

DISTRICT PLAN REVIEW

Proposed Waimakariri District Plan - Submission

Clause 6 of Schedule 1, Resource Management Act 1991

Submitter details

(Our preferred methods of corresponding with you are by **email** and **phone**).

Full name: _____

Email address: _____

Phone (Mobile): _____ Phone (Landline): _____

Postal Address: _____ Post Code: _____

Physical address: _____ Post Code: _____
(if different from above)

Please select one of the two options below:

I **could not** gain an advantage in trade competition through this submission (go to Submission details, you do not need to complete the rest of this section)

I **could** gain an advantage in trade competition through this submission (please complete the rest of this section before continuing to Submission details)

Please select one of the two options below:

I **am** directly affected by an effect of the subject matter of the submission that:

- A) Adversely affects the environment; and
- B) Does not relate to trade competition or the effect of trade competition.

I **am not** directly affected by an effect of the subject matter of the submission that:

- A) Adversely affects the environment; and
- B) Does not relate to trade competition or the effect of trade competition.

Submission details

The specific provisions of the proposal that my submission relates to are as follows: *(please give details)*

My submission is that: *(state in summary the Proposed Plan chapter subject and provision of your submission. Clearly indicate whether you support or oppose the specific provisions or wish to have amendments made, giving reasons) (please include additional pages as necessary)*

I/we have included: _____ additional pages

I/we seek the following decision from the Waimakariri District Council: *(give precise details, use additional pages if required)*

Submission at the Hearing

I/we wish to speak in support of my/our submission

I/we do not wish to speak in support of my/our submission

If others make a similar further submission, I/we will consider presenting a joint case with them at the hearing

Signature

Of submitters or person authorised to sign on behalf of submitter(s)

Signature _____

Date _____

(If you are making your submission electronically, a signature is not required)

Important Information

1. The Council must receive this submission before the closing date and time for submissions.
2. Please note that submissions are public. Your name and submission will be included in papers that are available to the media and public. Your submission will only be used for the purpose of the District Plan review process.
3. Only those submitters who indicate they wish to speak at the hearing will be emailed a copy of the planning officers report (please ensure you include an email address on this submission form).

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

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

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

Send your submission to: Proposed District Plan Submission
Waimakariri District Council
Private Bag 1005, Rangiora 7440

Email to: developmentplanning@wmk.govt.nz

Phone: 0800 965 468 (0800WMKGOV)

You can also deliver this submission form to one our service centres:

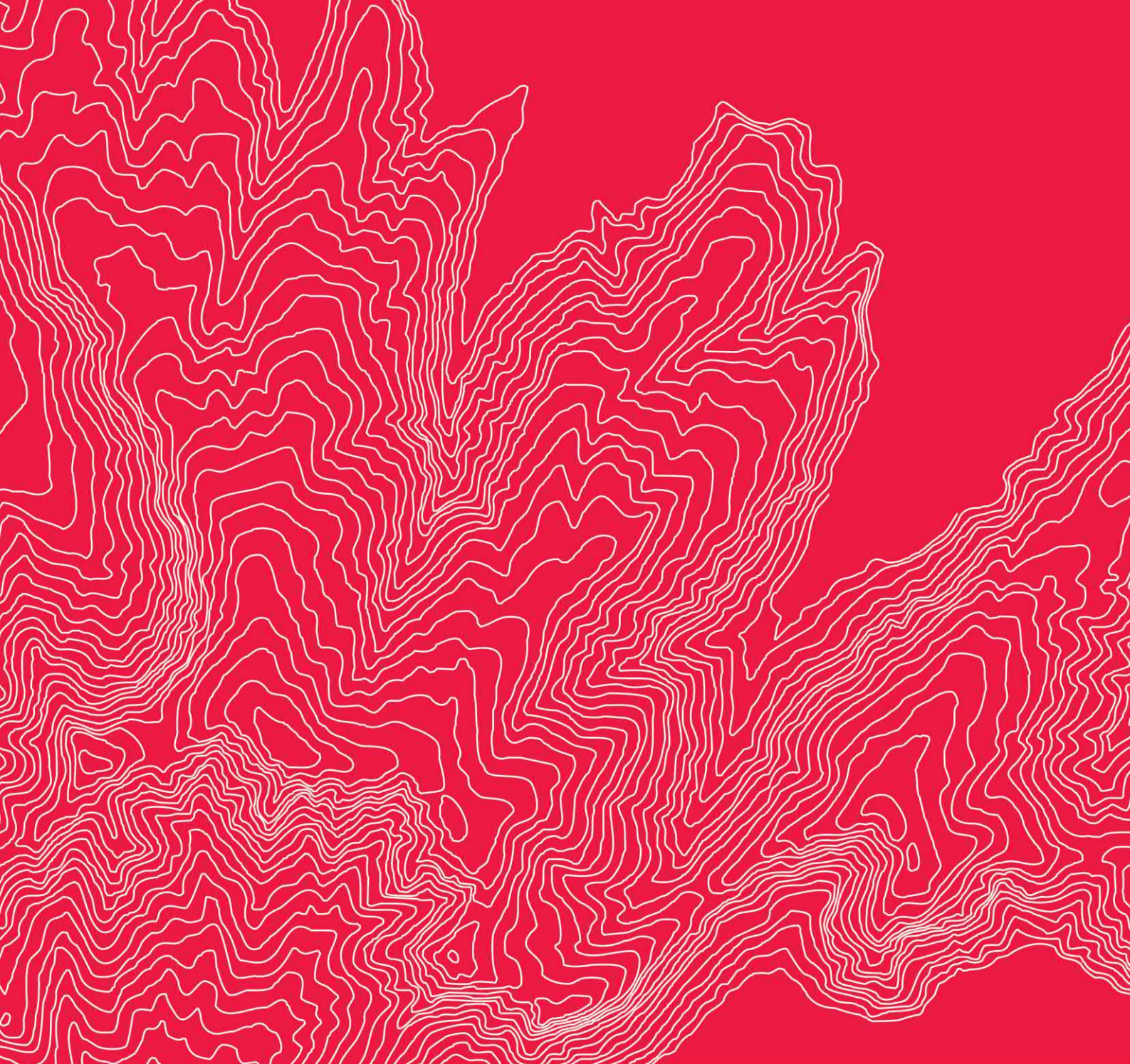
Rangiora Service Centre: 215 High Street, Rangiora

Kaiapoi Service Centre: Ruataniwha Kaiapoi Civic Centre, 176 Williams Street, Kaiapoi

Oxford Service Centre: 34 Main Street, Oxford

Submissions close 5pm, Friday 26 November 2021

Please refer to the Council website waimakariri.govt.nz for further updates



Section 32AA Planning Assessment

**eliot
sinclair**

63 Harewood Road, Oxford

Prepared for Geoff Mehrtens

432121

Section 32AA Planning Assessment

63 Harewood Road, Oxford

Prepared for Geoff Mehrtens

Project number: 432121

Quality Control Certificate

Eliot Sinclair & Partners Limited

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Status:	Final		
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Reference no:	432121		
Distributed to:	Geoff Mehrtens Waimakariri District Council		

Submission to Proposed Waimakariri District Plan.

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Geoff Mehrtens ('the Submitter') is making a submission on the proposed Waimakariri District Plan. The submission is to rezone the site at 63 Harewood Road, Oxford from proposed General Rural Zone to proposed General Residential Zone.

The Submitter will not gain an advantage in trade competition through this submission.

The Submitter wishes to be heard in support of this submission and would agree to consider presenting a joint case with other submitters who make a similar submission.

The relief sought is to rezone the site at 63 Harewood Road, Oxford to proposed General Residential Zone.



Signature of Geoff Mehrtens (or person
authorised to sign on behalf of the
applicant)

25 November 2021

Date

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Appendix D. Preliminary Site Investigation

Appendix E. Natural Hazards Assessment

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Appendix G. Assessment of Proposed Waimakariri District Plan

1. Introduction

1. Geoff Mehrrens ('the Submitter') is making a submission to the proposed Waimakariri District Plan to rezone their site at 63 Harewood Road, Oxford to be rezoned from proposed General Rural Zone to proposed General Residential Zone.
2. The submission is made on the grounds that the site has been identified in the Waimakariri District Development Strategy as an area for future residential development as further greenfield residential land is required in Oxford to accommodate the predicted residential growth in the area and in the wider Waimakariri District. The rezoning submission is to give effect to the strategic growth direction given by the Waimakariri District Development Strategy.
3. The Waimakariri District Development Strategy, and the "Housing Demand and Need" research report identified the need for additional residential land and residential housing to meet the future predicted residential growth of Oxford. However, there has been no additional land identified for the General Residential Zone in Oxford in the District Plan Review, and therefore no action to meet this housing need.
4. This submission to the Waimakariri District Plan has been assessed against the relevant higher level planning documents such as the RMA, National Policy Statements, National Environmental Standards, the Canterbury Regional Policy Statement, and the Proposed Waimakariri District Plan.
5. The relief sought is to rezone the site at 63 Harewood Road, Oxford from the proposed General Rural Zone to proposed General Residential Zone.
6. The proposed residential zoning would feasibly achieve approximately 48 residential sections and future dwellings.
7. As part of the submission an Outline Development Plan (ODP) has been prepared to provide a high level of certainty that the re-zoning and future residential development of the site will better achieve the statutory planning framework. As such, it is requested that the submitters proposed ODP be incorporated within the provisions of the proposed Waimakariri District Plan, including the change of zoning in the planning maps, to provide for high amenity and integrated development to occur. Supporting the ODP will be text to be included in the ODP description/requirements, in addition to the General Residential Zone provisions applying.
8. No changes are proposed to the Waimakariri District Plan objectives, policies, and rules, other than for the Planning Maps to be amended to show the site as General Residential Zone and to include a new Outline Development Plan and supporting text.
9. The following appendices are attached in support of, and form part of, the full submission:
 - Appendix A: Outline Development Plan
 - Appendix B: Record of Title
 - Appendix C: Infrastructure Servicing Report
 - Appendix D: Preliminary Site Investigation
 - Appendix E: Natural Hazards Risk Assessment
 - Appendix F: Assessment of Canterbury Regional Policy Statement 2013
 - Appendix G: Assessment of Proposed Waimakariri District Plan

2. Site Description

10. The submission site is located at 63 Harewood Road, Oxford. The site is legally described as Part RS 1917 held in record of title CB17B/415 attached in Appendix B. There are no registered interests on the title.
11. The site is "Limited, As to Parcels", with the survey area (title) being approximately 3.5 hectares, and the calculated area is determined to be 3.8 hectares. The site will need to be surveyed prior to future subdivision of the site to confirm the total legal and physical site area.
12. The proposed Waimakariri District Plan identifies the site as being in the General Rural Zone. The site is also identified in the Geographic Area Ecological Plains, Ecological District High Plains, and in the Oxford Observatory Light Protection Area. A small area of the site is identified as a flow path in the "Non-Urban Flood Assessment Overlay".
13. The site is identified in the Waimakariri District Development Strategy as an area for proposed residential growth direction. The strategy identifies that Oxford is the fourth largest town within the Waimakariri District.
14. The site has one existing residential dwelling and associated sheds. The ODP has been designed to show the existing dwelling retained, however should the existing dwelling be removed, this will also work with the ODP layout.
15. The site is bounded by existing residential to the north, the Oxford Hospital to the west, and rural land to the south and east. The site is located 1km south of the Main Street of Oxford. This is approximately a 12-minute walk or a 2 minute drive.
16. The site has existing access from Harewood Road. Harewood Road has a 50km/hr speed limit near the township, increasing to 100km/hr speed limit past the site.
17. Oxford is located approximately 34km from Rangiora, and 30km from Mandeville in the Waimakariri District, and 31km from Darfield in the Selwyn District.
18. The Eyre River is located approximately 460m south of the site, and the Waimakariri River is located 14km south of the site.
19. The site is not located in a statutory acknowledgement area, silent file area, or rūnanga sensitive area as identified on Canterbury Maps.
20. A drain is shown on the eastern boundary on the site on Canterbury Maps. However, during the site walkover undertaken by Eliot Sinclair engineers, no water or drain was observed.

3. Proposed Rezoning

21. This submission is requesting the rezoning of the site from proposed General Rural Zone to proposed General Residential Zone as part of the Waimakariri District Plan Review. This submission will provide for additional greenfield land in Oxford to be available for future residential development.
22. The proposed rezoning will provide for residential housing in accordance with the proposed General Residential Zone that applies to the residential area in Oxford. The proposed General Residential Zone provides for a minimum net site area of 500m².

23. A new Outline Development Plan (ODP) is proposed to be inserted into the District Plan in conjunction with a change to the site in any electronic maps. The proposed ODP in Appendix A It shows key elements to be incorporated into the future development of the site such as indicative primary road, indicative secondary road, future connections to adjoining land, and indicative stormwater reserve.



24. The proposed ODP demonstrates the ability of the site to provide approximately 48 future allotments at the density provided by the proposed General Residential Zone. This achieves 14.8 households per hectare (hh/ha) based on the title area of 3.5 hectares.



Figure 2. Indicative Allotment Layout

25. The proposed rezoning has considered future servicing for water, wastewater, telecommunications, electricity, and stormwater provisions by undertaking a preliminary engineering site design to confirm existing capacity and feasibility for servicing of the site. Water supply and wastewater disposal are able to be provided to the site with system extensions and upgrades. Stormwater is able to be directed to a stormwater management area where it can be treated and attenuated prior to discharging to ground. Further details are provided in the infrastructure assessment report contained in Appendix C. The specific design for these services would be determined at the time of subdivision when a final allotment layout is known.
26. A schedule of the proposed amendments to the District Plan is contained in Appendix A and are summarised and explained below:
 - Amend the planning maps to rezone the site from proposed General Rural Zone to proposed General Residential Zone and updated Non-Urban to Urban Flood Assessment Overlay as necessary;
 - Insert a new Outline Development Plan;

4. Reasons and Purpose

27. The Submission site has been identified as an area for “proposed residential growth direction” in the Waimakariri District Development Strategy 2048. Therefore, this site has been assessed as appropriate for future residential growth in Oxford. An assessment of the Waimakariri District Development Strategy is provided below in Section 8.

28. The "Housing Demand and Need Report in Waimakariri District" dated February 2020 identified that Oxford has projected growth for an additional 170 households in 2018 – 2028, an additional 110 households in 2028 – 2038, and an additional 100 households in 2038 – 2048. This results in an additional 380 households in the medium to long term.
29. In the proposed Waimakariri District Plan Review there has been a change in density from 600m² (operative Residential 2 Zone) to 500m² (proposed General Residential Zone). However, there has been no additional residential zone land identified. Some areas are subject to the Large Lot Residential Overlay; however, it is anticipated that this will not provide for an additional 170 households by 2028, nor 380 households by 2048.
30. The proposed District Plan also is proposing to rezone the site General Rural Zone which has a 20 hectare minimum allotment size. The site is only 3.5 hectares, and therefore the proposed General Rural Zone is not practical for the existing site.
31. Therefore, it is evident that additional greenfield land is required in Oxford to be rezoned to General Residential to ensure that the housing supply is adequate to accommodate for the projected housing growth expected in the short, medium and long term.
32. It is considered that the proposed rezoning of the site will positively contribute to housing capacity in Oxford, which will contribute to a well-functioning urban environment and create additional capacity in Oxford and Waimakariri to contribute to alleviating the anticipated housing supply shortfall. The rezoning will allow for residential density development on the site providing housing choice in the Waimakariri District.
33. Overall, the purpose of this submission is to rezone the site at 63 Harewood Road Oxford to General Residential as a shortfall of residential housing has been identified, and the site is identified as a strategic location for future residential growth in the Waimakariri District Development Strategy 2018.

5. Statutory Assessment

5.1. Resource Management Act 1991

34. The Resource Management Act (RMA) provides the legislative framework that defines the requirements for submissions to District Plan reviews. As this Submission proposes to include land for re-zoning it is appropriate to address these requirements as they relate to the site at 63 Harewood Road, Oxford.
35. Schedule 1 of the RMA provides the circumstances and requirements of preparation, change, and review of policy statements and plans. Clause 22 of Schedule 1 provides the requirements for changes to the District Plan.
36. Section 74 of the Act sets out the matters to be considered by territorial authorities in the decision making of changes to the District Plan.

74 Matters to be considered by territorial authority

(1) A territorial authority must prepare and change its district plan in accordance with-

- (a) Its functions under section 31; and*
- (b) The provisions on Part 2; and*
- (c) A direction given under section 25A(2); and*

- (d) *Its obligation (if any) to prepare an evaluation report in accordance with section 32; and*
 - (e) *Its obligation to have particular regard to an evaluation report prepared in accordance with section 32; and*
 - (ea) *a national policy statement, a New Zealand coastal policy statement, and a national planning standard; and*
 - (f) *Any regulations.*
- (2) *In addition to the requirements of section 75(3) and (4), when preparing or changing a district plan, a territorial authority shall have regard to –*
- (a) *Any –*
 - (i) *Proposed regional policy statement or*
 - (ii) *Proposed regional plan of its region in regard to any matter of regional significant or for which the regional council has primary responsibility under Part 2; and*
 - (b) *Any –*
 - (i) *Management plans and strategies prepared under other Acts and*
 - (ii) *[repealed]*
 - (iia) *relevant entry on the New Zealand Heritage List / Rarangi Korero required by the Heritage New Zealand Pouhere Taonga Act 2014; and*
 - (iii) *Regulations relating to ensuring sustainability, or the conservation, management, or sustainability of fisheries resources (including regulations or bylaws relating to taiapure, mahinga mataitai, or other non-commercial Maori customary fishing); and*
 - (iv) *Relevant project area and project objectives (as those terms are defined in section 9 of the Urban Development Act 2020), if section 98 of that Act applies, - to the extent that their content has a bearing on resource management issues of the district; and*
 - (c) *The extent to which the district plan needs to be consistent with the plans or proposed plans of adjacent territorial authorities.*
- (2A) *A territorial authority, when preparing or changing a district plan, must take into account any relevant planning document recognised by an iwi authority and lodged with the territorial authority, to the extent that its content has a bearing on the resource management issues of the district.*
- (3) *In preparing or changing any district plan, a territorial authority must not have regard to trade competition or the effects of trade competition.*
37. Section 31 of the RMA outlines the Council functions for giving effect to the Resource Management Act and the Submission has been prepared in accordance with the relevant requirements.
38. Section 32 establishes a procedure to evaluate the appropriateness of the proposed provisions, including objectives, policies, rules, and other methods. Noting that Council has provided its own S.32 assessments which do not propose the rezoning of this site, this report is a further evaluation under S.32AA. A detailed Section 32AA assessment is provided in Section 6 of this report.

39. This submission to request the rezoning of the site at 63 Harewood Road from proposed General Rural Zone to proposed General Residential Zone addresses the relevant matters of the RMA, including:
- The purpose and reason for the request.
 - The requirement to have regard to the Canterbury Regional Policy Statement.
 - Any management plans and strategies prepared under other Acts.
 - The requirement to take into account any relevant planning document recognised by Te Runanga o Ngāi Tahu lodged with the Council.
 - Provisions of the proposed Waimakariri District Plan.
 - Assessment of Environmental Effects (AEE).
 - Related Planning Documents (including Iwi Management Plan, Waimakariri District Development Strategy 2018, Our Space 2018 – 2048).
40. The submission to rezone the site has been prepared in accordance with the relevant provisions of the Resource Management Act, as described above.

5.2. National Policy Statement

41. There are five National Policy Statements (NPS) which are currently operative. These are:
- (a) New Zealand Coastal Policy Statement
 - (b) Electricity Transmission
 - (c) Renewable Electricity Generation
 - (d) Freshwater Management
 - (e) Urban Development
42. There are currently two proposed National Policy Statements. These are:
- (a) Indigenous Biodiversity
 - (b) Highly Productive Land
43. The NPS for Urban Development and the Proposed NPS on Highly Productive Land are considered relevant.
- National Policy Statement on Urban Development 2020
44. The National Policy Statement on Urban Development 2020 (NPS-UD 2020) applies to all local authorities that have all or part of an urban environment within their district or region. Urban areas are classified into Tier 1, 2, and 3. Christchurch is classified as a Tier 1 urban environment and includes Canterbury Regional Council, Christchurch City Council, Selwyn District Council, and Waimakariri District Council as Tier 1 authorities.
45. It is noted that the Waimakariri Residential Section 32 Report makes no clarification regarding the implementation of the NPS-UD in the District. Therefore, it is assumed that the NPS-UD applies to the entire Waimakariri District, and as such this rezoning submission for 63 Harewood Road Oxford has been assessed under the NPS-UD. An assessment of the NPS-UD 2020 is provided below:
46. The proposed rezoning is consistent with the objectives of the NPS-UD because it will:

- Achieve a well-functioning urban environment for people and communities to provide for their needs and is adjacent and integrated with the existing township of Oxford.
 - Enable a supply of residential land for residential development, thus improving housing capacity and contributing to the housing market and housing supply.
 - Create an integrated and strategic residential development that will provide for medium to long term growth and support the reduction in greenhouse gas emissions and climate change.
47. The proposed rezoning and ODP will enable a well-functioning urban environment adjacent to the existing township of Oxford. The proposal will address capacity issues by enabling approximately 48 residential allotments for residential development and will enable people and communities to meet their needs.
48. The ODP demonstrates a well-designed cohesive urban environment that is integrated with the surrounding urban environment and is sympathetic to the rural character and amenity of Oxford. The site is within 1km of Oxford and will have an efficient road network, and future walking and cycling routes to provide connectivity to future adjoining developments and to Oxford. The proposed rezoning is a logical development to provide residential capacity to Oxford and Waimakariri and is large enough to support housing capacity. The site, however, is a reasonable size so as not to have significant adverse effects on Oxford's rural character and amenity.
49. Policy 8 requires Councils to be responsive to plan changes that significantly add to development capacity and contribute to well-functioning urban environments if they are unanticipated or out-of-sequence. It is considered that this proposed rezoning is not unanticipated or out-of-sequence due to the identification of the site in the approved Waimakariri District Development Strategy. What constitutes significant development capacity is not defined, however the proposal will provide additional housing capacity and housing choice in Oxford and will provide a well-functioning residential environment.

Proposed National Policy Statement on Highly Productive Land

50. The Proposed National Policy Statement on Highly Productive Land (NPS-HPL) discussion document was published in August 2019 as part of the wider consultation on the proposed legislation. The NPS-HPL proposes to require councils to consider the availability of highly productive land for primary production now and in the future. Of relevance to this submission, a purpose of the proposed NPS-HPL is to protect highly productive land from inappropriate subdivision, use, and development as urban expansion and change of land use in rural areas is creating a loss of productive land.
51. The proposed objectives of the NPS-HPL are to recognise, provide for, and maintain highly productive land and protect highly productive land from inappropriate subdivision, use, and development.
52. Proposed Policy 1, identification of highly productive land, states that prior to a regional council identifying the spatial extent of highly productive land (where this has not yet occurred), the Land Use Capability (LUC) classes 1-3 apply in the interim. The site is identified as LUC Class 3 (Canterbury Maps), the lesser of the productive soil's classifications. The draft interpretation also states that highly productive land that has not been identified by a local authority is land that is at least 4 hectares in area (and LUC 1-3). This site is approximately 3.5 hectares so under the draft interpretation, is not considered to be productive land for the purpose of the draft NPS.

53. The other proposed policies relate to maintaining highly productive land and require councils to specify what is inappropriate subdivision use and development. Proposed Policy 3 states:
- “urban expansion must not be located on highly productive land unless:
- (a) There is a shortage of development capacity to meet demand (in accordance with NPS-UDC) and
- (b) it is demonstrated that it is the most appropriate option based on a consideration of:
- A cost-benefit analysis that explicitly considers the long-term costs associated with the irreversible loss of highly productive land for primary production;
 - Whether the benefits (environmental, economic, social and cultural) from allowing urban expansion on highly productive land outweigh the benefits of the continued use of that land for primary production; and
 - The feasibility of alternative locations and options to provide for the required demand, including intensification of existing urban areas.”
54. Even though the site is outside of Greater Christchurch it is consistent with this policy when used as a guide. It is considered that this proposed rezoning of lower-class productive land provides residential capacity in an area identified as having a shortage of development capacity and is therefore consistent with Policy 3 (a). The site is also being used as a lifestyle block and does not constitute use as highly productive land. This report contains a Section 32AA cost-benefit analysis in Section 6, which identifies that the benefits of the proposed rezoning outweigh the benefits of the continued use of the site as a lifestyle block. It is also noted that in terms of alternative locations of productive land to provide for the residential demand, the surrounding townships such as Cust has Class 1 and 2 soils.
55. Proposed Policy 4 seeks to avoid the fragmentation of highly productive land through managing rural subdivision. The proposal meets proposed Policy 4 because the rezoning of this land would be next to existing residential development and will not fragment rural land in Oxford.
56. Proposed Policy 5 states that territorial authorities must identify, restrict, and establish methods to manage reverse sensitivity effects with primary production and rural productive land adjacent to residential land. The site context has been carefully considered and the specific interface treatment to manage the effects of reverse sensitivity with the adjoining productive rural land can be managed at the subdivision consent stage.
57. Proposed Policy 6 directly relates to plan changes or rezoning of rural land. Proposed Policy 6 states that local authorities must have regard to the alignment of the request with statutory and non-statutory plans and policies, the benefits of the proposed land use compared to the benefits of the use for primary production, and alternative options for the proposed use on land that has less value for primary production. The site is identified in the Waimakariri District Development 2048 Strategy as an area for future residential development. Therefore, the site has already been identified for a form of residential intensification and a reduction in the use of the land for productive purposes. As stated in the Section 32AA assessment in Section 6 of this report, the benefits of the proposed rezoning outweigh the cost of a loss of productive land.
58. It is considered that despite the site having LUC Class 3 productive soils, the proposed change in use of the site for residential is not inappropriate and is not an uncoordinated urban expansion. The site has been identified in the District Development Strategy documents as a location for

future residential and commercial urban growth for Oxford, so a loss of productive soils has been previously accepted as reasonable in some form for the site.

5.3. National Environmental Standards

59. The following National Environmental Standards (NES) are currently operative:

- (a) Air Quality
- (b) Sources of Drinking Water
- (c) Telecommunication Facilities
- (d) Electricity Transmission Activities
- (e) Assessing and Managing Contaminants in Soil to Protect Human Health
- (f) Plantation Forestry
- (g) Freshwater
- (h) Marine Aquaculture
- (i) Storing Tyres Outdoors

60. The NES for Assessing and Managing Contaminants in Soil to Protect Human Health is considered relevant to this submission.

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

61. Due to the nature and location of the proposed Submission the only National Environmental Standard considered relevant is the NES for Assessing and Managing Contaminants in Soil to Protect Human Health. It is noted that the NES for Air Quality is provided for under existing District and Regional Plans and will not apply to this rezoning. Water supply will be to the reticulated Council network in accordance with the drinking water requirements.

62. The NES for Assessing and Managing Contaminants in Soil to Protect Human Health has been assessed through the Preliminary Site Investigation (PSI) contained in Appendix D and discussed in the Assessment of Environmental Effects in Section 7 of this report. The PSI concluded that no HAIL activities were identified on the site and that no further contamination investigation or assessment was required under the NESCS for the proposed rezoning to General Residential Zone.

63. It is highly unlikely that there will be a risk to human health following the proposed rezoning from rural to residential use.

64. It is considered that no further investigation is required at the time of this rezoning submission.

5.4. Canterbury Regional Policy Statement ('CRPS')

65. The Canterbury Regional Policy Statement (CRPS) sets out objectives, policies and methods to resolve resource management issues in Canterbury. An assessment of the CRPS full provisions is provided in Appendix F and a summary provided below. Chapter 5 (Land Use and Infrastructure) is the most relevant to this Submission. The site is not located within Greater Christchurch as delineated on Map A of the CRPS, therefore the objectives and policies in Chapter 6 (Greater Christchurch) are not considered relevant to this proposal.

66. Objective 5.2.1. *Location, Design, and Function of Development* relates to developments being located and designed in a way that achieves consolidated, well-designed, and sustainable growth and enables people and communities, including future generations, to provide for their social, economic, and cultural wellbeing and health and safety. The proposal is consistent with

this objective because the proposed rezoning would create consolidated, well-designed, and sustainable residential growth in Oxford. The rezoning will not adversely affect the coastal environment, outstanding natural features and landscapes, or natural values. The proposal will change rural land to residential; however, it will maintain the rural outlook and rural character of Oxford. The proposal will increase housing choice by increasing the supply of residential housing and providing for approximately 48 residential allotments. It is not anticipated that there will be any effects of reverse sensitivity from the surrounding rural use.

67. The proposal is also consistent with other key relevant policies such as Policy 5.3.1 *Regional growth (Wider Region)* and Policy 5.3.2 *Development conditions (Wider Region)* and Policy 5.3.3 *Management of development (Wider Region)*. The proposed rezoning and proposed ODP will provide for a well-designed, high quality, and sustainable residential environment. The proposed rezoning will be well integrated with the existing township of Oxford. Any adverse effects arising from the proposed rezoning can be avoided, remedied, or mitigated. The proposed rezoning will maintain the rural character and rural amenity values of Oxford, and the quality of the environment can be maintained or enhanced.
68. The proposed rezoning and future development are also consistent with Policy 5.3.5 *Servicing development for potable water, and sewage and stormwater disposal (Wider Region)* and Policy 5.3.6 *Sewerage, stormwater, and potable water infrastructure (Wider Region)*. The site can be adequately serviced with potable water supply and sewage disposal, with upgrades and extensions as necessary. Stormwater disposal can be to ground within each site and directed to and discharged through a stormwater management area.
69. The criteria in Policy 5.3.9 and 5.3.10 will be met as the proposal will not have adverse effects on regionally significant infrastructure.
70. The proposed rezoning will result in a loss of productive soils; however, this has already been anticipated by the strategic planning documents indicating residential growth for this site. The proposal will avoid the fragmentation of rural production land and will minimise any effects on reverse sensitivity with the adjoining rural land. The proposal is therefore consistent with Policy 5.3.12.
71. Overall, submission is consistent with the relevant objectives and policies of Chapter 5 of the CRPS. The proposed rezoning and proposed ODP will achieve a consolidated, well-designed, and sustainable residential development with sufficient infrastructure, servicing, and transportation connections. The proposal will avoid or mitigate any resulting adverse effects that may arise, including effects on servicing, infrastructure, and the wider transport network. The proposed ODP demonstrates how the site can be developed to minimise any adverse effects of reverse sensitivity with the adjoining rural productive land. In conclusion, the proposed rezoning and proposed ODP are consistent and meet the objectives and policies of Chapter 5 of the Canterbury Regional Policy Statement.

5.5. Proposed Waimakariri District Plan

72. The proposed Waimakariri District Plan (pWDP) was publicly notified for consultation on 18 September 2021. The objectives and policies in the pWDP are considered relevant and have been assessed in Appendix G of this submission. It is noted that some rules have immediate legal effect pursuant to section 86B(3) of the RMA; however, there are no rules that have immediate legal effect that relate to this submission. A summary of the relevant objectives and policies is provided below.

73. The site is located in the proposed General Rural Zone and this submission is seeking a change of zone to the General Residential Zone, and therefore, the objectives and policies of the General Residential Zone chapter are applicable and have been assessed in Appendix G. The General Rural objectives have not been assessed as it is assumed that the current site would be consistent with them; however, they are irrelevant for the purpose of this submission.
74. The site is consistent with the relevant parts of SD-O1 as the proposed rezoning is unlikely to have adverse effects on indigenous ecosystems and habitat, indigenous biodiversity, or the coastal environment or freshwater bodies. The ODP also shows an indicative area for stormwater management which provides open space within the proposed development.
75. A change to the General Residential Zone is considered urban development and the proposed rezoning is also consistent with the relevant parts of SD-O2 as it will provide for Residential Development in an area that is identified for this density, through the Waimakariri District Development Strategy, and has adequate infrastructure to support this rezoning.
76. The submission is consistent with SD-O3 because it is unlikely to have an impact on strategic or regionally significant infrastructure, and any future development can be well integrated and coordinated with the surrounding Oxford township.
77. The site is currently proposed to be General Rural zone; however, this submission is seeking General Residential zone. The site is identified in the Waimakariri District Development Strategy as an area for future residential growth, so a loss of rural productive land has already been anticipated, so the proposal is not contrary to SD-O4.
78. The site is consistent with SD-O5 and SD-O6 as the site is unlikely to have an adverse effect on Ngāi Tūāhuriri cultural values and is not in an area with unacceptable risk from natural hazards or other hazards.
79. The site is consistent with UFD-O1 in the Urban Form and Development Chapter. The site is identified in the Waimakariri District Development Strategy 2018 as a location for future residential growth, so is considered appropriate for a rezoning submission to reflect the future use of the site. The site is adjacent to existing residential use and is located in close proximity to shops, services, and the school in Oxford. An ODP has been prepared to inform the future development of the site, and it has been demonstrated that the site can be well serviced from both a transportation and servicing perspective. Therefore, the proposed rezoning to General Residential Zone overlay is considered consistent with UFD-O1.
80. The submission and proposed ODP will provide for high quality, residential development. The ODP will enable residential allotments which are consistent with and will promote a coordinated pattern of development with the existing residential development to the north. The ODP concentrates residential housing in a suitable location that is close to key activity nodes, including the Oxford hospital, local schools, and shops. Therefore, the proposed rezoning is considered consistent with UFD-P2.
81. The proposed rezoning is also consistent with the Subdivision Chapter, which is described in more detail below.
82. The proposed ODP demonstrates a future subdivision design that will integrate land use, development, and urban form that will achieve the density of the General Residential Zone whilst achieving 14.8 hh/ha, maintain residential character, support the protection of cultural, heritage

and conservation values, and support community resiliency to climate change and natural hazard risk. The proposal is consistent with SUB-O1.

83. The submission is also consistent with SUB-P1 as it has been designed in accordance with best practice urban design principles, minimises reverse sensitivity, recognises the cultural values of mana whenua, and supports the character and density of the General Residential Zone. Furthermore, the ODP and future construction of residential dwellings will help meet housing needs and is consistent with SUB-P2.
84. The proposal is also consistent with other relevant objectives and policies in the Subdivision Chapter because it is designed in a way that maximises solar gain and sustainable design (SUB-P3), allows for integration and connectivity throughout the future residential development and to Oxford (SUB-P4), and provides for housing choice while achieving the minimum site size for the zone (SUB-P5). Moreover, the ODP is in accordance with SUB-P6 by being prepared as a single plan that identifies principal roads and connections, nearly achieving the minimum 15 lots per hectare (approximately 14.8 hh/ha based on a title area of 3.5 hectares), and minimising reverse sensitivity effects. Finally, the proposal provides options to meet infrastructure needs (SUB-P8) and does not anticipate adverse effects on water bodies (SUB-P9).
85. The ODP is also consistent with the Residential Zone Chapter by proposing residential development that is in line with the residential growth direction in the District Development Strategy (RESZ-O1), by enabling a good quality residential environment that is attractive and functional (RESZ-O3), and by designing for safe movement and connections through the subdivision (RESZ-P3). In addition, the proposed ODP will provide additional housing capacity and will integrate with the surrounding township and residential areas in Oxford, which aligns with RESZ-P8.
86. Finally, the proposal meets the objectives and policies of the General Residential Zone Chapter by providing a range of larger sites for residential use (GRZ-O1), by supporting and maintaining the character and amenity values of the zone (GRZ-P1), and the ODP has been developed with SUB-P6 in mind in accordance with GRZ-P2.
87. Based on the assessment above, and the full objective and policy assessment in Appendix G the proposed rezoning to General Residential Zone and proposed ODP are consistent with the relevant objectives and policies of the General Residential Zone, general residential, urban form and development, and subdivision chapters. It is therefore considered that the proposed rezoning and ODP are appropriate in regard to achieving the objectives and policies of the Proposed Waimakariri District Plan.

6. Section 32AA Assessment

88. The Section 32AA evaluation provided below is in response to Waimakariri District Councils Residential Zone Section 32 Report. A Section 32AA assessment has been undertaken as an amendment to the chapter is sought by the proposed rezoning of the site at 63 Harewood Road to proposed General Residential Zone.
89. Section 32AA (1)(b) states that a further evaluation required under this Act must be undertaken in accordance with Section 32(1) to (4).
90. A Section 32 report requires the submitter (and the Council) to evaluate, at a level of detail corresponding to the scale and significance of the anticipated environmental, economic, social, and cultural effects.

- The extent to which the objectives of the proposal are the most appropriate to achieve the purpose of the RMA.
 - Whether the provisions (rules) are the most appropriate way for achieving the objective (purpose), by including consideration of any other reasonably practicable options, the efficiency and effectiveness of the provisions in achieving the purpose, and reasons for deciding on the provisions.
91. This submission is not proposing any new objectives or rules to be added to the District Plan; therefore, the objective of the proposal is considered to be the purpose of the rezoning. The purpose of the proposal is to rezone the site at 63 Harewood Road, Oxford from the proposed General Rural Zone to proposed General Residential Zone to allow for residential intensification.
92. Two options have been assessed below; retain the current proposed rural zoning or provide for a rezoning to proposed General Residential Zone.
93. The Quality Planning Guidance note on Section 32 analysis states that the most appropriate option means “suitable, but not necessarily superior”. The most appropriate option does not need to be the most optimal or best option but must demonstrate that it will meet objectives in an efficient and effective way.

6.1. Option 1: Retain proposed General Rural Zoning (status quo)

	Benefit	Cost
Environmental	<ul style="list-style-type: none"> • Maintains the rural character of the site. • No additional capacity for stormwater/wastewater required. • Retains rural use. 	<ul style="list-style-type: none"> • A missed opportunity for providing additional residential capacity in Oxford and Waimakariri. • Does not implement the Waimakariri District Development Strategy.
Economic	<ul style="list-style-type: none"> • No cost to the owner or Council to retain the existing zoning. 	<ul style="list-style-type: none"> • Does not contribute to housing demand/supply or choice. • No additional development contributions or increased rateable income for Council.
Social	<ul style="list-style-type: none"> • No social benefit recognised. 	<ul style="list-style-type: none"> • Does not contribute to Oxford housing stock or contribute to providing for projected increase in population.
Cultural	<ul style="list-style-type: none"> • No cultural benefit recognised. 	<ul style="list-style-type: none"> • No cultural cost recognised.

94. Option 1, retaining the land as proposed General Rural Zoning, i.e., do nothing, has slightly more costs than benefits. The benefit of this option would be that the rural character of the site and outlook for existing residential properties in Oxford would not change, and the rural use would continue. This option would not contribute to any residential expansion of Oxford.
95. The costs of doing nothing and retaining the proposed General Rural zoning means that there will be no residential development capacity provided on this site, and therefore there will be no residential capacity provided or wider benefit to Oxford, or Waimakariri. This would be a missed opportunity for the Council to demonstrate and supply residential housing capacity and housing choice in the short, medium, and long term as required by the NPS-UD.

96. By retaining the current proposed General Rural zoning, the site would also not be giving effect to the Waimakariri District Development Strategy.
97. As detailed below, the benefits of retaining the rural zoning (Option 1) can still be effectively managed and achieved by sensitive design and mitigation when implementing Option 2. The costs outweigh the benefits, and Option 1 is the least preferred option.

6.2. Option 2: Rezone to proposed General Residential Zone

	Benefit	Cost
Environmental	<ul style="list-style-type: none"> Reticulated water and wastewater services would be provided. Additional stormwater treatment and reserve area would be provided and would be vested in Council. Gives effect to Waimakariri District Development Strategy. 	<ul style="list-style-type: none"> Loss of rural land. Loss of rural outlook / character. Increase in impermeable area and increased discharges.
Economic	<ul style="list-style-type: none"> Provides the most housing capacity and potential for variety in housing choice. Provides income from the greatest number of development contributions and rateable sections for Council. Potential for affordable housing, with a greater number of dwellings available to the market Efficiencies in infrastructure cost to develop the site for the most number of dwellings. Will enable approximately 48 additional residential allotments. Short-medium term employment opportunities during construction. 	<ul style="list-style-type: none"> Economic cost for development of urban infrastructure (services and roading) for landowner.
Social	<ul style="list-style-type: none"> An integrated neighbourhood adjoining the existing township of Oxford. Adjoining existing residential development and in close proximity to community facilities and town centre. 	<ul style="list-style-type: none"> No social costs identified.
Cultural	<ul style="list-style-type: none"> Stormwater discharges to ground in accordance with preferred method. 	<ul style="list-style-type: none"> No cultural costs identified.

98. Option 2 is the preferred option as identified in this submission. Rezoning the site to proposed General Residential Zone will allow a potential yield of approximately 48 residential allotments, which will contribute to meeting the residential housing demand that Waimakariri is currently experiencing.

99. The rural character of the existing site will change to residential character; however, the development design can be sensitive to the natural environment of Oxford by maintaining the sense of open space and rural outlook.
100. The proposed rezoning to General Residential Zone and the proposed ODP best meets the objectives of the proposed General Residential Zone chapter. The benefits of rezoning the site to proposed General Residential Zone are greater than the costs, and therefore Option 2 has been determined as the most appropriate option.

6.3. Efficiency

101. Option 2, rezoning the site to proposed General Residential Zone has been assessed as the most efficient use of the land and is the most appropriate option when the costs and benefits of both options are compared. The benefits of Option 2 outweigh the costs meaning that it is the most efficient option, and therefore the most suitable use of land.

6.4. Effectiveness

102. Option 2 has been assessed above as the most efficient option; however, it is also assessed as the most effective option in giving effect to the Waimakariri District Development Strategy and providing the opportunity for future sustainable residential growth in Oxford. The proposal will provide a well-functioning urban environment that improves the supply of residential housing and housing capacity in the medium and long term. The proposed rezoning and ODP will provide for a consolidated residential development and will have sufficient future infrastructure servicing and accessibility.
103. The proposed rezoning is consistent with Objective 5.2.1 of the Canterbury Regional Policy Statement because it will achieve a consolidated and sustainable residential development which will enable people to provide for their social, economic and cultural well-being and health and safety now and in the future.
104. The proposed rezoning is consistent with the relevant objectives in Chapter 5 of the CRPS because the proposed rezoning will be well integrated with the existing township of Oxford. Any adverse effects arising from the proposed rezoning can be avoided, remedied, or mitigated. The proposed rezoning will maintain the rural character and rural amenity values of Oxford, and the quality of the environment can be maintained or enhanced.
105. As demonstrated in Section 5.5 of this report the proposed rezoning to General Residential Zone is consistent with and meets all of the relevant proposed objectives and policies relating to Urban Form and Development, and the General Residential Zone.

6.5. Risk of Acting or not Acting

106. The submission to the proposed Waimakariri District Plan has provided detailed technical reports to confirm the suitability of the site for the proposed rezoning. The information has been provided in as much detail as reasonably possible.
107. However, it is noted that at the time of writing this report confirmation from Waimakariri District Council regarding specific infrastructure upgrades and stormwater discharge is not yet known. This information will be confirmed prior to the hearing.

108. A traffic report was also not able to be obtained prior to the close of submissions. It is considered, that should Council require additional information regarding the access and transport effects of rezoning the site that this can be provided as supporting evidence prior to the hearing.
109. There is also a risk of not acting, as detailed in Option 1 costs, in that it has been identified that there is future demand for residential capacity in the Waimakariri District, and that by not acting, residential demand will continue to increase with a risk of insufficient residential supply being provided. The risk of not acting, also is that Council will not meet their requirements under the RMA to meet the needs of future generations and will not enable further land to be bought forward for residential development in Oxford to increase housing supply and housing choice.

7. Assessment of Actual and Potential Effects on the Environment

110. The assessment of actual and potential effects on the environment (AEE) has been prepared in accordance with the Fourth Schedule of the RMA. The First Schedule, clause 22(2) of the RMA requires *'Where environmental effects are anticipated, the request shall describe those effects, taking into account the provisions of Schedule 4, in such detail as corresponds with the scale and significance of the actual or potential environmental effects anticipated from the implementation of the change, policy statement, or plan'*.
111. The following actual and potential effects have been considered as part of the Submission to rezone the site at 63 Harewood Road, Oxford from proposed General Rural Zone to proposed General Residential Zone. Effects on:
- Urban Form and Landscape Amenity
 - Transport
 - Infrastructure and Servicing
 - Natural Hazards
 - Health of Land
 - Tangata Whenua and Cultural
 - Reverse Sensitivity
 - Positive Effects

7.1. Effects on Urban Form and Landscape Amenity

112. The proposed residential rezoning has the potential to alter the existing amenity of Oxford. The effects on urban form and landscape amenity values have been discussed below.
113. The proposed rezoning and future development of the site would align with the existing General Residential Zone in Oxford which ensures that the scale of the proposed development is proportionate in relation to the growth of Oxford as a whole. The proposed development would also provide an integrated living environment to reflect the rural township character of Oxford.
114. The existing character of the site's surrounds comprise a mix of rural and residential land uses. The development achieves a similar character by adjoining the existing residential development in Oxford whilst still providing a rural outlook to the adjoining rural land.
115. Given the design of the existing residential development north of the site, there are no pedestrian or vehicular connections available through to the north. Therefore, as shown on the ODP, the

provision for future connections to the east and west of the site have been shown to ensure connectivity when the land to the east is developed to residential (as this block of land is also shown in the Waimakariri District Development Strategy).

116. The internal roading will have provisions for on-street cycling and footpaths for pedestrian connectivity through the development.
117. An indicative stormwater reserve is shown in the south-east corner of the ODP if stormwater detention or treatment is required. This provides access to green space within the proposed ODP site. Whilst this area cannot technically be vested as recreation reserve, it will still provide public green space within close proximity to the proposed future residential development.
118. The site is bounded by developed residential land to the north, rural land to the east and south, and the Oxford Hospital to the west. The Oxford Hospital has green space and planting within the grounds which will provide a high amenity outlook for the future development.
119. The east boundary of the site has been considered as it provides a direct interface with the adjoining rural land. However, it is considered that the adjoining rural land is also identified in the Waimakariri District Development Strategy as future residential so it is anticipated that this land will become residential in the short to medium term.
120. In conclusion, the proposed rezoning will not adversely affect outstanding natural features or landscapes and will not adversely affect any indigenous biodiversity. The rezoning will maintain the character and amenity of the rural township and will facilitate residential growth in keeping with Oxford's character. Any potential adverse effects on urban form and visual amenity can be appropriately mitigated. Therefore, the potential adverse effects of the proposed rezoning and residential development will be less than minor.

7.2. Effects on Transport

121. The proposed rezoning and future subdivision would create approximately 48 residential allotments and have a primary road and a secondary road. At the time of writing this report, an integrated traffic assessment has not been obtained. However, an assessment of any potential transport effects has been undertaken.
122. Access is provided to the site from Harewood Road, which has a speed limit of 100km/hr past the site. It is recommended that the speed limit of Harewood Road be reviewed once the rezoning of this land has been approved. Harewood Road has a speed limit of 50km/hr closer towards the Oxford township, and this would be preferable to the current speed limit past the entrance to the site.
123. The ODP shows an indicative primary road and an indicative secondary road. The main vehicular access to the site will be from Harewood Road. There will be provision for on-road cycling and footpaths for pedestrian accessibility.
124. There is currently no public transport routes servicing Oxford. Public transport is governed by Canterbury Regional Council (Environment Canterbury) so is not a matter for the Waimakariri District Plan Review.
125. Due to the design of the existing residential development to the north of the site, there is no ability to provide pedestrian connections through to the township. However, the adjoining rural land to the east of the site has been indicated to accommodate future residential development in the Waimakariri District Development Strategy, so future connections have been provided for when

this occurs. This would enable vehicular and active modes of transport to access Oxford to the north and east.

126. It is considered that any future potential effects on transportation and traffic can be addressed at future subdivision stage, however, are likely to be less than minor.

7.3. Effects on Infrastructure and Servicing

127. An Infrastructure Servicing Report has been prepared by Eliot Sinclair, and is attached in Appendix C. The report has assessed and detailed the infrastructure and servicing requirements for the proposed rezoning and possible future subdivision including stormwater, water supply and wastewater.
128. Waimakariri District Council engineers have confirmed via email that the future subdivision would be able to connect to the reticulated water supply. Any development of the site would require the upgrade of the 150mm diameter main from Park Ave to the development. Additional internal upgrades may also be required. It is considered that once these upgrades have occurred, that water supply will be available to service the future subdivision.
129. Waimakariri District Council engineers have also confirmed that there are a number of short term and long-term options for the wastewater disposal from any future subdivision and development of the site. There are options for a new pump station with connection to the wastewater treatment plant, a reticulated pressure sewer, and a temporary pump station. WDC would need to complete the modelling for this development to confirm the pipe sizing and capacity at the wastewater treatment plant.
130. The Infrastructure Servicing report has also provided alternative design options, should there not be sufficient capacity at the wastewater treatment plant. These include onsite community wastewater scheme, a septic tank effluent pumping network, or a low pressure sewer network.
131. There is no known or existing stormwater infrastructure in the vicinity of the site, therefore a feasible stormwater will be discharged to ground. Stormwater from residential allotments and roading can be conveyed to a stormwater management area which would provide treatment and attenuation. Stormwater from individual roofs can be discharged to onsite soakage pits.
132. The Infrastructure Servicing Report identified alternatives such as storage tanks with a restricted orifice outlet, an attenuation basin, or a dual pipe network should the discharge to ground be determined to not be suitable.
133. Waimakariri District Council have provided limited comments on servicing at the time of writing this report. However, it is considered that there is capacity for connection to the reticulated water supply, multiple options for wastewater discharge, and the ability to discharge stormwater to ground.
134. Therefore, it is considered that the future development and subdivision of the site is able to be adequately serviced. Overall, it is considered that any adverse effects from infrastructure and servicing the site will be less than minor.

7.4. Effects on Natural Hazards

135. A Natural Hazards Risk Assessment, attached in Appendix E, was undertaken by Eliot Sinclair environmental engineers to assess the level of risk and suitability of rezoning the site to General Residential Zone.

136. The Natural Hazards Risk Assessment assessed the site characteristics as well as specific risk from natural hazards such as earthquake, flooding, erosion and sedimentation, land slippage, subsidence and climate change.
137. All risks were determined to be acceptable or tolerable, and therefore it is considered that any adverse effects from natural hazards of rezoning the site to General Residential Zone are considered to be less than minor.

7.5. Effects on Health of Land

138. A Preliminary Site Investigation (PSI), attached in Appendix D, was undertaken by Eliot Sinclair environmental engineers to support the rezoning submission.
139. The PSI was based on a review of Environment Canterbury records, historical aerial images, and an Eliot Sinclair site walkover.
140. The PSI concluded that no HAIL activities were identified on the site and that no further contamination investigation or assessment was required under the NESCS for the proposed rezoning to General Residential Zone.
141. It was recommended that should any unusual or contaminated materials be encountered during any future site works that the requirements of the Accidental Discovery Protocol provided in the report are followed. This can be addressed at the time of future development if required.
142. In conclusion, there is unlikely to be adverse effects on the health of the land from the proposed rezoning.

7.6. Effects on Tangata Whenua and Cultural Values

143. The site is not identified in an area of Wāhi Taonga, Wāhi Tapu, Ngā Wai, Ngā Reporepo, or Ngā Tūranga Tūpuna overlay as shown on the proposed Waimakariri District Plan. The site is not identified in a statutory acknowledgement area, silent file area, or rūnanga sensitive area as shown on Canterbury Maps.
144. The site is in the Waimakariri catchment, and a full assessment of the Mahaanui Iwi Management Plan (IMP) is provided below in Section 8.2.
145. The proposal is consistent with the relevant objectives and policies of the IMP in Section 51 Kaitiakitanga, 5.2 Ranginui, 5.3 Wai Maori, 5.4 Papatuanuku, and 6.4 Waimakariri.
146. The proposed rezoning and future subdivision and development that this submission will enable is unlikely to have any adverse effects on water quality, and therefore less than minor adverse effects on tangata whenua and cultural effects.
147. Overall, this submission for rezoning and proposed ODP will have less than minor adverse cultural effects and effects on Tangata Whenua.

7.7. Effects on Reverse Sensitivity

148. The potential for reverse sensitivity occurs when a change in land use is incompatible with, and causes new conflicts with, existing activities nearby. Typical reverse sensitivity effects are typically noise, odour, and dust. The change to rural residential use as a result of the rezoning request needs to consider the reverse sensitivity effects related to the site's proximity to the rural zoned land.

149. The site is bounded by Oxford Hospital to the west, residential land to the north, and rural land to the east and south. Therefore, there are potential reverse sensitivity effects from the rural land.
150. It is not considered that there will be any reverse sensitivity effects from the adjoining hospital. The hospital has open green space and planting which will provide a high amenity outlook from the future development.
151. The eastern interface directly abuts the adjoining rural zoned land. No specific interface treatments have been considered as part of the ODP, however interface and boundary treatments could be provided such as fencing, landscaping or buildings setbacks which can be determined at subdivision consent stage.
152. The rural land to the east is also identified in the Waimakariri District Development Strategy as an area for future residential development, so it is anticipated that this land could be developed in the short – medium term. At the time of rezoning this land it is considered that there would be no adjacent rural land and therefore no reverse sensitivity issues.
153. Overall, it is considered that any potential reverse sensitivity effects that may arise from the future subdivision and residential development will be less than minor.

7.8. Positive Effects

154. The proposed rezoning would allow for a potential yield of approximately 48 future residential dwellings. This would provide housing supply for Oxford, and thus contribute to increasing the housing capacity available in the Waimakariri District in the short-medium term. This is a positive effect as it is providing housing choice in an additional location for current and future Waimakariri residents.
155. In the case of this site, the rezoning of the land to residential would provide for a future residential development in close proximity to the existing township of Oxford. The site is considered walkable to Oxford and the townships community amenities.
156. The proposed residential growth would be managed effectively through an ODP which ensures there is sufficient vehicular and pedestrian movement throughout the site, and that the site can be serviced efficiently and effectively.
157. The proposed rezoning will give effect to the Waimakariri District Development Strategy, which provides strategic direction on the growth of the District and identifies this site as a site in Oxford for possible residential growth. Therefore, this rezoning submission is an opportunity for Council to enable residential land in Oxford to come forward to enable future residential supply and housing choice in Oxford and Waimakariri.

8. Consistency with other Relevant Planning Documents

158. In accordance with 74(2) the proposed rezoning has been considered with regard to other management plans and strategies. As such the proposal has been assessed against the following relevant planning documents:
- Waimakariri District Development Strategy 2018
 - Oxford Town Centre Strategy 2014
 - Mahaanui Iwi Management Plan
 - Our Space Strategy

8.1. Waimakariri District Development Strategy 2018

159. The Waimakariri District Development Strategy 2018 *"sets out broad directions for growth and development, acting as a platform to inform decision making within the context of a long-term view"*. The strategy is part of the ongoing growth management within Waimakariri and the Greater Christchurch context.
160. The Strategy's vision is *"Our District – the very best of town and country"* which is achieved by the seven principles identified throughout the strategy. The Strategy identifies that additional feasible greenfield residential land will be needed in the District's main centres, including Oxford.
161. There are 7 principles that set out the development strategy for the District. These are; Our Environment, Our Growing Communities, Our Rural Area and Small Settlements, Our Connections, Our Economy, Our Centres, and Our Community Spaces and Places.
162. The proposed rezoning is consistent with the principle of Our Environment because it will achieve the strategic aim of being environmentally rich and sustainable. The natural environment will be managed to ensure that there will be minimal adverse effects on resources such as groundwater, surface water, and soil health. The site is not identified in any areas of unacceptable natural hazard risk, or biodiversity or significant flora and fauna areas.
163. The Our Growing Communities principle aims to achieve consolidated and integrated urban growth that provides housing choice. The principle states that the District will experience medium to medium high growth over the next 30 years. The principle states that Oxford's demand for new households over a 30-year period can be met in part by developing existing vacant land and/or intensifying existing zoned areas. An area for greenfield growth in Oxford is also proposed to the south, in which this site is located, and residential rezoning is requested.
164. This rezoning submission gives effect to this principle because it is providing land for new houses within the residential growth direction identified for Oxford. The principle identifies further work is to be undertaken to determine the specific growth areas through the District Plan Review. It is noted that the District Plan review has not identified the growth areas shown in the Strategy and therefore this rezoning submission is requesting the site be rezoned to residential zone and providing the technical information to support this rezoning.
165. The Our Connections principle has the strategic aim of "well-connected through infrastructure". The proposed rezoning and ODP demonstrates that the future development can be well-connected and efficiently serviced. Water supply, stormwater, and wastewater have all been assessed in the attached Infrastructure Servicing Report (Appendix C), which determined that the site is able to be serviced. In addition to servicing, the proposal provides efficient transport networks with vehicle access from Harewood Road, and the site has good connectivity to Oxford.
166. The Our Centres principle states that the centre of Oxford needs to continue to be supported and progress should be monitored against the Oxford Town Centre Strategy. This proposal will focus residential growth around Oxford which will support the town centre.
167. The Community Spaces and Places principle has the strategic aim of community facilities and green space that meet community needs. The proposed ODP does not seek to create a new community facility or green space, however the location of the proposed rezoning will enable the future residents to access the existing community spaces and places in Oxford.
168. The Rural Area and Small Settlement and Our Economy, principles are not considered relevant to this submission.

169. The Oxford snapshot provides information regarding where the town was at the time of writing (2018) and where the town is going (2048). The Strategy identifies that 595 new households will be needed in Oxford by 2048 and there are future residential long-term growth directions proposed to the south of Oxford, which includes this submission site.
170. The Strategy has identified growth around Oxford as it would maximise the efficiency of infrastructure, services, amenities and transport, and would create critical mass for business and retail.
171. Overall, the Waimakariri District Development Strategy identifies this site as an area for future residential development as further greenfield residential land is required in Oxford to accommodate the predicted residential growth in the area and in the wider Waimakariri District.
172. This rezoning submission achieves the Strategy's vision and achieves the relevant principles such as Our Environment, Our Growing Communities, Our Connections and Our Community Spaces and Places.

8.2. Oxford Town Centre Strategy 2014

173. The Oxford Town Centre Strategy was developed in 2014 and provides direction on the Oxford town centre and its role as a local service centre for the residents of Oxford. The Strategy identifies three key themes; business and built environment, access to and within, and facilities and open spaces.
174. The Oxford Town Centre Strategy is not directly relevant to the proposed rezoning submission, however this proposed rezoning submission does not prevent Council from achieving the purpose and intent of the Oxford Town Centre Strategy.

8.3. Mahaanui Iwi Management Plan

175. The Mahaanui Iwi Management Plan (IMP) was lodged with the relevant Councils on the 1st March 2013, including the Waimakariri District Council. The Resource Management Act contains a number of provisions in regard to Maori interests, including the principles of the Treaty of Waitangi, and gives statutory recognition to Iwi Management Plans.
176. The Mahaanui Iwi Management Plan 2013 is a written document, it is an expression of kaitiakitanga which is fundamental to the relationship between Ngai Tahu and the environment. The IMP sets out how to achieve the 'protection of natural and physical resources according to Ngai Tahu values, knowledge, and practices' (IMP section 5.1). It identifies a number of issues and associated policies, including subdivision and development guidelines. This promotes early engagement at various levels of the planning process to ensure certain outcomes are achieved within the development.
177. The Mahaanui IMP 2013 has been prepared by the six Papatipu Rūnanga of the takiwā:
 - Ngāi Tūāhuriri Rūnanga
 - Te Hapū o Ngāti Wheke (Rāpaki) Rūnanga
 - Te Rūnanga o Koukourārata
 - Ōnuku Rūnanga
 - Wairewa Rūnanga
 - Te Taumutu Rūnanga

178. The site is located within the area covered by the Mahaanui Iwi Management Plan 2013(IMP) and as such it is considered appropriate to assess the application under the IMP, as required under Section 74(2A) of the RMA, to assess any potential effects on Tāngata Whenua vales.

179. The relevant sections and policies to the applications are addressed as follows;

Section 5.1 Kaititakiganga

180. The objectives of this section of the IMP acknowledge that the Mahaanui IMP 2013 is a manawhenua planning documents for the six Papatipu Rūnanga in the region. It is acknowledged that there is a relationship the Rūnanga have with the land and water, kaitiakitanga and Treaty of Waitangi. This section of the IMP provides an overarching policy statement on kaitiakitanga and is relevant to all other sections of the IMP.

Section 5.2 Ranginui

181. This section of the IMP addresses objectives and policies for air and provides guidance to the protection and use of air in a manner that respects the life supporting capacity and ensures that it is passed onto the next generation in a healthy state.

182. Air discharges will change from rural to residential in nature. This is considered to provide a possible benefit in that residential discharges have less potential to contaminate air.

183. The IMP identifies that celestial darkness should be protected. The rezoning from rural to residential may increase light sources, such as street lighting. However, given the adjoining residential use and the adjoining hospital, it is considered that any future street lighting will not significantly change the light sources and celestial darkness currently in the area.

184. The IMP also identifies the need to support reduction of emissions for climate change mitigation. The proposal allows for walking and cycling transport connections through the site, with future possible connections to adjoining land. The site is walkable to Oxford, which reduces dependence on private vehicles.

Section 5.3 Wai Maori

185. Section 5.3 addresses objectives and policies for freshwater and provides guidance to freshwater management in a manner consistent with Ngai Tahu cultural values and interests. It is recognised that Ngai Tahu and Rūnanga have interests and relationships with freshwater resources.

186. The site and future development will obtain water supply from the Oxford Urban Water Supply Scheme, with an upgrade to the existing main.

187. There is a drain shown, on Canterbury Maps, along the eastern boundary of the site. However, Eliot Sinclair engineers confirmed that there was no water or drain visible on the boundary of the site.

188. It is noted that WM6.17 requires stringent and enforceable controls for subdivision and development adjacent to waterways. The future subdivision and development of the site will be dealt with at subdivision consent stage and controls will be put in place to minimise any adverse effects on the waterbody during development.

189. Discharges from proposed new roads will be discharged to a stormwater management area which would comprise of treatment and attenuation facilities.

190. A stormwater management area will be developed as part of the subdivision which will provide treatment to stormwater runoff from the future development.

191. It is considered that the application is consistent with the Wai Maori section of the IMP.

Section 5.4 Papatūānuku

192. This section of the IMP addresses objectives and policies of issues of significance in regard to the land. It recognises the relationships and connections between land, water, biodiversity, and the sea.
193. The site is not in any known site or place of importance to tangata whenua, there are no protected places on the site, and no archaeological sites or any other protection, as identified on the Waimakariri District Planning Maps, the New Zealand Archaeological Association website, the New Zealand Historic Places Trust list, or in the IMP.
194. The assessment of environmental effects concluded that there will be less than minor adverse effects of the proposed rezoning of the land.

Section 6.4 Waimakariri

195. This section of the IMP addresses issues of particular significance to the lands and water of the Waimakariri catchment. The submission site is located in Waimakariri District and issues around water quality and quantity and the potential effects of subdivision and development are relevant considerations as part of this submission. The issues and policies focus on discharges to surface water, discharges to groundwater, subdivision and development, and cultural landscapes. The rezoning of the site and any future subdivision development will manage and mitigate any potential effects on groundwater, on surface water, and reduce any potential effects on the environment and the cultural values of the wider area.

Summary

196. The proposed change of zoning from proposed General Rural Zone to proposed General Residential Zone is considered to have less than minor adverse effects on the natural and cultural environment and is considered to be consistent with the provisions of the Mahaanui Iwi Management Plan 2013 and is therefore consistent with Tangata Whenua values.

8.4. Our Space Strategy 2018 – 2048

197. Our Space 2018-2048: Greater Christchurch Settlement Pattern Update Whakahāngai O Te Hōrapa Nohoanga (Our Space Update) has been prepared by the Greater Christchurch Partnership. The partnership includes:
- Christchurch City Council
 - Environment Canterbury
 - Selwyn District Council
 - Waimakariri District Council
 - Iwi – Te Rūnanga o Ngāi Tahu
 - Waka Kotahi New Zealand Transport Agency
 - Canterbury District Health Board
 - Greater Christchurch Group – the Department of Prime Minister and Cabinet

198. Waimakariri District Council is included in the Our Space Strategy, however Oxford is not included within Greater Christchurch. Therefore, it is considered that the Our Space Strategy is not relevant for this submission.

9. Part 2 of the Resource Management Act 1991

199. Section 74 of the Act requires the Plan Change Request to be assessed under the provisions of Part 2 of the Act. Part 2 sets out the purpose and principles of the Act.

200. Section 5 of the RMA outlines that the purpose of the RMA is the promotion of sustainable management of natural and physical resources. Sustainable management is defined as the management of:

(2) [...] the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while –

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

201. The proposed rezoning will provide for people and communities' social, economic, and cultural wellbeing by providing a well-designed and sustainable residential development with transportation, infrastructure and servicing connections. The site has been assessed as a suitable option for residential development and can promote the sustainable management of natural and physical resources. It is considered that any adverse effects can be avoided, remedied, or mitigated therefore resulting in less than minor adverse effects on the environment.

202. Section 6 identifies matters of national importance to be recognised and provided for. It is considered that none of these matters are relevant to the proposed rezoning.

203. Section 7 relates to 'other matters' which persons must have particular regard to. This submission for rezoning has given particular regard to (a) Kaitiakitanga, (b) the efficient use and development of natural and physical resources, (c) the maintenance and enhancement of amenity values and (f) maintenance and enhancement of the quality of the environment. The submission to rezone the site has had regard to these matters through the well-designed proposed Outline Development Plan, which has incorporated the natural features of the site, such as water courses, to ensure the maintenance of the quality of the environment and the amenity values.

204. Section 8 requires persons to take into account the principles of the Treaty of Waitangi. An assessment of the Mahaanui Iwi Management Plan has been undertaken in Section 8 of this report. It is considered that the proposed rezoning is consistent with the principles of the Treaty of Waitangi.

205. Overall, the submission to rezone the site is considered to achieve the principle and purpose of Part 2 of the RMA.

10. Conclusion

206. Geoff Mehrtens (the Submitter) is making a submission on the proposed Waimakariri District Plan. The submission is to rezone the site at 63 Harewood Road, Oxford, from the proposed General Rural Zone to proposed General Residential Zone.
207. The purpose of this submission is to rezone the site to General Residential Zone to allow for future residential development to provide for housing supply and increased housing capacity in Oxford.
208. No changes are proposed to the Waimakariri District Plan objectives, policies, or rules.
209. The Section 32AA assessment in Section 6 of this report demonstrates that rezoning of the land to proposed General Residential Zone is the most effective and efficient option for this site when considering the costs and benefits of the other option; retaining the General Rural Zone.
210. The assessment of environmental effects in Section 7 of this report identifies that adverse effects from the proposed rezoning and future residential development can be mitigated through detailed design at the time of subdivision consent and engineering approval and will be less than minor. The assessment also identifies that there are positive effects that would result from the proposal.
211. An assessment of the relevant National Policy Statements, Canterbury Regional Policy Statement, proposed District Plan, and other statutory and non-statutory documents has been undertaken in accordance with Section 74 of the RMA which demonstrates that the proposal gives effect to all provisions. The proposal provides for the logical, integrated provision of residential growth in Oxford, and provides housing choice with respect to location and typology in the Waimakariri District and gives effect to the Waimakariri District Development Strategy. The proposal is an efficient and effective use of the site, is able to be serviced, can mitigate potential adverse effects, can contribute positively to the amenity and housing choice in Oxford, and is consistent with Part 2 of the RMA in providing for sustainable use of resources for future generations.
212. In conclusion, for the reasons detailed throughout this report, the relief sought is to rezone the submission site at 63 Harewood Road, Oxford to proposed General Residential Zone, to amend the planning maps to include the site as proposed General Residential Zone and insert the new ODP.

Disclaimer

This report has been prepared by Eliot Sinclair & Partners Limited ("Eliot Sinclair") only for the intended purpose as a submission to the 2021 Proposed Waimakariri District Plan to request General Residential Zoning for 63 Harewood Road, Oxford.

The report is based on:

- Eliot Sinclair Infrastructure Servicing Report
- Eliot Sinclair Preliminary Site Investigation
- Eliot Sinclair Natural Hazards Risk Assessment
- Canterbury Maps
- Waimakariri Proposed District Plan website

Where data supplied by Geoff Mehrtens or other external sources, including previous site investigation reports, have been relied upon, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Eliot Sinclair for incomplete or inaccurate data supplied by other parties.

Whilst every care and reasonable effort has been taken during our investigation and interpretation to ensure that the conclusions drawn, and the opinions and recommendations expressed are correct at the time of reporting, Eliot Sinclair has not performed an assessment of all possible conditions or circumstances that may exist at the site. Variations in conditions may occur between data sources and Eliot Sinclair has provided conclusions in this report based on the best available information at the time of writing. Eliot Sinclair does not provide any warranty, either express or implied, that all conditions will conform exactly to the assessments contained in this report.






The exposure of conditions or materials that vary from those described in this report may require a review of our recommendations. Eliot Sinclair should be contacted to confirm the validity of this report should any of these occur.

This report has been prepared for the benefit of Geoff Mehrtens and the regulatory authority for the purposes as stated above. No liability is accepted by Eliot Sinclair or any of their employees with respect to the use of this report, in whole or in part, for any other purpose or by any other party.

Appendix A. Proposed Outline Development Plan



LEGEND

-  Site Boundary
-  General Residential Zone
-  Indicative Stormwater Reserve
-  Indicative Primary Road
-  Indicative Secondary Road

Appendix B. Record of Title



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Limited as to Parcels
Search Copy



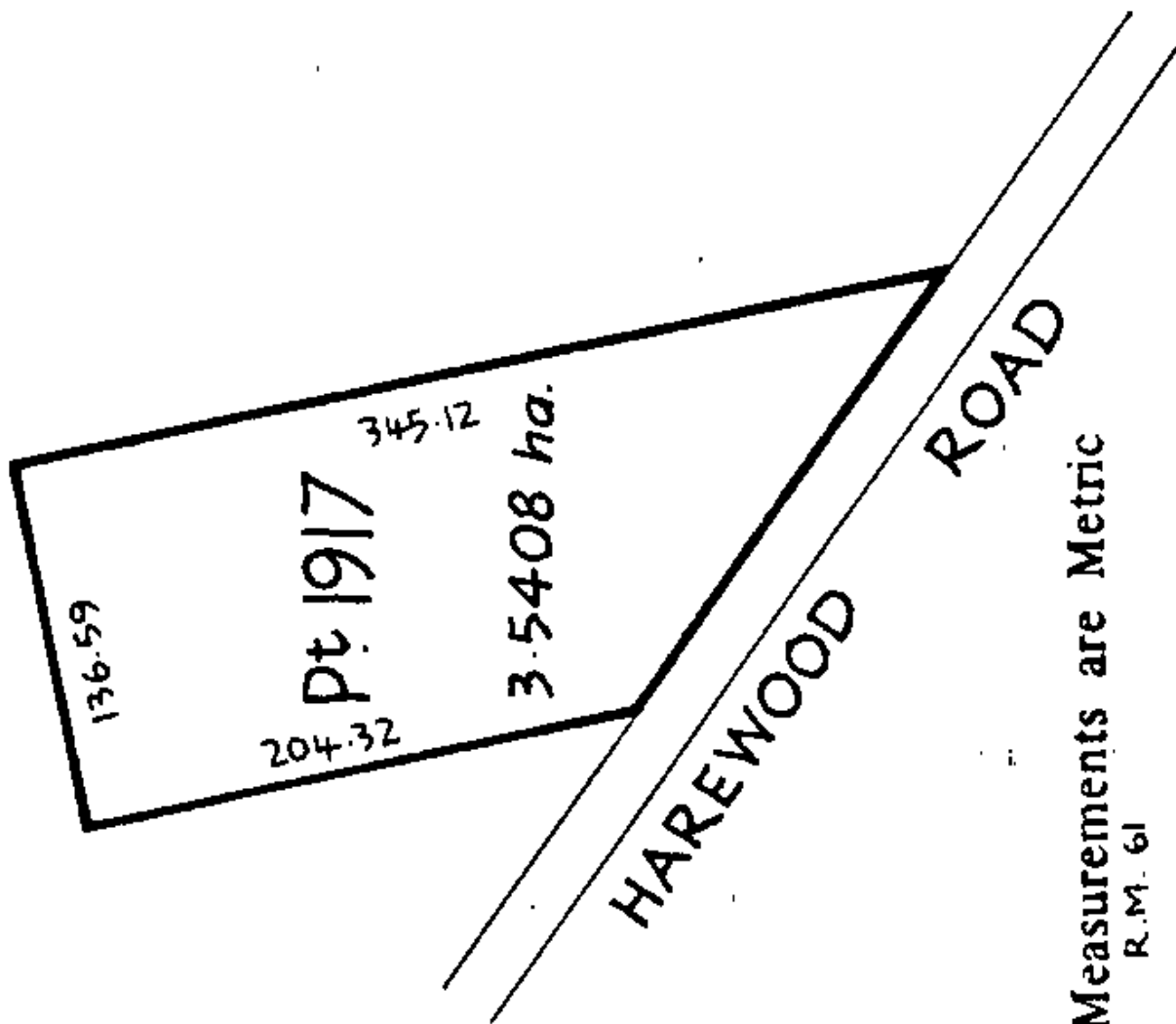

R.W. Muir
Registrar-General
of Land

Identifier **CB17B/415**
Land Registration District **Canterbury**
Date Issued 22 February 1977

Prior References
CB564/74

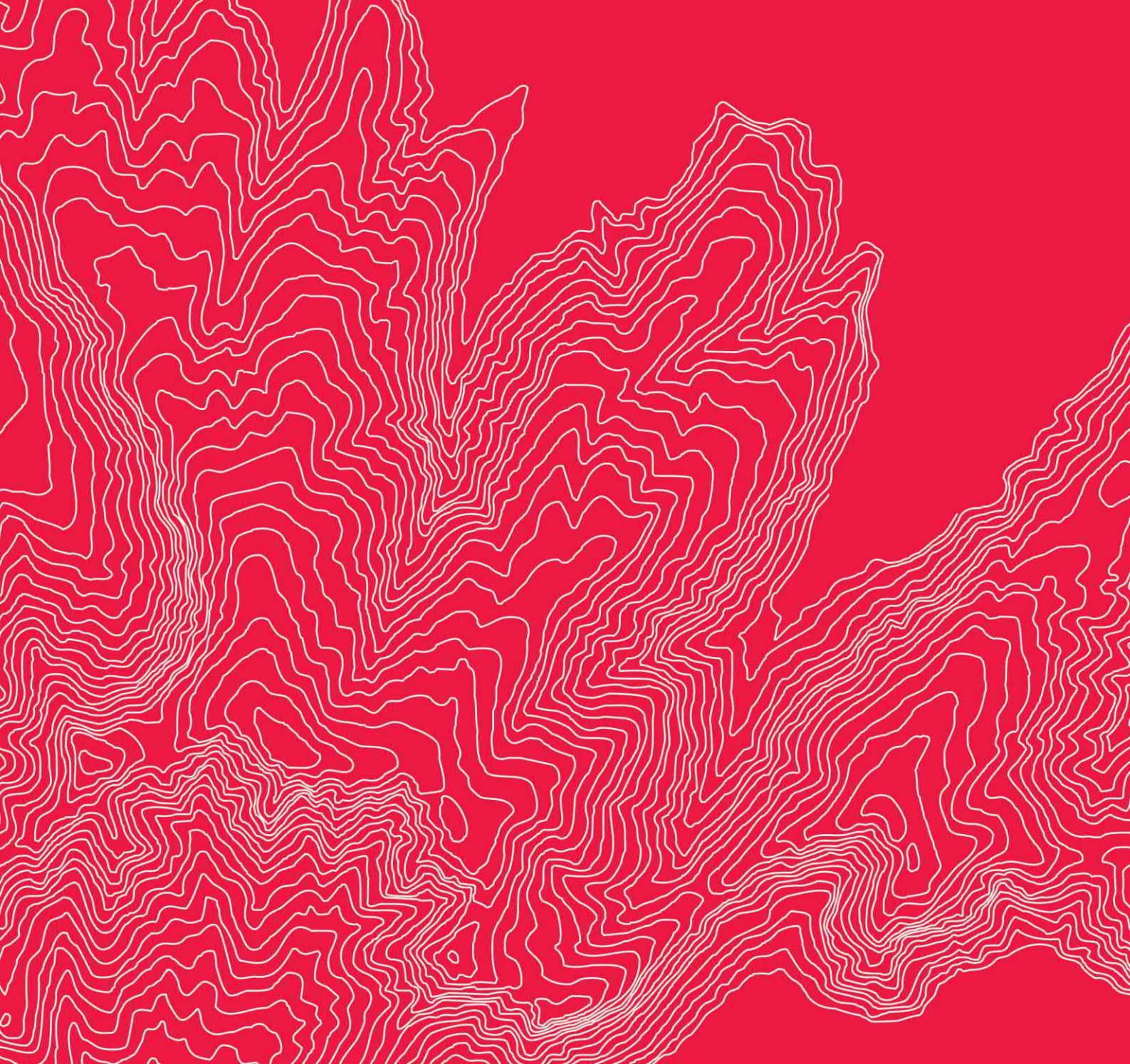
Estate Fee Simple
Area 3.5408 hectares more or less
Legal Description Part Rural Section 1917
Registered Owners
Claudia Elizabeth Mehrtens

Interests
11959025.3 Mortgage to ANZ Bank New Zealand Limited - 22.12.2020 at 3:46 pm



17B/415

Appendix C. Infrastructure Servicing Report



Infrastructure Servicing Report

**eliot
sinclair**

63 Harewood Road, Oxford

Prepared for Geoff Mehrtens

432121

Infrastructure Servicing Report

63 Harewood Road, Oxford




Prepared for Geoff Mehrtens

432121

Quality Control Certificate

Eliot Sinclair & Partners Limited

eliotsinclair.co.nz

Action	Name	Signature	Date
Prepared by:	Cameron Mars 3 Waters Engineer BE(Hons) Environ CMEngNZ CPEng cameron.mars@eliotsinclair.co.nz		19 November 2021
Reviewed by:	Laura Dance Resource Management Planner BEM MURR NZPI Assoc. laura.dance@eliotsinclair.co.nz		24 November 2021
Directed and approved for release by:	Mark Allan Surveyor Managing Director BSurv NZCLS FS+SNZ RPSurv LCS		26 November 2021
Status:	Final		
Release date:	26 November 2021		
Reference no:	432121		
Distributed to:	Geoff Mehrtens Waimakariri District Council		

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Appendix A. Proposed Master Plan

Appendix B. WDC Services Maps

Appendix C. Correspondence

1. Introduction

Eliot Sinclair has been engaged by Geoff Mehrstens to address the servicing requirements for stormwater, wastewater and drinking water (three waters) for a residential rezoning submission for a 3.5 ha block of land, located 63 Harewood Road, Oxford (PT RS 1917 BLK VIII OXFORD SD); also referred to as 'the Site'.

This Infrastructure Servicing Report has been prepared in support of a submission as part of the Waimakariri District Plan review process to confirm the site is not constrained in respect of future residential development, should the rezoning submission to General Residential Zone be successful.

2. Site Description

2.1. General

The Site is located south of the Oxford township. It comprises a total area of around 3.5 hectares. The property is accessed from Harewood Road. The Site is bounded by Harewood Road to the south existing residential properties to the north, Oxford Hospital to the west, with rural land to the east, as shown in Figure 1. The Site lies between the Ashley River (north) and the Eyre and Waimakariri Rivers (south).



Figure 1. Site Location Plan

2.2. Topography

The Site is primary flat and has a very minor fall in elevation to the south (approx. 1 m).

2.3. Flooding

The Waimakariri District Council (WDC) flood hazard mapping for the Site shows several small areas of the property are considered to be at a 'low' hazard in a 200-year flood event. The majority of the property is determined to be a 'very low' hazard area. The WDC flood hazard map also indicates there may be an abandoned alluvial channel situated towards the southern end of the site. The area may have been altered at some point in the past (e.g. levelling as the result of ongoing farming operations).

WDC localised flood depth data suggests that in a 200-year event depths will range from ~0.10m to ~0.25m on the site, some of this may just be localised ponding.



Figure 2. 200 Year Localised Flood Depth Map (WDC, 2021)

Data is also available on the WDC flood hazard map for a 500-year flood event. The patterns observed at the property for the 500-year event do not differ drastically in comparison to a 200-year event.

2.4. Engineering Geology

The published geology for the area¹ indicates the site is underlain by brownish-grey river alluvium with varying percentages of gravel, sand, silt, and clay.

Surrounding well bore log data has been reviewed and provides the following underlying soils characteristics:

- Well L35/0886, located 420 m east of the site: 0.5 m depth of top soil overlying a 15 m depth of claybound gravel.

¹ GNS 250K geological units map New Zealand Geotechnical Database, retrieved November 2021.

- Well L35/00668, located 530 m east of the site: 0.35 m depth of top soil overlying a 1.5 m depth of sandy claybound gravel, overlying a 5 m depth of claybound gravel.
- Well L35/0372, located 280 m north of the site: 0.3 m depth of top soil overlying a 32. m depth of sandy gravels, overlying 7 m depth of clay washed gravels.
- Well L35/0010, located 580 m north of the site: Shingles down to 20 m.

The wells noted above range from approximately 300 m to 600 m distance from the Site and the actual soils characterises underlying the Site will not be known until onsite investigations have been completed.

2.5. Groundwater

The Site is located within the unconfined/semiunconfined aquifer zone and the direction of groundwater flow is towards the east (Canterbury Maps, 2021)

There are no community drinking water supply zones within 3 km of the Site and none directly downstream in the direction of groundwater flow, however there is insufficient information to confirm if there are any privately own drinking water supply wells in close proximity.

There is limited groundwater monitoring data. Canterbury Maps suggests that the depth to groundwater is likely to be on average 5 m below ground level (bgl). The following bores provide groundwater monitoring data.

- Well L35/0004, located 422 m north-north east of the site, suggests a groundwater fluctuation between 3.28 to 7.04 m bgl.
- Well L35/0024, located 420 m north west of the site, suggests a ground water fluctuation of 9.83 m to > 15 m below ground level.

It is not possible to confirm without onsite monitoring the precise groundwater fluctuation. However, based on the available information, the seasonal groundwater fluctuation is potentially between 3.5 m to 8 m bgl, with a possible average of 5 m.

3. Stormwater

3.1. Overview

There is no known or existing stormwater infrastructure within the vicinity of the Site and it appears that all surrounding properties may discharge stormwater runoff into land via soakage pits (this would need to be confirmed by WDC). Service maps of the area suggest that there are no open drains adjacent to the Site which stormwater runoff could be discharged into (e.g. discharge of stormwater to a surface water). Therefore, it is assumed that soakage into land (at this stage) is the only feasible option and that any soakage system will be designed to ensure at least a 1 m separation from the highest groundwater (e.g. 1 m of unsaturated soils) and will be sized based on the measured soils infiltration rate (to be confirmed during future site investigations).

There are two primary options for the conveyance, treatment and attenuation of stormwater discharges for the Site allotments and roading as follows.

1. Stormwater runoff from residential allotments and roading would be conveyed via a pipe network to a downstream Stormwater Management Area (SMA) which would comprise of treatment and attenuation facilities to ensure both the water quality and quantity do not have adverse environmental effects on groundwater, surface waters or surrounding properties. The SMA would discharge to soakage trenches.

2. All roof stormwater could discharge to privately owned onsite soakage pits. All road stormwater runoff would be conveyed to a downstream SMA.

There are alternative options for the treatment, attenuation and discharge of the Site stormwater (e.g. storage tanks, dual pipe network for the separate conveyance of roof and hardstand stormwater); however, it is considered that the two options presented are the most likely to be designed for.

3.2. Stormwater Treatment

Stormwater runoff resulting from the first 25 mm rainfall depth or 10 mm/hr rainfall intensity (known as the “first flush”) will be required to undergo treatment prior to discharging into land via a soakage system. The type of treatment device will be dependent on the outcome of the final site layout and onsite investigations, to define in more detail the site characteristics. However, there are a variety of treatment options available such as soakage basins, rain gardens, swales and proprietary treatment devices (e.g. hydrodynamic separators and filter units).

Assuming the site could have up to 70% impervious surface coverage (roof, driveways and roading etc.), the Christchurch City Council (CCC) Waterways Wetland and Drainage Guide (WWDG) recommends a composite first flush runoff coefficient of 0.63. Therefore, the 3.5 ha land area first flush volume requiring treatment will be approximately 438 m³ or a flow of 61 L/s. This figure assumes all roof and handstand areas will discharge stormwater to a centralised SMA. The treatment volume or flow requirement would be reduced if all roof areas discharge via private onsite soakage pits.

3.3. Stormwater Attenuation

Any proposed development will result in an increase in impervious area (hardstand) which will generate a higher volume and flow of stormwater runoff in comparison to the existing pasture. Therefore, the Site will be required to ensure that the post development runoff does not exceed that of the pre-development for all rain fall events up to and including the 2% Annual Exceedance Probability (AEP, 1 in 50 year) critical duration rainfall.

Table 1 provides the potential (estimated) 2% AEP attenuation volume requirement based on simplistic hand calculations. The calculations assume a pre-development runoff coefficient of 0.35 and a post development runoff coefficient of 0.65. Rainfall was taken from HIRDS inclusive of climate change (RCP8.5 for the period 2081-2100). The actual critical duration and attenuation volume would be confirmed during the detailed design.

Table 1. Approximate Site 2% AEP Attenuation Volume Requirement

2% AEP Duration (Hour)	Pre-Development (m³)	Post Development (m³)	Attenuation Volume (m³)
1	490	910	420
2	670	1244	574
6	1100	2043	943
12	1482	2753	1271
24	1948	3617	1670

Adequate attenuation storage can be achieved via the following methods.

- All allotment and roading stormwater runoff is discharged to a downstream SMA with attenuation facilities which would comprise of a combination of grassed/landscaped basins and soakage trenches.
- All roof stormwater could discharge to an onsite storage tank within each allotment, the tanks would have a restricted orifice outlet to limit the discharge rate to the downstream primary conveyance network (pipes). All road and the roof water would stormwater runoff would be conveyed to the downstream SMA.
- All roof stormwater could discharge to privately owned onsite soakage pits sized to detain and discharge the 2% AEP runoff. All road stormwater runoff would be conveyed to an attenuation basin.

There are other possible methods of providing attenuation and these would be reviewed during the conceptual design phase and discussed with WDC.

3.4. Primary Conveyance

Stormwater runoff from residential allotments and roading can be conveyed by swales, kerb and channel, sumps and pipe reticulation. the stormwater network would be required to have capacity to convey the 10% AEP (1 in 10 year) critical duration rainfall runoff and will need to adhere with the WDC Engineering Code of Practise. The minimum pipe size would be 225 mm diameter.

3.5. Secondary Conveyance

Stormwater runoff flow rates beyond the pipe or sump capacities will discharge into the road network and will be conveyed via the roads to the SMA.

The secondary conveyance network would be sized/designed in accordance with the WDC Engineering Code of Practise to convey the 2% AEP.

3.6. Flooding

The development layout and SMA will be designed to ensure that during extreme storm events such as the 200 year ARI that the flood water depth is not exacerbated within surrounding properties. WDC Flood Hazard maps suggest the flooding effects during extreme rainfall are not significant and that it will be possible to mitigate the effects of the Site on flooding by having a roading layout that will be conducive to the conveyance of flood waters. All building finished floor levels will be at least 400 mm above the 200 year flood water depth.

4. Wastewater

WDC have stated via email correspondence that they have not considered an extension of the wastewater network into the Site to service growth.

WDC do consider that a potentially viable long term solution would be to install a new wastewater pump station at the corner of High Street and Harewood Road to service the full development area and an associated rising main up High Street to the Wastewater Treatment Plant, as shown in Figure 3.

WDC have also noted that the site could be reticulated as pressure sewer but potentially as the site will be medium residential density the pressure sewer would be a departure from their standard approach.

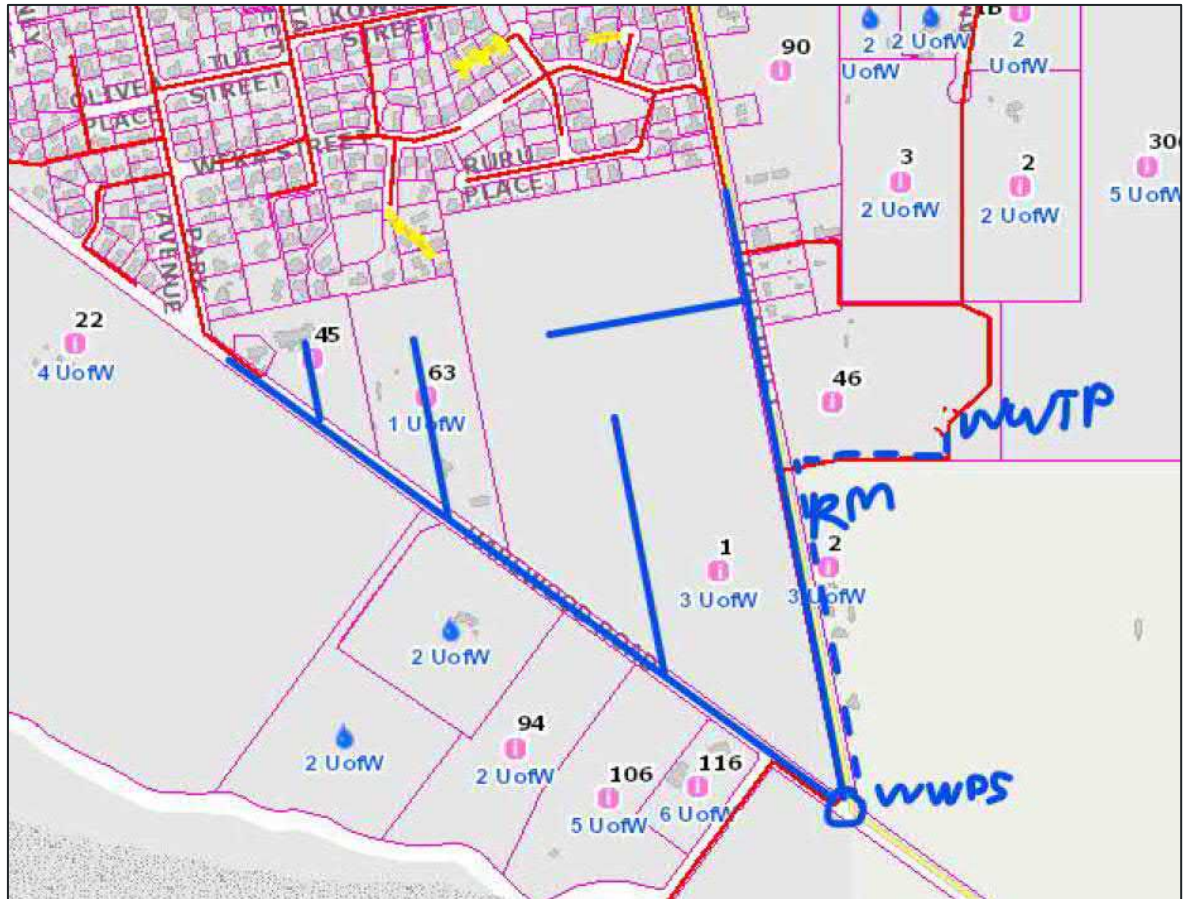


Figure 3. Possible Long Term New Wastewater Infrastructure to Service the Site (WDC, 2021)

WDC also consider there would also be several short term solutions that could be implemented with a temporary pump station at the development entrance on Harewood Road which would pump to the last manhole on Park Avenue or directly to the Wastewater Treatment Plant as shown in Figure 4.

Refer to Appendix C which provides the WDC correspondence.



Figure 4. Possible Temporary Wastewater Reticulation Options (WDC, 2021)

WDC would need to run through their model to confirm pipe sizing and available capacity for the short term solutions. They would also need to review the capacity of the WWTP and whether Council would be comfortable allowing additional demand into the WWTP given the current performance of the system, which appears to be related to ingress and infiltration of stormwater into the network during rainfall. WDC noted that if they manage to solve the ingress and infiltration issues in Oxford, there would be sufficient capacity.

It is considered that should the WWTP not be considered to have sufficient capacity, that design options are available, as follows:

- Installation of an onsite community wastewater scheme which would comprise of internal reticulation discharging to an onsite treatment plant and land disposal field. This option would require further discussions with both WDC and Environment Canterbury (ECan).
- The internal allotments could discharge wastewater via a Septic Tank Effluent Pumping (STEP) network. Dwellings would discharge influent to an onsite septic tank for primary treatment and storage, from where the wastewater is pumped out into a pressure sewer network. The STEP system has the potential to reduce downstream wastewater loading as solids are removed and the STEP pumps could be set to discharge during off peak periods.
- Wastewater could be reticulated via a Local Pressure Sewer (LPS) network. Dwellings would discharge effluent to an onsite pump chamber which has approximately 24 to 48 hours of storage capacity. The pump station discharges to a downstream pressure sewer network. The LPS pump stations can be fitted with an IOTA One Box Control unit which allows the pump discharge times to be set via telemetry to discharge during off peak periods.

Based on the information supplied by WDC it is considered that wastewater does not represent a constraint to the proposed General Residential Zone. WDC has noted there could be a capacity

constraint at the WWTP (this would need to be confirmed), however it is also considered that there are potential engineering solutions as alternatives, should this be the case.

5. Drinking Water

The site falls within the Oxford Urban Water Supply Scheme and WDC has confirmed via email correspondence that there should be no major barriers for the supply of potable and firefighting water demand. The WDC 50 year growth modelling identified a 150 mm diameter ring main would be required from Park Ave, through to High Street to service the wider development area. Additional internal upgrades were also required throughout the network in response to growth across the full scheme.

Refer to Appendix C which provides the WDC correspondence.

WDC have stated that they expect as a minimum any development of the Site would need to upgrade the 150 mm diameter main from the intersection of Harewood Road and Park Avenue to the development which is a distance of approximately 300 m.

Based on the information supplied by WDC it is considered that water supply does not represent a constraint to the proposed General Residential Zone.

6. Conclusion

It is concluded that the site at 63 Harewood Road, Oxford is suitable, from a servicing perspective, for residential rezoning. The site can be provided with necessary stormwater, wastewater and drinking water services and that there are no constraints to the proposed submission for General Residential Zone.

Disclaimer

This report has been prepared by Eliot Sinclair & Partners Limited ("Eliot Sinclair") only for the intended purpose as technical supporting documentation for a district plan review submission.

The report is based on:

- Review of Canterbury Maps (2021).
- Review of WDC Services Maps.
- Correspondence with WDC (2021).

Where data supplied by Geoff Mehrtens or other external sources, including previous site investigation reports, have been relied upon, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Eliot Sinclair for incomplete or inaccurate data supplied by other parties.

Whilst every care and reasonable effort has been taken during our investigation and interpretation of the site characteristics and services to ensure that the conclusions drawn, and the opinions and recommendations expressed are correct at the time of reporting, Eliot Sinclair has not performed an assessment of all possible conditions or circumstances that may exist at the site. Variations in conditions may occur between investigatory locations and there may be conditions such as the ability of the site to discharge stormwater etc. that were not detected by the scope of the investigation that was carried out or have been covered over or obscured over time. Eliot Sinclair does not provide any warranty, either express or implied, that all conditions will conform exactly to the assessments contained in this report.

The exposure of conditions or materials that vary from those described in this report may require a review of our recommendations. Eliot Sinclair should be contacted to confirm the validity of this report should any of these occur.

This report has been prepared for the benefit of Geoff Mehrtens for the purposes as stated above. No liability is accepted by Eliot Sinclair or any of their employees with respect to the use of this report, in whole or in part, for any other purpose or by any other party.

Appendix A. Proposed Master Plan



Notes:

Rev.	Description	Drawn	Date
-	-	-	-

	Name	Date	Surveyed:	Survey Date:
Designed	-	-	-	-
Drawn	-	-	Coord System:	
Drg. Chk	-	-	-	
Proj. Mgt	-	-	Calibration:-	
Design Review		Date	Origin of Levels:	
-		-	-	
Approved		Date	-	
-		-	Datum: -	

Client

Project Title	
---------------	--

DP SUBMISSION
63 HAREWOOD ROAD

Drawing Title	
---------------	--

SUBDIVISION MASTERPLAN
LOT LAYOUT

Scales

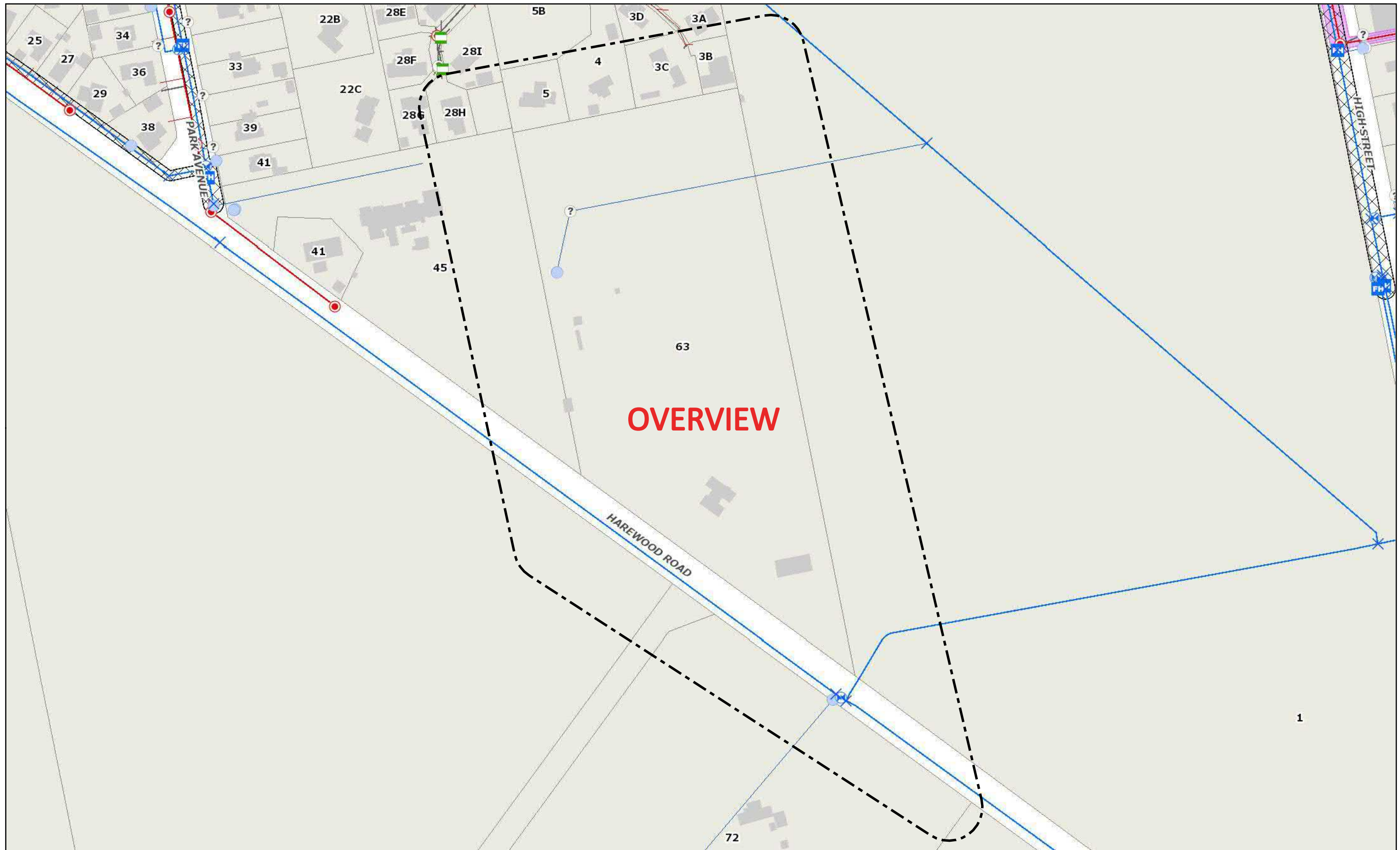
1:1250 [A3]

Project No.	Set No.	Sht No.	Rev.
432121	L1	1	A

**eliot
sinclair**

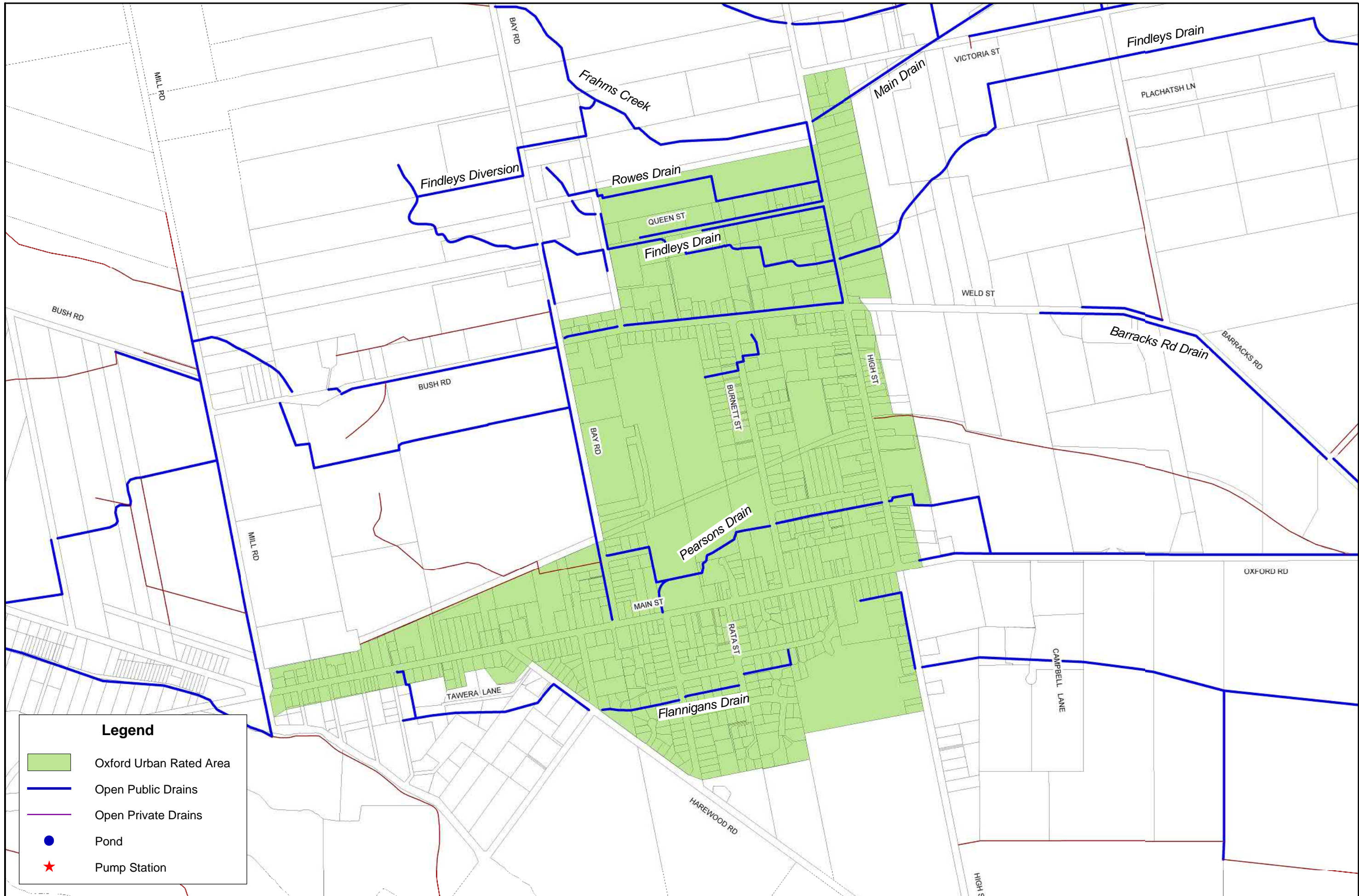
Preliminary

Appendix B. WDC Services Maps



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SN: 9883952
JN: 1936526
Date: 17/11/2021



Legend

- Oxford Urban Rated Area
- Open Public Drains
- Open Private Drains
- Pond
- Pump Station

Appendix C. Correspondence

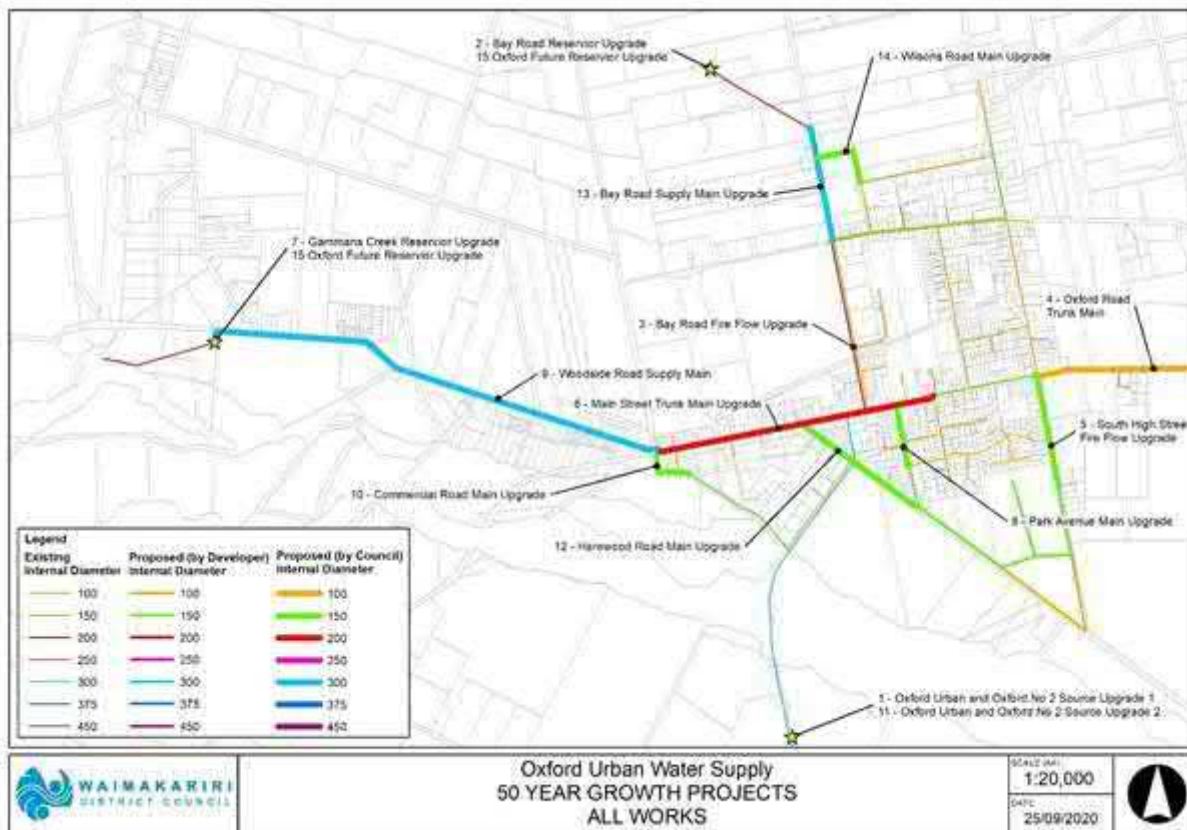
Cameron Mars

From: Network Planning <networkplanning@wmk.govt.nz>
Sent: Tuesday, 23 November 2021 11:36 a.m.
To: Colin Roxburgh; Network Planning
Cc: Robert Frizzell; Subdivision Eng
Subject: RE: [#432121] 63 Harewood Road Servicing Requirements

Hi Colin

Water Supply

In terms of the Water Supply there should be no major barriers. The 50 year growth modelling work identified a 150mm dia ringmain would be required from Park Ave through to High Street to service the wider development area. Additional internal upgrades were also required throughout the network in response to growth across the full scheme (see plan below):



I would expect that as a minimum they would be up for a 150mm dia main from the intersection of Harewood Road/Park Ave to the development. However without running it through the model its difficult to determine which (if any) of the other internal upgrades it may also trigger.

Please let us know if you'd like us to run that through the model?

Based on the required headworks upgrades it doesn't appear this would trigger any additional upgrades to reservoirs or pumps etc.

Wastewater

Wastewater would require a bit of extra work. To my knowledge we have never considered an extension of the wastewater system into this area to service growth.

I can see a long term solution being a new WWPS at the corner of High Street and Harewood Road to service the full development area and an associated rising main up High Street to the WWTP.

So something a little like this:



You could alternatively do it as pressure sewer but if we're talking medium density residential development that would be a departure from our standard approach.

There would also be a couple of potential short term solutions that could be implemented with a temporary pumpstation at the development entrance on Harewood Road pumping to either

1. The last manhole on Park Ave
2. Directly to the WWTP



Needless to say all of this would need running through the model to confirm pipe sizing and available capacity (for the short term solutions).

We would also need to make some calls around the capacity of the WWTP and whether we would be comfortable allowing additional demand into the WWTP given the current performance of the system. Bearing in mind of course if we ever managed to solve the I&I issues in Oxford there would be plenty of spare capacity.

Please let us know if you'd like us to run any of those scenarios through the model?

Cheers

Chris Bacon | Network Planning Team Leader

Project Delivery Unit

Phone: 0800 965 468 (0800 WMK GOV)

Mobile: +6421480925



From: Colin Roxburgh <colin.roxburgh@wmk.govt.nz>

Sent: Tuesday, 23 November 2021 10:20 AM

To: Network Planning <networkplanning@wmk.govt.nz>

Cc: Robert Frizzell <robert.frizzell@wmk.govt.nz>; Subdivision Eng <subdivisioneng@wmk.govt.nz>

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Cheers,

Colin Roxburgh | Water Asset Manager

3 Waters

Phone: 0800 965 468 (0800 WMK GOV)

Mobile: +6421481873

From: Subdivision Eng <subdivisioneng@wmk.govt.nz>
Sent: Tuesday, 23 November 2021 10:12 AM
To: Colin Roxburgh <colin.roxburgh@wmk.govt.nz>
Subject: FW: [#432121] 63 Harewood Road Servicing Requirements

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Can you have a look at the email trail below and provide some feedback. There is not much information to go on unfortunately.

Cheers

Deb

Debbie Wilson | Land Development Officer

Project Delivery Unit

Phone: 0800 965 468 (0800 WMK GOV)

Mobile: +64273222338

From: Cameron Mars <cameron.mars@eliotsinclair.co.nz>
Sent: Wednesday, 17 November 2021 11:33 AM
To: Subdivision Eng <subdivisioneng@wmk.govt.nz>
Subject: FW: [#432121] 63 Harewood Road Servicing Requirements

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Hi Debbie,

Our client has just been asking about the site services, would you be able to provide an update or timeline when this information could be provided?

Thanks

Cameron Mars

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To: Subdivision Eng <subdivisioneng@wmk.govt.nz>

Subject: RE: [#432121] 63 Harewood Road Servicing Requirements

Hi Debbie,

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Just as a quick note, we can ignore the neighbouring 21 ha land area and we are now only interested in the 63 Harewood Road Site.

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Please just sing out if your require any additional information.

Thanks

From: Subdivision Eng <subdivisioneng@wmk.govt.nz>
Sent: Monday, 1 November 2021 2:04 p.m.
To: Cameron Mars <cameron.mars@eliotsinclair.co.nz>
Subject: RE: [#432121] 63 Harewood Road Servicing Requirements

[EXTERNAL EMAIL]

Hi Cameron

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Could you please advise the number of lots serviced as a starting point to assess the impact that this would have on the network, so that we can check the capacity of the scheme. Also whether the intention is having pressure sewer or gravity, if your client has given this any thought.

Kind regards

Debbie Wilson | Land Development Officer

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Phone: 0800 965 468 (0800 WMK GOV)

Mobile: +64273222338



From: Colin Roxburgh <colin.roxburgh@wmk.govt.nz>
Sent: Thursday, 21 October 2021 11:09 AM
To: Subdivision Eng <subdivisioneng@wmk.govt.nz>
Subject: RE: [#432121] 63 Harewood Road Servicing Requirements

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Phone: 0800 965 468 (0800 WMK GOV)

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Further to the above, at this stage we are only looking at 63 Harewood Road, but there is the potential the neighbouring 21 ha site to the east (RS 15458) could also prepare a joint application with our client. If this was to occur could you also provide information on whether the existing network also has capacity and any specific requirements for this additional block of land.



Kind Regards

Cameron Mars

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BE(Hons) Environ CMEngNZ IntPE(NZ) CPEng



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11th - 13th November 2021, Naval Point Lyttelton. [Click here to find out more.](#)

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Cc: Subdivision Eng
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Hi Colin as per our discussion this application would fit with a pressure sewer system , main down Harewood Rd along High St and either straight into the pump station at the plant or into the Manhole on High St , there may be some benefit to think about where we connect into the plant ie Pump station or straight into the screen channel so that any potential pump station upgrade is avoided . cheers Rob

Robert Frizzell | Wastewater Engineer

3 Waters

Phone: 0800 965 468 (0800 WMK GOV)

Mobile: +6421480826



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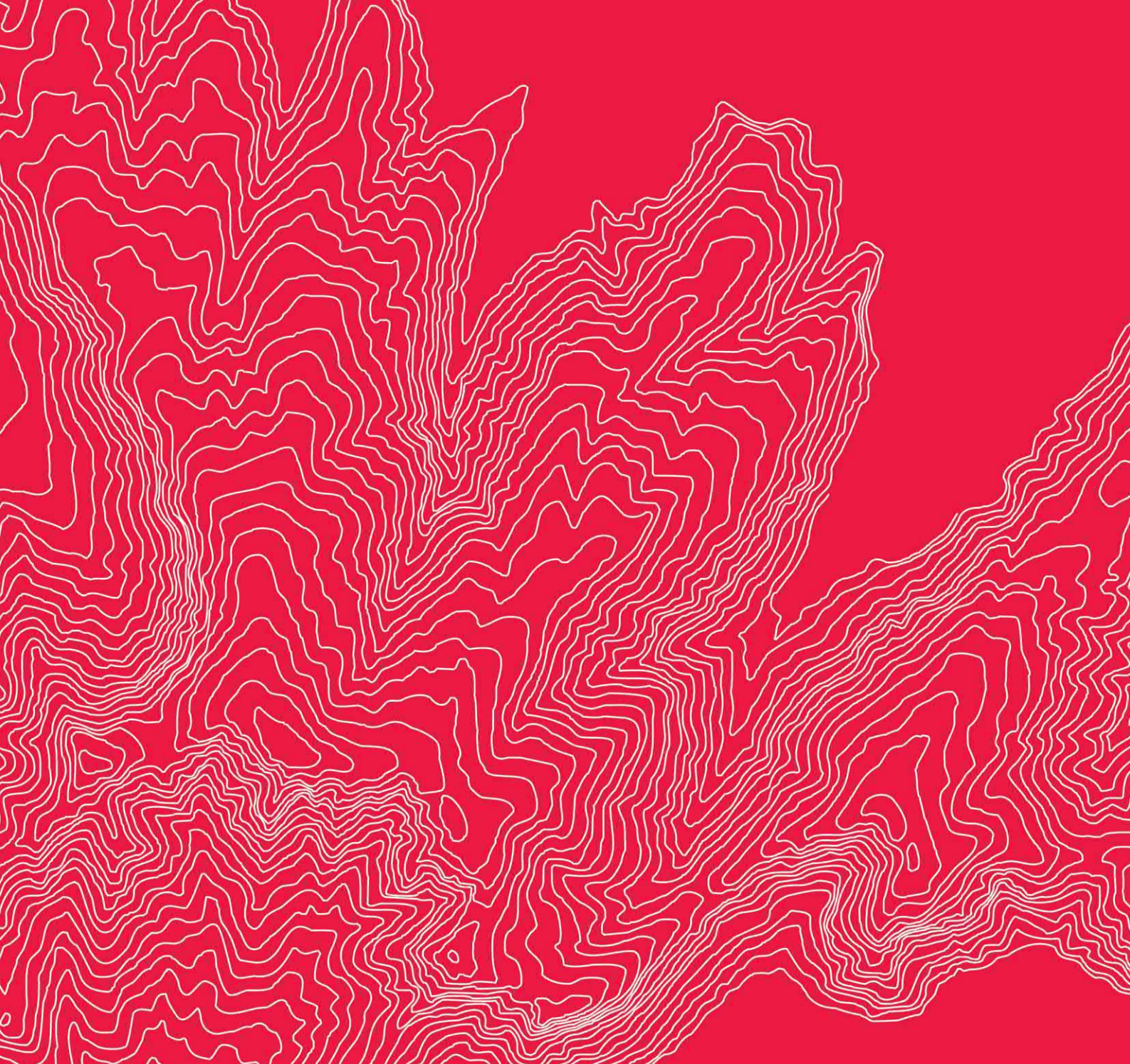
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Appendix D. Preliminary Site Investigation



Preliminary Site Investigation (PSI)

**eliot
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63 Harewood Road, Oxford

Prepared for Geoff Mehrtens

432121

Preliminary Site Investigation (PSI)

63 Harewood Road, Oxford




Prepared for Geoff Mehrtens

432121

Quality Control Certificate

Eliot Sinclair & Partners Limited

eliotsinclair.co.nz

Action	Name	Signature	Date
Prepared by:	Will Keay Geotechnical Engineering Technician MSc (Geography) CAPM		22 November 2021
Reviewed by:	Kristel Franklin Engineering Geologist MSc (HAZM) BSc (Geology) CMEngNZ PEngGeol SQEP		22 November 2021
Directed and approved for release by:	Kristel Franklin Engineering Geologist MSc (HAZM) BSc (Geology) CMEngNZ PEngGeol SQEP		22 November 2021
Status:	Final		
Release date:	22 November 2021		
Reference no:	432121		
Distributed to:	Geoff Mehrtens		

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Appendix A. Site Photographs (10 November 2021)

Appendix B. Historical Aerial Images

Executive Summary

Site Address	63 Harewood Road, Oxford
Legal Description	Pt RS 1917
Site Area	~3.5 hectares
Local Authority	Waimakariri District Council
Owner	Claudia Elizabeth Mehrrens
Proposed Activity	Rezoning from rural to residential
Historical and current land uses	Rural residential and rural
Current Zoning	Rural Zone
Proposed Zoning	General Residential Zone
Adopted NESCS land use scenario	Residential (10% produce)
HAIL activities identified during site history review, site inspection and owner interview	No HAIL activities identified
Conclusions and Recommendations	<ul style="list-style-type: none">■ No HAIL activities have been identified at the site.■ No further contamination investigation or assessment is currently required under the NESCS for the proposed change of use from rural to residential use.■ It is recommended that if any unusual or contaminated materials are encountered during any future site works within the site that the requirements of the Accidental Discovery Protocol provided in this report are followed. This can be addressed at future development stages as required.

1. Introduction

Eliot Sinclair & Partners Ltd was engaged by Geoff Mehrtens to undertake a Preliminary Site Investigation (PSI) at 63 Harewood Road, Oxford.

The purpose of the PSI is to support a rezoning submission to the Waimakariri District Plan.

A Natural Hazards Risk Assessment¹ of the site has also been prepared as part of the technical supporting documentation for the proposed rezoning.

1.1. Investigation Objectives and Scope

The objective of the investigation was to prepare a PSI in general accordance with MfE's Contaminated Land Management Guidelines (CLMG) No. 1 and 5², and the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, Regulations 2011 (NESCO).

The scope comprises:

- Reviewing Environment Canterbury's (ECan) Listed Land Use Register (LLUR) and resource consent database.
- Reviewing historical and recent aerial images of the area taken between 1940 and 2019.
- Reviewing information from the Waimakariri District Council (WDC) property file.
- Conducting a site walk over.
- Compilation of the findings generally in accordance with the NESCO and MfE's Contaminated Land Management Guidelines 1 and 5.

1.2. Site Identification

The site is located to the south of Oxford township. It comprises a total area of around 3.5 hectares. The property is accessed from Harewood Road. The site is bounded by rural properties to the south, east and west and residential properties to the north. Refer to Figure 1. The site is located approximately 450m north of the Eyre River.

Site identification details are provided in Table 1.

Table 1: Site identification

Details	
Street address	63 Harewood Road, Oxford
Legal description	PT RS 1917 BLK VIII Oxford SD
Area	~3.5 hectares
Current site plan	Refer to Figure 1
Locality map	Refer to Figure 2

¹ Natural Hazards Risk Assessment for 63 Harewood Road, Oxford prepared by Eliot Sinclair, ref 432121.

² Ministry for the Environment (MfE) 2011. Contaminated Land Management Guidelines No. 1. Reporting on Contaminated Sites in New Zealand. No. 5: Site Investigation and Analysis of Soils (Revised 2021).



Figure 1: Aerial imagery retrieved from Canterbury Maps in November 2021.

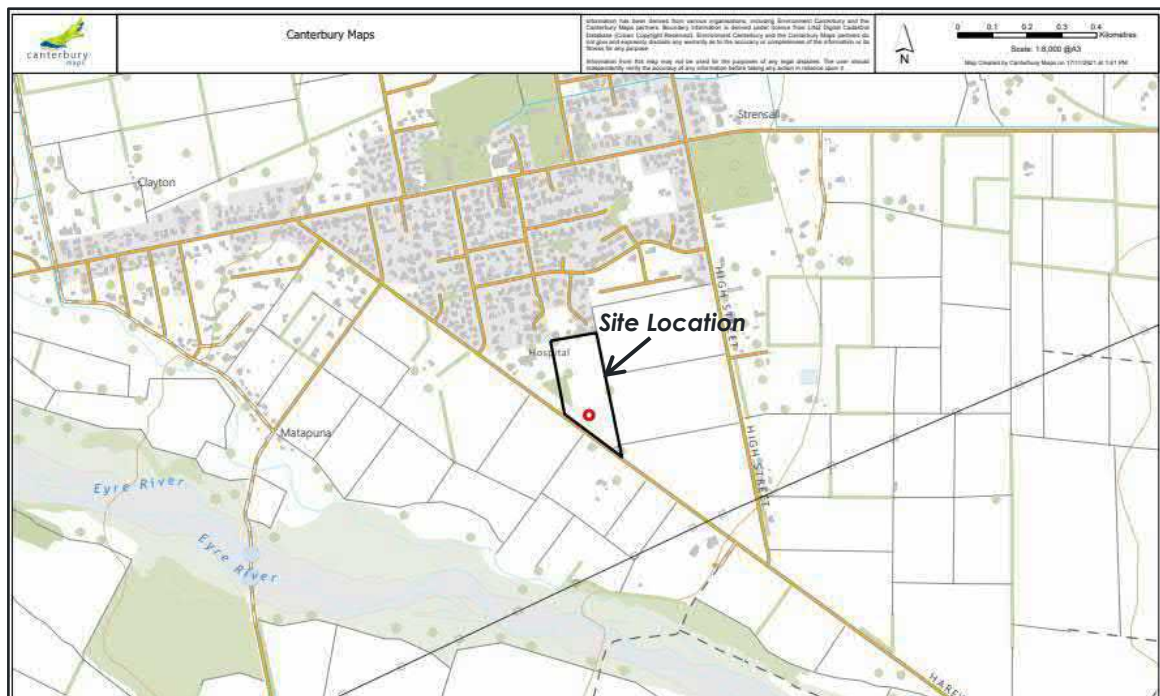


Figure 2: Locality Map. Topographic basemap sourced from Canterbury Maps in November 2021.

1.3. Proposed Site Use

It is proposed to rezone the land from General Rural zone to General Residential zone.

2. Site Description

2.1. Site Condition and Surrounding Environment

A residential dwelling is located near the southern end of the site off Harewood Road with an associated outbuilding/shed located to the southeast (Figure 1). The areas surrounding the property are fenced.

The environmental setting of the site is summarised in Table 2.

Table 2: Environmental setting

63 Harewood Road, Oxford	
Current land use	Rural
Neighbouring land use	Rural and Residential
District plan zoning	General Rural Zone
Adopted NESCS land use scenario	Residential (10% produce)
Geology	Brownish-grey River Alluvium (Q2a)
Surface water	No surface waterbodies observed within the property boundary.
Groundwater	~6-10m depth to groundwater interpreted from information available from Canterbury Maps
Topography	Flat

2.2. Site Inspection

The site was visited on 10th November 2021 by Eliot Sinclair Environmental Scientists. The following was noted:

- There is one modern residential dwelling and a modern barn/shed containing general farm equipment.
- There are two wooden sheds/shelters and one large (~40ft) container on the western side of the site (as visible in aerial images).
- There is a water tank on the western boundary.
- A horse training area was visible in front of the barn/shed area at the main entrance to the site.
- No evidence of burn piles or other contaminating activities was observed during the visit.

Representative photographs taken during the site visit are attached in Appendix A.

2.3. Owner interview

The property owner was not available for interview at the time of the walkover inspection.

3. Historical Site Use

3.1. Review of Waimakariri District Council (WDC) Information

The WDC property file was reviewed in November 2021. The property file contained consents, plans and inspection files for the construction of the new residential dwelling and outbuilding (files dated 2017-2018).

No HAIL activities were identified.

3.2. Review of Environment Canterbury information

3.2.1. Listed Land Use Register (LLUR)

The LLUR is a database containing records of contaminated, potentially contaminated and remediated (previously contaminated) sites in Canterbury. It is not an exhaustive database, i.e., an unregistered site does not confirm that there have never been any HAIL activities undertaken on the site in the past.

The property is not listed on the LLUR.

3.2.2. Resource consents database

The site has an inactive resource consent allowing for treated wastewater discharges from the residential dwelling.

No HAIL activities were identified.

3.3. Review of aerial photographs

Aerial images from the ECan GIS were reviewed to identify previous land-uses and potential HAIL activities between 1940 and 2019. The reviewed images are attached in Appendix B and the observations are summarised in Table 3.

Table 3: Reviewed aerial images (source: ECan GIS).

Aerial date	Land use, site features, identified HAIL area(s)
1940-1944	One large block of farmland. No structures visible.
1955-1959	No significant change. One additional fence added to northern end of property.
1960-1964	No significant change.
1965-1969	No significant change. Water tank visible on western boundary and planted hedgerow
1975-1979	No significant change. Small shed visible at western end of the hedgerow.
1980-1984	No significant change.
1990-1994	Structure on western boundary constructed.
1995-1999	No significant change.
2010-2014	No significant change. Additional fencing added
2015-2019	Container present, residential dwelling and associated outbuildings constructed, entrance constructed off Harewood Road, horse training area visible. Potential burn area visible in aerial, but not observed during walkover – organic stockpile only.

4. Risk Assessment

4.1. Conceptual Site Model

A conceptual site model helps to identify whether or not a complete exposure pathway exists. An exposure pathway must include a contaminant source, a transport mechanism and a receptor. If one of these components does not exist, or can be removed, then the exposure pathway is incomplete. If the exposure pathway is incomplete, then there is little risk to human health at the specified location.

A desktop review of the site history and walkover revealed that due to the absence of a contaminant source the exposure pathway is incomplete, and no further assessment required.

For the proposed land use change, we assess it is highly unlikely there is a risk to human health from soil contaminants.

4.2. Accidental Discovery Protocol

If any of the following materials are encountered during any future earthworks, then we recommend the actions be followed.

- Stained or odorous soil (e.g. black, green, grey; or smells of rotting organic material, petroleum hydrocarbons or solvents)
- Slag, ash, charcoal
- Rubbish comprising putrescible waste, or hardfill, or treated timber, or agrichemicals, etc
- Potential asbestos containing-material (for example fragments from cement fibre sheets, or loose fibres from insulation, etc.)

Recommend actions:

- Excavation and earthworks cease, the site secured to stop people entering the area where potential contamination was encountered, and then:
- Contact a contaminated land specialist for further advice. If required, **Eliot Sinclair (03) 379 4014** can inspect the area, assess the material determine if it is contaminated or hazardous, and then determine a practical course of action.

This report does not relieve contractors and landowners of their responsibilities under the Health and Safety at Work Act 2015.

5. Conclusion and Recommendations

This PSI is based on a review of Council records, Environment Canterbury records, historical aerial images, and Eliot Sinclair's site walkover inspection on 10 November 2021.

- No HAIL activities have been identified within the site.
- No further contamination investigation or assessment is currently required under the NESCS for the proposed change of use from rural to residential use.
- It is recommended that if any unusual or contaminated materials are encountered during any future site works within the site that the requirements of the Accidental Discovery Protocol provided in this report are followed. This can be addressed at future development as required.

6. Report Limitations

This report has been prepared by Eliot Sinclair & Partners Limited ("Eliot Sinclair") only for the intended purpose as a Preliminary Site Investigation report to support a zone change application.

The report is based on:

- Information shown on ECan's LLUR and resource consent database.
- Historical aerial imagery source from Canterbury Maps database.
- Information from the WDC property file.
- Information from the site owner (Geoff Mehrtens).
- Eliot Sinclair's site walkover on 20 November 2021.
- NESCS and MfE's CLMG no.1 and no.5.

It is possible these information sources may not provide a complete or accurate assessment of the entire site. As a result, Eliot Sinclair provides this information on the basis that it does not guarantee that the information is complete or without error and accepts no liability for any inaccuracy in, or omission from, this information.

All reasonable effort has been made to ensure that the conclusions drawn in this report are correct at the time of reporting. However, the activities described on the HAIL may change in the future as knowledge about potentially hazardous activities develops over time.

It is possible there may be unidentified subsoil conditions that are not obvious from the information obtained by our site inspection, and that differ from the conclusions of this report. Should unusual geotechnical conditions be encountered during future earthworks such as historical uncontrolled fill materials, then Eliot Sinclair should be advised. They can review any new information and to advise if the recommendations of this report are still valid.

This report has been prepared for the benefit of Geoff Mehrtens and the Waimakariri District Council. No liability is accepted by this company or any employee of this company with respect to the use of this report by any other party or for any other purpose other than what is stated in our scope of work.

This report does not relieve contractors of their responsibilities under the Health and Safety at Work Act 2015. Site conditions relevant to construction works should be assessed by contractors who can make their own interpretation of the factual data provided. They should perform any additional tests as necessary for their own purposes, at their own expense.

7. References

Environment Canterbury. (2021, July 21). *Canterbury Maps Viewer*. Retrieved from <https://mapviewer.canterburymaps.govt.nz/>

Environment Canterbury. (2021, July 20). *Listed Land Use Register (LLUR)*. Retrieved from <https://llur.ecan.govt.nz/home>

Ministry for the Environment. (2021). *Contaminated land management guidelines No 5: Site investigation and analysis of soils (Revised 2021)*. Wellington: Ministry for the Environment.

Ministry for the Environment. (2021). *Contaminated land management guidelines No. 1: Reporting on contaminated sites in New Zealand (Revised 2021)*. Wellington: Ministry for the Environment.

Appendix A. Site Photographs (10 November 2021)



A) Image of the site looking north/northwest from the edge of the horse training area.



B) Looking south/southeast towards the residential dwelling and barn/shed. The horse training area can be seen to the left of the image.



C) Looking south/southwest from the rear of the property. The red container is visible under the trees.



D) Looking down the western boundary. The water tank can be seen in the foreground.



E) Shed on the western boundary of the property.

Appendix B. Historical Aerial Images

Historic Aerials for 63 Harewood Road, Oxford

#432121

1940-1944:



1955-1959:



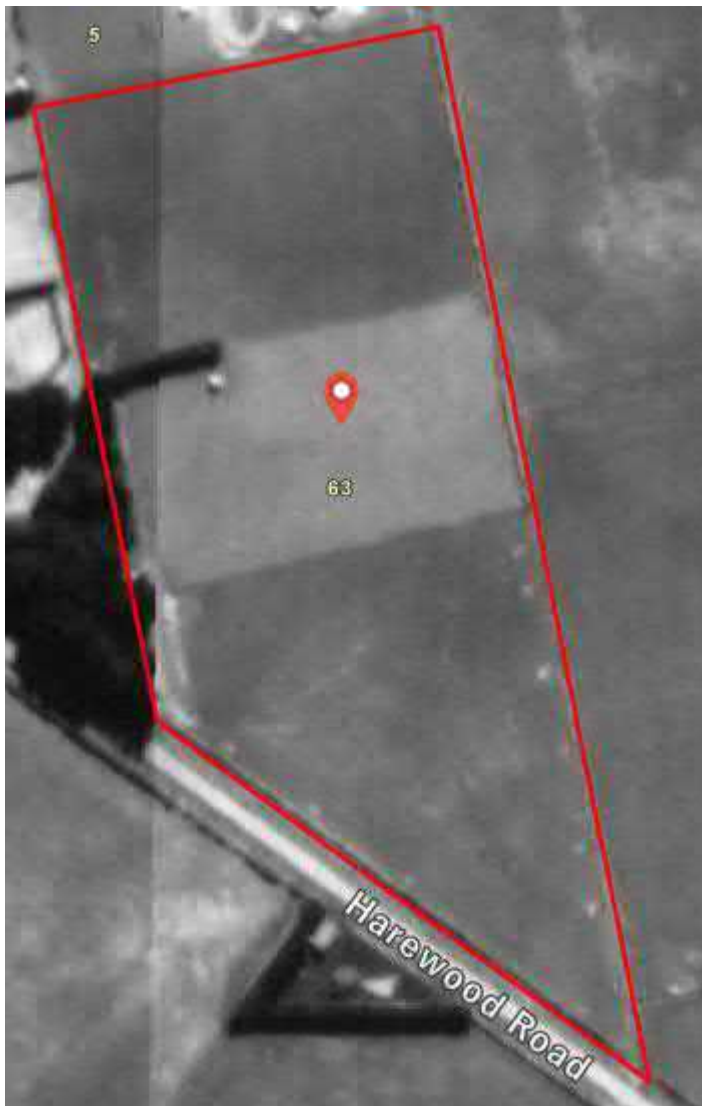
1965-1969:



1975-1979:



1980-1984:



1990-1994:



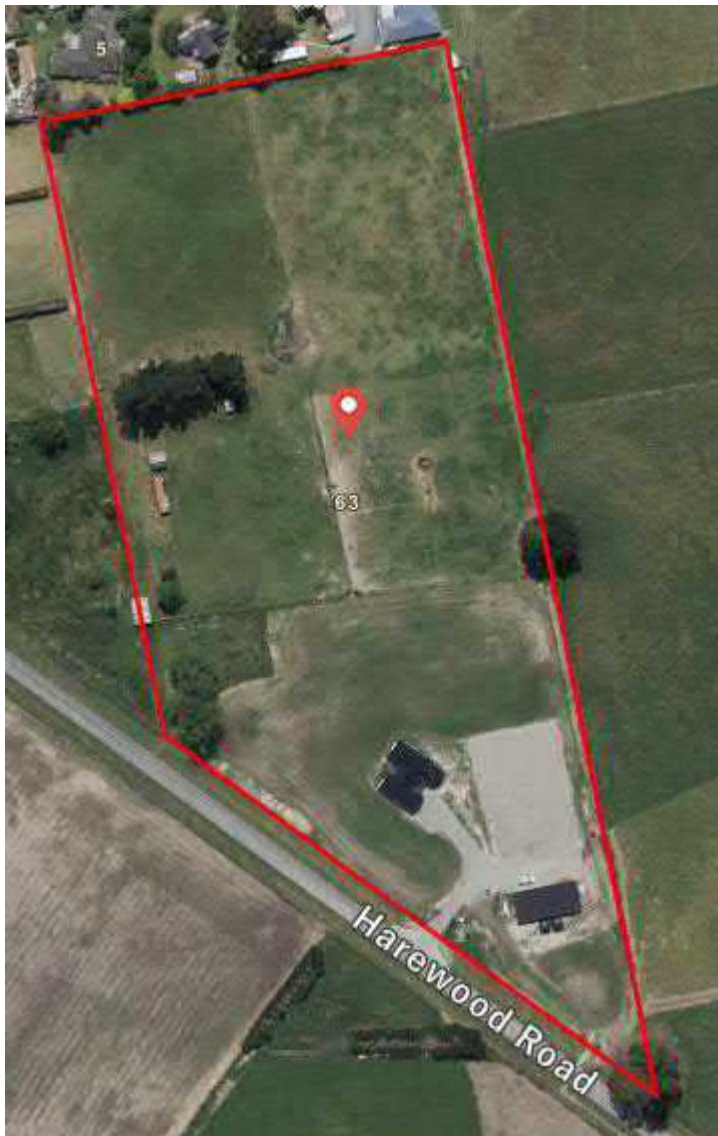
1995-1999:



2010-2014:



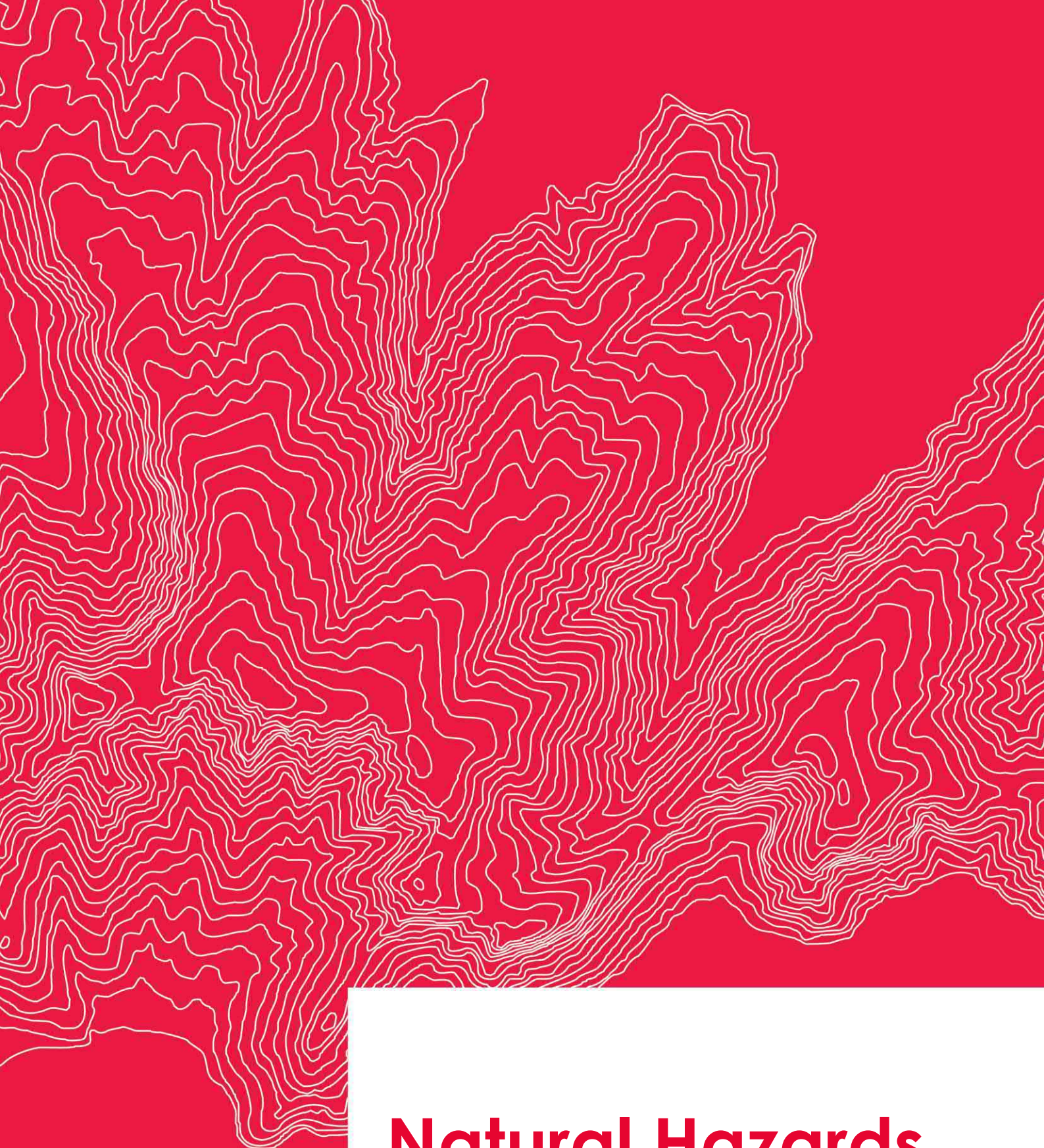
2015-2019:



Latest:



Appendix E. Natural Hazards Assessment



Natural Hazards Risk Assessment

**eliot
sinclair**

63 Harewood Road, Oxford

Prepared for Geoff Mehrtens

432121

Natural Hazards Risk Assessment

63 Harewood Road, Oxford

Prepared for Geoff Mehrtens

432121

Quality Control Certificate

Eliot Sinclair & Partners Limited

eliotsinclair.co.nz

Action	Name	Signature	Date
Prepared by:	Will Keay Geotechnical Engineering Technician MSc (Geography) CAPM		22 November 2021
Directed and approved for release by:	Kristel Franklin Engineering Geologist MSc (HAZM) BSc (Geology) CMEngNZ PEngGeol SQEP		22 November 2021
Status:	Final		
Release date:	22 November 2021		
Reference no:	432121		
Distributed to:	Geoff Mehrtens		

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Appendix A. Flood Hazard Maps

Appendix B. Natural Hazard Risk Assessment - Background

1. Introduction

Eliot Sinclair & Partners Ltd was engaged by Geoff Mehrtens to assess the risk of natural hazards at 63 Harewood Road, Oxford [PT RS 1917 BLK VIII OXFORD SD] (the Site) and to report on the geotechnical suitability of the land for the proposed re zoning of the land to General Residential Zone purposes.

The report is intended to be used as technical supporting documentation to support Mr Mehrtens submission as part of the Waimakariri District Plan review process to confirm the site is not constrained in respect of future residential development should the rezoning submission to General Residential Zone be successful.

We have also undertaken a PSI¹ at the site to assess potential contaminating land activities associated with the proposed rural residential zoning.

2. Reporting Requirements

The scope of the report is governed by the need to address the relevant requirements of the following documents:

- Ministry of Business, Innovation and Employment (MBIE), 2012: Repairing and Rebuilding Houses Affected by the Canterbury Earthquakes – Part D: Subdivisions²
- EQC / MBIE / Ministry for the Environment (MfE), 2017: Planning and Engineering Guidance for Potentially Liquefaction Prone Land³
- MfE, 2017: New matters to consider for resource consents and designations - Fact Sheet 10 re natural hazards⁴
- Waimakariri District Plan Rule 27⁵: Natural Hazards.
- Waimakariri District Council⁶: Engineering Code of Practice.

¹ Preliminary Site Investigation (PSI) for 63 Harewood Road, Oxford prepared by Eliot Sinclair, ref 432121

² MBIE <https://www.building.govt.nz/building-code-compliance/canterbury-rebuild/repairing-and-rebuilding-houses-affected-by-the-canterbury-earthquakes/>

³ EQC / MBIE / MfE <https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/planning-engineering-liquefaction-land/>

⁴ MfE <https://www.mfe.govt.nz/publications/rma/resource-legislation-amendments-2017-fact-sheet-series>

⁵ Waimakariri District Council Plan – Retrieved in November 2021 from <https://waimakariri.isoplan.co.nz/eplan/#Rules/0/35/1/0>

⁶ Waimakariri District Council Engineering Code of Practice – Retrieved in November 2021 from <https://www.waimakariri.govt.nz/building-services/engineering-code-of-practice>

3. Scope of Work

The scope of work for this assessment comprised:

- Review available data from the New Zealand Geotechnical Database⁷ (NZGD), Canterbury Maps⁸ and the Institute of Geological & Nuclear Sciences (GNS) Active Faults Database⁹.
- A walkover inspection of the site.
- Assess the risk of material damage from potential natural hazards.
- Prepare a Natural Hazards Risk Assessment report to comment on the hazards using Section 106 of the Resource Management Act 1991 as a guide to summarise the general geotechnical conditions encountered across the site and assess the suitability of the re-zoning from a natural hazard perspective.

4. Proposed Activity

It is proposed to rezone the land from General Rural Zone to proposed General Residential Zone.

5. Site Description

5.1. General

The site is located south of the Oxford township. It comprises a total area of around 3.5 hectares. The property is accessed from Harewood Road. The site is bounded by Harewood Road to the south and existing rural-residential property to the north and west, with agricultural paddocks to the east (Figure 1). The site lies between the Ashley River (north) and the Eyre and Waimakariri Rivers (south).

5.2. Engineering Geology

The published geology for the area¹⁰ indicates the site is underlain by brownish-grey river alluvium with varying percentages of gravel, sand, silt, and clay (Q2a).

The GNS Active Fault Database¹¹ indicates the Ashley Gorge Fault is located ~4 kilometres from the site at its nearest point.

5.1. Land Classification

The MBIE residential technical category of the site is recorded as "N/A Rural & Unmapped". Properties in rural areas or beyond the extent of land damage mapping, and properties in parts of the Port Hills and Banks Peninsula have not been given a Technical Category.

The ECan liquefaction hazards mapping¹² describes the site to have low liquefaction susceptibility.

⁷ New Zealand Geotechnical Database (NZGD) - <https://www.nzgd.org.nz/>

⁸ Canterbury Maps - <https://mapviewer.canterburymaps.govt.nz>

⁹ GNS Active Faults Database - <http://maps.gns.cri.nz/website/af/viewer.htm>

¹⁰ GNS 250K geological units map New Zealand Geotechnical Database, retrieved November 2021.

¹¹ Geological and Nuclear Sciences (2004). Active Faults Database. Retrieved November 2021 from <http://maps.gns.cri.nz/website/af/viewer.htm>

¹² <https://apps.canterburymaps.govt.nz/CanterburyLiquefactionHazards/>



Figure 1: Site Location Plan showing the property boundary (red) and other existing structures. Source: Canterbury Maps, November 2021.

6. Site Inspection

A site walkover was conducted on 10th November 2021. The site includes a residential dwelling and an associated barn/garage. The areas surrounding the residential dwelling are fenced.

The single residential dwelling and outbuilding on site is located within the southern area of 63 Harewood Road. Refer to Figure 1.

A horse training area was observed to the east of the dwelling. Refer to Figures 2 and 3. The site is well vegetated, with grass covering much of the site and some trees forming two separate shelter belts. There is an additional site entrance located approximately 100m west of the primary site entrance on Harewood Road refer to Figure 4.



Figure 2: Photo looking towards the residential dwelling, garage, and horse training area from one of the fenced paddocks.



Figure 3. Looking south towards some of the structures from the northern boundary of the site.



Figure 4. Secondary site entrance off Harewood Road.

7. Site Specific Assessment of Risk from Natural Hazards

The general principles of hazard assessment that have been adopted for this assessment are attached in Appendix B and have been considered by the following assessments.

7.1. Earthquake shaking hazard

The earthquake shaking hazard is as defined in the New Zealand National Seismic Hazard Model (NSHM)¹³. The NSHM is a model that calculates the likelihood and strength of earthquake shaking occurring in different parts of New Zealand. The model is used by a variety of end-users to estimate the likely impact of earthquakes on New Zealand land, buildings, and infrastructure. This helps to understand the impact of earthquake hazard on society and increase resiliency.

Earthquake shaking can cause land instability and structural damage. The strength of earthquake shaking is incorporated into industry design guidance such as NZS1170, NZS3604 and NZGS/MBIE Module 6.

The levels of earthquake shaking, and their associated likelihood considered in residential land and building developments are defined as:

- Serviceability Limit State (SLS) 1 in 25-year return period event = *Likely (5)*
- Intermediate Limit State (ILS) 1 in 100-year return period event = *Possible (4)*
- Ultimate Limit State (ULS) 1 in 500-year return period event = *Unlikely (3)*

For the proposed rezoning for residential usage and for the scenario with a newly designed and built residential building in place we determine the following for the 1 in 100-year return period event:

Consequence to Buildings	Moderate (3)
Consequence to Services (lifelines)	Moderate (3)
Consequence to H&S	Minor (2)

Consequence (3) x Likelihood (4) = 12 i.e., the level of earthquake shaking risk is deemed tolerable.

Looking at a conservative scenario for the existing older buildings and for the ULS shaking scenario the risk is assessed as:

Consequence (5) x Likelihood (3) = 15 i.e., the level of earthquake shaking risk is deemed tolerable.

Note: the CES subjected thousands of residential buildings to ULS levels of shaking with no fatalities so we adopt an insignificant to minor H&S consequence i.e., maximum risk rating of 10.

Overall, the natural hazard risk due to earthquake shaking to the land, other land and structures is determined to be tolerable.

¹³ <https://www.gns.cri.nz/Home/Our-Science/Natural-Hazards-and-Risks/Earthquakes/National-Seismic-Hazard-Model-Programme>

7.2. Earthquake fault rupture

Active faults are mapped on GNS's Active Faults Database¹⁴. The GNS Active Fault Database¹⁵ indicates the Ashley Gorge Fault is located ~4 kilometres from the site at its nearest point.

Based on available data, the site is located outside the minimum 20m fault avoidance zone that is recommended by the Ministry for the Environment¹⁶. Therefore, the natural hazard risk due to seismic shaking as a result of a fault rupture is deemed acceptable.

7.3. Erosion and sedimentation

Currently, there are no areas of material erosion or sedimentation at the site. Given the flat topography and soils of the site the risk of erosion and sedimentation is low.

The consequence for this risk assessment is assessed for a 1 in 100-year return period event storm event. Typically, stormwater capacity design on a residential site caters for a 1 in 50-year return period storm event, so we are interested in the effects of the stormwater overland flow over and above the 1 in 50-year event.

7.4. Land slippage

No evidence of land slippage was observed during our inspection and the site topography is flat. The site is not in a mapped mass movement area or vulnerable to rockfall or cliff collapse. Therefore, the natural hazard risk due to land slippage is deemed acceptable.

7.5. Flooding

The site is mostly flat and has a very minor fall in elevation to the south (~1m). The WDC flood hazard mapping for the site (Appendix A) shows several small areas of the property are considered to be at a 'low' hazard in a 200-year flood event. The majority of the property is determined to be a 'very low' hazard area. The WDC flood hazard map also indicates there may be an abandoned alluvial channel situated towards the southern end of the site. The area may have been altered at some point in the past (e.g., levelling as the result of ongoing farming operations).

Flooding hazard categories can be classified as the following (as per the WDC description):

High Hazard: Extremely high depth and/or water velocity. Potential for significant damage to buildings due to scour, flotation and debris impact. Possible danger to personal safety. Evacuation by trucks and/or wading difficult. High potential for water ingress into buildings.

Medium Hazard: Depth greater than 0.3m. Evacuation by light vehicles difficult due to flotation. Wading generally possible. Small likelihood of damage to structures. Potential for water ingress into buildings.

Low Hazard: Depth less than 0.3m. Evacuation by all vehicles generally possible. Wading possible. Some potential for water ingress into sheds and other structures with floor levels at or near ground level.

WDC localised flood depth data suggests that in a 200-year event that depths will range from ~0.10m to ~0.25m on the site.

Data is also available on the WDC flood hazard map for a 500-year flood event. The patterns observed at the property for the 500-year event do not differ drastically in comparison to a 200-year event.

¹⁴ <https://data.gns.cri.nz/af/>

¹⁵ Geological and Nuclear Sciences (2004). Active Faults Database. Retrieved November 2021 from <http://maps.gns.cri.nz/website/af/viewer.htm>

¹⁶ <https://www.mfe.govt.nz/publications/rma/planning-development-land-or-close-active-faults-guideline-assist-resource>

Considering the topography and potential 'Low' flood hazard for most parts of the site, we recommend that any building platform for the proposed Lots are constructed in an area that has Low to very low flood hazard potential. Any building platform constructed in these hazard areas will need to be constructed 400mm above the existing ground level as per the WDC rural zone construction requirements.

7.6. Subsidence

The site is predominately located on flat ground with alluvial derived soils. It is possible that there are areas of uncontrolled fill or unsuitable soils situated within the area defined by the abandoned alluvial channel (see Appendix A). To prove this, shallow geotechnical testing across the indicated area should be undertaken at the time of subdivision development.

The ECan liquefaction hazards mapping¹⁷ describes the site to have low liquefaction susceptibility.

Implying that adequate shallow geotechnical testing has taken place prior to subdivision development, the natural hazard risk due to subsidence can be deemed acceptable.

7.7. Climate change effects

The following is a summary of forecast climate change effects for Canterbury¹⁸:

- Sea level will rise.
- Seasonal mean minimum and maximum temperatures are projected to increase.
- Much of Canterbury is projected to experience a considerable increase in annual hot days per year.
- Canterbury is generally projected to observe moderate changes in future annual rainfall.
- The number of snow days reduces.
- Drought potential is projected to increase.
- Increases in annual mean wind speed are typically projected.
- Minimal change to annual mean relative humidity is generally projected.

7.8. Combinations of hazards

Common hazard combinations for a development of this nature include:

1. Flood + erosion + sedimentation + landslip
2. Earthquake + landslip + liquefaction
3. Wind + fire
4. Wind + fire + drought

Specific comments on these common hazard combinations are as follows:

1. As discussed above, if normal good practice design and development controls are implemented then the combined hazard of flood, erosion, sedimentation and landslip (or sub-sets of these) are deemed to be acceptable.

¹⁷ <https://apps.canterburymaps.govt.nz/CanterburyLiquefactionHazards/>

¹⁸ NIWA (2020) report at <https://www.ecan.govt.nz/your-region/your-environment/climate-change/climate-change-in-canterbury/>

2. To cater for earthquake-induced land instability, retaining walls should be designed in accordance NZGS/MBIE Module 6 *Earthquake resistant retaining wall design*¹⁹. As for liquefaction, there is a possibility of small, isolated areas becoming liquefied during strong shaking. However, if normal good practice design and development controls are implemented then the hazard can be deemed acceptable.
3. With the forecast climate change effects (see above) comes the expectation of increased fire hazard. It would be prudent for site development to include for water storage for fire suppression purposes.
4. As for Comment 3.

8. Conclusions

We have conducted a natural hazard risk assessment to assess the risks of re-zoning the site. The natural hazards have been assessed with risk levels found to be acceptable or tolerable.

Providing normal good practice design and development controls are implemented at the time of further development we have found no risks from natural hazards that would prevent the rezoning of the site to General Residential Zone.

9. Disclaimer

Comments made in this report are based on information shown on the NZGD, Canterbury Maps, GNS's Active Faults Database, our inspection of the site and geotechnical testing, and the Ministry of Business, Innovation and Employment's (MBIE) December 2012 guidelines.

Whilst every care was taken during our interpretation of the subsurface conditions, there may be subsoil strata and features that were not detected. Additionally, on-going seismicity in the general area may lead to deterioration or additional ground settlement that could not have been anticipated at time of writing of this report. The exposure of such conditions, or occurrence of additional strong seismicity, or any future update of MBIE's guidelines may require review of our recommendations or further investigations. Eliot Sinclair should be contacted if this occurs to confirm the recommendations of this report remain valid.

This report has been prepared for the benefit of Geoff Mehrrens (the property owner) and the Waimakariri District Council. This report is specifically prepared to support the submission for the rezoning of the site and should not be used to support any future consent application without prior review and approval by Eliot Sinclair.

No liability is accepted by this company or any employee of this company with respect to the use of this report by any other party or for any other purpose other than what is stated in our scope of work.

¹⁹ <https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/module-6-earthquake-retaining-wall-design/>

Appendix A. Flood Hazard Maps



A) 200 Year Flooding Hazard Map with the site outlined in (red). Area occupied by possible in-filled alluvial channel outlined in (yellow). Source: Waimakariri District Council, November 2021.



B) 200 Year Localised Flood Depth Map with the site outlined in (red). Area occupied by possible in-filled alluvial channel outlined in (yellow). Source: Waimakariri District Council, November 2021.

Appendix B. Natural Hazard Risk Assessment - Background

Introduction

Council can refuse subdivision consent/land re-zoning if there is a significant risk due to natural hazards. To determine whether there is a significant risk due to natural hazards, decision-makers are guided by the matters set out in RMA Section 106(1A). An assessment of the risk from natural hazards requires a combined assessment of:

- The **likelihood** of natural hazards occurring (whether individual or in combination); and
- The **consequences** (material damage) that would result from natural hazards to land where the consent is sought, other land, or structures; and
- Any **likely subsequent use** of the land where the consent is sought that would **accelerate, worsen, or result in material damage**.

Decision-makers are required to consider the magnitude of risk of natural hazards, including natural hazards that have a high impact but low probability of occurrence. This will align assessments with the definition of 'effect' in Section 3 of the RMA.

The RMA defines natural hazards as:

Any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment²⁰.

Risk assessment method

Principles

The natural hazards risk assessment is based on GNS's risk-based land use planning toolbox²¹. We have adapted the toolbox for the scale of the proposed residential subdivision and for the purposes of the RMA s106 reporting requirements. We have also considered Section 71 of the Building Act (2004), which includes a consent 'test' of whether land is *likely* to be subject to damage from a natural hazard.

The approach taken for this risk assessment considers whether land is *likely to be subject to material damage from a natural hazard*, where 'likely' has been determined to be a 1 in 100-year return period event, rather than an extreme event with a low probability of occurrence. There are inevitable inconsistencies in the definitions used by different agencies and in this instance, we note that GNS refers to a 1 in 100-year return period event as a 'possible' event.

The GNS toolbox report notes that many land use planning objectives, policies, rules, and decisions are based around a likelihood assessment of a natural hazard, such as the 1 in 100-year return period event. Where information exists that enables us to consider other relevant levels of likelihood, we have included additional commentary e.g., for different design earthquake scenarios.

Risk calculation

In accordance with GNS's approach the risk is calculated as the product of the *consequence* and the *likelihood*, with the two inputs drawn from the Consequence in Table 1 (GNS Figure 3.4) and the Likelihood Scale in Table 2 (GNS Figure 3.5), as presented below.

We have applied judgement and interpretation in the application of GNS's table to the scale and nature of the proposed subdivision.

²⁰ <https://www.mfe.govt.nz/publications/rma/resource-legislation-amendments-2017-fact-sheet-series>

²¹ <https://www.gns.cri.nz/Home/RBP/Risk-based-planning/A-toolbox>

For this assessment there are no social/cultural buildings to consider, and the economic impacts are deemed not applicable. We use the 'Buildings' column as the basis to assess effects on integrity of building/s (i.e., their amenity and life-safety function), and the 'Lifelines' column as the basis to assess the effects on utilities servicing the building/s.

To take a risk-based approach, the consequences and likelihood need to be quantified to provide a level of risk. To achieve this, a matrix is used that incorporates the relevant risk level, expressed as the consequences multiplied by likelihood as presented in Table 3 (GNS Figure 3.8 adapted from Saunders, 2012b). The risk then ranges from 1 (extremely low) to 25 (extremely high).

GNS then suggests the consent status (treatment) of the activity can be presented as follows in Table 4 (GNS Figure 3.9):

GNS recommends that when assessing consequences, the final level of impact is assessed on the 'first past the post' principle, in that the consequence with the highest severity of impact applies.

Table 1. GNS Consequence Table

Severity of Impact	Built				Economic	Health & Safety
	Social/ Cultural	Buildings	Critical Buildings	Lifelines		
Catastrophic (V)	≥25% of buildings of social/ cultural significance within hazard zone have functionality compromised	≥50% of affected buildings within hazard zone have functionality compromised	≥25% of critical facilities within hazards zone have functionality compromised	Out of service for >1 month (affecting ≥20% of the town/city population) OR suburbs out of service for >6 months (affecting <20% of the town/city population)	>10% of regional GDP	>101 dead and/or >1001 injured
Major (IV)	11-24% of buildings of social/cultural significance within hazard zone have functionality compromised	21-49% of buildings within hazard have functionality compromised	11-24% of buildings within hazard zone have functionality compromised	Out of service for 1 week – 1 month (affecting ≥20% of the town/city population) OR suburbs out of service for 6 weeks to 6 months (affecting <20% of the town/city population)	1-9.99% of regional GDP	11 – 100 dead and/or 101-1001 injured
Moderate (III)	6-10% of buildings of social/cultural significance within hazard zone have functionality compromised	11-20% of buildings within hazard zone have functionality compromised	6-10% of buildings within hazard zone have functionality compromised	Out of service for 1 day to 1 week (affecting ≥20% of the town/city population people) OR suburbs out of service for 1 week to 6 weeks (affecting <20% of the town/city population)	0.1-0.99% of regional GDP	2 – 10 dead and/or 11 – 100 injured
Minor (II)	1-5% of buildings of social/cultural significance within hazard zone have functionality compromised	2-10% of buildings within hazard zone have functionality compromised	1-5% of buildings within hazard zone have functionality compromised	Out of service for 2 hours to 1 day (affecting ≥20% of the town/city population) OR suburbs out of service for 1 day to 1 week (affecting <20% of the town/city population)	0.01-0.09% of regional GDP	<=1 dead and/or 1 – 10 injured
Insignificant (I)	No buildings of social/cultural significance within hazard zone have functionality compromised	<1% of affected buildings within hazard zone have functionality compromised	No damage within hazard zone, fully functional	Out of service for up to 2 hours (affecting ≥20% of the town/city population) OR suburbs out of service for up to 1 day (affecting <20% of the town/city population)	0.01% of regional GDP	No dead No injured

Table 2. Likelihood scale

Level	Descriptor	Description	Indicative Frequency
5	Likely	The event has occurred several times in your lifetime	Up to once every 50 years
4	Possible	The event might occur in your lifetime	Once every 51 – 100 years
3	Unlikely	The event does occur somewhere from time to time	Once every 101 – 1000 years
2	Rare	Possible but not expected to occur except in exceptional circumstances	Once every 1001 – 2,500 years
1	Very rare	Possible but not expected to occur except in exceptional circumstances	2,501 years plus

Table 3. Quantifying consequences and likelihood

Likelihood Level	Severity of Impact				
	1	2	3	4	5
5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5

Table 4. Level of risk and associated consent status

Level of risk	Consent
Acceptable (1-4)	Permitted
Acceptable (5-9)	Controlled
Tolerable (10-12)	Restricted Discretionary
Tolerable (15-16)	Discretionary
Intolerable (20-25)	Noncomplying, prohibited

Appendix F. Assessment of Canterbury Regional Policy Statement

Canterbury Regional Policy Statement 2013

The Canterbury Regional Policy Statement sets out objectives, policies, and methods to resolve resource management issues in Canterbury. Chapter 5 (Land Use and Infrastructure) is most relevant to this submission.

It is considered that Chapter 6, and the objectives and policies within Chapter 6 are not relevant to this proposal, as the site is not within Greater Christchurch as determined by Map A of the CRPS.

Chapter Summary

CRPS 2013 Chapters	Assessment of re-zoning 63 Harewood Road
Chapter 1 – Introduction	Chapter 1 does not contain any objectives or policies
Chapter 2 – Issues of Resource Management Significant to Ngāi Tahu	The proposal recognises that Te Rūnanga o Ngāi Tahu is the iwi authority and Ngāi Tūāhuriri are recognised mana whenua of Waimakariri District. Assessments of relevant documents have not identified that the submission site contains wahi tapu and other taonga.
Chapter 3 – Resource Management Processes for Local Authorities	This chapter discusses the working relationship of the Regional Council and the District Council. The proposal does not undermine the ability for these matters to be achieved.
Chapter 4 – Provision for Ngāi Tahu and their relationship with resources	This chapter sets out the tools and processes that the Canterbury Regional Council will use to engage with Ngāi Tahu as tangata whenua in the management of natural and physical resources. The proposal does not undermine the ability for these matters to be achieved.
Chapter 5 – Land use and infrastructure	The proposed general residential zoning will achieve a consolidated and well-designed future development that will be cohesive with the Oxford township to provide for needed residential growth and housing choice.

	<p>The submission will provide for integration and cohesion within Oxford Township to provide for needed residential growth and housing choice. The site is ideally located within the township with the ability to have efficient servicing infrastructure.</p> <p>A more detailed assessment of Chapter 5 is provided in the separate table below.</p> <p>The submission is consistent with this chapter.</p>
Chapter 6 – Recovery and Rebuilding of Greater Christchurch	<p>The proposal is not within Greater Christchurch; therefore, Chapter 6 does not apply.</p>
Chapter 7 – Fresh Water	<p>The proposed rezoning will not impact upon water flow, groundwater levels, or allocation regimes and does not impact on providing sufficient quantities of water in waterbodies.</p> <p>The submission is consistent with this Chapter.</p>
Chapter 8 – The Coastal Environment	<p>The submission site is not located in a coastal environment.</p>
Chapter 9 – Ecosystems and Indigenous Biodiversity	<p>The site is located in the Ecological District High Plains as shown on the proposed Waimakariri District Plan. The site is predominantly grassed and has no ecosystems or indigenous biodiversity. Chapter 9 is not considered relevant.</p>
Chapter 10 – Beds of rivers, lakes, and their riparian zones	<p>The drain running adjacent to the site boundary will not be adversely affected by the proposed rezoning and future subdivision.</p> <p>The submission is consistent with Chapter 10.</p>
Chapter 11 – Natural Hazards	<p>Natural hazards associated with the submission site have been assessed as part of the Geotechnical Report supporting this application. The site is considered suitable for rezoning from a geotechnical and natural hazards perspective. The submission is consistent with this Chapter.</p>

CRPS 2013 Chapters**Assessment of re-zoning 63 Harewood Road**

Chapter 12 – Landscape	<p>The site is not located within or identified as an outstanding natural feature or landscape.</p> <p>The submission is consistent with this Chapter.</p>
Chapter 13 – Historic Heritage	<p>The proposed rezoning will not cause the loss of any historical or heritage sites, buildings, places, and areas.</p>
Chapter 14 – Air Quality	<p>The proposal will not cause a deterioration of ambient air quality.</p>
Chapter 15 – Soils	<p>The proposal will not result in soil erosion, sedimentation of water bodies, or the loss of significant vegetation cover.</p>
Chapter 16 – Energy	<p>There are currently no public transport routes near the site. Good urban design will provide efficient use of the site and vehicular connectivity to Waimakariri and Greater Christchurch.</p>
Chapter 17 – Contaminated Land	<p>The application site has been investigated and is not considered to be contaminated. The proposed rezoning will not introduce activities that will cause contamination of natural resources.</p>
Chapter 18 – Hazardous Substances	<p>The Hazardous Substances chapter is not considered relevant.</p>
Chapter 19 – Waste Minimisation and Management	<p>The Waste Minimisation and Management chapter is not considered relevant.</p>

Chapter 5 – Land Use and Infrastructure

CRPS 2013 Chapter 5 Relevant Objectives and Policies

Objective 5.2.1 Location, Design and Function of Development (Entire Region)

Development is located and designed so that it functions in a way that:

1. Achieves consolidated, well designed, and sustainable growth in and around existing urban areas as the primary focus for accommodating the region's growth; and
2. Enables people and communities, including future generations, to provide for their social, economic, and cultural well-being and health and safety; and which:
 - a. Maintains, and where appropriate, enhances the overall quality of the natural environment of the Canterbury region, including its coastal environment, outstanding natural features and landscapes, and natural values;
 - b. Provides sufficient housing choice to meet the region's housing needs;
 - c. Encourages sustainable economic development by enabling business activities in appropriate locations;
 - d. Minimises energy use and/or improves energy efficiency;
 - e. Enables rural activities that support the rural environment including primary production;
 - f. Is compatible with, and will result in continued safe, efficient and effective use of regionally significant infrastructure;
 - g. Avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, and where avoidance is impracticable, remedies or mitigates those effects on those resources and infrastructure;
 - h. Facilitates the establishment of papakāinga and marae; and
 - i. Avoids conflicts between incompatible activities.

Assessment of rezoning 63 Harewood Road, Oxford.

The rezoning will allow for residential development on the site. This would create consolidated, well designed, and sustainable residential growth in Oxford.

The rezoning will not adversely affect the coastal environment, outstanding natural features and landscapes, or natural values. The proposal will change rural land to residential, however will maintain the rural outlook and rural character of Oxford.

The proposal will increase housing choice by increasing the supply of residential housing and providing for 48 residential allotments.

The rezoning and future subdivision will minimise energy use by maintaining a consolidated urban form with connections to Oxford and Waimakariri.

It is not anticipated that any effects of reverse sensitivity from the surrounding rural use will be less than minor.

The proposed rezoning is consistent with Objective 5.2.1 because it will achieve a consolidated and sustainable residential development in Oxford and will enable people to provide for their social, economic, and cultural well-being and health and safety now and in the future.

Objective 5.2.2 Integration of land-use and regionally significant infrastructure (Wider Region)

In relation to the integration of land use and regionally significant infrastructure:

1. To recognise the benefits of enabling people and communities to provide for their social, economic, and cultural well-being and health and safety and to provide for infrastructure that is regionally significant to the extent that it promotes sustainable management in accordance with the RMA.
2. To achieve patterns and sequencing of land-use with regionally significant infrastructure in the wider region so that:
 - a. development does not result in adverse effects on the operation, use and development of regionally significant
 - b. adverse effects resulting from the development or operation of regionally significant infrastructure are avoided, remedied, or mitigated as fully as practicable.
 - c. there is increased sustainability, efficiency, and liveability.

The proposed rezoning and future residential development have been designed so they will not have adverse effects on regionally significant infrastructure.

The proposal is consistent with Objective 5.2.2.

Objective 5.2.3 Transport network (Wider Region)

A safe, efficient, and effective transport system to meet local regional, inter-regional and national needs for transport, which:

1. supports a consolidated and sustainable urban form;
2. avoids, remedies, or mitigates the adverse effects of transport use and its provision;
3. provides an acceptable level of accessibility; and
4. is consistent with the regional roading hierarchy identified in the Regional Land Transport Strategy.

The proposed ODP shows a vehicular connection to Harewood Road.

On road walking and cycling are provided through the site. The proposal supports a consolidated and sustainable urban form and mitigates the effects on the transport network for the region.

The proposal is consistent with Objective 5.2.3.

Policy 5.3.1 Regional growth (Wider Region)

To provide, as the primary focus for meeting the wider region's growth needs, sustainable development patterns that:

1. ensure that any
 - a. urban growth; and
 - b. limited rural residential development

occur in a form that concentrates, or is attached to, existing urban areas and promotes a coordinated pattern of development;

2. encourage within urban areas, housing choice, recreation and community facilities, and business opportunities of a character and form that supports urban consolidation;
3. promote energy efficiency in urban forms, transport patterns, site location and subdivision layout;
4. maintain and enhance the sense of identity and character of the region's urban areas; and
5. encourage high quality urban design, including the maintenance and enhancement of amenity values.

The proposed rezoning is in the township of Oxford and will provide housing choice and recreation opportunities that are of a character and form that supports urban consolidation.

The proposed rezoning and future residential development will enable a consolidated urban form and integrated transport pattern with vehicle connections to the wider Waimakariri District.

The proposed rezoning will maintain the residential character and identity of Oxford.

The ODP has been designed in accordance with Urban Design best practice principles.

The proposed rezoning is adjacent to the existing township of Oxford and will provide additional housing capacity that is of a character and form that supports urban consolidation.

The proposed rezoning and future residential development will enable a consolidated urban form in close proximity to Oxford.

The proposed rezoning will maintain the rural character and identity of Oxford.

The ODP has been designed in accordance with Urban Design best practice principles.

Policy 5.3.2 Development conditions (Wider Region)

To enable development including regionally significant infrastructure which:

1. ensure that adverse effects are avoided, remedied, or mitigated, including where these would compromise or foreclose:
 - a. existing or consented regionally significant infrastructure;
 - b. options for accommodating the consolidated growth and development of existing urban areas;
 - c. the productivity of the region's soil resources, without regard to the need to make appropriate use of soil which is valued for existing or

The proposed rezoning will enable future residential development. The assessment of the proposed rezoning throughout the planning report has identified that any adverse effects can be avoided, remedied, or mitigated. There is not anticipated to be any adverse effects on regionally significant infrastructure, productive soils, protection of water sources for community supply and significant natural and physical resources.

The proposed rezoning and proposed ODP can also mitigate effects on natural hazards such as flooding and reverse sensitivity from the adjoining rural and industrial zoned land.

- foreseeable future primary production, or through further fragmentation of rural land;
- d. the protection of sources of water for community supplies;
- e. significant natural and physical resources;
- 2. avoid or mitigate:
 - a. natural and other hazards, or land uses that would likely result in increases in the frequency and/or severity of hazards;
 - b. reverse sensitivity effects and conflicts between incompatible activities, including identified mineral extraction areas; and
- 3. integrate with:
 - a. the efficient and effective provision, maintenance, or upgrade of infrastructure; and
 - b. transport networks, connections, and modes so as to provide for the sustainable and efficient movement of people, goods and services, and a logical, permeable and safe transport system.

The proposed ODP demonstrates that the proposed rezoning will integrate with the planned upgrade of infrastructure, and the transport network to Oxford and the wider Waimakariri District.

The proposal is consistent with Policy 5.3.2.

Policy 5.3.3 Management of development (Wider Region)

To ensure that substantial developments are designed and built to be of a high-quality, and are robust and resilient:

- 1. through promoting, where appropriate, a diversity of residential, employment and recreational choices, for individuals and communities associated with the substantial development; and
- 2. where amenity values, the quality of the environment, and the character of an area are maintained, or appropriately enhanced.

The proposed rezoning and proposed ODP will provide for a well-designed high quality residential environment where the rural amenity values and rural character of Oxford can be maintained, and the quality of the environment can be maintained or enhanced.

The proposal is consistent with Policy 5.3.3.

Policy 5.3.4 Papakāinga housing and marae (Entire Region)

To recognise that the following activities, when undertaken by tāngata whenua with mana whenua, are appropriate when they occur on their ancestral land in a manner that enhances their on-going relationship and culture and traditions with that land:

- 1. papakāinga housing;
-

This submission is not proposed papakāinga housing or a marae. Policy 5.3.4 is not relevant.

2. marae; and
3. ancillary activities associated with the above;

And provide for these activities if:

4. adverse effects on the health and safety of people are avoided or mitigated; and
5. as a result of the location, design, landscaping and management of the papakāinga housing and marae:
 - a. adverse effects on the following are avoided, and if avoidance is not practicable, mitigated:
 - i. the important natural character values of coastal environment, wetlands, lakes, rivers and their margins;
 - ii. the values of the outstanding natural features and landscapes;
 - iii. the values of the historic heritage; and
 - iv. the values of areas of significant indigenous vegetation and habitats of indigenous fauna.
 - b. regard has been given to amenity values of the surrounding environment.

Policy 5.3.5 Servicing development for potable water, and sewage and stormwater disposal (Wider Region)

Within the wider region, ensure development is appropriately and efficiently served for the collection, treatment, disposal or re-use of sewage and stormwater, and the provision of potable water, by:

1. avoiding development which will not be served in a timely manner to avoid or mitigate adverse effects on the environment and human health; and
2. requiring these services to be designed, built, managed or upgraded to maximise their on-going effectiveness.

The infrastructure servicing report provided with the supporting information to this submission details the servicing requirements and capacity for the proposed rezoning and future residential development.

Potable water can be supplied to the site after an upgrade of the existing water main.

There is capacity for sewage disposal with the installation of a new wastewater pump station at the corner of High Street and Harewood Road.

Stormwater will be conveyed to a stormwater management area where it will be treated and attenuated.

Policy 5.3.6 Sewerage, stormwater and potable water infrastructure (Wider Region)

Within the wider region:

1. Avoid development which constrains the on-going ability of the existing sewerage, stormwater and potable water supply infrastructure to be developed and used.
2. Enable sewerage, stormwater and potable water infrastructure to be developed and used, provided that, as a result of its location and design:
 - a. the adverse effects on significant natural and physical resources are avoided, or where this is not practicable, mitigated; and
 - b. other adverse effects on the environment are appropriately controlled.
3. Discourage sewerage, stormwater and potable water supply infrastructure which will promote development in locations which do not meet Policy 5.3.1.

The infrastructure servicing report provided with the supporting information to this submission details the servicing requirements and capacity for the proposed rezoning and future residential development.

The sewerage, stormwater and potable water will be able to be provided.

Policy 5.3.7 Strategic land transport network and arterial roads (Entire Region)

In relation to strategic land transport network and arterial roads, the avoidance of development which:

1. adversely affects the safe efficient and effective functioning of this network and these roads, including the ability of this infrastructure to support freight and passenger transport services; and
2. in relation to the strategic land transport network and arterial roads, to avoid development which forecloses the opportunity for the development of this network and these roads to meet future strategic transport requirements.

The proposed rezoning will not adversely affect the safe efficient and effective function of the strategic land transport network.

Harewood Road is not an arterial Road. Therefore, the proposed development will not adversely affect the arterial road.

The proposal is consistent with Policy 5.3.7.

Policy 5.3.8 Land use and transport integration (Wider Region)

Integrate land use and transport planning in a way:

1. that promotes:
 - a. the use of transport modes which have low adverse effects;
 - b. the safe, efficient and effective use of transport infrastructure, and reduces where appropriate the demand for transport;
2. that avoids or mitigates conflicts with incompatible activities; and
3. where the adverse effects from the development, operation and expansion of the transport system:
 - a. on significant natural and physical resources and cultural values are avoided, or where this is not practicable, remedied or mitigated; and
 - b. are otherwise appropriately controlled.

The proposed ODP provides a safe and efficient transport connection to Harewood Road which enables connection through to Oxford Town Centre and the wider Waimakariri District.

It is considered that there would be less than minor effects from the proposed rezoning and future residential development on the transport system.

The proposal is consistent with Policy 5.3.8

Policy 5.3.9 Regionally significant infrastructure (Wider Region)

In relation to regionally significant infrastructure (including transport hubs):

1. avoid development which constrains the ability of this infrastructure to be developed and used without time or other operational constraints that may arise from adverse effects relating to reverse sensitivity or safety;
2. provide for the continuation of existing infrastructure, including its maintenance and operation, without prejudice to any future decision that may be required for the ongoing operation or expansion of that infrastructure; and
3. provide for the expansion of existing infrastructure and development of new infrastructure, while:
 - a. recognising the logistical, technical or operational constraints of this infrastructure and any need to locate activities where a natural or physical resource base exists;
 - b. avoiding any adverse effects on significant natural and physical resources and cultural values and where this is not practicable,

The proposed rezoning and future residential development will not have an adverse impact on regionally significant infrastructure.

The proposal is consistent with Policy 5.3.9

remedying or mitigating them, and appropriately controlling other adverse effects on the environment; and

- c. when determining any proposal within a sensitive environment (including any environment the subject of section 6 of the RMA), requiring that alternative sites, routes, methods and design of all components and associated structures are considered so that the proposal satisfies sections 5(2)(a) – (c) as fully as is practicable.

Policy 5.3.10 Telecommunication infrastructure (Wider Region)

Within the wider region:

- 1. Avoid development which constrains the ability of telecommunication infrastructure in Canterbury to be developed and used.
- 2. Enable telecommunication infrastructure to be developed and used provided that, as a result of its location and design;
 - a. the adverse effects on significant natural and physical resources and cultural values are avoided, or where this is not practicable, remedied, mitigated; and
 - b. other adverse effects on the environment are appropriately controlled.

The proposed rezoning and future residential development will not have an adverse impact on telecommunication infrastructure.

The proposal is consistent with Policy 5.3.10.

Policy 5.3.11 Community-scale irrigation, stockwater, and rural drainage infrastructure (Wider Region)

Policy 5.3.11 is not considered relevant to this proposal.

Policy 5.3.12 Rural production (Wider Region)

Maintain and enhance natural and physical resources contributing to Canterbury's overall rural productive economy in areas which are valued for existing or foreseeable future primary production, by:

- 1. avoiding development, and/or fragmentation which:
 - a. forecloses the ability to make appropriate use of that land for primary production; and/or

The proposed rezoning will result in a loss of productive soils and land available for rural production, however this has been anticipated by strategic planning documents.

The proposal will avoid the fragmentation of rural production land and will minimise any effects on reverse sensitivity with the adjoining rural land.

The proposal is consistent with Policy 5.3.12.

- b. results in reverse sensitivity effects that limit or precludes primary production.
- 2. Enabling tourism, employment and recreational development in rural areas, provided that it:
 - a. is consistent and compatible with rural character, activities, and an open rural environment;
 - b. has a direct relationship with or is dependent upon rural activities, rural resources or raw material inputs sourced from within the rural area;
 - c. is not likely to result in proliferation of employment (including that associated with industrial activities) that is not linked to activities or raw material inputs sourced from within the rural areas; and
 - d. is of a scale that would not compromise the primary focus for accommodating growth in consolidate well designed and more sustainable development patterns
- and;
- 3. ensuring that rural land use intensification does not contributed to significant cumulative adverse effects on water quality and quantity.

Policy 5.3.13 Spread of wilding trees (Wider Region)

Avoid, or minimise as far as practicable, the risk of wilding tree spread, through the location of planting, design of planting, species selection and management, once planting has occurred.

The proposal does not relate to wilding trees.

Policy 5.3.13 is not considered relevant.

Appendix G. Assessment of Proposed Waimakariri District Plan

Proposed Waimakariri District Plan

The Proposed Waimakariri District Plan was publicly notified for consultation on 18 September 2021. The objectives and policies in the proposed District Plan have been considered for the assessment of this rezoning submission.

Relevant Objectives and Policies

SD-O1 Natural Environment

Across the District:

1. there is an overall net gain in the quality and quantity of indigenous ecosystems and habitat, and indigenous biodiversity;
2. the natural character of the coastal environment, freshwater bodies and wetlands is preserved or enhanced, or restored where degradation has occurred;
3. outstanding natural features and outstanding natural landscapes are identified and their values recognised and protected;
4. people have access to a network of natural areas for open space and recreation, conservation and education, including within riparian areas, the coastal environment, the western ranges, and within urban environments; and
5. land and water resources are managed through an integrated approach which recognises the importance of ki uta ki tai to Ngāi Tahu and the wider community, and the inter-relationships between ecosystems, natural processes and with freshwater.

SD-O2 Urban Development

Urban development and infrastructure that:

1. is consolidated and integrated with the urban environment;

Assessment of rezoning 63 Harewood Road

The site is not in an area of natural character or has indigenous ecosystems or indigenous biodiversity. The indicative stormwater reserve will provide access to green space within the proposed ODP site. Whilst this area cannot technically be vested as recreation reserve, it will still provide public green space within close proximity to the proposed future residential development.

The proposal will be consistent with the relevant aspects of SD-O1.

The proposed rezoning and ODP is consistent with Strategic Direction Objective 2.

Relevant Objectives and Policies

2. that recognises existing character, amenity values, and is attractive and functional to residents, businesses and visitors;
3. utilises the District Council's reticulated wastewater system, and potable water supply and stormwater infrastructure where available;
4. provides a range of housing opportunities, focusing new residential activity within existing towns, and identified development areas in Rangiora and Kaiapoi, in order to achieve the housing bottom lines in UFD-O1;
5. supports a hierarchy of urban centres, with the District's main centres in Rangiora, Kaiapoi, Oxford and Woodend being:
 - a. the primary centres for community facilities;
 - b. the primary focus for retail, office and other commercial activity; and
 - c. the focus around which residential development and intensification can occur.
6. provides opportunities for business activities to establish and prosper within a network of business and industrial areas zoned appropriate to their type and scale of activity and which support district self-sufficiency;
7. provides people with access to a network of spaces within urban environments for open space and recreation;
8. supports the transition of the Special Purpose Zone (Kāinga Nohoanga) to a unique mixture of urban and rural activities reflecting the aspirations of Te Ngāi Tūāhuriri Rūnanga;
9. provides limited opportunities for Large Lot Residential development in identified areas, subject to adequate infrastructure; and
10. recognise and support Ngāi Tūāhuriri cultural values through the protection of sites and areas of significance to Māori identified in SASM-SCHED1.

Assessment of rezoning 63 Harewood Road

The proposed rezoning will provide a consolidated and integrated urban environment that recognises the rural character of Oxford and is attractive to future and existing residents.

The proposed future development will utilise the Council's wastewater and water supply infrastructure, with stormwater discharge to ground.

The proposed rezoning will provide a range of housing opportunities within the existing town of Oxford which will contribute to achieving the housing bottom lines in UFD-O1.

The proposed rezoning will support the urban centres hierarchy by focusing the residential development within the main centre of Oxford.

The proposed ODP will provide people access areas of open space and recreation.

This submission is not proposing business or industrial zoned areas, nor is it the transition of the Kāinga Nohoanga zone.

Relevant Objectives and Policies

SD-O3 Energy and infrastructure

Across the District:

1. improved accessibility and multi-modal connectivity is provided through a safe and efficient transport network that is able to respond to technology changes and contributes to the well-being and liveability of people and communities;
2. infrastructure, including strategic infrastructure, critical infrastructure and regionally significant infrastructure:
 - a. is able to operate efficiently and effectively; and
 - b. is enabled, while:
 - i. managing adverse effects on the surrounding environment, having regard to the social, cultural and economic benefit, functional need and operational need of the infrastructure; and
 - ii. managing the adverse effects of other activities on infrastructure, including managing reverse sensitivity;
3. the nature, timing and sequencing of new development and new infrastructure is integrated and coordinated; and
4. encourage more environmentally sustainable outcomes as part of subdivision and development, including through the use of energy efficient buildings, green infrastructure and renewable electricity generation.

SD-O4 Rural land

Outside of identified residential development areas and the Special Purpose Zone (Kāinga Nohoanga), rural land is managed to ensure that it remains available for productive rural activities by:

Assessment of rezoning 63 Harewood Road

The proposed ODP has incorporated a road through the site which provides safe and efficient access throughout the site, and through to Harewood Road and into Oxford.

The site is able to be adequately serviced with upgrades and connections to the Councils reticulated water supply and wastewater disposal. It is anticipated that the development of the site will occur once the relevant water supply and wastewater disposal upgrades have occurred.

Stormwater is able to be discharged to ground within the ODP site.

The site is currently proposed to be zoned General Rural Zone which has a minimum allotment area of 20 hectares and the objective of primary production. However, this site is 3.5 hectares and not used for primary production so does not meet the requirements of a rural allotment.

Relevant Objectives and Policies

Assessment of rezoning 63 Harewood Road

1. providing for rural production activities, activities that directly support rural production activities and activities reliant on the natural resources of Rural Zones and limit other activities; and
2. ensuring that within rural areas the establishment and operation of rural production activities are not limited by new incompatible sensitive activities.

This submission is to rezone the land to General Residential Zone, therefore meaning that the rural land will be converted to residential. The property is currently not being used for high production rural activities and is identified in the strategic plan as a location for future residential growth, so a loss of rural productive land has already been anticipated.

SD-O5 Ngāi Tahu mana whenua/Te Ngāi Tūāhuriri Rūnanga

Te Ngāi Tūāhuriri Rūnanga's role in the management of natural and physical resources is recognised, so that:

1. Ngāi Tūāhuriri's historic and contemporary connections, and cultural and spiritual values, associated with the land, water and other taonga are recognised and provided for;
2. the values of identified sites and areas of significance to Ngāi Tūāhuriri are protected;
3. Ngāi Tūāhuriri can retain, and enhance access to sites of cultural significance;
4. Māori land is able to be occupied and used by Ngāi Tūāhuriri for its intended purposes and to maintain their relationship with their ancestral land;
5. recognised customary rights are protected;
6. Ngāi Tūāhuriri are able to carry out customary activities in accordance with tikanga; and

Te Ngāi Tūāhuriri Rūnanga are able to actively participate in decision-making and exercise kaitiakitanga.

The site is not located in an identified area of significance to Ngāi Tūāhuriri. However, this rezoning submission and any future subdivision and development that this may enable is unlikely to have an adverse effect on Ngāi Tūāhuriri cultural values.

Relevant Objectives and Policies

SD-O6 Natural hazards and resilience

The District responds to natural hazard risk, including increased risk as a result of climate change, through:

1. avoiding subdivision, use and development where the risk is unacceptable; and
2. mitigating other natural hazard risks.

UFD-O1

Feasible development capacity for residential activities.

Sufficient feasible development capacity for residential activity to meet specified housing bottom lines and a changing demographic profile of the District as follows:

Term	2018-2028	2028-2048	2018-2048
Housing bottom lines (development capacity)	6,300 residential units	7,100 residential units	13,400 residential units

UFD-O2 Feasible development capacity for commercial activities and industrial activities

Sufficient feasible development capacity to meet commercial and industrial development demand.

UFD-P1 Density of residential development

In relation to the density of residential development:

1. provide for intensification in urban environments through provision for minor residential units, retirement villages, papakāinga or suitable up-

Assessment of rezoning 63 Harewood Road

The site is not in an area with unacceptable risk from natural hazard or other hazards. Therefore, the proposed rezoning is consistent with SD-O6.

The proposed rezoning would enable approximately 48 residential allotments, which would contribute to the housing capacity in Waimakariri to achieve the housing bottom lines in UFD-O1.

The proposed rezoning and ODP are not proposing any commercial or industrial activities.

The proposed rezoning is providing for additional greenfield residential development, rather than intensification of existing residential areas. The rezoning is not seeking the Medium Density Residential Zone.

Relevant Objectives and Policies

Assessment of rezoning 63 Harewood Road

zoning of residential zones where it is consistent with the anticipated built form and purpose of the zone;

2. locate any Medium Density Residential Zone so it:
 - a. supports, and has ready access to, existing Commercial and Mixed Use Zones, schools, public transport and open space;
 - b. supports well connected walkable communities;
 - c. avoids or mitigates natural hazard risk in any high hazard area within existing urban areas; and
 - d. located away from any Heavy Industrial Zone.

UFD-P2 Identification/location of new Residential Development Areas

In relation to the identification/location of residential development areas:

1. residential development in new Residential Development Areas at Kaiapoi, North East Rangiora, South East Rangiora and West Rangiora is located to implement the urban form identified in the Future Development Strategy;
2. for new Residential Development Areas, other than those identified by (1) above, avoid residential development unless located so that they:
 - a. occur in a form that concentrates, or are attached to, an existing urban environment and promotes a coordinated pattern of development;
 - b. occur in a manner that makes use of existing and planned transport and three waters infrastructure, or where such infrastructure is not available, upgrades, funds and builds infrastructure as required;
 - c. have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport;

The proposed development and ODP are consistent with UFD-P2 and would represent a new Residential Development Area (South Oxford).

The site is south of an existing residential subdivision and the proposed development would be consistent with the urban form of those dwellings.

The site is accessed from Harewood Road, which is classified as a local road according to map 137 of the operative District Plan. Harewood Road provides access to Oxford town centre, making the site easily accessible.

The site is able to be serviced with reticulated water supply and wastewater once the existing infrastructure has been upgraded as required.

The proposed development concentrates residential housing in a suitable location that is close to key activity nodes including the Oxford hospital, local schools, and shops.

The proposed rezoning is attached to the existing residential development in Oxford.

The site is also in close proximity to Oxford with transport through to Waimakariri and Selwyn.

-
- d. concentrate higher density residential housing in locations focusing on activity nodes such as key activity centres, schools, public transport routes and open space;
 - e. take into account the need to provide for intensification of residential development while maintaining appropriate levels of amenity values on surrounding sites and streetscapes;
 - f. are informed through the development of an ODP;
 - g. supports reductions in greenhouse gas emissions; and
 - h. are resilient to natural hazards and the likely current and future effects of climate change as identified in SD-O6.
-

UFD-P3 Identification/Location and extension of Large Lot Residential Zone areas

The site is not in the Large Lot Residential overlay, so UFD-P3 does not apply.

In relation to the identification/location of Large Lot Residential Zone areas:

- 1. new Large Lot Residential development is located in the Future Large Lot Residential Zone Overlay which adjoins an existing Large Lot Residential Zone as identified in the RRDS and is informed through the development of an ODP;
 - 2. new Large Lot Residential development, other than addressed by (1) above, is located so that it:
 - e. occurs in a form that is attached to an existing Large Lot Residential Zone or Small Settlement Zone and promotes a coordinated pattern of development;
 - f. is not located within an identified Development Area of the District's main towns of Rangiora, Kaiapoi and Woodend identified in the Future Development Strategy;
 - g. is not on the direct edges of the District's main towns of Rangiora, Kaiapoi, and Woodend, nor on the direct edges of these towns'
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Relevant Objectives and Policies

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<p>identified new development areas as identified in the Future Development Strategy;</p> <p>h. occurs in a manner that makes use of existing and planned transport infrastructure and the wastewater system, or where such infrastructure is not available, upgrades, funds and builds infrastructure as required, to an acceptable standard; and</p> <p>i. is informed through the development of an ODP</p>	
<p>UFD-P4 Identification/location and extension of Town Centre Zones</p> <p>Provide for the extension of existing Town Centres and locate and develop new commercial activities to implement the urban form identified in the Future Development Strategy, WDDS or Town Centre Plans.</p>	<p>The site is not located in the Oxford Town Centre Zone and is not for new commercial activities, so UFD-P4 does not apply.</p>
<p>UFD-P5 Identification/location and extension of Industrial Zones</p> <p>Provide for the extension of existing Industrial Zones and locate and develop new industrial activities to implement the urban form identified in the Future Development Strategy or WDDS.</p>	<p>The site is not located in an Industrial Zone, so UFD-P5 does not apply.</p>
<p>UFD-P6 Mechanism to release Residential Development Areas</p> <p>The release of land within the identified new development areas of Kaiapoi, North East Rangiora and South East Rangiora occurs in an efficient and timely manner via a certification process to enable residential activity to meet short to medium-term feasible development capacity and achievement of housing bottom lines.</p>	<p>The site is not located in these areas, so UFD-P6 does not apply.</p>
<p>UFD-P7 Mechanism to provide additional Commercial and Mixed Use Zones</p> <p>If proposed, ensure any plan change to create new, or expanded existing Commercial and Mixed Use Zones:</p> <p>1. improve commercial self-sufficiency within the town and the Waimakariri District;</p>	<p>The proposal is not for commercial or mixed use, so UFD-P7 does not apply.</p>

Relevant Objectives and Policies

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2. are commensurate to the population growth forecast for the town subject to the plan change;
3. consider and address any adverse effects that might undermine other town centres and local centres in the District; and
4. address any development capacity shortfall as identified in the Future Development Strategy or WDDS.
5. is informed through the development of an ODP.

UFD-P8 Mechanism to provide additional Industrial Zones

If proposed, ensure any plan change to create new, or expanded existing Industrial Zones:

1. manages adverse effects at the interface between Industrial Zones and arterial roads, Rural Zones, Residential Zones and Open Space and Recreation Zones, through methods such as building setbacks and landscaping;
2. provides for development of greenfield areas in a manner aligned with the delivery of infrastructure, including upgrades to infrastructure, to avoid adverse effects on the capacity and efficiency of infrastructure serving these areas; and
3. locates new Industrial Zones in locations adjacent to existing urban environments where it can be efficiently serviced by infrastructure.
4. is informed through the development of an ODP.

The site is not located in an Industrial Zone and is not proposed for an Industrial use, so UFD-P8 does not apply.

UFD-P9 Unique purpose and character of the Special Purpose Zone (Kāinga Nohoanga)

Support a mix of development on Māori Land within the Special Purpose Zone (Kāinga Nohoanga) that:

The site is not located within the Special Purpose Zone (Kāinga Nohanga); however, this rezoning submission and any future subdivision that this may enable is unlikely to have an adverse effect on Ngāi Tūāhuriri cultural values.

Relevant Objectives and Policies

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1. enables Te Ngāi Tūāhuriri Rūnanga to fully occupy and use land in accordance with the principles and purposes for which the land was originally set aside;
2. will occur over generations and take place in different parts of the zone, and occur at different times; and
3. connects to reticulated infrastructure where available, but recognises that as public reticulated infrastructure is not available to all parts of the zone, alternative forms of onsite independent individual and communal infrastructure will be required.

UFD-P10 Managing reverse sensitivity effects from new development Within Residential Zones and new development areas in Rangiora and Kaiapoi:

1. avoid residential activity that has the potential to limit the efficient and effective operation and upgrade of critical infrastructure, strategic infrastructure, and regionally significant infrastructure, including avoiding noise sensitive activities within the Christchurch Airport Noise Contour, unless within an existing Residential Zone;
2. minimise reverse sensitivity effects on primary production from activities within new development areas through setbacks and screening, without compromising the efficient delivery of new development areas.

The site is not located in a Residential Zone in Rangiora or Kaiapoi, so UFD-P10 does not apply.

SUB-O1 Subdivision design

Subdivision design achieves an integrated pattern of land use, development, and urban form, that:

1. provides for anticipated land use and density that achieve the identified future character, form or function of zones;

The proposed ODP demonstrates an indicative lot layout that will integrate land use, development, and urban form that will achieve the density of the General Residential Zone, maintains residential character, supports the protection of cultural, heritage and conservation values, and supports community resiliency to climate change and natural hazard risk. The details of the subdivision design and layout will be determined at subdivision consent stage. The proposal is consistent with SUB-O1.

Relevant Objectives and Policies

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2. consolidates urban development and maintains rural character except where required for, and identified by, the District Council for urban development;
3. supports protection of cultural and heritage values, conservation values; and
4. supports community resilience to climate change and risk from natural hazards.

SUB-O2 Infrastructure and transport

Efficient and sustainable provision, use and maintenance of infrastructure; and a legible, accessible, well connected transport system for all transport modes.

The proposed ODP demonstrates an efficient, sustainable, and well-connected transport system for vehicular and active transport modes. The proposal is consistent with SUB-O2.

SUB-O3 Esplanade reserves and esplanade strips.

There will be no esplanade reserve or strip required. SUB-O3 is not considered relevant.

SUB-P1 Design and amenity

Enable subdivision that:

1. within Residential Zones, incorporates best practice urban design, access to open space, and CPTED principles;
2. minimises reverse sensitivity effects on infrastructure including through the use of setbacks;
3. avoids subdivision that restricts the operation, maintenance, upgrading and development of the National Grid;
4. recognises and provides for the expression of cultural values of mana whenua and their connections in subdivision design; and
5. supports the character, amenity values, form and function for the relevant zone.

The proposed ODP has been designed in accordance with best practice urban design principles, minimises reverse sensitivity, recognises the cultural values of mana whenua, and supports the character and density of the General Residential Zone. The proposal is consistent with SUB-P1.

Relevant Objectives and Policies

SUB-P2 Allotment layout, size, and dimension

Ensure that allotment layout, size, and dimensions:

1. in Residential Zones:
 - a. enables a variety of allotment sizes to cater for different housing types and densities to meet housing needs;
 - b. supports the achievement of high quality urban design principles for multi-unit residential development;
2. in Rural Zones:
 - a. retains the ability for rural land to be used for primary production activities; and
3. in Open Space and Recreation Zones:
 - a. provides a variety of types and sizes of open space and recreation areas to meet current and future recreation needs.

SUB-P3 Sustainable design

Ensure that subdivision design:

1. maximises solar gain, including through:
 - a. road and block layout; and
 - b. allotment size, dimension, layout, and orientation;
2. in Residential Zones, Commercial and Mixed Use Zones, and Open Space and Recreation Zones, supports walking, cycling and public transport; and
3. promotes:
 - a. water conservation,
 - b. on-site collection of rainwater for non-potable use,

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The proposed rezoning to General Residential Zone will enable residential allotments and the proposed ODP has been designed with best practice urban design principles. The proposal is consistent with SUB-P2.

The proposed ODP is designed to ensure that the future subdivision will enable allotments to maximise solar gain, support walking and cycling, and support sustainable design.

The proposed ODP and future subdivision can be consistent with SUB-P3, and the subdivision design will be determined at subdivision consent stage.

Relevant Objectives and Policies

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- c. water sensitive design, and
 - d. the treatment and/or attenuation of stormwater prior to discharge, and
- 4. recognises the need to maintain the design capacity of infrastructure within the public network and avoid causing flooding of downstream properties.

SUB-P4 Integration and connectivity

Achieve integration and connectivity by ensuring:

- 1. in urban environments that there is effective integration of subdivision patterns and multi-modal transport connections within new development and to existing development;
- 2. subdivision on the boundaries between new and existing development is managed to:
 - a. avoid or mitigate significant adverse effects, including reverse sensitivity effects, through the use of setbacks, landscaping to achieve screening, and other methods; and
 - b. continuation of transport and pedestrian or cycle linkages.

The proposed ODP has been designed to ensure integration and connectivity throughout the future subdivision and to Oxford. The ODP also shows provisions for future connections to the east and west of the site to ensure connectivity with potential future residential developments.

Further detail on the subdivision layout will be confirmed at subdivision consent stage.

SUB-P5 Density in Residential Zones

Provide for a variety of site sizes within Residential Zones, while achieving minimum residential site sizes that are no smaller than specified for the zone.

The proposed ODP and rezoning to General Residential Zone will provide for housing choice in the District whilst achieving the minimum site size for the zone. The proposal is consistent with SUB-P5.

SUB-P6 Criteria for Outline Development Plans

Ensure that new Residential Development Areas, new Large Lot Residential Zones, new Commercial and Mixed Use Zones and new Industrial Zones shall not be subdivided until an ODP for that area has been included in the District Plan and each ODP shall:

The submission to rezone the site to proposed General Residential Zone is accompanied by a proposed ODP.

The proposed ODP has been prepared as a single plan, and has identified principal roads and connections, and connections to relevant infrastructure and servicing.

Relevant Objectives and Policies

1. be prepared as a single plan; and
2. be prepared in accordance with the following:
 - a. identify principal roads, connections and integration with the surrounding road networks, relevant infrastructure and areas for possible future development;
 - b. any land to be set aside:
 - i. for community facilities or schools;
 - ii. parks and land required for recreation or reserves;
 - iii. for business activities;
 - iv. the distribution of different residential densities;
 - v. for the integrated management of water systems, including stormwater treatment, secondary flow paths, retention and drainage paths;
 - vi. from development for environmental or landscape protection or enhancement; and
 - vii. from development for any other reason, and the reasons for its protection.
 - c. for new Residential Development Areas demonstrate how each ODP area will achieve a minimum net density of at least 15 lots or households per ha, unless there are demonstrated constraints then no less than 12 households per ha;
 - d. identify any cultural, natural, and historic heritage features and values and show how they are to be enhanced or maintained;
 - e. indicate how required infrastructure will be provided and how it will be funded;

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Due to the size and scale of the ODP and the proximity to Oxford, no land is required to be set aside for community facilities, schools, reserves, business, or varying densities.

The proposed ODP is very close to achieving the minimum net density of 15 allotments per hectare (approximately 14.9 allotments per hectare).

No cultural, natural, or historic features have been identified.

The infrastructure servicing report attached with this submission details the infrastructure and servicing required for future subdivision and development of the site.

The proposed ODP has been designed to enable the future subdivision to be undertaken at once or staged. This will be determined at subdivision consent stage.

The proposed ODP has connection to Harewood Road which provides connectivity through to Oxford and the wider Waimakariri District.

The indicative stormwater management area provides open green space within the ODP area.

There is not anticipated to be any adverse effects from the proposed rezoning on strategic infrastructure or on the natural environment. The potential effects on reverse sensitivity with the boundary of the adjoining rural land have been considered and can be mitigated at subdivision stage with appropriate setbacks and fencing typologies.

The proposed rezoning and proposed ODP is consistent with SUB-P6.

- f. set out the phasing and co-ordination of subdivision and development;
 - g. demonstrate how effective provision is made for a range of transport options, including public transport systems, pedestrian walkways and cycleways, both within and adjoining the ODP area;
 - h. for new Residential Development Areas, demonstrate how open space, playgrounds or parks for recreation will be provided within a 500m radius of new residential allotments including:
 - i. transport connectivity for active, public and other transport modes;
 - ii. connection to any other open space or community facility and other zones; and
 - iii. potential use of open space for stormwater management;
 - i. show how other potential adverse effects on and/or from nearby existing or designated strategic infrastructure (including requirements for designations, or planned infrastructure) will be avoided, remedied or appropriately mitigated;
 - j. show how other potential adverse effects on the environment, the protection and enhancement of surface and groundwater quality, are to be avoided, remedied or mitigated;
 - k. include any other information which is relevant to an understanding of the development and its proposed zoning; and
 - l. demonstrate that the design will minimise any reverse sensitivity effects.
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Relevant Objectives and Policies

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SUB-P7 Requirement of Outline Development Plans

This will be determined at subdivision consent stage.

Ensure that subdivision is in accordance with the fixed or flexible elements of any relevant ODP.

SUB-P8 Infrastructure

Achieve integrated and comprehensive infrastructure with subdivision by ensuring:

1. upgrade of existing infrastructure where the benefit is solely for the subdivision and subsequent development, or otherwise provide for cost-sharing or other arrangements for any upgrade, such as financial contributions, that are proportional to the benefit received;
2. adequate infrastructure provision and capacity to service the scale and nature of anticipated land uses, including:
 - a. wastewater disposal that will maintain public health and minimise adverse effects on the environment, while discouraging small-scale standalone community facilities;
 - b. water supply;
 - c. stormwater management;
 - d. phone, internet and broadband connectivity can be achieved, with new lines being underground in urban environments, except within the Special Purpose Zone (Kāinga Nohoanga);
 - e. electricity supply, with new lines being underground in new urban environments except within the Special Purpose Zone (Kāinga Nohoanga);
3. where reticulated wastewater disposal is available, that any new site is to be provided with a means of connection to the system; and

The infrastructure servicing report supporting this rezoning submission and proposed ODP demonstrates that future subdivision and development of the site can be serviced.

The future site is able to be serviced with reticulated water supply and wastewater, with upgrades required. Stormwater will be discharged to a stormwater management area within the site and will be discharged to ground.

The specific details of this will be determined at future subdivision consent and engineering approval stage.

Relevant Objectives and Policies

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4. where a reticulated wastewater system is not available, ensure that onsite treatment systems will be installed.
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SUB-P9 Access to, protection and enhancement of the margins of water bodies

During subdivision development:

1. ensure the protection and enhancement of the margins of water bodies; and
 2. maintain the diversity, quality and quantity of any resources valued for mahinga kai through protection or restoration.
-

It is not anticipated that there will be any adverse effects on water bodies. This will be determined at subdivision consent stage.

SUB-P10 Esplanade reserves and esplanade strips

Provide for the creation of esplanade reserves or esplanade strips in areas where there is an actual or potential benefit for access, recreation, conservation or natural hazard mitigation by:

1. identifying water bodies where such reserves or strips will be provided, regardless of subdivision site size;
 2. recognising that provision of other areas that provide public benefit will be desirable; and
 3. providing for minimum site sizes to be calculated as if any esplanade reserve resulting from the subdivision was part of the overall subdivision area.
-

No esplanade reserves or esplanade strips are required. Policy SUB-P10 is not considered relevant.

RESZ-O1 Residential growth, location, and timing

Sustainable residential growth that:

1. provides more housing in appropriate locations in a timely manner according to growth needs;
-

The proposed ODP is consistent with the proposed residential growth direction identified in the District Development Strategy and would therefore provide housing in appropriate locations, respond to district needs, and enable new development. Overall, the proposed rezoning is consistent with RESZ-O1.

Relevant Objectives and Policies

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2. is responsive to community and district needs; and
3. enables new development, as well as redevelopment of existing Residential Zones.

RESZ-O2 Residential sustainability

Efficient and sustainable use of residential land and infrastructure is provided through appropriate location of development and its design.

The proposed rezoning will enable an efficient and sustainable use of the site.

RESZ-O3 Residential form, scale, design, and amenity values

A form, scale, and design of development that:

1. achieves a good quality residential environment that is attractive and functional;
2. supports community health, safety and well-being;
3. maintains differences between zones; and
4. manages adverse effects on the surrounding environment.

The proposed ODP has been designed in accordance with best practice principles. The proposed rezoning will enable a future subdivision to be consistent with RESZ-O3.

RESZ-O4 Non-residential activities

Small-scale non-residential activities that take place in residential areas support the function of local communities.

The ODP is not proposing any non-residential activities. It is considered that RESZ-O4 is not relevant.

RESZ-O5 Housing choice

Residential Zones provide for the needs of the community through:

1. a range of residential unit types; and
2. a variety of residential unit densities.

The proposed rezoning will enable residential environment which will provide housing choice in the Waimakariri District. The proposal is consistent with RESZ-O5.

RESZ-P1 Design of development

New development in residential areas is well designed and laid out, including by:

1. ensuring that the bulk, scale and location of buildings on sites is consistent with the environment anticipated for the zone, and that impacts in

The proposed ODP will enable future subdivision and residential development. The details of the bulk, scale, and location of buildings is not yet known; however, the ODP has been designed in a way to ensure residential density as expected in the General Residential Zone.

Relevant Objectives and Policies

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relation to dominance, privacy and shadowing are minimised, while recognising the ability for larger sites in the General Residential Zone and Medium Density Residential Zone to absorb greater height;

The further detail of residential dwellings and design will be addressed at subdivision consent stage.

2. ensuring that the combination of buildings, paved surface, and landscaped permeable surface coverage retain a landscaped component for residential sites and provide opportunity for on-site stormwater infiltration, and where this is reduced that it is offset by suitable planting, other green surface treatment, and stormwater attenuation;
3. maintaining streetscapes in Residential Zones where garaging and buildings are set back from the street, and where these setbacks are reduced, that sufficient space is still available for vehicle manoeuvring and impacts of dominance on the streetscape are minimised;
4. facilitating passive surveillance and active residential frontages through controls on glazing, avoidance of blank facades, provision of habitable rooms and front door entrances to residential units facing the street, and consider modification of those controls only where other active design features such as verandas are incorporated;
5. minimising the adverse impact of high fences on streetscape character and public safety; and
6. ensuring that residential activities are provided with sufficient on-site outdoor living space for residents through access to outdoor living space that complements the housing typology, or where not directly provided, take into account alternative arrangements for open space (either within the site or within close proximity to the site).

RESZ-P2 Multi-unit residential development

This submission is not proposing multi-unit residential development. Policy RESZ-P2 is not considered relevant.

Relevant Objectives and Policies

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Promote and manage the development of multi-unit residential development in the Medium Density Residential Zone and General Residential Zone, including the use of amalgamated or multi-site redevelopment, by:

RESZ-P3 Safety and well-being

Provide for safety and well-being by:

1. taking into account the following CPTED principles in the design of structures, residential units, outdoor areas and public open spaces:
 - a. access – safe movement and connections;
 - b. surveillance and sightlines – see and be seen;
 - c. layout - clear and logical orientation;
 - d. activity mix – eyes on the street;
 - e. sense of ownership – showing a space is cared for;
 - f. quality environments - well designed, managed and maintained environments;
 - g. physical protection – using active security measures; and
2. providing for peaceful and pleasant living environments which enable limited opportunities for signs, appropriately manage the impacts of on-site traffic generation to minimise impacts on neighbouring properties and road networks, and minimise adverse effects of noise and light, particularly in night time hours.

The proposed ODP is not proposing the design or structure, residential units, outdoor areas, or public open spaces. However, the ODP has been designed to ensure safe movement and connections and sightlines through the ODP. The ODP will also enable a future pleasant living environment, so is consistent with RESZ-P3.

RESZ-P4 Sustainable design

In relation to design of buildings in Residential Zones, encourage and advocate for:

The submission and proposed ODP is not proposing residential buildings. RESZ-P4 is not considered relevant.

Relevant Objectives and Policies

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1. minimisation of energy and water use, and the use of low impact design such as optimal site layout, passive solar design, solar power and water heating, and rainwater collection, detention and use; and
2. universal design which provides for all stages of life development, size, and abilities, in particular in relation to retirement village living and minor residential units.

RESZ-P5 Residential Commercial Precinct

Enable additional commercial activity to establish in the Residential Commercial Precinct where:

1. it assists the supply of commercial space for Rangiora town centre; and
2. effects on any adjacent residential activity are minimised.

The submission and proposed ODP is not proposing commercial activity. RESZ-P5 is not considered relevant.

RESZ-P6 Non-residential activities

Non-residential activities are provided for in a manner that:

The submission and proposed ODP is not proposing non-residential activities. RESZ-P5 is not considered relevant.

RESZ-P7 Commercial activity in the General Residential and Medium Density Residential Zones

This submission is not proposing any commercial activity. RESZ-P7 is not considered relevant.

RESZ-P8 Housing Choice

Enable a range of residential unit types, sizes and densities where:

1. good urban design outcomes are achieved; and
2. development integrates with surrounding residential areas and infrastructure.

This submission and proposed ODP will provide additional housing capacity and housing choice which will integrate with the surrounding township and residential areas in Oxford. The proposal is consistent with RESZ-P7.

RESZ-P9 Commercial activity in Settlement Zones

RESZ-P9 is not considered relevant.

RESZ-P10 Retirement villages

RESZ-P10 is not considered relevant.

RESZ-P11 Minor residential units

RESZ-P11 is not considered relevant.

Relevant Objectives and Policies

RESZ-P12 Outline development plans

Use and development of land subject to an ODP shall:

1. be in accordance with the development requirements and fixed and flexible elements in the relevant ODP, or otherwise delivers equivalent or better outcomes while achieving an efficient, effective and consolidated urban form, except relation to any interim use and development addressed in (3);
2. ensure that development:
 - a. contributes to a strong sense of place, and a coherent, functional and safe neighbourhood;
 - b. contributes to residential areas that comprise a diversity of housing types;
 - c. retains and supports the relationship to, and where possible enhances, recreational, historic heritage and ecological features and values; and
 - d. achieves a high level of visual and landscape amenity;
 - e. interim use and development of land subject to an ODP shall not compromise the timely implementation of, or outcomes sought by, the ODP.

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This submission includes a proposed ODP to be included within the District Plan. Any further subdivision and development of the site, and assessment of this policy, will be determined at subdivision consent and/or land use stage.

RESZ-P13 Location of higher density development

This submission and proposed ODP is not proposing higher density development. RESZ-P13 is considered not relevant.

RESZ-P14 Development density

Development densities for new Development Areas and Large Lot Residential Zone Overlays shall be as follows:

The proposed ODP and indicative lot layout can achieve a net density of 14.85hh/ha on the basis of the 3.5 ha title area. It is noted that 15hh/ha cannot be achieved on this site with the permitted minimum allotment size of 500m².

Relevant Objectives and Policies

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1. in new Development Areas, achieve a minimum net density of 15 households per ha averaged across the whole of the residential Development Area within the relevant ODP, unless that are demonstrated constraints then no less than 12 households per ha.
2. In new Large Lot Residential Zone Overlays, achieve a net density of 1 to 2 households per ha.

GRZ-O1 General Residential Zone

A general suburban residential zone with a range of larger site sizes providing for predominantly residential use.

The proposed rezoning and ODP is requesting the General Residential Zone and will provide allotments for residential use. The proposal is consistent with GRZ-O1.

GRZ-P1 Residential character and amenity values

Provide for activities and structures that support and maintain the character and amenity values anticipated for the zone which:

The detail of the future residential development will be determined at subdivision consent stage. The proposed rezoning and ODP is consistent with the General Residential Zone.

1. Provides for suburban character on larger sites primarily with detached residential units;
2. Provides for a pleasant residential environment, in particular minimising the adverse effects of night time noise, glare and light spill, and limited signs;
3. Provides opportunities for multi-unit residential development on larger sites;
4. Has sites generally dominated by landscaped areas, with open spacious streetscapes;
5. Through careful design provides a range of higher density living choices to be developed within the zone; and
6. Provides for small scale commercial activity that services the local community, and home businesses at a scale consistent with surrounding residential character and amenity values.

Relevant Objectives and Policies

GRZ-P2 General Residential Zone Overlay

For any General Residential Zone Overlay, ensure an ODP is developed in accordance with SUB-P6 and incorporated into the District Plan.

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While not in an Overlay Area, the submission includes an ODP that has been developed in accordance with SUB-P6 and is to be incorporated into the District Plan. The proposal is consistent with GRZ-P2.