

Proposed District Plan Change 50

135 Witako Street
Rezoning to Community Health Activity Area

Publicly Notified:

14 November 2017

Submissions Close:

13 December 2017



Part 1: Introduction

1. What is Proposed Plan Change 50

Hutt City Council (“Council”) has prepared Proposed Plan Change 50. The purpose of Proposed Plan Change 50 is to rezone 135 Witako Street, Epuni (Lot 1 Deposited Plan 53389) from General Recreation Activity Area to Community Health Activity Area (Area 1) under the City of Lower Hutt District Plan.

The main reason for this plan change is to provide a zone suitable for the development and use of healthcare facilities.

2. Structure of this document

This document contains four parts. These are as follows:

Part 1	Introduction.
Part 2	Public Notice.
Part 3	Proposed Amendment to District Plan Map D4.
Part 4	Section 32 Evaluation.
Part 5	Submission Form (Form 5).

All five parts of this document are publicly available from Council as detailed in the Public Notice (Part 2 of this document).

3. The Process for Proposed Plan Change 50

The process for Proposed Plan Change 50 can be summarised as follows:

24 March 2015	Council resolved to publicly notify a proposal to revoke the reserve status of the site.
15 December 2015	Council resolved to revoke the reserve status of the site.
14 November 2017	Proposed Plan Change 50 publicly notified.

Upon notification of the proposed Plan Change, all interested persons and parties have an opportunity to provide further input through the submission process. Council’s process for public participation in the consideration of this Plan Change under the Resource Management Act 1991 (“RMA”) is as follows:

- The period in which submissions may be made is at least 20 working days from the date of the Public Notice;
- After the closing date for submissions, Council must prepare a summary of the submissions and this summary must be publicly notified;
- Certain persons may make further submissions in support of, or in opposition to, the submissions already made no later than 10 working days after the notification of the summary of submissions;
- If a person making a submission or further submission asks to be heard in support of

his/her submission, a hearing must be held;

- Following the hearing Council must give its decision on the Plan Change in writing (including its reasons for accepting or rejecting submissions); and
- Any person who has made a submission has the right to appeal the Council decision on the Plan Change to the Environment Court.

Part 2: Public Notice

PUBLIC NOTICE

Public Notification of Proposed District Plan Change 50 to the City of Lower Hutt District Plan

Clause 5 of the First Schedule of the Resource Management Act 1991

Proposed District Plan Change 50: 135 Witako Street, Rezoning to Community Health Activity Area

Hutt City Council has prepared Proposed Plan Change 50 which seeks to rezone 135 Witako Street, Epuni (Lot 1 Deposited Plan 53389) from General Recreation Activity Area to Community Health Activity Area (Area 1) under the City of Lower Hutt District Plan.

The purpose of this Plan Change is to provide a suitable zone for the development and use of healthcare facilities at the site.

Documentation for Proposed Plan Change 50 can be viewed:

- on Council's website: huttcity.govt.nz/pc50;
- at all Hutt City Council Libraries; and
- at the Customer Services Counter, Council Administration Building, 30 Laings Road, Lower Hutt.

Copies can also be requested by contacting Hutt City Council:

- Phone: 04 570 6666 or
- Email: district.plan@huttcity.govt.nz

Any person may make a submission but, if the person could gain an advantage in trade competition through the submission, then the person may do so only if the person is directly affected by an effect of the proposal that -

- adversely affects the environment; and
- does not relate to trade competition or the effects of trade competition.

Submissions may be lodged in any of the following ways:

- Online huttcity.govt.nz/pc50
- Email: submissions@huttcity.govt.nz
- Post: Environmental Policy Division, Hutt City Council, Private Bag 31912, Lower Hutt 5040
- In Person: Council Administration Building, 30 Laings Road, Lower Hutt

Submissions must be written on or in accordance with RMA Form 5 and include:

- details on the specific provisions the submission relates to;
- whether the specific provision is supported or opposed or proposed to be amended, with reasons; and
- precise details on the decision that is sought from Council.

Submissions must also address potential trade competition advantages and state whether or not you wish to be heard in support of your submission.

Form 5 is available:

- on Council's website: huttcity.govt.nz/pc50;
- at all Hutt City Council Libraries; and
- at the Customer Services Counter, Council Administration Building, 30 Laings Road, Lower Hutt.

Copies can also be requested by contacting Hutt City Council:

- Phone: 04 570 6666; or
- Email: district.plan@huttcity.govt.nz

Submissions close on Wednesday 13 December 2017 at 5pm

The process for public participation in the consideration of this proposal under the RMA is as follows:

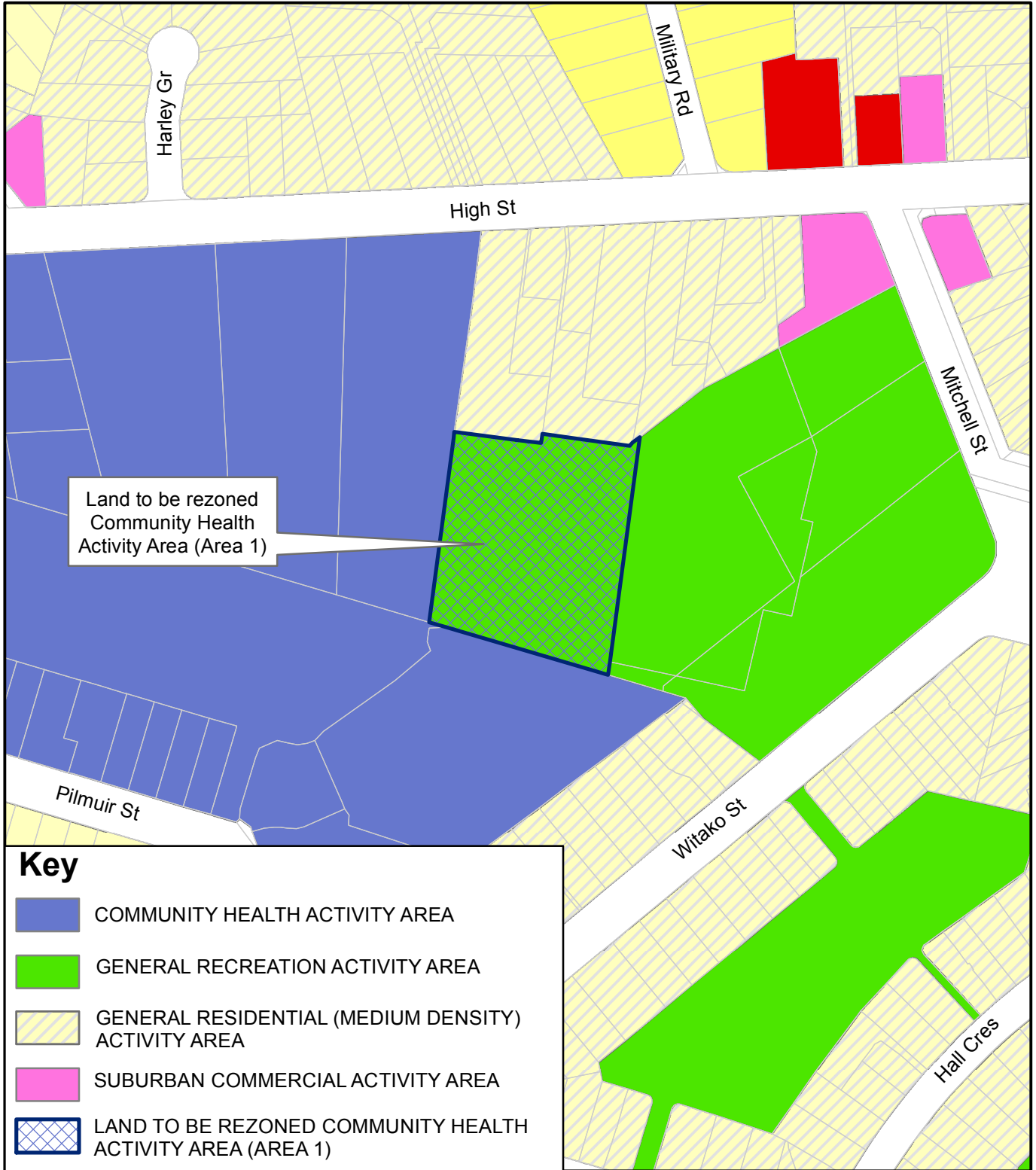
- after the closing date for submissions, Hutt City Council must prepare a summary of decisions requested by submitters and give public notice of the availability of this summary and where the summary and submissions can be inspected; and
- there must be an opportunity for the following persons to make a further submission in support of, or in opposition to, the submissions already made:
 - any person representing a relevant aspect of the public interest;
 - any person who has an interest in the proposal greater than the general public has;
 - the local authority itself; and
- if a person making a submission asks to be heard in support of his or her submission, a hearing must be held; and
- Hutt City Council must give its decision on the provisions and matters raised in the submissions (including its reasons for accepting or rejecting submissions) and give public notice of its decision within 2 years of notifying the proposal and serve it on every person who made a submission at the same time; and
- any person who has made a submission has the right to appeal against the decision on the proposal to the Environment Court if, -
 - in relation to a provision or matter that is the subject of the appeal, the person referred to the provision or matter in the person's submission on the proposal; and
 - in the case of a proposal that is a proposed policy statement or plan, the appeal does not seek the withdrawal of the proposal as a whole.

Please contact <name; telephone; email> if you have any questions about the proposal.

Tony Stallinger
Chief Executive

14 November 2017

Part 3: Plan Change 43
Proposed Amendment to District Plan Map D4



Proposed District Plan Change 50

135 Witako Street, Eponi

Planning Map D4



Scale 1:2,500

Part 4: Section 32 Evaluation

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Introduction

1. Proposed District Plan Change 50 (“the Proposed Plan Change”) seeks to rezone 135 Witako Street, Epuni (Lot 1 Deposited Plan 53389) from General Recreation Activity Area to Community Health Activity Area (Area 1) under the City of Lower Hutt District Plan (“the District Plan”). The land proposed to be rezoned (“the site”) has an area of 7,517m². The purpose of the Proposed Plan Change is to ensure that the site has the most appropriate zoning to meet the purpose of the Resource Management Act (“the RMA” or “the Act”) and the objectives of the District Plan.
2. No new District Plan provisions (objectives, policies or rules) would be introduced as a result of the Proposed Plan Change. The only required amendments would be to alter District Plan Map D4 to reflect the zone change.
3. This evaluation has been prepared to meet the requirements of section 32 of the RMA. The evaluation includes the following sections:
 - Introduction;
 - Statutory Basis for Section 32 Evaluation;
 - Background;
 - Scope of the Plan Change;
 - Scale and Significance Assessment;
 - Consultation;
 - National, Regional and Local Policy Framework;
 - City of Lower Hutt District Plan;
 - Effects of the Proposed Plan Change;
 - Evaluation of Options; and
 - Conclusion.

Statutory Basis for Section 32 Evaluation

4. Section 32 of the Resource Management Act 1991 (RMA) requires that an evaluation report be prepared before the notification of a plan change by Council. Sections 32(1), 32(2), 32(3) and 32(4) provide guidance as to what such an evaluation must examine and consider as follows:
 - (1) *An evaluation report must—*
 - (a) *examine the extent to which the objectives are the most appropriate way to achieve the purpose of this Act; and*
 - (b) *examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by –*
 - (i) *identifying other reasonably practicable options for achieving the objectives; and*
 - (ii) *assessing the efficiency and effectiveness of the provisions in achieving the objectives; and*
 - (iii) *summarising the reasons for deciding on the provisions; and*

- (c) *contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.*
- (2) *An assessment under subsection 1(b)(ii) must –*
- (a) *identify and assess the benefits and costs of the environmental, economic, social and cultural effects that are anticipated from the implementation of the provisions, including opportunities for –*
 - (i) *economic growth that are anticipated to be provided or reduced; and*
 - (ii) *employment that are anticipated to be provided or reduced; and*
 - (b) *if practicable, quantify the benefits and costs referred to in paragraph (a); and*
 - (c) *assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.*
- (3) *If the proposal (an amending proposal) will amend a standard, statement, regulation, plan, or change that is already proposed or that already exists (an existing proposal), the examination under subsection (1)(b) must relate to –*
- (a) *the provisions and objectives of the amending proposal; and*
 - (b) *the objectives of the existing proposal to the extent that those objectives –*
 - (i) *are relevant to the objectives of the amending proposal; and*
 - (ii) *would remain if the amending proposal were to take effect.*
- (4) *If the proposal will impose a greater prohibition or restriction on activity to which a national environmental standard applies than the existing prohibitions or restrictions in that standard, the evaluation report must examine whether the prohibition or restriction is justified in the circumstances of each region or district in which the prohibition or restriction would have effect*
- (4A) *If the proposal is a proposed policy statement, plan, or change prepared in accordance with any of the processes provided for in Schedule 1, the evaluation report must—*
- (a) *summarise all advice concerning the proposal received from iwi authorities under the relevant provisions of Schedule 1; and*
 - (b) *summarise the response to the advice, including any provisions of the proposal that are intended to give effect to the advice.*
5. This report has been prepared in accordance with these requirements.

Background

6. The Naenae Bowling Club had been leasing the site since 1945. With the lease due to expire in January 2017, the Club agreed to merge with the Park Avenue Bowling Club and relocate to the new regional bowls centre at Walter Mildenhall Park, Naenae.
7. Between 2013 and 2016, Council undertook a comprehensive review of all reserve land on the Hutt Valley floor from Pomare to Petone to consider future reserve needs (*Review of Valley Floor Reserves*).

8. In November 2014, Council staff prepared a report to discuss the future options of the site. These options included developing the land for another recreational use, or revoking the reserve status of the land and selling the land to an interested party, including to one of two neighbouring hospitals.
9. The report recommended that the local community be consulted, in accordance with the reserve revocation provisions of the Reserves Act 1977.
10. As a result of the review and consultation, Council concluded the site was surplus to its requirements for reserves, the site's reserve status should be revoked, and the site should be divested to advance two objectives:
 - i. Use the proceeds to assist with the development of the regional bowls centre at Walter Mildenhall Park, Naenae;
 - ii. Benefit the community by enabling expansion of health facilities in the community health precinct.
11. Council's Divisional Manager Parks and Gardens confirmed the background to the site's reserve status revocation in an email dated 26 September 2017 (Attachment 1).

Scope of the Plan Change

12. The purpose of the Proposed Plan Change is to rezone the site from its existing zone (General Recreation Activity Area) to one that provides for the intended future healthcare facilities. The proposed new zone that best meets these requirements is Community Health Activity Area (Area 1).
13. The Proposed Plan Change would not introduce new objectives, policies or rules to the District Plan. Any effects that may arise from future development of the site can be addressed appropriately through the existing objectives, policies and rules.
14. The scope of the Proposed Plan Change is limited to what can be considered under the RMA. The Proposed Plan Change cannot consider decisions made under the Reserves Act 1977, the Local Government Act 1974 or the Local Government Act 2002. For example, the Proposed Plan Change cannot reconsider whether it was appropriate for the reserve status of the site to be revoked (which has been addressed through a Reserves Act process). In addition, the Proposed Plan Change cannot consider whether it is appropriate for the site to be disposed of by the Council. The scope of the Proposed Plan Change is limited to whether the proposed zone and the associated District Plan provisions are the most appropriate method to meet the purpose of the RMA.

Scale and Significance Assessment

Introduction

15. Under s32(1)(c) of the RMA, this report needs to:

contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal [emphasis added].
16. The following Scale and Significance Assessment discusses the Proposed Plan Change in terms of 8 factors, and scores each factor out of 5 (where 1 is low and 5 is high).
17. The Assessment concludes with a table summarising the factors and scores, and gives a final overall score for the scale and significance of the Proposed Plan Change.

Factor 1 Reason for the Change

18. The Proposed Plan Change is necessary to ensure that the site has an appropriate zone,

given it is no longer required for recreational use and the General Recreation zoning is unsuitable for the development and use of healthcare facilities.

19. Factor 1 Reason for the Change scores 4.

Factor 2 Resource Management Issues / Problem Definition

20. The Proposed Plan Change anticipates resource management issues associated with the future development and use of healthcare facilities on the site. The existing issues identified in the operative District Plan are relevant:

- Issue 9.1.1A - The Hutt Hospital provides essential health care services, however the nature and scale of activities on the site have the potential to affect adversely the amenity values of the surrounding area. It is important that opportunity is available for the operations to continue and expand where necessary, while ensuring adverse effects upon the surrounding area are managed.
- Issue 9A 1.1.2 - Activities on sites surrounding the Hutt Hospital are principally residential in nature. It is necessary to provide opportunity for residential activities within the activity area, where the character and amenity values of surrounding activity areas can be maintained and enhanced.
- Issue 9A 1.2.1 - The site on which the Hutt Hospital is located is used intensively, and the scale of buildings is different in character to those in surrounding areas. Future development on the site must be managed to ensure buildings and structures do not affect adversely the amenity values of the surrounding area.
- Issue 9A 1.2.2 - The demand for on site vehicle parking generated by staff and visitor cars is significant. It is essential that on site parking is managed to maintain and enhance amenity values of the surrounding area, and ensure adverse effects upon the road network are avoided or mitigated.

21. The issues anticipated are appropriately addressed through the District Plan's existing objectives, policies and rules including those of the Community Health Activity Area (Area 1).

22. Factor 2 Resource Management Issues / Problem Definition scores 1.

Factor 3 Degree of Shift from the Status Quo

23. The proposed rezoning of the site would significantly increase the built development that could occur at the site. In addition, the types of activities that are enabled by the District Plan for the site would change. However, as the types and scale of development that would be enabled at the site would likely be in keeping with existing development in the surrounding area, the degree of shift is not at the highest level.

24. Factor 3 Degree of Shift from the Status Quo scores 4.

Factor 4 Who and How Many Will be Affected/Geographical Scale of Effects

25. The Proposed Plan Change involves the rezoning of a single site, which is not visually prominent when viewed from the wider environment. While the Proposed Plan Change rezones the site to allow for more intense development on the site the effects from the development would be localised to the adjacent properties.

26. Enabling the expansion of healthcare facilities is a potential community-wide benefit.

27. Factor 4 Who and How Many Will be Affected/Geographical Scale of Effects scores 2.

Factor 5 Degree of Impact On or Interest from Iwi/Māori

28. The site is not identified in the District Plan as having cultural values, and no adjacent

sites have been identified as having cultural value. Mana whenua (Port Nicholson Block Settlement Trust and Te Rūnanga o Toa Rangatira) have been invited to be involved in pre-notification consultation for the Proposed Plan Change. No concerns have been raised by either party.

29. Factor 5 Degree of Impact on or Interest from Iwi/Māori scores 1.

Factor 6 Timing and Duration of Effects

30. The effects of the Proposed Plan Change would be ongoing from the commencement of construction of a development that is enabled by the Proposed Plan Change. While the construction effects associated with development of the site would likely be for a limited amount of time, the effects of the buildings and activities at the site on the surrounding area would be ongoing. However, a plan change that results in a new development will always have ongoing effects.

31. Factor 6 Timing and Duration of Effects scores 2.

Factor 7 Type of Effects

32. The type of effects that would be generated by a development that is enabled by the Proposed Plan Change are well understood and are similar in type and scale to the effects generated by existing developments on adjacent sites.

33. In addition, as the Proposed Plan Change would not alter the provisions of the District Plan, there would be no change to how the effects are addressed by the District Plan.

34. Factor 7 Type of Effects scores 1.

Factor 8 Degree of Risk and Uncertainty

35. The type and scale of built development enabled by the permitted activity standards of the Proposed Plan Change have been modelled (Attachment 2). The likely built development and healthcare activities are in keeping with the existing Community Health Activity Area and likely potential effects on neighbouring properties are well understood and addressed appropriately by the existing provisions of the District Plan.

36. Factor 8 Degree of Risk and Uncertainty scores 1.

Overall Scale and Significance

37. *Table 1 Summary of Scale and Significance* below lists the factors discussed above and the scores for each factor. The scores are then combined to give a total scale and significance score for the Proposed Plan Change.

38. The scale and significance of the Proposed Plan Change is Moderate.

Table 1: Summary of Scale and Significance

Factor	Score
1. Reason for Change	4
2. Problem / Issue	1
3. Degree of Shift from Status Quo	4
4. Who and How Many Affected, Geographic Scale of Effects	2
5. Degree of Impact on or Interest from Māori	1
6. Timing and Duration of Effects	2

7.	Type of Effect	1
8.	Degree of Risk or Uncertainty	1
9.	Total (out of 40)	16

Total Score Interpretation

- 0-10 Scale and Significance = Low
11-20 Scale and Significance = Moderate
21-30 Scale and Significance = High
31-40 Scale and Significance = Very High

Consultation

Consultation with Iwi

39. Iwi authorities Port Nicholson Block Settlement Trust and Te Rūnanga o Toa Rangatira Inc were advised of the Proposed Plan Change at an early stage of its development. They were also provided with a draft of the Proposed Plan Change.

Consultation with Statutory Authorities

40. To meet the requirements of Schedule 1 of the RMA, a copy of the draft proposed plan change was sent to the following parties:
- Ministry for the Environment;
 - Greater Wellington Regional Council;
 - Port Nicholson Block Settlement Trust;
 - Te Rūnanga o Toa Rangatira Inc;
 - Upper Hutt City Council;
 - Porirua City Council;
 - South Wairarapa District Council;
 - Wellington City Council.
41. To date, no response has been received from any of these parties.

National, Regional and Local Policy Framework

42. The following sections of this report consider the Proposed Plan Change against the national, regional and local policy framework.

Part 2 of the RMA

43. Part 2 of the RMA outlines the purposes and principles of the Act.

Section 5

44. Section 5 sets out the purpose of the RMA, which is to promote the sustainable management of natural and physical resources.
45. The purpose of the rezoning of the site is to ensure that the site has the most appropriate

zone to meet the purpose of the Act. Council has determined that the site is surplus to requirements for reserve land. As such, the existing General Recreation Activity Area is no longer the most appropriate zone to reflect the purpose of the RMA as the zone discourages non-recreational activities being established on the site.

46. The site adjoins the Community Health Activity Area, which provides for activities associated with the Hutt Hospital. The Hutt Hospital is a critical community facility that has a limited ability to expand due to the limited amount of land in the Community Health Activity Area. The site also adjoins the site of the Boulcott Hospital, which is a large private hospital that complements the services provided by the Hutt Hospital. While the Boulcott Hospital is situated in the General Residential (Medium Density) Activity Area, it also has limited ability to expand, given the land to the west is occupied by the Hutt Hospital and the land to the east is occupied by residential dwellings.
47. Given the context and location of the site, the Community Health Activity Area zone is the best zone to achieve the sustainable management of the site as it would enable further development of healthcare facilities on the site, which would support the social wellbeing and health and safety of the local community. Potential effects associated with the development of the site can be addressed through the existing provisions of the District Plan for the Community Health Activity Area. This includes Permitted Activity Conditions that address the bulk and height of buildings to address effects on amenity values of the surrounding area.
48. The Community Health Activity Area would also permit the following activities:
- Dwelling houses;
 - Home occupations;
 - Child care and Kōhanga Reo facilities; and
 - Accessory buildings to the above Permitted Activities.
49. If these activities were to be established on the site, they would be required to comply with the Permitted Activity Conditions of *Chapter 4A: General Residential Activity Area*. These activities are considered to be a sustainable use of the site given the residential development in the surrounding area. In addition, any effects from these activities would be appropriately mitigated through the existing provisions of the District Plan.
50. Given the above factors, rezoning the site to Community Health Activity Area (Area 1) would provide for sustainable management of the site and is consistent with Section 5 of the RMA.

Section 6

51. Section 6 of the RMA identifies matters of national importance, and states:
52. In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:
- (a) *the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development;*
 - (b) *the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development;*
 - (c) *the protection of areas of significant indigenous vegetation and significant*

habitats of indigenous fauna;

- (d) *the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers;*
- (e) *the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga;*
- (f) *the protection of historic heritage from inappropriate subdivision, use, and development;*
- (g) *the protection of protected customary rights;*
- (h) *management of significant natural hazard risk.*

53. There are no relevant Section 6 matters that require consideration for the Proposed Plan Change.

Section 7

54. Section 7 of the RMA identifies other matters to be taken into account for the Proposed Plan Change. It states:

55. In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

- (a) *kaitiakitanga;*
- (aa) *the ethic of stewardship;*
- (b) *the efficient use and development of natural and physical resource;:*
- (ba) *the efficiency of the end use of energy;*
- (c) *the maintenance and enhancement of amenity values;*
- (d) *intrinsic values of ecosystems;*
- (e) *[Repealed]*
- (f) *maintenance and enhancement of the quality of the environment;*
- (g) *any finite characteristics of natural and physical resources;*
- (h) *the protection of the habitat of trout and salmon;*
- (i) *the effects of climate change;*
- (j) *the benefits to be derived from the use and development of renewable energy.*

56. The Section 7 matters that are applicable to this proposal are 7(b), 7(c), and 7(f). The Proposed Plan Change is considered to be consistent with these matters through the proposed zone and the existing objectives, policies and rules of the District Plan. This ensures that future development would be undertaken in a manner that is consistent with the established amenity and character of the local environment. In addition, the Proposed Plan Change would enable an efficient use of land that the Council has determined to be surplus to requirements as a reserve. Overall, the Proposed Plan Change is consistent with the identified matters within Section 7 of the RMA.

Section 8

57. Section 8 of the RMA states:

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and

physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

58. Section 8 requires Proposed Plan Changes to take into account the principles of the Treaty of Waitangi. As part of the consultation process, mana whenua of the district (Port Nicholson Block Settlement Trust and Te Rūnanga o Toa Rangatira) were invited to provide feedback on the plan change. The iwi have opted to not provide any feedback at this stage. There is no information to suggest the proposal is inconsistent with Section 8.

National Policy Statements

59. Section 75(3)(c) of the RMA states that a district plan must give effect to any National Policy Statement.

60. While the Community Health Activity Area principally provides for healthcare facilities, it also provides for residential activities as Permitted Activities. As this is the case, the National Policy Statement on Urban Development Capacity (“the NPS-UDC”) is relevant and the Proposed Plan Change has been assessed against the NPS-UDC.

61. The relevant policies that require consideration when assessing the Proposed Plan Change are policies PA1 – PA4. These are discussed in detail below:

62. *PA1: Local authorities shall ensure that at any one time there is sufficient housing and business land development capacity according to the table below:*

- a. *Short term Development capacity must be feasible, zoned and serviced with development infrastructure.*
- b. *Medium term Development capacity must be feasible, zoned and either:*
 - *serviced with development infrastructure, or*
 - *the funding for the development infrastructure required to service that development capacity must be identified in a Long Term Plan required under the Local Government Act 2002.*
- c. *Long-term Development capacity must be feasible, identified in relevant plans and strategies, and the development infrastructure required to service it must be identified in the relevant Infrastructure Strategy required under the Local Government Act 2002.*

63. The Proposed Plan Change is consistent with Policy PA1 in that if the site was developed for residential purposes, it would assist Council in providing short term housing development capacity. In addition, the site does not contain any physical constraints that would prevent the development of housing, and there are no known infrastructure constraints for development in this area.

64. *PA2: Local authorities shall satisfy themselves that other infrastructure required to support urban development are likely to be available.*

65. The Proposed Plan Change is consistent with Policy PA2. The site is located in an area with existing Council reticulated services and there are no known infrastructure constraints for development in this area.

66. *PA3: When making planning decisions that affect the way and the rate at which development capacity is provided, decision-makers shall provide for the social, economic, cultural and environmental wellbeing of people and communities and future generations, whilst having particular regard to:*

- a. *Providing for choices that will meet the needs of people and communities and future generations for a range of dwelling types and locations, working*

environments and places to locate businesses;

- b. Promoting the efficient use of urban land and development infrastructure and other infrastructure; and*
- c. Limiting as much as possible adverse impacts on the competitive operation of land and development markets.*

67. The Proposed Plan Change is consistent with Policy PA3. The Community Health Activity Area (Area 1) allows for a range of housing developments to be provided and enables an efficient use of urban land and development infrastructure. The proposed rezoning would allow for the site to be developed for residential purposes in a manner that is consistent with the character of the local environment. The site is already serviced by existing infrastructure and there are no known infrastructure constraints for development in this area.
68. *PA4: When considering the effects of urban development, decision-makers shall take into account:*
- a. The benefits that urban development will provide with respect to the ability for people and communities and future generations to provide for their social, economic, cultural and environmental wellbeing; and*
 - b. The benefits and costs of urban development at a national, inter-regional, regional and district scale, as well as the local effects.*
69. Residential development within the Community Health Activity Area (Area 1) zone is managed by the Permitted Activity Conditions for the General Residential Activity Area, which is the zone for most of the residential properties in the surrounding area. A residential development at the site would maintain the environmental wellbeing of the local environment by enabling a housing form that would be consistent with the character of the existing residential development in the surrounding area.
70. Due to the small size of the area to be rezoned, the benefits and costs associated with the proposal are limited to the district scale. The benefits and costs associated with the proposed rezoning are addressed earlier in this report.
71. No other National Policy Statements are relevant to the Proposed Plan Change.

Regional Policy Statement for the Wellington Region

72. Section 75(3)(c) of the RMA states that a district plan must give effect to any regional policy statement.
73. The Regional Policy Statement for the Wellington region (“the RPS”) sets out the regional approach for managing the environment providing for growth and addressing the associated effects. The RPS identifies the significant resource management issues for the region and outlines objectives, policies and methods to achieve integrated sustainable management of the region’s natural and physical resources.
74. The objectives and policies of the RPS that are relevant to the Proposed Plan Change are addressed below:

Regional Form, Design and Function

Objective 22

A compact well designed and sustainable regional form that has an integrated, safe and responsive transport network and:

- (e) urban development in existing urban areas, or when beyond urban areas, development that reinforces the region’s existing urban form;*

- (g) *a range of housing (including affordable housing);*
- (h) *integrated public open spaces;*
- (k) *efficiently use existing infrastructure (including transport network infrastructure);*
- (l) *essential social services to meet the region's needs.*

Policy 57:

Integrating land use and transportation – consideration

When considering an application for a resource consent, notice of requirement, or a change, variation or review of a district plan, for subdivision, use or development, particular regard shall be given to the following matters, in making progress towards achieving the key outcomes of the Wellington Regional Land Transport Strategy:

- (a) *whether traffic generated by the proposed development can be accommodated within the existing transport network and the impacts on the efficiency, reliability or safety of the network;*
- (b) *connectivity with, or provision of access to, public services or activities, key centres of employment activity or retail activity, open spaces or recreational areas;*
- (c) *whether there is good access to the strategic public transport network;*
- (d) *provision of safe and attractive environments for walking and cycling; and*
- (e) *whether new, or upgrades to existing, transport network infrastructure have been appropriately recognised and provided for.*

Policy 58:

Co-ordinating land use with development and operation of infrastructure – consideration

When considering an application for a resource consent, notice of requirement, or a plan change, variation or review of a district plan for subdivision, use or development, particular regard shall be given to whether the proposed subdivision, use or development is located and sequenced to:

- (a) *make efficient and safe use of existing infrastructure capacity; and/or*
- (b) *coordinate with the development and operation of new infrastructure.*

75. Objective 22 addresses several issues that relate to providing a compact, well designed, sustainable regional form. The key issues for the Proposed Plan Change from this objective and the associated policies are:
- Development in existing urban areas;
 - Efficient use of existing infrastructure;
 - Provision for a range of housing and essential social services; and
 - Provision of integrated public open spaces.
76. As the site is within the existing urban area of the district, the further development of the site would contribute to a compact regional form. In addition, the site is in a location that is already serviced by existing infrastructure, including the transport network.
77. The types of development that are anticipated in the Community Health Activity Area are healthcare facilities (an essential social service) and residential development. The site is

an appropriate location for both of these types of development as a healthcare facility would be in keeping with the character of the adjacent sites within the Community Health Activity Area and a residential development would be in keeping with the residential character of the surrounding area. The existing provisions of the District Plan, particularly the Permitted Activity standards, are appropriate to ensure that development at the site is well designed without imposing unnecessary regulation.

78. Objective 22 is also in part for the provision of integrated public open spaces. The Proposed Plan Change would enable development that reduces the amount of public space that is provided in the area. As discussed in Sections 6 to 11 of this report, the Council has determined that the site is surplus to requirements as a reserve, and the reserve status of the site has been revoked. However, public recreational land is still available in the surrounding area at Mitchell Park, Copeland Street Reserve, Hall Crescent Reserve and the public land surrounding the Epuni Community Hall.
79. Given these factors, the proposal is considered to be consistent with the objectives and policies of the RPS in relation to regional form, design and function.

Resource Management with Tangata Whenua

Objective 24

The principles of the Treaty of Waitangi are taken into account in a systematic way when resource management decisions are made.

Objective 25

The concept of kaitiakitanga is integrated into the sustainable management of the Wellington region's natural and physical resources.

Policy 48:

Principles of the Treaty of Waitangi – consideration

When considering an application for a resource consent, notice of requirement, or a change, variation or review of a district or regional plan, particular regard shall be given to:

- (a) the principles of the Treaty of Waitangi; and*
- (b) Waitangi Tribunal reports and settlement decisions relating to the Wellington region.*

Policy 49:

Recognising and providing for matters of significance to tangata whenua – consideration

When preparing a change, variation or review of a district or regional plan, the following matters shall be recognised and provided for:

- (a) the exercise of kaitiakitanga;*
- (b) mauri, particularly in relation to fresh and coastal waters;*
- (c) mahinga kai and areas of natural resources used for customary purposes; and*
- (d) places, sites and areas with significant spiritual or cultural historic heritage value to tangata whenua.*

80. Objectives 24 and 25 and the relevant associated policies seek to ensure that the principles of the Treaty of Waitangi are taken into account and that matters of significance to tangata whenua are recognised and provided for.

81. The site is not identified in the District Plan as having cultural values, and no adjacent sites have been identified as having cultural value. Mana whenua of the district (Port Nicholson Block Settlement Trust and Te Rūnanga o Toa Rangatira) have been invited to be involved in pre-notification consultation for the Proposed Plan Change. No concerns have been raised by either party.
82. Given these factors, the Proposed Plan Change is considered to be consistent with the objectives and policies of the RPS in relation to resource management with tangata whenua.

Regional Plans

83. Section 75(4)(b) of the RMA states that a district plan must not be inconsistent with any regional plan.
84. The Wellington Region has the following regional plans:
- Regional Coastal Plan;
 - Regional Air Quality Management Plan;
 - Regional Freshwater Plan;
 - Regional Plan for Discharges to Land; and
 - Regional Soil Plan.
85. As there are no objectives and policies in these regional plans that affect the Proposed Plan Change, the Proposed Plan Change is not inconsistent with any regional plans.

Proposed Regional Plans

86. Section 74(2)(a)(ii) of the RMA requires Council to have regard to any proposed regional plan of its region in regard to any matter of regional significance or for which the regional council has primary responsibility under Part 4 of the Act.
87. The Proposed Natural Resources Plan for the Wellington Region (PNRP) is a combined air, land, water and coastal plan. Once it is operative, the PNRP will replace the existing Regional Coastal Plan, Air Quality Management Plan, Freshwater Plan, Plan for Discharges to Land, and Soil Plan. However, all rules within the PNRP had immediate legal effect from the date it was notified (31 July 2015).
88. As there are no specific objectives and policies in the PNRP that are directly applicable to the Proposed Plan Change, the Proposed Plan Change is not inconsistent with the objectives and policies of the PNRP.

District Plans in Wellington Region

89. Section 74(2)(c) of the RMA requires Council to consider the extent to which the Proposed Plan Change needs to be consistent with the plans or proposed plans of adjacent territorial authorities.
90. The Proposed Plan Change involves a relatively small site that is located well within the boundaries of the district. It would have no effect on the operative plans or proposed plans of any adjacent territorial authorities, and as such, there are no issues with consistency.

Hutt City Council Strategies and Policies

91. Section 74(2)(b)(i) of the RMA requires Council to have regard to management plans and strategies prepared under other Acts. In 2013, the Council approved its Urban Growth Strategy. The key target of the Strategy is to provide an additional 6,000 houses in the district by 2032. As there is little land available within the district for greenfield

development, a significant number of these dwellings will need to be provided through more intense residential development in existing urban areas. While the proposed zoning principally encourages the development of healthcare facilities, residential activities would also be enabled. In the event that the site is developed for residential activities, this would contribute to meeting the housing target of the Strategy.

92. The provision of healthcare facilities is not specifically addressed by the Urban Growth Strategy. However, the additional residential development that is encouraged by the Strategy needs to be supported by community services such as healthcare facilities. If the site is developed as a healthcare facility it would support the aims of the Strategy by providing a community service that is needed to meet the increasing demand for services from future residential development.

City of Lower Hutt District Plan

93. Section 32(1)(a) and (b) require an examination of the extent to which:
- The objectives of a proposed plan change are the most appropriate way to achieve the purpose of the RMA; and
 - The provisions of a proposed plan change are the most appropriate way to achieve the objectives.
94. As this Proposed Plan Change is solely for the rezoning of the site to the Community Health Activity Area, no new objectives or provisions are proposed and it is not appropriate to review the objectives and provisions for the Community Health Activity Area as part of this process. They should be reviewed through a process that looks at the entire Community Health Activity Area.
95. However, this section reviews the appropriateness of the existing objectives and policies of the District Plan for this site.

Review of District Wide Objectives and Policies

96. Chapter 1 of the District Plan lists the district wide issues, objectives and policies. The following district wide objectives and policies are relevant for the Proposed Plan Change:

1.10.1 Resource Management and the Tangata Whenua of Lower Hutt

Objective

To respond to the principles of the Treaty of Waitangi and other matters of significance to the tangata whenua as specified in the Act.

Policies

(a) To have particular regard to tangata whenua's desire to carry out kaitiakitanga.

(d) To consult with the tangata whenua when discharging functions and duties under the Act.

97. The site is not identified in the District Plan as having cultural values, and no adjacent sites have been identified as having cultural value. Mana whenua of the district (Port Nicholson Block Settlement Trust and Te Rūnanga o Toa Rangatira) have been invited to be involved in pre-notification consultation for the Proposed Plan Change. No concerns have been raised by either party.

1.10.2 Amenity Values

Objective

To identify, maintain and enhance the character and amenity values of the different activity areas.

Policy

To identify within all activity areas the general character and amenity values of that activity areas.

98. The site is adjacent to a number of established buildings within the Community Health Activity Area. These buildings range in size, density and use. The indicative building plan (in Appendix 1) shows the size of a healthcare facility that could be established on the site as a Permitted Activity under the existing provisions for the Community Health Activity Area (Area 1). This size and type of development would be consistent with the established character of the local environment given the level of development at the adjacent Hutt and Boulcott Hospitals. Given these factors, the Community Health Activity Area (Area 1) is appropriate for the site and would maintain the character and amenity values of the surrounding environment.
99. The Permitted Activity Rules for the Community Health Activity Area (Area 1) also allow for residential development. The size and scale of these residential activities would be restricted by the Permitted Activity standards of *Chapter 4A: General Residential*. If these standards are breached, the residential activities would be a Discretionary Activity. If the site was developed for residential purposes, this development form would be at a lesser scale than a healthcare facility. Residential development would still be compatible with the character of the local environment, given that there is a large amount of residential development in the local area (most of which is zoned as General Residential (Medium Density) Activity Area). The density and form of residential development that could occur in the Community Health Activity Area (Area 1) would be consistent with what could be established on these existing residentially zoned properties.

1.10.6 Recreation and Open Space

Objective

To provide and maintain a diverse range of open space and recreation facilities for the enjoyment of residents and visitors which meet the needs of different sectors of the community.

Policies

- (a) *To ensure the adequate provision of open space for the passive recreational needs of the community.*
- (b) *To ensure adequate provision of larger open space areas for active and passive recreation.*

100. The Proposed Plan Change would result in the loss of an area of recreational land within the local environment. While the site is zoned General Recreation Activity Area, it has been leased to a bowling club since 1945, and has not been available for public use. However, the bowling club has not occupied the site since early 2017, and if the site was cleared of the associated buildings, structures and fences, the amount of useable recreation space would increase.
101. Despite the loss of recreation land, the Proposed Plan Change would not be inconsistent with Objective and Policies 1.10.6 as:

- In general, Epuni is well served with the amount of existing, useable reserve land that is available for both active and passive recreation, with most residents living within 8.5 minutes' walk of a reserve; and
- There is a large area of recreation land within Mitchell Park to the immediate east of the site that provides for both active and passive recreation;
- There are other recreational areas available within the local environment, including the Copeland Street Reserve, Hall Crescent Reserve and the public land surrounding the Epuni Community Hall.
- The lawn bowls activity that was located on the site has relocated to the bowls regional hub at Walter Mildenhall Reserve, ensuring that this recreational activity is still available to be undertaken by the Lower Hutt community.
- The site has been confirmed as being surplus to requirements for reserves (Appendix 2).

102. For the reasons given above, the site is consistent with the city wide objectives and policies of the District Plan.

Review of Community Health Activity Area Objectives and Policies

103. Chapter 9A of the District Plan lists the objectives, policies and rules for the Community Health Activity Area. The following objectives and policies are relevant for the Proposed Plan Change.

9A 1.1.1 Amenity Values

Objective

To accommodate a range of activities on the site in a manner which does not affect adversely amenity values of the surrounding area, or the efficient functioning of the roading network.

Policies

- That opportunity be available for a range of activities related to the provision of health services.*
- That the accommodation of activities not related to the provision of health care services be managed to ensure adverse effects upon the character and amenity values of surrounding recreation and residential activity areas, and the roading network are avoided, remedied or mitigated.*
- That the amenity values of surrounding residential and recreation activity areas be maintained and enhanced.*

9A 1.1.2 Residential Activities

Objective

To ensure opportunities are available for residential activities on the site, in a manner which does not affect adversely the amenity values or character of the surrounding area.

Policies

- That opportunity be available for a range of residential activities.*
- To ensure residential amenity values of surrounding areas are maintained and enhanced.*
- To allow home occupations where the adverse effects on the surrounding*

residential area are managed and the residential characteristics of the site and buildings are retained.

9A 1.2.1 Height, Scale and Location of Buildings and Structures

Objective

To ensure that all structures and buildings are designed and maintained to ensure the amenity values of surrounding residential and recreation activity areas, and the streetscape are maintained and enhanced.

Policies

- (a) To ensure a progressive reduction in height of buildings the closer they are located to a site boundary, maintaining adequate daylight and sunlight for adjoining properties.*
- (b) To require minimum setback requirements from all boundaries to maintain and enhance amenity values of surrounding the activity areas and the streetscape.*
- (c) To ensure that new buildings are of a height, shape and form that adverse effects of wind are managed and mitigated.*
- (d) To ensure that new buildings and structures are of a height, scale and design that adverse effects upon visual amenity values are avoided, remedied or mitigated.*

9A 1.2.2 On Site Parking

Objective

To ensure provision made for on site parking does not affect adversely the amenity values of adjacent activity areas, or the efficient functioning of the roading network.

Policies

- (a) That provision for on site parking be made when alterations or new buildings are proposed.*
- (b) That on site parking areas be adequately screened from surrounding activity areas and adjoining roads.*

104. Objectives 9A 1.1.1 (Amenity Values), 9A 1.1.2 (Residential Activities), 9A 1.2.1 (Height, Scale and Location of Buildings and Structures) and 9A 1.2.2 (On Site Parking) principally seek to provide for a variety of activities within the Community Health Activity Area and to ensure that developments maintain the amenity values of the local environment and do not affect the efficiency of the roading network.
105. The Community Health Activity Area is the same zone as the adjoining properties to the south and west. The Permitted Activity rules for development in this zone ensure that development maintains the amenity values and character of the local environment by controlling the size of buildings and providing setbacks from property boundaries. These rules are sufficient to ensure that any future development that is enabled by the Proposed Plan Change is consistent with the established character and amenity values of the local environment and that no additional rules are required to achieve the outcomes sought under these objectives.
106. The Community Health Activity Area has two subzones, Area 1 and Area 2. Area 1 typically applies to the portion of the Community Health Activity Area that does not adjoin a residential activity area, and allows for buildings up to 20m in height. Area 2 typically applies to the portion of the Community Health Activity Area that adjoins a residential activity area, and has a maximum building height of 8m. While the site adjoins one

property within a residential activity area, it is considered that the Area 1 subzone is the most appropriate zone for the site to ensure that the objectives are achieved for the following reasons:

- The residentially zoned property to the north of the site is occupied by the Boulcott Hospital, a non-residential activity that is less sensitive to building bulk than a residentially zoned property containing a residential activity;
- The residentially zoned property is located to the north of the site, and therefore is less likely to be shaded by a development that would be enabled by the Proposed Plan Change;
- The properties to the south and west of the site are already situated in the Community Health Activity Area (a mixed of Area 1 and Area 2). Given the activities that are undertaken on the portion of these sites that adjoin the site for the Proposed Plan Change, they are less sensitive to a loss in amenity values from development that would be enabled by the Proposed Plan Change; and
- The property to the immediate west of the site is within the Community Health Activity Area (Area 1). On this site, buildings up to 20m in height could be established. While the proposal would not change the ability for buildings up to 20m in height to be established alongside the General Recreation Activity Area, these buildings could be located further east. However, given that the majority of the immediately adjoining land to the east is occupied by tennis courts and a squash club, this additional height can be accommodated without significantly detracting from the amenity values of the land remaining in the General Recreation Activity Area.

107. Policies 9A 1.1.1 (Amenity Values) seek to encourage a range of activities, while ensuring that the resulting effects on the amenity values of the surrounding residential and recreational activities area are maintained. The existing rules of the Community Health Activity Area (Area 1) vary the building form and bulk depending on its intended use. It is considered that these rules are sufficient to ensure that the resulting development form is compatible with the amenity values and character of the local environment.

108. The Community Health Activity Area has two subzones, Area 1 and Area 2. The Area 1 subzone typically applies to the portion of the Community Health Activity Area that does not adjoin a residential activity area. This subzone allows for buildings up to 20m in height. The Area 2 subzone has a maximum building height of 8m and typically applies to the portion of the Community Health Activity Area that adjoins a Residential Activity Area. While the site adjoins a Residential Activity Area, it is considered that the Area 1 subzone is the most appropriate zone for the site to ensure that the objectives are achieved. The reasons for this are as follows:

- The residentially zoned property to the north is occupied by a non-residential activity, being the Boulcott Hospital. As such, this activity is less sensitive to building bulk and height than a residentially zoned property containing a residential activity;
- The residentially zoned property is located to the north of the site, and therefore is less likely to be shaded by a development resulting from the Community Health Activity Area;
- The properties to the south and west of the site are already situated in the Community Health Activity Area Zone (a mixed of Area 1 and Area 2). It is considered that given the activities undertaken on the portion of these sites that adjoin the site, they are less sensitive to a loss in amenity values from the resulting development form that arises from the Proposed Plan Change; and

- The property to the immediate west of the site is within the Area 1 subzone of the Community Health Activity Area. On this site, buildings up to 20m in height could be established. The proposal would not change the ability for buildings up to 20m in height to be established alongside the General Recreation Activity Area, albeit these buildings could be located further east than the existing situation. However, given that the majority of the immediately adjoining land to the east is occupied by tennis courts or the squash club, this additional height can be accommodated without significantly detracting from the amenity values of the land remaining in the General Recreation Activity Area.
109. Policies 9A 1.2.1 (Height, Scale and Location of Buildings and Structures) seek to manage the bulk of buildings. It is considered that the existing rules achieve these policy outcomes as these rules limit the height of buildings relative to boundaries, define yard setbacks, and set a maximum overall height for structures. It is also recognised that the site is a rear property. As such, any development form on the property is likely to have minimal impact on the streetscape values of the local area.
110. When the site is developed there will be a car parking requirement based on the activities that are proposed to be established on the site.

Effects of the Proposed Plan Change

111. The Proposed Plan Change seeks to rezone 135 Witako Street, Epuni from its existing General Recreation Activity Area to Community Health Activity Area (Area 1). It is proposed to rely on the existing District Plan objectives, policies and rules pertaining to the Community Health Activity Area (Area 1) to ensure that any environmental effects resulting from future development are appropriately addressed. As this is the case, the potential environmental effects that may result from the Proposed Plan Change have been assessed, to inform whether the Proposed Plan Change is appropriate.
112. The key environmental effects that have been considered are as follows:
- Amenity and Character Effects;
 - Traffic Effects;
 - Contamination Effects;
 - Natural Hazard Effects;
 - Recreation Effects; and
 - Economic Effects.

Amenity and Character Effects

113. The proposed rezoning of the site from General Recreation Activity Area to Community Health Activity Area (Area 1) would result in a different development form being established on the site. The existing General Recreation Activity Area provides for buildings with a small footprint and low height (the maximum permitted building footprint is 100m² and the maximum building height is 8m). The Community Health Activity Area (Area 1) zone would allow for buildings and structures up to 20m in height, with no maximum site coverage (although there is a 3m yard requirement and carparking requirements that would prevent 100% site coverage from occurring).
114. Precinct Architecture was commissioned to prepare an indicative development plan showing the built development that could be constructed on the site as a permitted activity under the Community Health Activity Area (Area 1) (Attachment 2). The building design

shown in the development plan is only an indication of the type of development that would be permitted for the site, and does not form part of the Proposed Plan Change.

115. The Community Health Activity Area (Area 1) essentially anticipates two types of development:
- Healthcare facilities and services; and
 - Residential development.
116. Both of these types of development are consistent with the character and amenity values of the local environment.
- The Boulcott Hospital is to the north of the site. The Hutt Hospital is to the east and south of the site. As such, establishing health facilities on the site would be consistent with this existing character of these adjoining sites.
 - While the adjoining sites contain either hospitals or reserves, much of the surrounding area is dominated by residential activities, and is typical of a residential neighbourhood. As such, a residential development on the site would be consistent with the existing character of the surrounding area.
117. The Community Health Activity Area has two subzones, Area 1 and Area 2. The Area 1 subzone typically applies to the portion of the Community Health Activity Area that does not adjoin a residential activity area. This subzone allows for buildings up to 20m in height. The Area 2 subzone has a maximum building height of 8m and typically applies to the portion of the Community Health Activity Area that adjoins a residential activity area. While the site adjoins a residential activity area, it is considered that the Area 1 subzone is the most appropriate zone for the site as:
- The residentially zoned property to the north of the site is occupied by the Boulcott Hospital, which is less sensitive to building bulk and height than a residential property;
 - As the adjacent residentially zoned property is to the north of the site, it is less likely to be shaded by a development in the Community Health Activity Area;
 - The properties to the south and west of the site are already situated in the Community Health Activity Area zone (a mix of Area 1 and Area 2). Given the activities undertaken on the portion of these sites that adjoin the site that would be rezoned, they are less sensitive to a loss in amenity values from development that would be enabled by the Proposed Plan Change; and
 - The property to the immediate west of the site is within the Area 1 subzone of the Community Health Activity Area. On this site, buildings up to 20m in height could be established. The proposal would not change the ability for buildings up to 20m in height to be established alongside the General Recreation Activity Area, albeit these buildings could be located further east. However, given that the majority of the immediately adjoining land to the east is occupied by tennis courts and the squash club, this additional height can be accommodated without significantly detracting from the amenity values of the land remaining in the General Recreation Activity Area.
118. The existing District Plan rules seek to manage the bulk of healthcare buildings established under the Community Health Activity Area (Area 1). These bulk and location provisions include:
- Minimum yard requirements;

- Recession plane requirements;
 - Maximum building length requirements;
 - A maximum building height of 20m; and
 - A maximum building length of 20m.
119. These rules apply to all boundaries of the site and are sufficient to ensure that the amenity values and character of the local environment are maintained by any future healthcare development resulting from the Proposed Plan Change.
120. In the event that a future development did not comply with the bulk and location provisions identified above, a resource consent would be required as a Discretionary Activity. This activity status allows Council to consider all relevant effects associated with the proposed development, including any effects on the character and amenity values of the local environment.
121. For any residential development on the site, Rule 9A 2.1 (j) of the District Plan requires the development to comply with the Permitted Activity standards of Chapter 4A – General Residential Activity Area. Otherwise, resource consent is required as a Discretionary Activity under Rule 9A 2.2(a). The Permitted Activity standards associated with the General Residential Activity Area would result in smaller buildings, with a lower height being established on the site when compared to what could result from a healthcare facility.
122. The development form that would result from the residential use of the site would be similar to what is located in the immediate environment on other sites that are in the General Residential Activity Area. The permitted activity conditions for buildings in the General Residential Activity Area include:
- Minimum yard requirements;
 - Recession plane requirements;
 - Maximum building length requirements;
 - A maximum building height of 8m; and
 - A maximum building length of 20m.
123. Compliance with these Permitted Activity conditions would result in a density of development that would be in keeping with the intended amenity values and character of the local environment, as envisioned under the District Plan. Any proposed development that does not comply with the Permitted Activity standards would require resource consent as a Discretionary Activity. This activity status allows Council to consider all relevant effects associated with the development, including the effect on the character and amenity values of the local environment.
124. In conclusion, while the proposed Community Health Activity Area (Area 1) would enable two different forms of development, both of these forms are consistent with the character and amenity values of the local environment. Given the location of the site, and the nature of the activities that share a boundary with the site, any potential adverse effects on amenity arising from future development of the site can be appropriately addressed through the existing provisions of the District Plan.

Traffic Effects

125. A traffic effects assessment was commissioned from Harriet Fraser Traffic Engineering and Transportation Planning. The assessment (Attachment 3) considered the traffic and

parking effects of a healthcare facility on the site and concluded that the Proposed Plan Change would not result in any significant traffic effects and any traffic effects arising from future development can be appropriately managed by the existing District Plan rules.

Contamination Effects

126. The Hazardous Activities & Industries List (HAIL) identifies activities and industries that are likely to cause land contamination resulting from hazardous substance use, storage or disposal. The HAIL is referenced in the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011, and therefore has statutory significance.
127. The HAIL lists *"Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds"* as a hazardous activity. The site falls into this category because the former bowling green was maintained as a sports turf.
128. Pattle Delamore Partners were commissioned to undertake a Detailed Site Investigation (DSI) of the site (Attachment 4). The DSI involved 34 soil samples from 20 locations and laboratory analysis for a range of heavy metals and organochlorine, organonitrogen and organophosphate pesticides. The soil samples were considered against the exceedance criteria for residential and commercial development, reflecting the different potential uses that could arise from the proposed zone. The findings of this analysis were:
- One sample exceeded the arsenic soil contaminant standard for residential use; and
 - No samples exceeded the soil contaminant standards for commercial use.
129. These test results show that the soil contamination levels on the site are appropriate for the potential healthcare use of the property.
130. In terms of the residential use of the site, the majority of the site is suitable for residential development. While one sample site exceeded the residential standards, the DSI identifies a number of measures to address this issue if the site was to be used for residential purposes, including:
- Further testing to determine the extent of the soil contamination; and
 - Removal of the contaminated material from the site and further testing to validate that the material has been removed.
131. If the site is developed for residential purposes, then it would require resource consent under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (for the change of use/subdivision and potentially for the associated earthworks as well). The resource consent application would need to demonstrate how the area of soil contamination would be addressed to ensure that the site is suitable for residential use, while ensuring any off-site effects from dust and sediment transportation are appropriately addressed.
132. Given the findings of the DSI investigation, there are no soil contamination issues that would prevent development of the site for a healthcare facility or residential activities. The resource consent process under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health would ensure that the area of soil contamination is appropriately remediated for future use of the site.

Natural Hazard Effects

133. The site is not located in a 1:100 year flood extent for any waterbodies. However, like most of the Hutt Valley, the site is within the 1:440 year flood extent for the Hutt River.
134. The site is in a variable liquefaction zone, which is consistent with the majority of the

district. This means the liquefaction potential for the site hasn't been identified as high, moderate or low, but that the potential for liquefaction could vary from low to high. The potential for liquefaction would need to be addressed as part of the design of the foundations for any built development at the site, and does not need a district plan response.

135. Neither of these hazards would result in an unacceptable increase in risk to life or property if the site was to be developed in the future.

Recreational Effects

136. As discussed earlier in this report, the site has been determined to be surplus to requirements as a reserve through a comprehensive review of reserve land on the valley floor, and Council has revoked the reserve status of the site and resolved to dispose of it. However, as the site is currently zoned for recreational purposes, the potential loss of recreational opportunities needs to be considered.
137. The site has historically been used as a bowls club. This use has been largely private and limited to fee paying members. This means that it has not been freely available to the local community for public use. In this regard, this piece of land is not an area that is currently widely used by the public and the loss of this land does not have a significant detrimental effect on the recreational opportunities in the local environment when compared to the existing situation.
138. The site shares a boundary with Mitchell Park to the immediate east. Mitchell Park provides for both passive and active recreation.
139. In addition, there are other areas of recreation land in the surrounding area that can be accessed by the public, including Copeland Street Reserve, Hall Crescent Reserve and the public land surrounding the Epuni Community Hall. These existing facilities assist with providing for the recreational needs of the local community.
140. Given the above factors, the proposed rezoning would not result in a significant change from the current situation and would not significantly compromise the ability for recreational activities to be undertaken within the local environment.

Economic Effects

141. The rezoning of the site would have positive economic effects. Currently, the site is zoned for recreational activities with limited ability for non-recreational activities to be undertaken. The Proposed Plan Change would enable different activities to be undertaken on the site (principally healthcare or residential activities). If healthcare facilities are established on the site, there would be additional employment opportunities, resulting in positive economic effects.
142. Similarly, if the site was developed for residential purposes, there would be increased employment during construction, in addition to the benefits derived from modern construction (insulated homes which are warm and dry). The additional housing would also increase the ratings base for the district, which would provide an increase in revenue to the Council and assist with improvements to services for the wider community.

Evaluation of Options

143. Section 32(2)(b) requires that if practicable the benefits and costs of a proposal are quantified. Quantifying costs and benefits would add significant time and cost to the s32 evaluation. Given the moderate scale and significance of the proposal, exact quantification of the benefits and costs is not considered necessary to distinguish between the available options.

144. During the preparation of the Proposed Plan Change, the following four options were considered:
- **Option A:** Retain the existing General Recreation Activity Area.
 - **Option B:** Rezone the site to General Residential (Medium Density) Activity Area.
 - **Option C:** Rezone the site to Community Health Activity Area (Area 1) (*Recommended Option*).
 - **Option D:** Rezone the site to Community Health Activity Area (Area 2)
145. These options are evaluated in *Table 2 Evaluation of benefits, costs, efficiency and effectiveness*, below.

Table 2: Evaluation of benefits, costs, efficiency and effectiveness

Option A: Retain the existing General Recreation Activity Area	
Opportunities for Economic Growth and Employment	
A.1	The potential for economic growth or employment opportunities would be limited as District Plan provisions do not support the establishment of non-recreational activities within the General Recreation Activity Area.
Benefits	
A.2	Avoids the costs associated with a plan change process.
A.3	The existing character and amenity of the site would be maintained.
Costs	
A.4	The site is considered to be surplus to recreation requirements. The General Recreation Activity Area zoning is unsuitable for other activities.
A.5	There would be a cost to the Council if it chose to remove the existing bowling club infrastructure on the site (buildings and greens) to allow for the site to be redeveloped for other recreational activities.
A.6	The proposed development and use of healthcare facilities would face significant increased costs and uncertainty. A healthcare facility is a Discretionary Activity in the General Recreation Activity Area and would be subject to resource consent process. Decision-makers would have to assess any proposal against the objectives and policies of General Recreation which do not support non-recreational activities.
A.7	Any potential future development of the site would be assessed against the provisions of the General Recreation Activity Area and any proposed non-recreational activities would require resource consent as a Discretionary Activity. The objectives and policies of the General Recreation Activity Area are not generally supportive of non-recreational activities, including the expansion of health related activities onto the site.
Risk of Acting or Not Acting	
A.8	Council would forego the opportunity to ensure the appropriate zoning of a parcel of land that is considered to be surplus to requirements as a reserve. This could result in an underutilization of this parcel of land.
A.9	If the site was developed with its existing zone, it would be subject to an

assessment against the existing objectives, policies and rules for the General Recreation Activity Area. As such, there would be a significant risk as to whether non-recreational activities could be established on the site.

Efficiency and Effectiveness

- A.10 The efficiency of this option is low because the costs significantly outweigh the benefits. The site has been determined to be surplus to requirements as a reserve and any development for non-recreation activities would be impeded by the District Plan's provisions for the General Recreation Activity Area..
- A.11 Retaining the existing zoning is ineffective in providing for non-recreational activities and development.

Overall Assessment of Option A

- A.12 This option is not recommended as the goals of the Proposed Plan Change to enable healthcare facilities would not be achieved. The potential costs outweigh the benefits.

Option B: Rezone the site to General Residential (Medium Density) Activity Area

Opportunities for Economic Growth and Employment

- B.1 Provides for economic and employment growth during development of the site.
- B.2 There would also be on-going economic benefits to local shops and the wider district through additional commercial activity from the additional people living on the site.

Benefits

- B.3 Would enable residential development of a site within an existing urban environment. This would assist Council to:
- B.4 Meet the aspirations of the Urban Growth Strategy 2013 - 2032.
- B.5 Meet the requirements of the National Policy Statement for Urban Development Capacity.

Costs

- B.6 Would not explicitly enable healthcare facilities.
- B.7 Costs associated with the plan change process.
- B.8 There would be a change in the character of the local environment as recreation/open space.
- B.9 There would be the loss of recreation land in the local environment.
- B.10 A healthcare facility with over 4 practitioners is a Discretionary Activity in the General Residential (Medium Density) Activity Area. Therefore there would be uncertainty for any proposal for the development and use of healthcare facilities with more than 4 practitioners. Any proposal would be subject to the resource consent process and would be considered against the objectives and policies of this zone, which generally support lower intensity activities.

Risk of Acting or Not Acting

- B.11 Council would forego the opportunity to ensure the appropriate zoning of a parcel of land that is considered to be surplus to requirements as a reserve. This could result in an underutilization of this parcel of land.
- B.12 If the site was developed as a General Residential Activity Area, it would be subject to an assessment against the existing objectives, policies and rules for the General Residential Activity Area. As such, there would be a significant risk as to whether the desired healthcare activities could be established on the site.

Efficiency and Effectiveness

- B.13 This option is not effective in providing for the desired healthcare facilities. However, it would be effective in providing for residential development.
- B.14 The option is not efficient in providing for healthcare facilities because the costs exceed the benefits.

Overall Assessment of Option B

- B.15 This option is not recommended as it would restrict the development of a healthcare facility on the site, which is an appropriate and intended use for the site.

Option C: Rezone the site to Community Health Activity Area (Area 1) (Recommended Option)**Opportunities for Economic Growth and Employment**

- C.1 Provides for greater economic growth and employment opportunities than the other options through increased employment both during construction and through the ongoing operation of a healthcare facility.
- C.2 In addition, the Community Health Activity Area (Area 1) enables residential development. If residential development were to occur there would be on-going economic benefits to local shops and the wider district through additional commercial activity from the additional people living on the site.

Benefits

- C.3 Would enable the site to be developed as either a healthcare facility or residential development, both of which are consistent with the character of the local area.
- C.4 Allows for a variety of activities to be established on the site, thereby providing flexibility to the final use of the site.
- C.5 Allows for an extension of the adjoining healthcare facilities to meet the needs of a growing population.
- C.6 Provides the maximum employment opportunities and social wellbeing outcomes by enabling a 20m high healthcare facility on the site as a permitted activity.
- C.7 Enables residential development of the site. If this occurred, the additional housing would contribute to the Council's housing supply requirements under the National Policy Statement for Urban Development Capacity and the Council's housing targets in the Urban Growth Strategy.

<p>Costs</p> <p>C.8 Costs associated with the plan change process.</p> <p>C.9 Costs associated with the plan change process.</p> <p>C.10 There would likely be a change in the character of the local environment as recreation/open space is made available for either a healthcare facility or residential development.</p> <p>C.11 Development would be enabled that would reduce the amount of recreational land in the local environment.</p>
<p>Risk of Acting or Not Acting</p> <p>C.12 The risk of not acting on this option is that the desired development of additional healthcare facilities may not occur.</p>
<p>Efficiency and Effectiveness</p> <p>C.13 The efficiency of this option is high because the benefits significantly outweigh the costs.</p> <p>C.14 This option would be effective in providing for either a healthcare development or a residential development as permitted activities while maintaining the character of the surrounding area.</p>
<p>Overall Assessment of Option C</p> <p>C.15 This is the recommended option as it provides for the desired form of development that is in keeping with the character of the surrounding area. In addition, it provides for development of a site that is surplus to requirements as reserve land. Adverse effects associated with the development of the site under the Community Health Activity Area (Area 1) would be appropriately addressed through the existing objectives, policies and rules of the District Plan.</p>

<p>Option D: Rezone the site to the Community Health Activity Area (Area 2).</p>
<p>Opportunities for Economic Growth and Employment</p> <p>D.1 Provides for economic growth and employment opportunities through increased employment both during construction and through the ongoing operation of a healthcare facility.</p> <p>D.2 In addition, the Community Health Activity Area (Area 2) enables residential development. If residential development were to occur there would be on-going economic benefits to local shops and the wider district through additional commercial activity from the additional people living on the site. However, the scale of economic growth and employment opportunities would be less than Option C as the maximum building height for a healthcare facility would be lower.</p>
<p>Benefits</p> <p>D.3 Results in a zoning which is consistent with the character of the local area, given the hospitals to the north and west of the site.</p> <p>D.4 Enables a variety of activities on the site.</p>

<p>D.5 Enables an extension of the existing, adjoining healthcare facilities to meet the needs of a growing population.</p> <p>D.6 Enables residential development, which would contribute to Council's housing supply requirements under the National Policy Statement for Urban Development Capacity and the Council's housing targets in the Urban Growth Strategy.</p>
<p>Costs</p> <p>D.7 Costs associated with the plan change process.</p> <p>D.8 There would likely be a change in the character of the local environment as recreation/open space is made available for either a healthcare facility or residential development.</p> <p>D.9 There would be the loss of recreational land in the local environment as a result of the rezoning.</p> <p>D.10 There would be an opportunity cost compared to Option C because the scale of development enabled in Community Health Activity Area (Area 2) is significantly lower than that enabled in Community Health Activity Area (Area 1).</p>
<p>Risk of Acting or Not Acting</p> <p>D.11 The risk of not acting on this option is that the desired development of additional healthcare facilities may not occur.</p>
<p>Efficiency and Effectiveness</p> <p>D.12 The efficiency of this option is high because the benefits outweigh the costs, but not to the extent of Option C.</p> <p>D.13 This option would be effective in providing for either a healthcare development or a residential development as permitted activities while maintaining the character of the surrounding area. However, the option would be less effective than Option C because a more significant healthcare facility would be required to go through a resource consent process.</p>
<p>Overall Assessment of Option D</p> <p>D.14 Option D is less favoured than Option C because it does not provide for the intended scale of healthcare facility as a permitted activity.</p>

146. Based on the above analysis, Option C (Community Health Activity Area (Area 1)) is the recommended option for the Proposed Plan Change. The option explicitly provides for the intended healthcare facility while using the established objectives, policies and rules of the zone to manage effects. The benefits of Option C outweigh the associated costs and would ensure that the site has an appropriate zone to meet the purpose of the Act.

Conclusion

147. Proposed Plan Change 50 seeks to rezone 135 Witako Street, Epuni from General Recreation Activity Area to Community Health Activity Area (Area 1) under the District Plan.
148. No new District Plan provisions (objectives, policies, rules and standards) would be

introduced as a result of the Proposed Plan Change. The only amendments proposed are to District Plan Map D4 to reflect the proposed zone change.

149. The potential effects from a development that is enabled by the proposed rezoning of the site can be appropriately managed through the existing objectives, policies and rules of the District Plan.
150. The Proposed Plan Change is consistent with the relevant provisions of the Resource Management Act, National Policy Statement on Urban Development Capacity and Regional Policy Statement.
151. Based on the Section 32 analysis, the proposed rezoning is the most effective and efficient approach for Council to meet its statutory requirements.

Attachment 1 – Email from Divisional Manager Parks and Gardens

From: [Bruce Hodgins](#)
To: [Andrew Cumming](#)
Cc: [Dan Kellow](#)
Subject: Mitchell Park Plan Change
Date: Friday, 22 September 2017 10:56:37 AM

Council has undertaken a comprehensive review of all of its reserve land on the Hutt Valley floor from Pomare to Petone to consider future reserve needs, with the likelihood of housing intensification.

The Valley Floor Review as it was known, commenced in 2013 and took three years to complete. The valley floor was broken into 5 separate areas with each area being subject to community consultation.

Mitchell Park was considered as part of the central part of the City from Boulcott to Woburn and between the Hutt River and the railway line.

The Policy and Regulatory Committee considered a report on this area at its meeting of 3 December 2013 making its recommendations to Council.

Council agreed that it would look to improve the quality and distribution of existing reserves wherever possible and fund this through rationalisation of existing reserve land and requested officers to prepare a report on the possible future use or rationalisation of reserves properties at Hall Crescent, Mitchell Park (Naenae Bowling Club land) and Phil Evans Reserve.

The future of the Mitchell Park bowling club land was further considered by Council in February 2015 at which it resolved to publicly notify a proposal to revoke the reserve status of the land and use the proceeds to help develop an indoor bowls centre in Naenae.

The key question Council considered in looking at the future of this land was whether the City would be better served retaining this area of land as open space for alternative reserve or recreational activities or reinvesting the capital value of the land in other reserve development and as a consequence making the land available for hospital expansion.

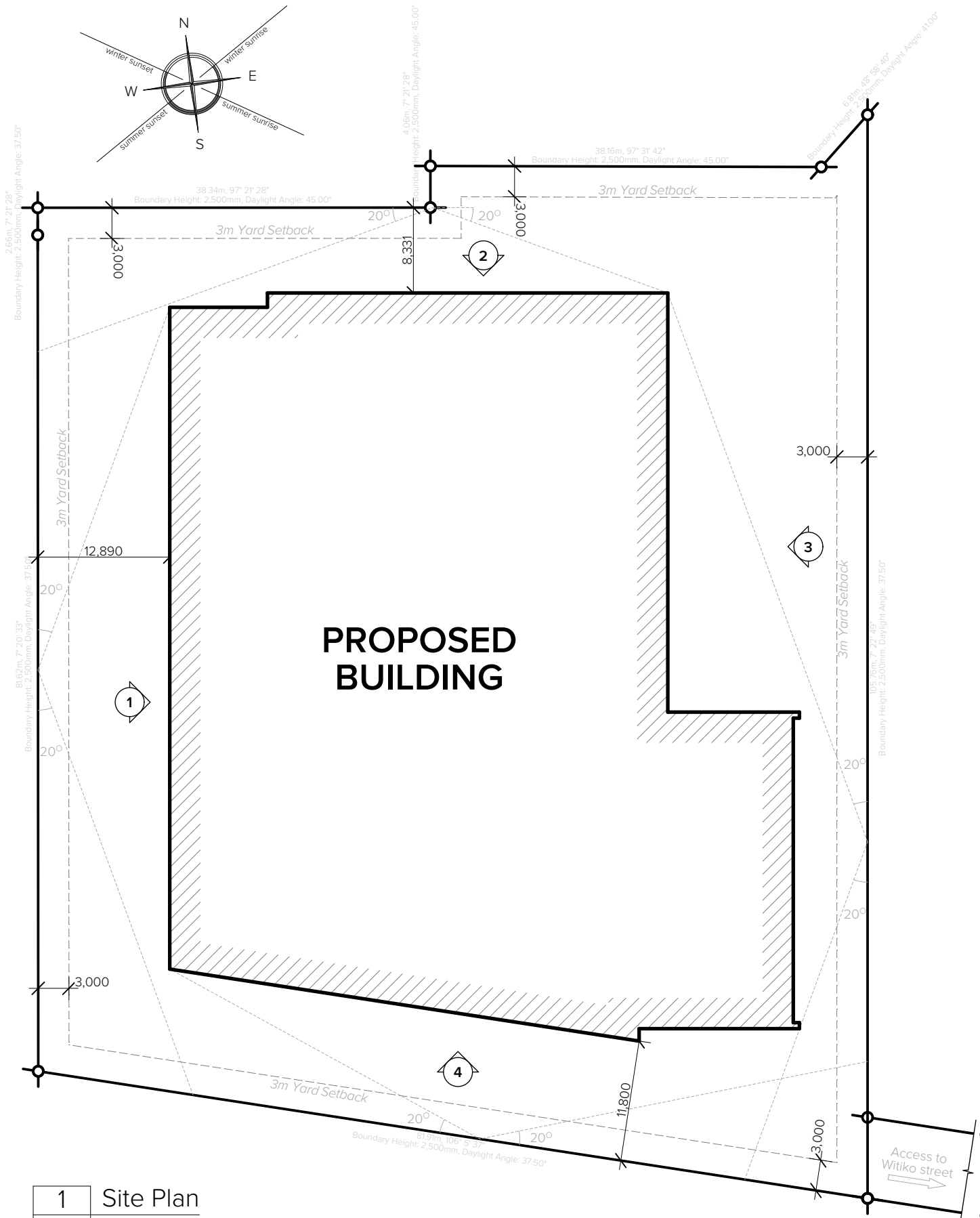
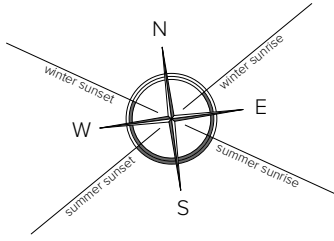
When making its final decision on the proposal to revoke the reserve status of the land and make available for disposal, the Council at its meeting of 15 December 2015 took into account the following reasons:

- (a) that the land is not required for a specific identified recreational purpose once bowling vacates the site;
- (b) that the revocation and disposal of the land will benefit the City by enabling hospital services to be expanded to meet future community health needs; and
- (c) that there is overall community benefit in being able to reinvest the capital from the sale of the land into upgrading Walter Mildenhall Park.

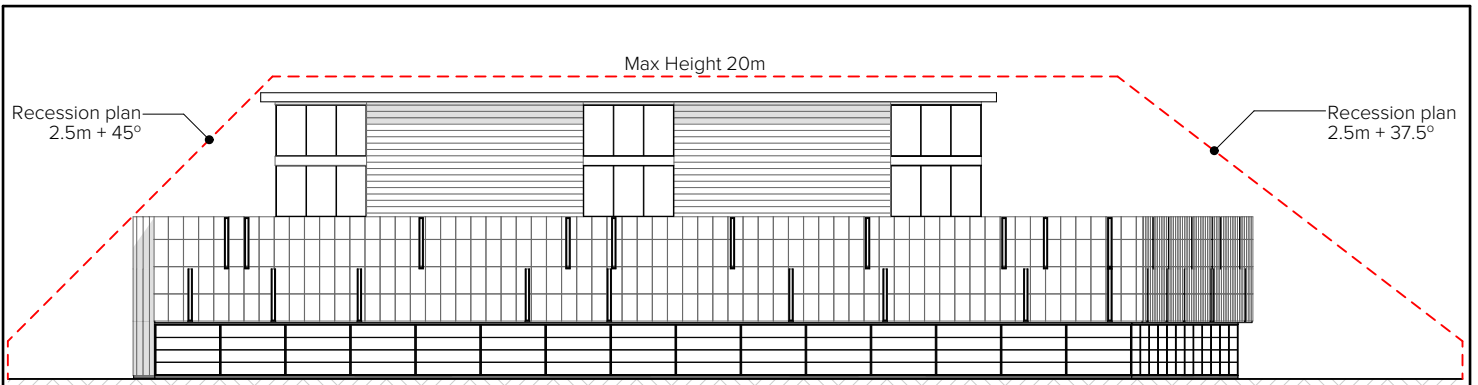
Attachment 2 – Renders of Potential Permitted Activity Building

Legal Description:

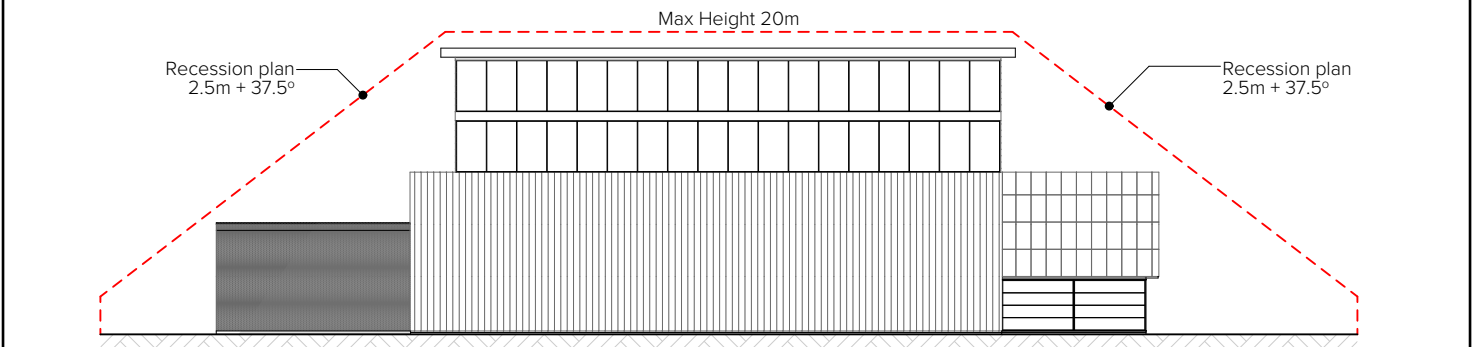
Address: 135 Witako Street, Epuni, Lower Hutt.
 District Plan Zone: Community Health Activity Area. (Proposed)
 Lot No.: 1
 DP No.: 53389
 Site area: 751



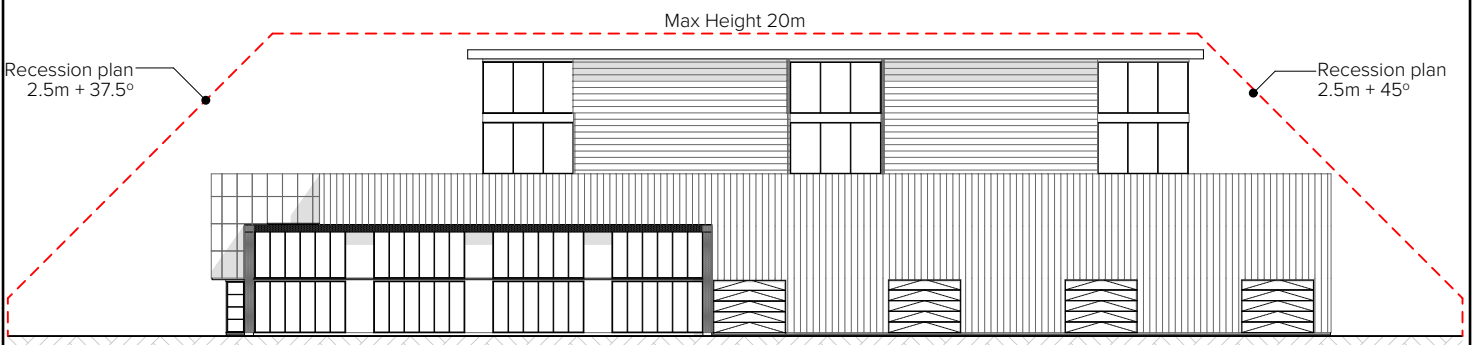
1	Site Plan
-	1:500



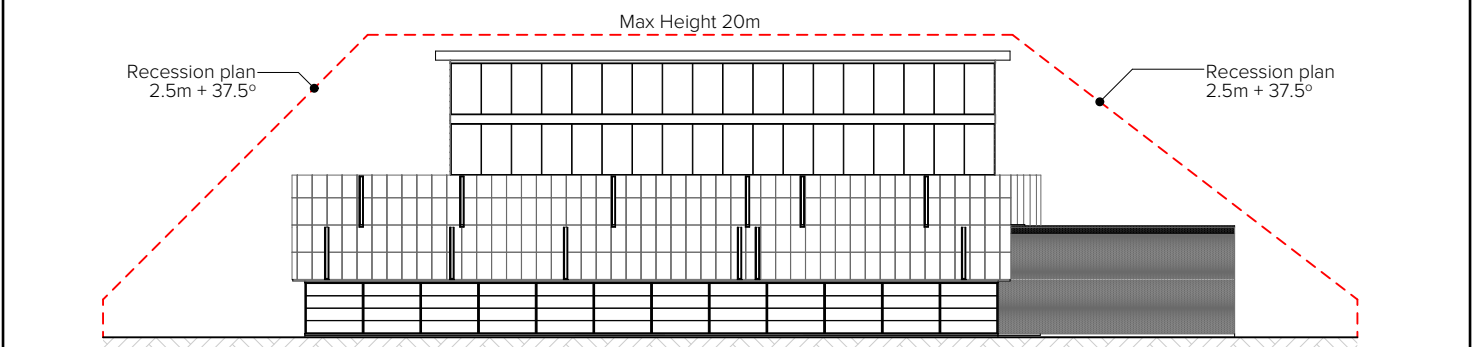
1	West Elevation
-	1:500



2	North Elevation
-	1:500



3	East Elevation
-	1:500



4	South Elevation
-	1:500

Attachment 3 – Transport Assessment

Harriet Fraser Traffic Engineering & Transportation Planning

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Upper Hutt
5140
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M 027 668 5872
E harriet@harrietfraser.co.nz

30 October 2017

James Beban
Urban Edge Planning

Copy via email: james@urbanedgeplanning.co.nz

Dear James

Proposed Plan Change, 135 Witako Street, Lower Hutt Transportation Assessment

Further to your request, I am pleased to provide below a transportation assessment for the proposed plan change involving the rezoning of 135 Witako Street in Lower Hutt from Recreational Activity Area to Community Health Activity Area. The assessment that follows includes a review of the existing local transportation characteristics and a summary of the potential traffic effects associated with the development of the site for permitted activities under the proposed Community Health Activity Area zoning.

In summary the findings of the assessment show that the proposed rezoning would allow for the site to be developed for a range of permitted activities in a manner which is consistent with the District Plan traffic and transportation related objectives and policies.

1. Background

The extent of the site is shown in the attached Site Plan prepared by Precinct Architects. The site is currently occupied by the Naenae Bowling Club. All vehicle and pedestrian access to the site is via a driveway from Witako Street. Under the proposed zoning for the site as well as community health activities, residential and childcare activities would also be permitted.

2. Existing Traffic Environment

The site is a rear site located on the northern side of Witako Street. It is accessed via a driveway which is around 80m long. The first 55m of the driveway has a formed width of 3.8m which then widens out to between 4.9m and 6.5m for the last 25m. The legal width of the access from Witako Street varies but is at least 7.5m wide at the narrowest point. As such, it could readily be widened to accommodate two-way traffic flows along its full length. The existing driveway and its connection with Witako Street is shown in Figure 1. The driveway operates as a slow speed shared space accommodating both vehicle and pedestrian movements. There is very limited on-site parking, some 5 spaces of which two are stacked behind one of the other spaces. As a result there will be considerable existing overspill parking onto the local kerbsides when the bowling club is being used.

Figure 2 shows the formation of Witako Street in the vicinity of the site and includes:

- footpaths and berms on both sides;
- parking lanes on both sides; and
- a traffic lane in each direction separated by a centreline.



Figure 1: Driveway to 135 Witako Street



Figure 2: Witako Street Cross-section

Witako Street is classified as an Access Road in the City of Lower Hutt District Plan road hierarchy. As such it has the following intended functions:

- provides for slow moving vehicles;
- delivery of goods;
- servicing activities;
- access to carparks; and
- accommodates pedestrian activity.

A 2012 Hutt City Council traffic count for Witako Street in the vicinity of the site shows average daily traffic volumes of around 2,480 vehicles per day. The count includes peak flows of 290 vehicle movements per hour on weekday mornings between 8am and 9am and 230 vehicle movements per hour between 3pm and 4pm on weekdays. Weekend traffic peaks are noticeably lower.

As part of this assessment traffic flows at the intersection of High Street and Mitchell Street were counted. The peak hours of these counts are summarised in Table 1.

Traffic Movement	Weekday 8.00-9.00am	Weekday 4.15-5.15pm
Mitchell Street		
Left	109	86
Right	22	46
High Street (N)		
Left	133	76
Through	786	551
High Street (S)		
Through	375	911
Right	91	70
Total	1,516	1,740

Table 1: High Street Intersection with Mitchell Street (vph)

As shown, this is a busy intersection with high through traffic flows. During the surveys, queues of up to three vehicles were observed waiting to turn right into Mitchell Street and queues of up to five vehicles were observed waiting to turn out of Mitchell Street. The layout of the intersection is shown in Figure 3.



Figure 3: High Street intersection with Mitchell Street

A search of the NZTA crash database for the most recent five years was undertaken for the length of Witako Street between Copeland Street and Mitchell Street and along Mitchell Street through to the High Street intersection. There have been 22 reported crashes of which three involved minor injury and the balance were non-injury crashes. The crashes can be summarised as follows:

High Street/ Mitchell Street Intersection

- a minor injury crash involving a westbound car on High Street hitting a skateboarder who suddenly stepped onto the pedestrian crossing;
- a minor injury crash involving an eastbound car on High Street hitting the rear of a car that had stopped or slowed for a pedestrian;
- a minor injury crash involving a westbound car on High Street hitting a car turning right from the left that had failed to give way;
- nine rear end non-injury crashes of which five mention vehicles slowing or stopping for pedestrians;
- two non-injury crashes involving westbound cars on High Street hitting a car merging from the left;
- a non-injury crash involving a northbound car on Mitchell Street hitting a car turning right into Mitchell Street;
- a non-injury crash involving a southbound car on Mitchell Street hitting a cyclist;
- a non-injury crash involving a car on Mitchell Street losing control turning right;

Witako Street Mid-Block

- a non-injury crash involving a southbound car on Witako Street hitting a car doing a driveway manoeuvre;
- a non-injury crash involving an eastbound car on Witako Street hitting a car that was parking/ unparking;

- a non-injury crash involving a westbound car on Witako Street hitting a parked car;

Witako Street/ Copeland Street Intersection

- a non-injury crash involving a car turning right into Copeland Street hitting a car head-on; and
- a non-injury crash involving a westbound car on Copeland Street failing to give way and hitting a car crossing at right angles from the right.

While the crashes at the High Street intersection with Mitchell Street have typically not involved injury the number of crashes is a concern and suggests that the ongoing operation of the intersection should be monitored.

The site is located around a 500m walk from Epuni train station and there are bus stops on High Street within a 300m walk. The High Street bus stops have regular services to Upper Hutt, Lower Hutt CBD, Queensgate and Petone train station.

3. District Plan Transportation Requirements

The proposed plan change involves the rezoning of the site to Community Health Activity Area. Objectives, policies and rules included in the District Plan which have an influence on transportation matters within the Community Health Activity Area and would apply to this site include:

9A 1.1.1 Amenity Values

Objective – to accommodate a range of activities on the site in a manner which does not affect adversely amenity values of the surrounding area, or the efficient functioning of the roading network.

Policy

- b) That the accommodation of activities not related to the provision of health care services be managed to ensure adverse effects upon the character and amenity values of surrounding recreation and residential activity areas, and the roading network are avoided, remedied or mitigated.
- c) That the amenity values of surrounding residential and recreation activity areas be maintained and enhanced.

9A 1.2.2 On Site Parking

Objective – to ensure provision made for on site parking does not affect adversely the amenity values of adjacent activity areas, or the efficient functioning of the roading network.

Policy

- a) That provision for on site parking be made when alterations or new buildings are proposed.
- b) That on site parking areas be adequately screened from surrounding activity areas and adjoining roads.

9A 2.1.1 Permitted Activities – Conditions

- i) On Site Parking:
 - (i) All parking areas where they are not contained within buildings, which abut a Residential or Recreation Activity Area shall be screened by a close boarded fence or a fence of solid material, to a height of 1.8 metres.

- (ii) *At least 5% of car parking areas not contained within a building and adjoining legal roads must be landscaped and screened.*
- (iii) *General Rules:*
Compliance with all matters in the General Rules – See Chapter 14.

The Operative version of Chapter 14A Transport includes the following objectives, policies and rules that apply to this site.

14A(ii) Property Access and Manoeuvring Space

Objective - *to maintain the safety and efficiency of the roading network.*

Policy

- a) *That the location and design of access to properties is managed to provide for safe entry and exit movements, particularly in relation to intersections.*
- b) *That adequate provision is made on site for turning movements to allow exit movements in a forward direction for sites accommodating more than four parking spaces.*
- c) *That adequate provision is made on site for turning movements associated with heavy commercial vehicles to ensure that access and exit movements are in a forward direction.*

The Rules in Section 14A(ii) include provisions for the following:

- how vehicle accesses shall be located and designed;
- separation of driveways from intersections;
- the number and width of vehicle crossings; and
- on-site vehicle circulation and manoeuvring space.

14A(iii) Car and Cycle Parking

Objective - *To provide adequate on site car parking in a safe and visually attractive manner, to maintain the safety and efficiency of the roading system, and the amenity values of the area.*

Policy

- a) *That adequate on site parking space is provided for each type of activity in a safe and visually attractive manner.*

The Rules in Section 14A(iii) include provisions for the following:

- the number of vehicle and bicycle parking spaces needed;
- the location of the parking spaces; and
- the design of any parking spaces.

New residential dwellings are required to provide two parking spaces per dwelling as a permitted activity. Three or more dwelling houses on any single site in the Residential Activity Areas are required to provide one parking space per dwelling. Childcare facilities are required to provide one parking space per staff member and the following provisions apply for community health activities:

- 0.75 spaces per person for the first 800 persons employed; and
- 2.0 spaces per person for every staff member in excess of 800 persons employed.

14A(iv) Loading and Unloading

Objective - *To maintain the safety and efficiency of the roading network and the amenity values of the area.*

Policy

- a) *That adequate on site loading and unloading provision be made in a safe and attractive manner.*

The Rules set out that one loading space shall be provided for permitted non-residential activities on the site. There is no requirement to provide loading beyond the parking requirements for residential developments having fewer than 20 dwelling units or accommodating fewer than 20 residents.

Plan Change 39 which includes changes to Chapter 14A has been heard and a decision is pending. The proposed objectives, policies and rules as apply to permitted activities on the site and as included in the Officer's Report, are as follows:

Objective 14A 3.1 – *A safe, efficient and resilient transport network that is integrated with land use patterns, meets local, regional and national transport needs and provides for all modes of transport.*

Objective 14A 3.4 – *Adverse effects on the safety and efficiency of the transport network from land use and development that generate high volumes of traffic are managed.*

Objective 14A 3.5 – *Adverse effects on the safety and efficiency of the transport network from on-site transport facilities (vehicle access, parking, manoeuvring and loading facilities) are managed.*

Policy 14A 4.2 – *Land use, subdivision and development should not cause significant adverse effects on the connectivity, accessibility and safety of the transport network.*

Policy 14A 4.5 – *Any activity that is a High Trip Generator must be assessed on a case by case basis. Adverse effects of High Trip Generators on the safety and efficiency of the transport network should be managed through the design and location of the land use, subdivision or development.*

Policy 14A 4.6 – *Vehicle access, parking, manoeuvring and loading facilities should be designed to standards that ensure they do not compromise the safety and efficiency of the transport network.*

Policy 14A 4.7 – *The transport network, land use, subdivision and development should provide for all transport modes.*

Rule 14A 5.1

- a) *Any activity is permitted if it:*
- i. *Complies with the standards listed in Appendix Transport 1; and*
 - ii. *Does not exceed the high trip generator thresholds specified in Appendix Transport 2.*
- b) *Any activity that does not comply with the standards listed in Appendix Transport 1 is a Restricted Discretionary Activity. Discretion is restricted to:*
- i. *The effects generated by the standard(s) not being met.*
- c) *Any activity that exceeds the high trip generator thresholds specified in Appendix Transport 2 is a Restricted Discretionary Activity. Discretion is restricted to:*
- i. *The effects of the activity on the transport network including impacts on on-street parking.*

An Integrated Transport Assessment, prepared by a suitably qualified traffic engineer/ planner, must be submitted with any resource consent application under this rule.

Appendix Transport 1 and Transport 2 include the following provisions that apply to this site:

- For dwellings, one parking space per dwelling
- For childcare centres, one space per staff member plus 0.2 spaces per child that the facility is designed to accommodate
- For medical activities in the Community Health Activity Area, 3 spaces per 100m² GFA

- Loading and unloading requirements for non-residential activities:

Gross Floor Area	No. of Spaces	Minimum Design Vehicle
Up to 500m ²	Nil	-
501-1000m ²	1	Small Rigid Vehicle
1001-3000m ²	1	Medium Rigid Vehicle
Greater than 3000m ²	1	Heavy Rigid Vehicle

- High Trip Generator Thresholds
 - o Any residential development or subdivision enabling more than 60 dwelling houses
 - o A childcare facility with more than 30 children
 - o A healthcare service of more than 500m² GFA

The potential traffic effects associated with the possible development of the site with activities that are permitted within the Community Health Activity Area are discussed in the following sections of this assessment.

4. Traffic Effects

The traffic effects have been assessed on the basis that Plan Change 39 is adopted and with the provisions as amended by the Officer's Report to the hearing committee. As such, of the activities that are permitted in the Community Health Activity Area, the following could be established without triggering the high trip generator threshold and requiring an Integrated Transport Assessment:

- a residential development with up to 60 households;
- a childcare centre with up to 30 children; or
- a healthcare facility with a floor area of up to 500m².

Residential Development – 60 Dwellings

It is understood that it is unlikely that the site could accommodate 60 dwellings due to the size of the property and the need to comply with the provisions of Chapter 4A of the District Plan. Regardless of this, this assessment will consider the potential traffic effects that could result for the purposes of completeness.

A 60 unit residential development would be required to provide one parking space per unit. Based on the 2013 Census data for Epuni West, it is estimated that existing car ownership is around 1.35 cars per household. This estimate includes allowance for some households having three cars. For a new development with relative high density it is considered reasonable to assume that a car ownership rate of closer to 1.20 cars per household could be expected resulting in a potential overspill of 12 spaces. Overspill parking of up to some 10 to 15 spaces for visitor use can be expected at peak times of visitor activity, that is during the evenings and at weekends.

In practice it is likely that developers will provide the level of residential parking that is considered required by the particular market. There is a risk of some overspill parking but this will be most likely to be associated with visitor activity and will occur outside the hours of peak kerbside parking demands. In the event that a residential development were to result in additional parking pressures at peak times, Council has the means to manage the kerbside parking through the use of time restrictions to ensure that kerbside parking spaces remain available for visitors to existing residents and businesses.

With regard to traffic generation, a 60 unit residential development could be expected to generate up to 480 vehicle movements per day with up to 60 vehicle movements during the busiest hours. Based on the traffic counts at the intersection of Mitchell Street and High Street it is estimated that during peak hours 26 vehicles per hour will travel to and from the direction of Mitchell Street and 34 vehicles per hour to and from the Copeland Street direction. The most sensitive part of the local road network is the intersection between High Street and Mitchell Street. The addition of up to 26 vehicle movements per hour though the intersection amounts to an increase in traffic flows of 1 to 2% which will not be discernible from day to day traffic fluctuations.

Childcare Centre

A childcare centre with up to 30 children with an estimated six staff would be required to provide between six and twelve parking spaces depending on the final provisions included in the Plan Change 39 decision. Childcare centres of this size typically generate peak parking demands for up to 7 or 8 spaces at peak times of drop-off and pick-up with lesser demands outside these times. Accordingly overspill parking for one or two vehicles may occur for brief periods of the day. This level of overspill parking will not be discernible from day-to-day fluctuations in local kerbside parking demands.

Peak traffic generations of 25 to 30 vehicle movements per hour can be expected based on the rates included in the NZTA Research Report 453. This level of additional traffic activity would amount to an increase of less than 1% in traffic flows through the High Street intersection with Mitchell Street and accordingly would not be discernible from day to day traffic fluctuations.

Given the likely size of the childcare centre in this scenario, it is unlikely to trigger the need to provide a loading bay and in any case most deliveries can be expected to be made by car or van which would briefly use one of the on-site parking spaces.

Healthcare Facility

A healthcare facility with a floor area of up to 500m² would be required to provide 15 on-site parking spaces. If it is assumed that the more conservative parking requirement of 5 spaces per 100m² GFA for health care service, hospital and veterinary surgery included as part of Plan Change 39, is well matched to likely demands, then overspill parking demands for some ten spaces could be expected. In practice, given the size of the site it is considered likely that all parking demands could be accommodated within the site. In the event that a permitted healthcare development were to result in additional parking pressures at peak times, Council has the means to manage the kerbside parking through the use of time restrictions to ensure that kerbside parking spaces remain available for visitors to existing residents and businesses.

In order to forecast the level of traffic generation that could be expected, traffic surveys were undertaken of the nearby existing Boulcott Hospital driveway. Traffic flows of up to 81 vehicle movements per hour were counted with the busiest hour being between 8.30am and 9.30am. It has been roughly estimated that the existing Boulcott Hospital has a floor area of around 4,600m². As such, the peak hour trip generation rate would be 1.8 vehicle movements per hour per 100m² GFA. Applying a rate of 2 vehicle movements per hour per 100m² GFA would result in a forecast trip generation of 10 vehicle movements per hour. This may be appropriate for an extension to an existing hospital facility but a new standalone medical centre could be expected to have significantly higher traffic generations.

A medical centre with eight doctors and three nurses (two of which take scheduled appointments), each taking 15 minute appointments would see up to 40 patients per hour with an associated traffic generation of up to 80 vehicle movements per hour. Medical centres increasingly also have on-site pharmacies, which might generate a further 20 vehicle movements per hour. With this scenario the site could generate up to 100 vehicle movements per hour. Based on existing trip distributions this level of traffic

activity could result in up to 44 additional vehicle movements per hour though the High Street intersection with Mitchell Street. This would result in an increase in traffic flows of 2 to 3% which will not be discernible from day-to-day traffic fluctuations.

A 500m² healthcare facility would not trigger the need for a loading bay. However given the size of the site and nature of the activity a loading bay would likely form an integral part of any proposal and could be readily provided within the site. The loading facilities associated with a larger healthcare facility would be considered as part of the required resource consent application.

6. Summary and Conclusion

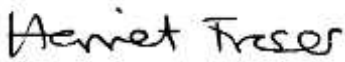
As such, the forecast traffic effects associated with permitted development as a result of the proposed zone change can be safely and efficiently accommodated. Accordingly the site can be rezoned to Community Health Activity Area and developed with a range of activities with the development meeting the transportation related objectives, policies and rules of the District Plan.

If the development form was not permitted, then it would be subject to the resource consent process, where any resulting traffic effects could be assessed and considered. If appropriate, as part of the resource consent process, specific traffic mitigation measures may be required to address traffic effects associated with the proposed development.

Furthermore, given the size of the site, the most likely development scenarios would be high trip generators and would trigger the need for an Integrated Transport Assessment to be undertaken. Key matters for such an assessment should include effects on kerbside parking and also on the safety and efficiency of the High Street intersection with Mitchell Street.

Please do not hesitate to be in touch should you require clarification of any of the above.

Yours faithfully

A handwritten signature in black ink that reads "Harriet Fraser". The signature is written in a cursive style and is underlined.

Harriet Fraser

attach....

Attachment 4 – Soil Contamination Reports



4 August 2017

❖ Andrew Cumming
Divisional Manager Environmental Policy
Hutt City Council
Private Bag 31912
LOWER HUTT 5040

Dear Andrew

DETAILED SITE INVESTIGATION - 135 WITAKO STREET, EPUNI

1.0 Introduction

Hutt City Council (HCC – the client) has engaged Pattle Delamore Partners Limited (PDP) to undertake a Detailed Site Investigation (DSI) and soil disposal assessment at 135 Witako Street, Epuni (legally described at Lot 1 DP 53389).

The property was previously occupied by the Naenae Bowling Club and comprises a clubhouse, implement sheds and a garage, three bowling greens and a croquet green. It is understood that the client is preparing a district plan change which would allow the future redevelopment of the property, the likely end use being associated with the nearby hospital. However, the client has requested that the property is conservatively assessed under a proposed residential scenario.

Under the Resource Management (*National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health*) Regulations 2011 (the NESCS), only that land with a potential for contamination (i.e. the bowling greens, the croquet green and the implement sheds – collectively referred to as the site) should be considered as HAIL (Hazardous Activities and Industries List) land. Given the proposed change of use and the potential for soil disturbance and subdivision of the site, a DSI is required for these areas. The remainder of the property would not be subject to the provision of the NESCS.

The DSI has been undertaken in general accordance with the Ministry for the Environment's (MfE) *Contaminated Land Management Guidelines No. 5 – Site Investigation and Analysis of Soils* (MfE, 2011a). This report documents the methodology and findings of the site investigation and has been reported in general accordance with MfE's *Contaminated Site Management Guidelines No. 1 – Guidelines for Reporting on Contaminated Sites in New Zealand revised 2011* (MfE, 2011b).

2.0 Objectives and Scope

The objectives of the DSI are to:

- ❖ Undertake soil sampling to characterise and assess contamination at the site;
- ❖ Assess the risk of any identified site contaminants to future users of the site;



- ∴ Assess the proposed activity under the NESCS; and
- ∴ Undertake a waste disposal assessment for the site.

The scope of works included:

- ∴ Carrying out an intrusive investigation on the basis of the historical information including; hand augering and collection of soil samples for laboratory analysis; and
- ∴ The production of this letter report describing the results of the investigation.

3.0 Site Description and Background

The site has an approximate area of approximately 0.556 ha and is broadly rectangular in shape, forming part of the wider 0.75 ha property at 135 Witako Street, Epuni. The site is zoned as "General Recreation" under the HCC District Plan. A brief review of historical aerial imagery (appended) shows the site to have originally been public open space before being developed into three bowling greens, one croquet green, an implement/storage shed and pavilion during 1945/46. An additional storage shed was constructed in the centre of the greens after 2010.

Land use surrounding the site is as follows:

- ∴ North: Boulcott Hospital, with High Street beyond.
- ∴ East: Tennis courts associated with Mitchell Park.
- ∴ South: The clubhouse and garage, with the YMCA beyond.
- ∴ West: Hutt Hospital.

A plan of the site in relation to the wider property is shown in Figure 1, appended. Photographs of the site are also appended (Photographs 1 – 4).

4.0 Geology and Hydrology

The geological map of the Wellington region indicates that the site is underlain by well-sorted floodplain gravels (Begg & Johnson, 2000).

Groundwater is inferred to flow in south-westerly direction towards Wellington Harbour.

A groundwater bore search was requested from GWRC for groundwater bores and water-take resource consents within the vicinity of the site. The GWRC records identified 16 bores within a 200 m radius of the site, with depths ranging between 2.2 and 51.8 m below ground level (bgl). A summary of the groundwater bores is appended.

5.0 Investigation Rationale

5.1 Conceptual Site Model

A risk to human health or the environment can only arise if there is a hazard (e.g. contaminated soil), a receptor (people or the environment) and an exposure pathway between the hazard and receptor. An absence of any of these components means no risk can exist.

A conceptual site model (CSM) is set out in Table 1, below. The table presents the potential contaminant sources, the future receptors (i.e. users of the site) and the potential pathways whereby the receptors could be exposed directly or indirectly to soil contaminants. The likelihood of contamination, based on the site history, and the likelihood of exposure based on the proposed site use, can then be assessed to

determine where a complete pathway is likely to exist. At the client’s request, the site has been assessed under a residential scenario.

Table 1: Conceptual Site Model – 135 Witako Street, Epuni

Source	Exposure Pathway	Possible Receptor	Pathway Linkage
Former pesticide use on the bowling/croquet greens	Produce consumption	Future residents	Potentially complete – A potential risk to human health could arise if pesticide residues are present.
	Ingestion of soil	Future residents and excavation workers	
	Dermal contact	Future residents and excavation workers	
	Dust Inhalation	Future residents and excavation workers	
Hydrocarbon and pesticide spills in the vicinity of the two storage sheds	Produce consumption	Future residents	Potentially complete – A potential risk to human health could arise should hydrocarbon contamination and pesticide residues be present.
	Ingestion of soil	Future residents and excavation workers	
	Dermal contact	Future residents and excavation workers	
	Inhalation of vapours	Future residents and excavation workers	
	Dust Inhalation	Future residents and excavation workers	

5.2 Sampling Rationale

The site history suggests that any pesticide contamination would be distributed relatively evenly across the greens. Therefore, sixteen sampling locations (HA1 – HA16) were targeted to the bowling/croquet greens, with four hand augers located in each green.

In order to assess the likelihood of fuel and pesticide spills, two sampling locations (HA17 and HA20) were chosen to target areas outside of the implement sheds situated in the centre of the site and along the site’s southern boundary. Two sampling locations (HA18 and HA19) were positioned in close proximity to HA20 with samples obtained for possible analysis to delineate any potential impacts pending review of laboratory results from location HA20.

Three additional sampling locations were planned in the concrete path, immediately outside the entrances of the implement shed located in the site’s southwestern corner to assess the potential for historical spills in this area. However, once these locations were concrete cut (Photograph 5) it was identified that the original concrete path identified in the 1958 aerial image (appended) remained, indicating that any spills that may have occurred were unlikely to have impacted the underlying soil.

6.0 Site Investigation Activities

6.1 Hand Auger Locations

An intrusive investigation, involving hand augering and soil sampling was undertaken on 9 June 2017 to determine the concentrations of the most likely contaminants at the site. A total of 20 hand auger locations (HA1 – HA20) were extended to depths ranging between 0.5 and 0.6 m below ground level (bgl). Hand auger locations are shown on Figure 1, appended.

6.2 Soil Sampling

A total of 60 soil samples were obtained from the hand auger locations, with 34 soil samples being submitted for laboratory analysis. Soil samples were collected directly from the auger head. Sampling equipment was decontaminated between samples with a solution of Decon90 diluted in water. A fresh pair of nitrile gloves was worn to transfer material from the hand auger to a glass sample jar. The jars were placed immediately into a chilly bin containing ice before being sent via courier to Hill Laboratories in Hamilton.

At each location, a sample was collected from the surface and from 0.25 m bgl. An additional deeper soil sample was obtained from 0.5 to 0.6 m bgl.

In addition to the samples collected for laboratory analysis, soil samples were collected for field screening of photo-ionising compound readings using a photo-ionisation detector (PID¹) from hand auger locations HA17 and HA20. The soil samples for field screening were placed into plastic re-sealable bags which were half-filled and sealed. The samples were allowed to stand for several minutes prior to the bag being pierced and the headspace vapour readings measured with the PID.

6.3 Laboratory Analysis

A total of 34 soil samples were analysed at the laboratory. Sixteen soil samples (HA1 0.0 – HA16 0.0) were analysed for a suite of heavy metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc) and organochlorine pesticides (OCPs).

In addition, in order to take into account the potential for the addition or removal of material from the bowling greens over time, sixteen deeper samples (0.25 m bgl deep), HA1 0.25 - HA16 0.25, were analysed as a four composite samples (with each composite sample comprising the four individual samples from each bowling/croquet green) for heavy metals and OCPs.

Two samples (HA17 0.0 and HA20 0.0) were analysed for a suite of heavy metals and a suite of organochlorine, organonitrogen and organophosphate pesticides.

Given the low PID measurements (see below) no samples were analysed for petroleum hydrocarbons.

The remaining samples were placed on hold at the laboratory.

7.0 Soil Sampling Results

7.1 Observations

The geology observed in the auger holes comprised of silty topsoil underlain by brown sandy silts (Photographs 6 and 7).

¹ A PID measures most volatile photo-ionisable compounds providing they have an ionisation potential below 10.6 eV. This includes most petroleum hydrocarbon compounds with a carbon range of between 1 and 10.

Hydrocarbon odours were not identified during the sampling activities. The PID screening results were very low in hand auger locations HA17 and HA20, with a maximum concentration of 0.2 ppm observed in HA17 at a depth of 0.25 m bgl.

7.2 Analytical Results

The results of the laboratory analysis are presented in Tables 1 - 4, appended. Copies of the laboratory reports and chain of custody documentation are also appended.

Concentrations of heavy metals above the laboratory detection limit were identified in every surface sample with many results appearing to be typical of background (natural) concentrations. However, in comparison with the other surface samples, soil sample HA1 0.0 (located in the northwest green) reported elevated arsenic and lead concentrations of 31 and 106 mg/kg, respectively. Arsenic concentrations were also elevated in the other three surface samples (HA2 – HA4) situated in the northwest green, relative to the other greens. Heavy metal concentrations were relatively consistent in the remaining surface samples.

Low concentrations of DDT were identified in surface samples with concentrations ranging from 0.08 to 2.19 mg/kg (samples HA20 0.0 and HA17 0.0, respectively). Dieldrin concentrations ranged from below the laboratory level of detection to 0.82 mg/kg (sample HA3 0.0). Endosulfan concentrations were low with concentrations ranging from below the laboratory level of detection to 0.28 mg/kg (HA8 0.0).

Samples HA17 0.0 and HA20 0.0 reported organonitrogen and organophosphate pesticides below the laboratory level of detection and therefore have not been considered further.

Concentrations of heavy metals above the laboratory detection limit were identified in every composite of samples, with the exception of cadmium in one. In comparison with the other deeper composite samples, composite sample HA1 0.25, HA2 0.25, HA3 0.25 & HA4 0.25 reported slightly elevated arsenic and zinc concentrations of 12 mg/kg and 85 mg/kg, respectively.

Low concentrations of OCPs were detected in the deeper composite samples, with a maximum DDT and dieldrin concentration of 0.22 mg/kg and 0.131 mg/kg, respectively, recorded in composite sample HA1 0.25, HA2 0.25, HA3 0.25 & HA4 0.25.

8.0 Health Risk Assessment

8.1 Applicable Soil Acceptance Criteria

In accordance with MfE's *Contaminated Land Management Guidelines No. 2 – Hierarchy and Application in New Zealand of Environmental Guideline Values* (2011d), New Zealand risk-based standards or guidelines should be used where the exposure assumptions and exposure scenarios are relevant to the site. Where New Zealand guidelines do not exist overseas risk-based guidelines may be used.

There are soil contaminant standards (SCS) contained in MfE (2011c) for dieldrin, DDT and all the heavy metals analysed in the investigation with the exception of nickel and zinc. For endosulfan, nickel and zinc, the results have been compared to the Australian National Environmental Protection (Assessment of Site Contamination) Amendment Measure 2013 (NEPC, 2013) criteria.

At the client's request, the SCS for residential use (10% produce) have been utilised.

8.2 Comparison of Analytical Results to Applicable Criteria

Soil sample HA1 0.0 exceeded the residential SCS for arsenic. No other soil samples exceeded the relevant criteria.

Consequently, the soil in the vicinity of HA1 presents a risk to human health should it be utilised for residential use. The soil underlying the site in the vicinity of the remaining sample locations is considered to have an acceptably low health risk.

9.0 Application of the NESCS

The NESCS may apply to a site that falls within one of the descriptions on the MfE's HAIL. Given the long history use as bowling/croquet greens, the site would be considered an intensively managed sports turf and therefore falls into HAIL Category A10 (described as "*persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds*"). As such, for the purposes of the NESCS, the HAIL 'piece of land' relates to the bowling greens, croquet green only and implement sheds. Secondly, as HAIL land, the NESCS will apply if one of the regulated activities is to take place, the most likely being subdivision, change of use and soil disturbance/disposal.

Given the 5560 m² site area, should soil disturbance be required for future development, up to 278 m³ of material may be disturbed and up to 55 m³ of material disposed of before the permitted activity thresholds of the NESCS are exceeded.

The NESCS aims to control changes of use that are more sensitive than the current use. Should it be considered that the redevelopment of the site constituted a change of use, the provisions of the NESCS would also apply.

10.0 Waste Disposal Assessment

To assess soil disposal options, laboratory results have been compared to the MfE's *Landfill Waste Acceptance Criteria and Landfill Classification* (MfE, 2004) and the waste acceptance criteria for Silverstream Landfill, this being the nearest Class A landfill. The results for the waste disposal assessment are presented in Table 3.

All samples reported concentrations of heavy metals which exceeded Class B landfill screening criteria. However, all samples complied with the Class A landfill and Silverstream landfill screening criteria for heavy metals with the exception of lead in soil sample HA1 0.0.

All samples reported concentrations of DDT and endosulfan which complied with Class A, Class B and Silverstream landfill screening criteria. Three samples (HA1 0.0, HA3 0.0 and HA4 0.0) reported dieldrin concentrations which exceeded both the Silverstream and Class B landfill screening criteria. In addition, eleven other soil samples, two of which were deeper composite samples, recorded dieldrin concentrations which exceeded the screening criteria for Silverstream Landfill.

Given that two composite samples recorded dieldrin concentrations which exceeded the Silverstream screening criteria, total dieldrin analysis was carried out on the individual samples which made up the composite sample in which the greatest dieldrin concentration was recorded (Composite sample HA1 0.25, HA2 0.25, HA3 0.25 & HA4 0.25). The individual samples (HA1 0.25 – HA4 0.25) all recorded dieldrin concentrations which exceeded the Silverstream screening criteria.

Given the landfill acceptance exceedances, soil sample HA1 0.0 was scheduled for toxicity characteristic leaching procedure (TCLP) analysis for lead and dieldrin. In addition, sample HA3 0.0, which contained the highest dieldrin concentration, was also scheduled for TCLP analysis for dieldrin. The TCLP results are presented in Table 4.

The TCLP results indicate that the leachable concentration of lead and dieldrin comply with both the Class A and Silverstream leachate criteria. Extrapolation of the TCLP results for HA3 0.0 indicates that the

soil from the remaining locations which recorded Silverstream screening criteria exceedances, and were not subject to TCLP analysis, would also fall well within the Silverstream leachate criteria for dieldrin.

It is therefore considered that material from the site may be disposed of at Silverstream Landfill or some other Class A landfill.

11.0 Conclusion

Pattle Delamore Partners Limited was engaged by Hutt City Council to undertake a detailed site investigation at 135 Witako Street, Lower Hutt. It is understood that the Council is preparing a district plan change which would allow the future redevelopment of the property.

An intrusive investigation, involving hand augering and soil sampling, was undertaken on 9 June 2017. A total of 20 auger locations were sampled, with 34 soil samples undergoing laboratory analysis for a suite of heavy metals and a suite of organochlorine, organonitrogen and organophosphate pesticides as part of a human health and soil disposal assessment.

One soil sample exceeded the arsenic soil contaminant standard for residential (10% produce). No other soil samples exceeded the relevant criteria. As a result of the arsenic exceedance, should the site be subdivided for residential use, additional soil sampling is recommended in the green with exceedance (the northwest green) to confirm that the average arsenic concentrations in the subdivided lots in the vicinity of sample location HA1 are below the relevant SCS. Alternatively, given that the deeper composite sample in this area did not report an exceedance, presumptive stripping and off-site disposal of the surface soils in the vicinity of sample HA1 may be sufficient. However, the successful removal of the contaminants would need to be confirmed by validation sampling across the stripped area.

Laboratory analysis identified that soil removed from site can be disposed of at Silverstream Landfill or some other Class A landfill.

As the site falls within one of the descriptions on the MfE's HAIL, should any future redevelopment at the site, constitute a change of use, the provisions of the NESCS would apply. Given the 5560 m² site area, should soil disturbance be required for future development, up to 278 m³ of material may be disturbed and up to 55 m³ of material disposed of before the permitted activity thresholds of the NESCS are exceeded.

12.0 Limitations

This report has been prepared based on the visual observations of the site vicinity, PID results from field headspace analysis, and analysis of 34 soil samples from 20 hand auger locations. All soil samples were analysed by an analytical laboratory for a suite of heavy metals and OCPs. The site conditions as described in this report have been interpreted from, and are subject to, this information and its limitations and accordingly PDP does not represent that its interpretation accurately represents the full site conditions.

The information contained within this report applies to sampling of soil undertaken on the date stated in this report. With time, the site conditions and environmental standards could change so that the reported assessment and conclusions are no longer valid. Accordingly, the report should not be used to refer to site conditions and environmental standards applying at a later date without first confirming the validity of the report's information at that time.

This report has been prepared by PDP on the specific instructions of Hutt City Council for the limited purposes described in the report. PDP accepts no liability if the report is used for a different purpose or if it is used or relied on by any other person. Any such use or reliance will be solely at their own risk.

Yours sincerely

PATTLE DELAMORE PARTNERS LIMITED

Prepared by



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Environmental Geologist

Reviewed by



Bo Simkin

Contaminated Sites Service Leader
Suitably Qualified Environmental Practitioner

Approved by



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References

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Figures



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FIGURE 1 : SITE LAYOUT AND SAMPLING LOCATIONS

- KEY :**
- Site Boundary
 - HA1 Sample Location
 - As - 0.0m Exceedence

SOURCE: IMAGERY SOURCED FROM THE LINZ DATA SERVICE VIA THE COASTAL AND MARINE SERVICES ACT, 2012. DATA SERVICE PI 1. USING LINZ DATA ATTRIBUTING TO LINZ DATA SERVICE AND LICENSED FOR REUSE UNDER THE CREATIVE COMMONS ATTRIBUTION 3.0 NEW ZEALAND LICENSE. 2. DIGITAL TOPOGRAPHICAL INFORMATION AND INSET DERIVED FROM LINZ DATA.

Tables

Table 1: Soil Sampling Results - Heavy Metals and OCPs

Soil Samples Collected at a Depth of 0.0 m Below Ground Level ¹											
Sample Name	HA1 O.0	HA2 O.0	HA3 O.0	HA4 O.0	HA5 O.0	HA6 O.0	HA7 O.0	HA8 O.0	HA9 O.0	Soil Contaminant Standards: Residential (10% produce) ^{2,3}	
Laboratory Reference	1790264.1	1790264.2	1790264.3	1790264.4	1790264.5	1790264.6	1790264.7	1790264.8	1790264.9	HA9	HA9
Sample Location	HA1	HA2	HA3	HA4	HA5	HA6	HA7	HA8	HA9	Remaining	Remaining
Soil Fate	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Silt	Silt
Soil Type - Field	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	0.0	0.0
Sample Depth (m bg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavy Metals											
Arsenic	31	18	14	14	6	5	5	8	7	7	20
Cadmium	0.22	0.2	0.21	0.32	0.15	0.18	0.17	0.15	0.22	0.22	3
Chromium	17	18	17	16	16	15	14	15	15	15	460
Copper	24	21	24	21	19	12	14	16	17	17	NL ⁴
Lead	106	72	62	57	55	43	48	53	46	46	210
Mercury	0.16	0.14	0.12	0.23	0.18	0.12	0.26	0.11	0.15	0.15	310
Nickel	11	13	12	11	10	9	7	10	9	9	400
Zinc	71	77	65	80	56	48	46	52	57	57	7,400
Organochlorine Pesticides ⁵											
Dieldrin	0.4	0.34	0.82	0.48	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	2.6
ZDDT ⁶	0.88	0.57	1.11	1.32	0.63	0.62	1.68	0.97	0.92	0.92	70
Endosulfan ⁷	ND	ND	ND	ND	0.02	0.11	0.26	0.28	ND	ND	43
Soil Samples Collected at a Depth of 0.0 m Below Ground Level ¹											
Sample Name	HA10 O.0	HA11 O.0	HA12 O.0	HA13 O.0	HA14 O.0	HA15 O.0	HA16 O.0	HA17 O.0	HA20 O.0	Soil Contaminant Standards: Residential (10% produce) ^{2,3}	
Laboratory Reference	1790264.10	1790264.11	1790264.12	1790264.13	1790264.14	1790264.15	1790264.16	1790264.33	1790264.34	HA20	HA20
Sample Location	HA10	HA11	HA12	HA13	HA14	HA15	HA16	HA17	HA20	Remaining	Remaining
Soil Fate	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Silt	Silt
Soil Type - Field	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	0.0	0.0
Sample Depth (m bg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Heavy Metals											
Arsenic	8	7	7	8	7	7	7	11	10	10	20
Cadmium	0.15	0.16	0.13	0.19	0.21	0.12	0.19	0.23	0.22	0.22	3
Chromium	15	15	16	14	14	15	15	17	18	18	460
Copper	12	12	11	12	13	9	10	19	17	17	NL ⁴
Lead	66	46	66	30	35	41	38	50	62	62	210
Mercury	0.13	0.22	1.34	0.27	0.9	1.08	0.17	0.14	0.29	0.29	310
Nickel	9	9	10	8	9	12	9	13	13	13	400
Zinc	46	56	49	50	49	50	49	85	80	80	7,400
Organochlorine Pesticides ⁵											
Dieldrin	< 0.014	< 0.016	0.05	0.27	0.2	0.25	0.177	< 0.014	0.022	0.022	2.6
ZDDT ⁶	1.38	1.16	1.25	1.41	0.77	0.59	0.50	2.19	0.08	0.08	70
Endosulfan ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43

Notes:

- All results in mg/kg.
- Arsenic, cadmium, chromium, copper, lead, dieldrin and DDT criteria from MfE (2011d).
- Nickel, zinc and endosulfan criteria from NEPC (2013).
- NL = No Limit. Derived value exceeds 10,000 mg/kg (MfE, 2011d).
- Only those pesticides which have screening criteria and contained concentrations above the laboratory level of detection have been reported.
- ZDDT was calculated by adding the laboratory results of the individual DDX compounds with the sum rounded to the least number of significant figures of the results. Where one of the compounds was below the detection limit, a value of half the detection limit was used in the sum. Where all compounds in the sum are non-detects, the overall detection limit is the sum of the detection limits.
- Endosulfan was calculated by adding the laboratory results of Endosulfan I and Endosulfan II.

Concentration above MfE (2011d) Soil Contaminant Standards - Residential (10% produce)

Table 2: Composite Soil Sampling Results - Heavy Metals and OCPs

Soil Samples Collected at a Depth of 0.25 m Below Ground Level ¹				
Sample Name	Composite of HA1 0.25, HA2 0.25, HA3 0.25 & HA4 0.25	Composite of HA5 0.25, HA6 0.25, HA7 0.25 & HA8 0.25	Composite of HA9 0.25, HA10 0.25, HA11 0.25 & HA12 0.25	Composite of HA13 0.25, HA14 0.25, HA15 0.25 & HA16 0.25
Laboratory Reference	1790264.61	1790264.62	1790264.63	1790264.64
Sample Location	HA1 - HA4	HA5 - HA8	HA9 - HA12	HA13 - HA16
Soil Fate	Remaining	Remaining	Remaining	Remaining
Soil Type - Field	Silty Sand	Silty Sand	Silty Sand	Silty Sand
Sample Depth (m bgl)	0.25	0.25	0.25	0.25
Heavy Metals				
Arsenic	12	6	6	5
Cadmium	0.24	0.12	0.19	< 0.10
Chromium	18	15	18	16
Copper	24	16	20	13
Lead	55	43	52	24
Mercury	0.13	0.11	0.14	0.14
Nickel	14	13	12	12
Zinc	85	63	74	65
Organochlorine Pesticides ⁵				
Dieldrin	0.131	<0.013	<0.013	0.087
ΣDDT ⁶	0.22	0.12	0.13	0.16
Endosulfan ⁷	ND	ND	ND	ND
				Soil Contaminant Standards: Residential (10% produce) ^{2,3}

Notes:

- All results in mg/kg.
- Arsenic, cadmium, chromium, copper, lead, dieldrin and DDT criteria from MFE (2011d).
- Nickel, zinc and endosulfan criteria from NEPC (2013).
- NL = No Limit. Derived value exceeds 10,000 mg/kg (MFE, 2011d).
- Only those pesticides which have screening criteria and contained concentrations above the laboratory level of detection have been reported.
- ΣDDT was calculated by adding the laboratory results of the individual DDX compounds with the sum rounded to the least number of significant figures of the results. Where one of the compounds was below the detection limit, a value of half the detection limit was used in the sum. Where all compounds in the sum are non-detects, the overall detection limit is the sum of the detection limits.
- Endosulfan was calculated by adding the laboratory results of Endosulfan I and Endosulfan II.

Table 3: Soil Disposal Assessment- Heavy Metals and DCPs

Soil Samples Collected at a Depth of 0.0 m Below Ground Level ¹														
Sample Name	HA1 0.0	HA2 0.0	HA3 0.0	HA4 0.0	HA5 0.0	HA6 0.0	HA7 0.0	HA8 0.0	HA9 0.0	Class A Landfill Screening Criteria ²		Class B Landfill Screening Criteria ²		Silverstream Landfill Screening Criteria
Laboratory Reference	1790264.1	1790264.2	1790264.3	1790264.4	1790264.5	1790264.6	1790264.7	1790264.8	1790264.9					
Sample Location	HA1	HA2	HA3	HA4	HA5	HA6	HA7	HA8	HA9					
Soil Fate	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining					
Soil Type - Field	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt					
Sample Depth (m bg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Heavy Metals														
Arsenic	31	18	14	14	6	5	5	8	7	100	100	10	100	100
Cadmium	0.22	0.2	0.21	0.32	0.15	0.18	0.17	0.15	0.22	20	20	2	20	20
Chromium	17	18	17	16	16	15	14	15	15	100	100	10	100	100
Copper	24	21	24	21	19	12	14	16	17	100	100	10	100	28
Lead	106*	72	62	57	55	43	48	53	46	100	100	10	100	100
Mercury	0.16	0.14	0.12	0.23	0.18	0.12	0.26	0.11	0.15	4	4	0.4	4	4
Nickel	11	13	12	11	10	9	7	10	9	200	200	20	200	40
Zinc	71	77	65	80	56	48	46	52	57	200	200	20	200	200
Organochlorine Pesticides ³														
Dieldrin	0.4*	0.34*	0.82*	0.48*	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	8	8	0.4	8	0.08
ΣDDT ⁴	0.88	0.57	1.11	1.32	0.63	0.62	1.68	0.97	0.92	500 ^{5,6}	500 ^{5,6}	50 ⁵	500 ^{5,6}	500 ^{5,6}
Endosulfan	ND	ND	ND	ND	0.02	0.11	0.26	0.28	ND	6	6	0.3	6	4
Soil Samples Collected at a Depth of 0.0 m Below Ground Level ¹														
Sample Name	HA10 0.0	HA11 0.0	HA12 0.0	HA13 0.0	HA14 0.0	HA15 0.0	HA16 0.0	HA17 0.0	HA20 0.0	Class A Landfill Screening Criteria ²		Class B Landfill Screening Criteria ²		Silverstream Landfill Screening Criteria
Laboratory Reference	1790264.10	1790264.11	1790264.12	1790264.13	1790264.14	1790264.15	1790264.16	1790264.33	1790264.34					
Sample Location	HA10	HA11	HA12	HA13	HA14	HA15	HA16	HA17	HA20					
Soil Fate	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining					
Soil Type - Field	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt					
Sample Depth (m bg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Heavy Metals														
Arsenic	8	7	7	8	7	7	7	11	10	100	100	10	100	100
Cadmium	0.15	0.16	0.13	0.19	0.21	0.12	0.19	0.23	0.22	20	20	2	20	20
Chromium	15	15	16	14	14	15	15	17	18	100	100	10	100	100
Copper	12	12	11	12	13	9	10	19	17	100	100	10	100	28
Lead	66	46	66	30	35	41	38	50	62	100	100	10	100	100
Mercury	0.13	0.22	1.34	0.27	0.9	1.08	0.17	0.14	0.29	4	4	0.4	4	4
Nickel	9	9	10	8	9	12	9	13	13	200	200	20	200	40
Zinc	46	56	49	50	49	50	49	85	80	200	200	20	200	160
Organochlorine Pesticides ³														
Dieldrin	< 0.014	< 0.016	0.05	0.27*	0.2*	0.25*	0.177*	< 0.014	0.022	8	8	0.8	8	0.08
ΣDDT ⁴	1.38	1.16	1.25	1.41	0.77	0.59	0.50	2.19	0.08	500 ^{5,6}	500 ^{5,6}	50 ⁵	500 ^{5,6}	500 ^{5,6}
Endosulfan ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	6	0.3	6	4

Table 3: Soil Disposal Assessment- Heavy Metals and OCPs (continued)

Sample Name	Soil Samples Collected at a Depth of 0.25 m Below Ground Level ¹										Composite of HA13 0.25, HA14 0.25, HA15 0.25 & HA16 0.25	Class A Landfill Screening Criteria ²	Class B Landfill Screening Criteria ²	Silverstream Landfill Screening Criteria
	HA1 0.25	HA2 0.25	HA3 0.25	HA4 0.25	Composite of HA1 0.25, HA2 0.25, HA3 0.25 & HA4 0.25	Composite of HA5 0.25, HA6 0.25, HA7 0.25 & HA8 0.25	Composite of HA9 0.25, HA10 0.25, HA11 0.25 & HA12 0.25	Composite of HA13 0.25, HA14 0.25, HA15 0.25 & HA16 0.25						
Laboratory Reference	1790264.17	1790264.18	1790264.19	1790264.20	1790264.61	1790264.62	1790264.63	1790264.64	1790264.64	1790264.64				
Sample Location	HA1	HA2	HA3	HA4	HA1 - HA4	HA5 - HA8	HA9 - HA12	HA13 - HA16	HA13 - HA16	HA13 - HA16				
Soil Fate	Remaining Silty Sand	Remaining Silty Sand	Remaining Silty Sand	Remaining Silty Sand	Remaining Silty Sand	Remaining Silty Sand	Remaining Silty Sand	Remaining Silty Sand	Remaining Silty Sand	Remaining Silty Sand				
Sample Depth (m bgl)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25				
Heavy Metals														
Arsenic	-	-	-	-	12	6	6	5	5	5				
Cadmium	-	-	-	-	0.24	0.12	0.19	< 0.10	< 0.10	< 0.10				
Chromium	-	-	-	-	18	15	18	16	16	16				
Copper	-	-	-	-	24	16	20	13	13	13				
Lead	-	-	-	-	55	43	52	24	24	24				
Mercury	-	-	-	-	0.13	0.11	0.14	0.14	0.14	0.14				
Nickel	-	-	-	-	14	13	12	12	12	12				
Zinc	-	-	-	-	85	63	74	65	65	65				
Organochlorine Pesticides ³														
Dieldrin	0.32*	0.37*	0.115*	0.33*	0.131*	< 0.013	< 0.013	0.087*	0.087*	0.087*				
ΣDDT ⁴	-	-	-	-	0.22	0.12	0.13	0.16	0.16	0.16				
Endosulfan ⁷	-	-	-	-	ND	ND	ND	ND	ND	ND				
											8	0.8	0.8	0.08
											500 ^{5,6}	50 ⁵	500 ^{5,6}	500 ^{5,6}
											6	0.3	0.3	4

Notes:

- All results in mg/kg.
- Screening criteria from Landfill Waste Acceptance Criteria and Landfill Classification (MFE, 2004).
- Only those pesticides which have screening criteria and contained concentrations above the laboratory level of detection have been reported.
- ΣDDT was calculated by adding the laboratory results of the individual DDX compounds with the sum rounded to the least number of significant figures of the results. Where one of the compounds was below the detection limit, a value of half the detection limit was used in the sum. Where all compounds in the sum are non-detects, the overall detection limit is the sum of the detection limits.
- Total concentration from Landfill Waste Acceptance Criteria and Landfill Classification (MFE, 2004).
- Derived from the concentration at which free product would be present in leachate.
- Endosulfan was calculated by adding the laboratory results of Endosulfan I and Endosulfan II.

	Concentration above Class A Landfill Screening Criteria
802	Concentration above Class B Landfill Screening Criteria
13.1*	Concentration above Silverstream Landfill Screening Criteria

Table 4: Soil Sample Results - TCLP Analysis

Soil Samples Collected at a Depth of 0.0 m Below Ground Level ¹				
Sample Name	HA1 0.0	HA3 0.0	Class A Landfill TCLP Screening Criteria ²	Silverstream Landfill TCLP Leachate Criteria
Laboratory Reference	1790264.65	1790264.66		
Sample Location	HA1	HA3		
Soil Fate	Remaining	Remaining		
Soil Type - Field	Silt	Silt		
Sample Depth (m bgl)	0.0	0.0		
Leachate Concentrations ³				
Lead	0.022	-	5	5
Dieldrin	0.00021	0.00044	0.4	0.004

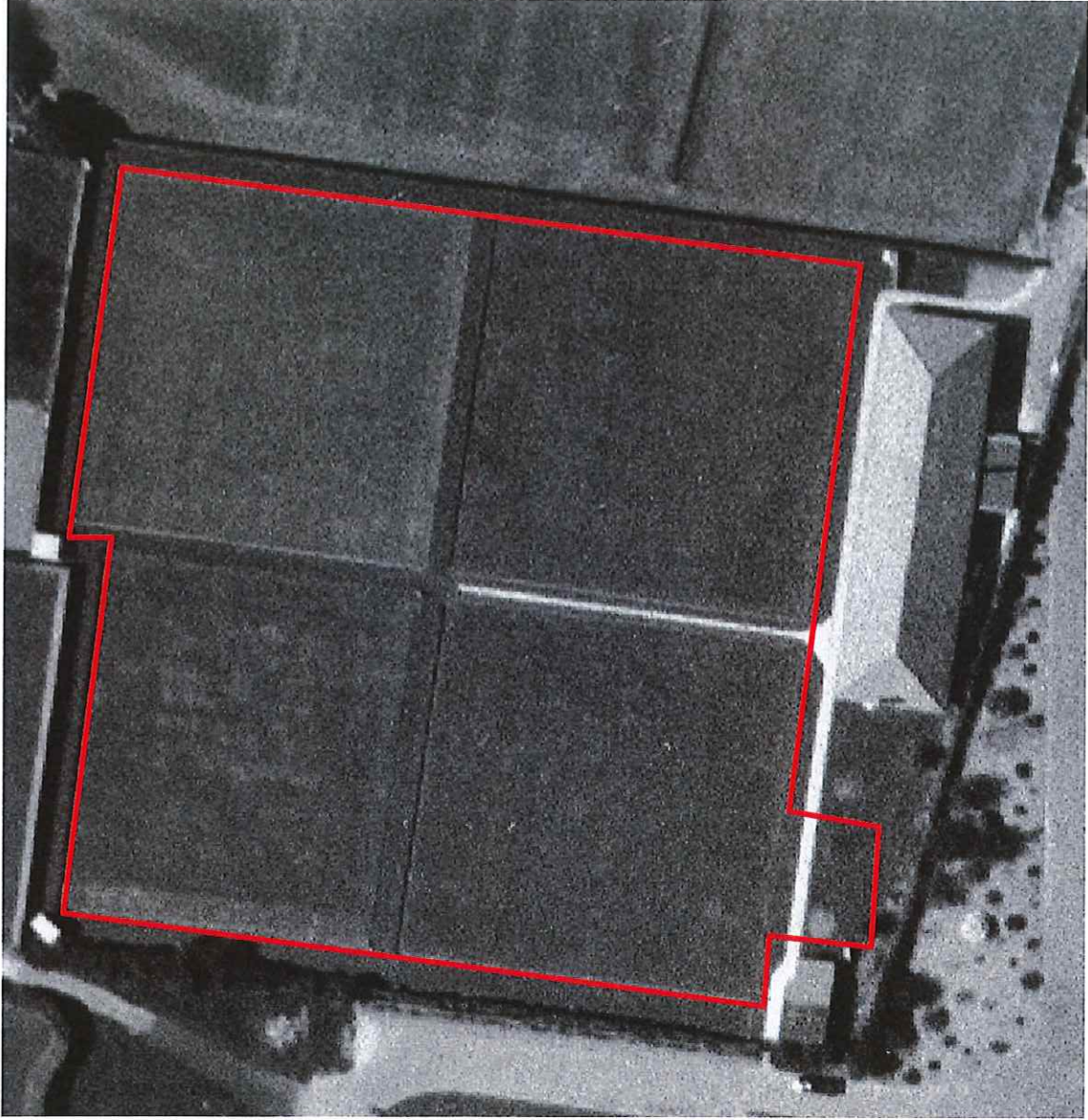
Notes:

1. All results in mg/L.
2. Leachate criteria from Landfill Waste Acceptance Criteria and Landfill Classification (MFE, 2004).
3. Samples submitted for toxicity characteristic leaching procedure (TCLP)

Historical Aerial Photographs



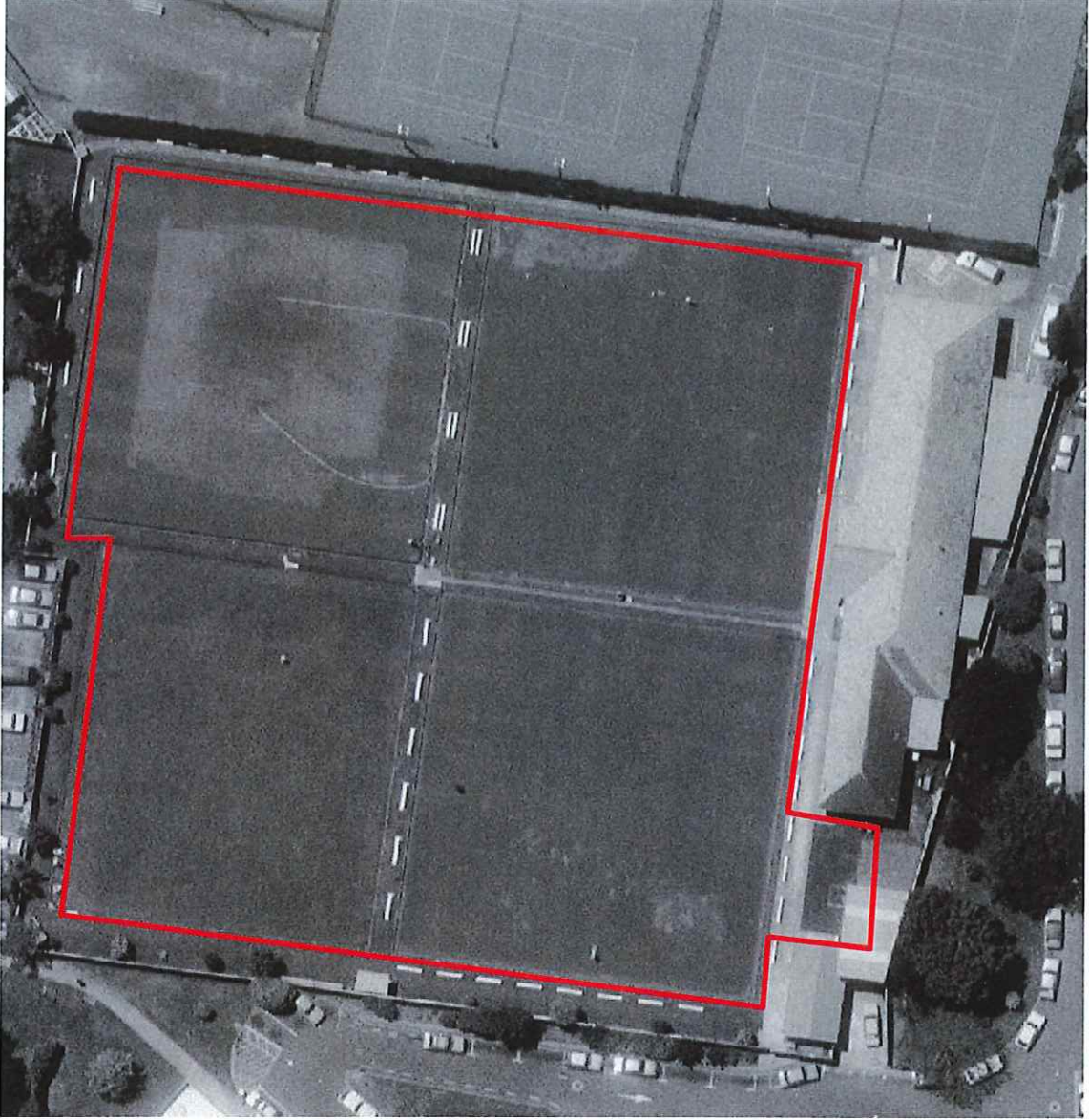
Historical Aerial Photograph 1: 1941 - 1942



Historical Aerial Photograph 2: 1958



Historical Aerial Photograph 3: 1977



Historical Aerial Photograph 4: 1988



Historical Aerial Photograph 5: 1995



Historical Aerial Photograph 6: 2003



Historical Aerial Photograph 7: 2008



Historical Aerial Photograph 8: 2013

Site Photographs



Photograph 1: The site, looking northwest.



Photograph 2: A typical bowling green, looking southeast from the centre of the site.



Photograph 3: The implement shed situated in the southwestern corner.



Photograph 4: The implement shed situated in the centre of the bowling/croquet greens.



Photograph 5: The historical concrete path still present beneath the present-day path outside the implement shed in the southwestern corner of the site.



Photograph 6: Silty topsoil observed at a depth of 0.0 m bgl in HA16.



Photograph 7: Sandy silt observed at a depth of 0.25 m bgl in HA16.

Laboratory Reports



ANALYSIS REPORT

Client:	Pattle Delamore Partners Limited	Lab No:	1790264	SPv2
Contact:	B Simkin	Date Received:	10-Jun-2017	
	C/- Pattle Delamore Partners Limited	Date Reported:	13-Jul-2017	(Amended)
	PO Box 6136	Quote No:	81087	
	Wellington 6141	Order No:	WO2173100	
		Client Reference:	WO2173100	
		Submitted By:	Melody Robyns	

Sample Type: Soil						
Sample Name:	HA1 0.0 09-Jun-2017	HA2 0.0 09-Jun-2017	HA3 0.0 09-Jun-2017	HA4 0.0 09-Jun-2017	HA5 0.0 09-Jun-2017	
Lab Number:	1790264.1	1790264.2	1790264.3	1790264.4	1790264.5	
Individual Tests						
Dry Matter	g/100g as rcvd	73	71	79	70	66
TCLP Weight of Sample Taken	g	100	-	100	-	-
TCLP Initial Sample pH	pH Units	6.2	-	6.2	-	-
TCLP Acid Adjusted Sample pH	pH Units	1.6	-	1.6	-	-
TCLP Extractant Type*		NaOH/Acetic acid at pH 4.93 +/- 0.05	-	NaOH/Acetic acid at pH 4.93 +/- 0.05	-	-
TCLP Extraction Fluid pH	pH Units	5.0	-	5.0	-	-
TCLP Post Extraction Sample pH	pH Units	5.0	-	5.0	-	-
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	31	18	14	14	6
Total Recoverable Cadmium	mg/kg dry wt	0.22	0.20	0.21	0.32	0.15
Total Recoverable Chromium	mg/kg dry wt	17	18	17	16	16
Total Recoverable Copper	mg/kg dry wt	24	21	24	21	19
Total Recoverable Lead	mg/kg dry wt	106	72	62	57	55
Total Recoverable Mercury	mg/kg dry wt	0.16	0.14	0.12	0.23	0.18
Total Recoverable Nickel	mg/kg dry wt	11	13	12	11	10
Total Recoverable Zinc	mg/kg dry wt	71	77	65	80	56
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
alpha-BHC	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
beta-BHC	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
delta-BHC	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
gamma-BHC (Lindane)	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
cis-Chlordane	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
trans-Chlordane	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
Total Chlordane [(cis+trans)* 100/42]	mg/kg dry wt	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
2,4'-DDD	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
4,4'-DDD	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
2,4'-DDE	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
4,4'-DDE	mg/kg dry wt	0.50	0.30	0.59	0.77	0.30
2,4'-DDT	mg/kg dry wt	< 0.014	0.037	0.081	0.097	0.018
4,4'-DDT	mg/kg dry wt	0.35	0.21	0.42	0.43	0.29
Total DDT Isomers	mg/kg dry wt	0.85	0.55	1.09	1.29	0.61
Dieldrin	mg/kg dry wt	0.40	0.34	0.82	0.48	< 0.015
Endosulfan I	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
Endosulfan II	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	0.016
Endosulfan sulphate	mg/kg dry wt	0.071	0.040	0.043	0.104	0.27



Sample Type: Soil						
Sample Name:		HA1 0.0	HA2 0.0	HA3 0.0	HA4 0.0	HA5 0.0
		09-Jun-2017	09-Jun-2017	09-Jun-2017	09-Jun-2017	09-Jun-2017
Lab Number:		1790264.1	1790264.2	1790264.3	1790264.4	1790264.5
Organochlorine Pesticides Screening in Soil						
Endrin	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
Endrin aldehyde	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
Endrin ketone	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
Heptachlor	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
Heptachlor epoxide	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
Hexachlorobenzene	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
Methoxychlor	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.014	< 0.015
Sample Name:		HA6 0.0	HA7 0.0	HA8 0.0	HA9 0.0	HA10 0.0
		09-Jun-2017	09-Jun-2017	09-Jun-2017	09-Jun-2017	09-Jun-2017
Lab Number:		1790264.6	1790264.7	1790264.8	1790264.9	1790264.10
Individual Tests						
Dry Matter	g/100g as rcvd	64	36	44	69	70
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	5	8	7	8
Total Recoverable Cadmium	mg/kg dry wt	0.18	0.17	0.15	0.22	0.15
Total Recoverable Chromium	mg/kg dry wt	15	14	15	15	15
Total Recoverable Copper	mg/kg dry wt	12	14	16	17	12
Total Recoverable Lead	mg/kg dry wt	43	48	53	46	66
Total Recoverable Mercury	mg/kg dry wt	0.12	0.26	0.11	0.15	0.13
Total Recoverable Nickel	mg/kg dry wt	9	7	10	9	9
Total Recoverable Zinc	mg/kg dry wt	48	46	52	57	46
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
alpha-BHC	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
beta-BHC	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
delta-BHC	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
gamma-BHC (Lindane)	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
cis-Chlordane	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
trans-Chlordane	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
Total Chlordane [(cis+trans)* 100/42]	mg/kg dry wt	< 0.04	< 0.06	< 0.05	< 0.04	< 0.04
2,4'-DDD	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
4,4'-DDD	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	0.020
2,4'-DDE	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
4,4'-DDE	mg/kg dry wt	0.40	0.95	0.62	0.55	0.78
2,4'-DDT	mg/kg dry wt	0.024	0.08	0.03	0.043	0.092
4,4'-DDT	mg/kg dry wt	0.178	0.60	0.27	0.30	0.47
Total DDT Isomers	mg/kg dry wt	0.60	1.62	0.92	0.89	1.36
Dieldrin	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
Endosulfan I	mg/kg dry wt	0.042	0.11	0.06	< 0.015	< 0.014
Endosulfan II	mg/kg dry wt	0.071	0.15	0.22	< 0.015	< 0.014
Endosulfan sulphate	mg/kg dry wt	1.10	2.3	3.7	0.43	0.33
Endrin	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
Endrin aldehyde	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
Endrin ketone	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
Heptachlor	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
Heptachlor epoxide	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
Hexachlorobenzene	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
Methoxychlor	mg/kg dry wt	< 0.015	< 0.03	< 0.03	< 0.015	< 0.014
Sample Name:		HA11 0.0	HA12 0.0	HA13 0.0	HA14 0.0	HA15 0.0
		09-Jun-2017	09-Jun-2017	09-Jun-2017	09-Jun-2017	09-Jun-2017
Lab Number:		1790264.11	1790264.12	1790264.13	1790264.14	1790264.15
Individual Tests						
Dry Matter	g/100g as rcvd	65	68	56	64	67

Sample Type: Soil						
Sample Name:	HA11 0.0 09-Jun-2017	HA12 0.0 09-Jun-2017	HA13 0.0 09-Jun-2017	HA14 0.0 09-Jun-2017	HA15 0.0 09-Jun-2017	
Lab Number:	1790264.11	1790264.12	1790264.13	1790264.14	1790264.15	
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	7	7	8	7	7
Total Recoverable Cadmium	mg/kg dry wt	0.16	0.13	0.19	0.21	0.12
Total Recoverable Chromium	mg/kg dry wt	15	16	14	14	15
Total Recoverable Copper	mg/kg dry wt	12	11	12	13	9
Total Recoverable Lead	mg/kg dry wt	46	66	30	35	41
Total Recoverable Mercury	mg/kg dry wt	0.22	1.34	0.27	0.90	1.08
Total Recoverable Nickel	mg/kg dry wt	9	10	8	9	12
Total Recoverable Zinc	mg/kg dry wt	56	49	50	49	50
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
alpha-BHC	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
beta-BHC	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
delta-BHC	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
gamma-BHC (Lindane)	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
cis-Chlordane	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
trans-Chlordane	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Total Chlordane [(cis+trans)* 100/42]	mg/kg dry wt	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
2,4'-DDD	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
4,4'-DDD	mg/kg dry wt	0.033	0.036	0.042	< 0.016	< 0.015
2,4'-DDE	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
4,4'-DDE	mg/kg dry wt	0.72	0.55	0.73	0.46	0.36
2,4'-DDT	mg/kg dry wt	0.060	0.091	0.096	0.046	0.033
4,4'-DDT	mg/kg dry wt	0.33	0.56	0.52	0.24	0.177
Total DDT Isomers	mg/kg dry wt	1.14	1.23	1.39	0.74	0.57
Dieldrin	mg/kg dry wt	< 0.016	0.050	0.27	0.20	0.25
Endosulfan I	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Endosulfan II	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Endosulfan sulphate	mg/kg dry wt	0.32	0.063	0.46	0.175	0.062
Endrin	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Endrin aldehyde	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Endrin ketone	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Heptachlor	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Heptachlor epoxide	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Hexachlorobenzene	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Methoxychlor	mg/kg dry wt	< 0.016	< 0.015	< 0.018	< 0.016	< 0.015
Sample Name:	HA16 0.0 09-Jun-2017	HA1 0.25 09-Jun-2017	HA2 0.25 09-Jun-2017	HA3 0.25 09-Jun-2017	HA4 0.25 09-Jun-2017	
Lab Number:	1790264.16	1790264.17	1790264.18	1790264.19	1790264.20	
Individual Tests						
Dry Matter	g/100g as rcvd	62	-	-	-	-
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	7	-	-	-	-
Total Recoverable Cadmium	mg/kg dry wt	0.19	-	-	-	-
Total Recoverable Chromium	mg/kg dry wt	15	-	-	-	-
Total Recoverable Copper	mg/kg dry wt	10	-	-	-	-
Total Recoverable Lead	mg/kg dry wt	38	-	-	-	-
Total Recoverable Mercury	mg/kg dry wt	0.17	-	-	-	-
Total Recoverable Nickel	mg/kg dry wt	9	-	-	-	-
Total Recoverable Zinc	mg/kg dry wt	49	-	-	-	-
Dieldrin in Soil by GC/ECD						
Dieldrin	mg/kg dry wt	-	0.32	0.37	0.115	0.33
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.016	-	-	-	-
alpha-BHC	mg/kg dry wt	< 0.016	-	-	-	-

Sample Type: Soil						
Sample Name:	HA16 0.0 09-Jun-2017	HA1 0.25 09-Jun-2017	HA2 0.25 09-Jun-2017	HA3 0.25 09-Jun-2017	HA4 0.25 09-Jun-2017	
Lab Number:	1790264.16	1790264.17	1790264.18	1790264.19	1790264.20	
Organochlorine Pesticides Screening in Soil						
beta-BHC	mg/kg dry wt	< 0.016	-	-	-	-
delta-BHC	mg/kg dry wt	< 0.016	-	-	-	-
gamma-BHC (Lindane)	mg/kg dry wt	< 0.016	-	-	-	-
cis-Chlordane	mg/kg dry wt	< 0.016	-	-	-	-
trans-Chlordane	mg/kg dry wt	< 0.016	-	-	-	-
Total Chlordane [(cis+trans)* 100/42]	mg/kg dry wt	< 0.04	-	-	-	-
2,4'-DDD	mg/kg dry wt	< 0.016	-	-	-	-
4,4'-DDD	mg/kg dry wt	< 0.016	-	-	-	-
2,4'-DDE	mg/kg dry wt	< 0.016	-	-	-	-
4,4'-DDE	mg/kg dry wt	0.32	-	-	-	-
2,4'-DDT	mg/kg dry wt	0.024	-	-	-	-
4,4'-DDT	mg/kg dry wt	0.127	-	-	-	-
Total DDT Isomers	mg/kg dry wt	0.47	-	-	-	-
Dieldrin	mg/kg dry wt	0.177	-	-	-	-
Endosulfan I	mg/kg dry wt	< 0.016	-	-	-	-
Endosulfan II	mg/kg dry wt	< 0.016	-	-	-	-
Endosulfan sulphate	mg/kg dry wt	0.50	-	-	-	-
Endrin	mg/kg dry wt	< 0.016	-	-	-	-
Endrin aldehyde	mg/kg dry wt	< 0.016	-	-	-	-
Endrin ketone	mg/kg dry wt	< 0.016	-	-	-	-
Heptachlor	mg/kg dry wt	< 0.016	-	-	-	-
Heptachlor epoxide	mg/kg dry wt	< 0.016	-	-	-	-
Hexachlorobenzene	mg/kg dry wt	< 0.016	-	-	-	-
Methoxychlor	mg/kg dry wt	< 0.016	-	-	-	-
Sample Name:	HA17 0.0 09-Jun-2017	HA20 0.0 09-Jun-2017	Composite of HA1 0.25, HA2 0.25, HA3 0.25 & HA4 0.25	Composite of HA5 0.25, HA6 0.25, HA7 0.25 & HA8 0.25	Composite of HA9 0.25, HA10 0.25, HA11 0.25 & HA12 0.25	
Lab Number:	1790264.33	1790264.34	1790264.61	1790264.62	1790264.63	
Individual Tests						
Dry Matter	g/100g as rcvd	71	75	76	76	75
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	11	10	12	6	6
Total Recoverable Cadmium	mg/kg dry wt	0.23	0.22	0.24	0.12	0.19
Total Recoverable Chromium	mg/kg dry wt	17	18	18	15	18
Total Recoverable Copper	mg/kg dry wt	19	17	24	16	20
Total Recoverable Lead	mg/kg dry wt	50	62	55	43	52
Total Recoverable Mercury	mg/kg dry wt	0.14	0.29	0.13	0.11	0.14
Total Recoverable Nickel	mg/kg dry wt	13	13	14	13	12
Total Recoverable Zinc	mg/kg dry wt	85	80	85	63	74
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
alpha-BHC	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
beta-BHC	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
delta-BHC	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
gamma-BHC (Lindane)	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
cis-Chlordane	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
trans-Chlordane	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Total Chlordane [(cis+trans)* 100/42]	mg/kg dry wt	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
2,4'-DDD	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
4,4'-DDD	mg/kg dry wt	0.015	< 0.014	< 0.013	< 0.013	< 0.013
2,4'-DDE	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
4,4'-DDE	mg/kg dry wt	0.82	0.046	0.131	0.067	0.067
2,4'-DDT	mg/kg dry wt	0.187	< 0.014	< 0.013	< 0.013	< 0.013

Sample Type: Soil						
Sample Name:	HA17 0.0 09-Jun-2017	HA20 0.0 09-Jun-2017	Composite of HA1 0.25, HA2 0.25, HA3 0.25 & HA4 0.25	Composite of HA5 0.25, HA6 0.25, HA7 0.25 & HA8 0.25	Composite of HA9 0.25, HA10 0.25, HA11 0.25 & HA12 0.25	
Lab Number:	1790264.33	1790264.34	1790264.61	1790264.62	1790264.63	
Organochlorine Pesticides Screening in Soil						
4,4'-DDT	mg/kg dry wt	1.15	< 0.014	0.066	0.022	0.033
Total DDT Isomers	mg/kg dry wt	2.2	< 0.08	0.20	0.09	0.10
Dieldrin	mg/kg dry wt	< 0.014	0.022	0.131	< 0.013	< 0.013
Endosulfan I	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Endosulfan II	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Endosulfan sulphate	mg/kg dry wt	< 0.014	< 0.014	0.013	< 0.013	0.015
Endrin	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Endrin aldehyde	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Endrin ketone	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Heptachlor	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Heptachlor epoxide	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Hexachlorobenzene	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Methoxychlor	mg/kg dry wt	< 0.014	< 0.014	< 0.013	< 0.013	< 0.013
Organonitro&phosphorus Pesticides Screen in Soil by GCMS						
Acetochlor	mg/kg	< 0.07	< 0.07	-	-	-
Alachlor	mg/kg	< 0.05	< 0.05	-	-	-
Atrazine	mg/kg	< 0.07	< 0.07	-	-	-
Atrazine-desethyl	mg/kg	< 0.07	< 0.07	-	-	-
Atrazine-desisopropyl	mg/kg	< 0.13	< 0.13	-	-	-
Azaconazole	mg/kg	< 0.04	< 0.04	-	-	-
Azinphos-methyl	mg/kg	< 0.13	< 0.13	-	-	-
Benalaxyl	mg/kg	< 0.04	< 0.04	-	-	-
Bitertanol	mg/kg	< 0.13	< 0.13	-	-	-
Bromacil	mg/kg	< 0.07	< 0.07	-	-	-
Bromopropylate	mg/kg	< 0.07	< 0.07	-	-	-
Butachlor	mg/kg	< 0.07	< 0.07	-	-	-
Captan	mg/kg	< 0.13	< 0.13	-	-	-
Carbaryl	mg/kg	< 0.07	< 0.07	-	-	-
Carbofuran	mg/kg	< 0.07	< 0.07	-	-	-
Chlorfluazuron	mg/kg	< 0.07	< 0.07	-	-	-
Chlorothalonil	mg/kg	< 0.07	< 0.07	-	-	-
Chlorpyrifos	mg/kg	< 0.07	< 0.07	-	-	-
Chlorpyrifos-methyl	mg/kg	< 0.07	< 0.07	-	-	-
Chlortoluron	mg/kg	< 0.13	< 0.13	-	-	-
Cyanazine	mg/kg	< 0.07	< 0.07	-	-	-
Cyfluthrin	mg/kg	< 0.08	< 0.08	-	-	-
Cyhalothrin	mg/kg	< 0.07	< 0.07	-	-	-
Cypermethrin	mg/kg	< 0.16	< 0.16	-	-	-
Deltamethrin (including Tralomethrin)	mg/kg	< 0.07	< 0.07	-	-	-
Diazinon	mg/kg	< 0.04	< 0.04	-	-	-
Dichlofluanid	mg/kg	< 0.07	< 0.07	-	-	-
Dichloran	mg/kg	< 0.2	< 0.2	-	-	-
Dichlorvos	mg/kg	< 0.09	< 0.09	-	-	-
Difenoconazole	mg/kg	< 0.10	< 0.09	-	-	-
Dimethoate	mg/kg	< 0.13	< 0.13	-	-	-
Diphenylamine	mg/kg	< 0.13	< 0.13	-	-	-
Diuron	mg/kg	< 0.07	< 0.07	-	-	-
Fenpropimorph	mg/kg	< 0.07	< 0.07	-	-	-
Fluazifop-butyl	mg/kg	< 0.07	< 0.07	-	-	-
Fluometuron	mg/kg	< 0.07	< 0.07	-	-	-
Flusilazole	mg/kg	< 0.07	< 0.07	-	-	-
Fluvalinate	mg/kg	< 0.05	< 0.05	-	-	-
Furalaxyl	mg/kg	< 0.04	< 0.04	-	-	-

Sample Type: Soil

Sample Name:	HA17 0.0 09-Jun-2017	HA20 0.0 09-Jun-2017	Composite of HA1 0.25, HA2 0.25, HA3 0.25 & HA4 0.25	Composite of HA5 0.25, HA6 0.25, HA7 0.25 & HA8 0.25	Composite of HA9 0.25, HA10 0.25, HA11 0.25 & HA12 0.25
Lab Number:	1790264.33	1790264.34	1790264.61	1790264.62	1790264.63
Organonitro&phosphorus Pesticides Screen in Soil by GCMS					
Haloxfop-methyl	mg/kg	< 0.07	< 0.07	-	-
Hexaconazole	mg/kg	< 0.07	< 0.07	-	-
Hexazinone	mg/kg	< 0.04	< 0.04	-	-
IPBC (3-Iodo-2-propynyl-n-butylcarbamate)	mg/kg dry wt	< 0.4	< 0.4	-	-
Kresoxim-methyl	mg/kg	< 0.04	< 0.04	-	-
Linuron	mg/kg	< 0.07	< 0.07	-	-
Malathion	mg/kg	< 0.07	< 0.07	-	-
Metalaxyl (Mefenoxam)	mg/kg	< 0.07	< 0.07	-	-
Methamidophos	mg/kg	< 0.4	< 0.4	-	-
Metolachlor	mg/kg	< 0.05	< 0.05	-	-
Metribuzin	mg/kg	< 0.07	< 0.07	-	-
Molinate	mg/kg	< 0.13	< 0.13	-	-
Myclobutanil	mg/kg	< 0.07	< 0.07	-	-
Naled	mg/kg	< 0.4	< 0.4	-	-
Norflurazon	mg/kg	< 0.13	< 0.13	-	-
Oxadiazon	mg/kg	< 0.07	< 0.07	-	-
Oxyfluorfen	mg/kg	< 0.04	< 0.04	-	-
Paclobutrazol	mg/kg	< 0.07	< 0.07	-	-
Parathion-ethyl	mg/kg	< 0.07	< 0.07	-	-
Parathion-methyl	mg/kg	< 0.07	< 0.07	-	-
Pendimethalin	mg/kg	< 0.07	< 0.07	-	-
Permethrin	mg/kg	< 0.03	< 0.03	-	-
Pirimicarb	mg/kg	< 0.07	< 0.07	-	-
Pirimiphos-methyl	mg/kg	< 0.07	< 0.07	-	-
Prochloraz	mg/kg	< 0.4	< 0.4	-	-
Procymidone	mg/kg	< 0.07	< 0.07	-	-
Prometryn	mg/kg	< 0.04	< 0.04	-	-
Propachlor	mg/kg	< 0.07	< 0.07	-	-
Propanil	mg/kg	< 0.2	< 0.2	-	-
Propazine	mg/kg	< 0.04	< 0.04	-	-
Propiconazole	mg/kg	< 0.05	< 0.05	-	-
Pyriproxyfen	mg/kg	< 0.07	< 0.07	-	-
Quizalofop-ethyl	mg/kg	< 0.07	< 0.07	-	-
Simazine	mg/kg	< 0.07	< 0.07	-	-
Simetryn	mg/kg	< 0.07	< 0.07	-	-
Sulfentrazone	mg/kg	< 0.4	< 0.4	-	-
TCMTB [2-(thiocyanomethylthio)benzothiazole, Busan]	mg/kg dry wt	< 0.13	< 0.13	-	-
Tebuconazole	mg/kg	< 0.07	< 0.07	-	-
Terbacil	mg/kg	< 0.07	< 0.07	-	-
Terbufos	mg/kg	< 0.07	< 0.07	-	-
Terbumeton	mg/kg	< 0.07	< 0.07	-	-
Terbuthylazine	mg/kg	< 0.04	< 0.04	-	-
Terbuthylazine-desethyl	mg/kg	< 0.07	< 0.07	-	-
Terbutryn	mg/kg	< 0.07	< 0.07	-	-
Thiabendazole	mg/kg	< 0.4	< 0.4	-	-
Thiobencarb	mg/kg	< 0.07	< 0.07	-	-
Tolylfluanid	mg/kg	< 0.04	< 0.04	-	-
Triazophos	mg/kg	< 0.07	< 0.07	-	-
Trifluralin	mg/kg	< 0.07	< 0.07	-	-
Vinclozolin	mg/kg	< 0.07	< 0.07	-	-

Sample Type: Soil						
Sample Name:		Composite of HA13 0.25, HA14 0.25, HA15 0.25 & HA16 0.25				
Lab Number:		1790264.64				
Individual Tests						
Dry Matter	g/100g as rcvd	76	-	-	-	-
Heavy Metals with Mercury, Screen Level						
Total Recoverable Arsenic	mg/kg dry wt	5	-	-	-	-
Total Recoverable Cadmium	mg/kg dry wt	< 0.10	-	-	-	-
Total Recoverable Chromium	mg/kg dry wt	16	-	-	-	-
Total Recoverable Copper	mg/kg dry wt	13	-	-	-	-
Total Recoverable Lead	mg/kg dry wt	24	-	-	-	-
Total Recoverable Mercury	mg/kg dry wt	0.14	-	-	-	-
Total Recoverable Nickel	mg/kg dry wt	12	-	-	-	-
Total Recoverable Zinc	mg/kg dry wt	65	-	-	-	-
Organochlorine Pesticides Screening in Soil						
Aldrin	mg/kg dry wt	< 0.013	-	-	-	-
alpha-BHC	mg/kg dry wt	< 0.013	-	-	-	-
beta-BHC	mg/kg dry wt	< 0.013	-	-	-	-
delta-BHC	mg/kg dry wt	< 0.013	-	-	-	-
gamma-BHC (Lindane)	mg/kg dry wt	< 0.013	-	-	-	-
cis-Chlordane	mg/kg dry wt	< 0.013	-	-	-	-
trans-Chlordane	mg/kg dry wt	< 0.013	-	-	-	-
Total Chlordane [(cis+trans)* 100/42]	mg/kg dry wt	< 0.04	-	-	-	-
2,4'-DDD	mg/kg dry wt	< 0.013	-	-	-	-
4,4'-DDD	mg/kg dry wt	< 0.013	-	-	-	-
2,4'-DDE	mg/kg dry wt	< 0.013	-	-	-	-
4,4'-DDE	mg/kg dry wt	0.101	-	-	-	-
2,4'-DDT	mg/kg dry wt	< 0.013	-	-	-	-
4,4'-DDT	mg/kg dry wt	0.031	-	-	-	-
Total DDT Isomers	mg/kg dry wt	0.13	-	-	-	-
Dieldrin	mg/kg dry wt	0.087	-	-	-	-
Endosulfan I	mg/kg dry wt	< 0.013	-	-	-	-
Endosulfan II	mg/kg dry wt	< 0.013	-	-	-	-
Endosulfan sulphate	mg/kg dry wt	< 0.013	-	-	-	-
Endrin	mg/kg dry wt	< 0.013	-	-	-	-
Endrin aldehyde	mg/kg dry wt	< 0.013	-	-	-	-
Endrin ketone	mg/kg dry wt	< 0.013	-	-	-	-
Heptachlor	mg/kg dry wt	< 0.013	-	-	-	-
Heptachlor epoxide	mg/kg dry wt	< 0.013	-	-	-	-
Hexachlorobenzene	mg/kg dry wt	< 0.013	-	-	-	-
Methoxychlor	mg/kg dry wt	< 0.013	-	-	-	-

Sample Type: Aqueous						
Sample Name:		HA1 0.0 [TCLP Extract]	HA3 0.0 [TCLP Extract]			
Lab Number:		1790264.65	1790264.66			
Individual Tests						
Total Lead	g/m ³	0.022	-	-	-	-
Organochlorine Pesticides Screening in Water, By Liq/Liq						
Aldrin	g/m ³	< 0.00010	< 0.00010	-	-	-
alpha-BHC	g/m ³	< 0.0002	< 0.0002	-	-	-
beta-BHC	g/m ³	< 0.0002	< 0.0002	-	-	-
delta-BHC	g/m ³	< 0.0002	< 0.0002	-	-	-
gamma-BHC (Lindane)	g/m ³	< 0.0002	< 0.0002	-	-	-
cis-Chlordane	g/m ³	< 0.00010	< 0.00010	-	-	-
trans-Chlordane	g/m ³	< 0.00010	< 0.00010	-	-	-
2,4'-DDD	g/m ³	< 0.0002	< 0.0002	-	-	-

Sample Type: Aqueous						
Sample Name:		HA1 0.0 [TCLP Extract]	HA3 0.0 [TCLP Extract]			
Lab Number:		1790264.65	1790264.66			
Organochlorine Pesticides Screening in Water, By Liq/Liq						
4,4'-DDD	g/m ³	< 0.0002	< 0.0002	-	-	-
2,4'-DDE	g/m ³	< 0.0002	< 0.0002	-	-	-
4,4'-DDE	g/m ³	< 0.0002	< 0.0002	-	-	-
2,4'-DDT	g/m ³	< 0.0002	< 0.0002	-	-	-
4,4'-DDT	g/m ³	< 0.0002	< 0.0002	-	-	-
Dieldrin	g/m ³	0.00021	0.00044	-	-	-
Endosulfan I	g/m ³	< 0.0002	< 0.0002	-	-	-
Endosulfan II	g/m ³	< 0.0002	< 0.0002	-	-	-
Endosulfan sulfate	g/m ³	< 0.0002	< 0.0002	-	-	-
Endrin	g/m ³	< 0.00010	< 0.00010	-	-	-
Endrin aldehyde	g/m ³	< 0.00010	< 0.00010	-	-	-
Endrin ketone	g/m ³	< 0.0002	< 0.0002	-	-	-
Heptachlor	g/m ³	< 0.00010	< 0.00010	-	-	-
Heptachlor epoxide	g/m ³	< 0.00010	< 0.00010	-	-	-
Hexachlorobenzene	g/m ³	< 0.0008	< 0.0008	-	-	-
Methoxychlor	g/m ³	< 0.00010	< 0.00010	-	-	-
Total Chlordane [(cis+trans)*100/42]	g/m ³	< 0.0004	< 0.0004	-	-	-

Analyst's Comments

Amended Report: This report replaces an earlier report issued on 26 Jun 2017 at 12:43 pm
Reason for amendment: Dieldrin and TCLPs added as per client's request.

SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
TPH in Soil extraction by Sonication	Sonication extraction, Silica cleanup, GC-FID analysis.	-	1-16, 33-34, 61-64
TPH/SVOC/OC/PAH Extraction Vial*	.	-	1-16, 33-34, 61-64
TPH/SVOC/OC/PAH Intermediate Vial*	.	-	1-16, 33-34, 61-64
Dry Matter (Env)	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	1-16, 33-34, 61-64
OCP in Soil extraction by Sonication,Screen	Sonication extraction, SPE cleanup, dual column GC-ECD analysis.	-	1-16, 33-34, 61-64
Composite Environmental Solid Samples*	Individual sample fractions mixed together to form a composite fraction.	-	17-32
Heavy Metals with Mercury, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	1-16, 33-34, 61-64
Dieldrin in Soil by GC/ECD	Sonication extraction, Florisil cleanup, GC-ECD analysis. Tested on dried sample	0.005 mg/kg dry wt	17-20
Organochlorine/nitro&phosphorus Pest.s Screen in Soils, GCMS	Sonication extraction, Dilution cleanup, GC-MS analysis. Tested on as received sample	-	33-34
Organochlorine Pesticides Screening in Soil	Sonication extraction, SPE cleanup, dual column GC-ECD analysis (modified US EPA 8082). Tested on as recieved sample	0.010 - 0.06 mg/kg dry wt	1-16, 61-64
TCLP Profile*	Extraction at 30 +/- 2 rpm for 18 +/- 2 hours, (Ratio 1g sample : 20g extraction fluid). US EPA 1311	-	1, 3
TCLP Profile			
TCLP Weight of Sample Taken	Gravimetric. US EPA 1311.	0.1 g	1, 3
TCLP Initial Sample pH	pH meter. US EPA 1311.	0.1 pH Units	1, 3
TCLP Acid Adjusted Sample pH	pH meter. US EPA 1311.	0.1 pH Units	1, 3
TCLP Extractant Type*	US EPA 1311.	-	1, 3

Sample Type: Soil			
Test	Method Description	Default Detection Limit	Sample No
TCLP Extraction Fluid pH	pH meter. US EPA 1311.	0.1 pH Units	1, 3
TCLP Post Extraction Sample pH	pH meter. US EPA 1311.	0.1 pH Units	1, 3

Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Sample No
Individual Tests			
Total Digestion of Extracted Samples*	Nitric acid digestion. APHA 3030 E 22nd ed. 2012 (modified).	-	65
Total Lead	Nitric acid digestion, ICP-MS, screen level. APHA 3125 B 22 nd ed. 2012.	0.0021 g/m ³	65
Organochlorine Pesticides Screening in Water, By Liq/Liq	Liquid / liquid extraction, SPE (if required), dual column GC-ECD analysis	0.00010 - 0.0008 g/m ³	65-66

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

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Kim Harrison MSc
Client Services Manager - Environmental

Year	Population	Area	Population Density
1950	1,000,000	100,000	10
1960	1,500,000	100,000	15
1970	2,000,000	100,000	20
1980	2,500,000	100,000	25
1990	3,000,000	100,000	30
2000	3,500,000	100,000	35
2010	4,000,000	100,000	40
2020	4,500,000	100,000	45

Bores

Well No	Well type	Date drilled	Depth	Diameter	Groundwater Zone
R27/6938	Bore				Lower Hutt
R27/7353			15	150	Lower Hutt
R27/1076		1971-01-0	12.6		
R27/1078		1971-01-0	12.6		
R27/1080		1971-01-0	12.6		
R27/1081		1971-01-0	12.6		
R27/1082		1971-01-0	12.6		
R27/6325		1975-01-0	2.2		
R27/1116	Bore	1968-01-0	51.8		Lower Hutt
R27/6940	Bore				Lower Hutt
R27/6941	Bore				Lower Hutt
R27/6942	Bore				Lower Hutt
R27/6939	Bore				Lower Hutt
R27/6960	Bore	1/09/2004	9	110	Lower Hutt
BQ32/0090	Bore		15	100	Lower Hutt
BQ32/0091	Bore		20	100	Lower Hutt



3 October 2017

Andrew Cumming
Divisional Manager Environmental Policy
Hutt City Council
Private Bag 31912
LOWER HUTT 5040

Dear Andrew

REPORT REINTERPRETATION OF DETAILED SITE INVESTIGATION - 135 WITAKO STREET, EPUNI

1.0 Introduction

Hutt City Council (HCC – the client) has engaged Pattle Delamore Partners Limited (PDP) to reinterpret the Detailed Site Investigation (DSI) report at 135 Witako Street, Epuni (PDP, 2017) based on additional information provided by HCC. The original scope of the DSI required an assessment of the property under a proposed residential end use. However, HCC has prepared a district plan change for the property that details its redevelopment for community health purposes (comprising a commercial building with car parking and some landscaping) and has therefore requested PDP to reassess the analytical results of the initial DSI in the context of a commercial/industrial scenario.

The purpose of this letter is to reassess the analytical results by comparing against commercial/industrial criteria. This letter should be read in conjunction with the original DSI (PDP, 2017).

2.0 Health Risk Assessment

2.1 Applicable Soil Acceptance Criteria

In accordance with the Ministry for the Environment's (MfE's) *Contaminated Land Management Guidelines No. 2 – Hierarchy and Application in New Zealand of Environmental Guideline Values* (2011a), New Zealand risk-based standards or guidelines should be used where the exposure assumptions and exposure scenarios are relevant to the site. Where New Zealand guidelines do not exist overseas risk-based guidelines may be used.

There are soil contaminant standards (SCS) contained in MfE (2011b) for dieldrin, DDT and all the heavy metals analysed in the investigation with the exception of nickel and zinc. For endosulfan, nickel and zinc, the results have been compared to the Australian National Environmental Protection (Assessment of Site Contamination) Amendment Measure 2013 (NEPC, 2013) criteria.



At the client's request, the SCS and overseas guidelines for commercial use have been applied for the reinterpretation. It should be noted that these values apply to unpaved soil, such as a future garden that might be developed from the existing soil. Any areas that will be covered or paved are permitted to have unlimited concentrations.

2.2 Comparison of Analytical Results to Applicable Criteria

No soil samples exceed the applicable commercial/industrial SCS (see attached Table 1). Therefore, the soil in the vicinity of the sample locations is considered to have an acceptably low health risk for the proposed commercial use. We note that the earlier comparisons with soil disposal criteria in PDP (2017) still apply.

3.0 Application of the NESCS

The proposed development of the site into a commercial building and carpark constitutes a less sensitive use of the site than the previous recreational use. The change of use provisions under the Resource Management (*National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health*) Regulations 2011 (the NESCS) will therefore not apply. However, when it comes to the development phase, should the soil be disturbed and removed from the site, the soil disturbance provisions if the NESCS will still apply as set out in the DSI (PDP, 2017).

4.0 Conclusion

Pattle Delamore Partners Limited was engaged by Hutt City Council to undertake a reinterpretation of the detailed site investigation report at 135 Witako Street, Lower Hutt. It is understood that the council is preparing a district plan change which would allow the future redevelopment of the property for commercial use.

Reassessment of the analytical results determined that no soil samples exceeded the soil contaminant standards for a commercial/industrial land use, and consequently future redevelopment of the property for commercial use presents a low risk to human health. The previous conclusion in the DSI with respect to soil disposal still applies.

5.0 Limitations

This report has been prepared on the basis of reinterpretation of information contained in the report prepared by PDP in June 2017 and as such, any limitations associated with that report are valid and should be considered in conjunction with this letter.

The information contained within this report applies to the analytical results of soil samples listed in the original DSI (June, 2017). With time, the site conditions and environmental standards could change so that the reported assessment and conclusions are no longer valid. Accordingly, the report should not be used to refer to site conditions and environmental standards applying at a later date without first confirming the validity of the report's information at that time.

This report has been prepared by PDP on the specific instructions of Hutt City Council for the limited purposes described in the report. PDP accepts no liability to any other person for their use of or reliance on this report, and any such use or reliance will be solely at their own risk.

Yours faithfully

PATTLE DELAMORE PARTNERS LIMITED

Prepared by



Olya Albot

Environmental Geologist

Reviewed by



Stacey Marquardt

Senior Environmental Scientist

Approved by



Graeme Proffitt

Technical Director – Contaminated Land
Suitably Qualified and Experienced Practitioner (SQEP)

References

- MfE, 2011a. *Contaminated Land Management Guidelines No. 2 – Hierarchy and Application in New Zealand of Environmental Guideline Values*. Ministry for the Environment, Wellington.
- MfE, 2011b. *Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health*. Ministry for the Environment, Wellington.
- NEPC, 2013. *National Environment Protection (Assessment of Site Contamination) Amendment Measure 2013*. National Environment Protection Council, Canberra.
- PDP, 2017. *Detailed Site Investigation – 135 Witako Street, Epuni*. Pattle Delamore Partners Limited, 2017.

Table 1: Soil Sampling Results - Heavy Metals and OCPs

Sample Name	Soil Samples Collected at a Depth of 0.0 m Below Ground Level ¹										Soil Contaminant Standards: Commercial ^{2,3}
	HA1 O.0 1790264.1	HA2 O.0 1790264.2	HA3 O.0 1790264.3	HA4 O.0 1790264.4	HA5 O.0 1790264.5	HA6 O.0 1790264.6	HA7 O.0 1790264.7	HA8 O.0 1790264.8	HA9 O.0 1790264.9	HA0 O.0	
Laboratory Reference	HA1	HA2	HA3	HA4	HA5	HA6	HA7	HA8	HA9	HA0	
Sample Location	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	
Soil Type - Field	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	
Sample Depth (m bgl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Heavy Metals											
Arsenic	31	18	14	14	6	5	5	8	7	7	70
Cadmium	0.22	0.2	0.21	0.32	0.15	0.18	0.17	0.15	0.22	0.22	1300
Chromium	17	18	17	16	15	15	14	15	15	15	6300
Copper	24	21	24	21	19	12	14	16	17	17	NL ⁴
Lead	108	72	62	57	55	43	48	53	46	46	3300
Mercury	0.16	0.14	0.12	0.23	0.18	0.12	0.26	0.11	0.15	0.15	4200
Nickel	11	13	12	11	10	9	7	10	9	9	6000
Zinc	71	77	65	80	56	48	46	52	57	57	400,000
Organochlorine Pesticides⁵											
Dieldrin	0.4	0.34	0.82	0.48	< 0.015	< 0.015	< 0.03	< 0.03	< 0.015	< 0.015	160
DDT ⁶	0.88	0.57	1.11	1.32	0.63	0.62	1.68	0.97	0.92	0.92	1000
Endosulfan ⁷	ND	ND	ND	ND	0.02	0.11	0.26	0.28	ND	ND	2000
Soil Samples Collected at a Depth of 0.0 m Below Ground Level¹											
Sample Name	HA10 O.0 1790264.10	HA11 O.0 1790264.11	HA12 O.0 1790264.12	HA13 O.0 1790264.13	HA14 O.0 1790264.14	HA15 O.0 1790264.15	HA16 O.0 1790264.16	HA17 O.0 1790264.33	HA20 O.0 1790264.34		
Laboratory Reference	HA10	HA11	HA12	HA13	HA14	HA15	HA16	HA17	HA20		
Sample Location	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining	Remaining		
Soil Type - Field	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt	Silt		
Sample Depth (m bgl)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Heavy Metals											
Arsenic	8	7	7	8	7	7	7	11	10	10	70
Cadmium	0.15	0.16	0.13	0.19	0.21	0.12	0.19	0.23	0.22	0.22	1300
Chromium	15	15	16	14	16	15	15	17	18	18	6300
Copper	12	12	11	12	13	9	10	19	17	17	NL ⁴
Lead	66	46	66	30	35	41	38	50	62	62	3300
Mercury	0.13	0.22	1.34	0.27	0.9	1.08	0.17	0.14	0.29	0.29	4200
Nickel	9	9	10	8	9	12	9	13	13	13	6000
Zinc	46	56	49	50	49	50	49	85	80	80	400,000
Organochlorine Pesticides⁵											
Dieldrin	< 0.014	< 0.016	0.05	0.27	0.2	0.25	0.177	< 0.014	0.022	0.022	160
DDT ⁶	1.38	1.16	1.25	1.41	0.77	0.59	0.50	2.19	0.08	0.08	1000
Endosulfan ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2000

Notes:

- All results in mg/kg.
- Arsenic, cadmium, chromium, copper, lead, dieldrin and DDT criteria from MIE (2011b).
- Nickel, zinc and endosulfan criteria from NEPC (2013).
- NL = No Limit. Derived value exceeds 10,000 mg/kg (MIE, 2011b).
- Only those pesticides which have screening criteria and contained concentrations above the laboratory level of detection have been reported.
- DDT was calculated by adding the laboratory results of the individual DDX compounds with the sum rounded to the least number of significant figures of the results. Where one of the compounds was below the detection limit, a value of half the detection limit was used in the sum. Where all compounds in the sum are non-detects, the overall detection limit is the sum of the detection limits.
- Endosulfan was calculated by adding the laboratory results of Endosulfan I and Endosulfan II.

Part 5: Submission Form

Submission on publicly notified Proposed District Plan Change

Clause 6 of the First Schedule, Resource Management Act 1991



To: Chief Executive, Hutt City Council

1. **This is a submission from:**

Full Name	<i>Last</i> _____		<i>First</i> _____	
	Company/Organisation _____			
Contact if different	_____			
Address	<i>Number</i> _____		<i>Street</i> _____	
	<i>Suburb</i> _____			
	<i>City</i> _____		<i>Postcode</i> _____	
Address for Service if different	<i>Postal Address</i>		<i>Courier Address</i>	
	_____		_____	
Phone	<i>Home</i>		<i>Work</i>	
	_____		_____	
Email	<i>Mobile</i>			

2. This is a **submission** on the following proposed change to the City of Lower Hutt District Plan:

Proposed District Plan Change No:

Title of Proposed District Plan Change:

3.a I **could** **could not** gain an advantage in trade competition through this submission
(Please tick one)

3.b If you could gain an advantage in trade competition through this submission:

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

- (a) adversely affects the environment; and
- (b) does not relate to trade competition or the effects of trade competition.

(Please tick one)

Note: 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.

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

Please give details:

(Please use additional pages if you wish)

5. My submission is:

Please include whether you support or oppose the specific provisions or wish to have them amended; and reasons for your views:

(Please use additional pages if you wish)

6. I seek the following decision from Hutt City Council:

Please give precise details:

(Please use additional pages if you wish)

7. I **wish** **do not wish** to be heard in support of my submission

(Please tick one)

8. If others make a similar submission,

I **will** **will not** consider presenting a joint case with them at the hearing.

(Please tick one)

Signature of submitter
*(or person authorised to sign
on behalf of submitter)*

	<i>Date</i>
--	-------------

A signature is not required if you make your submission by electronic means

Personal information provided by you in your submission will be used to enable Hutt City Council to administer the submission process and will be made public. You have the right under the Privacy Act 1993 to obtain access to and to request correction of any personal information held by the Council concerning you.