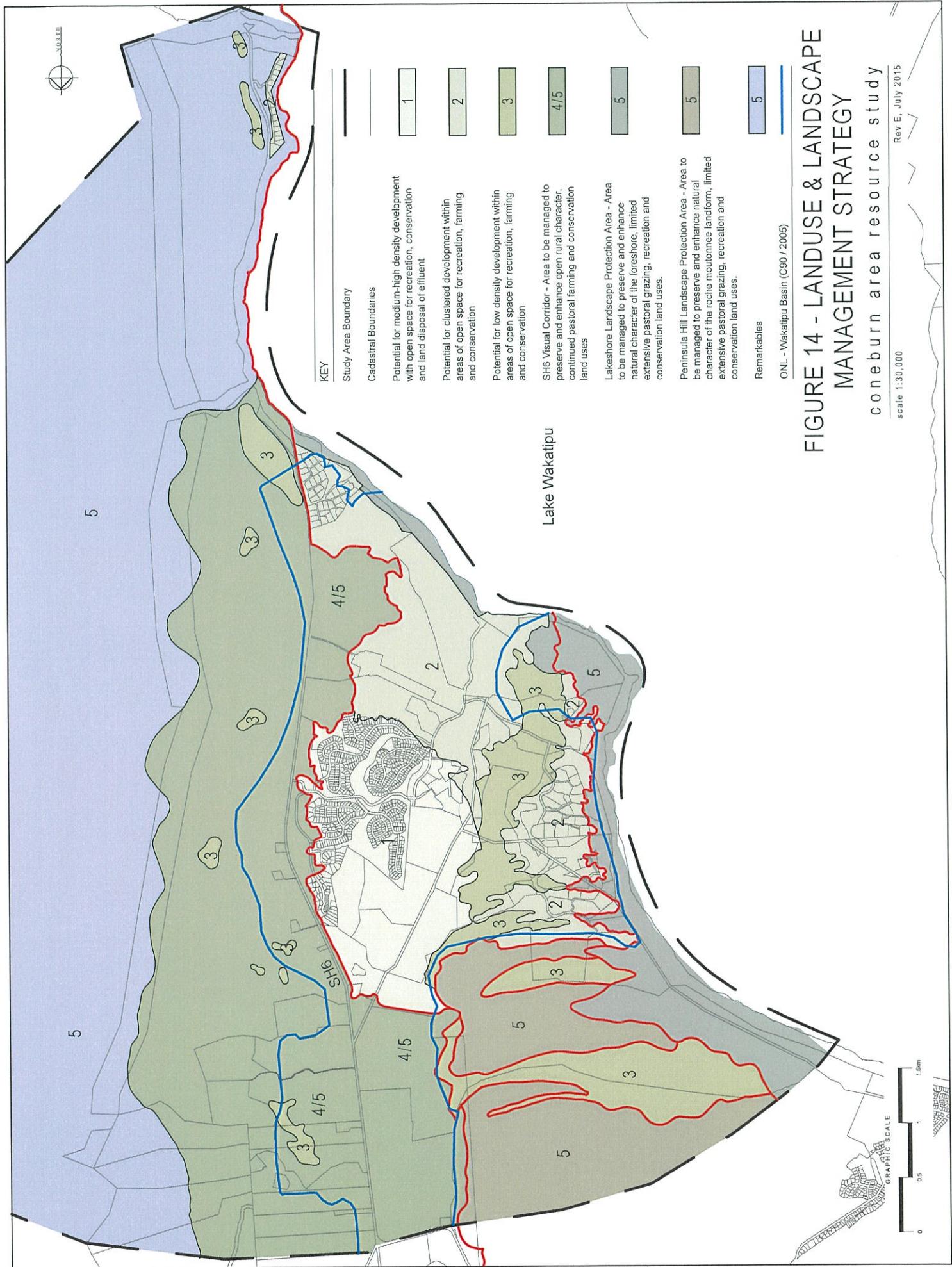


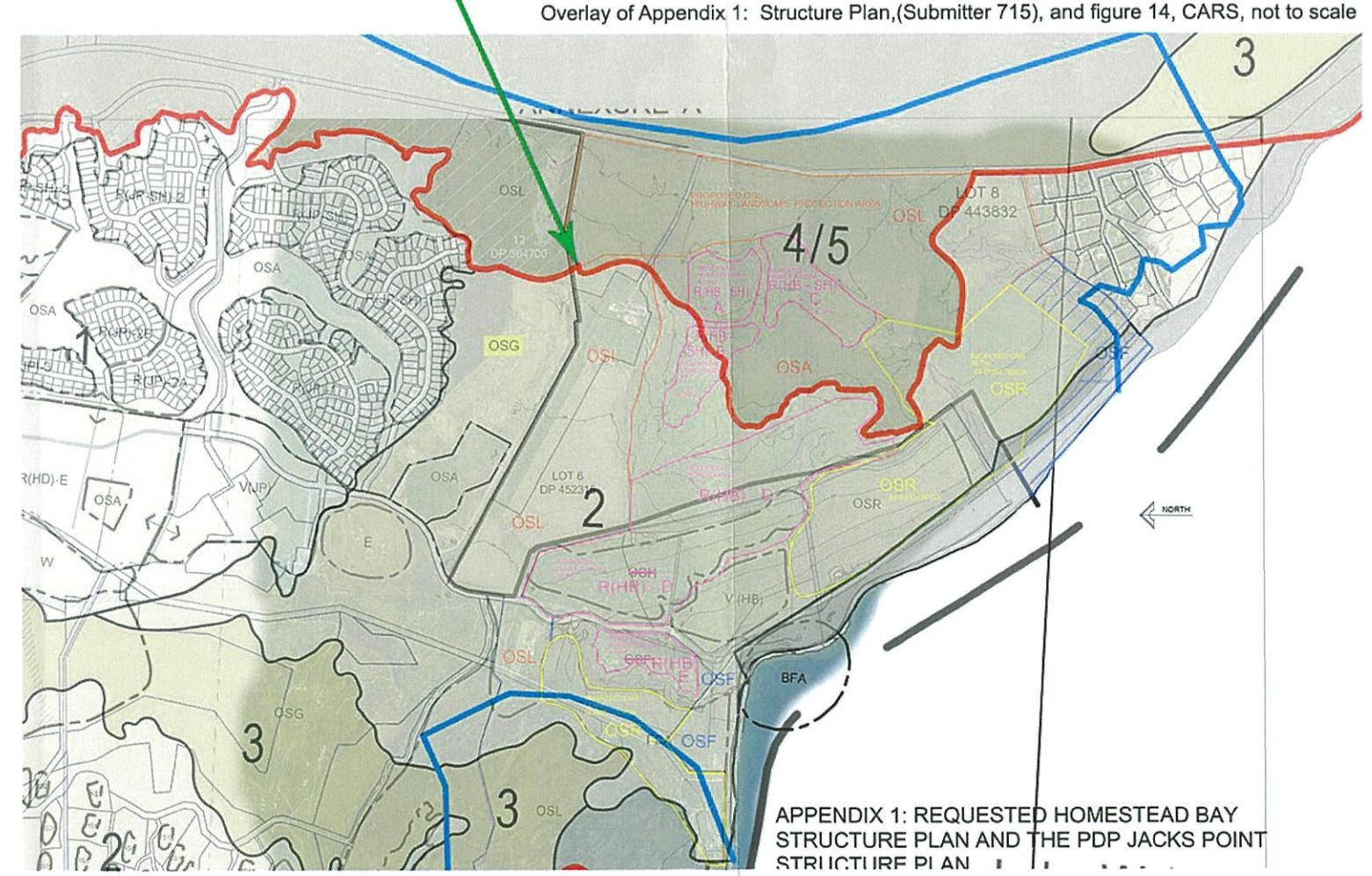
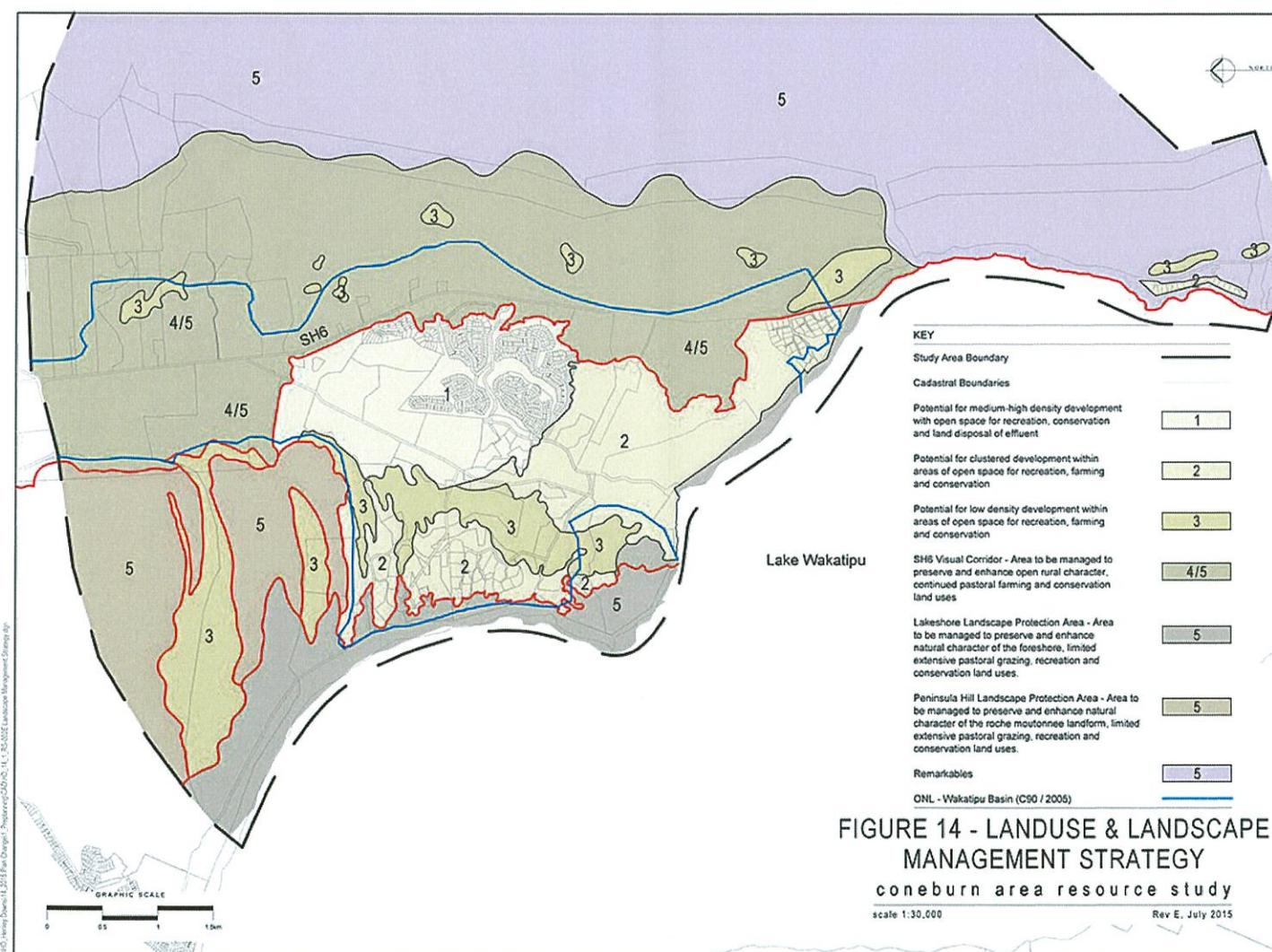
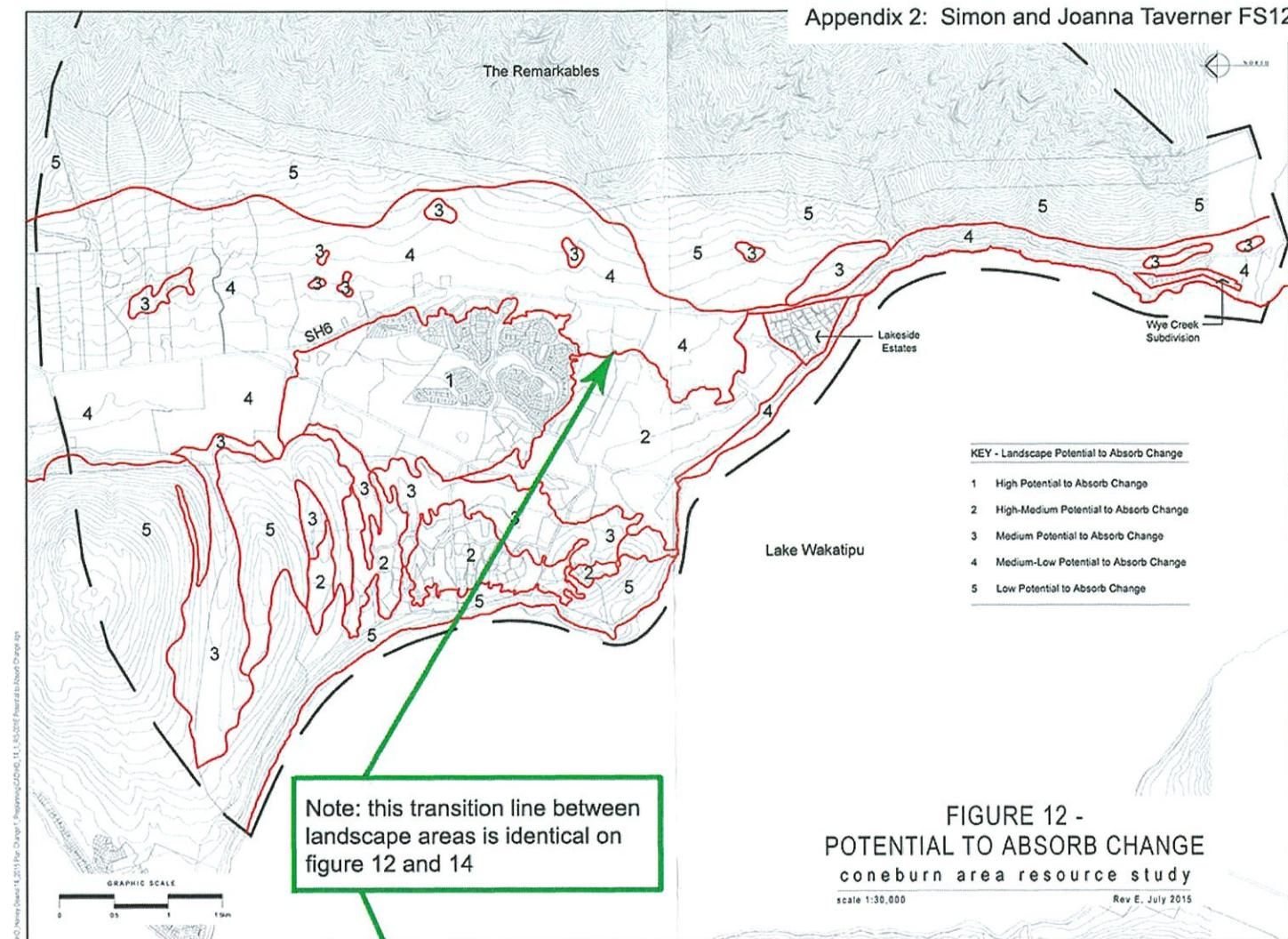
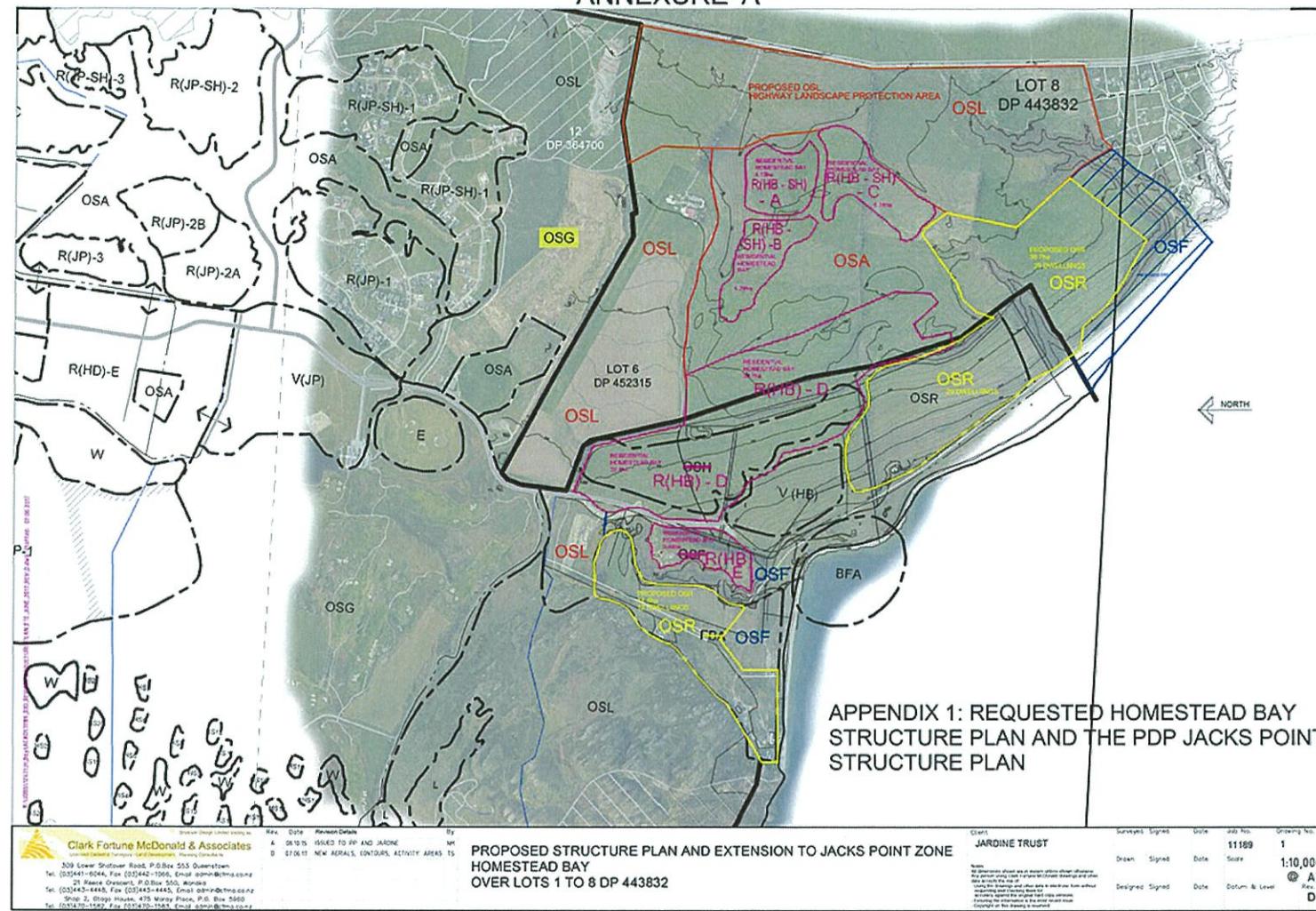
**FIGURE 12 -
POTENTIAL TO ABSORB CHANGE**

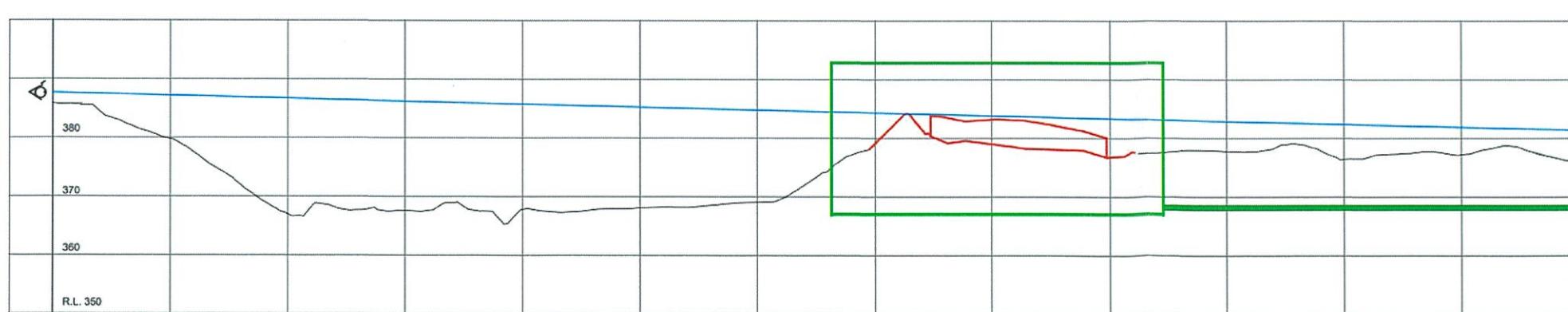
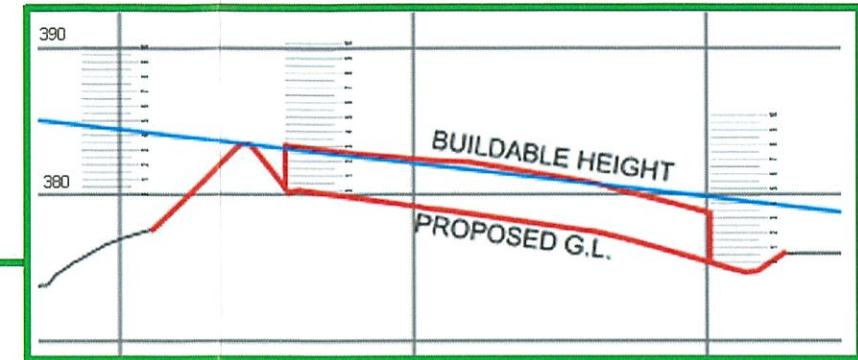
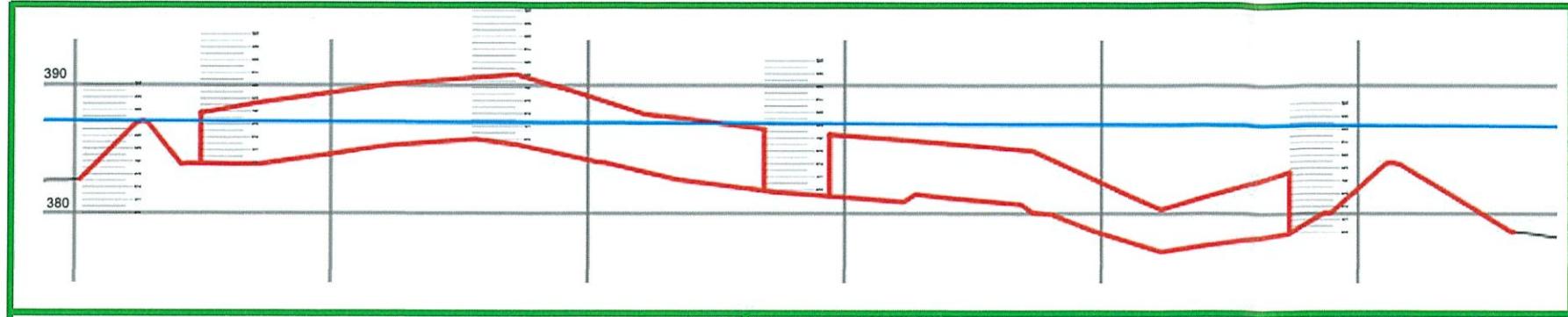
Coneburn area resource study

scale 1:30,000

Rev E, July 2015





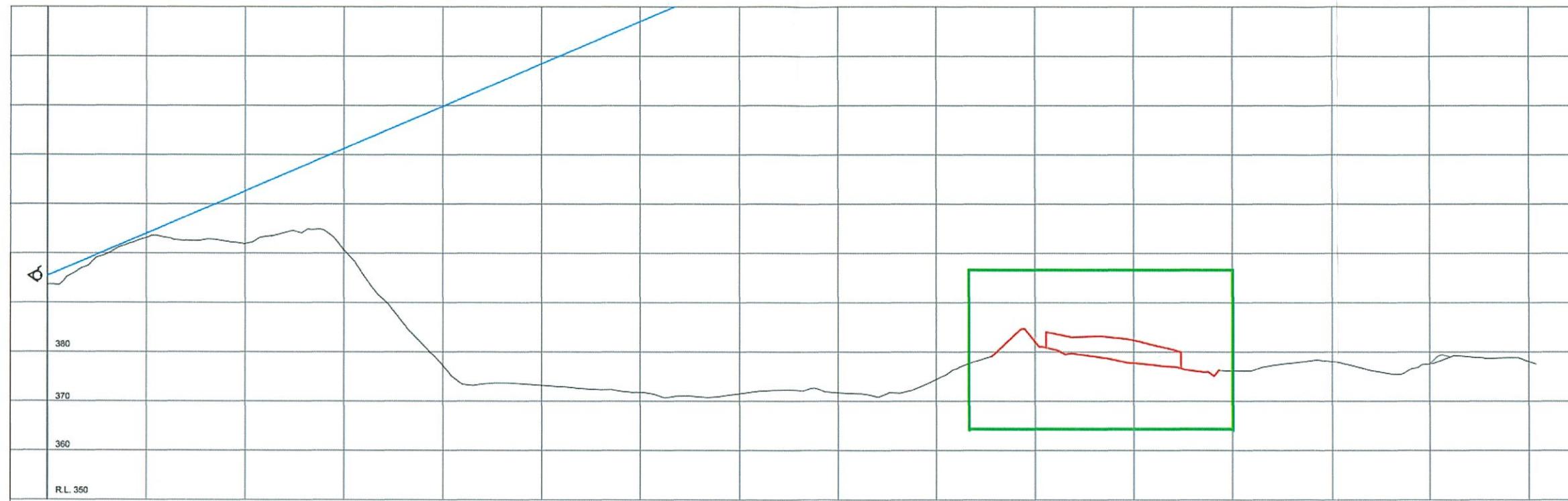
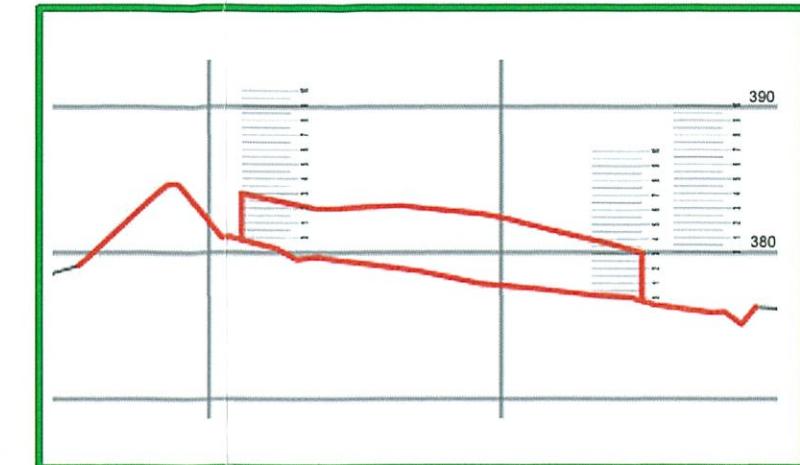
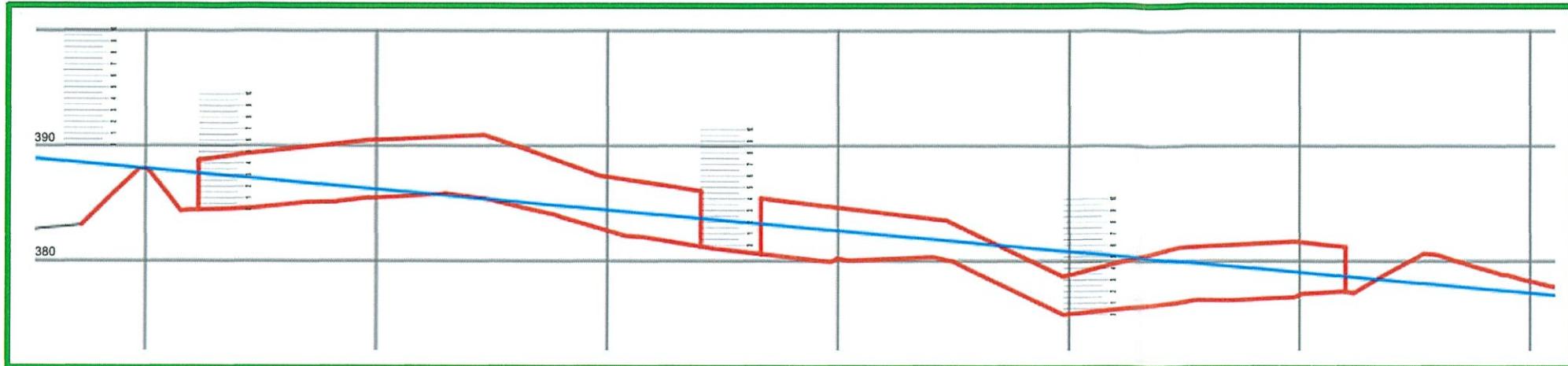


FOR REVIEW 19/05/2017

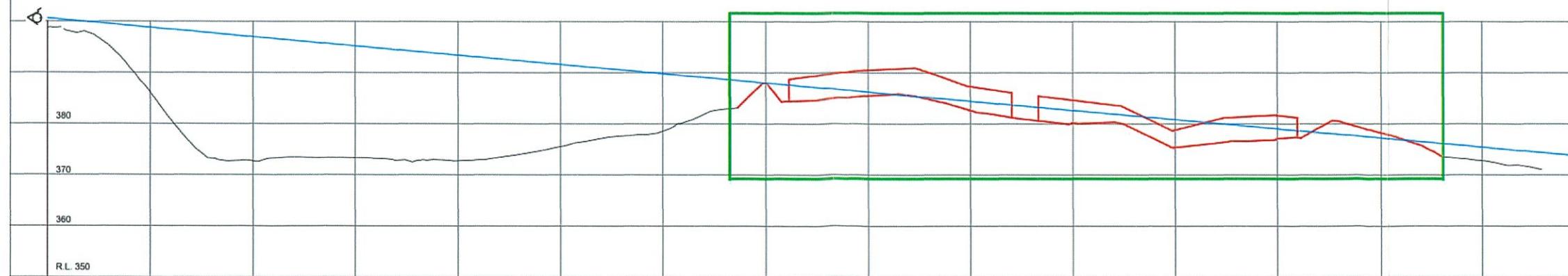

Clark Fortune McDonald & Associates
 Licensed Cadastral Surveyors - Land Development - Planning Consultants
 300 Lower Shotover Road, P.O.Box 553 Queenstown
 Tel. (03)441-6044, Fax (03)442-1066, Email admin@cfma.co.nz
 21 Reece Crescent, P.O.Box 550, Warka
 Tel. (03)443-4448, Fax (03)443-4445, Email admin@cfma.co.nz
 Shop 2, Otago House, 475 Moray Place, P.O. Box 5980
 Tel. (03)470-1582, Fax (03)470-1583, Email admin@cfma.co.nz

HOMESTEAD BAY STRUCTURE PLAN SECTIONS FROM JACKS POINT (SOUTH)

Client	D & J JARDINE	Surveyed	Signed	Date	Job No.	Drawing No.
		Drawn TPS	Signed	Date MAY.17	Scale 1:1000 @ A1 1:2000 @ A3	12471 V_004 SHEET 002
		Designed NTM	Signed	Date FEB.17	Datum & Level	MSL



SECTION E



SECTION D

FOR REVIEW 19/05/2017

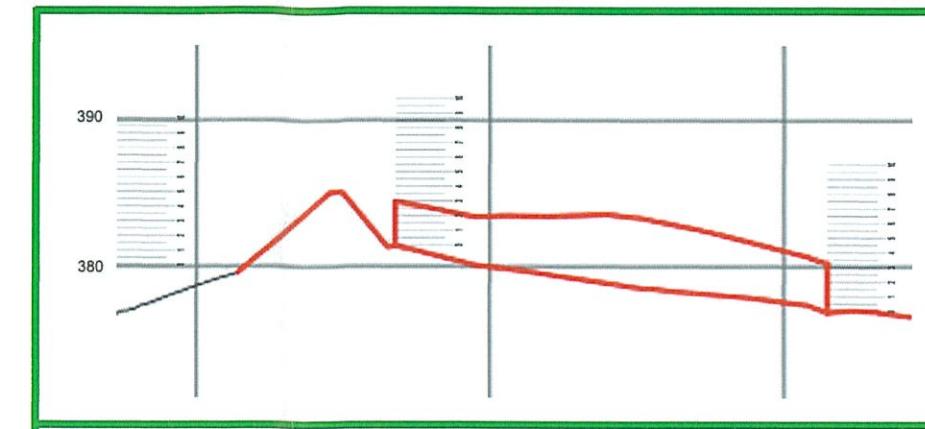


HOMESTEAD BAY STRUCTURE PLAN SECTIONS FROM JACKS POINT (SOUTH)

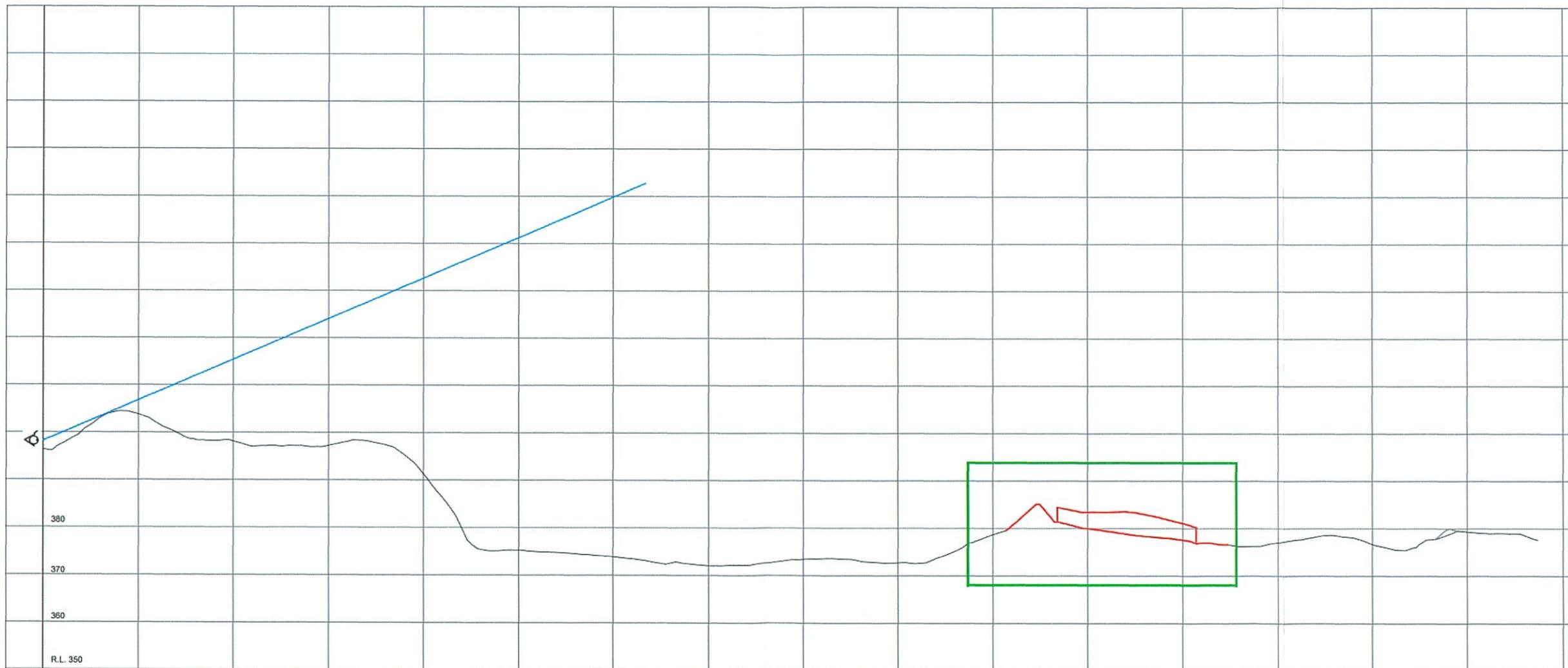
Client	D & J JARDINE	Surveyed	Signed	Date	Job No.	Drawing No.
		Drawn TPS	Signed	Date MAY.17	Scale 1:1000 @ A1 1:2000 @ A3	12471 SHEET 003 V_004
		Designed NTM	Signed	Date FEB.17	Datum & Level MSL	Rev. -

Notes:
All dimensions shown are in meters unless shown otherwise.
Any person using Clark Fortune McDonald drawings and other data accepts the risk of:
- Using the drawings and other data in electronic form without requesting and obtaining them for accuracy against the original hard copy versions.
- Copywrite on this drawing is reserved.

Taverner Evidence, Attachment 3: Section magnified x2 and vertical scale applied



DATUM: NZVD 2016
ORIGIN: TRIG B
CONEBURN SURVEY DISTRICT
RL 381.699
CODE: A3BL



SECTION G

FOR REVIEW 19/05/2017



Rev.	Date	Revision Details	By
-	-	-	-

HOMESTEAD BAY STRUCTURE PLAN SECTIONS FROM JACKS POINT (SOUTH)

Client	D & J JARDINE	Surveyed	Signed	Date	Job No.	Drawing No.
	TPS			MAY.17	12471	V_004 SHEET 005

Notes:
All dimensions shown are in meters unless shown otherwise.
Any person using Clark Fortune McDonald drawings and other data accepts the risk of:
- Using the drawings and other data in electronic form without requesting and obtaining permission for accuracy against the original hard copy versions.
- Copywrite on this drawing is reserved.



AERIAL IMAGE 1: Google Earth Professional aerial photograph dated 8th of October 2004.

SUBMISSION 715 – ESPIE EVIDENCE SUMMARY – APPENDIX 1 – AERIAL IMAGES OF THE LOCATION OF THE CURRENTLY BUILT PART OF JACKS POINT.



natural landforms either side of Jacks Point



Image © 2017 DigitalGlobe

IMAGE 2: Google Earth Professional aerial photograph dated 8th of December 2015.

SUBMISSION 715 – ESPIE EVIDENCE SUMMARY – APPENDIX 1 – AERIAL IMAGES OF THE LOCATION OF THE CURRENTLY BUILT PART OF JACKS POINT.

vivian+espie
resource management and landscape planning



natural landforms either side of Jacks Point

Taverner Evidence, Attachment 4, part 2



IMAGE 4: From SH6 at the same location as Image 3 above. Again, the proposed mounding associated with R(HB)-A to C (the orange line) does not impinge on the visibility of the lake surface. The mounding associated with R(HB)-D (the yellow line) will impinge on the visibility of the lake surface to the degree shown.