I, Fergus Power, Chief Executive Officer, hereby give notice that an Ordinary Meeting of Council will be held on:

Date:	**Tuesday, 1 August 2017**
Time:	**1.30pm**
Location:	**Council Chamber, Wairoa District Council, Coronation Square, Wairoa**

AGENDA

Ordinary Council Meeting

1 August 2017

The agenda and associated papers are also available on our website: www.wairoadc.govt.nz

For further information please contact us 06 838 7309 or by email info@wairoadc.govt.nz

Order Of Business

1 KARAKIA

2 APOLOGIES FOR ABSENCE

3 DECLARATIONS OF CONFLICT OF INTEREST

4 CHAIRPERSON'S ANNOUNCEMENTS

5 LATE ITEMS OF URGENT BUSINESS

6 PUBLIC PARTICIPATION

A maximum of 30 minutes has been set aside for members of the public to speak on any item on the agenda. Up to 5 minutes per person is allowed. As per Standing Order 14.14 requests to speak must be made to the meeting secretary at least one clear day before the meeting; however this requirement may be waived by the Chairperson.

7 MINUTES OF THE PREVIOUS MEETING

Ordinary Meeting - 20 June 2017

Extraordinary Meeting - 23 June 2017

Extraordinary Meeting - 4 July 2017

Extraordinary Meeting - 18 July 2017

MINUTES OF WAIROA DISTRICT COUNCIL
ORDINARY COUNCIL MEETING
HELD AT THE COUNCIL CHAMBER, WAIROA DISTRICT COUNCIL, CORONATION SQUARE, WAIROA
ON TUESDAY, 20 JUNE 2017 AT 1.32PM

PRESENT: His Worship the Mayor Craig Little (Mayor), Cr Denise Eaglesome-Karekare (Deputy Mayor), Cr Hine Flood, Cr Michael (Mike) Bird, Cr Jeremy Harker, Cr Charles (Charlie) Lambert, Mr Paul Kelly, Mr Kiwa Hammond

IN ATTENDANCE: Fergus Power - Chief Executive Officer, Helen Montgomery - Chief Operating Officer, Gary Borg - Chief Financial Officer, James Baty - Corporate Services Manager, Jamie Cox - Engineering Manager, Chris Hankey - Financial Planning Manager, Kitea Tipuna - Economic Development and Engagement Manager, Emmanuel Guzman - Governance Advisor, Austin King - Economic Development Officer

1 KARAKIA

The karakia was led by Kiwa Hammond.

2 APOLOGIES FOR ABSENCE

APOLOGIES

RESOLUTION 2017/45

Moved: Cr Denise Eaglesome-Karekare
Seconded: Cr Hine Flood

That the apology received from Cr Michael Johansen for absence and Cr Charles Lambert for lateness be accepted.

CARRIED

3 DECLARATIONS OF CONFLICT OF INTEREST

Cr Jeremy Harker declared conflicts of interest regarding Item 8.11 Waste Services – Regional Collaboration Opportunities, and Item 10.2 WDC Quarry options.

4 CHAIRPERSON'S ANNOUNCEMENTS

None.

5 LATE ITEMS OF URGENT BUSINESS

A. AFFCO WATER CHARGES

B. MAHIA BEACH MOTELS AND HOLIDAY PARK

C. COUNCIL'S RESPONSE TO THE VANDALISM OF QUEEN'S PARADE GROUNDS

D. OTHER LATE ITEMS

6 PUBLIC PARTICIPATION

A maximum of 30 minutes has been set aside for members of the public to speak on any item on the agenda. Up to 5 minutes per person is allowed. As per Standing Order 14.14 requests to speak must be made to the governance advisor at least one clear day before the meeting; however this requirement may be waived by the Chairperson.

7 MINUTES OF THE PREVIOUS MEETING

RESOLUTION 2017/46

Moved: Cr Denise Eaglesome-Karekare
Seconded: Cr Hine Flood

That the minutes of the Ordinary Council Meeting held on 9 May 2017 be confirmed.

CARRIED

RESOLUTION 2017/47

Moved: Cr Michael (Mike) Bird
Seconded: Cr Jeremy Harker

That the minutes of the Extraordinary Council Meeting held on 17 May 2017 be confirmed.

CARRIED

RESOLUTION 2017/48

Moved: Cr Hine Flood
Seconded: Cr Denise Eaglesome-Karekare

That the minutes of the Extraordinary Council Meeting held on 30 May 2017 be confirmed.

CARRIED

RESOLUTION 2017/49

Moved: Cr Michael (Mike) Bird
Seconded: His Worship the Mayor Craig Little

That the minutes of the Extraordinary Council Meeting held on 1 June 2017 be confirmed.

CARRIED

8 GENERAL ITEMS

8.1 ADOPTION OF 2017/18 FEES AND CHARGES

RESOLUTION 2017/50

Moved: His Worship the Mayor Craig Little
Seconded: Cr Jeremy Harker

That the Council resolve to adopt the Fees and Charges as scheduled for the 2017/18 Financial Year.

CARRIED

8.2 MINOR AMENDMENT TO THE REVENUE AND FINANCING POLICY - ALTERATION OF THE WAIROA URBAN RESIDENTIAL RATING DIFFERENTIAL THRESHHOLD

RESOLUTION 2017/51

Moved: His Worship the Mayor Craig Little
Seconded: Cr Denise Eaglesome-Karekare

That the Council resolve to:

a. adopt the following amendment to the Revenue and Financing Policy: *the threshold for the Wairoa urban residential rating differential 0.55 be amended from a land value of less than $80,000.00 to a land value of less than $68,000.00 for the year commencing 1 July 2017*, and

b. adopt that this amendment is not significant and therefore requires neither audit under LGA S103(4) nor full public consultation under LGA S83 or S93A.

CARRIED

8.3 APPROVAL OF VARIANCE - FINANCIAL PLANNING AND MANAGEMENT SYSTEM UPGRADE

RESOLUTION 2017/52

Moved: His Worship the Mayor Craig Little
Seconded: Cr Denise Eaglesome-Karekare

That the Council approve a variance of $19,000 to the budget for the year ended 30 June 2017 for the upgrade to its financial system.

CARRIED

8.4 COMMUNITRAK SURVEY 2017

RESOLUTION 2017/53

Moved: Cr Jeremy Harker
Seconded: His Worship the Mayor Craig Little

That the Council receive the report and discuss options and feedback on Council performance at a future workshop.

CARRIED

8.5 ADOPTION OF THE 2017/18 ANNUAL PLAN

RESOLUTION 2017/54

Moved: Cr Denise Eaglesome-Karekare
Seconded: Cr Jeremy Harker

That the Council adopt the 2017/18 Annual Plan.

CARRIED

Secretarial notes:

1. The Financial Planning Manager will correct the typographical error in the dollar figure on Paragraph 5.5 of the report to reflect the correct amount of $15,246,300.

2. Within the Annual Plan, the Joint Statement From the Mayor and the Chief Executive Officer will remove reference to the Railbike Adventure tourism and reference increase diversification and use of the Wairoa-Gisborne Rail Link. Also, within the list of projects, add a phrase or sentence referencing that Council will continue to explore options regarding the Mahia cemetery.

8.6 RESOLUTION TO SET RATES FOR THE YEAR COMMENCING 1ST JULY 2017 TO 30TH JUNE 2018

RESOLUTION 2017/55

Moved: Cr Jeremy Harker
Seconded: Cr Denise Eaglesome-Karekare

That the Council resolve to set the following rates under the Local Government (Rating) Act 2002 for the financial year commencing 1st July 2017 in accordance with the resolution attached as Appendix 1.

CARRIED

8.7 RATES REBATES UPDATE

RESOLUTION 2017/56

Moved: Cr Hine Flood
Seconded: Cr Charles (Charlie) Lambert

That the Council receive the report.

CARRIED

8.8 CONTRACT FOR THE PROVISION OF VALUATION SERVICES

RESOLUTION 2017/57

Moved: Cr Hine Flood
Seconded: Cr Denise Eaglesome-Karekare

That the Council resolve to approve the contract for the provision of valuation services and database management services proposed by Quotable Value Limited for a period of three years commencing 1 July 2017 at a total cost of $273,352.50.

CARRIED

8.9 GENESIS ENERGY LIMITED - JULY 2017 - APRIL 2018 EXPENDITURE PURCHASE ORDER APPROVAL

RESOLUTION 2017/58

Moved: Cr Hine Flood
Seconded: Cr Denise Eaglesome-Karekare

That the Council resolve to approve Purchase Order 173818 for $575,000.00 (Incl. GST) in favour of Genesis Energy Limited for Council's power usage for period July 2017 – April 2018.

CARRIED

Secretarial note:

That the Finance Planning Manager will delete Appendix 2, Item 8.9, Page 536.

8.10 HBLASS STATEMENT OF INTENT 2017-18

RESOLUTION 2017/59

Moved: Cr Jeremy Harker
Seconded: Cr Hine Flood

That the Council receive the report of its Finance Audit and Risk Committee.

CARRIED

At 2:56 pm, Cr Jeremy Harker left the meeting.

8.11 WASTE SERVICES- REGIONAL COLLABORATION OPPORTUNITIES

RESOLUTION 2017/60

Moved: His Worship the Mayor Craig Little
Seconded: Cr Charles (Charlie) Lambert

That the Council receive the report and instruct Council officers to continue investigation of further regional collaboration in the waste services area, and that this report be referred to the Maori Standing Committee for consideration.

CARRIED

Cr Jeremy Harker declared an interest in this item and took no part in the discussion or voting on the matter.

At 3:09 pm, Cr Jeremy Harker returned to the meeting.

8.12 EASTLAND GROUP COMMUNITY FUND

RESOLUTION 2017/61

Moved: Cr Denise Eaglesome-Karekare
Seconded: Cr Michael (Mike) Bird

That the Council approve the Eastland Group Wairoa Community Fund of $15,000 be allocated to the Wairoa Museum for the purposes of contributing to Stage Three of the Museum's major development – Kakapa.

CARRIED

In Favour: Crs Craig Little, Denise Eaglesome-Karekare, Michael (Mike) Bird, Charles (Charlie) Lambert, Paul Kelly and Kiwa Hammond

Against: Crs Hine Flood and Jeremy Harker

8.13 LTP 2018-2028 PROJECT PLAN

RESOLUTION 2017/62

Moved: His Worship the Mayor Craig Little
Seconded: Cr Jeremy Harker

That the Council receive the report.

CARRIED

9 RECEIPT OF MINUTES FROM COMMITTEES/ACTION SHEETS

9.1 MINUTES OF FINANCE, AUDIT & RISK COMMITTEE MEETING - 23 MAY 2017

RESOLUTION 2017/63

Moved: His Worship the Mayor Craig Little
Seconded: Cr Hine Flood

1. That the Minutes of the Finance, Audit & Risk Committee Meeting held on Tuesday, 23 May 2017 be received.

CARRIED

9.2 MINUTES OF ECONOMIC DEVELOPMENT COMMITTEE MEETING - 16 MAY 2017

RESOLUTION 2017/64

Moved: His Worship the Mayor Craig Little
Seconded: Cr Michael (Mike) Bird

1. That the Minutes of the Economic Development Committee Meeting held on Tuesday 16 May 2017 be received.

CARRIED

9.3 MINUTES OF MAORI STANDING COMMITTEE MEETING - 8 JUNE 2017

RESOLUTION 2017/65

Moved: Cr Hine Flood
Seconded: Cr Michael (Mike) Bird

That the unconfirmed Minutes of the Māori Standing Committee Meeting held on Thursday 8 June 2017 be received and the recommendations therein be adopted.

Secretarial note:

Member Nissen be included in RES 2017/30 of the Maori Standing Committee meeting held on 8 June 2017.

CARRIED

10 PUBLIC EXCLUDED ITEMS

RESOLUTION TO EXCLUDE THE PUBLIC

RESOLUTION 2017/66

Moved: Cr Denise Eaglesome-Karekare
Seconded: Cr Charles (Charlie) Lambert

That the public be excluded from the following parts of the proceedings of this meeting.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution
10.1 - Statute Barred Rate Arrears Write-off 2009-2010.	s7(2)(a) - the withholding of the information is necessary to protect the privacy of natural persons, including that of deceased natural persons	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
10.2 - WDC Quarry options	s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
10.3 – AFFCO Water Charges	s7(2)(b)(ii) - the withholding of the information is necessary to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
10.4 - Mahia Beach Motels and Holiday Park	s7(2)(a) - the withholding of the information is necessary to protect the privacy of natural persons, including that	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to

	of deceased natural persons s7(2)(b)(ii) - the withholding of the information is necessary to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities s7(2)(i) - the withholding of the information is necessary to enable Council to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)	result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
10.5 – Council's response to vandalism of Queen's parade grounds	s7(2)(a) - the withholding of the information is necessary to protect the privacy of natural persons, including that of deceased natural persons	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
10.6 – Council's direction to QRS regarding organisational restructure	s7(2)(b)(ii) - the withholding of the information is necessary to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
10.7 – QRS sewerage facility upgrade	s7(2)(i) - the withholding of the information is necessary to enable Council to carry on, without prejudice or	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to

	disadvantage, negotiations (including commercial and industrial negotiations)	result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7

CARRIED

3:49PM PUBLIC EXCLUDED START

RESOLUTION 2017/67

Moved: His Worship the Mayor Craig Little
Seconded: Cr Charles (Charlie) Lambert

That Council moves out of Closed Council into Open Council.

CARRIED

The Meeting closed at 6:30pm.

The minutes of this meeting were confirmed at the Ordinary Council Meeting held on 1 August 2017.

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CHAIRPERSON

MINUTES OF WAIROA DISTRICT COUNCIL
EXTRAORDINARY COUNCIL MEETING
HELD AT THE COUNCIL CHAMBER, WAIROA DISTRICT COUNCIL, CORONATION SQUARE, WAIROA
ON FRIDAY, 23 JUNE 2017 AT 1PM

PRESENT: His Worship the Mayor Craig Little (Mayor), Cr Denise Eaglesome-Karekare (Deputy Mayor), Cr Hine Flood, Cr Michael (Mike) Bird, Cr Jeremy Harker, Cr Michael (Min) Johansen

IN ATTENDANCE: C Knight (Governance Advisor & Policy Strategist), C Hankey (Financial Planning Manager), R Moyle (Executive Assistant)

1 KARAKIA

Given by Cr Denise Eaglesome-Karekare (Deputy Mayor)

2 APOLOGIES FOR ABSENCE

APOLOGY

RESOLUTION 2017/70

Moved: His Worship the Mayor Craig Little
Seconded: Cr Denise Eaglesome-Karekare

That the apology received from Cr Lambert be accepted and leave of absence granted.

CARRIED

3 DECLARATIONS OF CONFLICT OF INTEREST

None.

4 PUBLIC PARTICIPATION

None.

5 PUBLIC EXCLUDED ITEMS

RESOLUTION TO EXCLUDE THE PUBLIC

RECOMMENDATION

That the public be excluded from the following parts of the proceedings of this meeting at 1.01pm.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution
5.1 - Chief Executive Officer Recruitment and Interim CEO Process, Estimated Costs and Funding Options	s7(2)(i) - the withholding of the information is necessary to enable Council to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations) s7(2)(j) - the withholding of the information is necessary to prevent the disclosure or use of official information for improper gain or improper advantage	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7

RESOLUTION 2017/71

Moved: His Worship the Mayor Craig Little
Seconded: Cr Michael (Min) Johansen

That Council moves out of Closed Council into Open Council at 2.06 p.m.

CARRIED

The Meeting closed at 2.07 p.m.

The minutes of this meeting were confirmed at the Ordinary Council Meeting held on 1 August 2017.

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CHAIRPERSON

MINUTES OF WAIROA DISTRICT COUNCIL
EXTRAORDINARY COUNCIL MEETING
HELD AT THE COUNCIL CHAMBER, WAIROA DISTRICT COUNCIL, CORONATION SQUARE, WAIROA
ON TUESDAY, 4 JULY 2017 AT 1PM

PRESENT: His Worship the Mayor Craig Little (Mayor), Cr Denise Eaglesome-Karekare (Deputy Mayor), Cr Hine Flood, Cr Michael (Mike) Bird, Cr Jeremy Harker, Cr Michael (Min) Johansen.

IN ATTENDANCE: F Power (Chief Executive Officer), G Borg (Chief Financial Officer), J Baty (Corporate Services Manager), K Tipuna (Economic Development & Engagement Manager), C Knight (Governance Advisor & Policy Strategist), C Hankey (Financial Planning Manager), P Jones (Consultant).

1 KARAKIA

Given by the Corporate Services Manager.

2 APOLOGIES FOR ABSENCE

Cr Lambert.

3 DECLARATIONS OF CONFLICT OF INTEREST

Cr Jeremy Harker declared a pecuniary interest in relation to item 5.2, due to being employed by QRS.

4 PUBLIC PARTICIPATION

None.

5 PUBLIC EXCLUDED ITEMS

RESOLUTION TO EXCLUDE THE PUBLIC

RESOLUTION 2017/47

Moved: Cr Hine Flood
Seconded: Cr Michael (Min) Johansen

That the public be excluded from the following parts of the proceedings of this meeting at 1.01pm.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution

5.1 - Funding Economic Development Expenditure	s7(2)(b)(ii) - the withholding of the information is necessary to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities s7(2)(i) - the withholding of the information is necessary to enable Council to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
5.2 - Review of Council Controlled Organisation	s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities s7(2)(j) - the withholding of the information is necessary to prevent the disclosure or use of official information for improper gain or improper advantage	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7

CARRIED

RESOLUTION 2017/48

Moved: Cr Hine Flood
Seconded: His Worship the Mayor Craig Little

That Council moves out of Closed Council into Open Council at 1.56pm.

CARRIED

At 1.56 p.m., Cr Jeremy Harker returned to the meeting.

Closing karakia by Corporate Services Manager

The Meeting closed at 1.57pm.

The minutes of this meeting were confirmed at the Ordinary Council Meeting held on 1 August 2017.

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CHAIRPERSON

MINUTES OF WAIROA DISTRICT COUNCIL
EXTRAORDINARY COUNCIL MEETING
HELD AT THE COUNCIL CHAMBER, WAIROA DISTRICT COUNCIL, CORONATION SQUARE, WAIROA
ON TUESDAY, 18 JULY 2017 AT 8.30AM

PRESENT: His Worship the Mayor Craig Little (Mayor), Cr Denise Eaglesome-Karekare (Deputy Mayor), Cr Hine Flood, Cr Michael (Mike) Bird, Cr Jeremy Harker, Mr Kiwa Hammond

IN ATTENDANCE: F Power (Chief Executive Officer), J Freeman (Consultant), G Borg (Chief Financial Officer), K Tipuna (Economic Development & Engagement Manager), Mana Elizabeth (Liz) Hunkin (Interpreter), D Culshaw (Maori Relationships Manager), Mr Henare Mita (MSC Representative), Mr Adrian Manuel (MSC Representative), C Knight (Governance Advisor & Policy Strategist), J Baty (Corporate Services Manager), A King (Communications Officer)

Deputy Mayor Cr Eaglesome-Karekare opened the meeting at 8.32am.

1 KARAKIA

Given by Mr Mita

Mihi whakatau by Mr Hammond

At 9:36 a.m., His Worship the Mayor Craig Little entered to the meeting and resumed the chair.

2 APOLOGIES FOR ABSENCE

Crs Johansen and Lambert.

3 DECLARATIONS OF CONFLICT OF INTEREST

None.

4 PUBLIC PARTICIPATION

None.

5 GENERAL ITEMS

5.1 TE KAUPAPA HERE MO TE REO MAORI KI TE KAUNIHERA O TE WAIROA – WAIROA DISTRICT COUNCIL TE REO MAORI POLICY

RESOLUTION 2017/49

Moved: His Worship the Mayor Craig Little
Seconded: Cr Denise Eaglesome-Karekare

That Council receive the submissions.

CARRIED

Angela Smith spoke to her submission.

Mana Elizabeth (Liz) Hunkin gave a verbal submission in support of the adoption of the policy.

Adjourned 9.18am

Reconvened 9.28am

Ropata Ainsley spoke to his submission – translation by Liz Hunkin.

Rongomaiwahine Te Rau o Patuwai gave a verbal submission in support of the adoption of the policy – translated by Liz Hunkin.

RESOLUTION 2017/50

Moved: Cr Denise Eaglesome-Karekare
Seconded: Cr Jeremy Harker

That Council adopt the Te Kaupapa Here mō Te Reo Māori ki Te Kaunihera o Te Wairoa – Wairoa District Council Te Reo Māori Policy.

CARRIED

The Meeting closed at 10.12 am.

The minutes of this meeting were confirmed at the Ordinary Council Meeting held on 1 August 2017.

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CHAIRPERSON

8 GENERAL ITEMS

8.1 UPDATE ON PROPERTY ASSET MANAGEMENT PLAN, DATABASE AND STRATEGY

Author: **Luke Knight, Property Manager**

Authoriser: **Jamie Cox, Engineering Manager**

Appendices:
1. **Property Register - Working Document - Public Excluded**
2. **Airport Plan** ⇩
3. **Draft Property Strategy** ⇩

1. PURPOSE

1.1 The purpose of this report is to provide council with an update on the development of the WDC property asset management plan, strategy and asset database for council's property.

1.2 To receive direction form Council regarding the proposed property strategy

1.3 To receive direction regarding more urgent property matters such as the required Airport land acquisition for the runway extension

RECOMMENDATION

The Engineering Manager RECOMMENDS that Council receive the report and resolves to commence negotiations for acquisition of adequate clear zone land for the runway extension

2. BACKGROUND

2.1 Much of the land that Council owns is service property – property assets which are used to deliver council services. Council also holds non-service property, which is property owned by Council that is not used to deliver Council services. Over time Council has acquired a portfolio of over 297 parcels of land (excluding road reserve parcels) that are crucial to the delivery of services to the community. They include, but are not limited to parks, reserves, public toilets, paper roads, social housing, community halls, corporate offices, landfill, water and waste water plants and cemeteries. Council also owns forestry land as a commercial investment providing a financial return to Council.

2.2 Council's Property Manager has been tasked with development of council's property register in order to enable improved management of council's assets. This work coincides with the required update of the Asset Management Plans for these work areas.

2.3 The proper management of council's property assets requires a strategic approach. In this instance, a property consultant has been engaged to provide support in development of a property strategy.

2.4 Asset management plans (AMPs) for these work areas are being developed with support from professional advisors

2.5 This strategic approach is appropriate for Council's long term needs however following Council's proposal to extend the airport runway, an additional clear zone parcel of land of 2.6 ha will need to be acquired at the northern end of the runway. Council has an airport plan (appendix 3) for the 110 ha of land blocks which make up the airport reserve

and there is approximately 50 ha of land which is surplus to planning requirements. Council may wish to consider resetting the airport boundaries and divesting this surplus land in lieu of developing a financial reserve which can be applied to airport development plans which include the purchase of clear zone land and runway extension costs. It is estimated that the surplus land would have a market value in excess of $1M however it would be prudent to impose some development restrictions to protect the height obstacle restrictions necessary around a runway area

3. PROPERTY DATABASE DEVELOPMENT

3.1 Record of council owned properties is complete in spreadsheet form.(attached??)

3.2 Asset database is to be transferred in to AssetFinda module that can be viewed through council's internal IntraMaps service. This service will show council owned property, current leased areas as well as a breakdown of council used land by category e.g. pensioner housing, sports grounds etc.

3.3 All land parcels current leases and road reserves areas are loaded in to IntraMaps internal service under a separate property tab.

3.4 An assessment of each property/land parcel is ongoing- This will be driven by the strategic review

4. PROPERTY STRATEGY

4.1 The driver behind this strategy is for Council to undertake a strategic review of the property portfolio using a service network approach to assess how council owned property is performing. This strategic approach will ensure that the property portfolio is regularly reviewed against the Council's vision and to reflect the changing nature of community outcomes and activity specific objectives, with data being regularly gathered and analysed to enable informed decision making.

4.2 The property strategy covers the following key areas: why council owns and manages property, property held for future use, property development, how council holds property, property acquisition, development of property, disposal of property and property management.

4.3 The role and purpose of the Property Strategy is to:

4.3.1. Guide council in ensuring they have the right property in the right place at the right time

4.3.2. Articulate the guiding philosophy in considering decisions about the acquisition, management and disposal of property assets; and to

4.3.3. Identify specific property-related objectives for Councils seven Activity Groups where no over-arching strategy is in place.

4.4 A first draft of this strategy has been developed and is included in Appendix 2 for comment and direction from Council

5. ASSET MANAGEMENT PLANS

5.1 Work is continuing with the asset management plan review for the Property work areas.

5.2 AMPs have been restructured in to two areas – **Open Spaces** including parks, reserves, cemeteries and undeveloped land and **Built Spaces** including property and public toilets. This change rationalises the management of the assets in similar forms.

5.3 The property strategy currently in development will provide further strategic direction for the updated property AMPs (Built and Open Spaces).

5.4 It is anticipated that the AMPs will be developed by September 2017 for Council review.

6. AIRPORT PLAN

6.1 Council has an airport plan (Appendix 3) which separates the reserve into zones for future planning purposes.

6.2 Council's 2017/18 Annual plan includes plans to extend the runway which will require the purchase of 2.6 ha of clear zone land

6.3 It is anticipated that 50 ha of land within the airport land blocks are surplus to current and future planning requirements

6.4 Currently it is estimated that approximately 80 ha of the airport land blocks are leased to adjoining landowners for grazing purposes. In order to divest some of this land, a resetting of the legal boundaries for the various land titles making up the entire WDC owned area would be required

6.5 It is proposed that the clearzone area be negotiated with urgency with the adjoining landowner and this may include a landswap arrangement

7. OPTIONS

7.1 The options identified are:

a. Comment on property update

b. Provide input into property strategy

c. Provide direction on airport land

d. Enter into negotiations with the adjoining farmer to secure the clear zone requirements of the runway extension

7.2 Any comments, input and direction offered will be considered for incorporation into the property planning process

7.3 The 2.6 ha clear zone required is on pastoral land and the adjoining owner has expressed an interest in purchasing land currently leased by him for pastoral purposes. It is not expected that a land exchange will cause any issues for Council or the farmer.

8. CONCLUSION

8.1 The development of a property asset database, asset management plan and strategy will lead to more visibility, connection and informed strategic decision making about the community's property assets.

8.2 Providing direction on the airport land blocks will allow for the future development of the airport

8.3 Securing the airport clear zone area will allow the runway extension to proceed

9. CORPORATE CONSIDERATIONS

What is the change?

9.1 This paper is offered to provide an update as well as to seek direction on property matters. A 2.6 ha extension of the runway clearzone is anticipated

Compliance with legislation and Council Policy

9.2 The airport plan and runway extension was supported in the 2017/18 annual plan

What are the key benefits?

9.3 The development of a property database, asset plans and strategic direction

What is the cost?

9.4 Included within existing budgets

What is the saving?

9.5 It is expected that in the future, an airport reserve fund may be developed as part of this initiative

9.6 A property plan and strategy will allow Council to make the best use of its assets

Who has been consulted?

9.7 At this point, the author is asking for direction from Council on property planning. Following this, the community will be consulted on the property plan through the LTP

Service delivery review

9.8 N/A

Maori Standing Committee

9.9 No, however it is anticipated that the MSC will be included in the process once Council has provided direction

10. SIGNIFICANCE

10.1 Impacts are limited at this point due to this being broadly an update and direction seeking report. The proposed airport clearzone land negotiation is of a minor nature

10.2 Historically the property portfolio has been relatively ignored

10.3 No budget impact at this point

10.4 The opportunity to benefit Councils strategic assets through good planning will be available through this process

11. RISK MANAGEMENT

11.1 The strategic risks (e.g. publicity/public perception, adverse effect on community, timeframes, health and safety, financial/security of funding, political, legal – refer to S10 and S11A of LGA 2002, others) identified in the implementation of the recommendations made are as follows:

a. Limited risks at this point of the property asset strategy development

Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,

b. is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

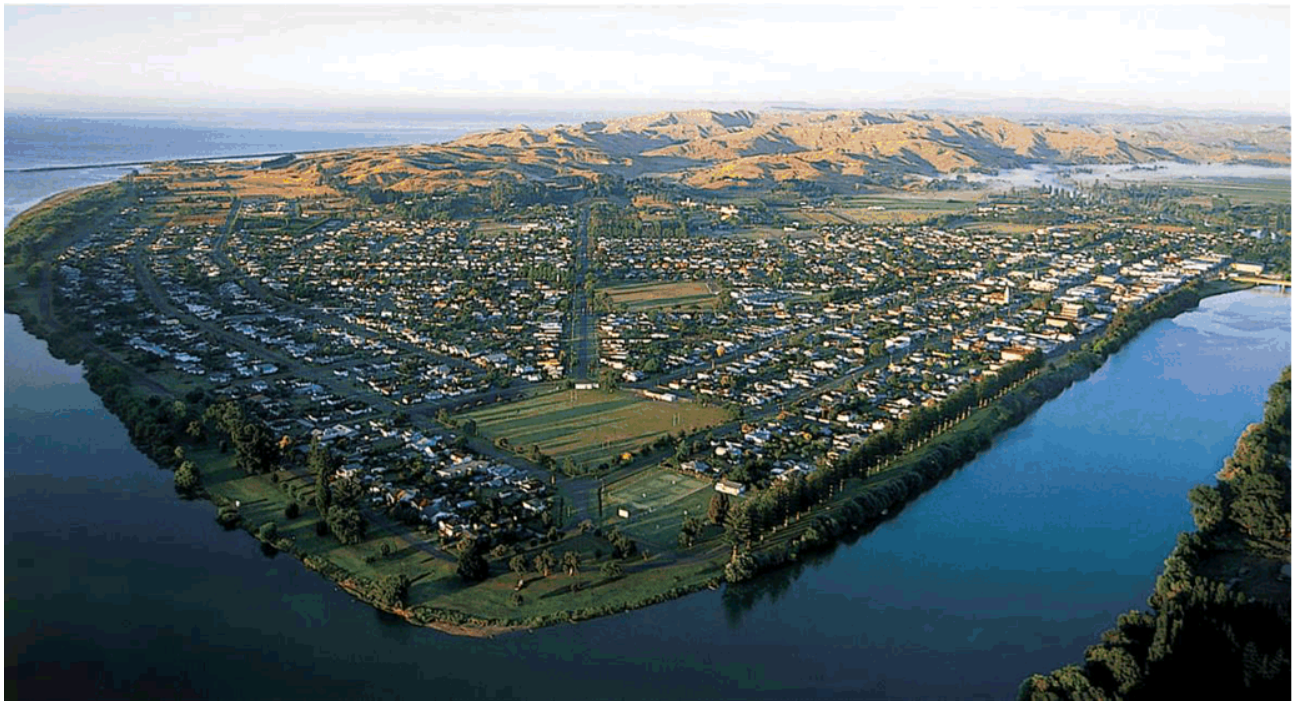
Signatories

	
Author Luke Knight	Approved by Jamie Cox

Wairoa Airport Plan

Mustang Jet type used by Skyline Air Ambulance

Top dressing aircraft used by Farmers Air



Wairoa Airport Plan

Contents

Appendices

1 Foreword

The Wairoa Airport plan is a strategic planning tool with an aim to ensure the most effective and efficient development of the airport's land holdings and infrastructure over time. It is intended that all future decisions relating to the airport should take into consideration and be managed appropriately through this plan. The plan should be subject to continuous review to take into consideration the circumstances prevailing at the time and changes to airport/air transport policy.

The Wairoa Airport plan is a living document. The Wairoa District Council should continue to refine its long term strategy to ensure that the airport supports the growth and aviation capacity needs of the Wairoa District and to quickly provide for the establishment of business if the need arises.

2 Our Airport

2.1 Service Description

Wairoa Airport is a Wairoa District Council owned asset. The airport is a non-certified airstrip, classified as a Public Aerodrome by Air Transport, a division of the Ministry of Transport (NZ). Wairoa airport is located approximately 3km North West of Wairoa Township. The airport consists of one runway comprising 914m. Facilities at the airport consist of private hangers which are leased; terminal building housing local radio station, function room, kitchen and toilets with car parking behind; an aircraft taxi/apron area; and a 'Z' energy refuelling area.

The airport is primarily used by private light aircraft and helicopters, including for agricultural use. It is also used by emergency aircraft for transfer of patients into and out of the district.

Z Energy has a Jet A1 gas supply at the airport adjacent to the terminal. There is currently no aviation gas supply at the airport for light aircraft.




Images 1 – 4 (Left to right - Aero Club Incorporated Hanger, Terminal Building, Cookson's/Ashworth Helicopters Hanger, Z Refuelling area

2.1.1 The Runway

The sealed length of the runway at 914m constrains its use to aircraft in the category of 5700kg Maximum Take-Off Weight (MTOW) or less. Normally, this means that the largest aircraft to use the airport would be a light engine turboprop carrying up to 12 passengers. Currently the runway is not able to accommodate the newly purchased Skyline jet air ambulance or commercial operators which have the potential to capitalise on the opportunities Rocket Lab brings to the region along with other elements of a growing economy.

2.1.2 The Airport Land

The Wairoa District Council own a large area of land at the airport. These landholdings are shown in Appendix B. – Land surrounding the airport is leased to local farmers.

A recent land feasibility report by Logan Stone has highlighted that a portion of the existing car parking area is partly located on land owned by Ashworth Aviation and the access road through to the super bins encroaches on private property. The transfer of the car parking area and road access into Wairoa District Council ownership is part of the airport plan vision.

2.2 Customers and Stakeholders

The current airport stakeholders are:

- Airways New Zealand (Dave Jordan/Richard Fry)
- Skyline Aviation (Alex McHardy)
- Air Napier (Gary Peacock)
- Civil Aviation Authority of New Zealand (Nick Jackson)
- Massey University School of Aviation (Andrew Vialoux)
- Hawke's Bay & East Coast Aero Club (and Air Hawke's Bay – wholly owned company of the Aero Club)
- Ashworth Helicopters Ltd.
- Farmers Air Ltd (Andrew Hogarth)
- Wairoa Aero Club (Richard Tollison)

In 2016 the stakeholders and users of the Wairoa Airport were contacted for their feedback on the current state of the airport.

The feedback received from stakeholders is summarised as follows:

- There have been instances of stock incursions into the airport operational areas
- Failure of runway lighting in certain weather conditions
- There have been instances where grass mowing tractors have not followed Notice to Airman requirements (NOTAM)
- Issues with night-time visibility
- Wairoa Lighthouse causing visual distraction to pilots on final approach
- Lack of information regarding weather conditions
- Lack of information for visitors and tourists

- Lack of shelter during inclement and hot weather
- Non-aviation related vehicles using the apron and runway and causing damage to the surfacing
- Ashworth Helicopters report that since last sealing their hangar now floods during heavy rain events.
- Long grass on strip to the north of the runway
- Issue with loose chips on the runway and in particular apron/refuelling area
- Lack of runway visual markings
- Both Air Napier and Skyline have indicated that the runway length is an issue for several of their aircraft in certain weather conditions.
- Lack of Navigational visual aids to assist in making night time operations safer and easier including lack of GPS flightpath approach for runway-16
- Control of obstacles such as trees and power poles
- The Hawke's Bay and East Coast Aero Club (via Air Hawke's Bay) stated that the existing facilities on site are sufficient for their operations, and were concerned that lengthening the runway would result in increased landing charges with no benefit to them.
- Wairoa Aero Club have no planes at present but the current setup is generally ok for their needs
- Farmers Air expressed concern at length of time taken to resolve permanent fuel storage application, lack off maintenance assistance regarding hardstand areas in front of leased hangar and super bins.

2.3 Demand for Airport Services

The development of airport infrastructure is normally in response to a known or perceived demand. Factors that could affect demand at the Wairoa Airport include airline economics and competition, public demand for air travel, population growth/decline, the cost and convenience of alternative forms of travel, the development of new industries and businesses, and changes in the popularity of Wairoa District as a tourism destination. The latter two, tourism and new industry, have the most potential to increase the utilisation of the Wairoa airport, although at present there is limited demand.

2.3.1 Air Ambulance

Skyline Aviation currently operate an air ambulance service based in Napier for Hawke's Bay in conjunction with the Hawke's Bay District Health Board. One of the air ambulance aircraft utilised by Skyline is a Cessna Mustang Jet which has the potential to service Wairoa through navigational and runway upgrades at the airport (refer to aircraft and aeronautical upgrade requirements in Section 2.5 below). Although flight times from Napier to Wairoa in the Mustang jet will be only marginally quicker than a turbo prop, significant life saving time advantages could come when patients from Wairoa with life threating conditions need to be flown directly to a tertiary hospital. *(NZ Major Trauma national clinical network is implementing a new policy whereby patients will be transported directly to the hospital that is best suited for their injuries, rather than the closest)*

2.3.2 Rocket Lab

The establishment of Rocket Labs launch site at Mahia Peninsula could result in an increase in the utilisation of the Wairoa Airport through associated tourism and business travel. If this eventuates it is envisaged that small passenger jet aircrafts will be the most likely type to be utilised by Aviation operators.

The provision of land at the airport for the establishment of a business park could also attract industries related to Rocket Lab that would benefit from convenient access to the peninsula any other economic development.

2.3.3 Light Aircraft

The provision of aviation gas supply at the airport could result in an increase in light aircraft visitors such as those associated with the Wairoa Aeroclub.

2.4 Objectives/Service Drivers for the Airport

The key objectives for the planning of the Wairoa Airport are to:

- Ensure that existing airport continues to provide for the aeronautical needs of the Wairoa community
- Improve navigational aids to remove operational limitations associated with all fixed wing air ambulance operations at night and in bad weather.
- Ensure that the airport and its facilities can provide for jet aircraft likely to be utilised by emergency services, tourism and business travellers.
- Enable the establishment of non-airport related business in a business park campus leveraging off the location next to the airport.
- Ensure that aeronautical safety and the safety of persons is a top priority

This Airport plan supports these key objectives by:

- Ensuring that the airport is developed in a planned and coordinated fashion
- Outlining options and pathways to the maintenance and upgrade of the airport overtime

2.5 Runways, Taxi and Apron Upgrades

A recent report commissioned by Wairoa District Council has identified options for upgrades and improvements at the airport to:

1. Maintain airport infrastructure and improve navigation and safety
2. Accommodate jet aircraft associated with Skyline's jet air ambulance and commercial operators.

These upgrades are:

- Upgraded fencing of the airport to prevent stock incursions and unauthorised vehicle access
- Runway resurfacing
- Taxiway and apron resurfacing (see image of taxiway condition in Image 7 below)
- The provision of runway markings to assist night-time landings
- Improvements to the receiver system for the existing pilot activated lights (PAL)
- The provision of a new runway, taxiway and apron lighting system
- The provision of navigational aids which include GPS flightpath approach for runway-16, Precision Approach Path Indicators (PAPI); Visual Approach Slope Indicator System (VASIS); and the provisions of new lighted windsocks.

- The extension of the runway to cater for jet aircraft; to cater for landings in adverse weather conditions; and to cater for aircraft greater than the 5700kg Maximum Take-off Weight (MTOW) range.

Indicative costs associated with these upgrades and timeframes for the upgrades are set out in Table 1 below. Table 2 is a summary of the estimated infrastructure upgrade costs to provide for jets such as the air ambulance jet and larger turbo prop aircraft.

2.5.1 Runway Extensions and Land Requirements

Image 5 below and Appendix D show potential runway extension of 300m which will increase the length of the runway to 1200m. Civil aviation regulations require a minimum clear zone at the end of the runway of 240m. The Land Requirement Plan (C06-B) in Appendix E and Image 6 below shows additional land which is currently not owned by Wairoa District Council but which is needed to provide for this 240m clear zone (2.55ha). Part of the existing carparking area is located on private land (see Image 7 below).

Image 5 – Proposed Runway Extensions

2.5.2 Fencing

There are existing post and wire fences at the airport around the runway (set back approximately 50m from the runway). This fence ranges in condition, from very good to very poor condition (I.e. not stock proof). Should the runway be extended to accommodate larger aircraft, the existing fences will need to be relocated so that they are a minimum of 75m either side of the runway centreline and 240m off the end of the runway for Runway End Safety Area (RESA). The total length of new fencing equates to 2.2km. The location of this new fencing is shown on the airport plan layout drawing in Appendix A.

Image 6 – Land requirement Plan (Lot boundaries shown in yellow)

Image 7 – Aerial showing the portion of the airport car park located in private ownership (shown in red)

Table 1 – Summary of estimated costs for the maintenance of airport infrastructure and improvements to navigation and safety

Item	Description of Issue Raised	Required Action	Cost ($)	Financial Year
1	Stock incursions - Runway	Ensure fences are stock proof	$15,000	2016/17
2	Failure of runway lights in certain weather conditions	Relocate pilot activation receiver away from power pole, fix broken runway lights	$15,000	2016/17
3	Wairoa Lighthouse causing visual distraction to pilots whilst making night time approach to airport	Investigate possible solution for deactivation and/or screening of light for the odd occasions that night time approach to airport is required.	$7,500	2016/17
4	Issue with loose chips/poor surfacing on apron - planes removing chip	Resurface apron with asphaltic concrete or slurry	$195,000 to $500,400	2017/18
5	Improve Night Time visibility of Runway along with navigation aids for approaches	Full upgrade of runway and taxiway edge lighting, along with flood lights for apron etc. Install PAPI's, VASIS and windsocks (Existing runway only)	$280,000	2017/18
6	Only runway 34 has a GPS approach path	Have Airways investigate and design GPS approach for runway 16 *(Airways reluctant to give ROC)*	$50,000 *maximum*	2017/18
7	Non-Aviation vehicles using the runway and damaging surface	Install security fencing and card activated gate	$50,000	2017/18
8	Lack of weather and landing condition indicators	Investigate weather broadcasts from Metservice weather station and possibility of installing Webcam on terminal building - linked to Airport Website	$15,000	2017/18
9	Runway AC surfacing fatigued and cracking	Resurface Runway with Asphaltic concrete or cape seal	$411,300 to $945,990	2017/18
10	Lack of runway visual markings	Upgrade runway markings	$24,230	2017/18
11	Lack of shelter during inclement and hot weather for pilots and passengers	Allow access to terminal building and/or provide shade sails	$15,000 to $20,000	2017/18
12	Pavement deformation and failures around Super Bin loading area	Carry out pavement repairs	$10,000	2017/18

13	Lack of information for tourist and visitors	Establish Wairoa District Council Airport web page or incorporate with Wairoa I-site page	$5,000	2017/18
14	Control of hazards such as trees and power poles	Carry out an investigation and programme removal of hazards	$30,000	2018/19
15	Issue with loose chips/poor surfacing on taxiways - planes removing chip	Resurface taxiways with asphaltic concrete or slurry	$72,900 to $187,470	2018/19

Table 2 – Summary of estimated costs to provide for jet aircraft and larger turbo prop aircraft

Item	Description of Issue Raised	Required Action	Cost ($)	Financial Year
1	Runway extension to enable jet aircraft and larger passenger planes to use the airport	Extension of the runway by 300m	$1million to $1.2million	2018
2	Northern Taxiway not wide enough for safety limits for jets / larger turbo prop planes	Seal widen edge of northern taxi way - 1m either side	$30,000	2019/20

3 Wairoa Airport plan layout

The Airport plan layout is included in Appendix A and is shown as Image 9 below. The airport has been separated into zones and a description of the type of activity/use envisaged for the zone is described in Table 3 below.

Table 3 – Summary of activities for each zone on the Airport plan layout

Zone	Zone Description / Activities and uses provided for
Aircraft Hangar / Terminal Zone - Existing	The existing area set aside for hangers/ terminals /airport maintenance
Road and Parking-Zone	Public/private car parking and business park access road.
Business Park-Zone	Area intended for aeronautical and non-aeronautical industry and business.
Fuel-Zone	This zone covers the existing refuelling station and additional land area for a second refuelling station.
Rail Interface-Zone	The rail interface zone includes an area of land located adjacent to the railway. The zone is currently occupied by Farmers Air for the storage and loading of fertiliser. Where possible further development of this area should be limited to activities that can utilise direct rail access.
Operational A-Zone	The operational A-Zone includes the runway strip (75m from the centre line of the runway), the taxi areas and apron. This zone is intended to be fenced to prevent stock and unauthorised access to the runway and aircraft operational area.
Grazing-Zone	The zone covers the remainder of the airport land which is suitable to grazing/cropping activities.

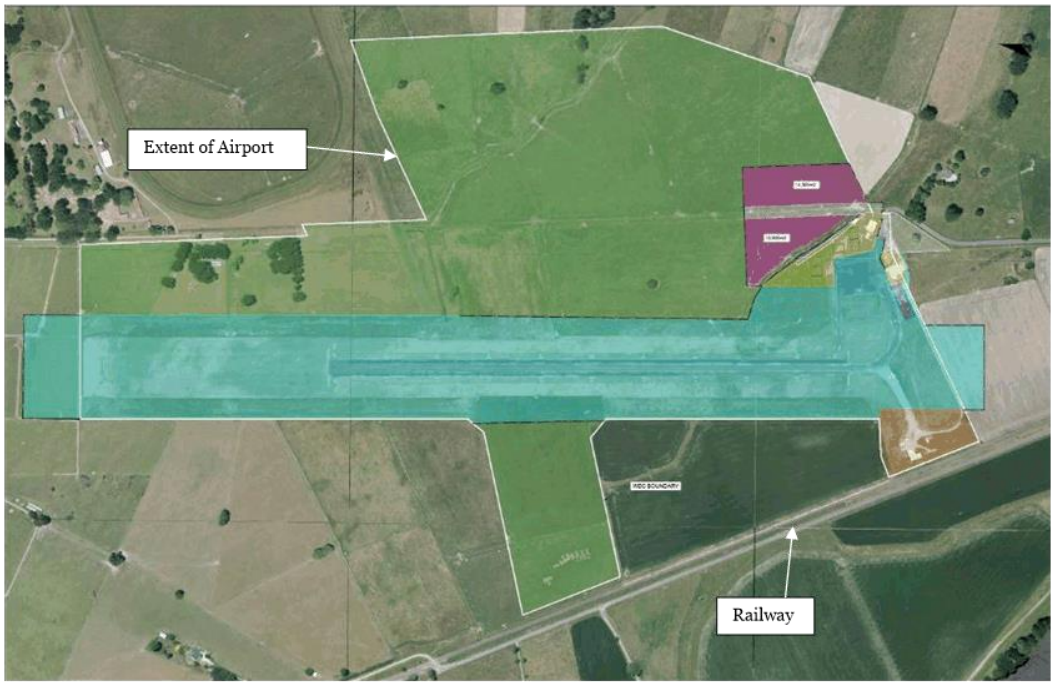


Image 8 – Airport plan Layout (see Appendix A for a larger version of the layout plan)

4 Business Park Development

A preliminary feasibility investigation has been undertaken to identify whether there are any constraints related to the development of a business park at the airport. The investigations considered the following factors:

1. Natural Hazards such as flooding and land stability (See Appendix G)
2. The provision of water supply, wastewater and stormwater services (See Appendix F)
3. The availability of power, and computer media (See Appendix H)
4. Resource Management Act requirements (See Appendix H)
5. Archaeological implications (See Appendix H)

The above investigations did not identify any barriers to the establishment of the business park at the airport. The costs associated with the extension and provision of service/utilities at the business park are as follows:

Table 4 – Business Park Development Costs

SUMMARY OF ESTIMATED BUSINESS PARK DEVELOPMENT COSTS[1]	
Description	**Costs**
Extension of water mains to the Business Park	$ 88,000
Wastewater disposal (on-site and reticulated) Assumes 100% occupancy of the business park	$ 250,000 - 336,000
Stormwater (box culvert under proposed road) does not include treatment	$ 149,213
Road extension (sealed)	$ 101,750
Power Reticulation	$ 151,455
Telecommunications	$ 100,000
Overall Development Cost	**$ 926,418**

5 Airport Protection and Environmental Effects Management

The key requirements for protecting airport capacity and growth are:

- The creation of flight paths and obstacle limitation surfaces; and
- District planning policies and rules which ensure compatible land use activities in close proximity to airport. This includes the exclusion of noise sensitive activities from areas which would otherwise curtail airport operations and expansion.

5.1 Flight Paths and Obstacle Limitation Surfaces

The protection of airspace required for aircraft to approach the airport runway and to take-off and climb to the required cruising altitude is essential to the operation of the airport.

Flight path protection for the proposed extended runway is provided by defining Obstacle Limitation Surfaces (OLS) in accordance with –

a. CAA Advisory Circular AC139-06A
b. ICAO Annex 14 – Aerodromes and ICAO Procedures for Air Navigation Services (PANS OPS).

OLS are designed to provide obstacle-free paths for any multi-engine aircraft which lose the power of an engine during take-off.

The obstacle limitation surface for the Wairoa Airport, which essentially defines the maximum heights for trees and structures, is shown on plan C08-C09-B in Appendix C and Image 9 below. No buildings, structures or trees should exceed the maximum heights as indicated on Image 9. It is recommended that the Wairoa District Council incorporate these height limitation surfaces into the Wairoa District Plan.

[1] Typically most of the costs associated with the extension of services to a development are a cost of the developer. Some of the costs in the table such as wastewater disposal and internal roadways are likely to be costs for the business.

The greatest risk to the breach of these height limits is likely to be new buildings or structures within the airport land; new farm buildings on adjacent properties; or new telecommunication masts.

Image 9 – Obstacle Limitation Surfaces for Wairoa Airport (the contours show the maximum height limits for structures and vegetation.

5.2 Airport Noise Boundaries

Noise is the most significant adverse effect of aircraft movements on properties located close to an airport or beneath the airports approach and take-off paths. The most common objection to airport expansion and capacity utilisation is a proposed increase in aircraft noise.

New Zealand Standard 6805 is used by territorial authorities and regional government for the control of airport noise. The standard establishes maximum acceptable levels of aircraft noise exposure around airports for the protection of community health and amenity values whilst recognising the airports need to operate efficiently. It provides a guide for territorial authorities wishing to include appropriate land use controls in their district plans, as provided for in the Resource Management Act 1991.

The Standard uses an air noise boundary mechanism for local authorities to establish compatible land use planning and set limits for the management of aircraft noise at airports where noise control measures are needed to protect community health and amenity values.

The Standard suggests that noise control measures are necessary where the exposure of residential communities exceed 100 pasques (or an Ldn of 65) and may be necessary where exposure exceeds 10 pasques (or an Ldn of 55).

District plans generally have noise contour maps and associated rules for Airports and medium to large aerodromes. If the number of flights at Wairoa Airport is expected to increase in the future, particularly if there is expected to be an increase in jet and night-time flights, the Wairoa District Council should consider incorporating noise control contours and associated rules into the Wairoa District Plan.

These noise contours serve two purposes. Firstly they provide a basis for creating rules to prevent the establishment of sensitive activities (such as dwellings) within specified noise contours unless mitigation measures such as noise insulation is provided. This protects the sensitive occupiers from aircraft noise and enables the airport to grow without undue restrictions. Secondly the contours enable the District Plan to provide some control over the timing of flights (mainly night-time restrictions) to protect noise effects on sensitive users.

6 Ownership and Control

Potentially the Hanger zone/Business Park Zone could be subdivided into freehold lots and sold into private ownership, however lease arrangements are likely to be most favourable option for the Hanger Zone. Often business/industry prefer freehold titles as this gives them greater control over their future interests in the land. The current Airport plan arrangement does not preclude the establishment of freehold title.

7 Conclusion

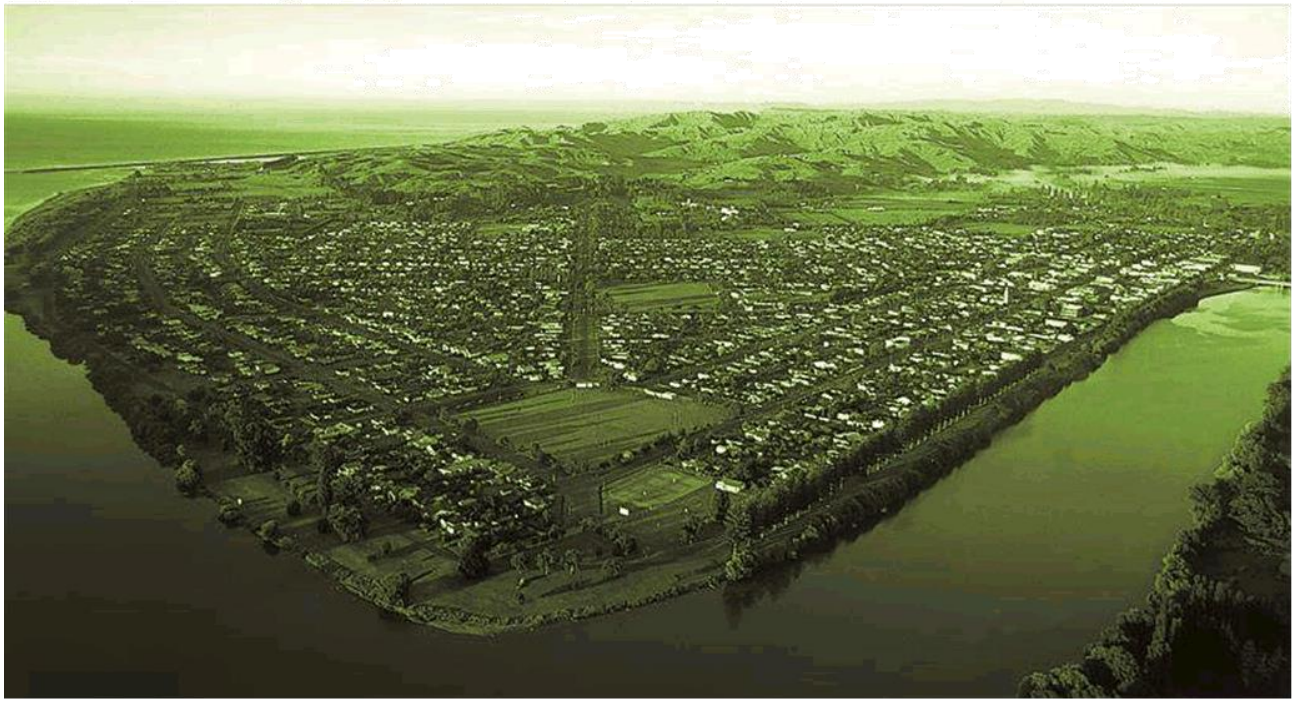
A Wairoa Airport plan layout has been prepared to ensure the most effective and efficient development of the airport's land holdings and infrastructure over time. It is intended that all future decisions relating to the airport take into consideration the plan layout. The plan is a living document and the Wairoa District Council should continue to refine this layout overtime due to changes in demand and other development related factors.

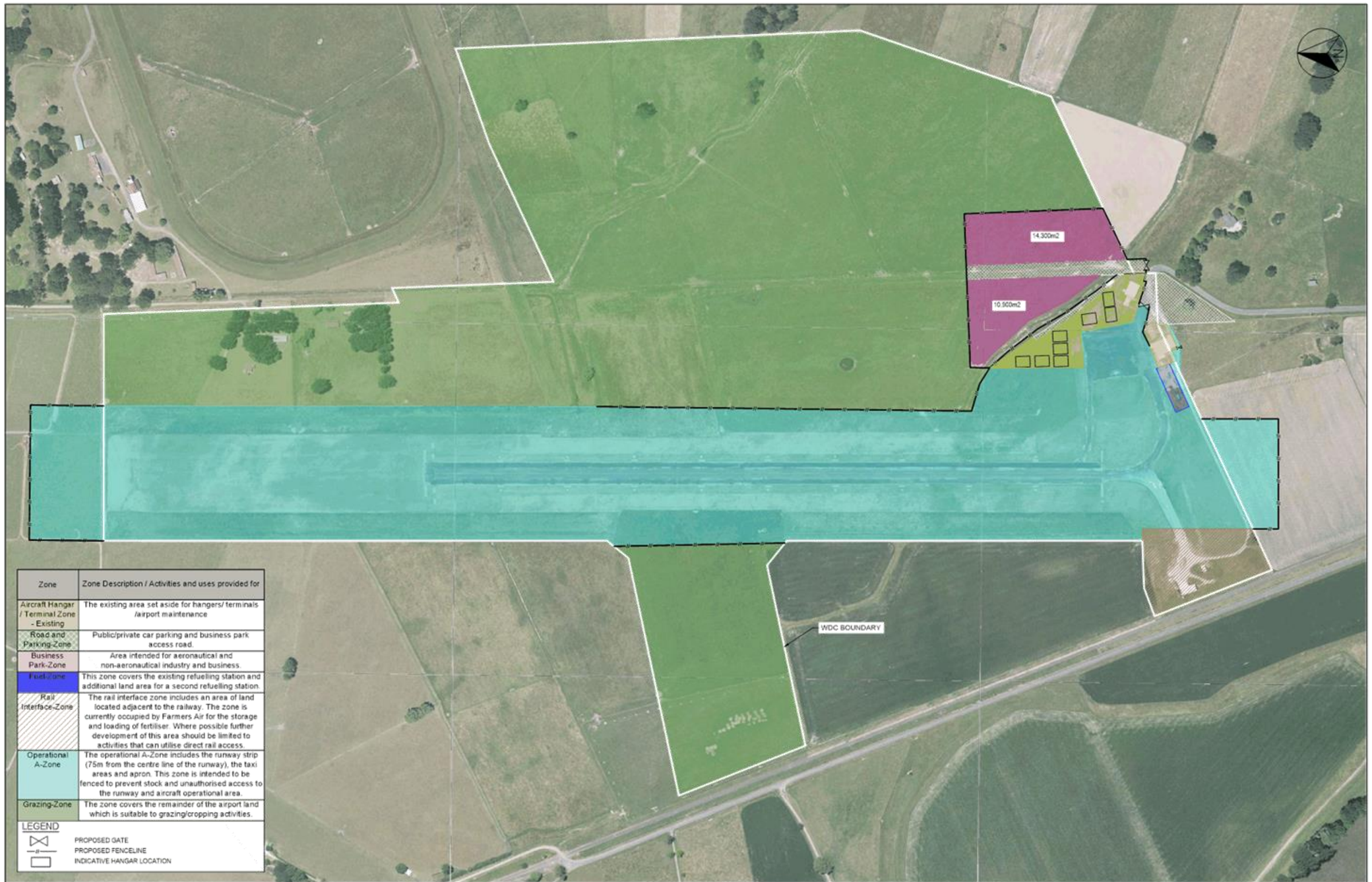
Appendix A

Wairoa Airport Plan Layout

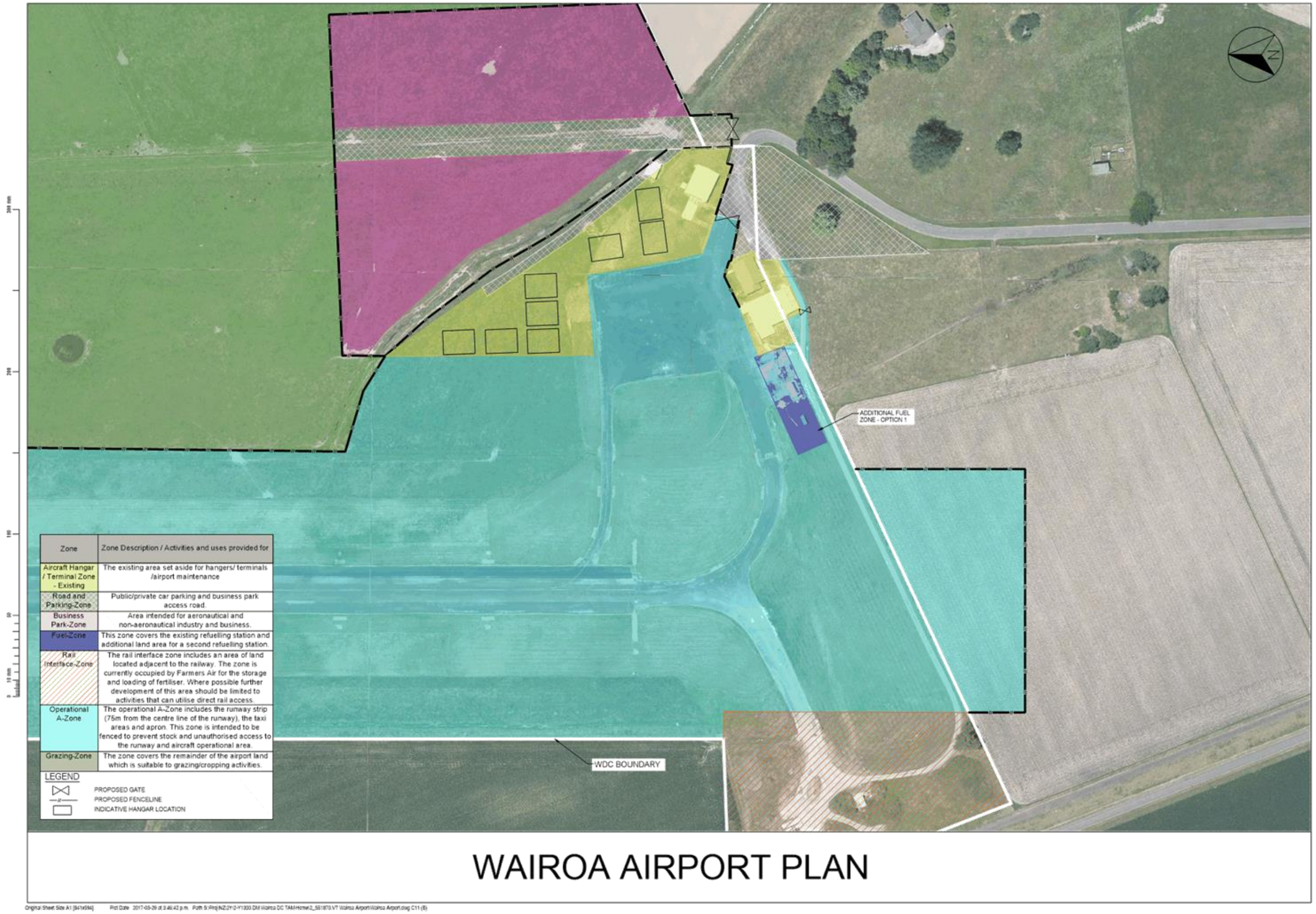
Mustang Jet type used by Skyline Air Ambulance

Top dressing aircraft used by Farmers Air





WAIROA AIRPORT PLAN


ADDITIONAL FUEL ZONE - OPTION 1
WDC BOUNDARY
N
Zone
Zone Description / Activities and uses provided for
Aircraft Hangar / Terminal Zone - Existing
The existing area set aside for hangers/ terminals /airport maintenance
Road and Parking-Zone
Public/private car parking and business park access road.
Business Park-Zone
Area intended for aeronautical and non-aeronautical industry and business.
Fuel-Zone
This zone covers the existing refuelling station and additional land area for a second refuelling station.
Rail Interface-Zone
The rail interface zone includes an area of land located adjacent to the railway. The zone is currently occupied by Farmers Air for the storage and loading of fertiliser. Where possible further development of this area should be limited to activities that can utilise direct rail access.
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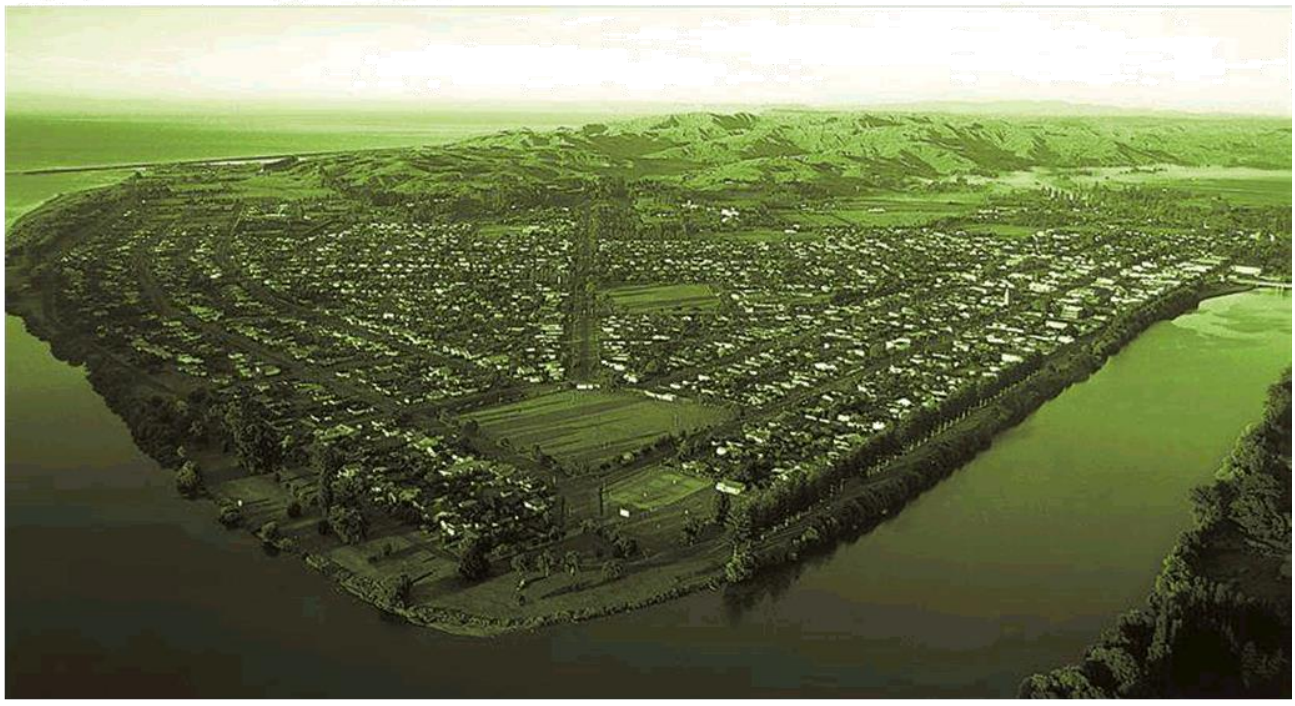
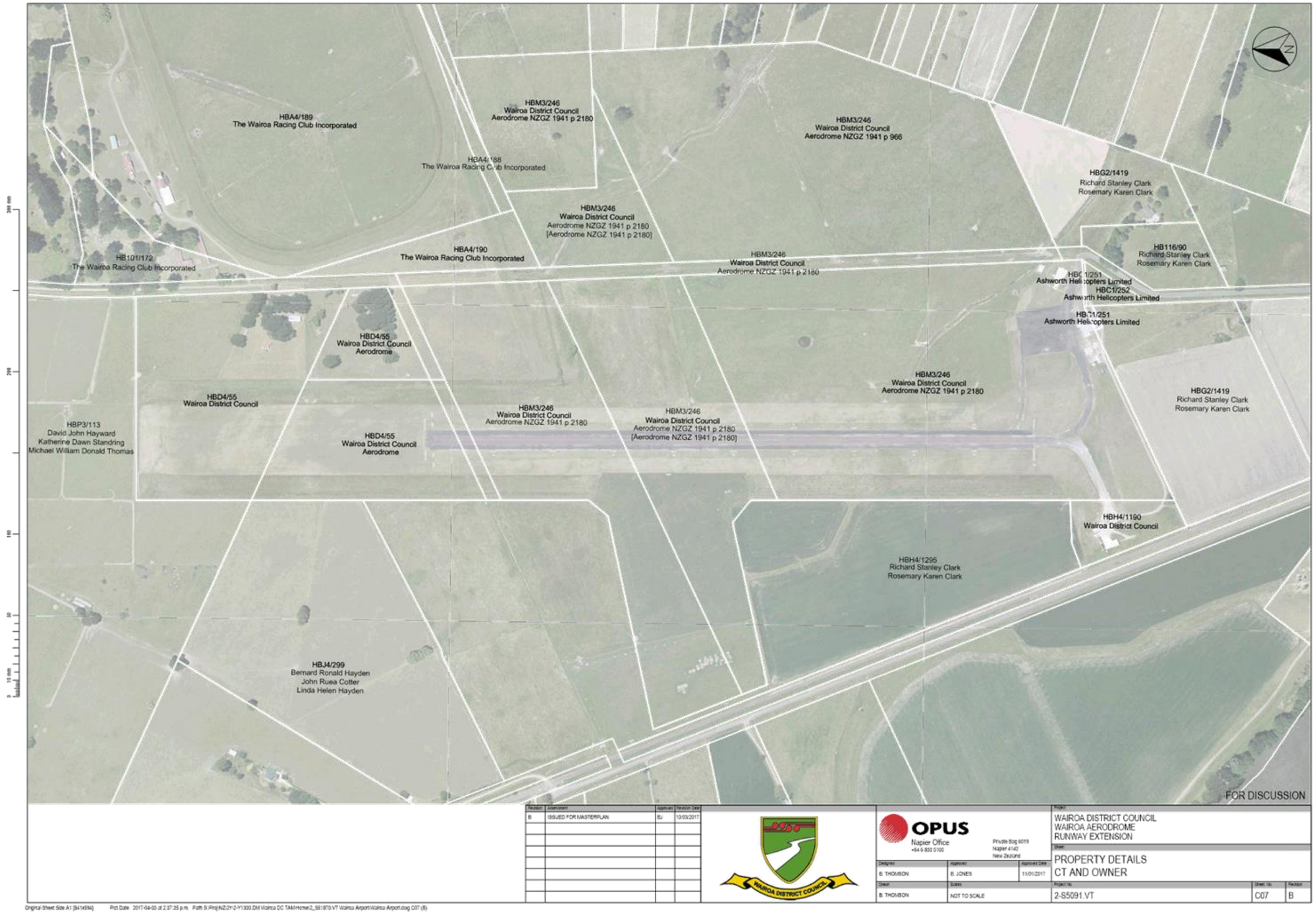
The operational A-Zone includes the runway strip (75m from the centre line of the runway), the taxi areas and apron. This zone is intended to be fenced to prevent stock and unauthorised access to the runway and aircraft operational area.
Grazing-Zone
The zone covers the remainder of the airport land which is suitable to grazing/cropping activities.
LEGEND
PROPOSED GATE
PROPOSED FENCELINE
INDICATIVE HANGAR LOCATION
WAIROA AIRPORT PLAN

Appendix B

Land Ownership Plan

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HBM3/246
Wairoa District Council
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HBM3/246
Wairoa District Council
Aerodrome NZGZ 1941 p 966
HBA4/188
The Wairoa Racing Club Incorporated
HBG2/1419
Richard Stanley Clark
Rosemary Karen Clark
HBM3/246
Wairoa District Council
Aerodrome NZGZ 1941 p 2180
[Aerodrome NZGZ 1941 p 2180]
HB116/90
Richard Stanley Clark
Rosemary Karen Clark
HB101/172
The Wairoa Racing Club Incorporated
HBA4/190
The Wairoa Racing Club Incorporated
HBM3/246
Wairoa District Council
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HBC1/251
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HBG2/1419
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HBP3/113
David John Hayward
Katherine Dawn Standring
Michael William Donald Thomas
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Wairoa District Council
Aerodrome
HBH4/1190
Wairoa District Council
HBH4/1295
Richard Stanley Clark
Rosemary Karen Clark
HBJ4/299
Bernard Ronald Hayden
John Ruea Cotter
Linda Helen Hayden
FOR DISCUSSION
B ISSUED FOR MASTERPLAN BJ 10/03/2017
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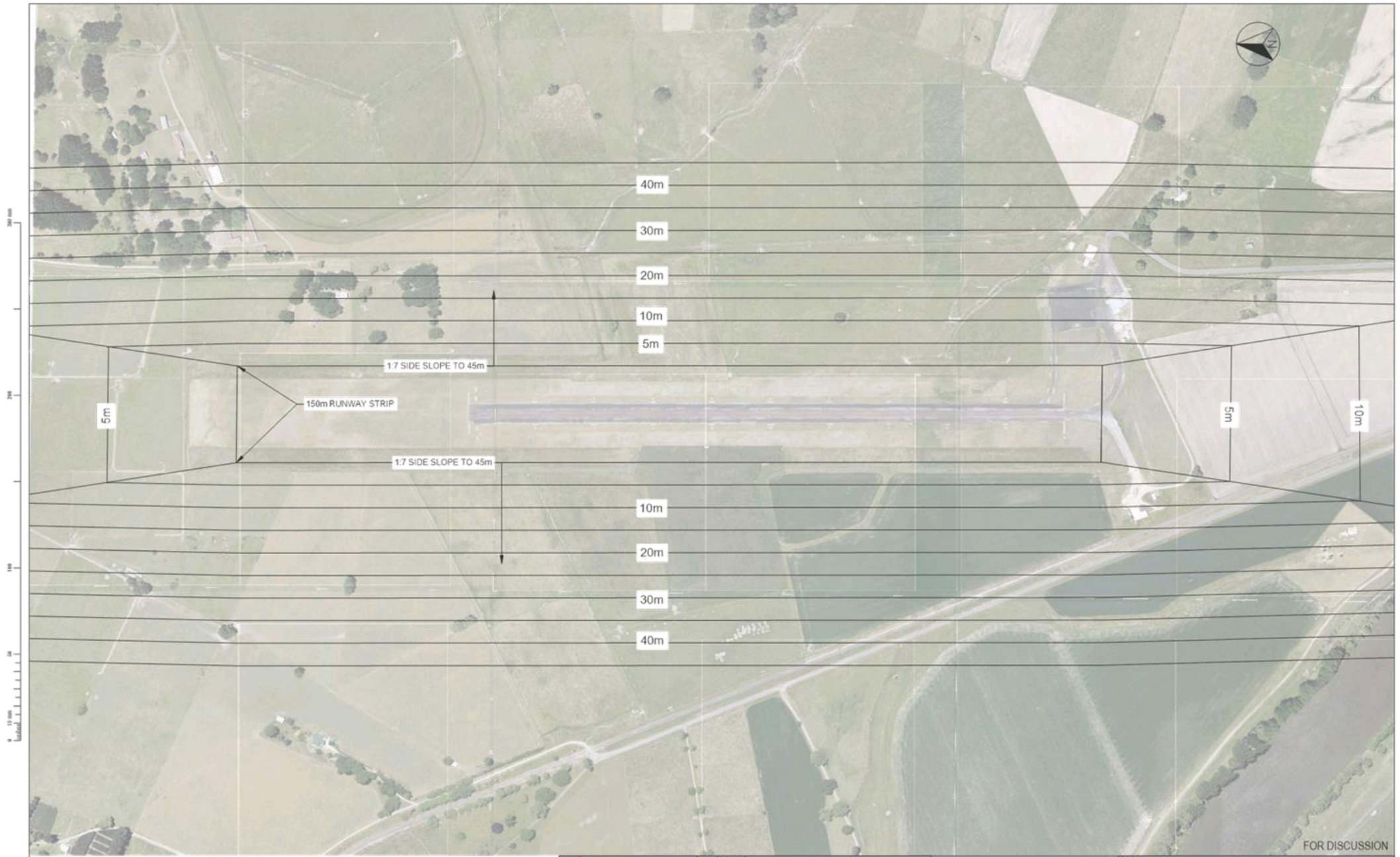
Private Bag 6019
Napier 4142
New Zealand
WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION
PROPERTY DETAILS
CT AND OWNER
B. THOMSON
B. JONES
11/01/2017
B. THOMSON
NOT TO SCALE
2-S5091.VT
C07
B

Appendix C

Obstacle Limitation Surfaces

Mustang Jet type used by Skyline Air Ambulance

Top dressing aircraft used by Farmers Air



NOTE: LEVELS SHOWN ARE HEIGHT FROM RUNWAY CENTRELINE LEVEL

Revision	Amendment	Approved	Revision Date
B	ISSUED FOR MASTERPLAN	BJ	10/05/2017

OPUS
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Napier 4142
New Zealand

Designed	Approved	Approved Date
S. THOMSON	B. JONES	11/01/2017
Drawn	Scales	Project No.	Sheet No.	Revision
S. THOMSON	NOT TO SCALE	2-S5091.VT	C08	B

WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION

TRANSITIONAL SLOPE
OBSTACLE LIMITATION SURFACE

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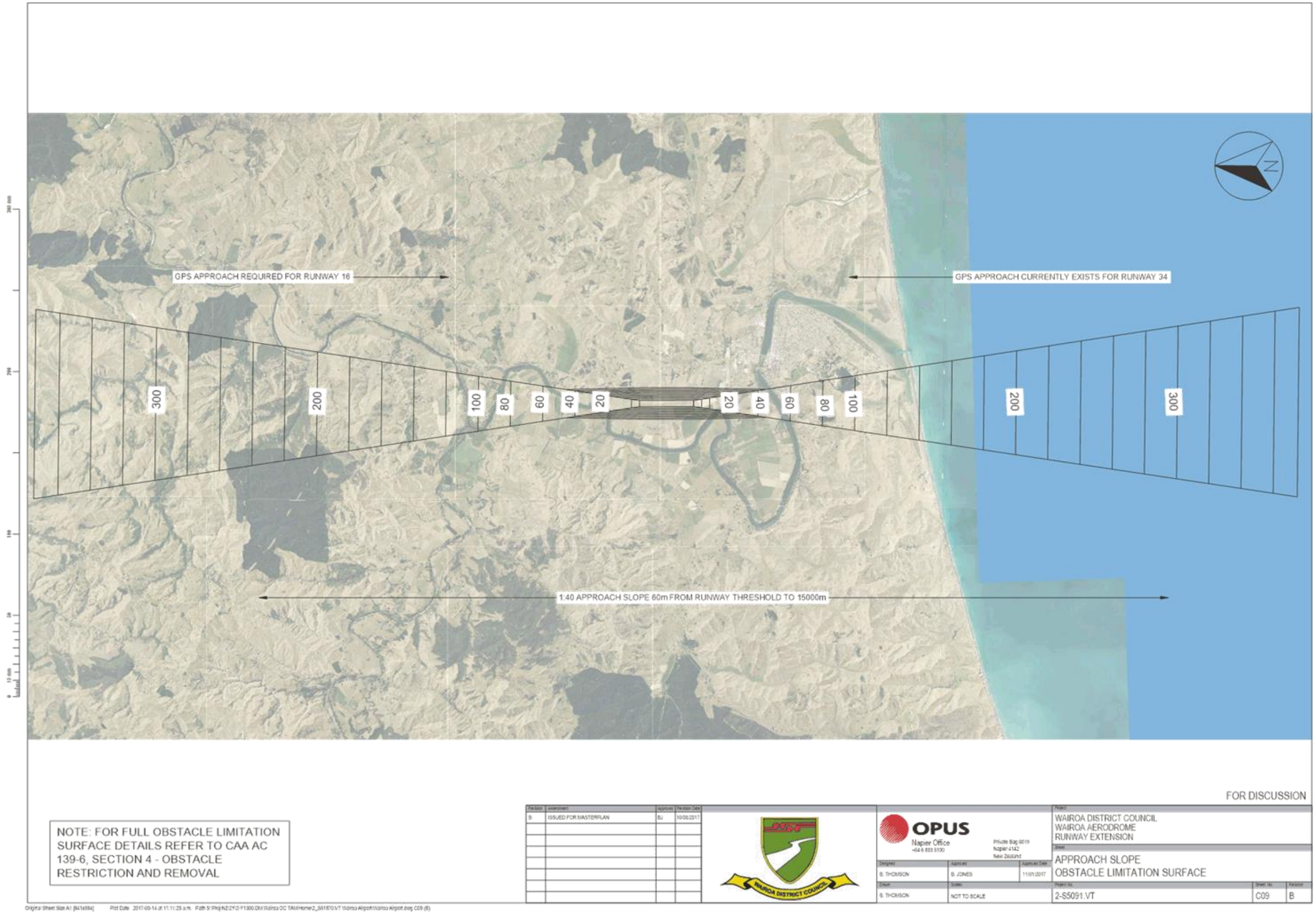

FOR DISCUSSION

NOTE: FOR FULL OBSTACLE LIMITATION SURFACE DETAILS REFER TO CAA AC 139-6, SECTION 4 - OBSTACLE RESTRICTION AND REMOVAL

Revision	Amendment	Approved	Revision Date
B	ISSUED FOR MASTERPLAN	BJ	10/08/2017

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New Zealand

Designed	Approved	Approved Date
B. THOMSON	B. JONES	11/01/2017
Drawn	Scales	Project no.	Sheet no.	Revision
B. THOMSON	NOT TO SCALE	2-S5091.VT	C09	B

WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION

APPROACH SLOPE
OBSTACLE LIMITATION SURFACE

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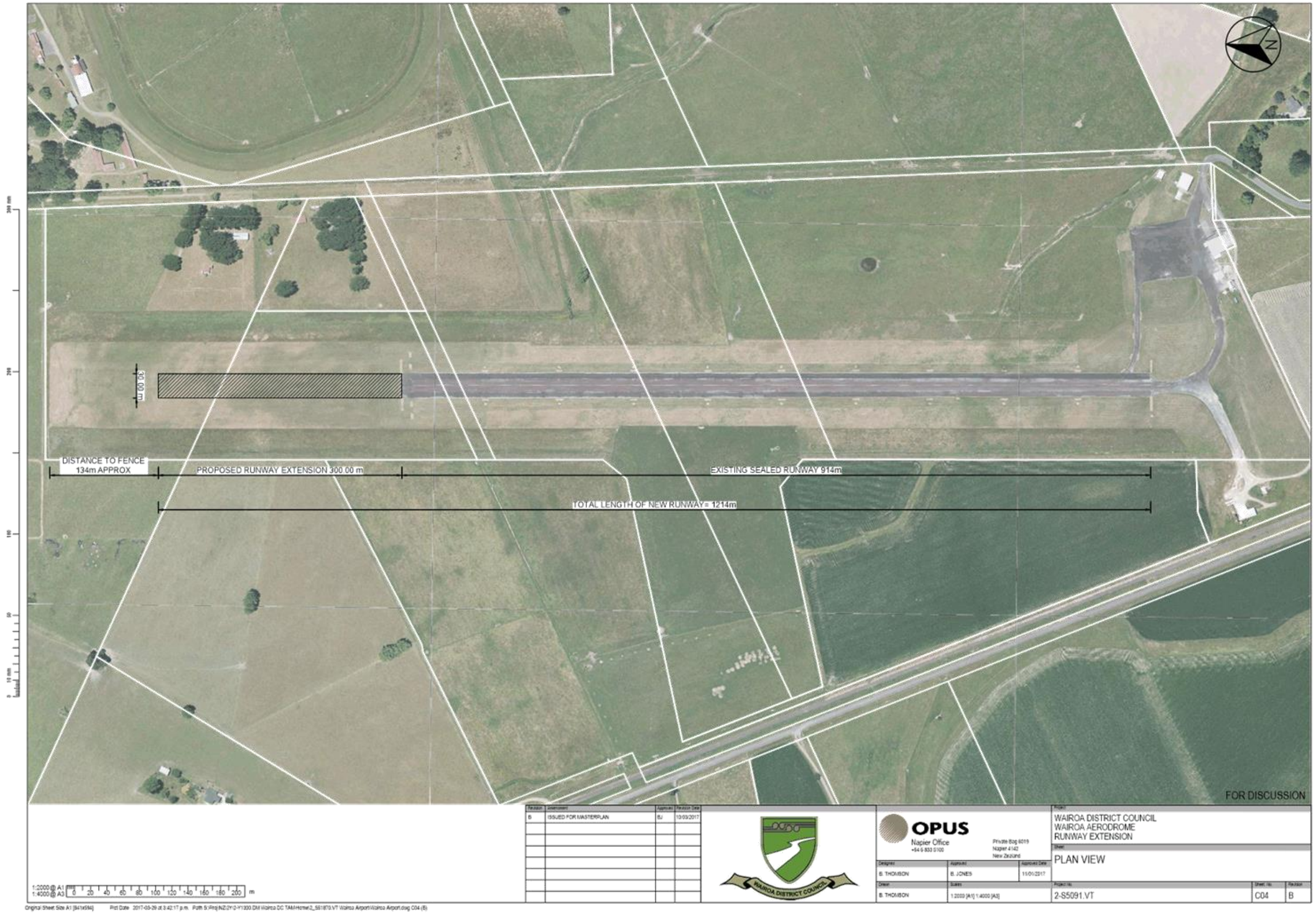
Appendix D

Runway Extension Drawings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DISTANCE TO FENCE
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PROPOSED RUNWAY EXTENSION 300.00 m
EXISTING SEALED RUNWAY 914m
TOTAL LENGTH OF NEW RUNWAY = 1214m
FOR DISCUSSION
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1:4000 @ A3
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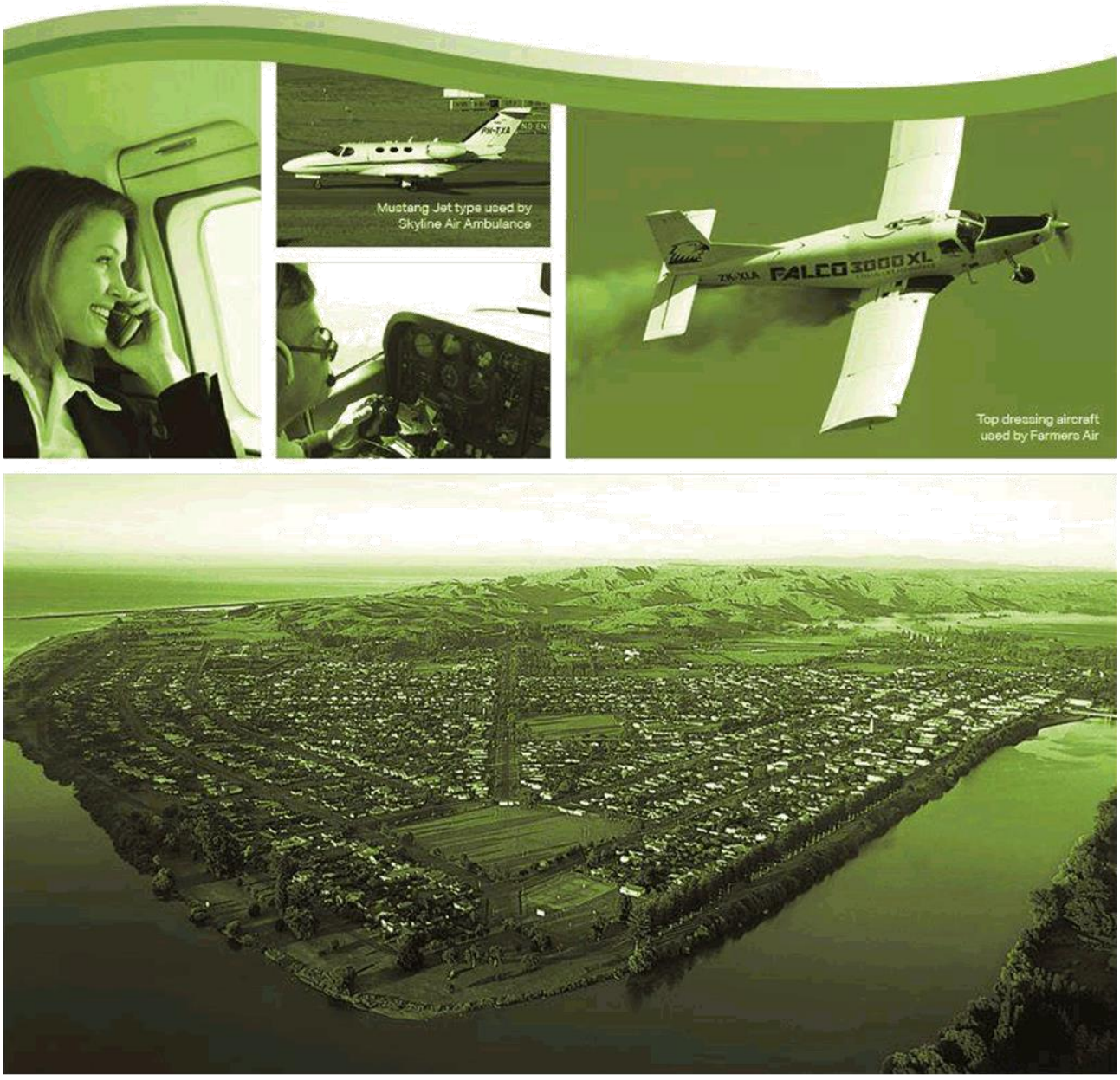
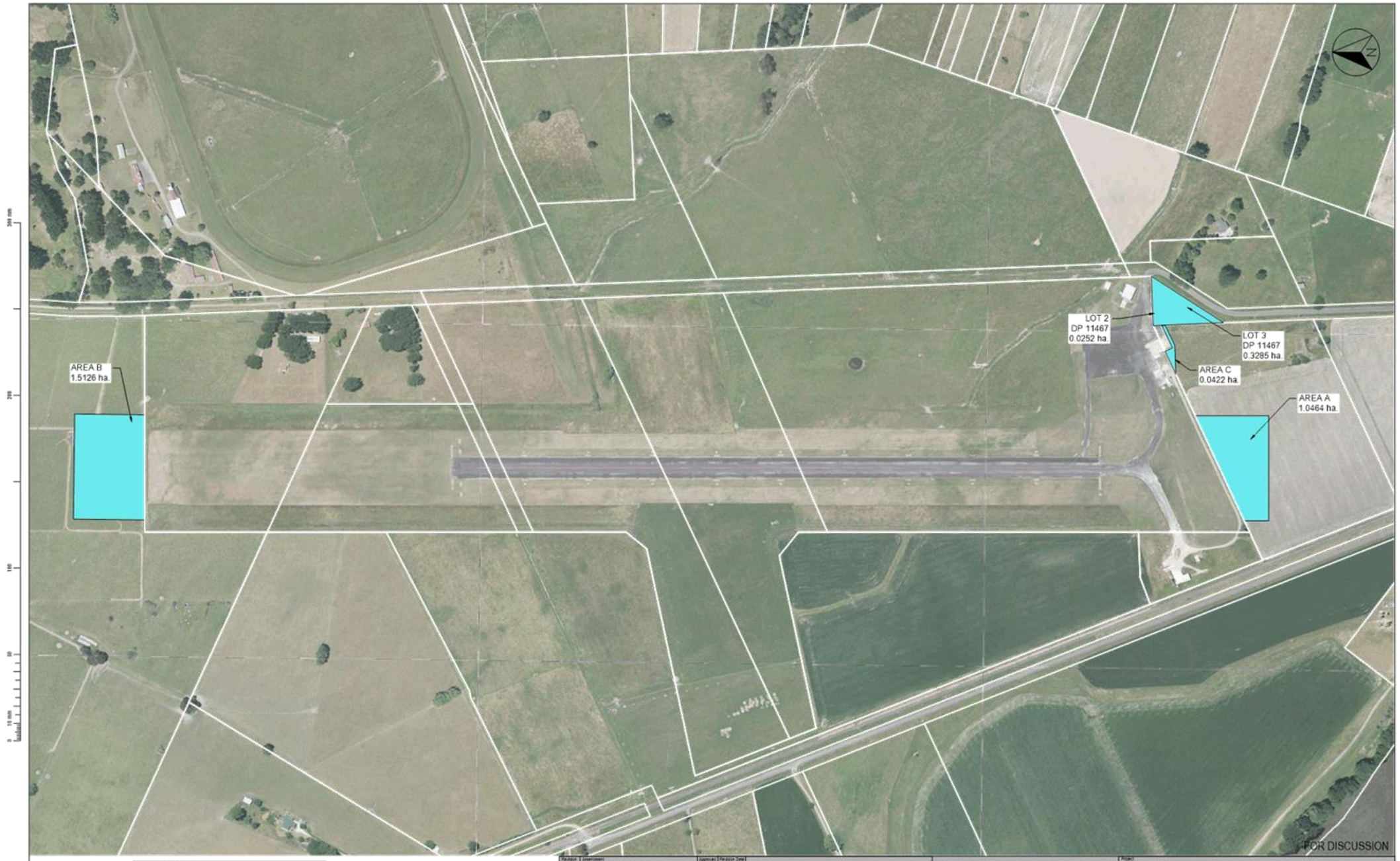
Revision
Amendment
Approved
Revision Date
B
ISSUED FOR MASTERPLAN
BJ
13/09/2017
WAIROA DISTRICT COUNCIL
OPUS
Napier Office
+64 6 833 5100
Private Bag 6019
Napier 4142
New Zealand
Designed
B. THOMSON
Approved
B. JONES
Approved Date
11/01/2017
Drawn
B. THOMSON
Scales
1:2000 [A1] 1:4000 [A3]
WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION
Sheet
PLAN VIEW
Project No.
2-S5091.VT
Sheet No.
C04
Revision
B

Appendix E

Land Requirement Plan

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LOT 2
DP 11467
0.0252 ha.
LOT 3
DP 11467
0.3285 ha.
AREA C
0.0422 ha.
AREA A
1.0464 ha.
N
FOR DISCUSSION
LEGEND
LAND TO BE PURCHASED
B ISSUED FOR MASTERPLAN BJ 10/03/2017
C AREA C ADDED BJ 22/03/2017
OPUS
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New Zealand
WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION
LAND REQUIREMENT PLAN
B. THOMSON
B. JONES
11/01/2017
B. THOMSON
NOT TO SCALE
2-S5091.VT
C06
C

Appendix F

Preliminary Servicing Assessment Report

OPUS

2-Y1300.DM/17/01

Wairoa Airport Plan

Preliminary Servicing Assessment

For Wairoa District Council

2-Y1300.DM/17/01

Wairoa Airport Plan

Preliminary Servicing Assessment

For Wairoa District Council

Prepared By
Brylee Thomson
Civil Engineering Cadet

Reviewed By
Kirsten Wallis
Civil/Environmental Engineer

Approved for Release by
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CPEng, Technical Principal

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Date: March 2017
Reference: 2-Y1300.DM
Status: Final

Contents

1 Introduction

Wairoa District Council (the Council) have identified a need for future provision of industrial / commercial development near to the Wairoa Aerodrome to support future growth in Wairoa and the surrounding area.

Opus International Consultants (Opus) have been engaged by the Council to develop a concept plan for development of a business park within the Wairoa Airport (the site), adjacent to the existing airport infrastructure. A plan showing likely development areas is provided in Figure 1.

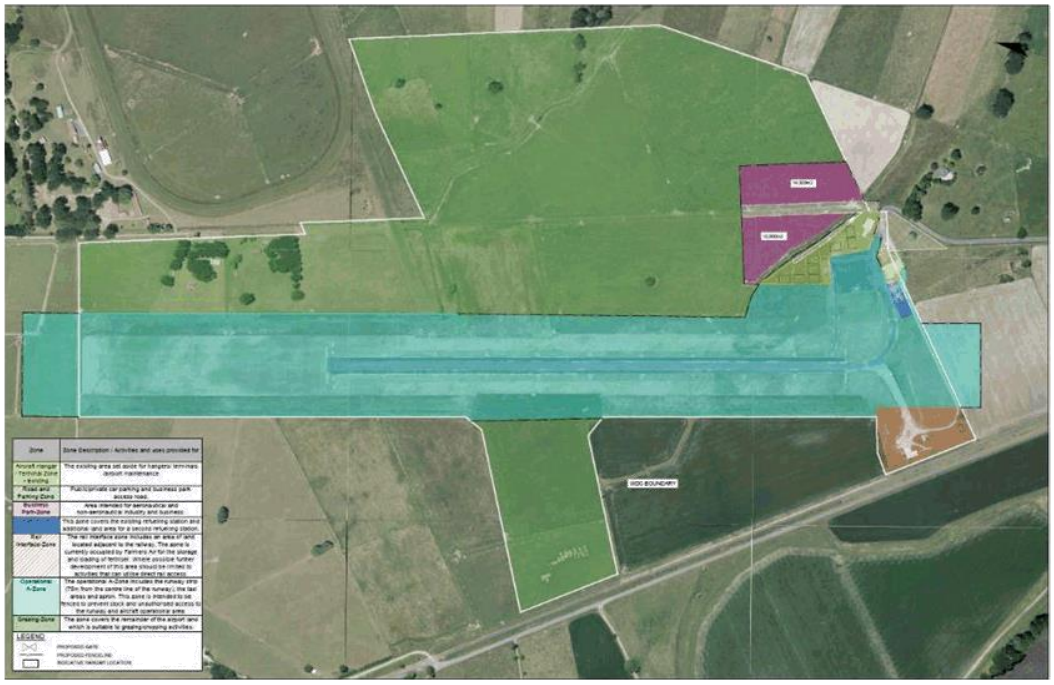

Figure 1 : Wairoa Airport Internal Zoning Plan

2 Servicing the development plan

This report will address the existing constraints and future servicing options to support the proposed development on the site, specifically:

- Water supply
- Firefighting Provisions
- Wastewater
- Stormwater

At present, Opus understands that reticulated services extending to the site are limited to potable water supply, with associated provision of firefighting supply.

Wastewater and stormwater are currently managed onsite for the limited infrastructure that exists.

The types of industry to occupy the business park area would traditionally be linked to aviation related activities, including aircraft maintenance and repair, freight handling and storage.

The Council believes that the future expansion of businesses associated with Rocket Lab for example, could bring other service related industries to the site.

3 Water

3.1 Domestic Potable Water Supply

3.1.1 Existing Servicing

At present, a 100mm water main connects to the existing airport terminal building from Airport Road, and terminates with a fire hydrant. A pipe lateral extends to the west along the boundary of the aerodrome and provides water supply to those buildings along this boundary. This Council managed potable supply is suitable for the existing domestic and firefighting needs on the site.

3.1.2 Required Servicing

The business park development on the site will require the existing 100mm water main to be extended.

The peak domestic flow requirements for the proposed business park has been estimated by Opus as approximately 4 l/s, assuming a medium intensity mixed commercial / industrial loading, based on available data from a combination of sources including Engineering Codes of Practice, and NZS4404.

The design flows could be as high as 8l/s if food and materials manufacture were to be established within the business park, however this would appear unlikely.

Opus expects that this domestic supply can be provided through the extension of the existing 100mm main infrastructure on site.

Available water pressures should be checked at the time of development, and supplemented on site by header tanks or pumping if needed. This should be considered further during detailed design.

3.2 Firefighting Supply

3.2.1 Existing Servicing

An existing fire hydrant adjacent to the terminal building and fuel storage facility appears to provide adequate firefighting capacity for the extent of existing infrastructure. The surrounding land appears un-serviced.

3.2.2 Required Servicing

Based on likely extent of development on the site (refer Figure 1), Opus believes an extension of the existing 100mm main with an additional 2 hydrants is required, to provide a minimum level of

firefighting service of FW2 from the mains supply. This is adequate for most structures that are fitted with sprinkler systems. This should be confirmed by detailed design.

Additional fire protection could include supply from bores, and / or storage tanks which could be fed from either ground water, stormwater, or drip fed from the reticulated supply. These options should be further explored during detailed design.

4 Wastewater

4.1 Existing Servicing

The nearest likely connection to the Council reticulated wastewater network is approximately 1.8 kilometres to the south east of the site, in Ormond Road. This is a 150mm main. The network capacity at this point is not known by Opus.

The existing airport infrastructure is serviced using onsite mechanisms. With no consents listed on the title, Opus expects that the current onsite disposal of wastewater is a permitted activity under the Hawkes Bay Regional Resource Management Plan.

4.2 Required Servicing

If the proposed development is largely aviation and service related activities, only domestic wastewater will be generated. Site specific onsite wastewater systems can be designed to service each industry as they develop within the area. These systems will be required to be designed in accordance with HBRC guidelines Regional Resource Management Plan (RRMP) Rules 37 (Permitted) and 52 (Discretionary).

To optimise the use of the land to be rezoned, Opus recommends that the discharge field (s) be established in the adjacent allotment to the north that is currently held by the airport.

Should the development area look to extend in the future to the north, and/or the business park include "wet industries" then consideration should be given to the installation of a new pumped rising main to service the whole site, linked to the existing Council reticulated services. Such a scheme would require careful detailed design, and more upfront investment. The main benefit of the recirculated main option would be optimisation of the available land area for development.

5 Stormwater

The site is currently noted to be subject to inundation during the 1 in 100-year storm event, according to advice from the Hawkes Bay Regional Council (HBRC). The peak water level within the area during the 100-year storm event is modelled by HBRC to be approximately 20m RL, whilst the average existing ground level is only 19.75m RL. Hence flooding in peak storm events is expected under current conditions. HBRC recommends that additional modelling be undertaken to confirm the extents of inundation within the site and surrounding area, should the proposed development proceed.

If, as a result of future modelling, the flooding risk is confirmed, consideration should be given to elevating the new building platforms above the predicted maximum flood level by engineered earthworks. Inundation offsets will then need to be considered in detailed design.

5.1 Existing Servicing

At present, an open drain traverses the proposed development site. The drain has been estimated by Opus to have an average cross sectional area of 11m^2, at a grade of approximately 0.2%. On this basis, the existing swale is estimated to be able to carry up to 16m^3/s when flowing full. Anecdotal evidence suggests the drain flows near full during peak storm events.

5.2 Required Servicing

The proposed development adds additional flows from new roof and hardstand surfaces. Opus estimates the new flows to be approximately 0.55m^3/s during a 5 year 10-minute storm event, and 1.2m^3/s during a 100 year 10-minute storm event based on an 85% hardstand surface coverage and an overall development area of 3.74 hectare.

These flows could be incorporated into the total flow within the existing drain by providing an additional 600mm of base width.

Additional mechanisms to mitigate stormwater increases generated onsite could include the collection of rainwater into storage, for either slow release (stormwater attenuation), for use within industry or as an alternative firefighting supply.

If piping of the existing open channel drain was required, to reticulate the 5-year flow would need a large diameter pipe (Opus estimates at least an 825mm pipe, assuming this is laid at a similar grade to the existing open channel drain) with all exceedance events also directed towards secondary flow paths near to or above the buried drain.

Alternatively, the existing open channel drain could remain, and continue to provide passage for the existing overland flow through the area. Stormwater collected on the development site could be reticulated separately (using for example 450mm diameter pipes) from the site to a new discharge point downstream of the existing road crossing, thus benefiting not only the development area but the wider stormwater drainage system. Concepts such as this should be considered more closely in detailed design.

6 Recommendations

Based on the findings discussed above, Opus believes the proposed Wairoa Airport Business Park development can be appropriately serviced through a variety of mechanisms. These servicing options will need further consideration and refinement during detailed design.

7 Limitations

The factual data, interpretations and recommendations contained in this report pertain to a specific project as described in the report and are not applicable to any other project or site. If the project is modified in any significant way, or if the project is not initiated within eighteen months of the date of the report, Opus International Consultants should be given an opportunity to confirm that the recommendations are still valid.

Where conditions encountered at the site differ significantly from those anticipated in this report, either due to natural variability of subsurface conditions or development/construction activities, it is a condition of this report that Opus International Consultants be notified of the changes and provided with an opportunity to review the recommendations of this report. Recognition of changed soil conditions requires experience and is recommended that an experienced engineer be employed to visit the site with sufficient frequency to detect if conditions have changed significantly.

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Appendix G

Preliminary Geotechnical Assessment

OPUS

2-Y1300.DM/17/01

Wairoa Airport Plan

Preliminary Geotechnical Assessment

For Wairoa District Council

OPUS

2-Y1300.DM/17/01

Wairoa Airport Plan

Preliminary Geotechnical Assessment

For Wairoa District Council

Prepared By
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Reviewed By
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Approved for Release by
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Date: March 2017
Reference: 2-Y1300.DM
Status: Issue 1

Contents

1 Introduction

Opus International Consultants Ltd (the consultant) was engaged by Wairoa District Council (the Council) to carry out geotechnical investigations for the potential future development of Wairoa Aerodrome (the site). The site is located at the end of Airport Road, Wairoa.

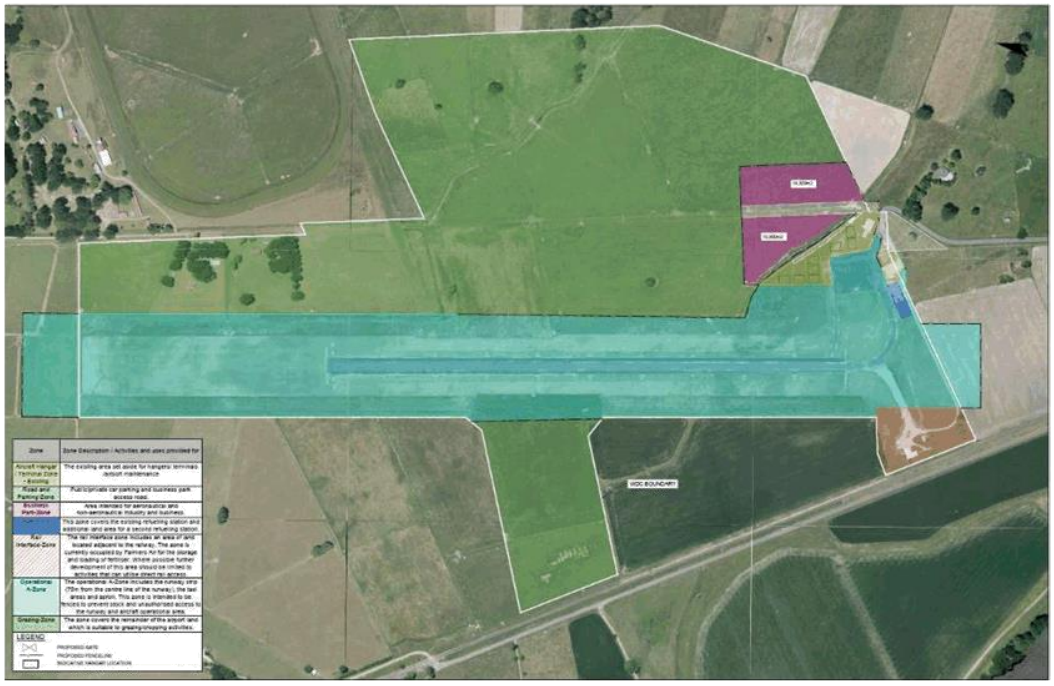


Figure 1 : Airport Internal Zoning Plan

2 This report

This report presents a preliminary geotechnical assessment of the site. This includes the results of a desktop review and site investigations.

This report in and of itself does not provide a suitability statement for any site development proposal (including the suitability of foundations proposed at the site). However, foundation designers may use this report to evaluate the site liquefaction hazard and near surface foundation conditions based on the information presented herein.

3 Desktop Study

The desktop study included consideration of: existing reports and unpublished geotechnical data for the site; available published geological maps; aerial photographs of the site; information published in Facing the Risks and the Hawke's Bay Emergency Management groups on-line

Hazard Maps. The pertinent information returned from this desktop study is presented in the following sections and the automatic report generated from the Hazard Maps web site is attached.

3.1 Geomorphology and Topography

The site is located on a flood plain in the lower reaches of the Wairoa River valley. The site is generally level, incised with two surface drains approximately 2 to 3 m in depth, as shown in Figures 2 and 3. A lower area of 1 to 2 m depth several metres wide runs north to south through the site. A shallow pond and rush bushes growing along the floor suggests this area is normally wet. The investigations reported herein were completed during very dry summer conditions.

Figure 2 Dry pond in shallow depression

Figure 3 Existing surface drain

3.2 Site Geology

The site is shown on several published geological maps and soil maps, the most current of which Mazengarb et al. (2000)[1] indicates that the site is located in the Wairoa syncline and the near surface is underlain by floodplain deposits of Holocene age (0 – 24 k years), being: poorly to moderately sorted gravel with minor sand and mud overlain by tephra; older beds are more deeply weathered.

3.3 Natural Hazard

The site was assessed by Opus for the following natural hazards:

- Seismic Hazard;
- Ground stability and Landform changes
- Flood Hazard and Meteorological Hazard;
- Volcanic Impact Hazard;

The following sections cover those hazards which are considered by Opus to be significant with respect to the site and the proposed development.

[1] Mazengarb, C; Spenden, I.G. (compliers); Geology of the Hawke's Bay Area; Institute of Geological & Nuclear Sciences; 1:250,000 geological map 6; 1 sheet + 60 p.; Lower Hutt, New Zealand, GNS Science.

3.3.1 Fault Rupture

The site is not shown to be crossed by any active or historic faults. The GNS New Zealand Geology[2] map identifies the nearest active fault as an unnamed fault about 20 km to the north east of the Site of unknown recurrence interval.

No fault avoidance zones are identified at the site on the on-line *Hazard Maps*. Therefore, ground rupture at the site due to seismic faulting is not expected.

3.3.2 Ground Shaking

An earthquake of moderate to high magnitude generated in the East Coast region could cause considerable ground shaking at the site, and can be expected to be experienced during the design life of any proposed building; therefore any proposed building should be appropriately designed to mitigate against the adverse effects of such potential ground shaking.

The on-line Hazards Maps show that shaking may be amplified at the site due to the underlying deposits of moderately to coarsely interlayered SILT, sandy SILT, silty SAND and SAND deposits (Wairoa River Sediments). For the purpose of design the ground shaking risk on the site is typical of that for the Wairoa river valley.

3.3.3 Seismic Liquefaction and Lateral Spreading

One of the more destructive secondary effects of earthquake shaking is liquefaction. Liquefaction typically occurs when loose, saturated cohesionless soils lose strength under earthquake or other applied cyclic loading. For a soil to liquefy it must also be saturated and so the level of the ground water table plays a critical role in liquefaction potential. Cohesive soils are not usually susceptible to liquefaction but may soften due to the earthquake stress loading. Sites susceptible to liquefaction may also undergo lateral spreading if a water way or free face is nearby.

The on-line *Hazards Maps* show a high liquefaction potential for this site.

3.3.4 Ground Stability and Landform changes

Aerial images from 1962, and 1979 available on the Retrolens website[3] were studied by Opus for evidence of geological hazards, and landform changes to the present day.

The imagery shows free surface water in the area 1962 that has largely disappeared in the 1979 imagery, showing the effect of surface drainage works that occurred in conjunction with the construction of the runway. The land beyond the runway is now grassed for agricultural use.

The overall profile of the water courses appears relatively consistent over the time period above. The presence of surface water historically indicates the land is susceptible to high ground water conditions and even flooding.

---

[2] Geological & Nuclear Sciences. *New Zealand Geology Web Map* webpage. Available on-line at http://data.gns.cri.nz/af/. Accessed February 2016.

[3] Local Government Geospartial Alliance (LGGA). Retrolens webpage. Sourced from http://retrolens.nz and licensed by LINZ CC-BY 3.0. Accessed February 2016

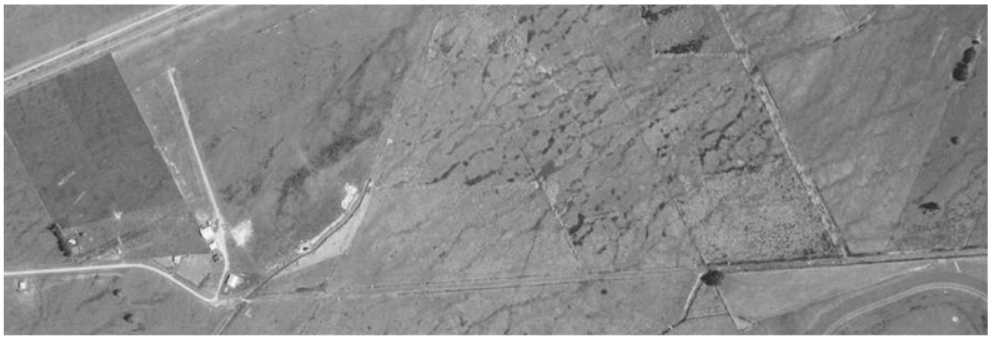


Figure 4 : Imagery September 1962

Figure 5 : Imagery September 1979

3.3.5 Extreme Rainfall

Facing the Risks indicates that the 142 year (this event was chosen by *Facing the Risks* corresponding to a 35% probability of occurring within a 50 year period) rainfall event is likely to see between 300 mm and 350 mm of rain fall at the site within any 24 hour period. This could lead to extensive, localised flooding, and overland flow conditions.

In general, the risk to the site due to extreme rainfall is not considered to be substantially more than the risk posed elsewhere near Wairoa. However, consideration during detailed design should be given to provide secondary flow paths so that stormwater/overland flows are directed away from points of concentration and buildings within the site.

3.3.6 Flood

The *Hazards Maps* show the 1% AEP level for river flood areas and 2% (1/50 year) AEP for floodplain risk areas. The *Hazards Maps* are indicative only but show that there is a 2% AEP flood risk at the site.

Flood mitigation and stormwater controls will need careful consideration during detailed design of any proposed development.

3.3.7 Extreme Winds

Facing the Risks and AS/NZS 1170.2:2011 discuss the general risks of sustained wind gusting as well as the concentrating effects of topographical features. The proposed subdivision is located on the Wairoa river valley, and the site is not considered to be in an exposed location.

3.3.8 Volcanic Impact Hazard

Whilst there are no active volcanoes in the Hawke's Bay region, volcanic ash erupted from volcanoes to the west and northwest can be expected to fall on the site. *Facing the Risks* estimates that 0-1 mm thick tephra falls can be expected once every 10-20 years, while 1-5 mm thick tephra falls can be expected every 100 years. This risk is considered to be low to medium in its impact, and consistent with the level of risk at other similar locations in the region.

4 Site Testing

On 18 January 2017 staff from Opus Napier completed site investigations including six mechanically excavated test pits (TPs), Dynamic Cone Penetration (DCP: Sala) and Hand Auger (HA) tests and four Cone Penetration Tests utilising a piezoelectric cone (CPTu), at the locations shown in Figure 6. Test Pit 4 was subsequently abandoned on direction by our Napier based archaeologist, due to the potential risk of damage to artefacts.

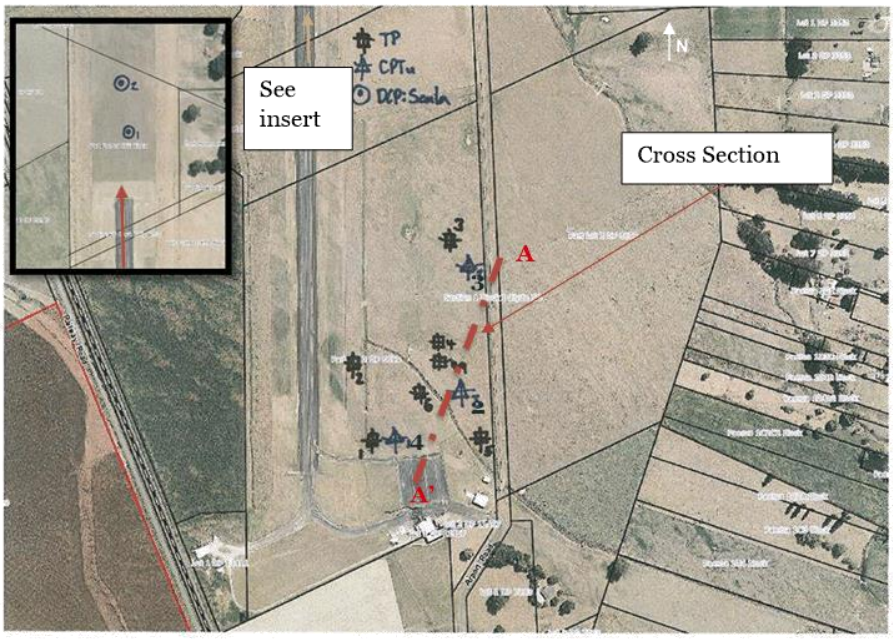


Figure 6 : Testing Location Plan

The bore logs of five wells drilled near the site obtained from the Hawkes Bay Regional Council were also used in the Opus desk top study.

DCP: Scala testing and hand held Shear Vanes were conducted where appropriate as part of the TP investigations to assist with characterisation of the near surface the soil strength and bearing capacity. No laboratory testing was conducted.

The results of the site testing and analysis are appended to this report. Further testing may be required during detailed design.

4.1 Liquefaction Analysis

The CPTu were terminated at a depths of approximately of 18m. Utilising a commercial grade electronic dip meter, the groundwater level was measured between depths of 1.4 -2.0m below the existing ground surface immediately following completion of the CPTu. The CPTu data was analysed utilising the computer software CLiq[4]. The liquefaction analysis results are factual only, and no engineering judgement has been applied other than as explicitly described within this report.

For the liquefaction analysis, AS/NZS 1170:2002 was applied to determine the design earthquake return period, whilst the *Bridge Manual*[5] was applied to determine the design earthquake magnitude (*M*) and peak ground acceleration (PGA) values. The *M* and PGA values developed via application of the *Bridge Manual* are considered to be more appropriate for liquefaction analyses than those developed via application of AS/NZS 1170:2004 alone because the *Bridge Manual* values are not magnitude-weighted values. The following were assumed for this analysis:

- A site Soil Class of "C" (Shallow Soil);
- Near fault factor N(T,D) of 1.0
- An Importance Level (IL) 2 and 3 based on Table 3.2 of AS/NZS1170.0:2002; and
- A building Design Life of 50 years.

Based on this application, the parameters presented in Table 1 were determined for the site for Ultimate Limit State (*ULS*) and Serviceability Limit State (*SLS1*) design earthquakes

Table 1: Earthquake Shaking

Limit State	Return Period	Design Earthquake Magnitude	Design Earthquake PGA
SLS1	25 years	6.2	0.09 g
ULS_{IL2}	500 years	6.4	0.36 g
ULS_{IL3}	1000 years	6.5	0.47 g

Default assessment values were utilised within CLiq during the liquefaction analysis. These include, but are not limited to, assuming the existing ground is level, assuming the groundwater level during earthquake shaking is equivalent to the groundwater level observed during the site

[4] GeoLogismiki (2006). *CLiq (version 2.0.6.83)* [Software]. Available from http://www.geologismiki.gr/
[5] NZ Transport Agency. *Bridge Manual.* 3rd Ed. Amendment 3. Manual No. SP/M/022. May 2016.

testing, utilising the Boulanger & Idriss (2014)[6] calculation method, utilising a soil behaviour type index (I_C) cut-off of 2.6, applying clean sand and overburden corrections, automatic calculations for soil unit weights and applying automatic corrections to the input data at soil transition layers. Refer to Robertson & Wride (1998)[7] for the definition of I_C and for a discussion on its applications. Site-specific calibration of the fines content estimated by the Boulanger & Idriss (2014) method was not conducted. Therefore, the fine fitting parameter (C_{FC}) value was set to zero. The index parameters referred to as "liquefaction-induced free-field vertical volumetric strain" were estimated by CLiq for the *SLS1* and *ULS* design seismic events using the method of Zhang et al. (2002)[8].

The liquefaction analysis generally indicates that interbedded SAND, silty SAND, sandy SILT layers are potentially liquefiable. CLAY and silty CLAY layers may be susceptible to cyclic softening, but any potential earthquake-induced strain in these layers is not included in this liquefaction analysis at this stage. Volcanic soils (i.e. Pumice SAND) may undergo liquefaction but there is currently limited research on the behaviour of these soils and so is not included in this analysis.

Table 2 presents the liquefaction-induced vertical free-field volumetric strain index values estimated for the SLS and ULS design earthquakes.

Table 2: Summary of Liquefaction Analysis Results

Description	*SLS1*	*ULS*
CPT-2 (assumed groundwater table at 1.98mbgl)	Liquefaction not anticipated	90mm
CPT-3 (assumed groundwater table at 1.66mbgl)	Liquefaction not anticipated	20mm
CPT-4 (assumed groundwater table at 1.40mbgl)	Liquefaction not anticipated	50mm

NZGS Guidelines (Module 3, Table 5.1) provides a general guidance of the performance level of the liquefied deposits. In the extreme ULS event the performance level at the site is likely to be L2 and to have a moderate effect with the characteristics described as "liquefaction occurs in layers of limited thickness (small proportion of the deposit, say 10 percent or less) and lateral extent; ground deformation results relatively small in differential settlements."

[6] Boulanger, R.W. and Idriss, I.M. *CPT and SPT Based Liquefaction Triggering Procedures*. University of California at Davis Center for Geotechnical Modelling Report No. UCD/CGM-14/01. April 2014.

[7] Robertson, P.K. and Wride, C.E. (1998). "Evaluating cyclic liquefaction potential using the cone penetrometer test". *Canadian Geotechnical Journal*. Vol. 35. No. 3. pp. 442-459.

[8] Zhang, G., Robertson, P.K. and Brachman, R.W.I. (2002). "Estimating Liquefaction induced Ground Settlements from CPT for Level Ground". *Canadian Geotechnical Journal*, 39(5): 1168-1180.

4.2 Ground Model

The information gained from the desktop studies and the recent site investigations and testing have been used to develop the indicative ground model for the soils up to an approximate depth of 20 m at the site given in Table 3.

Table 3 Ground Model

Layer No.	Approximate Thickness of Layer (m)	General Soil Description	Typical Consistency (DCP blows/100 mm) [Peak / Remoulded Shear Strength, in kPa]
1	0.4	Topsoil	-
2	0.7-1.4	Sandy SILT, dry, non-plastic	Stiff to very stiff (3-8 blows/100 mm) [200+ kPa]
3	0.15- 0.3	Tephra (Pumice SAND), moist to saturated	Medium dense to very dense (4 to 24+ blows/100 mm)
4	0.6 – 1.5 +	Clayey SILT/Silty CLAY, wet, slightly plastic, with wood fragments in upper layer	Soft (1 to 4 blows/100 mm)
5	0.3	Tephra (Pumice SAND), saturated	Medium dense
6	3 - 12	CLAY	Soft (1 to 4 blows/100 mm) qt <1 MPa
7	0 – 13+	Interbedded CLAY & silty CLAY, Silty SAND and Sandy SILT	qt 1 - 8 MPa
8	0 - 12	CLAY	qt <1 MPa
9	4+	Silty SAND and Sandy SILT	qt 1 - 4 MPa

The Opus investigations indicate that the depth to the water table is between approximately 1.2 m to 2.2m, following very dry summer conditions. This is expected to rise in winter and following heavy rainfall events.

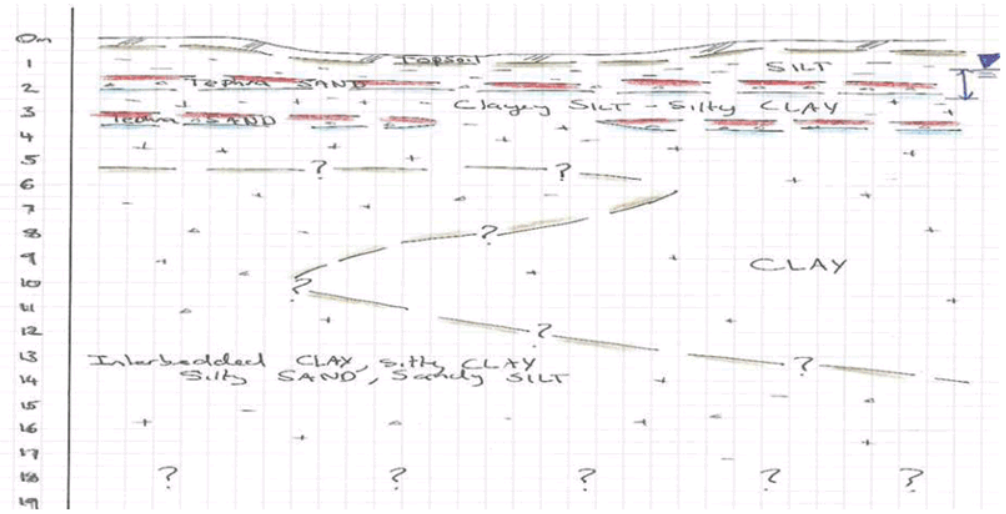


Figure 7 Indicative soil layering of Cross Section A-A'

The general soil profile that could be expected (refer Figure 7) varies at the site but is consistent with the geological maps for the area. The well logs in the area, available online on the HBRC intramaps website, indicate that layers of clays, sands and gravels may continue for depths in excess of 50 m but SILTSTONE may be encountered earlier at an approximate depth of 30m.

4.3 Bearing Capacity

For light timber structures "Good ground" as defined in NZS3604:2011 is unlikely to be present at the site, given the depths to and variations in the groundwater levels, and presence of expansive moisture sensitive fine grained soils in the near surface subsoils.

Site Specific Engineering (SED) foundation design will be required for new building foundations. This can include braced shallow piles supporting elevated timber floors, or near surface ground improvement options (e.g. geogrid reinforced granular hardfill) supporting RibRaft™ slab on ground foundations.

4.4 Settlement

The soft, wet subsoils encountered during the investigations indicate that settlement may be a significant detailed design issue. The induced soil settlement depends on the new loading to occur from structures or embankments (or both).

If the site needs to be built up by engineered earthworks for example to mitigate flooding effects time related pre-loading of the soil will be required to help mitigate future settlement effects.

4.5 Pavement Subgrade

While airport pavements have different loadings and requirements than for road pavement the DCP: Scala testing provides useful information to guide future pavement works.

Two Scala penetrometer conducted at the end of the runway yielded a minimum blow count of 8 per 100mm at 0.8m depth correlating with a design CBR of 8%, following dry summer conditions.

During the site visit the stock owner informed the Opus staff that in winter months the grass end of the main runway becomes' boggy' and the ground was observed to be rough and slightly rutted.

This suggests that future pavement subgrade design values could be much less than the reported CBR of 8%, requiring careful consideration during detailed design.

5 Recommendations

From a geotechnical perspective, any future development at the site must consider the following:

- The site subsoils may become saturated during wet periods and as result of flooding. Site development should carefully manage stormwater and the flood risk. Soil bearing capacity is reduced in saturated soils
- Development options, specifically infrastructure and underground services, should consider the likely effects of moderate soil liquefaction during an extreme earthquake event
- Bearing capacity of the soil for shallow foundations are unlikely to be on "Good Ground" in accordance with NZS 3604:2011. Building foundations will need Specific Engineering Design
- Embankment and overall site level increasing earthworks should involve pre-loading to mitigate future settlement effects
- New pavements will encounter soft, wet subgrade conditions, the effects of which will need to be mitigated by appropriate design and construction methods.

6 Limitations

The factual data, interpretations and recommendations contained in this report pertain to a specific project as described in the report and are not applicable to any other project or site. If the project is modified in any significant way, or if the project is not initiated within eighteen months of the date of the report, Opus International Consultants should be given an opportunity to confirm that the recommendations are still valid.

Where conditions encountered at the site differ significantly from those anticipated in this report, either due to natural variability of subsurface conditions or construction activities, it is a condition of this report that Opus International Consultants be notified of the changes and provided with an opportunity to review the recommendations of this report. Recognition of changed soil conditions requires experience and is recommended that an experienced geotechnical engineer be employed to visit the site with sufficient frequency to detect if conditions have changed significantly.

7 Appendix A

Site testing results

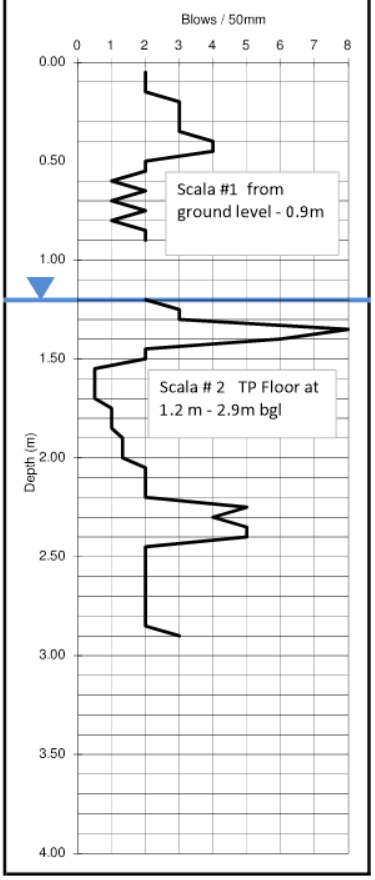
TEST PIT TEST REPORT

OPUS

Project :	**Wairoa Airport Development**
Location :	**39°054.9 S 177°24'21.3E 6m WGS 1984**
Client :	**Wairoa District Council**
Contractor :	**Opus - Napier**
Test number :	**1**
Shear vane number :	**DR955**
Shear vane correction :	**1.655**
Water level (m):	**1.2**
Reduced level (m):	**Existing Ground**

Project No :	**2-Y1300.DM**
Task No :	**001WA**
Client Ref No :	

Scala Penetrometer



Test Results

Depth (m)	Shear Strength (kPa)	Soil Description
0.35		Topsoil, dark brown, stiff, dry
0.75	200 +	Sandy SILT, grey with orange mottles, stiff, dry, non plastic
1.20		Medium SAND, grey brown, medium dense, wet, (Pumice), charcoal fragmen
1.50		as above but fine
2.5+ End Test pit - Filling with water		SILT, blue grey, soft, wet, low plasticity

Test Methods

Determination of Penetration Resistance of a Soil, NZS 4402 : 1988, Test 6.5.2 Shear Strength using a Hand Held Shear Vane: NZ Geotechnical Soc Inc 8/2001	Field Descriptions of Soils and Rocks by NZ Geotechnical Society Dec 2005

Date tested : 18/01/17
Date reported : 24/01/17

Approved **C.Hopkins**

Designation : *Geotechnical Technician*
Date : 30/01/17

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Website www.opus.co.nz

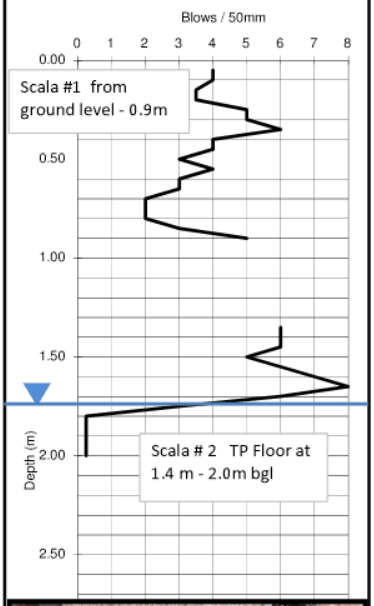
TEST PIT TEST REPORT

OPUS

Project :	**Wairoa Airport Development**
Location :	**39°051.3 S 177°24'19.6E 6m WGS 1984**
Client :	**Wairoa District Council**
Contractor :	**Opus - Napier**
Test number :	**2**
Shear vane number :	**DR955**
Shear vane correction :	**1.655**
Water level (m):	**1.75**
Reduced level (m):	**Existing Ground**

Project No :	**2-Y1300.DM**
Task No :	**001WA**
Client Ref No :	

Scala Penetrometer



Test Results

Depth (m)	Shear Strength (kPa)	Soil Description
0.38		Topsoil, dark brown, stiff, dry
0.65		Course SAND, orange grey, dense, moist, (Pumice)
1.20		Medium SAND, grey , medium dense, wet, (Pumice), charcoal fragments, as above but fine
1.75		
2.00		SILT, blue grey, soft, wet, low plasticity, preserved wood
2.70		SILT, blue grey, soft, wet, low plasticity,
2.90		Medium SAND, grey , medium dense, saturated, (Pumice)
3.3+		SILT, blue grey, soft, wet, low plasticity,
End at 3.3m at target depth		

Test Methods

Determination of Penetration Resistance of a Soil, NZS 4402 : 1988, Test 6.5.2 Shear Strength using a Hand Held Shear Vane: NZ Geotechnical Soc Inc 8/2001	Field Descriptions of Soils and Rocks by NZ Geotechnical Society Dec 2005

Date tested : 18/01/17
Date reported : 24/01/17

Approved **C.Hopkins**

Designation : *Geotechnical Technician*
Date : 30/01/17

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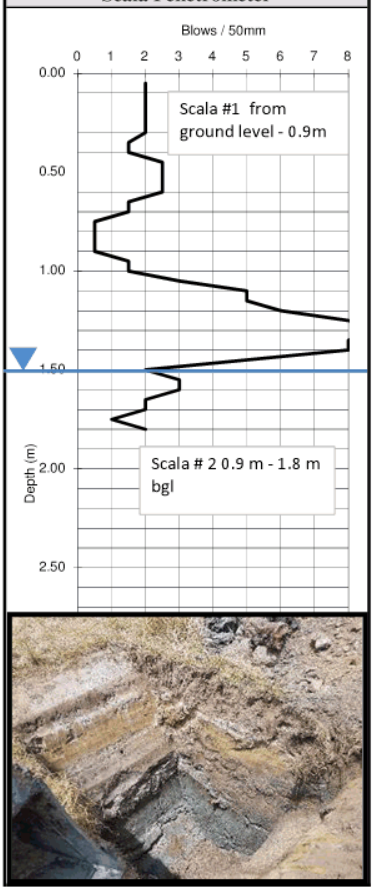
TEST PIT
TEST REPORT

OPUS

Project :	**Wairoa Airport Development**
Location :	**39°046.1 S 177°24'25.5E 4m WGS 1984**
Client :	**Wairoa District Council**
Contractor :	**Opus - Napier**
Test number :	**3**
Shear vane number :	**DR955**
Shear vane correction :	**1.655**
Water level (m):	**1.5**
Reduced level (m):	**Existing Ground**

Project No :	**2-Y1300.DM**
Task No :	**001WA**
Client Ref No :	

Scala Penetrometer



Test Results

Depth (m)	Shear Strength (kPa)	Soil Description
0.35		Topsoil, brown, stiff, dry
0.45		Fine SAND, light grey, medium dense, dry, (Pumice)
0.85		SILT, light brown, firm, moist, non plastic
0.95		SILT, brown, soft, wet, non plastic, (paleo topsoil?)
1.40		Medium fine SAND, grey brown, dense, moist, charcoal fragments, (Pumice)
1.45		SILT, blue grey, soft, wet, low plasticity, preserved wood
3.10		SILT, blue grey, soft, wet, low plasticity,
End at 3.1m at target depth		

Test Methods

Determination of Penetration Resistance of a Soil, NZS 4402 : 1988, Test 6.5.2	Field Descriptions of Soils and Rocks by
Shear Strength using a Hand Held Shear Vane: NZ Geotechnical Soc Inc 8/2001	NZ Geotechnical Society Dec 2005

Date tested : 18/01/17
Date reported : 24/01/17

Approved **C.Hopkins**

Designation : *Geotechnical Technician*
Date : 30/01/17

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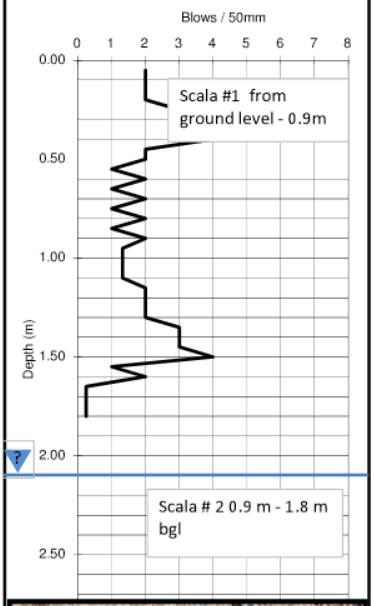
TEST PIT TEST REPORT

OPUS

Project :	**Wairoa Airport Development**
Location :	**39°051.6 S 177°24'25.0E 4m WGS 1984**
Client :	**Wairoa District Council**
Contractor :	**Opus - Napier**
Test number :	**4a**
Shear vane number :	**DR955**
Shear vane correction :	**1.655**
Water level (m):	**Some seepage at 2.1m**
Reduced level (m):	**Existing Ground**

Project No :	**2-Y1300.DM**
Task No :	**001WA**
Client Ref No :	

Scala Penetrometer



Test Results

Depth (m)	Shear Strength (kPa)	Soil Description
0.20		Topsoil, brown, stiff, dry
0.45		SILT, grey, stiff, dry, non-plastic
0.70		Course SAND, whitish grey, medium dense, dry (Pumice)
1.25		Medium SAND, grey brown, medium dense, moist, (Pumice)
1.60		SILT, blue grey, soft, wet, low plasticity, preserved wood
2.80+		SILT, blue grey, soft, wet, low plasticity,
		End at 2.8m at target depth

Test Methods	
Determination of Penetration Resistance of a Soil, NZS 4402 : 1988, Test 6.5.2 Shear Strength using a Hand Held Shear Vane: NZ Geotechnical Soc Inc 8/2001 Field Descriptions of Soils and Rocks by NZ Geotechnical Society Dec 2005	Note: TP4 was not completed as directed by archaeologist

Date tested : 18/01/17
Date reported : 24/01/17

Approved **C.Hopkins**

Designation : *Geotechnical Technician*
Date : 30/01/17

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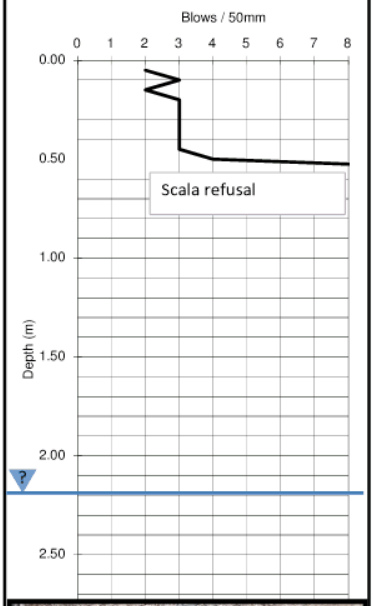
TEST PIT TEST REPORT

OPUS

Project :	**Wairoa Airport Development**
Location :	**39°054.6 S 177°24'27.5E 4m WGS 1984**
Client :	**Wairoa District Council**
Contractor :	**Opus - Napier**
Test number :	**5**
Shear vane number :	**DR955**
Shear vane correction :	**1.655**
Water level (m):	**Some seepage at 2.2m**
Reduced level (m):	**Existing Ground**

Project No :	**2-Y1300.DM**
Task No :	**001WA**
Client Ref No :	

Scala Penetrometer



Test Results

Depth (m)	Shear Strength (kPa)	Soil Description
0.25		Topsoil, brown, stiff, dry
0.40		Sandy SILT, grey orange mottles, stiff, dry, non-plastic
0.60		Course SAND, whitish grey, dense, dry (Pumice)
0.90		As above but light brown
1.35		Fine SAND, grey, dense, moist, (Pumice)
1.50		SILT, blue grey, soft, wet, low plasticity, preserved wood
1.90		SILT, blue grey, soft, wet, low plasticity,
2.20		Medium SAND, brown, medium dense, saturated
		SILT, blue grey, soft, wet, low plasticity,
		End at 3.1m at target depth

Test Methods

Determination of Penetration Resistance of a Soil, NZS 4402 : 1988, Test 6.5.2 Shear Strength using a Hand Held Shear Vane: NZ Geotechnical Soc Inc 8/2001	Field Descriptions of Soils and Rocks by NZ Geotechnical Society Dec 2005

Date tested : 18/01/17
Date reported : 24/01/17

Approved **C.Hopkins**

Designation : *Geotechnical Technician*
Date : 30/01/17

PF-LAB-061 (30/05/2013)

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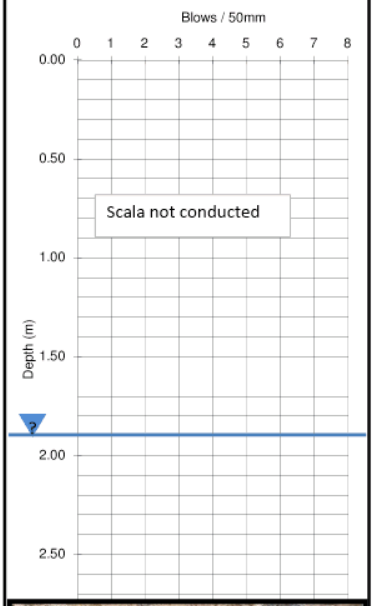
TEST PIT
TEST REPORT

OPUS

Project :	**Wairoa Airport Development**
Location :	**39°052.6 S 177°24'23.7E 4m WGS 1984**
Client :	**Wairoa District Council**
Contractor :	**Opus - Napier**
Test number :	**6**
Shear vane number :	**DR955**
Shear vane correction :	**1.655**
Water level (m):	**Some seepage from 1.9m**
Reduced level (m):	**Existing Ground**

Project No :	**2-Y1300.DM**
Task No :	**001WA**
Client Ref No :	

Scala Penetrometer



Test Results

Depth (m)	Shear Strength (kPa)	Soil Description
0.25		Topsoil, brown, stiff, dry
0.55		Medium SAND / SILT mix, grey brown, stiff, dry, non-plastic
0.80		Medium SAND, brown, medium dense, moist, (Pumice Sand)
1.30		Medium SAND, brown, medium dense, moist, (Pumice Sand)
1.60		Fine SAND, grey, dense, wet, (Pumice Sand)
1.90		Fine SAND, grey, dense, wet, (Pumice Sand)
2.30		SILT, blue grey, soft, wet, low plasticity, preserved wood
2.60		SILT, blue grey, soft, wet, low plasticity,
2.90		Medium SAND, grey, medium dense, moist, (Pumice Sand)
3.00+		SILT, blue grey, soft, wet, low plasticity,
End TP at 3.0m at target		

Test Methods

Determination of Penetration Resistance of a Soil, NZS 4402 : 1988, Test 6.5.2 Shear Strength using a Hand Held Shear Vane: NZ Geotechnical Soc Inc 8/2001	Field Descriptions of Soils and Rocks by NZ Geotechnical Society Dec 2005

Date tested : 18/01/17
Date reported : 24/01/17

Approved **C.Hopkins**

Designation : *Geotechnical Technician*
Date : 30/01/17

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Website www.opus.co.nz

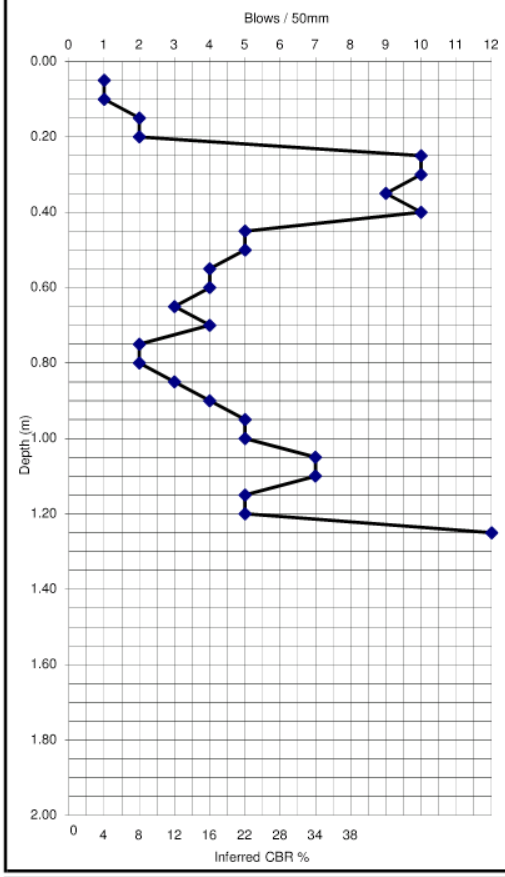
SCALA PENETROMETER TEST REPORT

OPUS

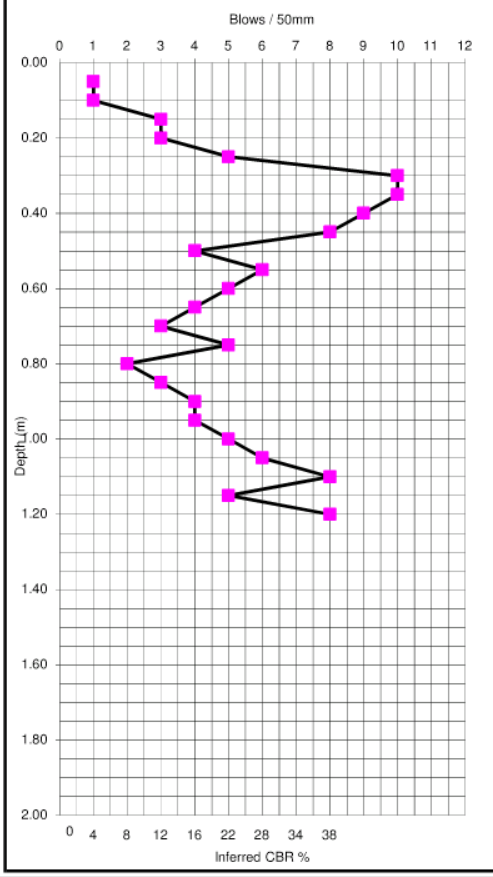
Project :	**Wairoa Airport Development**
Location :	**39 00 23.3 S 177 24 14.8 E and**
Client :	**Wairoa District Council**
Contractor :	**Opus - Napier**
Water level (m):	**Not established**
Reduced level (m):	**Existing ground**

Project No :	**2-Y1300.DM**
Lab Ref No :	**001WA**
Client Ref No :	

Scala Penetrometer 1



Scala Penetrometer 2



Test Methods	Notes
Determination of Penetration Resistance of a Soil, NZS 4402 : 1988, Test 6.5.2 Inferred CBR values taken from Austroads Pavement Design Manual 2004	

Date tested : 18/01/17
Date reported : 01/02/17

Approved **C.Hopkins**

Designation : *Geotechnical Technician*
Date : 01/02/17

PF-LAB-062 (30/05/2013)

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8 Appendix B

Liquefaction Analysis Outputs

Opus International Consultants Ltd
Opus House, 6 Ossian Street
Ahuriri
Napier 4110

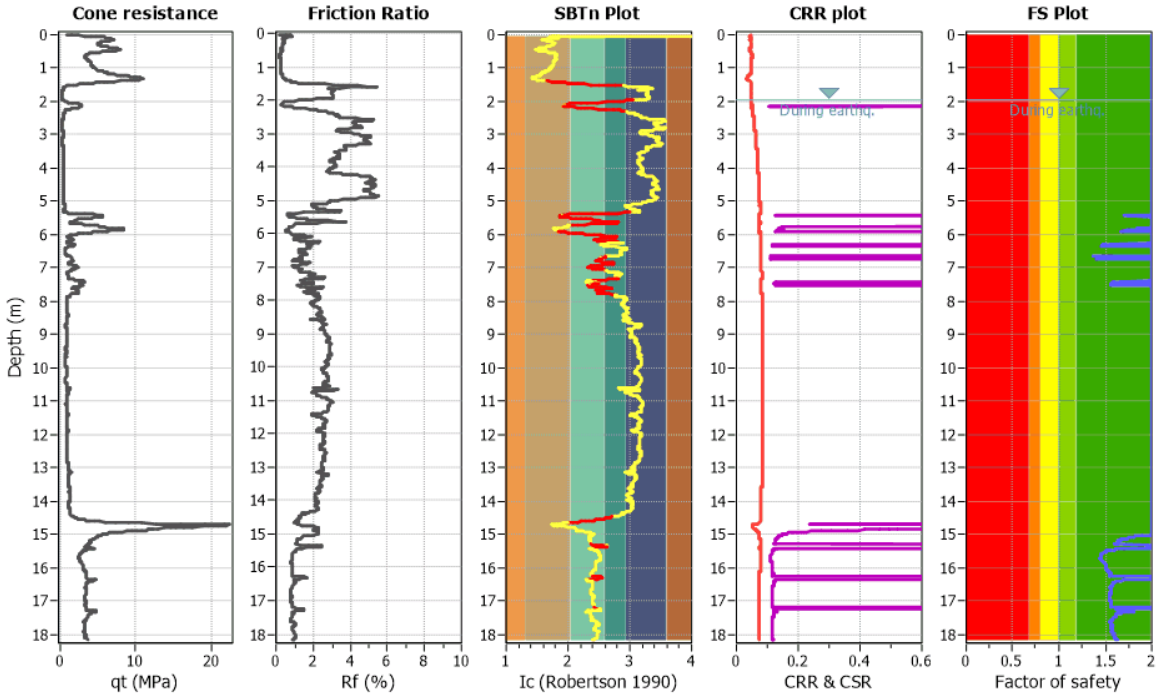
LIQUEFACTION ANALYSIS REPORT

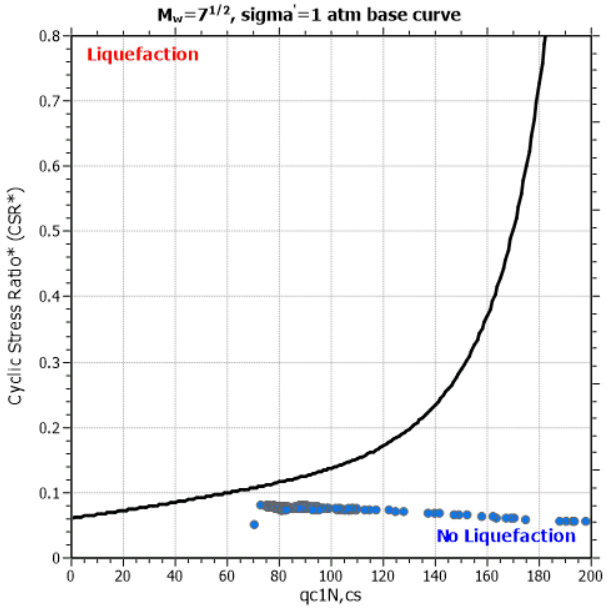
Project title : Liquefaction Assessment **Location : Wairoa Aerodrome**

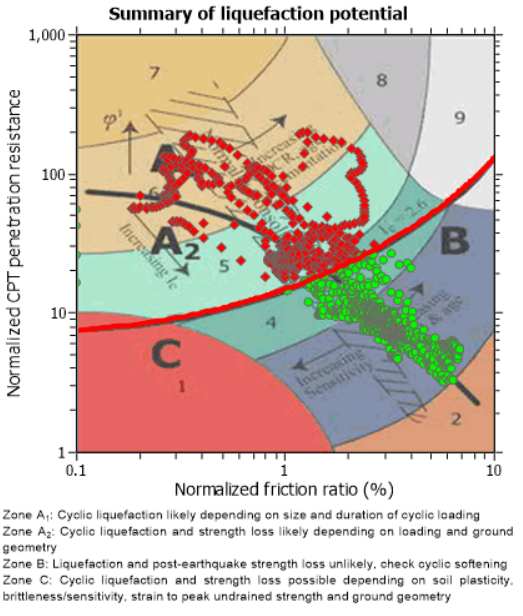
CPT file : CPT-2_SLS_6.2M_0.09g

Input parameters and analysis data

Analysis method:	B&I (2014)	G.W.T. (in-situ):	1.98 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	1.98 m	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.20	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method
Peak ground acceleration:	0.09	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		





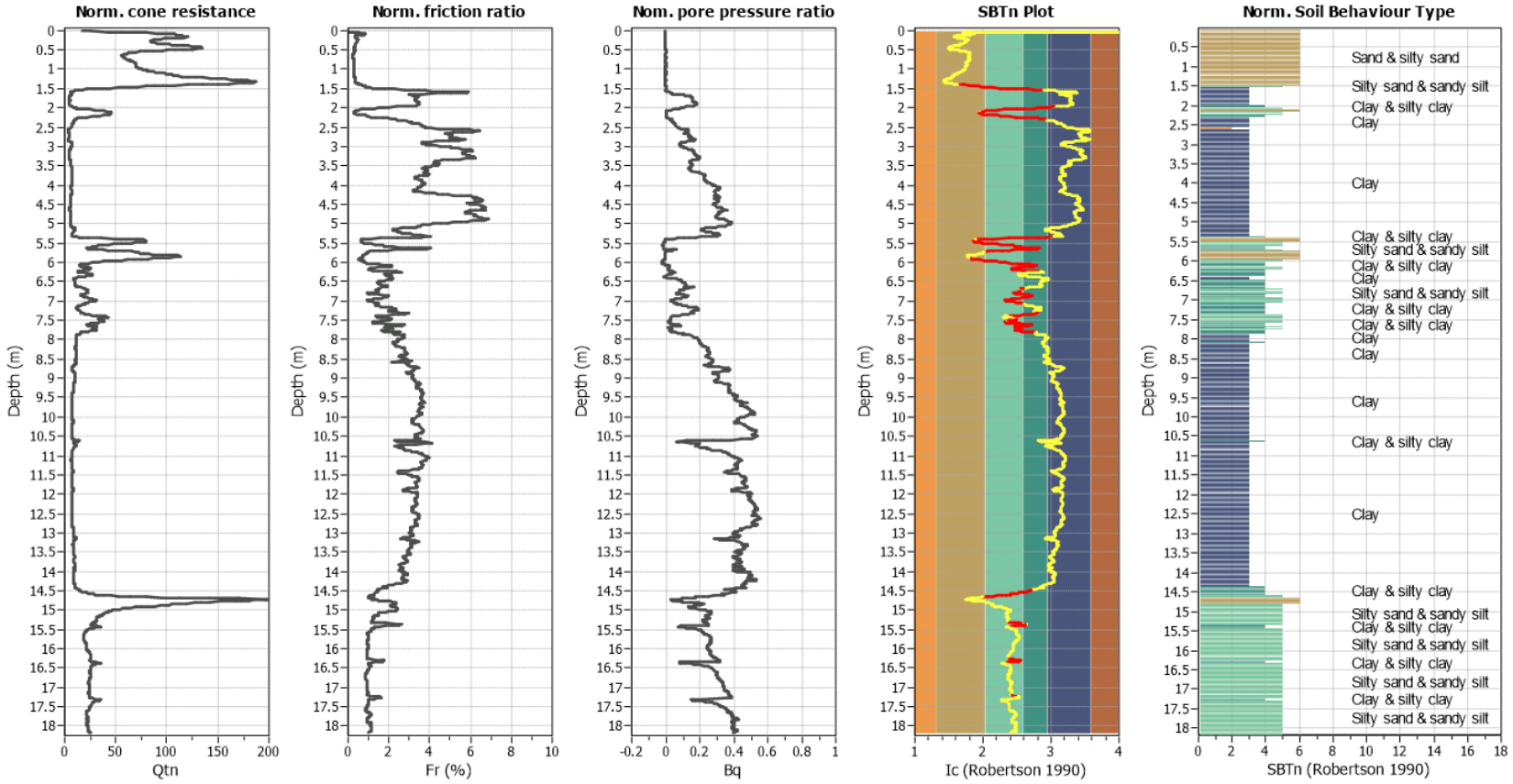


Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

This software is licensed to: OPUS

CPT name: CPT-2_SLS_6.2M_0.09g

CPT basic interpretation plots (normalized)



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.98 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.20	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.09	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.98 m	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 4:59:26 p.m.

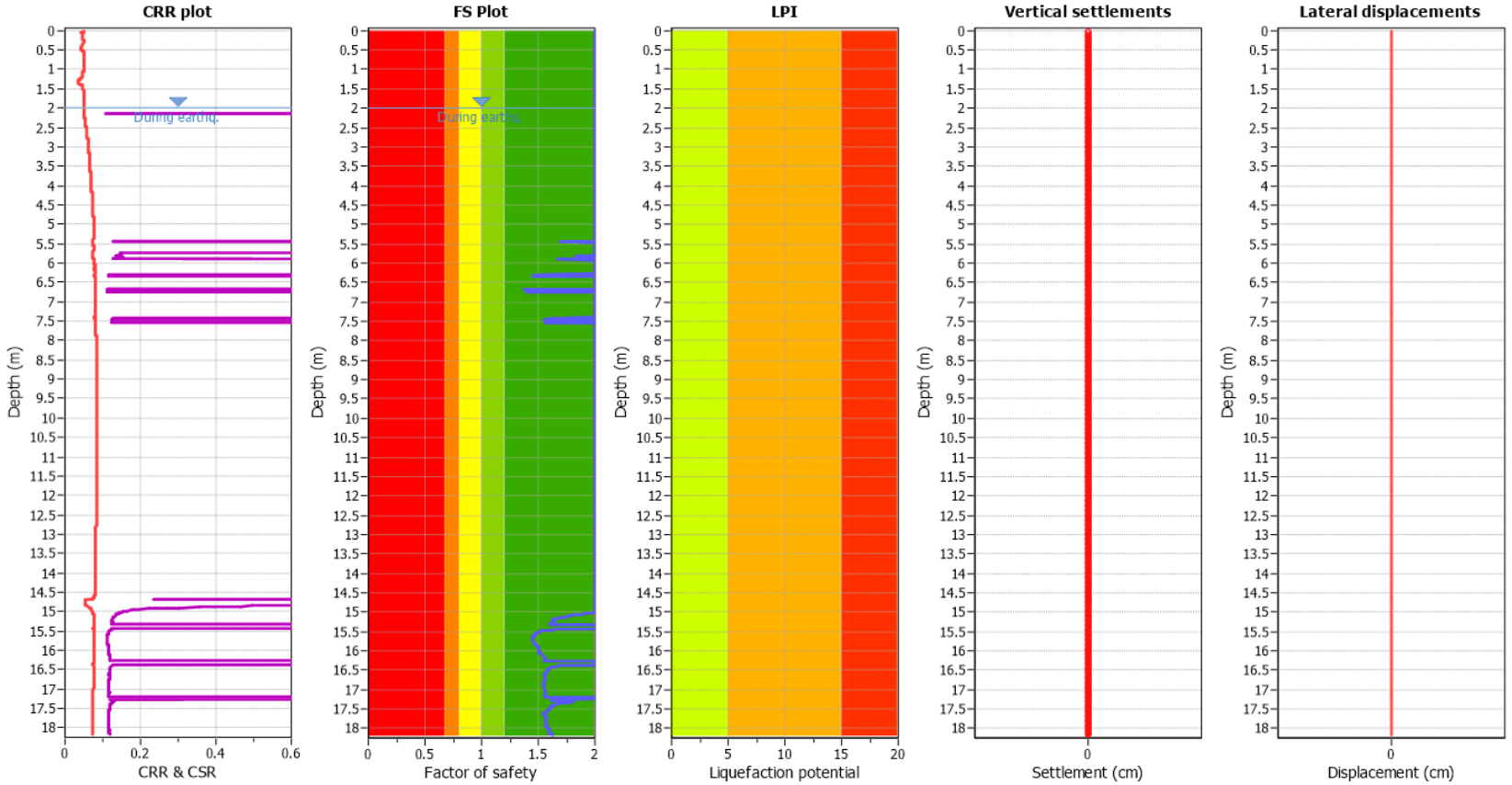
Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT Data.clq

2

This software is licensed to: OPUS

CPT name: CPT-2_SLS_6.2M_0.09g

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.98 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.20	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.09	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.98 m	Fill height:	N/A	Limit depth:	N/A

F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 4:59:26 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT Data.clq

3

Opus International Consultants Ltd
Opus House, 6 Ossian Street
Ahuriri
Napier 4110

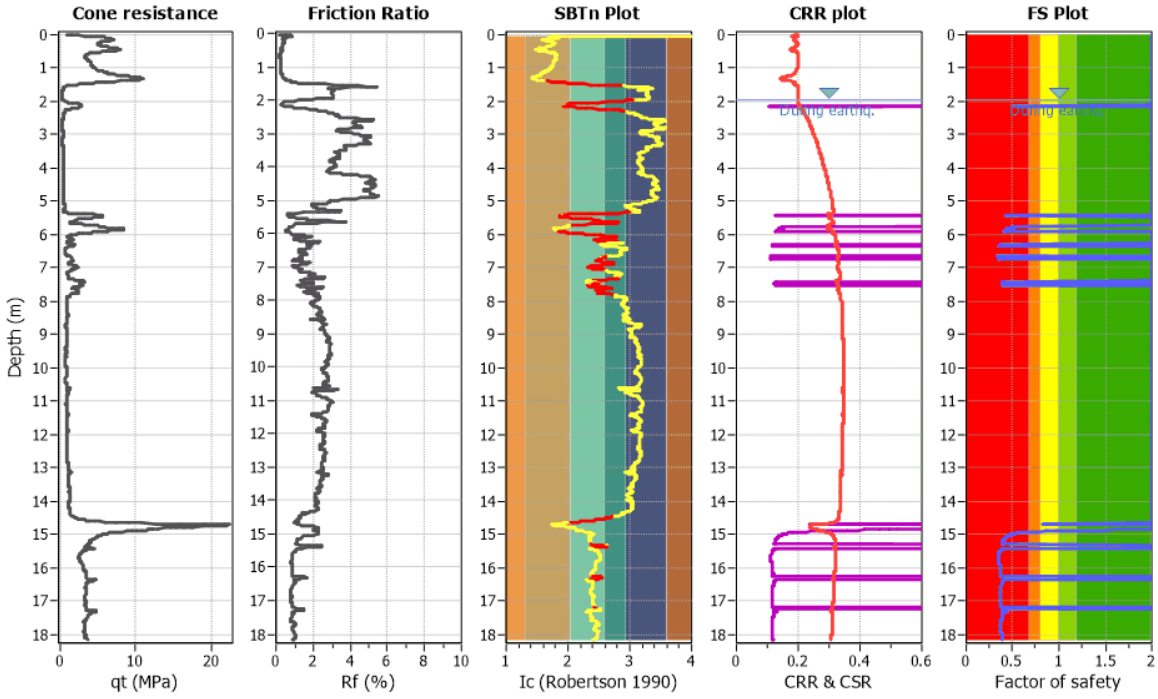
LIQUEFACTION ANALYSIS REPORT

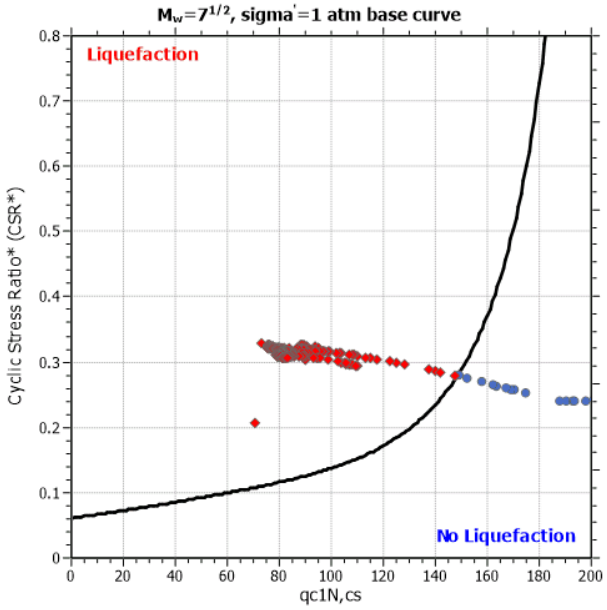
Project title : Liquefaction Assessment **Location : Wairoa Aerodrome**

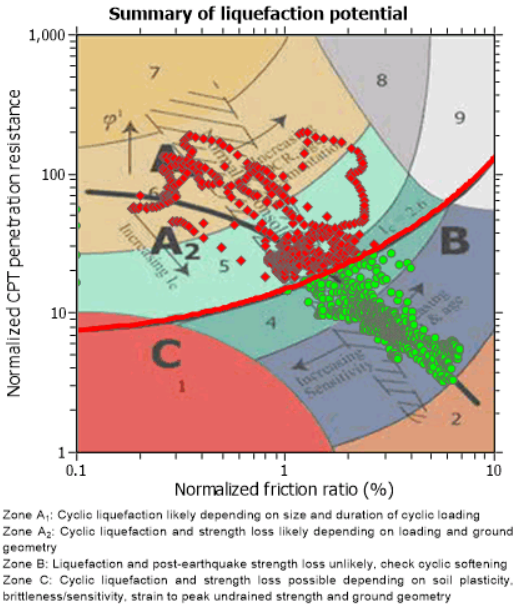
CPT file : CPT-2_ULS-L2_6.4M_0.36g

Input parameters and analysis data

Analysis method:	B&I (2014)	G.W.T. (in-situ):	1.98 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	1.98 m	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.40	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method
Peak ground acceleration:	0.36	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		







Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

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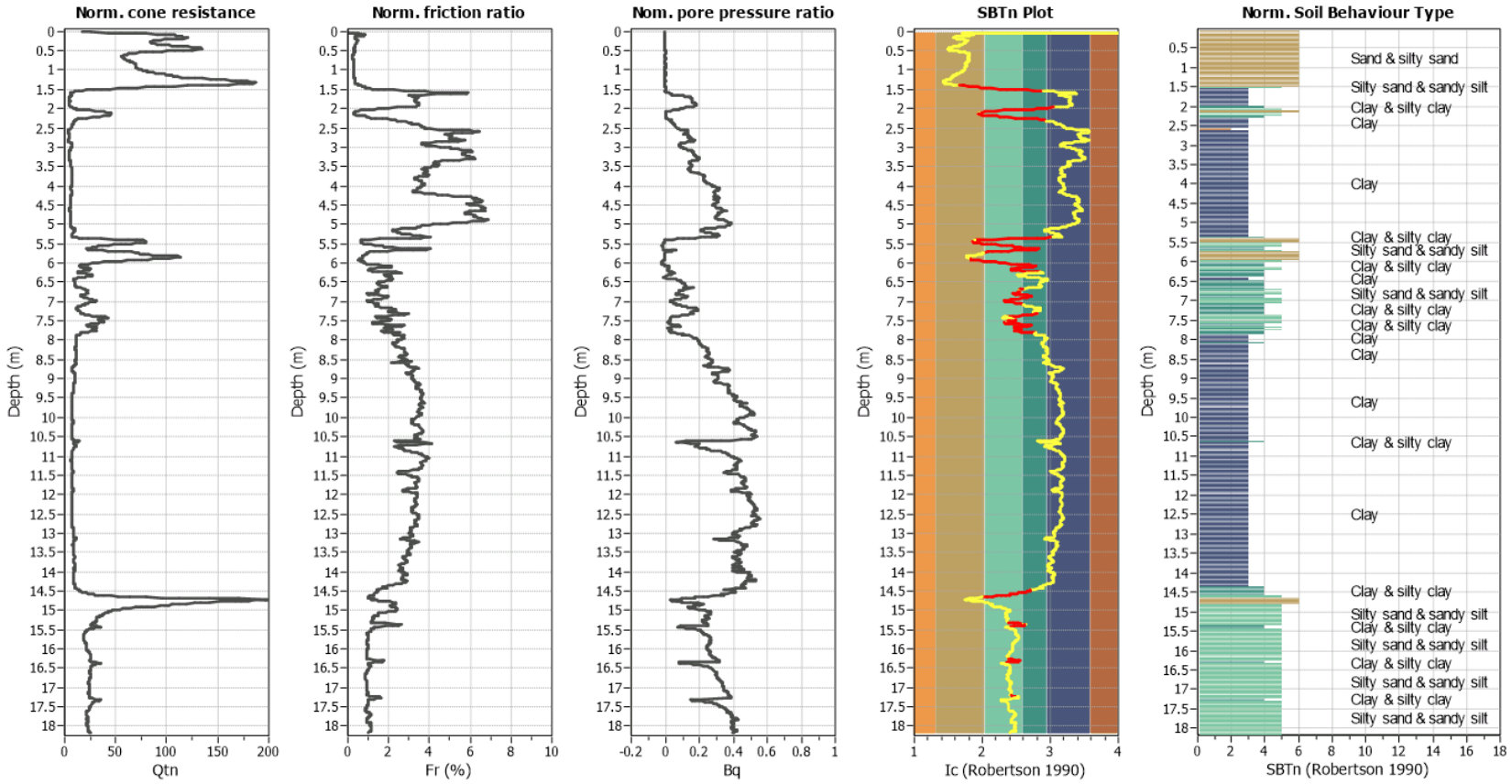
CPT name: CPT-2_ULS-L2_6.4M_0.36g

CPT basic interpretation plots (normalized)



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.98 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.40	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.36	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.98 m	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 4:59:27 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT Data.clq

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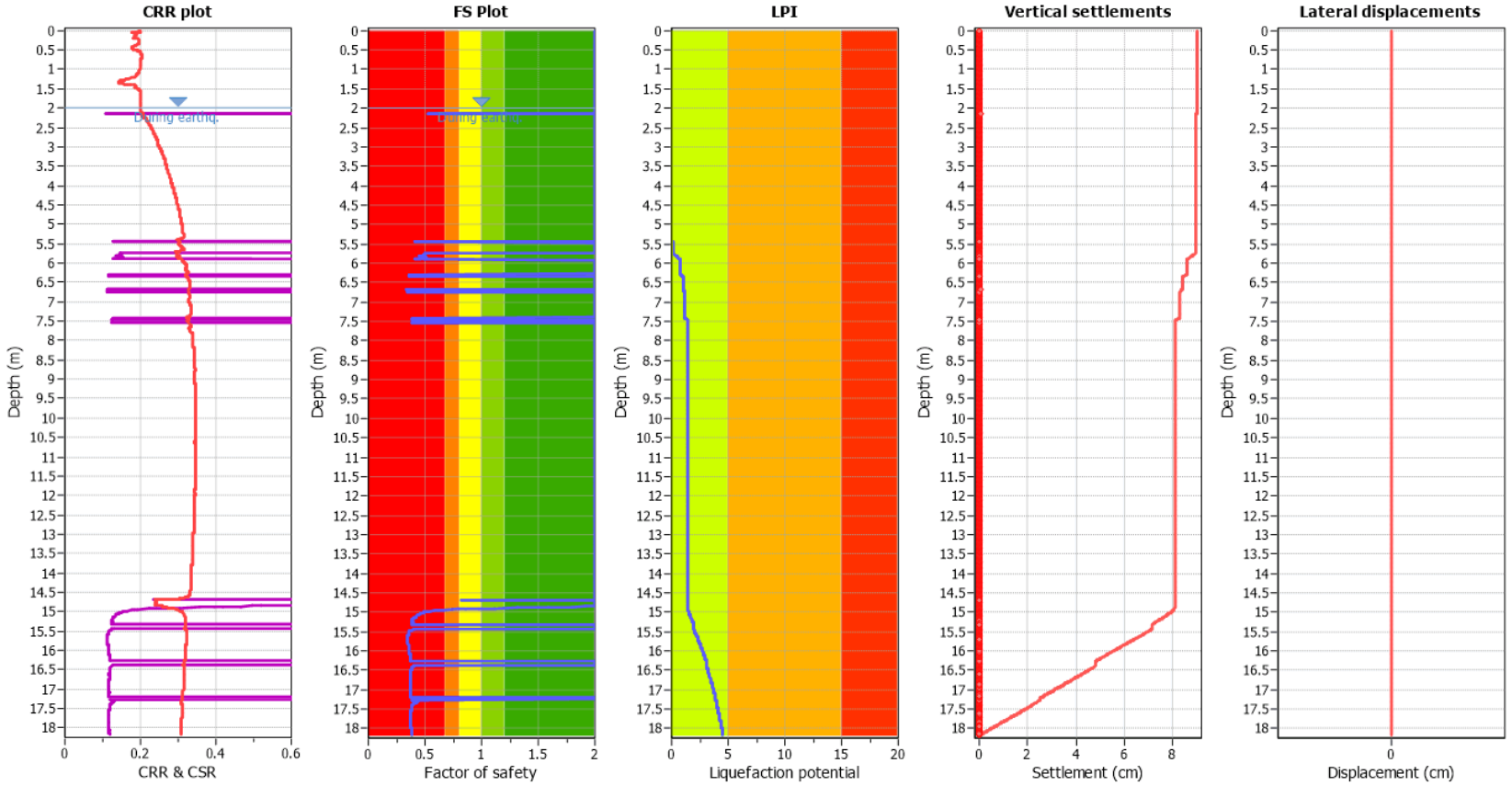
This software is licensed to: OPUS

CPT name: CPT-2_ULS-L2_6.4M_0.36g

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.98 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.40	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.36	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.98 m	Fill height:	N/A	Limit depth:	N/A

F.S. color scheme
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme
- Very high risk
- High risk
- Low risk

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 4:59:27 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT Data.clq

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Ahuriri
Napier 4110

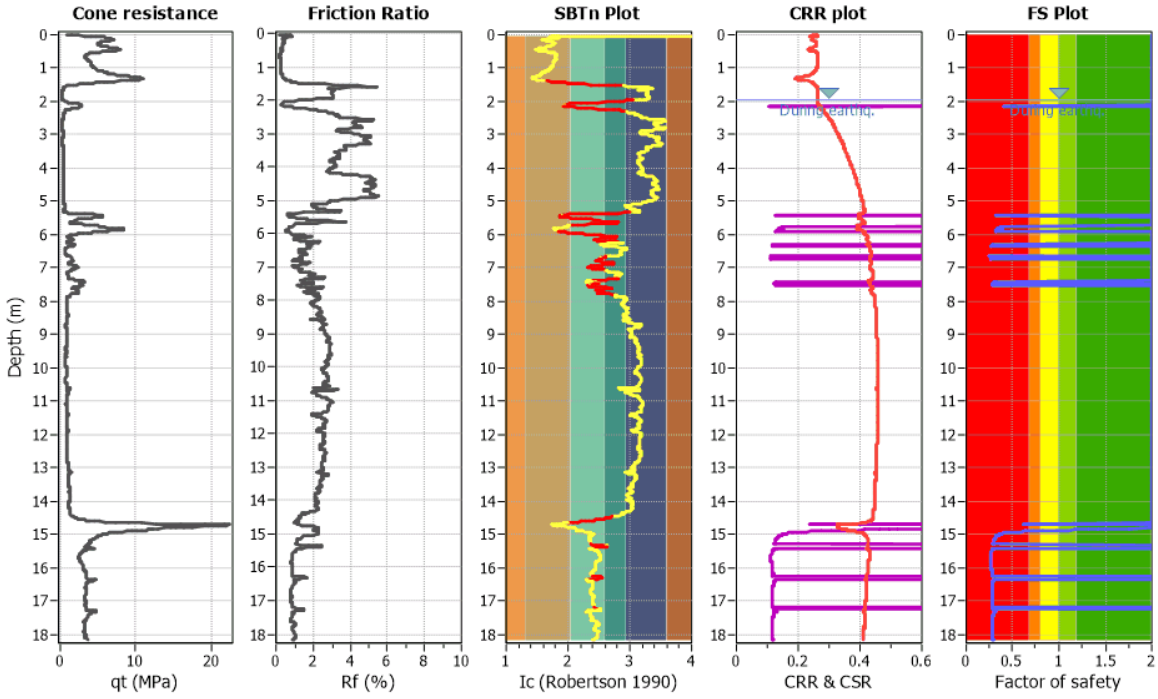
LIQUEFACTION ANALYSIS REPORT

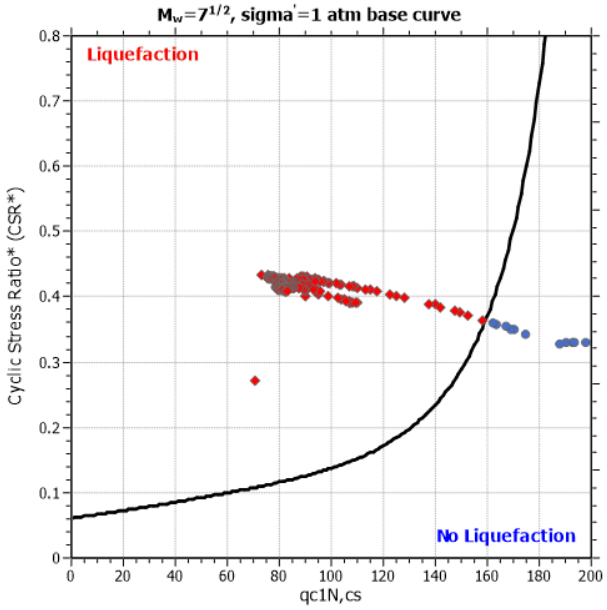
Project title : Liquefaction Assessment **Location : Wairoa Aerodrome**

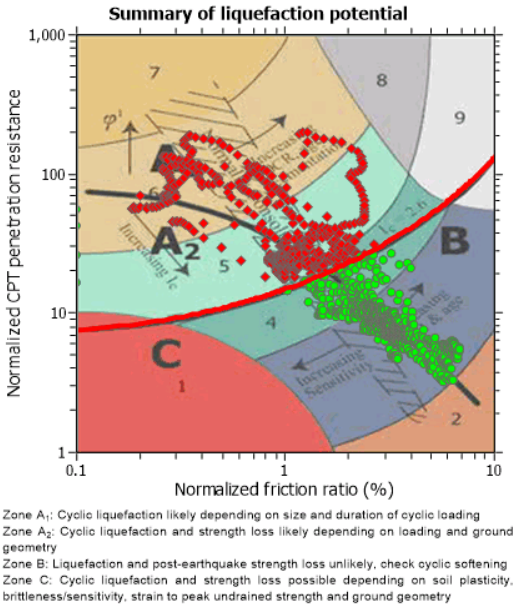
CPT file : CPT-2_ULS-L3_6.5M_0.47g

Input parameters and analysis data

Analysis method:	B&I (2014)	G.W.T. (in-situ):	1.98 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	1.98 m	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.50	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method
Peak ground acceleration:	0.47	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		







Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

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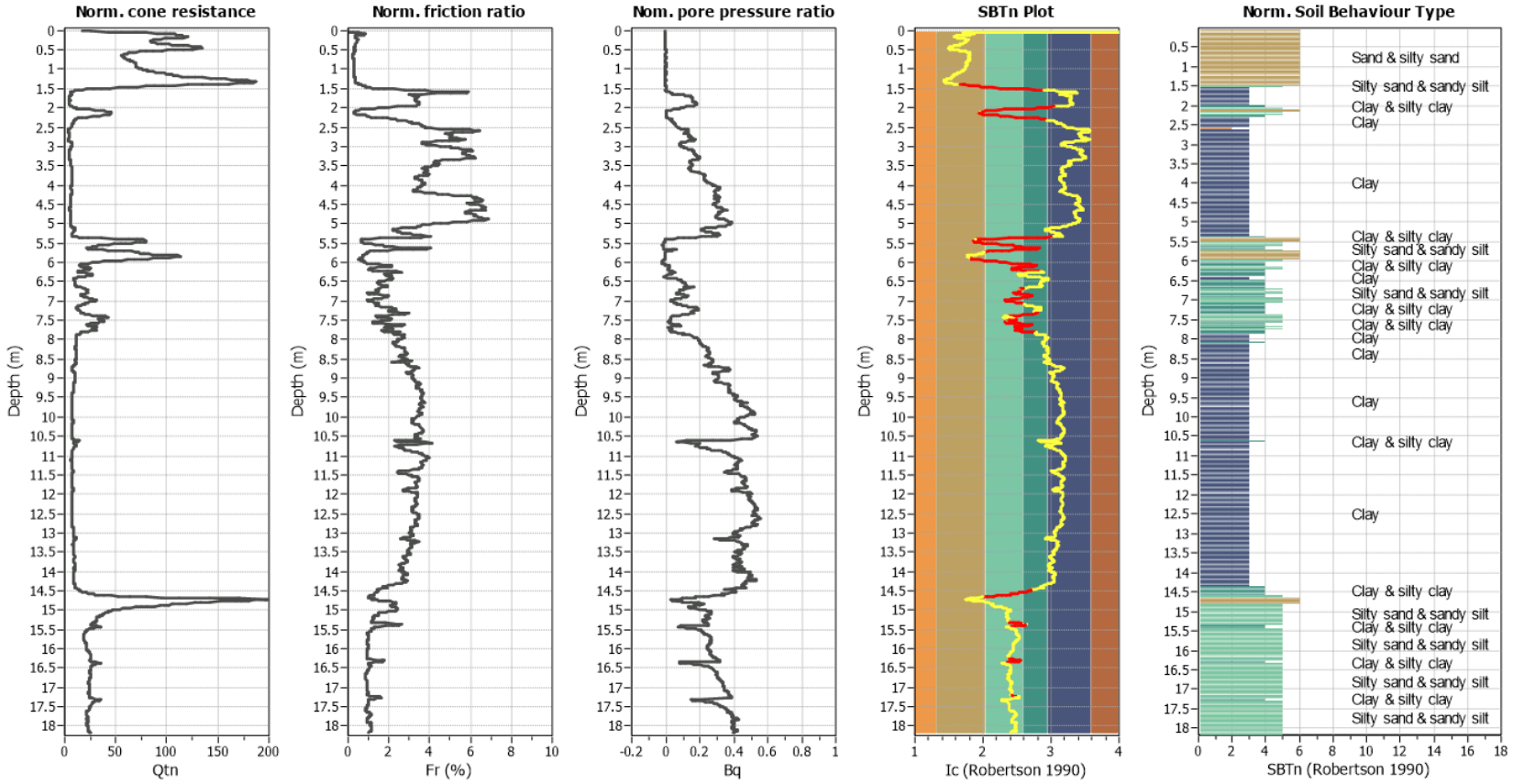
CPT name: CPT-2_ULS-L3_6.5M_0.47g

CPT basic interpretation plots (normalized)



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.98 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.47	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.98 m	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 4:59:28 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT Data.clq

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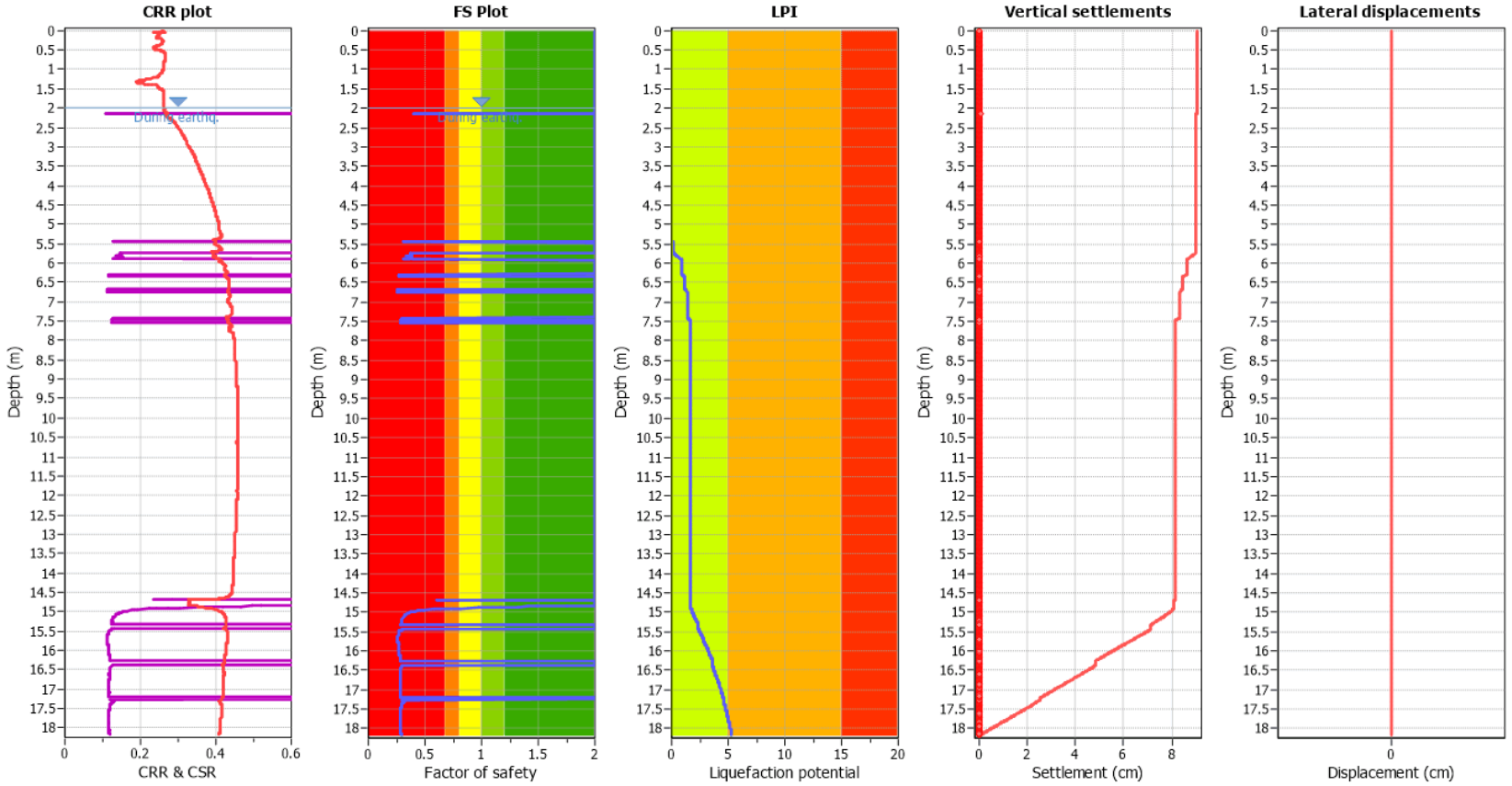
CPT name: CPT-2_ULS-L3_6.5M_0.47g

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.98 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.47	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.98 m	Fill height:	N/A	Limit depth:	N/A

F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 4:59:28 p.m.

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Opus House, 6 Ossian Street
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Napier 4110

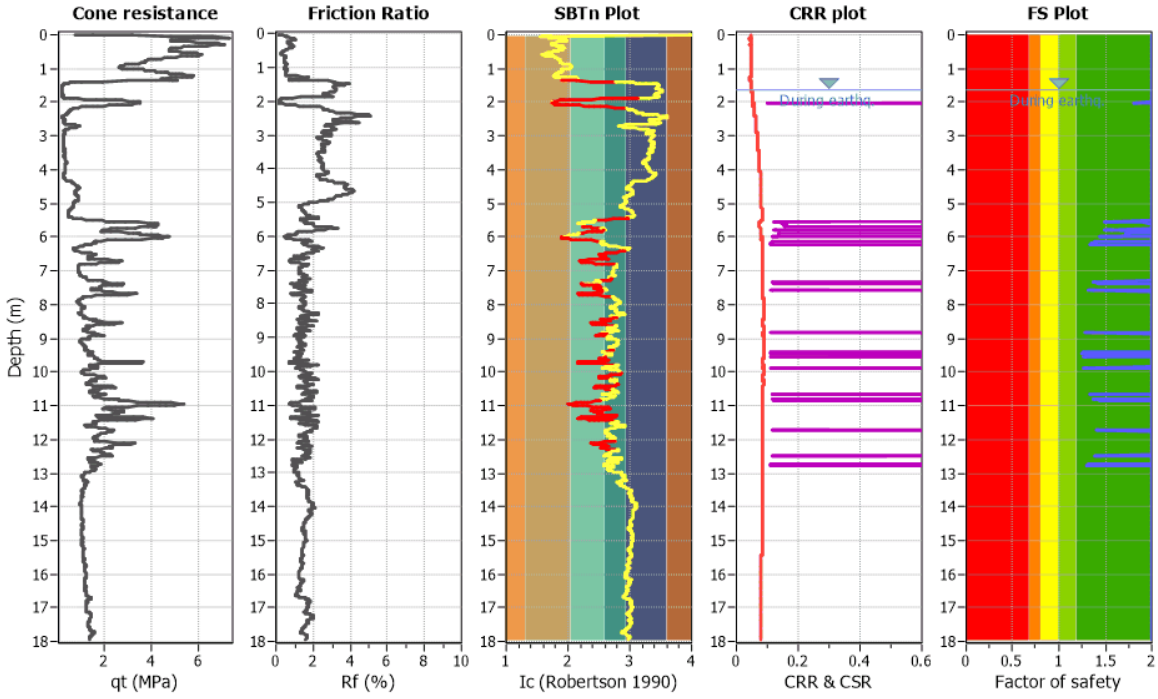
LIQUEFACTION ANALYSIS REPORT

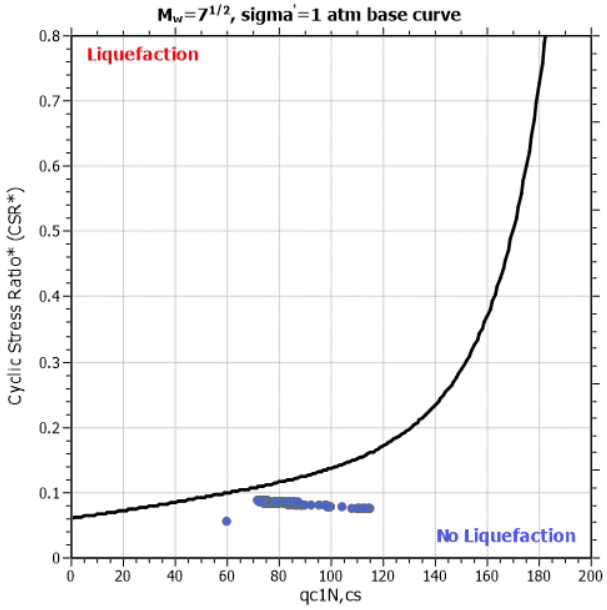
Project title : Liquefaction Analysis **Location : Wairoa Aerodrome**

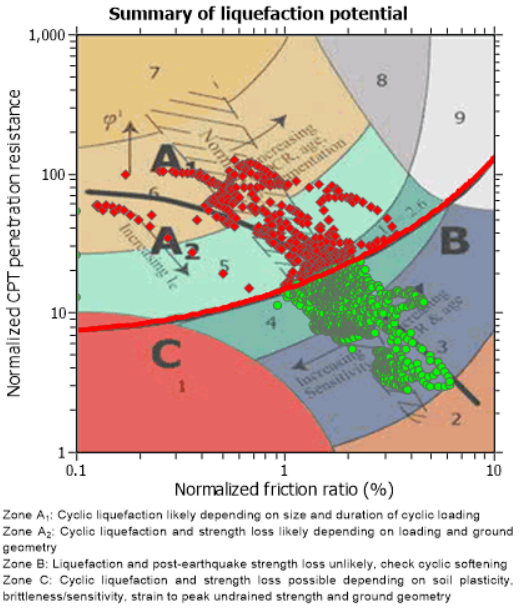
CPT file : CPT-3_SLS_6.2M_0.09g

Input parameters and analysis data

Analysis method:	B&I (2014)	G.W.T. (in-situ):	1.66 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	1.66 m	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.20	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method
Peak ground acceleration:	0.09	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		







Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

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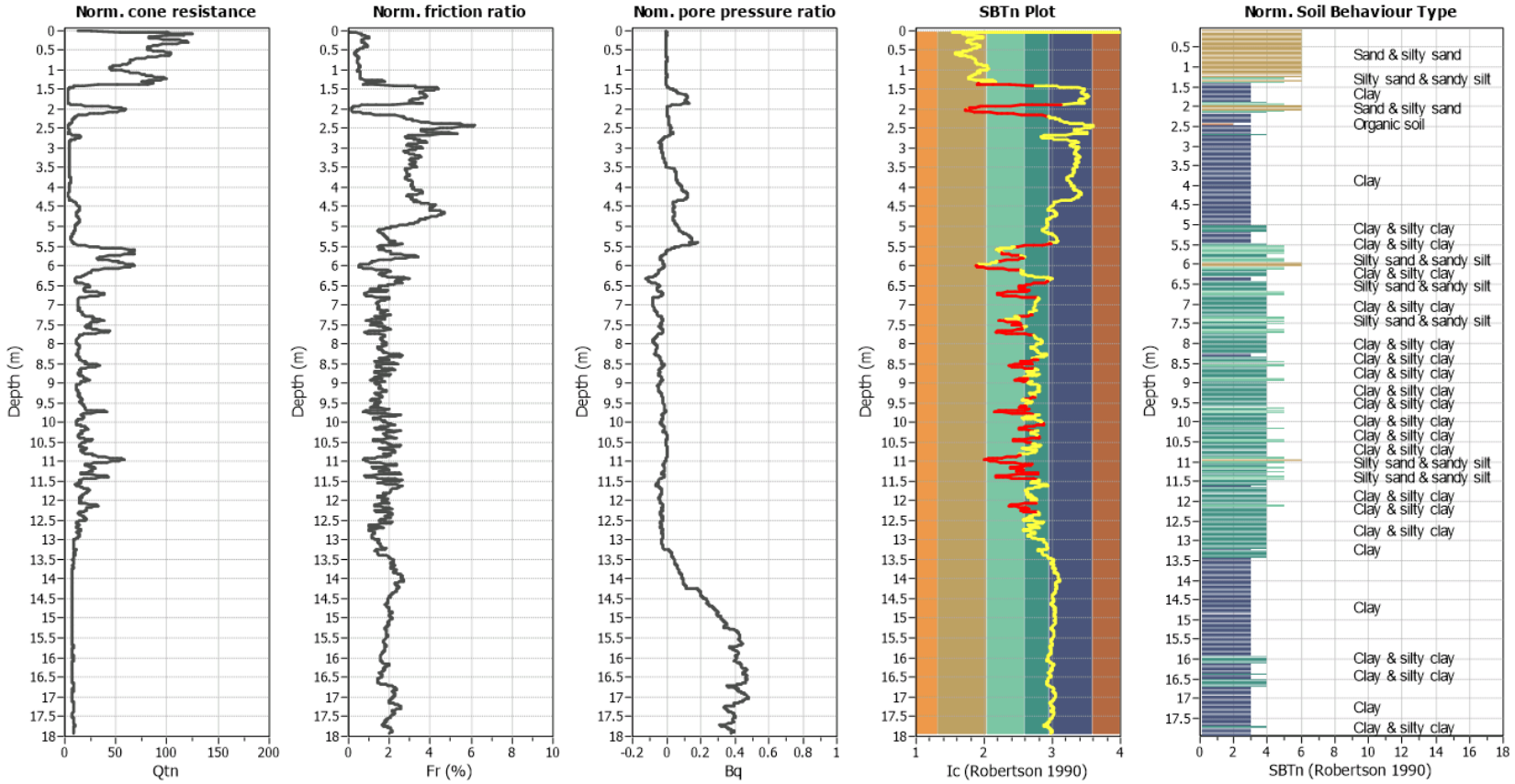
CPT name: CPT-3_SLS_6.2M_0.09g

CPT basic interpretation plots (normalized)



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.66 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.20	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.09	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.66 m	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:08:22 p.m. 2

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT3.clq

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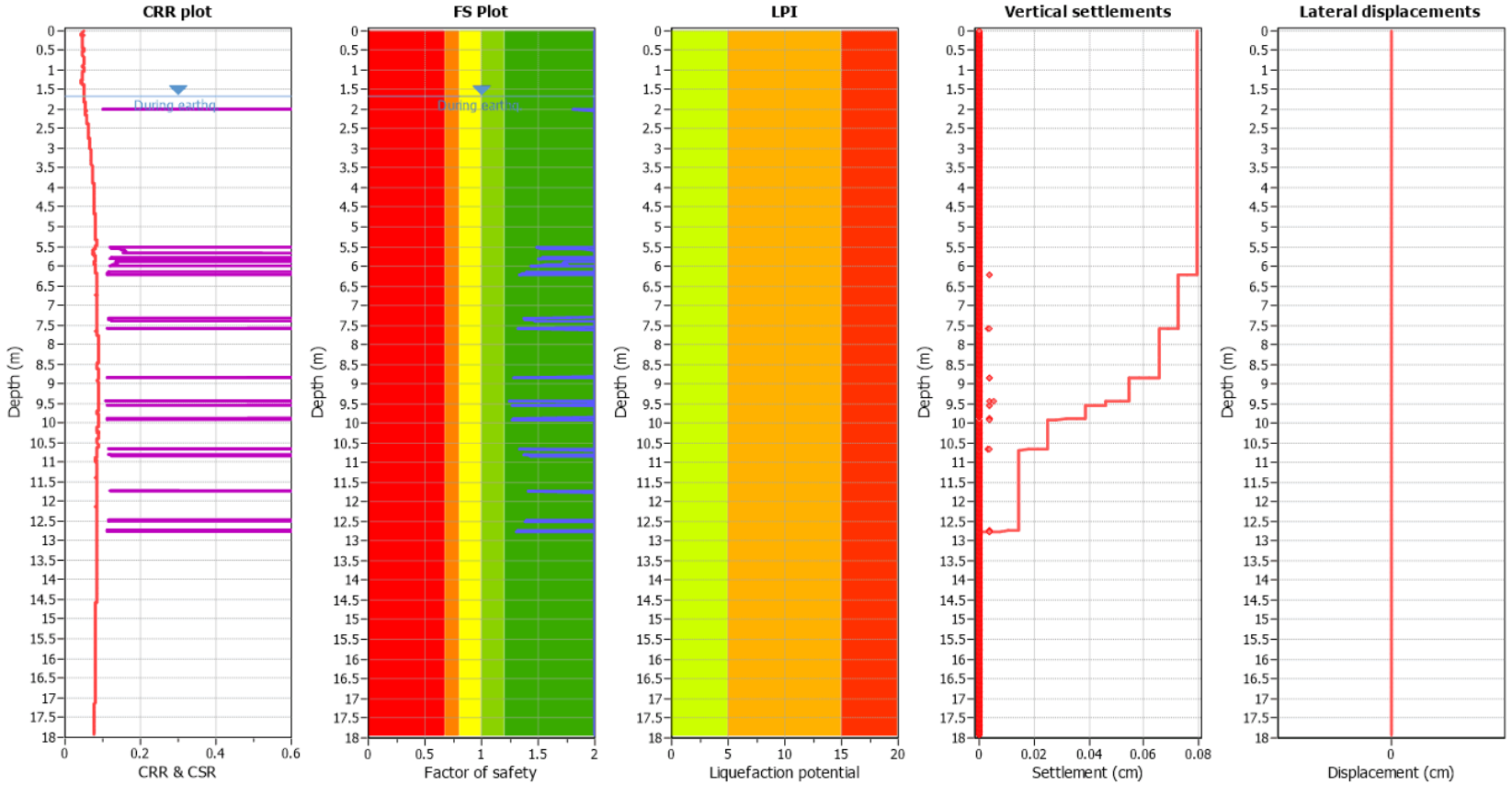
CPT name: CPT-3_SLS_6.2M_0.09g

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.66 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.20	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.09	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.66 m	Fill height:	N/A	Limit depth:	N/A

F.S. color scheme
- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme
- Very high risk
- High risk
- Low risk

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:08:22 p.m.

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Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT3.clq

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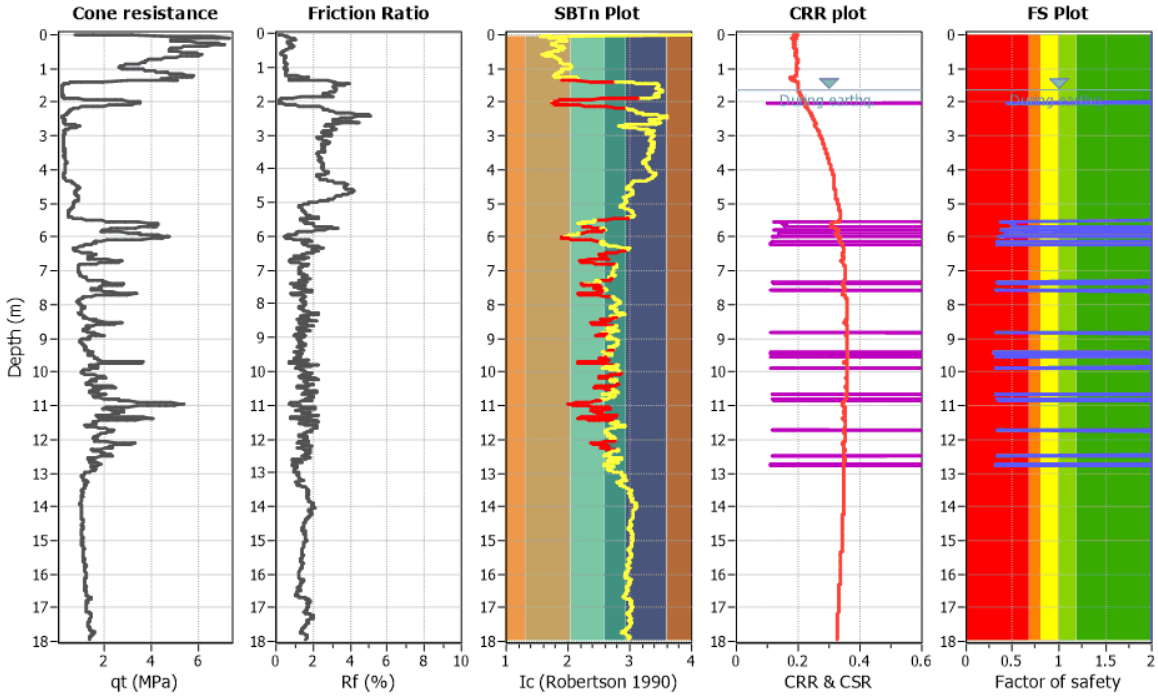
LIQUEFACTION ANALYSIS REPORT

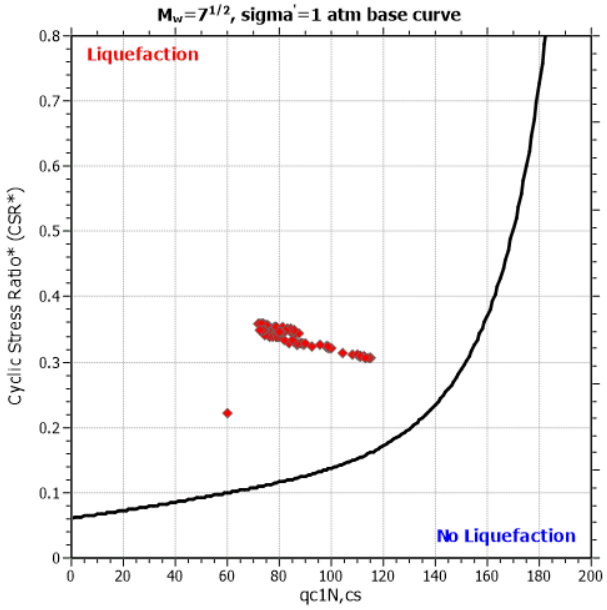
Project title : Liquefaction Analysis **Location : Wairoa Aerodrome**

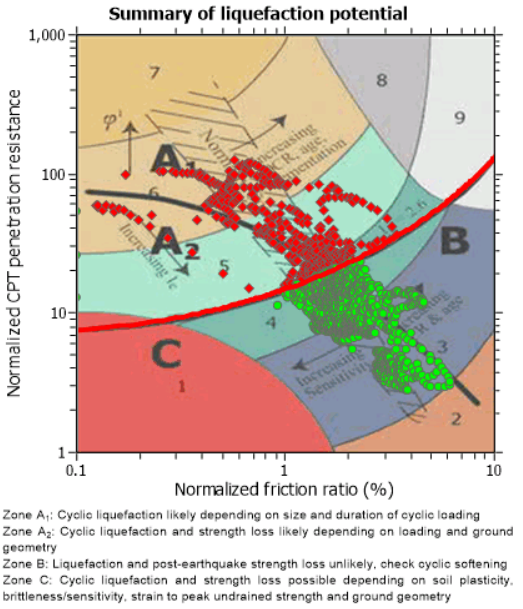
CPT file : CPT-3_ULS-L2_6.4M_0.36g

Input parameters and analysis data

Analysis method:	B&I (2014)	G.W.T. (in-situ):	1.66 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	1.66 m	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.40	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method
Peak ground acceleration:	0.36	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		





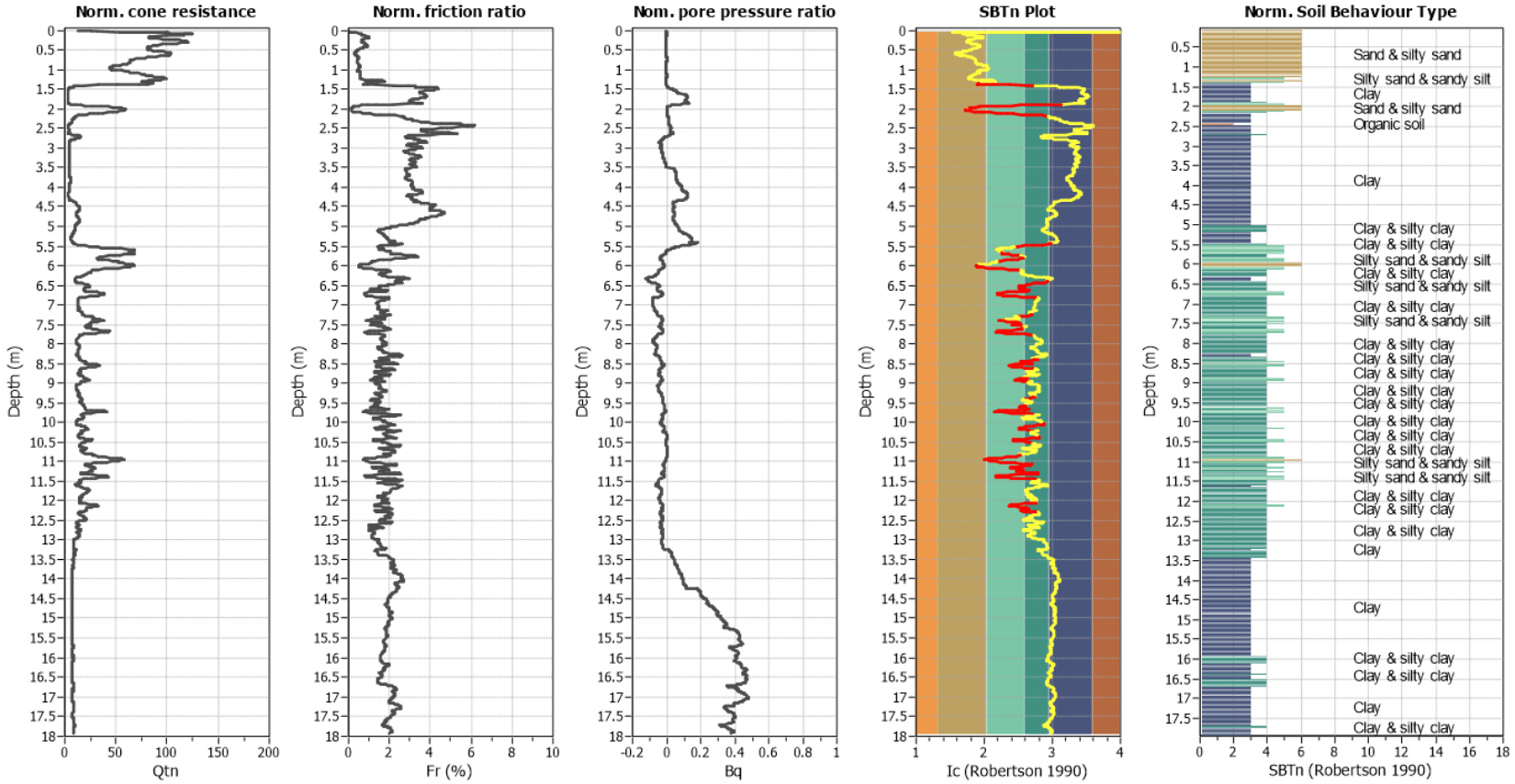


Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

This software is licensed to: OPUS

CPT name: CPT-3_ULS-L2_6.4M_0.36g

CPT basic interpretation plots (normalized)



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.66 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.40	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.36	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.66 m	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:08:23 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT3.clq

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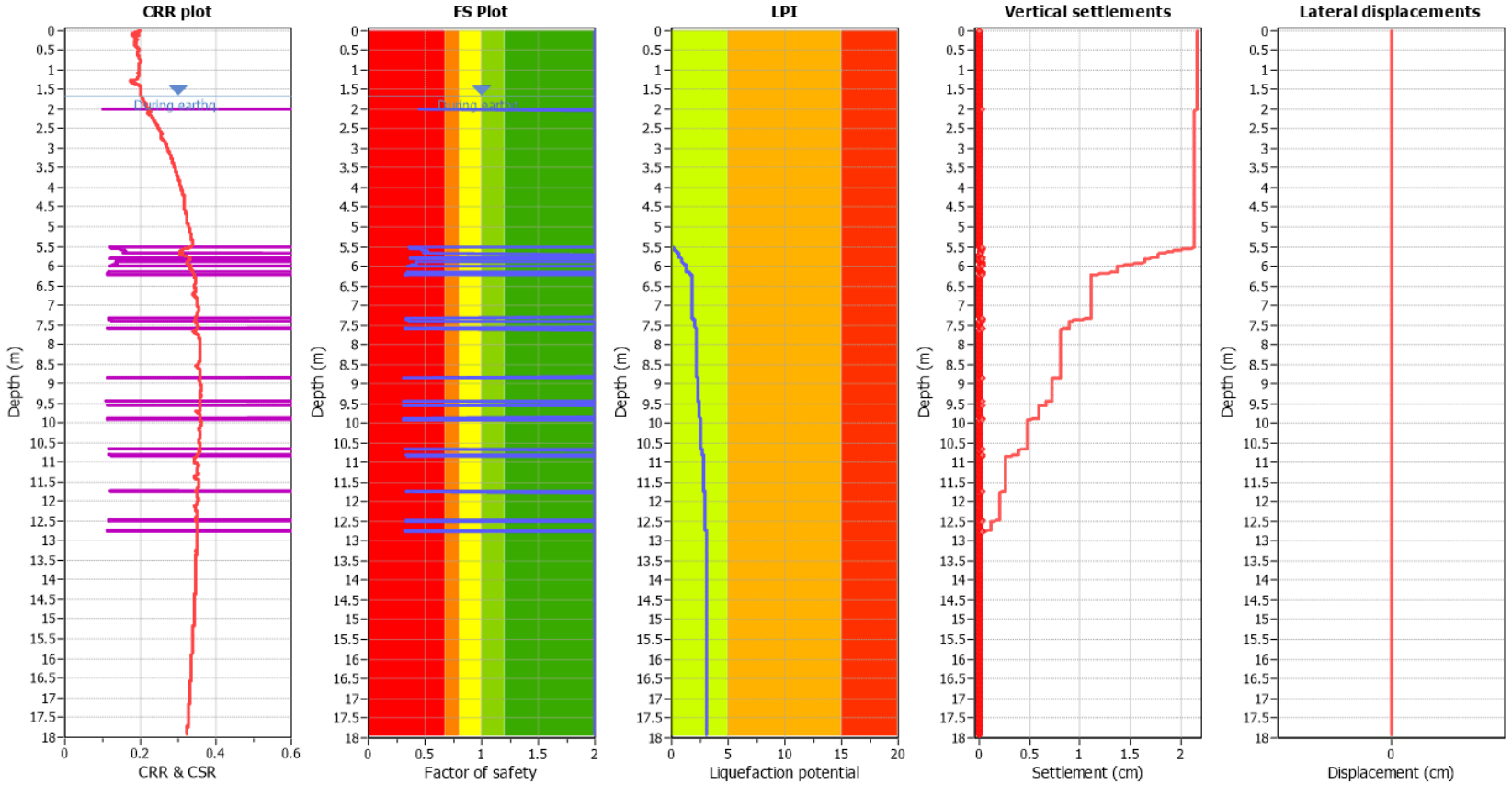
CPT name: CPT-3_ULS-L2_6.4M_0.36g

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	B&I (2014)	Depth to GWT (erthq.):	1.66 m	Fill weight:	N/A
Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.40	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.36	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.66 m	Fill height:	N/A	Limit depth:	N/A

F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:08:23 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT3.clq

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Napier 4110

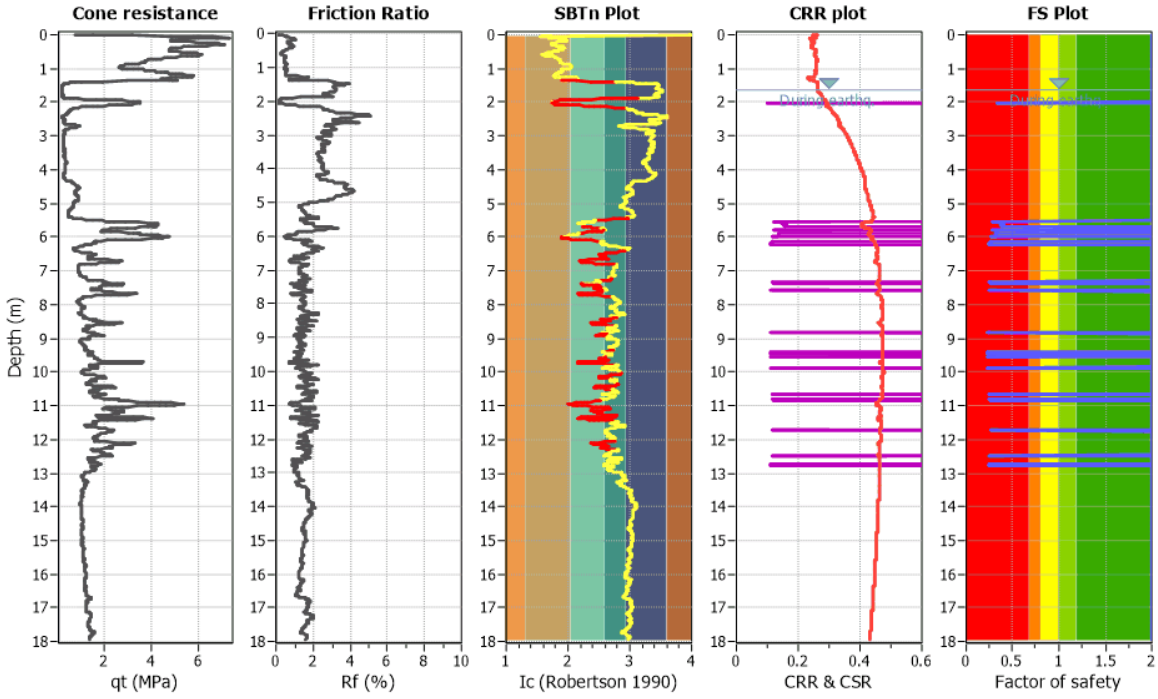
LIQUEFACTION ANALYSIS REPORT

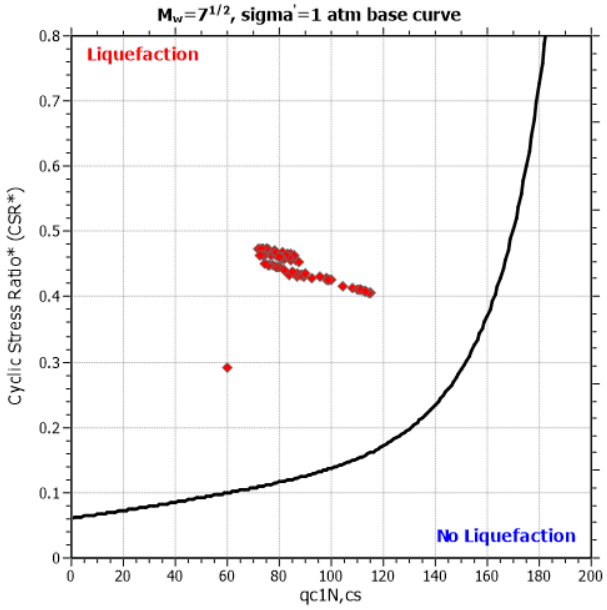
Project title : Liquefaction Analysis **Location : Wairoa Aerodrome**

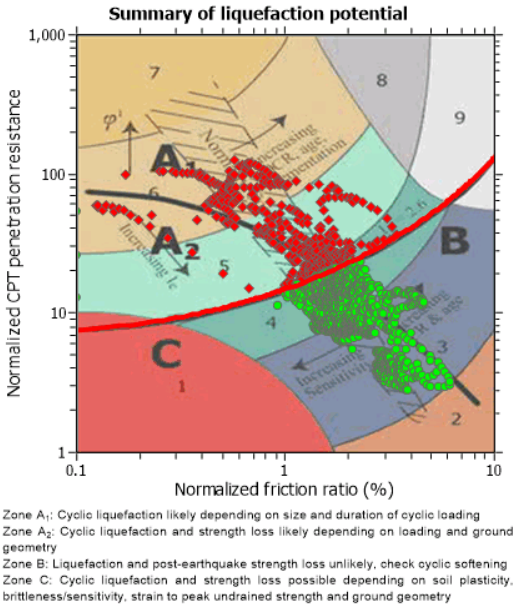
CPT file : CPT-3_ULS-L3_6.5M_0.47g

Input parameters and analysis data

Analysis method:	B&I (2014)	G.W.T. (in-situ):	1.66 m	Use fill:	No	Clay like behavior applied:	Sands only
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	1.66 m	Fill height:	N/A	Limit depth applied:	No
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.50	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method
Peak ground acceleration:	0.47	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		







Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

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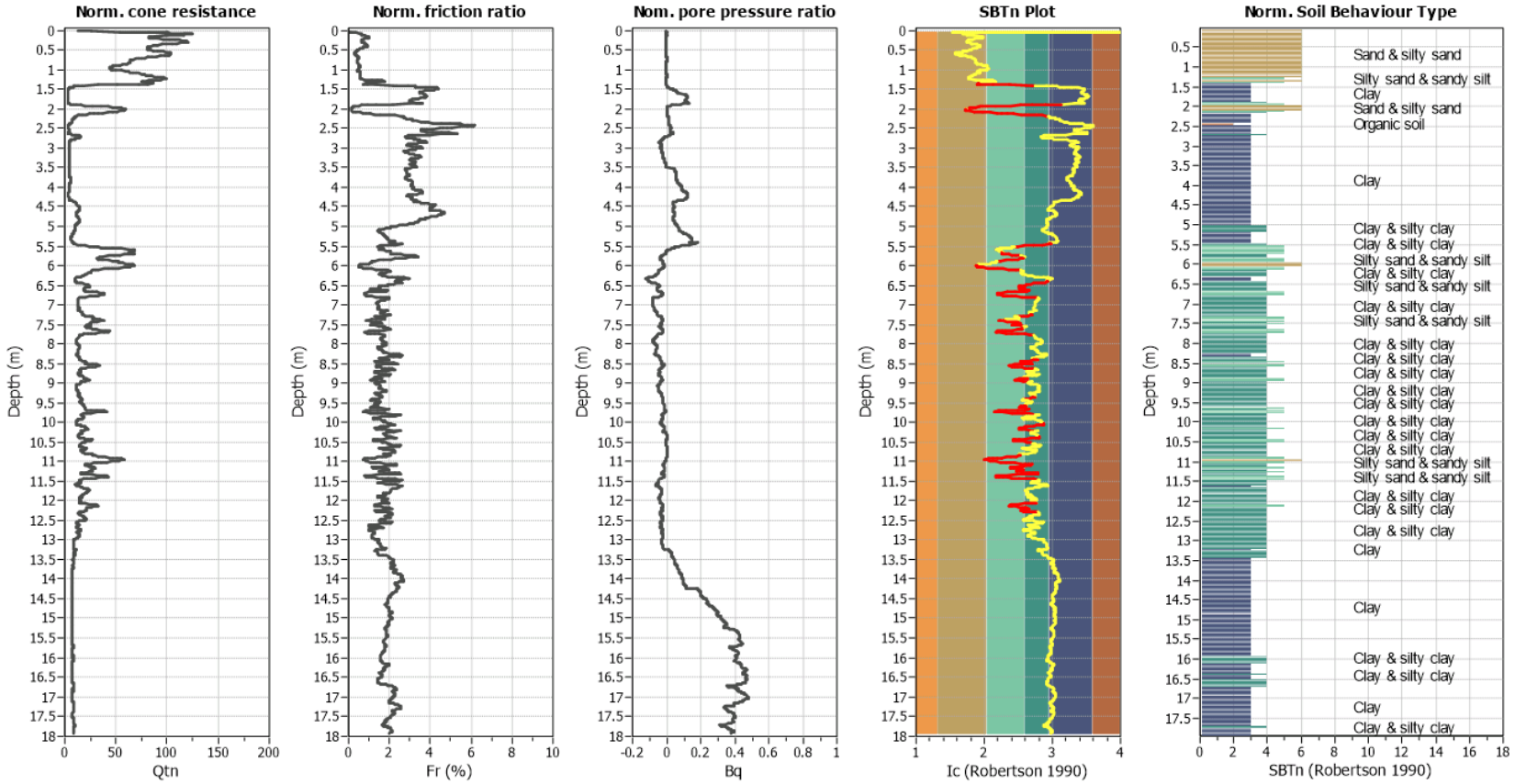
CPT name: CPT-3_ULS-L3_6.5M_0.47g

CPT basic interpretation plots (normalized)



Input parameters and analysis data

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Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.47	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.66 m	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:08:25 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT3.clq

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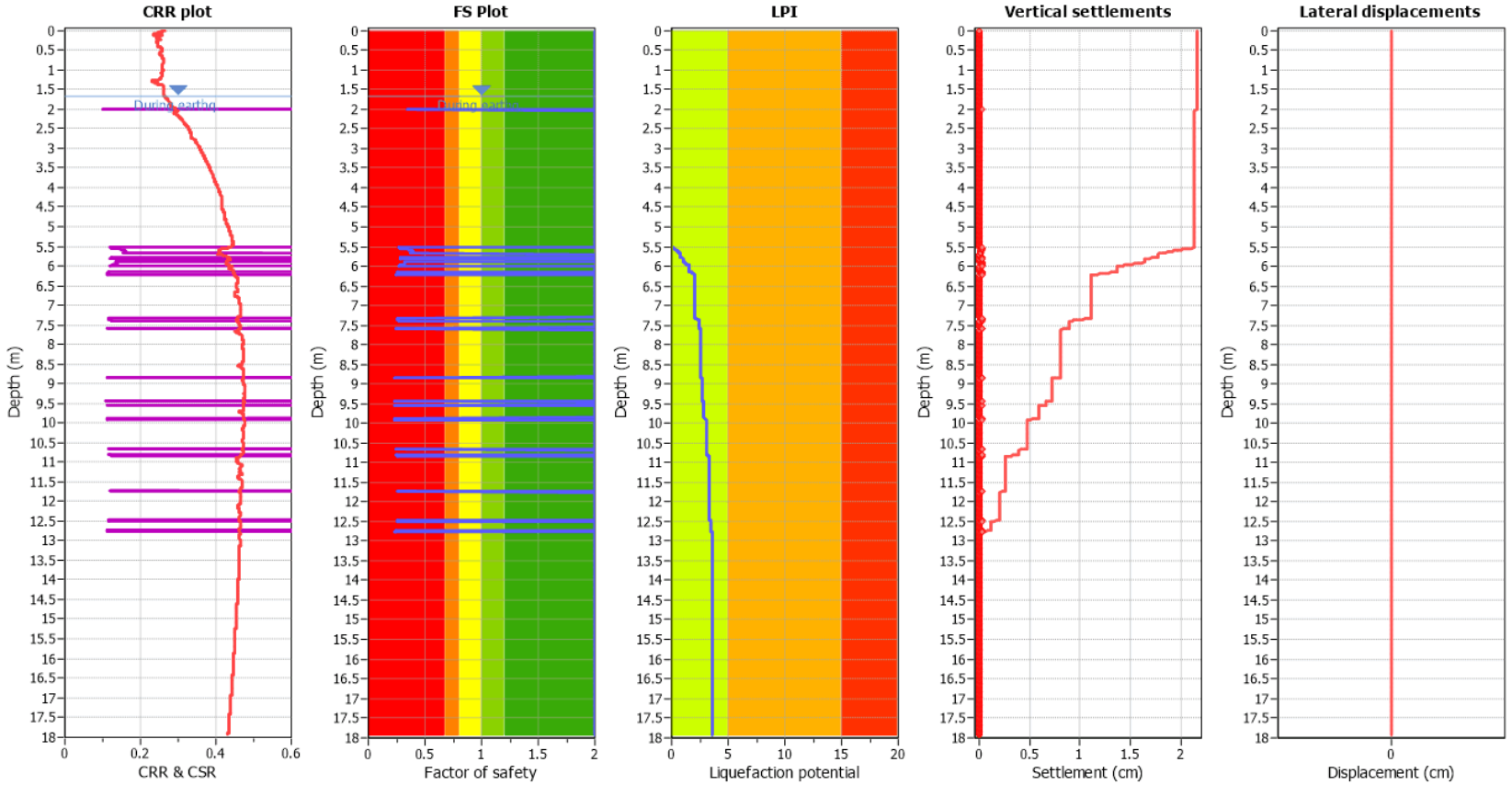
This software is licensed to: OPUS

CPT name: CPT-3_ULS-L3_6.5M_0.47g

Liquefaction analysis overall plots



Input parameters and analysis data

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Fines correction method:	B&I (2014)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.47	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.66 m	Fill height:	N/A	Limit depth:	N/A

F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:08:25 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT3.clq

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Opus International Consultants Ltd
Opus House, 6 Ossian Street
Ahuriri
Napier 4110

LIQUEFACTION ANALYSIS REPORT

Project title : Liquefaction Analysis **Location : Wairoa Aerodrome**

CPT file : CPT-4_SLS_6.2M_0.09g

Input parameters and analysis data

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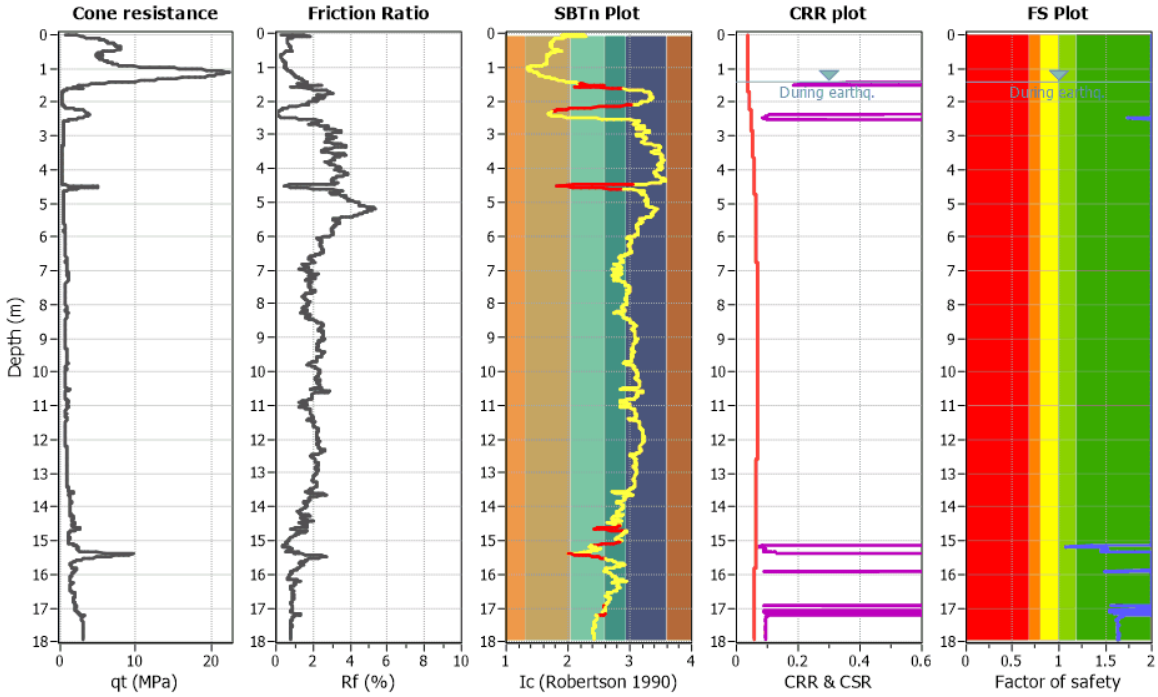
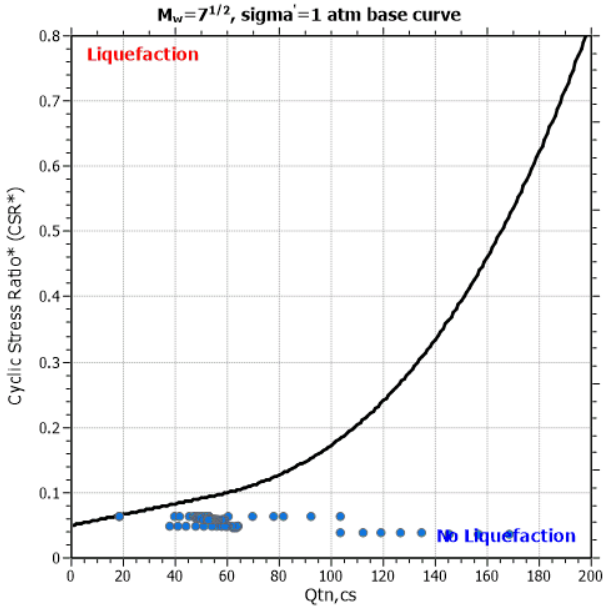
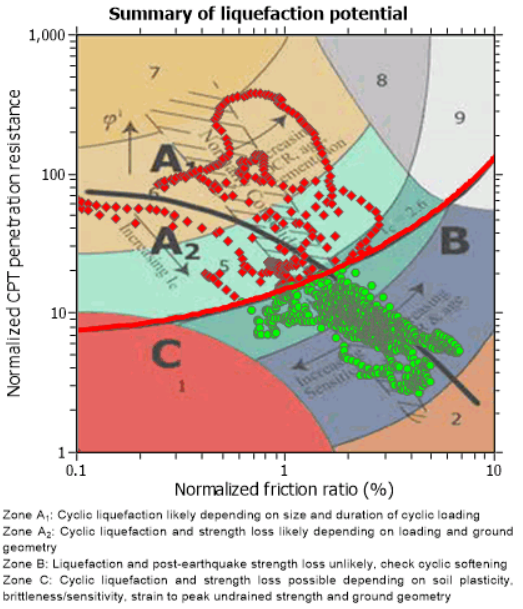
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.20	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.09	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		





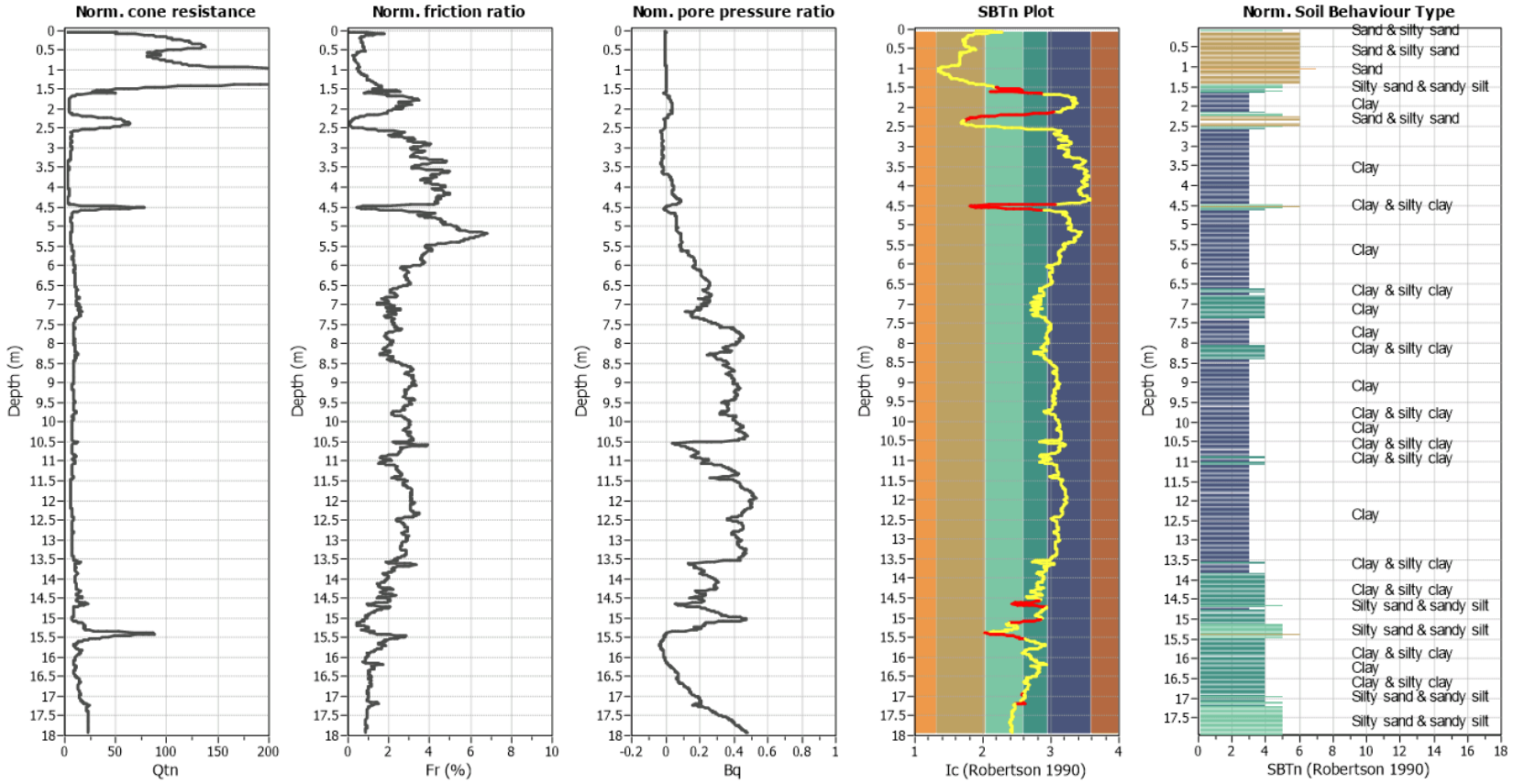


Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

This software is licensed to: OPUS

CPT name: CPT-4_SLS_6.2M_0.09g

CPT basic interpretation plots (normalized)



Input parameters and analysis data

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Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.20	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.09	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.40 m	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

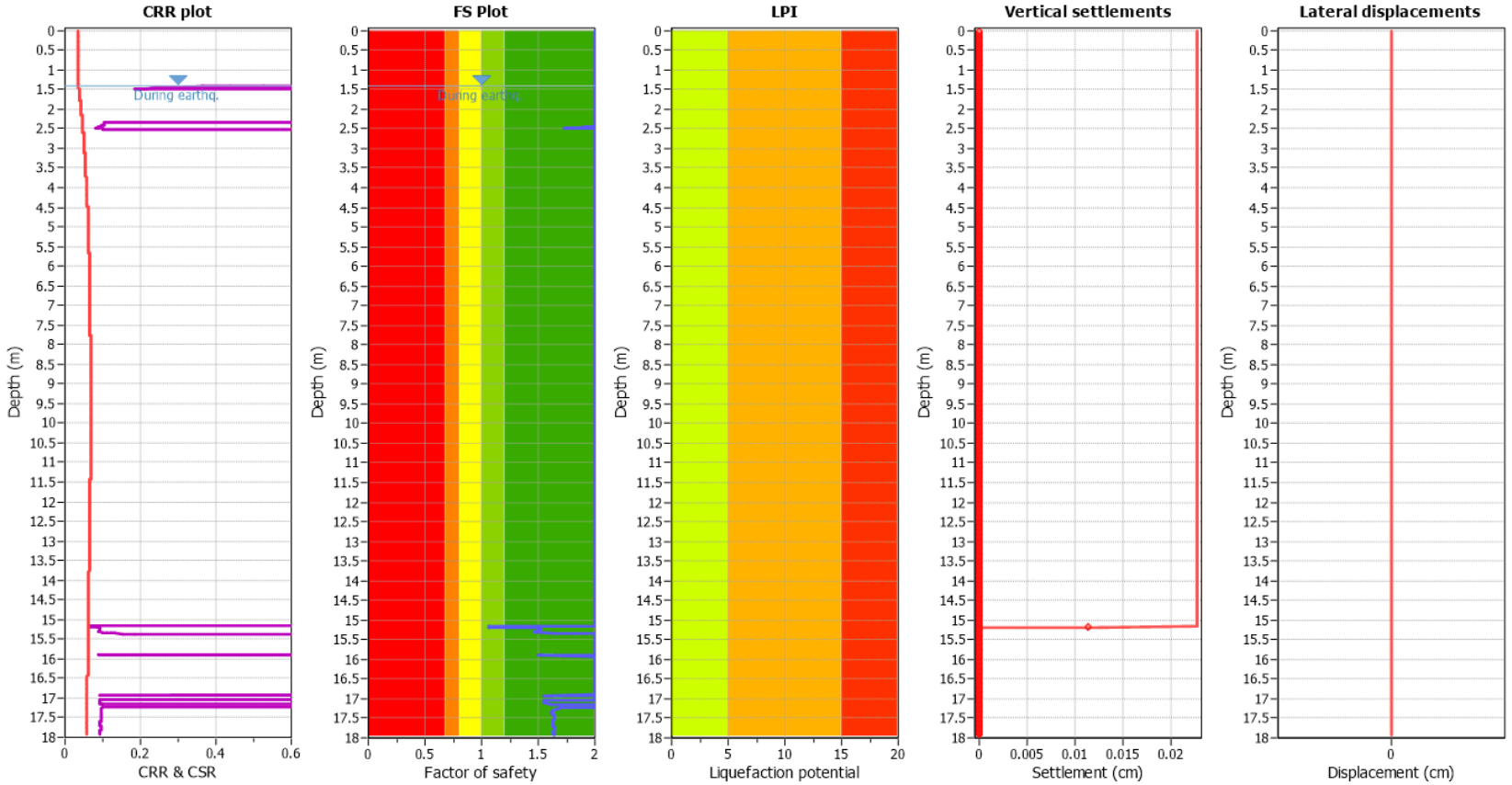
CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:15:39 p.m. 2

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT4.clq

This software is licensed to: OPUS

CPT name: CPT-4_SLS_6.2M_0.09g

Liquefaction analysis overall plots



Input parameters and analysis data

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Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.20	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.09	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.40 m	Fill height:	N/A	Limit depth:	N/A

F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:15:39 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT4.clq

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Napier 4110

LIQUEFACTION ANALYSIS REPORT

Project title : Liquefaction Analysis **Location : Wairoa Aerodrome**

CPT file : CPT-4_ULS-L2_6.4M_0.36g

Input parameters and analysis data

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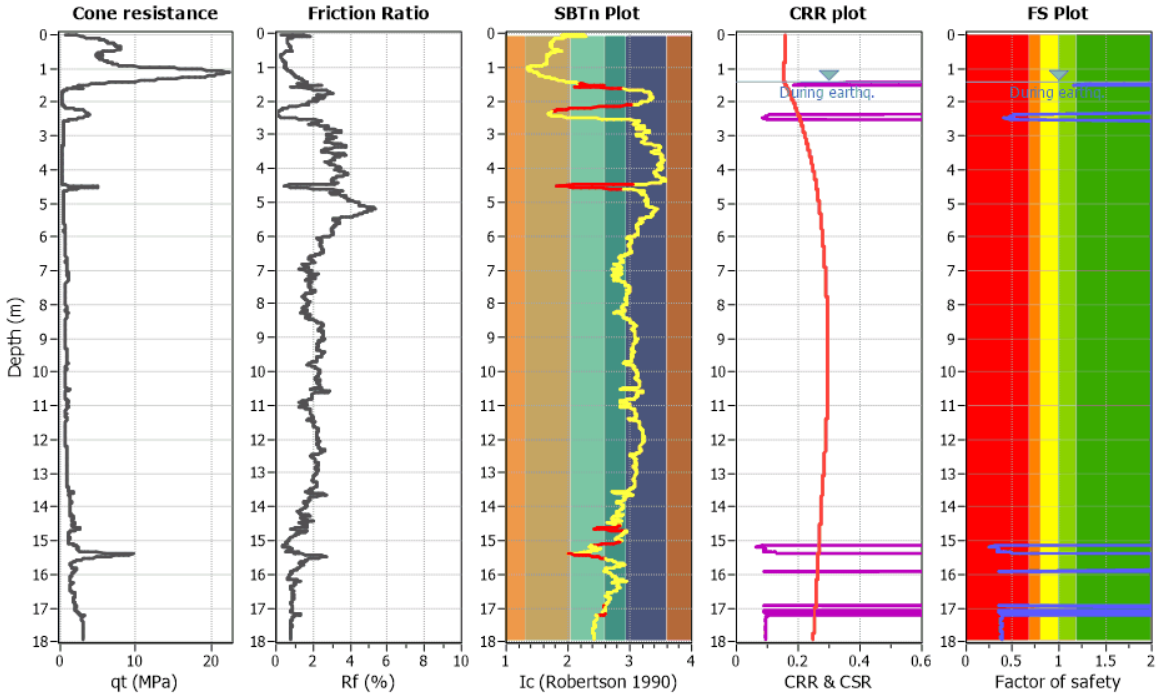
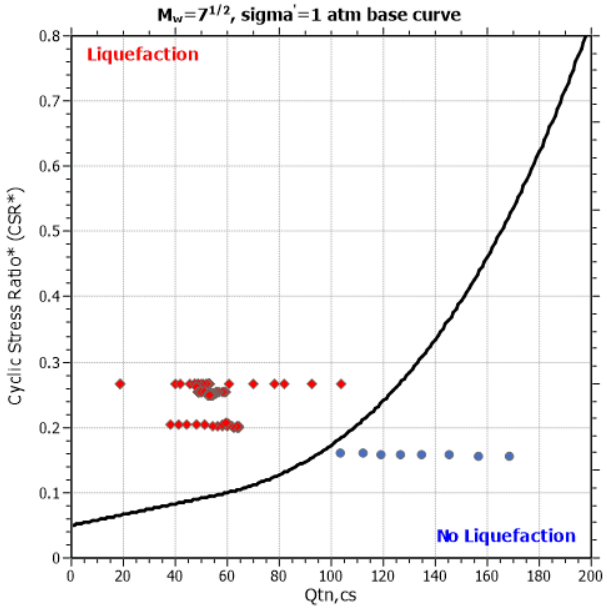
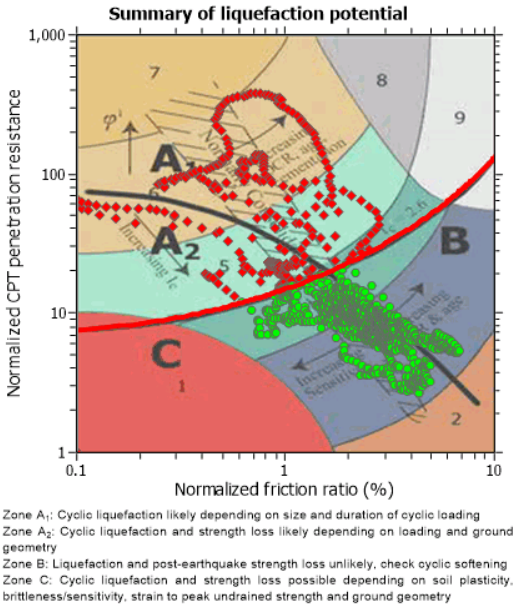
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.40	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.36	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		





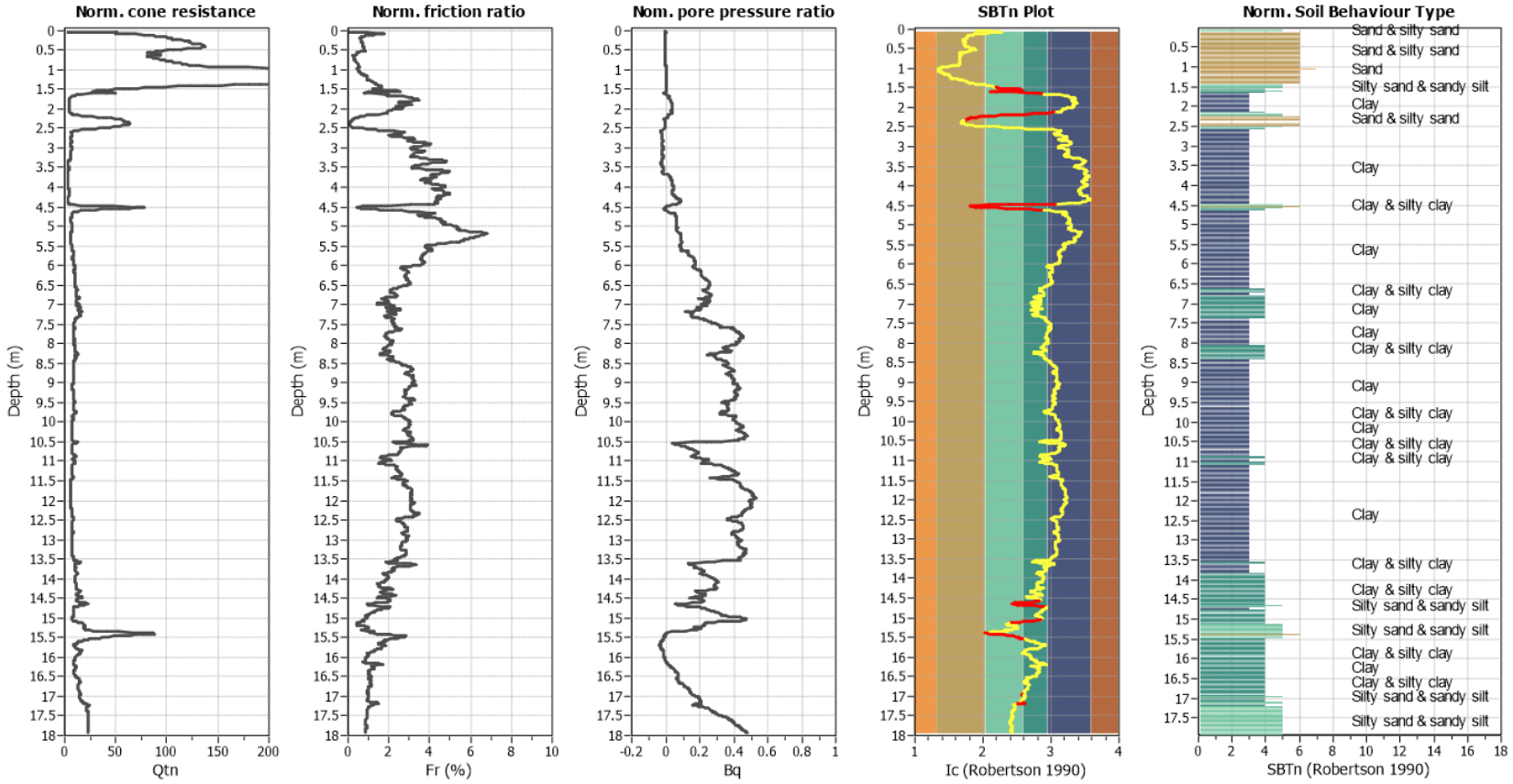


Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

This software is licensed to: OPUS

CPT name: CPT-4_ULS-L2_6.4M_0.36g

CPT basic interpretation plots (normalized)



Input parameters and analysis data

Analysis method:	NCEER (1998)	Depth to water table (erthq.):	1.40 m	Fill weight:	N/A
Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.40	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.36	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.40 m	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

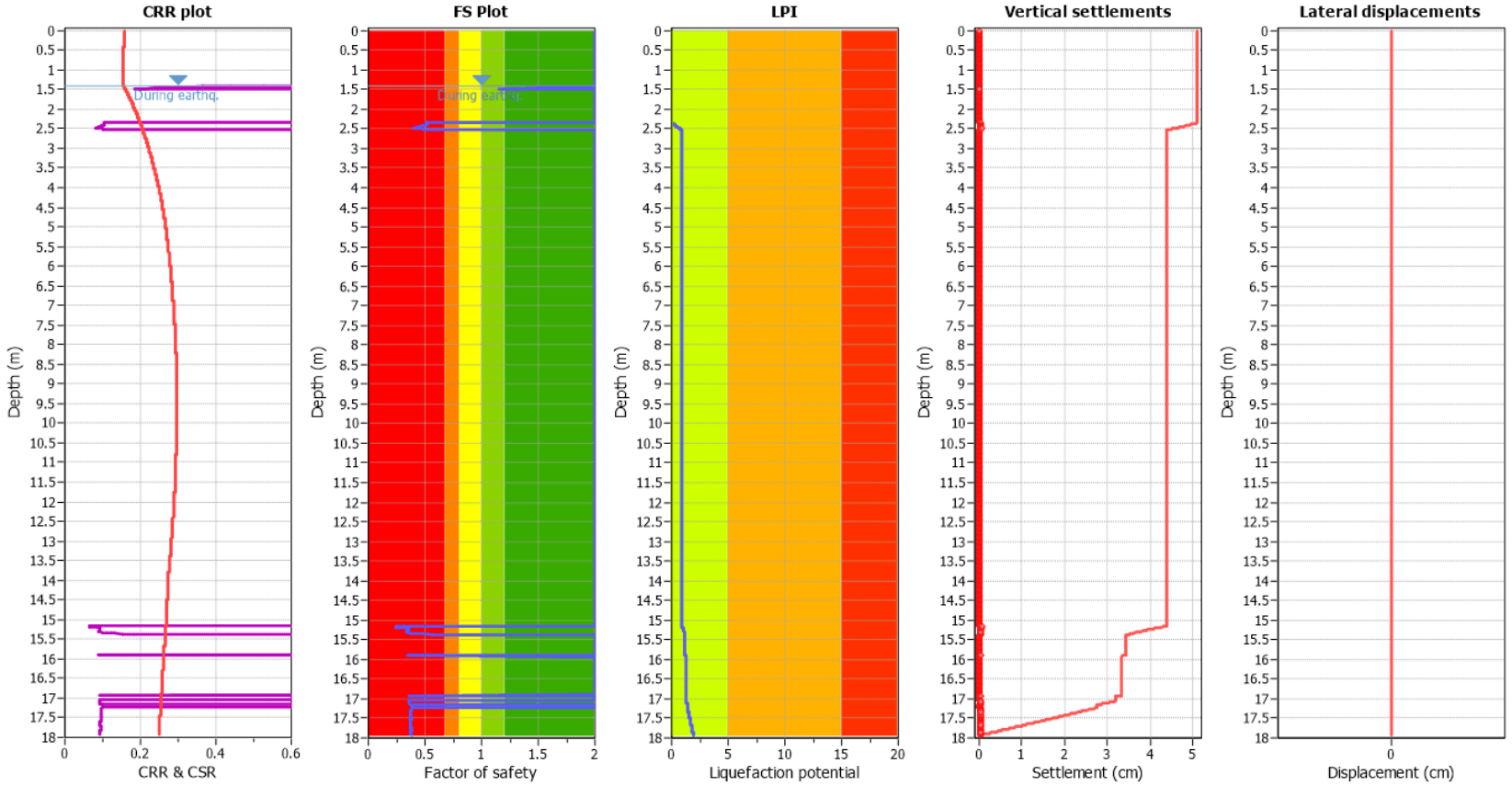
CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:15:40 p.m. 5

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT4.clq

This software is licensed to: OPUS

CPT name: CPT-4_ULS-L2_6.4M_0.36g

Liquefaction analysis overall plots



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Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.40	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.36	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.40 m	Fill height:	N/A	Limit depth:	N/A

F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:15:40 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT4.clq

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Ahuriri
Napier 4110

LIQUEFACTION ANALYSIS REPORT

Project title : Liquefaction Analysis **Location : Wairoa Aerodrome**

CPT file : CPT-4_ULS-L3_6.5M_0.47g

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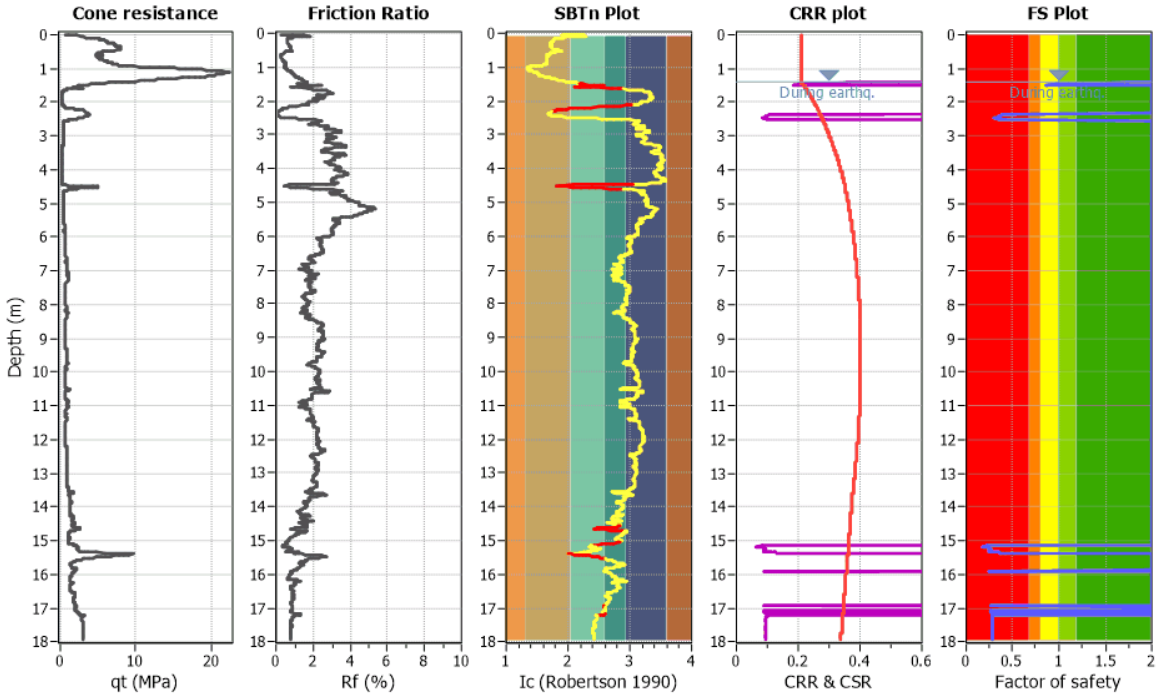
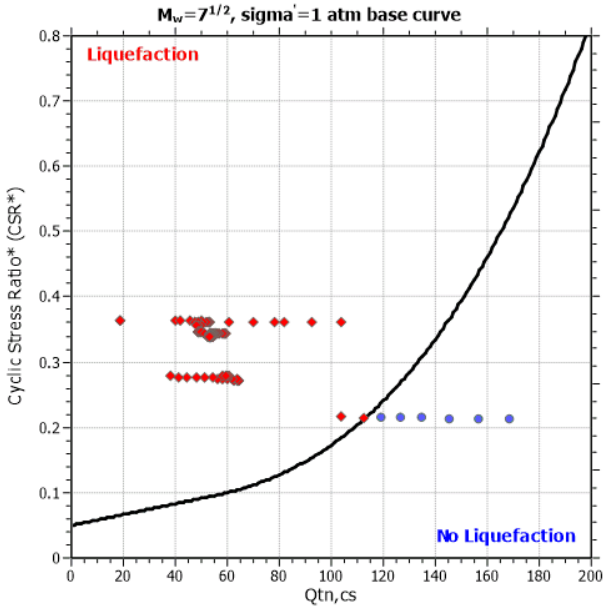
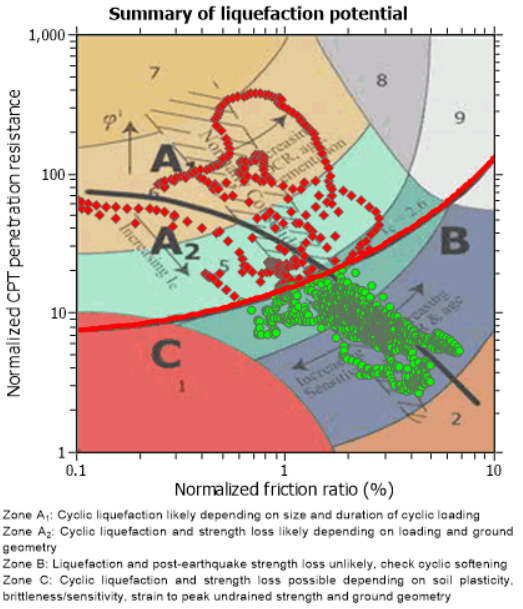
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	N/A
Earthquake magnitude M_w:	6.50	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.47	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		





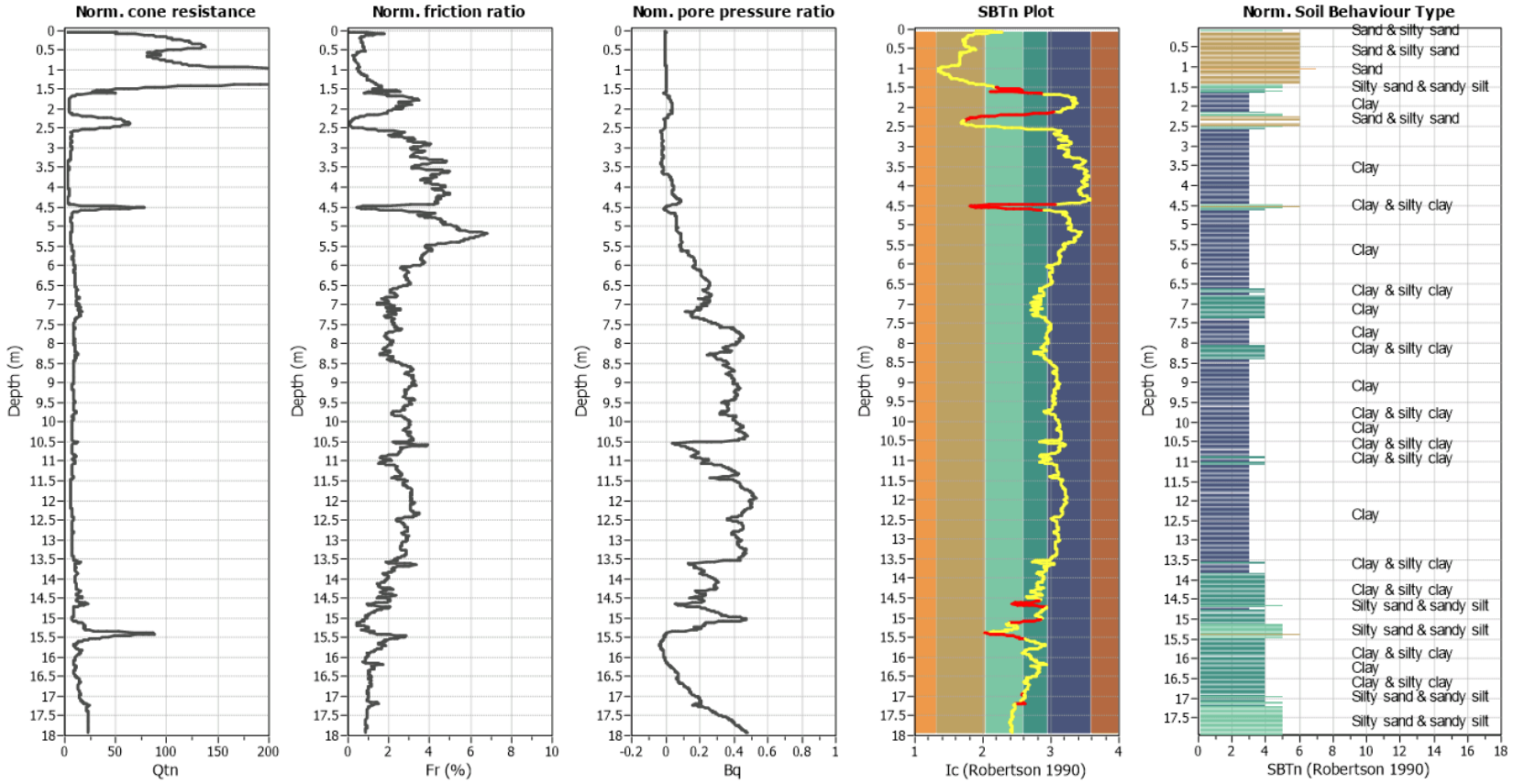


Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

This software is licensed to: OPUS

CPT name: CPT-4_ULS-L3_6.5M_0.47g

CPT basic interpretation plots (normalized)



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Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	6.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.47	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.40 m	Fill height:	N/A	Limit depth:	N/A

SBTn legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravely sand to sand
8. Very stiff sand to
9. Very stiff fine grained

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:15:42 p.m.

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8

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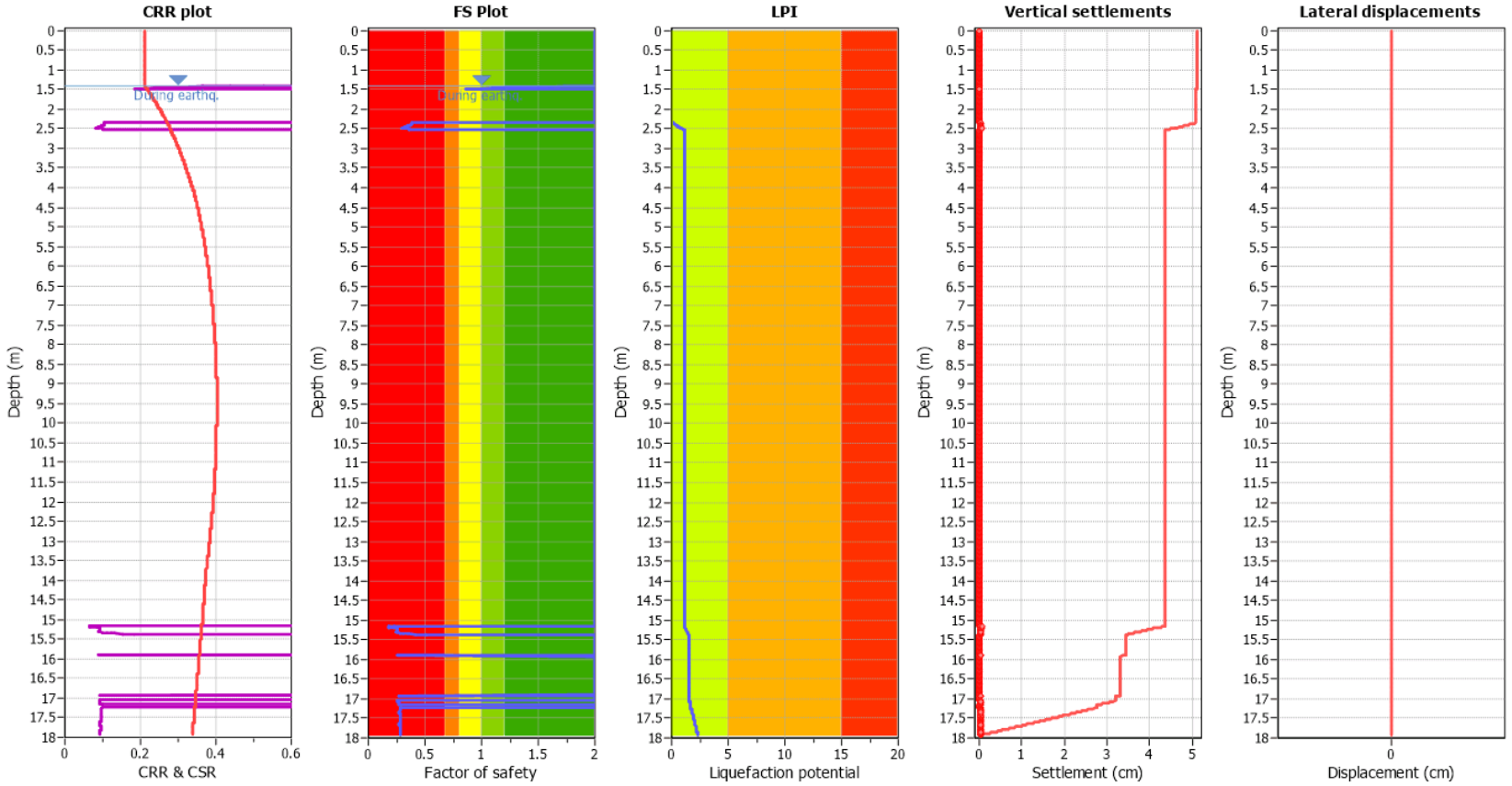
CPT name: CPT-4_ULS-L3_6.5M_0.47g

Liquefaction analysis overall plots



Input parameters and analysis data

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Fines correction method:	NCEER (1998)	Average results interval:	3	Transition detect. applied:	Yes
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Earthquake magnitude M_w:	6.50	Unit weight calculation:	Based on SBT	Clay like behavior applied:	Sands only
Peak ground acceleration:	0.47	Use fill:	No	Limit depth applied:	No
Depth to water table (insitu):	1.40 m	Fill height:	N/A	Limit depth:	N/A

F.S. color scheme

- Almost certain it will liquefy
- Very likely to liquefy
- Liquefaction and no liq. are equally likely
- Unlike to liquefy
- Almost certain it will not liquefy

LPI color scheme

- Very high risk
- High risk
- Low risk

CLiq v.2.0.6.83 - CPT Liquefaction Assessment Software - Report created on: 8/02/2017, 5:15:42 p.m.

Project file: S:\Proj\NZ\2Y\2-Y1300.DM Wairoa DC TAM\Home\VT011 Wairoa Aerodrome Stage 2\Geotech\CPT results\Cliq Data- CPT4.clq

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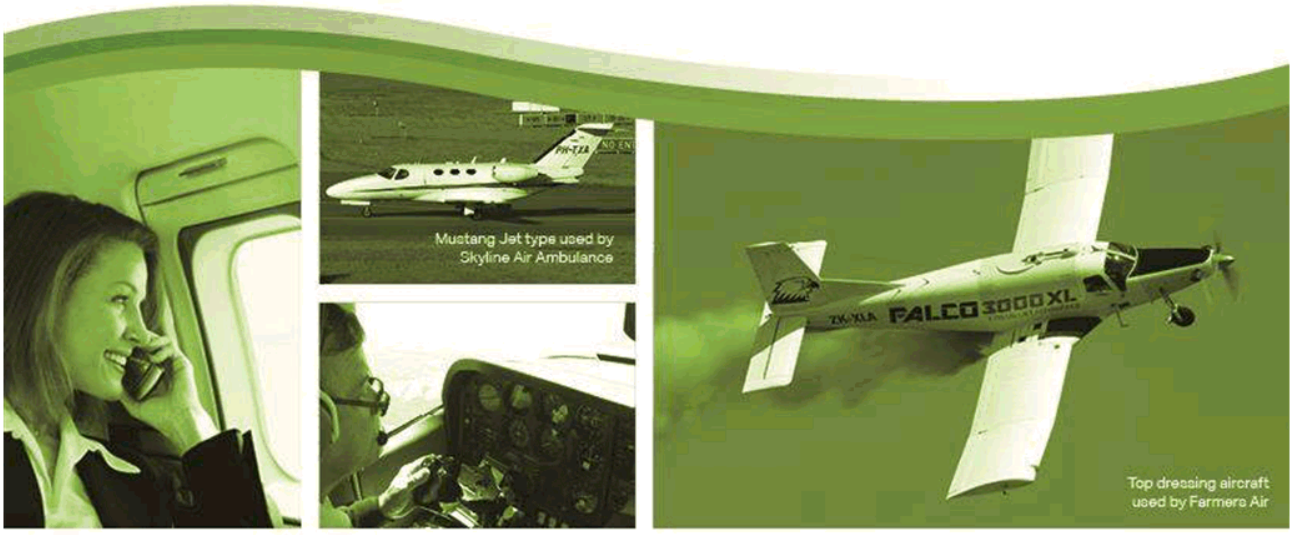
Napier 4142
New Zealand

t: +64 6 833 5100
f: +64 6 835 0881
w: www.opus.co.nz

Appendix H

Business Park Development Constraints



OPUS

Memorandum

To	Jamie Cox
Copy	
From	Andrew Sowersby (Principal Planner)
Office	Napier Office
Date	16 March 2017
File	2-Y13000.DM
Subject	Business Park Constraints Investigations

Opus have undertaken as review of the proposed Wairoa Airport Business Park to:

1. Identify the Resource Management Act 1991 requirements associated with the development of the business park
2. Ascertain whether the land has any archaeological sites of significance
3. Identify availability of power and computer media to the business park

The findings of our review are set out below:

1.1.1 Planning and the Resource Management Act 1991 (RMA)

The airport is currently located entirely within Designation 64 on the Operative Wairoa District Council Planning Maps. This designation means that airport activities do not require resource consent under the Wairoa District Plan and may establish as a permitted activity (refer to Image 1 below).

The development of the business park for 'non-airport activities' will be a permitted activity (not requiring resource consent) under the District plan provided that the typical development standards in the plan are complied with.

The designation does not override the rules in the Hawkes Bay Regional Resource Management Plan related to the discharge of stormwater or contaminants. Stormwater discharge consent will be required from the Hawkes Bay Regional Council in the event that the airport is extended or the business park is developed. Discharge consent will also be required for the establishment of a new refuelling area. These consents are both likely to be granted with appropriate contaminant mitigation.

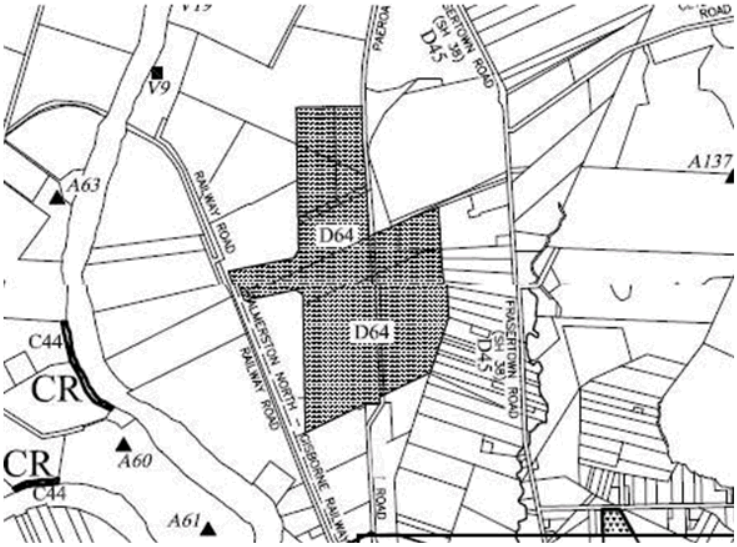


Image 1 – District Plan extract showing Designation 64

1.1.2 *Archaeological and Cultural*

An 'ArchCheck' was undertaken by Opus International Consultants on 03/03/2017 within the extent of the proposed business park to the west of the paper road. There are no recorded archaeological sites within the immediate area of proposed work, nor are there any recorded archaeological sites within a 100 - 200m radius of the proposed work. However, there is a suggestion that there could be cultivation soils and other evidence of pre- European Māori horticulture and occupation across the wider area.

It is recommended that the geotechnical test-pitting is undertaken under an ADP (Accidental Discovery Protocol) in conjunction with an archaeological site visit (ArchCheck Stage 3) during excavations of building platforms or the runway extension.

1.1.3 *Power and Telecommunications*

Chorus's website indicates that the airport has ADSL broadband availability at speeds greater than 1 Mbps. Speeds of greater than 5Mbps are available to the south of the airport. There is no fibre rollout currently planned for this area.

Vodafone have limited 3G coverage at the airport but 4G extended is available at the airport. Spark's network provides both good coverage for 3G and 4G extended.

Appendix I

Preliminary Investigations for Upgrades and Improvements Report

Wairoa District Council

Wairoa Airport

Preliminary Investigations For Upgrade and Improvements

Wairoa District Council

Wairoa Airport

Preliminary Investigations For Upgrade and Improvements

Prepared By
Brendon Thomson
Civil Engineering Technician

Reviewed By
Andrew Sowersby
Principal Planner

Approved for Release By
Brian Jones
Asset Management Consultant

Opus International Consultants Ltd
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Opus House, 6 Ossian Street
Private Bag 6019, Hawkes Bay Mail Centre,
Napier 4142
New Zealand

Telephone: +64 6 833 5100
Facsimile: +64 6 835 0881

Date: 04/04/2017
Reference: 2-Y1300.00
Status: FINAL

Contents

1 Introduction

1.1 Background

Wairoa Airport is a Council owned asset, it is a non-certified airstrip, designated as a Public Airport by Air Transport, a division of the Ministry of Transport (NZ). The Airport is located approximately 3km NW of Wairoa Township. The existing 914m sealed length of the runway constrains its use to aircraft in the category of 5700kg Maximum Take-Off Weight (MTOW) or less. Normally, this means that the largest aircraft to use the Airport would be a light engine turboprop carrying up to 10 or 12 passengers. In order to accommodate the newly purchased Skyline jet air ambulance, and attract commercial operators to capitalise on the opportunities Rocket Lab brings to the region, Opus International Consultants (Opus) have been engaged by Wairoa District Council (WDC) to consult with stakeholders and users of the Airport, investigate improvements, and provide Rough Order Costings (ROC) for financial planning.

1.2 Airport Description

ICAO: NZWO

IATA: WIR

RUNWAY: 16/34 grass strip of 1371m in length containing an all-weather sealed strip of 914m on its southern two thirds.

RUNWAY STRENGTH ESWL: 9530

CIRCUIT FIXED WING: Left Hand for all runways

LIGHTING: Pilot controlled runway lighting

FUEL: Jet A1 available.

1.3 Pathway to CAA Certification

CAA Certification of the Airport is required for "an Airport serving an aeroplane having a certificated seating capacity of more than 30 passengers that is engaged in regular air transport operations for the carriage of passengers". With certification comes greater responsibilities, and expenses, relating to management, safety, fire and/or rescue response, and wildlife management. A discussion with Nick Jackson of CAA, recommended 2 pathways to gaining ultimate certification of the Airport.

Pathway 1: Progressively upgrade the Airport over 5-10 years or as demand necessitates, then as aircraft operations approach the level required for certification, request a visit by CAA to advise on the process to be followed and how it can be achieved. The advantage of taking this path to certification is that the Airport can be steadily upgraded overtime and as funds become available.

Pathway 2: Ask CAA to visit and undertake an inspection and advise on what needs to be upgraded to meet certification standards. This results in CAA effectively driving the upgrades and making key points deliverable on a set time period.

2 Stakeholder Consultation

2.1 Stakeholders

As part of this investigation, stakeholders and users of the Wairoa Airport were contacted for their feedback on the current state of the Airport and what they would or would not like to see happen at the Airport. Stakeholders contacted in the course of this investigation were:

- Airways New Zealand (Dave Jordan/Richard Fry)
- Skyline Aviation (Alex McHardy)
- Air Napier (Gary Peacock)
- Civil Aviation Authority of New Zealand (Nick Jackson)
- Massey University School of Aviation (Andrew Vialoux)
- Hawke's Bay & East Coast Aero Club (and Air Hawke's Bay – wholly owned company of the Aero Club))
- Ashworth Helicopters Ltd.
- Farmers Air Ltd (Andrew Hogarth)
- Wairoa Aero Club (Richard Tollison)

2.2 Stakeholder Feedback

The feedback/complaints received from stakeholders is as follows:

- There have been instances of stock incursions into the airport operational areas
- Failure of runway lighting in certain weather conditions.
- There have been instances where grass mowing tractors have not followed Notice to Airman requirements (NOTAM)
- Issues with night-time visibility
- Wairoa Lighthouse causing visual distraction to pilots on final approach
- Lack of information regarding weather conditions
- Lack of information for visitors and tourists
- Lack of shelter during inclement and hot weather
- Non-Aviation related vehicles using the apron and runway and causing damage to the surfacing
- Ashwortrh Helicopters report that since last sealing their hangar now floods during heavy rain events.
- Long grass on strip to the North of the runway
- Issue with loose chips on the runway and in particular apron/refuelling area

- Lack of runway visual markings
- Both Air Napier and Skyline have indicated that the runway length is an issue for several of their aircraft in certain weather conditions.
- Lack of Navigational Visual Aids to assist in making night time operations safer and easier including lack of GPS flightpath approach for runway-16
- Control of obstacles such as trees and power poles
- The Hawke's Bay and East Coast Aero Club (via Air Hawke's Bay) stated that the existing facilities on site are sufficient for their operations, and were concerned that lengthening the runway would result in increased landing charges with no benefit to them.
- Wairoa Aero Club have no planes at present but the current set is generally OK for their needs
- Farmers Air expressed concern at length of time taken to resolve permanent fuel storage application, lack off maintenance assistance regarding hardstand areas in front of leased hangar and super bins.

Appendix A has a table summarising the above feedback from stakeholders, the recommended actions, timeframes and rough order costs.

3 Recommended Actions

3.1 General Procedural Changes

As upgrades occur and air traffic increases, Wairoa District Airport needs to ensure it is compliant with Civil Aviation and Airways requirements relating to Airport operation. Particularly, the Council needs to ensure that maintenance contractors are contactable by Airways during maintenance operations. Also, should any works be undertaken within the airside apron and runway space, a NOTAM (Notice to Airmen) should be issued through Airways to notify pilots and air traffic control of potential hazards. Additionally, any works being carried out in the airside space should have a MOWP (method of works plan) as per CAA AC 139-5, to advise contractors and stakeholders of the impending works and to be aware of airside safety issues and activity limitations. This would include approved hours of work, clean up requirements and daily flight information etc.

3.2 Fencing – Airport Operational Zone

The existing post and wire perimeter fencing for the Airport currently ranges in condition, from very good to very poor condition. *(I.e. not stock proof)*. It is recommended that the entire perimeter fencing is checked and upgraded to ensure it is stock proof. It may be possible to install new posts and batons as required, while restraining the existing wire as a lower cost alternative. The northern 3rd of the runway appears to be partially buried as can be seen in the attached photo. *(Note: - extension of fence height using battens)*.

Should the runway be extend to accommodate larger aircraft then in keeping with CAA guidelines the width of the runway strip needs to be a minimum of 75m either side of the runway centreline *(Currently 55m either side of centreline)* and 240m off the end of the runway for Runway End

Safety Area (RESA) requirements. Therefore the existing runway perimeter fences will need to be removed and/or relocated.

Interim repairs to fences to make stock proof in particular northern fences (1.2km) = $15,000

Removal of existing fences (3.8km) = $19,000 - $25,000

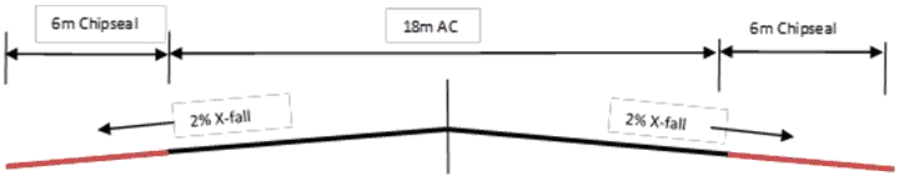
Option-1:- Renew fences around extremity of Extended Runway Strip (4.15km) = $62,000 - $83,000

Option-2:- Extend operational area out to utilise existing boundary fences (approximately another 15m wider either side. Construct new fences as required (2.25km) = $33,750 - $45,000

WDC has already indicated their intention to improve security and access onto the Airport by installing card activated security gates and fencing at the entrance = $50,000 - $70,000 budgeted

3.3 Existing Runway Resurfacing

The existing all weather runway is 914m long and 30m wide comprising 6m grade 3/5 chipseal, 18m asphaltic concrete (AC) and 6m grade 3/5 chipseal. The sides of the runway were sealed in 2014, but the age of the AC is approaching 30+ years and showing signs of fatigue with extensive cracking. Options for resurfacing the central runway and sides have been considered taking into account the likelihood of the runway being extended.



Runway Typical X-Section

Whilst the runway is not showing any signs of pavement failure it is recommended that either FWD testing or Benkelman Beam testing is carried out to help with determining the most appropriate resurfacing treatment. The various options are discussed below and summarised.

Refer to Appendix – B for Cost Estimates, Seal Areas (Drawing – C01-B) and Research paper on Pavement Surfacing for Passenger Jet Aircraft.

Photo showing Grade 3/5 chipseal and AC surfacing

3.3.1 Option-1:- Overlay existing AC (22m x 40mm) – $965,184 – 6m Chip seal sides to be resurfaced 2024/25

This option is the most expensive and provides for resurfacing of the fatigued and cracked AC with a PME membrane seal to help fill cracks and reduce reflective cracking prior to overlaying with 40mm of AC. The AC will need to be feathered out over 2m so that changes in x-fall grades are not too significant. Benefit is that the AC surface is more conducive to the operation of jet aircraft should the runway be extended in the future. Dis-benefit is that AC is expensive and additional width is required to accommodate grade change, edges of AC could look ragged and delaminate over time. Predicted life expectancy 18-25 years.

3.3.2 Option-2:- Mill off Existing AC and Replace (18m x 40mm) – $945,990 – 6m Chip seal sides to be resurfaced 2024/25

This option is the 2nd most expensive as the existing AC will need to be milled off prior to resurfacing with a membrane seal and 40mm of AC in order to maintain desired cross fall limits and tie-into sealed sides. Benefit is that the AC surface is more conducive to the operation of jet aircraft should the runway be extended in the future, less width of AC required. Dis-benefit is that AC is expensive. Predicted life expectancy 18-25 years.

3.3.3 Option-3:- Mill and Replace "Landing Zone" with AC (350m x 18m) and resurface remainder of Runway with a PMB grade 3 - Cape seal (564m x 18m) = $645,300 - 6m Chip seal sides to be resurfaced 2024/25

This option is the 3rd most expensive and provides for milling off the fatigued and cracked AC within the landing zone *(350m based on a mustang jet)* on the southern end of the existing runway-34 and 50m on the northern end runway-16 allowing for a future 300m extension. This area is recognised as being subjected to higher stresses due to wheel impact. The remainder of the runway to be resurfaced with a PMB grade-3 cape seal. Benefit is that the AC is more conducive to the operation of jet aircraft should the runway be extended in the future and this option is less expensive than the previous two options. Predicted life expectancy 18-25 years.

3.3.4 Option-4:- Overlay existing AC with PMB grade-3 fabric seal – Topped with Type III Slurry – $411,300 – 6m Chip seal sides to be resurfaced 2024/25

This option is the 4th most expensive and provides for resurfacing of the fatigued and cracked AC with a PMB grade 3 chip fabric seal topped with a type III slurry to provide a smoother surface similar to that of AC. The slurry surface should also be conducive to the operation of jet aircraft should the runway be extended in the future. The benefit is that the cost of resurfacing is approximately 50% less than AC. Dis-benefit is that the life expectancy is less than AC. Predicted life expectancy 12-18 years

3.3.5 Option-5 Fabric Chipseal Gr3/5/6 on AC – $320,814 – 6m Chip seal sides to be resurfaced 2024/25

This option is the 5th most expensive and provides for resurfacing of the fatigued and cracked AC with a PMB grade 3/5/6 chip fabric seal. The fabric will help to provide additional binder to bridge

the cracks and reduce reflective cracking along with PMB. The grade 6 provides a smoother surface and less likely to fret loose chip once it has settled down and established. This treatment requires additional rolling in order to bed down the chip. Benefit is that the costs are extremely affordable. Dis-benefit is that periodic rolling and suction sweeping should be carried out on a regular basis and surfacing not totally conducive to the operation of jet aircraft due to threat of loose chip being sucked into engines causing damage. Predicted life expectancy 15-20 years

3.3.6 Option-6 Emulsion + Latex Chipseal on AC – $213,876 – 6m Chip seal sides to be resurfaced 2024/25

This option is the least expensive and provides for resurfacing of the fatigued and cracked AC with an Emulsion and Latex grade 3/5/6 chip seal. The emulsion will hopefully filter into the cracks and the latex will make the binder more durable. The grade 6 provides a smoother surface and less likely to fret loose chip once it has settled down and established. This treatment requires additional rolling in order to bed down the chip. Benefit is that the costs are extremely affordable. Dis-benefit is that periodic rolling and suction sweeping should be carried out on a regular basis and surfacing not totally conducive to the operation of jet aircraft due to threat of loose chip being sucked into engines causing damage. Predicted life expectancy 15-20 years

3.3.7 Summary – Existing Runway Resurfacing Options

Option	Proposed Treatment	Estimated Cost	Life Expectancy
1	AC Overlay – Full length *(914m long x 22m wide)*	$965,184	18 – 25yrs
2	AC Mill & Replace – Full length *(914m long x 18m wide)*	$945,990	18 – 25yrs
3	AC Mill & Replace "Touch Down Zone" *(400m long x 18m wide)* Cape Seal – PMB Fabric - G3 + Slurry *(514m x 18m)*	$645,300	18 – 25yrs
4	Cape seal – PMB Fabric - G3 + Slurry *(914m long x 18m wide)*	$411,300	12 – 18yrs
5	PMB Fabric seal – G3/5/6 chip *(914m long x 18m wide)*	$320,814	15 – 20yrs
6	Emulsion + Latex - G3/5/6 chip	$213,876	15 – 20yrs

With the likelihood of the runway being extended in the near future we would recommend option-3 as the preferred resurfacing treatment. The construction of AC in the touchdown zone allows for the inclusion of jet aircraft operations in the near future, whilst resurfacing the remaining runway with a Cape Seal makes the overall runway resurfacing more affordable.

3.4 Taxiways and Apron Resurfacing

The taxiway and apron were sealed in 2014 with a grade 3/5 chip which has lost chip in areas that haven't been trafficked sufficiently to imbed the chip and some areas where aircraft do power turns. There has been complaints / concern regarding this issue. Three options have been considered to remedy this problem.

3.4.1 Option-1 Resurface with a AC – Taxiways = $187,470 and Apron = $500,400

This option is the most expensive but provides a more homogenous surfacing throughout the Airport and is conducive with Jet aircraft operations. The surface is smooth providing for easier pedestrian and health care patience mobility and transfer and is less likely to have adverse effects from aircraft power turns. Predicted life expectancy 18-25 years

3.4.2 Option-2 Resurface with Slurry – Taxiways = $72,905 and Apron = $194,600

This option is the 2nd most expensive but provides a more reasonable alternative to AC. The surface is smoother than a chip seal providing for easier pedestrian and health care patience mobility and transfer and is reasonably conducive to jet aircraft operations. Predicted life expectancy 12-18 years

3.4.3 Option-3 Resurface with Emulsion + Latex G6 chipseal – Taxiways = $27,079 and Apron = $72,280

This option is the least expensive surfacing but provides an economic solution to minimising the chip loss and creating a smoother surface than existing still providing for easier pedestrian and health care patience mobility and transfer. Some maintenance texturizing of areas where chip has been lost maybe required prior to applying the grade 6 seal. Predicted life expectancy 10-15 years

Photo showing chip loss on Taxiway

3.4.4 Summary – Taxiway & Apron Resurfacing Options

Option	Proposed Treatment	Estimated Cost Taxiway	Estimated Cost Apron	Life Expectancy
1	Resurface - AC	$187,470	$500,400	18 – 25yrs
2	Resurface - Slurry	$72,905	$194,600	12 – 18yrs
3	Resurface - Emulsion +Latex -G6	$27,079	$72,280	10 – 15yrs

3.5 Resurface Taxiway to Super bins

The taxiway to and from the super bins needs to be resurfaced at some stage in the future. It is proposed that a 3/5/6 chipseal will be adequate for this purpose. During inspections it was noticed that sections of the taxiway are showing signs of deformation obviously due to loading operations and aircraft traffic. Estimated Cost = $24,180

3.6 Runway Marking

It is recommended that runway marking design is undertaken and implemented as per CAA AC139-6 with the use of aviation glass beads etc. for night time landings. We have consulted with Orsborn Road Markers Ltd as they currently mark Napier Airport. They have suggested that for the number of night time flights into Wairoa Airport that Highway glass beads could be used as latest Aviation beads are approximately 200% more expensive. There are only a couple of the major airports using them at present. *(Refer Appendix – C – Drawings C02-B & C03-B for required Markings and Estimate)*

Existing Runway Markings: - ROC = $24,480

Runway Extension Markings: - ROC = $42,620

3.7 Runway Lighting and Navigational Aids - Upgrade

Richard Fry of Airways New Zealand was contacted for his input on the Lighting of the Wairoa Airport, following his recent visit. Airways believe the issue with lights failing to activate in certain weather conditions is due to the proximity of the receiver to a power pole. Their recommendation is to move the receiver. He advised this would only require technicians for a couple of days, and some further trenching. A site inspection showed that many of the lights are damaged, and should be repaired or replaced as necessary. ROC = $15,000

Richard was asked for his comment on the adequacy of the current lighting system to cope with the proposed runway extension. His response was, "while the existing system could be used, if WDC are looking to attract commercial operators to the area, a new system may be a better option" This would also provide some assurance of reliability and safeguard against failure of an aging system.

It is recommended Richard and Airways New Zealand are consulted to provide detailed inputs for the lighting design of the runway extension. Richard indicated that in some cases Airways part fund/part own the lighting systems, in return for revenue from the airport operations, this may be an opportunity worth investigating to allow Wairoa District Council to upgrade while reducing the upfront capital investment.

The cost of a full upgrade of lighting inclusive of night time navigational aids such as PAPI's, VASIS and emergency power source has been based on the Westport Airport upgrade in 2008. Costs have been escalated to 2016 values. Tender schedule and plans attached for reference.
(Refer Appendix – D)

Existing Runway Upgrade ROC = $280,000

Runway Extension ROC = $95,000

3.8 Runway Extension

Both Air Napier and Skyline Aviation indicated that the existing runway length is inadequate for some of their aircraft in certain weather conditions. Lengthening the runway is also recommended to attract new commercial operators to the Airport and accommodate Skyline's jet Ambulance services for the region. Based on this, we have prepared an estimate to extend the runway to the North 300m. *(Refer Appendix – E – Drawings C04-B to C06-B)*

3.8.1 Pavement and Surfacing

Comparing recent LiDAR data to the original construction drawings, it appears the grass section of the runway has already been shaped as designed. This should mean, the extension will be a matter of constructing the pavement and surfacing. For the purposes of the preliminary pavement design, we have assumed the subgrade will have a CBR of 4 or better which will be confirmed when geotechnical investigations are undertaken as part of Phase 2 of this project and based on aircraft that are likely to use the Airport a pavement design will be confirmed. *(Since the initial draft report was done geotechnical investigations were carried out on Wednesday 19th January 2017. Unfortunately due to the extreme dry conditions it is inconclusive as to whether the subgrade CBR would be greater than 4 but from test pits dug for the development area our Geotechnical Engineer is reasonably confident that the CBR shouldn't be less than 4)*

It is therefore recommended that a test pit is dug within the existing runway to establish depths of the existing runway pavement and further scala testing is carried out in Autum to confirm subgrade CBR's. The results may allow a reduction in required pavement depths.

For the purpose of these ROC's the preliminary design consists of 200mm of Granular Subbase, 100mm of M4 Basecourse with Asphaltic Concrete (AC) surfacing. Alternative costing for surfacing with a Capeseal - Slurry has also been included.

We have included two cost estimates for construction of the extension, *(refer Appendix E)* one is "Conservative" utilising rates received for Mangahohi Bridge replacement SH38, the 2nd is "Best-Case" scenario based on a recent WDC urban contract.

3.8.2 Runway Extended Safety Area (RESA)

Should WDC look to gain certification of the Airport in the future, based on CAA Part-139.51 design requirements a Runway Extended Safety Area (RESA) will be necessary. As a minimum 90m is required but ideally this should be 240m. The existing distance to fence from end of proposed runway extension is 134m. The director of CAA will need to accept and agree any RESA less than 240m. Therefore land purchase for the additional length required has been allow for within the estimate. *(Refer to Appendix – E - plan C06-B and C07-B, and Loganstone report)*

3.8.3 Runway Drainage

The existing runway has slotted drainage along the outside edges of the sealed pavement for the latest extension of 400m but not for the original length of 490m. In discussion with colleagues the slotted drains are an ideal scenario but not totally necessary. We have allowed for the cost of a combination of subsoil drainage and surface water collection within our estimate.

3.8.4 Runway Lighting

As part of the runway extension the cost for lighting has been included. Two costs scenarios have been allowed for, extending the existing lighting system and constructing a new circuit for the entire runway. Refer to section 3.7 above regarding lighting upgrade.

3.8.5 Runway Markings

As part of the extension runway markings have been allowed for within the estimate. This includes removal of parts of the Threshold Markings and Designation number on end of existing runway and replacing with approach aiming markers along with centreline and threshold markings. *(Refer Appendix – E)*

3.8.6 Summary of Estimated Cost

Runway Extension - Summary of Estimated Costs		
Item	Description	Estimated Cost
1	Runway Construction	$696,600
2	Runway Lighting and Navigational Aids *(Runway Extension Only)*	$95,000
3	Runway Markings	$42,460
4	Land Requisition for RESA	$47,360
5	Remove and Relocate Fences – perimeter of runway strip	$69,700
6	Preliminary & General Costs	$30,000
7	Professional Services (4%)	$39,240
8	Contingency (10%)	$102,040
	Total Estimated Cost	**$1,122,400**

3.9 Fuel Storage Resource Consent Requirements

From discussions with Farmers Air it is apparent that they would like to install a permanent fuel storage tank as soon as possible. Multiple fuel storage is common at other airports.

Whanganui have two suppliers: - Air BP and 'Z' Energy provide AVGAS 100 and Jet A1, with associated 'swipecard' service.

- Air BP is located adjacent to the main Terminal building. Their Jet A1 dispensers are located mid apron and at the eastern end, while the Avgas 100 dispenser is at the western end of the apron.
- 'Z' Energy dispensers are on the airfield near Aero Work towards the eastern end of the hangars

For the Wairoa Airport the ideal location for an additional fuel storage supply tank would be alongside the existing 'Z' Energy site provided future height limitations associated to the runway are not compromised.

Resource consent will be required from the HBRC for the establishment of the additional fuel supply.

4 Recommendations

4.1 Maintenance and Upgrades

Opus recommends Wairoa District Council convene a workshop to discuss the contents of this report and agree on options and timelines for the various components so that budgets and Forward Work Programmes (FWP) can be confirmed. Further consultation with stakeholders, Airways, CAA and Opus maybe required to discuss and analyse the pros and cons of a runway extension.

Upon completion of the upgrades and/or runway extension, should it become likely that CAA Certification is required, it is recommended that WDC consult with CAA to determine and confirm the requirements.

Appendix A – Feedback Summary

APPENDIX - A

Stake Holder Feedback - Summary

Problem	Action	Target Completion Date	Estimated Cost	Comments
Short term/Immediate tasks				
Incursions of stock in operational zone	Ensure Fences are secure and maintained to prevent stock incursions	Immediate/ASAP	$15,000 - Northern End of Runway is in the worsed state of disrepair - approx. 1.2km	Existing = 3.8km of fencing total. Need another 0.35km to extend out to 150m and include RESA = Total New = 4.15km Fence cost $15-$20/m. Cost to renew all Fences = $62,000-$83,000. If runway extended - look at removal of existing fences ($20-25,000) and move operational area out to boundary fences another 30-35m wider than existing. Install new fences as required. (approximately 1.5km - $30,000) Note:- Extension will increase mowing requirements.
Grass Mowing Contractors randomly crossing the runway when aircraft are on their final approach to land (recent event)	Ensure mowing contractor is contactable during operations. Ensure correct procedures are in place for all works in apron/runway and that works have an approved method of works plan (as required by CAA). Consult with Airways NZ.	Immediate/ASAP	Nil - Procedural updates only	
Failure of lighting in certain weather conditions	Relocate reciever away from powerpole - replace/repair broken lights	Immediate/ASAP	$15,000	Airways representative inspected in November 2016
Night Time visibility issues	Upgrade runway and apron edge lighting and apron floodlighting and inclusion of PAPI's	Investigate costs	$280,000	Full upgrade and installation of runway lights, taxiway lights, apron flood lights, controls, PAPI navigation aids, illuminated wind socks, and backup power supply. Cost based on Westport Airport
Wairoa Lighthouse causing visual distraction to pilots	Minimise light spill from Wairoa Lighthouse	ASAP - Investigate & Resolve	$7,500	Maybe lighthouse can be controlled same as landing lights?
Lack of weather and landing conditions indicators	Install webcam (/weatherstation?) on terminal	As Nescessary/Mid 2017	$15,000	There is a metservice weather station at the aerodrome. Investaigate weather broadcast and linking data to a common website along with webcam
Lack of information for tourists and visitors	Establish airport webpage (perhaps incorporate with Wairoa i-site page?)	As Nescessary/2017/18	$5,000	WDC to investigate

Problem	Action	Target Completion Date	Estimated Cost	Comments
Lack of shelter during inclement and hot weather	Provide access to old airport lounge for pilots and passengers during inclement weather	As Nescessary/2017/18	$15,000 - $20,000	Nil - Utilise existing facilities. Funds could be allocated for upgrades
Non-Aviation related vehicles using the runway and damaging runway surface	Prohibit the use of non-aviation related vehicles on the runway and apron.	As Nescessary/2017/18	$50,000 - $70,000	Mostly procedural - but need security fencing / gates with swipe card access required
Long grass on the strip to the North of the runway	Ensure grass is mown on strip North of runway - update procedures so NOTAM is issued if not	Start Immediately/ASAP	Possible increase in maintenance costs. Unsure of existing arrangements.	Look at existing frequency of mowing - dicuss with Mtce contractor
Issue with loose chips/poor surfacing on runway, especially apron/refuelling area	Runway Resurfacing	Programme in stages starting 2017/18	Refer Appendix B	Refer Appendix B
Lack of runway visual markings	Upgrade runway markings	2017/2018	$18,760 - Thresholds and Designation No. & Hold Bars, $4,060 - Centreline, $1,410 Taxiway centreline. Total = $24,230	Minimum requirements - Threshold either end plus Runway designation numbers. Centreline Marking is optional
Pavement failure and potholes in area between Super Bins and taxiway - also pavement deformation noticed in taxiway	Carry out pavement repairs as required	2017/2018	$10,000	WDC to investigate
Medium Term Tasks				
Length of runway is too short for several aircraft in certain weather conditions (Air Napier & Skyline)	Lengthen Runway	2018/2019	Refer Appendix C - Runway Extension	
Lack of navigational aids to make night time operations safer and easier.	Install navigational aids. PAPI's, VASIS and REIL	2019/2020	Refer Appendix C - Runway Extension	
Control of obstacles such as tree and power poles	Undertake obstacle assessment, ROC and programme for removal	2018/19	$25,000 - $30,000	Refer to Height Limitations Plan
Long Term Tasks				
	Aerodrome certification	When required		

$0,000	Estimates to be confirmed
2019	Dates to be confirmed

Appendix B – Existing Runway Resurfacing

- **Existing Runway Resurfacing Options Costings**
- **Drawing - Seal Areas (C01-B)**
- **Resurfacing FWP**
- **Research Paper – Airport Seals**

APPENDIX - B EXISTING RUNWAY - RESURFACING OPTIONS - COSTS

Existing Runway Dimensions

914m long **30m** wide = 6m chipseal + 18m AC + 6m chipseal

Areas: =

Chipseal sides - 12m	=	10,968 m2
Central Runway - 18m	=	16,452 m2
AC Overlay - 22m	=	20,108 m2
AC - 400m touch down	=	7,200m2
Capeseal - 514m	=	9,252m2

Central Runway

	Option-1- AC Overlay (22m)	Option-2 - Replace AC (18m)	Option-3 AC Touch Down Zone Cape seal Remainder	Option-4 - Capeseal PMB Fabric G3 + Slurry	Option-5 - PMB - Fabric Seal 3-5-6 Chipseal	Option-6 - Emulsion + Latex 3-5-6 Chipseal
	$965,184	$945,990	$645,300	$411,300	$320,814	$213,876
Runway Sides	Grade 6 $47,528	Grade 6 $71,292	Grade 6 $71,292	Grade 6 $71,292	Grade 6 $71,292	Grade 6 $71,292

Existing Taxiways **Area A** = 1,136 m2 **Area D** = 3,030 m2 **Area E** = 1,860 m2

	Option-1 AC Overlay	Option-2 Slurry	Option-3 Gr 3/5/6 Chipseal
Areas A & D	$187,470	$72,905	$27,079
Area E - to Superbins			$24,180

Existing Aprons **Area B** = 10,200 m2 **Area C** = 920 m2

	Option-1 AC Overlay	Option-2 Slurry	Option-3 Gr 3/5/6 Chipseal
Areas B & C	$500,400	$194,600	$72,280

Carpark and Entrance **Area F** = 2,120 m2

Option-1 AC Overlay	Option-2 Slurry	Option-3 Gr 6 Chipseal
$95,400	$37,100	$13,780

Revision	Amendment	Approved	Revision Date
B	ISSUED FOR MASTERPLAN	BJ	10/03/2017

WAIROA DISTRICT COUNCIL

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Designed	Approved	Approved Date
B. THOMSON	B. JONES	11/01/2017
Drawn	Scales	Project No.	Sheet No.	Revision
B. THOMSON	NOT TO SCALE	2-S5091.VT	C01	B

WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION

SEALED SURFACE AREAS

Original Sheet Size A1 [841x594] Plot Date: 2017-03-14 at 11:10:22 a.m. Path: S:\Proj\NZ\2Y\2-Y1300.DM\Wairoa DC TAM\Home\2_S5187\0.VT\Wairoa Airport\Wairoa Airport.dwg C01 (B)

APPENDIX - B WAIROA AIRPORT - RESURFACING FORWARD WORKS PROGRAMME

EXISTING RUNWAY Actual age and dates unknown

Start RP	End RP	Offset	Length	Width	Extra Area	Total Area m2	Existing Surfacing	Date	Age	Condition	Remaining Usefull Life	Future Surfacing Date	Proposed Treatment	Predicted Life - Treatment	Rate $/m2	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
0	400	C	400	18	0	7,200	AC	1987	30	Poor	0	2018	AC	18-25	$ 57.50		$ 414,000								
400	914	C	514	18	0	9,252	AC	1987	30	Poor	0	2018	Cape seal	18-25	$ 25.00		$ 231,300								
0	914	L	914	6	0	5,484	G3/5	2014	3	Very Good	7	2024	G6 PME	15-20	$ 6.50									$ 35,646	
0	914	R	914	6	0	5,484	G3/5	2014	3	Very Good	7	2024	G6 PME	15-20	$ 6.50									$ 35,646	
Total						**27,420**										$ -	$ 645,300	$ -	$ -	$ -	$ -	$ -	$ -	$ 71,292	$ -

TAXIWAYS

Start RP	End RP	Segment	Length	Width	Extra Area	Total Area m2	Existing Surfacing	Date	Age	Condition	Remaining Usefull Life	Future Surfacing Date	Proposed Treatment	Predicted Life - Treatment	Rate $/m2	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
0	140	A	140	8	18	1,138	G3/5-R	2014	3	Average	7	2018	Slurry	12-15	$ 17.50				19915						
0	190	D	215	12	450	3,030	G3/5-R	2014	3	Average	7	2018	Slurry	12-15	$ 17.50				53025						
0	180	E	180	10	60	1,860	G3/5-R	2010	7	Good	5	2024	G3/5/6	15-20	$ 13.00						$ 24,180				
Total						**6,028**											$ -	$ -	$ 72,940	$ -	$ 24,180	$ -	$ -	$ -	$ -

APRON

Start RP	End RP	Segment	Average Length	Average Width	Extra Area	Total Area m2	Existing Surfacing	Date	Age	Condition	Remaining Usefull Life	Future Surfacing Date	Proposed Treatment	Predicted Life - Treatment	Rate $/m2	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
0	120	B	120	85	0	10,200	G3/5-R	2014	3	Good	7	2017	AC	18-25	$ 45.00			459000							
0	35	C	35	20	220	920	G3/5-R	2014	3	Good	7	2017	AC	18-25	$ 45.00			41400							
Total						**11,120**										$ -	$ -	$ 500,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Carpark & Entrance

Start RP	End RP	Segment	Average Length	Average Width	Extra Area	Total Area m2	Existing Surfacing	Date	Age	Condition	Remaining Usefull Life	Future Surfacing Date	Proposed Treatment	Predicted Life - Treatment	Rate $/m2	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
0	0	F	0	0	2120	2,120	G3/5-R	2010	7	Very Good	7	2017	G6 PME	8-12	$ 6.50						$ 13,780				
Total						**2,120**															**$ 13,780**				

Total Resurfacing Expenditure																$ -	$ 645,300	$ 500,400	$ 72,940	$ -	$ 37,960	$ -	$ -	$ 71,292	$ -

EMERY, S.J. AND CAPLEHORN, M. W. (1993) Use of surface treatments on runways for RPT jet aircraft. Conf. Airport Pavement Innovations, Am. Soc. Civil Eng., Vicksburg

USE OF SURFACE TREATMENTS ON PAVEMENTS FOR PASSENGER JET AIRCRAFT

By S. J. Emery[1] and M. W. Caplehorn[2]

ABSTRACT

Asphalt is generally used as the surfacing for flexible airport pavements with airline passenger jet aircraft. In Australia and its neighbouring territories, surface treatments (seals) have been used for many years in remote areas, and for aircraft up to Boeing 767 in size. The suitability of surface treatments; their design, construction and maintenance; and their cost effectiveness are discussed within a framework of practical application.

TERMINOLOGY

Bitumen terminology used in this paper	Terminology used in other countries
Asphalt	Bitumen concrete, premix, hotmix
Cape Seal	A single seal overlain with a thin (5mm) slurry to form a relatively smooth surface texture
Cutter	Jet A1 or AVTUR or kerosine or paraffin
Double seal	Two engineered layers of stone and of bitumen
Fogspray	Enrichment coat
Flux	Diesel, flux oil
Modified bitumen	Bitumen with the addition of rubber or polymers
Surface treatment	Seal
Slurry	Cold microsurfacing, without polymer modification of the bitumen, and with a setting time of 10-24 hours
Stone	Aggregate, chip
Triple seal	Two engineered layers of stone and of bitumen, overlain with a third engineered layer of sand and of bitumen

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INTRODUCTION

For flexible pavements carrying airline passenger jet aircraft, the choice of surfacing is generally restricted to asphalt (for example: ICAO Aerodrome Design Manual, 1983). This type of treatment can be expensive to construct in areas which do not have ready access to an asphalt plant. In these areas, the alternative of a surface treatment (bitumen seal) can be technically and financially viable.

In Australia and its neighbouring territories, surface treatments have been used on flexible airport pavements for many years. The aircraft types using these pavements range from Fokker F28 to Boeing 767. Operations have also been reported in the South Pacific with DC10 and L1011 aircraft on surface treatments (McClung, 1992). The experiences built up have led to an understanding of the limitations and practicalities of surface treatments on these pavements.

In particular, this paper draws on experiences at 8 airports with surface treated pavements and served by airline passenger jet aircraft (Table 1). At these airports, the authors' have been variously involved with new surface treatments, reseals, pavement inspections and full-scale pavement investigations. This experience is combined with the results of recent research into bituminous surfacings for low volume roads in southern Africa by the Council for Scientific and Industrial Research (CSIR) and Southern African Bitumen and Tar Association (SABITA) (Emery et al., 1991).

The main advantage of surface treatments over asphalt is construction cost. Many areas do not have access to an asphalt plant, and the infrastructure to support a mobile asphalt plant in terms of materials sources is poor. If materials have to be transported significant distances, the volume of materials required for surface treatments is less than for a thin asphalt. Under these circumstances, a surface treatment can cost as little as half that of an asphalt.

Surface treatments should not be automatically substituted for asphalt, and the limitations to their use are discussed here. Experience in the use of surface treatments on airport pavements and roads has shown important differences between the two applications. These differences are discussed in terms of design, construction and maintenance. The cost effectiveness of surface treatments is compared to asphalt, and their increased maintenance costs and reduced lives are balanced against construction cost savings.

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TABLE 1 Airports with surface treatment pavements

Airport (1)	Main runway (2)	Largest aircraft (3)	Movements[a] (4)
Broome, WA	2026m x 45m	F28/BAe146 Boeing 767	8 per day 1 per month
Carnarvon, WA	1679m x 30m	F28	4 per day
Christmas Island, Indian Ocean	2103m x 45m	Boeing 737	4 per week
Derby, WA	1736m x 45m	F28/BAe146	4 per day[c]
Geraldton, WA	1981m x 45m	F28/BAe146 DC9	4 per day 1 per month[b]
Kalgoorlie, WA	1828m x 45m	F28/BAe146 Boeing 727	4 per day 1 per month[b]
Meekatharra, WA	2181m x 45m	Boeing 727	1 per month[c]
Newman, WA	2072m x 30m	F28/BAe146	6 per day

Notes: a: varies with schedule; b: used or was used as an alternate and aircraft type may vary with fleet changes; c: no longer in use

SUITABILITY OF FLEXIBLE AIRPORT PAVEMENTS FOR SURFACE TREATMENT

The suitability of flexible airport pavements for surface treatments varies, and surface treatments should not be considered to be a universal substitute for thin asphalt surfacings. Suitable applications are characterised by:

- Location : areas of lower shear stress,
- Traffic : occasional or infrequent trafficking,
- Design aircraft: lower tyre pressures, lighter aircraft.
- Foreign object damage (FOD) control.

Location

Surface treatments are better suited to the low stress locations. Although most of the runway and taxiway has low shear stress from aircraft traffic, the sections with higher shear stress on the surfacing are the runway turning nodes, runway ends (if these are used for 180° turning), intersections, and (to a much lesser extent) the touchdown zone. These areas are less suited to surface treatments,

and some special treatment may be necessary. It is very rare to see damage due to aircraft braking, and this is therefore not defined here as a high stress area. Aprons are generally medium stress areas, and parking bays are considered to be very high stress areas.

In the low stress areas, the double surface treatment (10-14mm stone on the lower layer and 5-7mm stone on the upper layer; plus a prime) has proved very successful for new construction. The single surface treatment has been used occasionally for general aviation aircraft <5700kg (such as Laverton, Western Australia), but extrapolating research into its performance on roads (Emery et al., 1991) confirms that it is not suitable for airline passenger jet aircraft.

In the high stress areas, the triple surface treatment (double surface treatment with a thin sand seal on top to fill the voids) or a Cape Seal (single surface treatment with a 13mm or a 19mm stone, and a thin slurry on top which almost fills the voids and creates a strong mosaic; TRH3, 1986) can be used. It may be desirable to use asphalt or concrete or concrete block paving in the high and very high stress areas; this has been done at Broome, for example, where the runway, taxiway and apron have a surface treatment and the parking area for 767 aircraft is concrete.

Traffic

The experience to date has been with airports with infrequent or occasional trafficking, and the suitability of surface treatments for intensive trafficking by airline passenger jet aircraft is not known. Surface treatments have been used on roads at traffic volumes more than 100,000 vehicles per day (Colwill, 1991). The materials requirements are more stringent at higher traffic volumes involving stone polishing/abrasion, and possibly modified bitumens. However with these requirements met, it should be possible to accept some increase in traffic volumes on airport pavements with surface treatments, although the contribution of asphalt to the pavement structural capacity would need to be balanced.

Design aircraft

The suitability of surface treatments decreases with increasing size of design aircraft. For the smallest airline jets (40 tonne class: F28 all variants, BAe146-200), surface treatments are generally suited to all pavements, and good success has been had with these at varying levels of traffic over many years. As the design aircraft size increases (and typically the tyre pressure increases), then surface treatments become less suitable and should be confined to progressively lower traffic frequencies. For the Boeing 767, they are suited only to occasional operations. For the Boeing 747, surface treatments are not recommended.

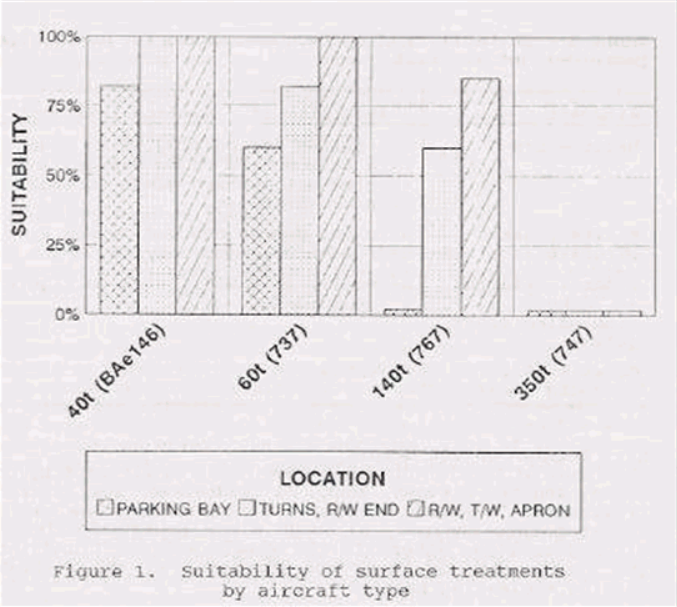

Figure 1. Suitability of surface treatments by aircraft type

The suggested suitability, based on the authors' experience, is shown in Figure 1. The range of design aircraft is 40 tonne, 60 tonne (Boeing 737-400, DC-9, Airbus 320), 140 tonne (Boeing 767-200, Airbus A300), and 350 tonne (Boeing 747). Although this paper addresses airline passenger jet aircraft, the suitability of surface treatments for other aircraft is noted briefly in Table 2.

TABLE 2 Suitability of surface treatments for non-airline passenger jet aircraft

Aircraft	Suitability of a surface treatment
Helicopters	Not suited for parking. Even light skid helicopters cause damage, and wheeled helicopters punch through or pick up stones.
Military jet aircraft	Marginal due to FOD and damage from narrow high pressure tyres.
General aviation >5,700kg (including small jets)	Generally suitable; refer to Figure 1 for guidance.
General aviation <5,700kg	Suitable.

Foreign object damage

The issue of foreign object damage (FOD) to aircraft by the stone and/or bitumen must be addressed for surface treatments. The main problem is that loose stone can be ingested into engines, although minor problems exist if bitumen or stone adhere to the wheels and are flung into the wheel wells or along the underside of the aircraft causing a cleaning problem.

FOD is obviously more of a potential problem with surface treatments than with asphalts, and a specific pavement maintenance programme is essential to deal with it, as discussed later under maintenance. However in over 15 years of airline jet operations on surface treatments, with suitable maintenance, the authors' have encountered no problems with FOD due to stone ingestion.

There have been occasional problems with bitumen in the wheel wells and on the aircraft in the first week after a new seal or reseal, usually when the work has been done in hot weather and the airport is opened to traffic within an hour of completing each stage. These have not caused operational or safety problems.

DESIGN

The design of a surface treatment for an airport pavement is similar to that for a road. The performance of the pavement depends on the:

- characteristics of the stone and bitumen,
- rate of application of the stone and the bitumen,
- texture depth, development of good adhesion, and initial compaction at the construction stage to obtain a dense interlocking mosaic of stone,

and a number of other factors including the strength and flexural properties of pavement, climate, etc. which are common to roads and well documented (NAASRA, 1975). Only the design differences for airport pavements will be discussed here.

Stone

The suitability of the stone is a key issue in the performance of the surfacing. Experience has been that the testing and validation of stone supplies for airport surface treatments is a more extensive process compared to roads. The stone-related factors that affect the performance of a surface treatment are the:

- spread rate, shape, Average Least Dimension (ALD), Flakiness Index (FI) and nominal size,
- single-sized gradation,
- cleanness and dust content,
- strength, and
- adhesion.

All aggregates used in surface treatments, whether stone, crusher dust or natural sand, should conform to the specific quality recommendations on these factors from the various road or airport authorities.

The shape of the stone affects the interlocking of the compacted stone layer and thus the stability of the surface treatment, and this is especially important on airport pavements. The more angular the stone, the better the interlocking because there are many points of contact. Experience with rounded stone (such as screened river gravels at Carnarvon) has not always been satisfactory, and such stone is probably limited to occasional movements of 40 tonne aircraft. Stone not of uniform size results in firm tyre contact over a smaller area (decreasing the skid resistance, especially in wet weather), loss of the larger stone by plucking, and concentrated wear on the larger particles.

It is essential that the stone has good adhesion characteristics, and these should be retained throughout the life of the surface treatment in order to maintain a stable position under the action of aircraft. The presence of one per cent dust on the stone can result in a substantial loss of stone (TRH 3, 1986). Moist aggregate does not adhere well to bitumens (except bituminous emulsions) and if aircraft are allowed to use the surface treatment coat before adequate bonding has occurred, excessive whip-off can occur.

Precoating improves adhesion and obviates the problems associated with stone that is not free of dust and moisture. Generally speaking, it should be mandatory for airport surface treatments. Adhesion agents (generally of the amine type) are either mixed with the bitumen or applied in a dilutant to the aggregate. Laboratory precoating tests with the actual aggregate and various agents are essential to determine the correct agent and application rate. On occasions it has been necessary to use adhesion agents in both the bitumen and applied to the stone in the precoat (such as Broome with a high percentage of quartz).

Caution should be exercised with the application of diesel to the aggregate as part of a precoat. This acts as a fluxing agent, softening the bitumen for several months leading to a possible loss of stone. Precoating at 6-9 litres/m^3 with diesel is equivalent to a flux of 2-4% in the bitumen in the surface treatment.

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The aggregate must be strong enough not to break excessively during rolling or under traffic, and this parameter is more critical for airport surface treatments than for roads because of the higher tyre pressures and wheel loads on airports. Recommended tests include the 10 per cent Fines Aggregate Crushing Test (FACT) or the Aggregate Crushing Value (ACV). The Los Angeles abrasion test is not especially applicable to airports since it is a wear test rather than a crushing test. Experience has been that a polished stone value requirement is not generally applicable due to the low traffic on an airport.

The stone must not weather during the life of the surface treatment. This property is more difficult to assess, but is generally specified by a minimum percentage ratio of soaked/dry 10 per cent FACT. In addition to this the stone should be inspected visually for the presence of inferior material, quartz (poor adhesion), and harmful minerals such as pyrite; a hand microscope is recommended.

Various test limits have been adapted from Australian and South African road and airport specifications to give a partial specification for stones for surface treatments on airports (Table 3). Other specifications such as grading can be taken directly from the road specifications.

TABLE 3 Partial specification for airport sealing aggregates

TEST	FUNCTION	SUGGESTED LIMIT
10% FACT dry	Aggregate crushing	≥ 210 kN
Ratio soaked/dry 10% FACT	Weathering	≥ 75%
ACV[a]	Aggregate crushing	≤ 21
Fines	Cleanliness	≤ 0,5% passing 0,425mm sieve
Stripping test	Adhesion	Varies with test type
Flakiness Index	Shape	≤ 30%

However in some areas, stone which meets this specification is just not available economically, and a marginal stone must be used. In such cases, the use of a triple seal or Cape Seal will give additional support to the stone and ameliorate crushing to an extent.

Bitumen

Retention of the stone, the degree of stone whip-off, and durability are all related to the adhesive forces developed by the bitumen, and in turn depend on the type, grade and amount of bitumen applied. The bitumen must develop early adhesion and cohesive strength, and must be able to withstand "softening-up" under the normal temperature range encountered in service and to retain the stone under the action of moving wheel loads. Bitumen properties that affect the performance of a surface treatment are the:

- grade and type,
- spray rate, and
- durability.

Bitumen grade and type

The climatic conditions in the region where the surface treatment is to be laid affect the correct grade and type of bitumen to cater for. Extremely hot weather will reduce cohesion, and cold weather will result in a brittle, hard binder. Penetration grade bitumens, cut-back bitumens (i.e. bitumen with added cutter), and bitumen emulsions are used as binders for the construction of surface treatments on roads. However on airports penetration grade bitumens are preferable because of their rapid improvement in cohesive properties after spraying. The amount of cutter and flux depends on the climatic conditions. Experience has shown that the amount of cutter should be somewhat reduced on airports relative to roads, and the flux should be substantially reduced. If significant amounts of cutter are required (say > 8%), then the pavement should be kept closed for as long as possible before trafficking, or a specific anti-stripping design used such as a sand seal on top.

Good experience has been found in the warm to hot climate of Western Australia with medium class bitumens (such as Australian Class 160. Typically penetration at 25°C/100g/5s,1/10mm of 80-100; viscosity at 60°C, Pa.s of 60-130 ASTM D4402). Some work has been done with harder bitumens in warm climates (such as Australian Class 320. Typically penetration at 25°C/100g/5s,1/10mm of 60-70; viscosity at 60°C, Pa.s of 140-240 ASTM D4402), but no practical benefit could be identified despite the theoretical advantages. There may be a cost penalty with the harder bitumens, and at Broome in 1992 the tendered price was an extra $US0.20/l for the harder bitumen which is approximately $US60,000 for the entire runway.

The use of modified bitumens on roads has indicated properties which may be of benefit to airport surface treatments and where available are worth considering. Compared to penetration grade bitumens, they typically have

improved toughness-tenacity properties and improved temperature sensitivity (Van Zyl, 1991). A higher application rate can be used resulting in a thicker bitumen film thickness and reduced voids, and bitumen rubber modified bitumens retain flexibility for longer than unmodified bitumen (Bergh and Thompson, 1991).

Spray rate

The bitumen spray rate (application rate) for airport surface treatments is higher than that for roads, partly because the lower traffic requires a higher design percentage voids filled and partly because bleeding is rarely an issue so the spray rate can go closer to the limit. A minimum spray rate is required to hold the stone firmly in place and bind it to the underlying surface. There is also a maximum spray rate, which, if exceeded, will overfill the voids in the compacted layer and result in low skid resistance, particularly in wet weather.

In Australia, typical spray rates are 1.35 l/m^2 cold with a 10mm stone (nominal size, not ALD) and 1.2 l/m^2 cold with a 5mm stone (Department of Transport, 1973). At Broome, for example, on a new double seal, the rates used were 1.45 l/m^2 cold with a 14mm stone and 1.2 l/m^2 cold with a small 7mm stone. It is possible to increase the spray rate on the runway outside the central 10 metres by 0.1-0.2 l/m^2 to improve the stone retention in untrafficked areas.

A "split application" of binder (defined below) for double surface treatments can be used to improve early stone retention and avoid any problems of fluxing from a diesel precoat on the top layer of stone, although it is less common now since it is preferred to precoat the top layer of stone instead. Split application and precoated top stone are not combined. The aim of the split application is to provide a fog spray with a hot application rate of 0,8 - 1,0 l/m^2 . This fogspray is subtracted from the total (both layers) calculated binder application rate. The remaining binder application rate is divided between the first and second layers in the ratio 60% for the first and 40% for the second (TRH 3, 1986). A disadvantage of the split application is that it closes the voids and a later fogspray (say at 80% life) is usually not possible.

Durability

The main cause of long term deterioration of surface treatments is the hardening of the bitumen. In Australia, this is primarily through a slow thermal reaction which causes oxidation hardening at high pavement temperatures (Dickenson, 1982). There is an Australian Road Research Board Durability Test for bitumen which has been adopted by most authorities in Australia and its use is recommended to ensure that the bitumen has good durability characteristics.

Texture depth, adhesion and compaction

The design of airport surface treatments should provide for mechanical interlock and support between the stones, and only slight protrusion of the stone above the bitumen. Stones which protrude far above the bitumen are likely to be plucked out by aircraft tyres, especially in turns. A low surface texture is therefore desirable. Experience has also shown that the stone on the upper layer should have a maximum nominal size of 7mm (maximum size - not average least dimension which is smaller). The use of larger stone leads to tyre shredding or excessive tyre wear on wheel spin-up in the touchdown zone.

In the early stages of introducing airline jets to runways with surface treatments, larger stones were experimented with. At Karratha Airport in the mid-1970s, a 10mm top stone gave a very high surface texture of 1.7-3.3mm, but caused unacceptable tyre wear in just four movements of a Gulfstream II (Tuisk, 1977). The runway was urgently rolled with a steel wheel roller and the touchdown area resealed with a smaller size aggregate. No data are available on the grading and ALD of the original stone, but from the unusually high rate of tyre wear, it is suspected that this was a particularly 'large and angular' 10mm stone.

Some texture depth is required to alleviate reverted rubber and viscous skidding problems. A limit of a minimum of 0.5mm and desirably 1mm has been used in Australia (Tuisk, 1977). There is no maximum value yet specified. Measurements at a number of airports across Australia gave general values in the range 1-2mm for surface treatments (isolated examples in the range 0.5-1.0mm), in the range of 0.25-1.00mm for ungrooved asphalts, and in the range 1.0-2.0mm for grooved asphalts; all using the grease patch method. The texture depth of a Cape Seal is usually low (it presents the appearance of an asphalt), and it is not recommended for use along an entire runway; however it is useful for runway ends and turning nodes.

The final control of texture depth on a new surface treatment or a reseal is best done at construction, and this is discussed below.

CONSTRUCTION

Construction of surface treatments at airports is similar to that on roads. The main differences are rolling and control of texture depth. Rolling is more important on airport pavements than roads, because of their lack of subsequent trafficking. An Australian specification is 1 roller hour per 450 litres of bitumen sprayed for the first seal and again for the second seal (Department of Transport, 1973). This is at least twice the rolling applied on road construction, and close supervision of the contractor is needed to achieve it. Indeed practical experience is that the supervision of an airport surface treatment is very

important, and it is somewhat unsatisfactory to leave the project to a supervisor experienced only in road construction.

The final control of texture depth is best done at construction. For runways where operations of medium to large airline jets are envisaged, a prudent construction method is to adjust the average texture of the pavement by applying steel rolling using static three point steel rollers.

At Broome on a new double seal for Boeing 767 aircraft, the high strength of the aggregate meant that static steel rolling did not significantly reduce the texture, and there was concern about stones being stripped during turns. Therefore at the runway ends, a large vibrating steel roller was used to crush the stone. It was observed during 767 operations that some minor stripping occurred while the aircraft was travelling in a straight line on the area just prior to the vibrating steel rolled area. This stripping ceased completely once the aircraft, still travelling in a straight line, reached the area where the surface texture had been reduced. Stripping still occurred where the aircraft was forced to do a minimum radius turn, though clearly the reduction of the surface texture in this area prevented major stripping.

MAINTENANCE

Maintenance of a surface treatment on an airport comprises mainly patching, rolling, sweeping, fogsprays and reseals. Early and ongoing maintenance of an airport surface treatment is essential, and in countries which lack an institutional capability for maintenance, surface treatments are not recommended. Experience has shown that most surface treatments will be damaged by airline jet aircraft during the initial period of their life, particularly at turning areas and to a lesser extent at touchdown areas. It is common in Australia to issue a NOTAM during this initial period requesting "maximum radius turns at minimum speed". Even then, at the very least, there is rollover and stripping of stone at the inside wheels on turns and this has to be patched. The preferred patch method is to sweep the stone back in and then overlay with a thin sand-cement grout (mix of 1:4 cement to sand) and roll in.

One solution is to leave new work closed to aircraft for a month and only traffic it with a maintenance roller. This is not as impractical as it seems, particularly in the case of a surface treatment on a new pavement. Another solution is to use a triple seal or Cape Seal for the high stress areas.

Rolling

Rolling can be an important component of maintenance in the first year or two

after sealing or resealing, to compensate for the lack of trafficking. The pavement is rolled during warm weather (surface warm to touch) to knead the stones and bitumen and to push in loose stone. A suitable roller type is the pneumatic tyred roller, with 11 wheels, and an unballasted weight of 6 tonnes which can be ballasted to 12 tonnes. Tyre pressures should be about 600 kPa.

This type of maintenance rolling is negligible in structural terms. With a 12 tonne roller on a pavement designed for 40 tonne aircraft, and taking load equivalencies into account at an exponent of 4 (TRH 4, 1985), six months of maintenance rolling at 3 hours/day on a 2,000m x 45m pavement is structurally equivalent to one aircraft movement. However the effect of the roller on the surface treatment is much greater. It can be assumed that in terms of the trafficking effect on the surface treatment, 1 roller is equivalent to 15 light vehicles (TRH 3, 1986), and so the same six months maintenance rolling is equivalent to 1200 vehicles trafficking.

Practical experience with maintenance rolling has been good, although difficult to quantify. The need varies with each surface treatment. At Broome (new work, double seal), rolling was performed for 3 hours daily for a month after sealing. At Christmas Island (reseal), rolling was performed for 3 hours daily for the first few months. The positive effect in re-embedding loose aggregate can easily be observed. At Newman (reseal with a fogspray shortly afterwards to reduce the stripping), no rolling was needed after the fogspray, although the number of aircraft coverages at Newman is in the order of ten times higher than Christmas Island.

An example of contrary maintenance was observed at Christmas Island (Thomas, 1992), with excessive stripping, which was noted as a combination of failure to continue maintenance rolling, along with excess sweeping with mechanical brooms during warm weather (daily air temperature range 22-28^{o}C) on a surface treatment which was only a year old.

Brooming

Periodic brooming (or sweeping) of a surface treatment is required every month or two to remove loose stone, although it is noted that brooming of any surfacing type is needed periodically to maintain a clean runway from the FOD viewpoint. Brooming should be reserved for the cooler times of the day (surface cool to touch). The broom pressure should be adjusted so that it is not actually picking out stone.

Brooming is a low cost maintenance option. It is possible to reduce the frequency by applying a fogspray (provided there is adequate texture). However the cost of a fogspray is equivalent to five years of daily brooming in the cooler

seasons, even before the need to broom for FOD containment, is considered.

Fogspray

A fogspray can be used to improve stone retention, particularly if the bitumen is oxidised and brittle. The application of a fogspray (usually of emulsion diluted 50% with water, and sprayed at 1 l/m^2) is usually triggered by an increase in the amount of loose stone. If the brooming frequency has to be increased to more than once a month, this is usually an indication of problems and a fogspray should be considered. The fogspray reduces the texture depth, and its use is therefore limited by considerations of skid resistance.

Sand seal

If stripping of stone from a surface treatment is noted in its early life, a sand seal may be useful on top to reduce texture depth, and improve stone retention in high stress areas.

Resealing

It is important for good performance that resealing of surface treatments be done before the integrity and impermeability of the surface treatment is lost. Reseal intervals range from 7 to 10 years, depending on climate (oxidation) and seal performance (stone loss). The two are inter-related, and experience is that a reseal is generally indicated by an increase in stone loss after several years of stable conditions. A fogspray can be used to extend the period before resealing. Interestingly, the higher binder application possible on an airport surface treatment with the subsequent increase in binder film thickness and increase in life seems to be countered by a reduction in life due to the low levels of trafficking on an airport.

COSTS

The primary advantage of a surface treatment over asphalt is construction cost, and this is particularly important in outlying areas without a local asphalt plant, which is the case over large parts of Australia and Africa.

Experience has shown that in these outlying areas, the main cost variable is the supply of stone (the authors' experience includes stone hauls of 700 km by road at Meekatharra and 800 km by rail at Forrest). The cost to haul and spray bitumen in remote areas is in the same order of magnitude as non-remote areas.

To quantify the cost differential, a lifecycle cost analysis was performed for a new flexible pavement surfacing in a remote area for the range of surfacings

shown in Table 4. The analysis was performed over a 30 year period, and lifecycle cost was calculated from construction and major maintenance costs, and expressed as present worth of costs, discounted at 8% real rate.

The construction cost included bitumen and stone buy, haul and apply, job establishment costs (also known as mobilisation, P&Gs, or set-up), camp and accommodation, site engineer's fee, profit, contingency, and basecourse sweeping. The cost of a prime was considered to be common to all new surfacings and was omitted. The construction costs were taken from a study which considered 27 combinations of size, location and cost in South Africa (Wright et. al., 1990), and were adjusted to 1993 costs and converted to $US. The costs used here were for a typical 90,000 m^2 project with a bitumen haul of 300km and a stone haul of 100km. These were then checked against recent tender prices at Australian airports and good agreement was found.

The cost of grooving was not included for asphalt, since its use is partially climate and traffic dependent. It would however add significantly to the cost of the asphalt and would increase the differential between asphalt and surface treatment. The routine maintenance cost of brooming, crack sealing and patching was assumed to be the same for all surfacings and not included. Even for brooming, this is considered reasonable because asphalt pavements need to be broomed at similar frequencies as pavements with surface treatments to remove foreign objects. The additional routine maintenance cost of rolling was added to the cost of surface treatments. Major maintenance costs such as overlays and reseals were included as noted in Table 4.

The lifecycle costs are shown in Figure 2. The lifecycle cost of surface treatments is less than that of the thinnest asphalt pavement, even though the lives are shorter. The "double seal and repairs" option was included to show the cost implications of problems with the surface treatment; this example required two fogsprays over the entire runway and a sand seal on the high stress areas. Even with the cost of the repairs, the lifecycle cost of the 25mm asphalt was 40.8% higher than this.

The cost analysis suggests that it is probably justified to vary the surface treatment for the low and the high stress areas from the start. The cost of the 'double/triple seal' option was only 7.7% higher than the 'double seal' alone; but the 'double seal & repairs' was 29.0% higher than the 'double seal' alone.

TABLE 4 Surfacings analyzed by lifecycle cost in Figure 2

Surfacing	Construction cost	Pavement history

(1)	$US/sq.m. (2)	(3)
Asphalt 25mm	$4.20	Initial surfacing of 25mm asphalt; overlay every 16 years with 25mm asphalt
Asphalt 50mm	$6.35	Initial surfacing of 50mm asphalt; overlay every 16 years with 25mm asphalt
Double seal	$2.23	Initial surfacing of double seal; resealed every 10 years with single seal
Double/triple	varies	Initial surfacing of double seal in low stress areas and triple seal in high stress areas; resealed every 10 years with single seal
Triple seal	$3.04	Initial surfacing of triple seal; resealed every 10 years with single seal
Double seal & repairs	varies	Initial surfacing of double seal which is unsuccessful; fogspray at years 1 and 8, sand seal in high stress areas at year 1; resealed every 10 years with single seal

Sensitivity analysis

In the sensitivity analysis, a 25mm asphalt was compared with a double/triple seal. The four alternatives were:

- asphalt cost reduced by two-thirds,
- surface treatment cost increased by one-third,
- surface treatment life reduced to 7 years,
- asphalt life increased to 20 years.

The results are shown in Figure 3 and confirm that lifecycle cost differential between asphalt and surface treatments is robust.

Rapid assessment

To enable the lifecycle cost differential between a surface treatment and a 25mm asphalt to be rapidly assessed, Figure 4 was developed. This is used by entering the construction cost of each (the Figure is dimensionless so any currency can be used), and the surfacing choice can be quickly seen.

EMERY, S.J. AND CAPLEHORN, M. W. (1993) Use of surface treatments on runways for RPT jet aircraft. Conf. Airport Pavement Innovations, Am. Soc. Civil Eng., Vicksburg

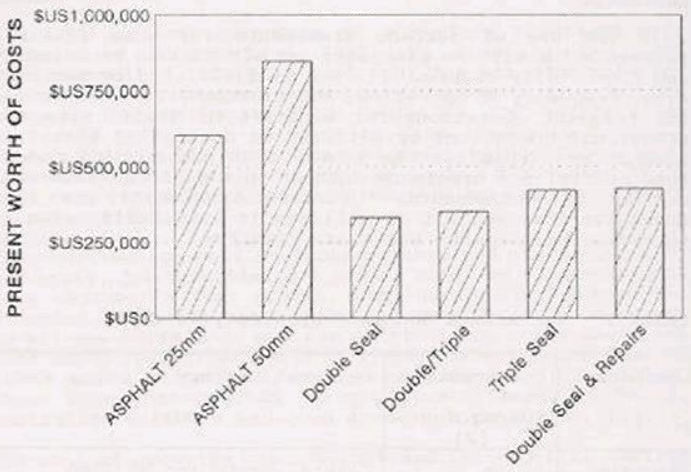

Figure 2. Lifecycle costs of various surfacings

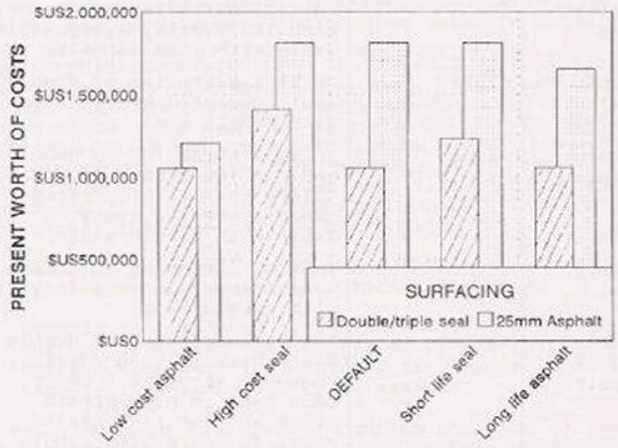

Figure 3. Sensitivity of lifecycle costs

CONCLUSIONS

The use of surface treatments for some flexible pavements for airline passenger jet aircraft is technically and financially viable. Its use is restricted by aircraft size, frequency of operation, and location. They are suited for frequent operations for aircraft of BAe146 size and occasional operations by aircraft of

Boeing 767 size. In high stress areas such as runway ends and turning nodes, some specialised treatment such as an additional sand seal on top is recommended.

There are a number of differences between surface treatments on airports and on roads. In design for airports, they are characterised by small stone sizes, angular stone, mandatory precoating of stone, and higher bitumen application rates. In construction they are characterised by increased rolling and careful control of texture depth. In maintenance they are characterised by maintenance rolling, patching and brooming.

The lifecycle cost of various surface treatments and asphalts has been calculated on a present worth of costs basis over a 30 year analysis period. The surface treatments are less expensive than asphalt, even if excessive maintenance costs are incurred. A sensitivity analysis of construction cost and surfacing life confirm this.

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KEYWORDS
AIRPORTS, ASPHALTS, BENEFIT COST ANALYSIS, BITUMEN, PAVEMENTS

Appendix C – Runway Pavement Making

- **Estimate**
- **Drawings - 1200m Runway (C02-B)**
  - 900m Runway (C03-B)

APPENDIX - C

Runway Markings - Estimate

		Area (m2)	Rate $/m2	Amount
Existing Runway	Runway Threshold (Both Ends)	864	20	$ 17,280
	Runway Designation (16 & 34)	54	20	$ 1,080
	Centreline Markings	210	20	$ 4,200
	Taxiway Markings	68	20	$ 1,360
	Hold Markers and Words	28	20	$ 560
	TOTAL	**1224**		**$ 24,480**
Runway Extension	Runway Threshold Northern End	462	20	$ 9,240
	Runway Designation (16)	27	20	$ 540
	Aiming Point Markers	1440	20	$ 28,800
	Centreline Markings	120	20	$ 2,400
	Taxiway Markings	0	20	$ -
	Hold Markers	0	20	$ -
	Removal of Threshold Markings	164	10	$ 1,640
	TOTAL	**2213**		**$ 42,620**

Revision	Amendment	Approved	Revision Date
B	ISSUED FOR MASTERPLAN	BJ	10/03/2017

WAIROA DISTRICT COUNCIL

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Private Bag 6019
Napier 4142
New Zealand

Designed	Approved	Approved Date
B. THOMSON	B. JONES	11/01/2017
Drawn	Scales	Project No.	Sheet No.	Revision
B. THOMSON	NOT TO SCALE	2-S5091.VT	C02	B

WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION

RUNWAY MARKINGS
900m RUNWAY

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Revision	Amendment	Approved	Revision Date
B	ISSUED FOR MASTERPLAN	BJ	10/03/2017

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New Zealand

WAIROA DISTRICT COUNCIL

Designed	Approved	Approved Date
B. THOMSON	B. JONES	11/01/2017
Drawn	Scales	
B. THOMSON	NOT TO SCALE	

Project: WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION

Sheet: RUNWAY MARKINGS
1200m RUNWAY

Project No.	Sheet No.	Revision
2-S5091.VT	C03	B

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Appendix D – Runway Lighting

- **Westport - Tender Schedule**
- **Westport - Estimate Schedule**
- **Westport - Lighting Layout Drawing**

1 Schedule of Quantities

Schedule of Quantities: Contract 10925					
Item	**Description**	**Unit**	**Qty**	**Rate**	**Amount**
1.0	**Construction Management**				
1.1	Buller District Council Site Registration, Induction and Site Specific Management	LS	1		2200.00
1.2	Construction Programme	LS	1		400.00
1.3	Health and Safety Plan and Implementation	LS	1		500.00
1.4	Quality Management Plan and Implementation	LS	1		600.00
2.0	**Establishment**				
2.1	General	LS	1		1225.00
2.2	Liaison with Generator Supplier	LS	1		100.00
2.3	Liaison with Airways Corporation for A-PAPI's and cable rerouting	LS	1		100.00
2.4	Liaison with Buller Electricity for transformer upgrade	LS	1		200.00
3.0	**Structure**				
3.1	Foundation Structure	LS	1		17000.00
3.2	Reinstatement of pavement/ground	LS	1		1207.00
4.0	**Electrical Installation**				
4.1	Supply and installation of the new mains cable from new 55kVA transformer to MSB in new generator building	LS	1		20500.00
4.2	Supply and installation of sub mains from MSB to terminal building	LS	1		14955.00
4.3	Supply and installation of Main Switchboard	LS	1		7980.00
4.4	Rerouting of the cable from the old control tower towards the generator building	LS	1		2840.00
4.5	Lighting and general purpose power in Generator building	LS	1		3970.00
4.6	Supply and installation of control cables between Generator and changeover switchgear	LS	1		9540.00
4.7	Installation of runway edge lights and cables	LS	1		48376.00
4.8	Installation of turning bay edge lights and cables	LS	1		4476.00
4.9	Installation of runway end / threshold lights and cables	LS	1		7452.00
4.10	Installation of taxiway edge lights and cables	LS	1		12850.00
4.11	Installation of visual approach slope indicator and cables on both end of runway	LS	1		11054.00
4.12	Installation of windsock lighting and cables on both end of runway and in front of terminal.	LS	1		11804.00
4.13	Installation of aerodrome beacon	LS	1		1532.00
4.14	Installation of day / night mode lighting system	LS	1		500.00
4.15	Installation of a pilot activation system	LS	1		500.00

Schedule of Quantities: Contract 10925

Item	Description	Unit	Qty	Rate	Amount
4.16	Electrical testing and Commissioning	LS	1		4000.00
4.17	Supply and installation of airfield lighting manual control cable between generator building and terminal	LS	1		12470.00
4.18	Supply and installation of airfield lighting manual control panel inside the terminal	LS	1		1000.00
5.0	**Generator Positioning and connecting**				
5.1	Generator uplift and placement in new building	LS	1		480.00
5.2	Installation of Vent ducting	LS	1		1500.00
5.3	Generator testing and commissioning	LS	1		500.00
6.0	**As-Built Drawings and Documentation**	LS	1		4000.00
7.0	**Dayworks**				
7.1	Labour	hr	20		1000.00
7.2	Digger	hr	20		1600.00
7.3	Truck	hr	20		1600.00
7.4	Loader	hr	20		1600.00
7.5	Excavate to Waste	m^3	20		400.00
7.8	Other Materials	%	$1000		1150.00
8.0	**Provisional Sum**				
	Relocation of existing underground services if necessary	PS	1	$3000.00	$3000.00
Schedule Total (Excl. GST)					**216161.00**

Tenderer's Name Kevin E. Jackson

Address: 63 Palmerston Street, Westport

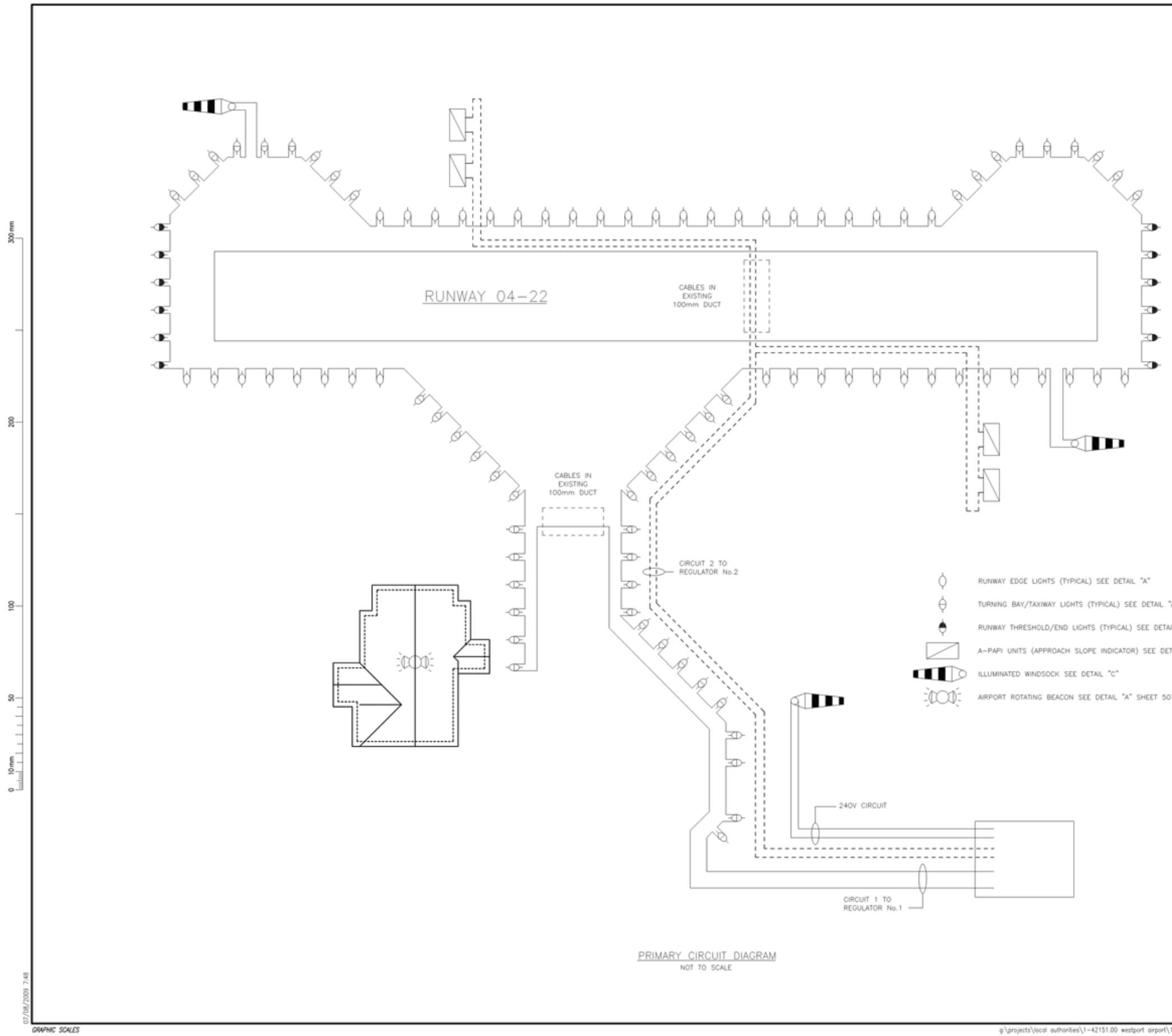
Signature: K. G. Jackson

Date: 21/01/2008

Telephone No: 03 789 7662

Facsimile No:

Schedule of Quantities: Contract 10925 Westport Airport Lighting Upgrade 21-11-2007					
Description	**Unit**	**Qty**	**Rate**	**Amount**	**Estimate**
Construction Management					
Buller District Council Site Registration, Induction and Site Specific Management	LS	1			$500.00
Construction Programme	LS	1			$500.00
Health and Safety Plan and Implementation	LS	1			$500.00
Quality Management Plan and Implementation	LS	1			$500.00
Establishment					
General	LS	1			
Liaison with Generator Supplier	LS	1			$500.00
Liaison with Airways Corporation for A-PAPI's and cable rerouting	LS	1			$1,000.00
Liaison with Buller Electricity for transformer upgrade	LS	1			$500.00
Structure					
Foundation Structure and Genereator building assembly	LS	1			$8,000.00
Reinstatement of pavement/ground	LS	1			$3,000.00
Electrical Installation					
Supply and installation of the new mains cable from new 55kVA transformer to MSB in new generator building	LS	1			$13,300.00
Supply and installation of sub mains from MSB to terminal building	LS	1			$14,000.00
Supply and installation of Main Switchboard	LS	1			$4,500.00
Rerouting of the cable from the old control tower towards the generator building	LS	1			$500.00
Lighting and general purpose power in Generator building	LS	1			$850.00
Supply and installation of control cables between Generator and changeover switchgear	LS	1			$1,500.00
Installation of runway edge lights and cables	LS	1			$36,500.00
Installation of turning bay edge lights and cables	LS	1			$7,250.00
Installation of runway end / threshold lights and cables	LS	1			$4,500.00
Installation of taxiway edge lights and cables	LS	1			$14,750.00
Installation of visual approach slope indicator and cables on both end of runway	LS	1			$22,500.00
Installation of windsock lighting and cables on both end of runway and in front of terminal.	LS	1			$3,000.00
Installation of aerodrome beacon	LS	1			$600.00
Installation of day / night mode lighting system	LS	1			$700.00
Installation of a pilot activation system	LS	1			$700.00
Electrical testing and Commissioning	LS	1			$2,000.00
Supply and installation of airfield lighting manual control cable between generator building and terminal	LS	1			$2,000.00
Supply and installation of airfield lighting manual control panel inside the terminal	LS	1			$1,000.00
Generator Positioning and connecting					
Generator uplift and placement in new building	LS	1			$3,000.00
Installation of Vent ducting and building sound proofing	LS	1			$20,000.00
Generator testing and commissioning	LS	1			$2,500.00
As-Built Drawings and Documentation	LS	1			$500.00
Daywork excluded from estimate - Included in pricing schedule to establish contractor rates for for variations if required.					
Provisional Sum					
Relocation of existing underground services if necessary	PS	1	$3,000.00	$3,000.00	$3,000.00
Contingency (10%)					$17,415.00
Additional Cost					
Supply of Airfield Lighting Equipment	PS	1			$132,567.75
Generator Set	PS	1			$23,900.00
OPUS International Consultant fees	PS	1			$27,380.00
				Grand Total	**$375,412.75**



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NOT TO SCALE

AS BUILT
CERTIFIED TRUE AS BUILT RECORD
Contractor: Buller Refrigeration and Electrical
Signed:.....
Date: 06/08/2009

RAB – AS BUILT

AMENDMENT		APP'D	DATE
	JEB		08/09

	BY	CHECKED	DATE
DESIGN	RSD	PJD	08/07
DRAWN	RSD	JEB	08/07
APPROVED			

BULLER DISTRICT COUNCIL

OPUS
Christchurch
Mechanical & Electrical
PO Box 1482
Christchurch, New Zealand
Tel: +64 3 363 5400
Fax: +64 3 365 7858

TITLE
WESTPORT AIRPORT
Buller District Council
Brougham Street, PO Box 21
Westport 7825

RUNWAY EDGE LIGHTING CIRCUIT DIAGRAM

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Appendix E – Runway Extension

- Estimate
- Drawings - Runway Extension (C04-B – C07-B)
- Loganstone – WDC Airport – Land Feasibility Report

APPENDIX - E **RUNWAY EXTENSION - ROUGH ORDER COST ESTIMATE**

"CONSERVATIVE" 300m long x 30m wide

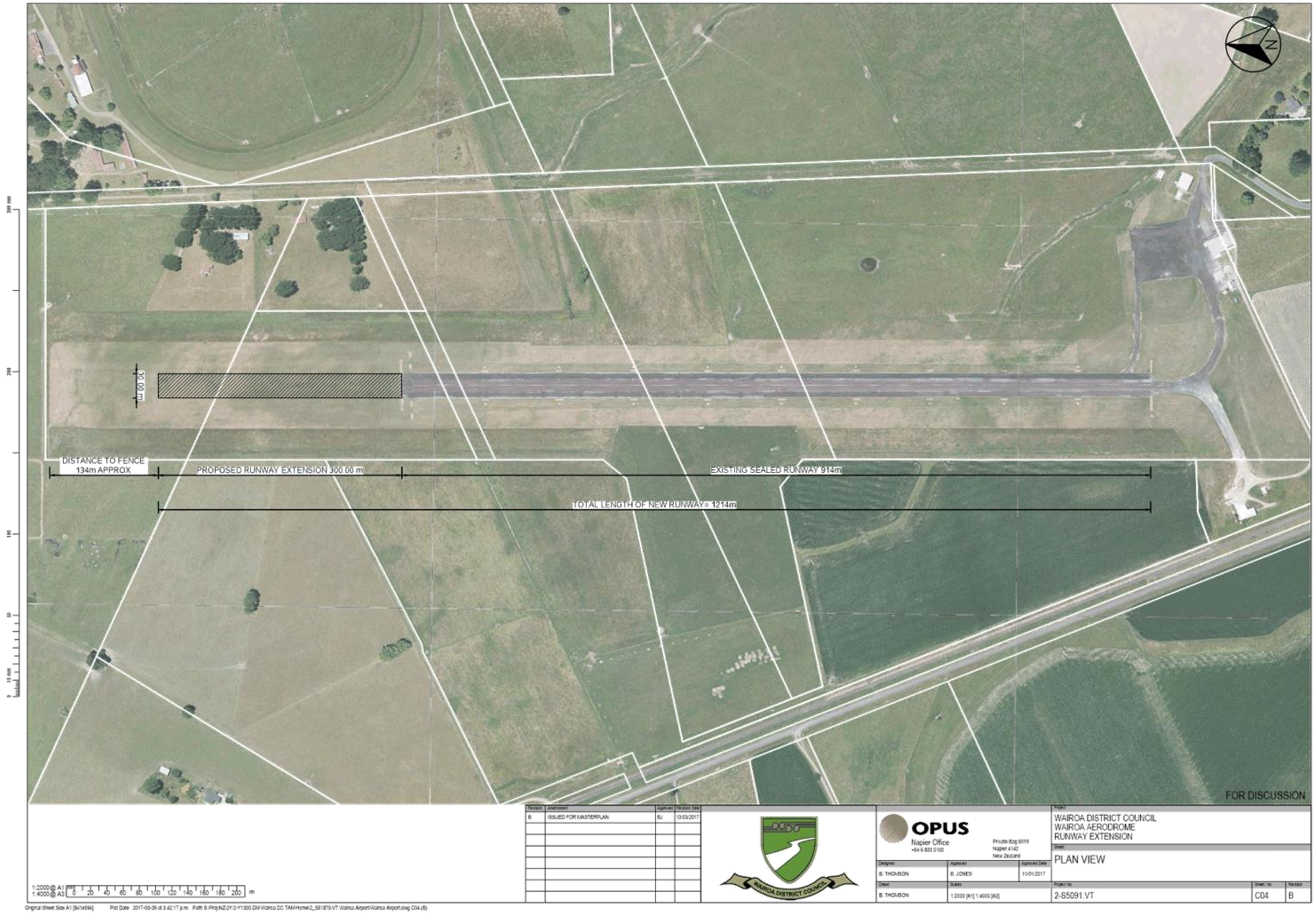
Item	Unit	Quantity	Rate	Cost	Assume CBR>4
AC surfacing (18m wide + Turn around)	m2	5760	$48.00	$276,480.00	50AC
Chipseal runway sides - G3/5/6	m2	3240	$13.00	$42,120.00	G3/5/6
100mm Basecourse	m3	900	$120.00	$108,000.00	100BC
200mm Subbase	m3	1800	$85.00	$153,000.00	200SB
Cut to waste 300mm	m3	3150	$20.00	$63,000.00	
Subsoil / SWC Drains	m	600	$90.00	$54,000.00	
Runway Lighting (Extension Only)	LS	100%	$95,000.00	$95,000.00	
Runway Marking (Extension Only)	LS	100%	$42,460.00	$42,460.00	
Land required for RESA	Ha	2.56	$18,500.00	$47,360.00	$15k - $22K/Ha
Removal of Existing Fences	Km	3.80	$6,500.00	$24,700.00	$7.5 - $10/m
Construction of New Fences	Km	2.25	$20,000.00	$45,000.00	$15 - $20/m
P&G	LS	100%	$30,000.00	$30,000.00	
Proff. services	LS	4%	$981,120.00	$39,244.80	
Contingency	LS	10%	$1,020,364.80	$102,036.48	
			TOTAL	**$1,122,401.28**	

"BEST CASE SCENARIO"

Item	Unit	Quantity	Rate	Cost	Assume CBR>4
AC surfacing (18m wide + Turn around)	m2	5760	$42.00	$241,920.00	50AC
Chipseal runway sides - G3/5/6	m2	3240	$12.50	$40,500.00	G3/5/6
100mm Basecourse	m3	900	$95.00	$85,500.00	100BC
200mm Subbase	m3	1800	$75.00	$135,000.00	200SB
Cut to waste 300mm	m3	3150	$20.00	$63,000.00	
Subsoil / SWC Drains	m	600	$75.00	$45,000.00	
Runway Lighting (Extension Only)	LS	100%	$75,000.00	$75,000.00	
Runway Marking (extn)	LS	100%	$42,460.00	$42,460.00	
Land required for RESA	Ha	2.56	$15,000.00	$38,400.00	$15k - $22K/Ha
Removal of Existing Fences	Km	3.80	$5,000.00	$19,000.00	$7.5 - $10/m
Construction of New Fences	Km	2.25	$15,000.00	$33,750.00	$15 - $20/m
P&G	LS	100%	$30,000.00	$30,000.00	
Proff. services	LS	4%	$849,530.00	$33,981.20	
Contingency	LS	10%	$883,511.20	$88,351.12	
			TOTAL	**$971,862.32**	

"Cost of Alternative Surfacing"

Item	Unit	Quantity	Rate	Cost
Capeseal/Slurry surfacing (18m wide + Turn around)	m2	5760	$17.50	$100,800.00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EXISTING SEALED RUNWAY 914m
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FOR DISCUSSION
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B ISSUED FOR MASTERPLAN BJ 13/09/2017
WAIROA DISTRICT COUNCIL
OPUS
Napier Office
+64 6 833 5100
Private Bag 6019
Napier 4142
New Zealand
B. THOMSON
B. JONES
11/01/2017
B. THOMSON
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WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION
PLAN VIEW
2-S5091.VT
C04
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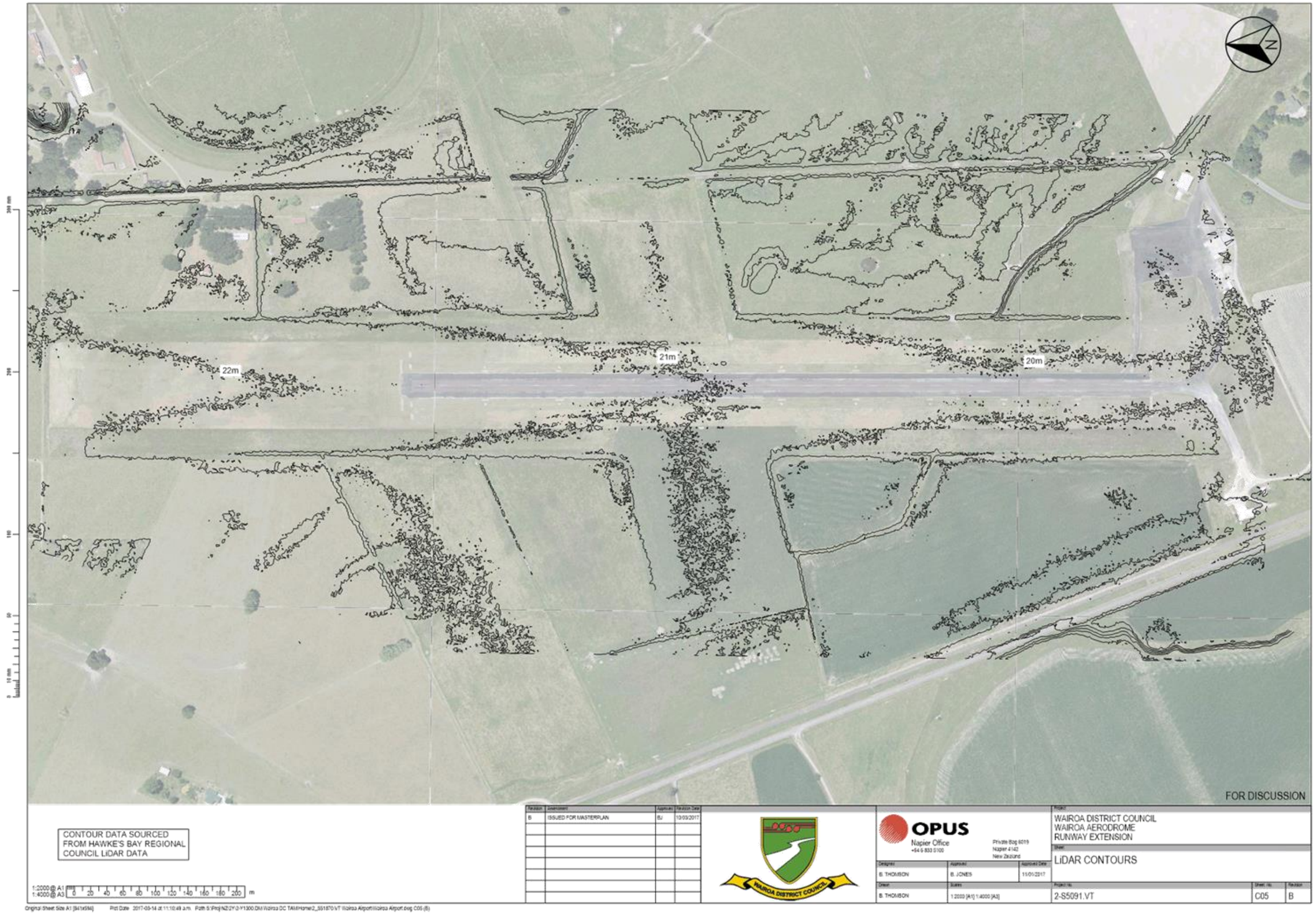
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22m
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FOR DISCUSSION
CONTOUR DATA SOURCED
FROM HAWKE'S BAY REGIONAL
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B ISSUED FOR MASTERPLAN BJ 13/09/2017
WAIROA DISTRICT COUNCIL
OPUS
Napier Office
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Private Bag 6019
Napier 4142
New Zealand
B. THOMSON
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1:2000 [A1] 1:4000 [A3]
WAIROA DISTRICT COUNCIL
WAIROA AERODROME
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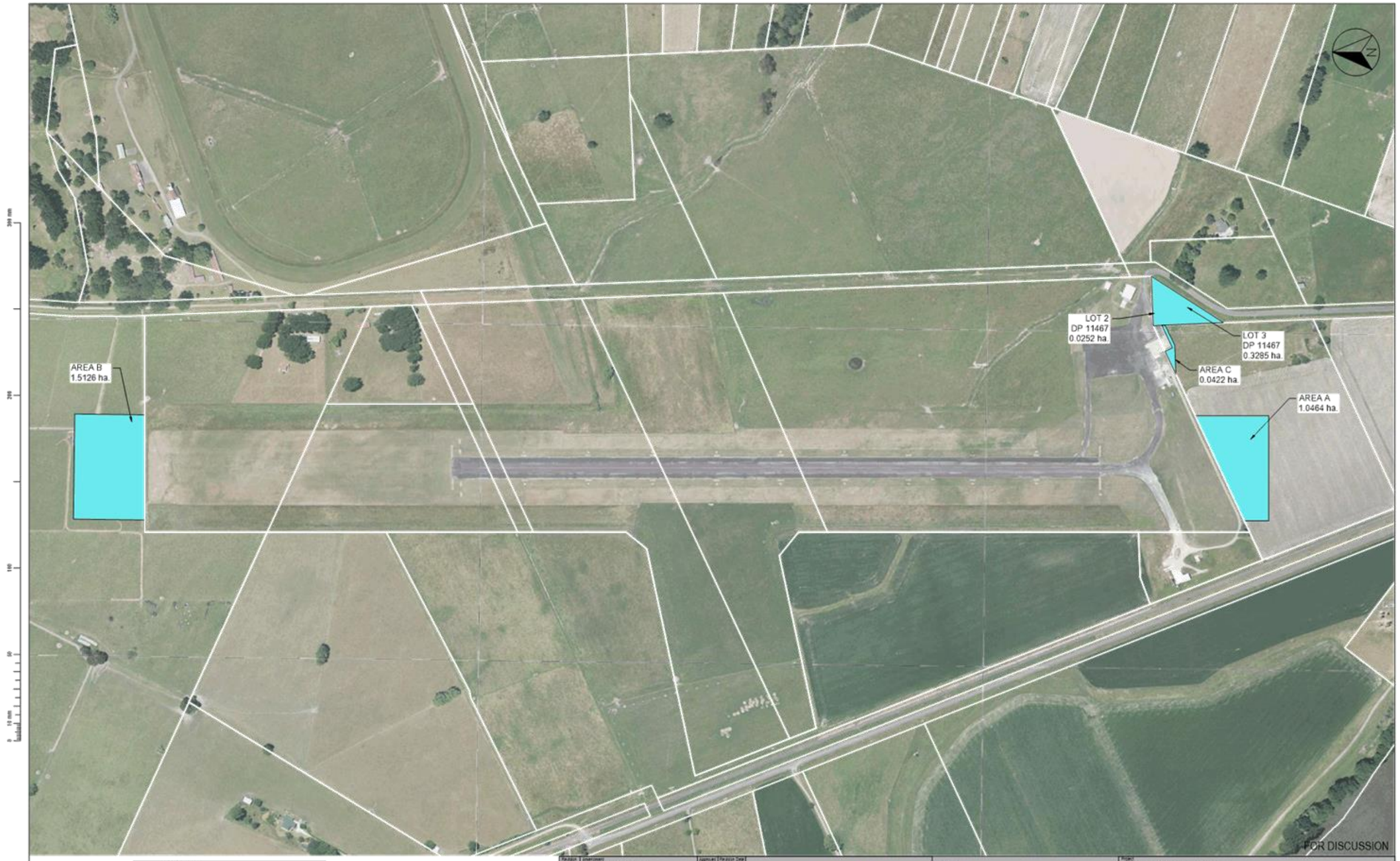
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LOT 2
DP 11467
0.0252 ha.
LOT 3
DP 11467
0.3285 ha.
AREA C
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AREA A
1.0464 ha.
N
FOR DISCUSSION
LEGEND
LAND TO BE PURCHASED
B ISSUED FOR MASTERPLAN BJ 10/03/2017
C AREA C ADDED BJ 22/03/2017
OPUS
Napier Office
+64 6 833 5100
Private Bag 6019
Napier 4142
New Zealand
WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION
LAND REQUIREMENT PLAN
B. THOMSON
B. JONES
11/01/2017
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NOT TO SCALE
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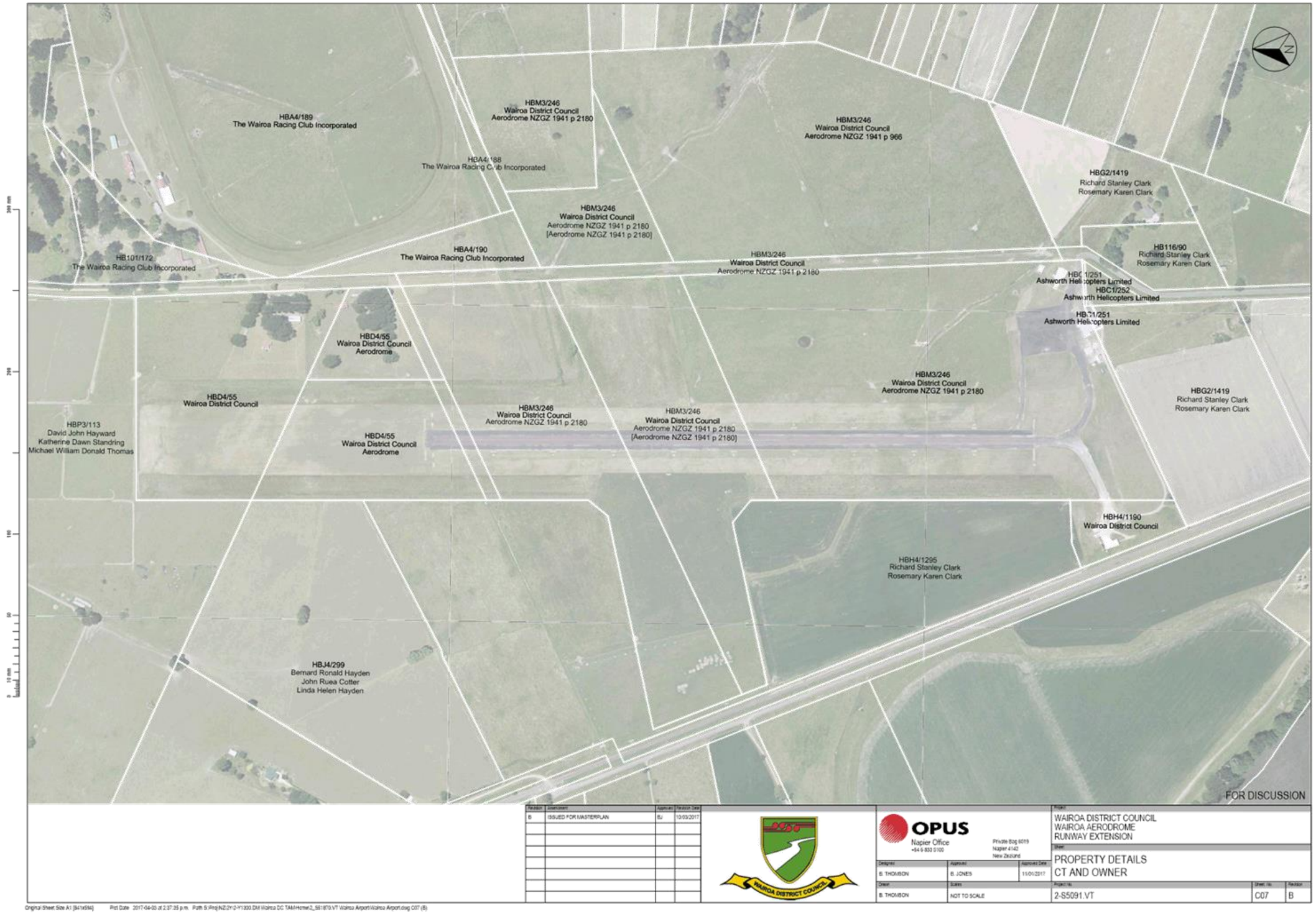
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The Wairoa Racing Club Incorporated
HBM3/246
Wairoa District Council
Aerodrome NZGZ 1941 p 2180
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Wairoa District Council
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HBA4/188
The Wairoa Racing Club Incorporated
HBG2/1419
Richard Stanley Clark
Rosemary Karen Clark
HBM3/246
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Richard Stanley Clark
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The Wairoa Racing Club Incorporated
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Wairoa District Council
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Ashworth Helicopters Limited
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Wairoa District Council
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Wairoa District Council
HBG2/1419
Richard Stanley Clark
Rosemary Karen Clark
HBP3/113
David John Hayward
Katherine Dawn Standring
Michael William Donald Thomas
HBD4/55
Wairoa District Council
Aerodrome
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HBH4/1190
Wairoa District Council
HBH4/1295
Richard Stanley Clark
Rosemary Karen Clark
HBJ4/299
Bernard Ronald Hayden
John Ruea Cotter
Linda Helen Hayden
FOR DISCUSSION
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New Zealand
WAIROA DISTRICT COUNCIL
WAIROA AERODROME
RUNWAY EXTENSION
PROPERTY DETAILS
CT AND OWNER
B. THOMSON
B. JONES
11/01/2017
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LOGANSTONE
PROPERTY ■ SOLUTIONS ■ VALUATION

File Ref: 5295

26 January 2017

Wairoa District Council
C/- OPUS International Consultants Ltd
Private Bag 6019
Hawke's Bay Mail Centre
NAPIER 4142

Attention: Andrew Sowersby
andrew.sowersby@opus.co.nz

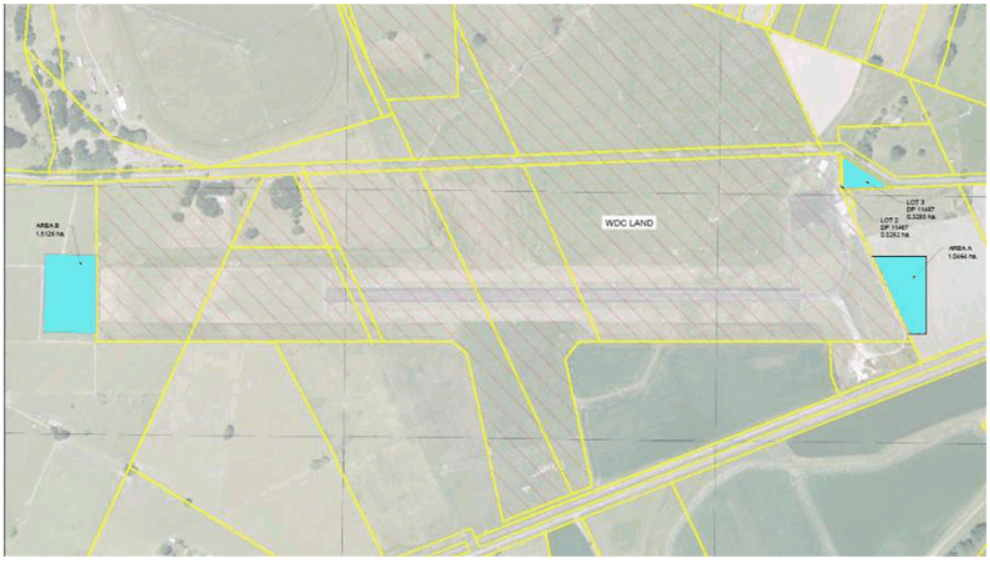
RE: Wairoa Aerodrome – Feasibility Assessment
Airport Road, Wairoa

1.0.1 Further to instructions from Andrew Sowersby OPUS International Consultants Ltd we inspected the above properties on 20 January 2017 in order to provide a short report commentary on the general Wairoa market including breakdown of land values per hectare for varying land classes. This report is also to highlight key issues affecting the properties from which the land is to be acquired. We note this report does not constitute a full compensation assessment, and should only be relied upon for feasibility purposes.

1.0.2 The valuation has been completed in accordance with the International Valuation Standard framework. International Valuation Standards IVS 101 – Scope of Work, International Valuation Standard IVS 102 – Implementation, International Valuation Standard IVS 103 – Reporting, Property Institute of New Zealand Valuation Guidance Note 1 – Valuation Procedures for Real Property and Guidance Note 10 – Valuation of Agricultural Properties. The only deviation is a full report was not required as per client's instructions and therefore this letter does not meet IVS or PINZ Reporting Standards

1.0.3 The feasibility study relates to the taking of three parcels of land as outlined in the map and table below.

valuers@loganstone.co.nz ■ Ph: 64 6 870 9850 ■ www.loganstone.co.nz
Business HQ | 308 Queen Street East ■ PO Box 914 Hastings 4156 New Zealand



Area	Land Required (ha)	Owner	Current Utilisation
A	1.0464	Clark	Cropping
B	1.5126	Hayward, Standring & Thomas	Dairy
C	0.3537	Ashworth Helicopters Ltd	Grazing and Access

1.0.4 We have been asked to provide commentary on the general Wairoa rural land market and breakdown of land values per hectare for varying land classes. In determining this we have analysed a number of recent sales within the Wairoa District in order to determine appropriate land value rates for different land classes.

1.0.5 The majority of flat land on the Plains surrounding Wairoa is utilised for cropping, or pastoral finishing purposes with a small number of dairy farms. The land rates per hectare vary depending on the soils, contour, drainage and location. Sale volumes of this type of land are generally small in number, however well located high productivity blocks are generally met with good interest from existing land owners.

1.0.6 There has also been a small amount of interest from out of town purchasers seeking blocks to develop for horticulture. A number of these discussions are still in a feasibility stage and are reliant on suitable water volumes for horticulture being available. These operators are also seeking to lease properties long term rather than purchase. This interest is therefore yet to flow through to sales or value levels. Values are therefore generally consistent as seen from the sales analysed.

Address	Sale Date	Title Area	Net Sale Price	Imp. $/ha	Site Value	Prod Land Value/eff ha
101 RUATANIWHA RD	Nov-16	2.16	247,000	85,648	30,000	19,277
KAIMOANA ST	Sep-16	0.19	20,000	54,048	9,920	
14 KITCHENER ST	Aug-16	3.37	120,000		70,000	17,437
118 SH 38	May-16	20.27	474,000	13,709	30,000	8,404
OHUIA RD	Apr-16	8.99	100,000	1,113	20,000	8,248
2 RUATANIWHA RD	Apr-16	1.03	117,000	76,162	38,500	
220 RUATANIWHA RD	Apr-16	25.30	1,042,000	17,710	40,000	21,985
442 AWAMATE RD	Mar-16	8.59	417,000	28,686	60,000	18,986
251 TE RATO RD	Feb-16	0.25	29,000	35,957	20,000	
78 CLYDEBANK RD	Dec-15	7.47	354,000	28,462	52,000	13,162
370 STATE HIGHWAY 38	Dec-15	38.85	793,000	7,069	45,000	12,490
104 HURUMUA RD	Oct-15	22.59	795,000	12,000	45,000	21,968
MILL RD	Jul-15	23.22	484,000	7,752	40,000	11,579
36 HURUMUA RD	May-15	35.74	975,000	7,055	30,000	19,278
50 BELL RD	May-15	92.21	2,542,000	4,917	20,000	22,559
Average of above data		19.35	567,267	27,163	36,695	16,281

1.0.7 When analysing the above sales we have broken out the site value or lifestyle component of the land, and the productive land value. From the above sales information we are the able to extrapolate the following land rate per hectare for the following land classes. A description of the land classes are shown below, along with the value range per hectare.

			Erosion		Gradient	Land Value Range
Unit	Description	Derived from	Present	Potential*	Range	$/ha
Ic1	Recent river terraces with soils of high fertility.	Alluvium from sedimentary rocks	Nil	Nil	0 - 3°	$20,000-$24,000
IIIw1	Low river terraces subject to surface flooding, and having clay subsoils and a moderately high water table.	Alluvium from sedimentary rocks	Nil	Nil	0 - 3°	$12,000-$22,000
IIIw2	Low, poorly drained river terraces subject to surface flooding. Soils have a poor structure and low organic matter levels.	Alluvium from sedimentary rocks	Nil	Slight to moderate deposition	0 - 3°	$19,000-$21,000
IIw1	Low river terraces with a slight wetness limitation due to moderately slow subsoil drainage.	Alluvium from sedimentary rocks	Nil	Nil	0 - 3°	$11,500-$20,000
IVe2	Rolling to strongly rolling downlands with a mantle of recent rhyolitic tephra.	Taupo tephras on Quaternary and Tertiary sediments.	Nil	Severe sheet and rill, and slight gully when cultivated. Slight tunnel gully.	Predominantly 8 - 15° with pockets of 16 - 20°	$10,000-$12,000
IVw1	Former swamps and present swamp margins where high water table levels make drainage difficult.	Peat and alluvium.	Nil	Nil	0 - 3°	$7,000-$9,000
VIe1	Strongly rolling to moderately steep hills, with a mantle of recent rhyolitic tephra on Tertiary and Quaternary rocks.	Taupo tephras on mudstones, sandstones, siltstones.	Nil to slight soil slip. Nil to slight tunnel gully.	Slight soil slip. Nil to slight tunnel gully.	Predominantly 16 - 20° with pockets of 21 - 25°	$7,000-$12,500

Unit	Description	Derived from	Erosion		Gradient Range	Land Value Range
			Present	Potential*		$/ha
VIe7	Moderately steep to steep, fertile hills of soft siltstone, subject to severe soil slip erosion	Soft siltstones and silty sandstones. (Taupo tephra in places).	Moderate to severe soil slip. Slight sheet.	Severe soil slip. Slight sheet.	Predominantly 21 - 25° with pockets of 26 - 35°	$5,000-$11,000

* Assessed as under actual or assumed grassland cover with average management and no soil conservation measures applied.

1.0.8 All of the areas proposed to be acquired are contained within Land Use Classification IIw1.

1.0.9 The below commentary relates to the specific land areas to be acquired, and potential value impacts.

1.0.10 Area A – This area was planted in maize at inspection and was utilised in conjunction with surrounding land blocks. The taking of this land would include the physical loss from a productive perspective along with impacting on the overall workability of the block from a cropping perspective. The land take will make the residual area an irregular shape which will be difficult to effectively crop. There would therefore be some injurious affect to the shape of this block, and the impact on the value of land on either side of the land take would need to be determined. This land is contained within Land Classification IIw1 so the physical loss would be reflective of the upper end of the productive land value range shown above, plus the allowance for injurious affect given the impact on the shape of the property from a productive perspective. This injurious affect amount would need to be determined using before and after compensation methodology. Improvements impacted would need to be reinstated as part of the works.

1.0.11 The access to the southern end of the runway also appears to currently run over the Clark's land, with no easement apparent. We would recommend that this be addressed as part of the proposed land takes. This area is shown in the aerial below. (Source: Property-guru).

1.0.12 Area B – This area is contained at the northern of the runway, and is presently utilised for pastoral grazing as part of a larger dairy unit. This area could also be potentially cropped. The impact on this area will be similar to that of Area B, and would include the physical land take plus some Injurious Affect given the impact on shape and workability. This land is also contained within Land Classification IIw1 so the physical loss would be reflective of the upper end of the productive land value range shown above, plus an allowance for injurious affect given the impact on the shape of the property from a productive perspective. This injurious affect amount would need to be determined using before and after compensation methodology. Any impact on improvements would need to be reinstated as part of the works.

1.0.13 There may be some opportunity to offset the above land take by completing a land swap with other WDC land found on the eastern side of the runway. This would however need to be negotiated between parties, and approved by WDC.

1.0.14 Area C – This area comprises a triangular shaped paddock being utilised for limited pastoral grazing purposes, along with sealed yard and entrance area. This area is contained in two Computer Freehold Registers (CFR's). The sealed access is presently utilised to access a storage shed, and is also used as a secondary access to the main airport, however there appears to be no right of way easement for this access. Power is reticulated by way of overhead power lines along the western boundary, with water being provided by town supply. The pastoral component would have limited appeal from a grazing perspective given its size, with the lifestyle appeal of this area also likely to be low given the proximity to the airport. The land may have some commercial appeal given the proximity to the airport, but potential purchasers would be small in number.

1.0.15 The value of the land would likely therefore be at the mid to lower end of the site factors determined within the sales analysis given the properties proximity to the airport. The taking of the land will however have an impact on the ability to access the current storage shed found on the land. Access would therefore need to be provided over the airport land to ensure that this shed can be effectively utilised by the current land owners.

1.0.16 Improvements contained on the land that would be impacted by the land take would include approximately 220m^2 of sealed yard. This would need to be compensated for. The impact on any other improvements would need to be reinstated as part of the works. Easements may also need to be registered for services to be provided to the shed.

1.0.17 We have been advised that the above land parcels are required as part of a run way extension, and allocation for land for business and car parking. The runway extension may allow larger aircrafts to fly from the airport. This may increase noise and disturbance to the surrounding properties. We would expect any impact on these properties to be minimal given the current productive land uses, and limited lifestyle appeal. We would therefore expect limited injurious affect from increased noise and disturbance.

1.0.18 A summary of the above is provided below.

Area	Land Required (ha)	Land Value Range	Improvements	Injurious Affect
A	1.0464	$15,000-$22,000/ha	Reinstated if impacted	Yes - shape
B	1.5126	$15,000-$22,000/ha	Reinstated if impacted	Yes - shape
C	0.3537	$10,000-$35,000 total	Impact on sealed yard area, other improvements to be reinstated if impacted	Yes - access

1.0.19 The values of areas A and B would be plus GST if any, with Area C being inclusive of GST if any. The impact on improvements and any injurious affect would need to be added to the value of the land taken.

1.0.20 The above information is to be used for feasibility purposes only. In order to quantify the full impacts to each property before and after scenarios would need to be undertaken, along with discussions with land owners.

DISCLAIMER

Logan Stone Ltd prohibits the publication of this report in whole or in part, or any reference thereto, or to the valuation figures contained therein, or to the names and professional affiliations of the valuer, without the written approval of the valuer as to the form and context in which it is to appear.

Our valuation has been completed in compliance with International Valuation Standard framework. International Valuation Standards IVS 101 – *Scope of Work,* International Valuation Standard IVS 102 – *Implementation*, International Valuation Standard IVS 103 – *Reporting*. We confirm that:

- The statements of fact presented in the report are correct to the best of the Valuer's knowledge;
- The analysis and conclusions are limited only by the reported assumptions and conditions;
- The Valuer has no interest in the subject property;
- The Valuer's fee is not contingent upon any aspect of this report;
- The valuation was performed in accordance with an ethical code and performance standards;
- The Valuer has satisfied professional educational requirements;
- The Valuer has experience in the location and category of the property being valued;
- The Valuer has made a personal inspection of the property;
- The Valuer has an Annual Practicing Certificate; and
- No one except those specified in the report, has provide professional assistance in preparing the report.

1.0.21 The report has been internally Peer Reviewed as part of the Logan Stone Limited internal review process. This review considers all aspects of the report, unless specifically instructed or stated otherwise.

1.0.22 Should you require any further advice, do not hesitate to contact us.

Yours faithfully
LOGAN STONE LIMITED

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Reviewed by:

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1701-5295Short

STATEMENT OF GENERAL VALUATION POLICIES

1. Our responsibility in connection with this valuation report is limited to the person to whom the report is addressed and we disclaim all responsibility to any other party without reference to us.
2. This report may not be reproduced, in whole or in part, without our prior written approval.
3. This report has been prepared for the purpose stated in the report and may be relied upon for that purpose only. Assumptions made in the preparation of the report are as expressly stated in the report or set out below.
4. Where it is stated in the report that information has been supplied to us by another party, this information is believed to be reliable but we cannot accept responsibility if this should prove not to be so. Where information is given without being attributed directly to another party, this information has been obtained by our search of records and examination of documents or by enquiry from Government or other appropriate departments.
5. We have made no survey of the property and unless otherwise stated assume that all improvements lie within the Computer Freehold Register boundaries. No guarantee is given that the land is not subject to statutory rights not recorded on the relevant Computer Freehold Register and not apparent from normal inspection of the property. We assume no responsibility in connection with such foregoing matters.
6. We do not carry out investigations on site in order to determine the suitability of ground conditions and services, nor do we undertake environmental or geotechnical surveys. Unless notified to the contrary, our valuations are on the basis that these aspects are satisfactory and also that the site is clear of underground mineral or other workings, methane gas or other noxious substances.
7. Unless otherwise stated our report is subject to there being no detrimental registration(s) affecting the land other than those appearing on the Computer Freehold Register(s) valued in this report. Such registrations may include Wahi Tapu registrations and Historic Places Trust registrations.
8. We have not obtained from the territorial authority a Land Information Memorandum. Our valuation has been made on the basis that such Memorandum if obtained would not have disclosed information which would have affected adversely our opinion of the market value of the property.
9. No environmental audit has been undertaken, although contaminants present on the site and obvious to us on inspection may have been noted in the report. No warrant is given, or is to be implied, in this report that the property is free from contaminants.
10. While in the course of inspection due care is taken to note building defects, no structural survey has been made and no undertaking is given about the absence of rot, termite or pest infestation, deleterious substances such as asbestos or calcium chloride or other hidden defects. We can give no guarantee as to outstanding requisitions in respect to the subject building.
11. In preparing the valuation it has been assumed hot and cold water systems, electrical systems and other devices, fittings and conveniences as are in the building to be in proper working order and functioning for the purpose for which they were designed.
12. Where a property is leased, this report records the nature of the information supplied. That information has been accepted and relied upon at face value. It has been assumed that the information supplied is complete and accurate, and that the lease is fully enforceable.
13. Unless otherwise stated in our report our valuation is on the basis that the property complies with the Building Act 1991, Health and Safety in Employment Act 1992, Evacuation of Buildings Regulations 1992 and Disabled Persons Community Welfare Act 1975 or that the legislation has no significant impact on the value of the property.
14. We certify that Logan Stone Limited holds professional indemnity insurance.

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Wairoa District Council
Draft Property Strategy

Contents

1 Introduction

With few exceptions, all that Council does and the services it provides is done either in, on or under council property. Therefore property has a major role to play in achieving Council's vision, community outcomes and strategic goals.

In this context of this strategy, Property is land, buildings and other structures used to deliver council services.

Most of the land that Council owns is service property – property assets which are used to deliver council services. Council also holds non-service property, which is property owned by Council that is not used to deliver Council services e.g. a café or is leased to other parties.

Over time Council has acquired a portfolio of over 297 parcels of land (excluding road reserves) that are crucial to the delivery of services to the community. They include, but are not limited to parks, reserves, public toilets, paper roads, social housing, community halls, corporate offices, landfill, water and waste water plants and cemeteries. Council also owns forestry land as a commercial investment providing a financial return to Council.

In addition to land council owns and uses to provide council services, council also leases approximately 76 parcels of council land and/or building to third parties, and also leases land such as the dog pound to provide council services.

The driver behind this strategy is for Council to undertake a strategic review of the property portfolio using a service network approach to assess how council owned property is performing. This strategic approach will ensure that the property portfolio is regularly reviewed against the Council's vision and to reflect the changing nature of community outcomes and activity specific objectives, with data being regularly gathered and analysed to enable informed decision making.

The role and purpose of the Property Strategy is to:

- guide council in ensuring they have the right property in the right place at the right time
- articulate the guiding philosophy in considering decisions about the acquisition, management and disposal of property assets; and to
- identify specific property-related objectives for Councils seven Activity Groups where no over-arching strategy is in place.

The Property Strategy is an enabling mechanism for Council to deliver on its 30 year infrastructure strategy which in turn informs the Long Term Plan and Asset Management Plans. As such, the Property Strategy is a key tool to enable the delivery of council services.

2 Council's vision and strategic goals

Council's vision is:

"Connected Communities Desirable Lifestyles Treasured environments

Creating the ultimate living environment. To be a vibrant attractive and thriving district, by developing sustainable lifestyle based around our unique environment; the envy of New Zealand and recognised worldwide."[1]

Council's Strategic goals are:

Community Development and Participation

Council's aim is to provide services and facilities to encourage community focus, ensuring access to information and leisure opportunities and to promote the expansion of the economy by encouraging tourism options and business development.

Safe Living Environment

Council's aim is to provide services and facilities which contribute to community health and safety and ensure that the natural and physical resources of the district are preserved for future generations.

3 The current environment

Property is an enabler to the delivery of Council's vision and strategic goals. As such, the driver for this strategy is for Council to undertake a strategic review of the property portfolio using a service network approach to assess how council owned property is performing in the context of a declining population and in some cases, aging assets. This will then inform strategic decisions on future acquisition, disposal and management of property. In undertaking the assessment Council faces many challenges in managing the delivery of its services through its property portfolio. Current challenges include:

- revising leases and rents while balancing community vs commercial needs
- optimising the current property portfolio
- using land, buildings and council ownership of land as an enabler for economic development
- declining population forecasts and the impact on utilisation, renewals and the future acquisition and disposal of land
- developing appropriate delegations to enable efficient decision-making
- disposing of land that is no longer required for the purpose for which it was acquired or is no longer required for
- property encroachments between private and public land
- acquisition conditions and circumstances that impact on the ability to use or dispose of property
- development and maintenance of a database of council owned land and buildings that enables efficient reporting and management
- measuring the performance of the portfolio
- having a comprehensive understanding of the land that council holds and why

[1] Long Term Plan 2015-2025

4 Principles and outcome areas

In addressing the challenges and resulting opportunities arising from a review of the property portfolio, Council will work to seven key principles to achieve a high performing property portfolio. They are:

- To plan and provide for future requirements
- Property meets the service delivery needs of the district
- To hold and manage property strategically
- To use of property resource sustainably
- To be financially astute in our property dealings
- To be transparent in our decision making
- Property assets are managed and maintained appropriately
- Property is fit for purpose

Applying these seven principles will best deliver the right property in the right place at the right time with the following outcomes:

Planning	Property is used to deliver Council and community outcomes
Service delivery	Property efficiently delivers council services
Management	Property assets and data are well managed
Adaptable and flexible portfolio	Property is fit for purpose and can easily adapt to the changing needs and demands of the community
Optimisation	The property portfolio is optimised through co-location, redevelopment, acquisition and disposal that delivers value for money for the Council and the community

Why Council owns and manages property

Most of what council does is either on, in or under council property. Council owns property to support the delivery of services in alignment with Council's vision, strategic goals and community outcomes.

Council owns and manages property:

- to provide land to deliver council's current and future services
- to enable the use of council land by the community and /or community groups at an affordable cost
- to support economic development goals
- as part of councils investment portfolio

4.1.1 Property held for future use

Property that is being held for future development should only continue to be held when the intended purpose is likely to be realised within a defined time period that should have been

assessed and stated at the time of purchase. Where a property fails this threshold, consideration should be given to disposing of the property with buy-back covenants in place if necessary.

Where a property is larger than required for the service for which it was acquired, opportunities should be sought to obtain a financial return from the balance of the property, either through disposal, lease or other means where it does not compromise the purpose for which the property was acquired.

4.1.2 Property Development

Council will consider becoming involved in property development where appropriate to act as a catalyst for private sector development and investment where it is considered that the level of perceived risk would otherwise deter private sector development, or to control the form, scale and timing of development.

Council will not compete with private developers, however Council will look to implement opportunities to capture value from the development of its land, including entering into joint ventures, ground leases.

5 How Council holds property

There are a variety of ways that council holds property to meet strategic outcomes.

5.1 Ownership

In most cases there are more financial benefits for council to own property than to lease it, particularly as it relates to its strategic assets (e.g. parks and services, water treatment plans, waste management facilities, cemeteries). This benefit is determined through financial modelling and whole of life costings during due diligence, acquisition and management processes.

Ownership can also be more desirable as it gives Council full control of the land and decisions over it. However it also places responsibility on Council to manage those land and buildings in a safe way in compliance with legislative requirements.

Council also chooses to lease land it owns to third parties and has developed a standardised approach to the calculations of leases that are based on reasonable rent and fair returns to Council.

5.2 Alternatives to ownership

Where it has been established that property is required for a service it will be assessed against all options including approaches that do not involve property ownership. This includes:

- leasing the land or securing the required outcome via easements etc.
- redesigning the service to reduce the use of assets
- reducing demand for the service
- increasing the utilisation of existing assets
- contracting the service to a provider that supplies the assets

5.2.1 Leasing

Some services can be provided on any land or within any building, and ownership is not critical to secure or enable service delivery. In these circumstances, council may choose to lease property rather than own property. Leasing may also be an option where non-ownership solutions have been found to offer superior outcomes and offer flexibility to Council if the service is considered as a short term solution.

6 Property acquisition

The acquisition of property is an important part of the property function that enables the delivery of council services. In making a decision to purchase land and/or property, Council is making a decision to use public money to provide a service or investment now or in the future. Council will assess property acquisitions by identifying future property requirements to meet service and investment needs through a strategic property assessment. As the property market changes the timing of the acquisition of property needs to be right to ensure the right level of investment is made at the right time for the purpose for which the land is required.

In determining when council buys property we will consider the following:

- assessing service needs now and into the future
- current market conditions
- forecasting future changes in land use
- land conditions (e.g. contaminated/unstable land, or land susceptible to flooding/natural hazards)
- what the property will be used for, is it fit for purpose?
- when the property will be needed
- is it part of a rolling programme of prioritised infrastructure projects
- does it align with Council's vision and community outcomes
- alternative ownership options
- whole of life costing, how the purchase will be funded and any impacts on rates

Council will make a decision to purchase property if it will achieve the best outcome for the council and community in a financially prudent manner and will consult with the community where required under the Significance and Engagement Policy.

7 Development of property

There are instances that Council will hold or acquire land for the delivery of service and may need to develop the land or buildings to make it fit for purpose for the service e.g. the construction /replacement of a library. Similarly, in optimising the property portfolio, Council may decide to co-locate services on one site which may require redevelopment or reconfiguration of land and/or buildings to make it fit for purpose. In these instances, Council will 'develop' the property so it is fit for purpose. Expenditure for this development will be identified in the Long Term Plan.

8 Disposal of property

In order to have an efficient property portfolio, Council will identify property that is no longer required for the purpose for which it was acquired. A strategic assessment will be undertaken for land and/or buildings identified that should potentially be sold. In determining when council disposes of property we will consider the following:

- whether the property supports service delivery or achieves strategic objectives (including investment and economic development objectives)
- in the case of non-service properties, are they necessary for the future delivery of services
- how the land was originally acquired and any obligations, constraints and limitations associated with that e.g. land that was gifted, covenants etc.
- the costs/benefits of selling the property
- impacts on levels of service
- the level of risk
- strategic alignment
- Councils financial position and where the proceeds of the sale will go

If this assessment results in a decision to proceed with the sale of the property, consultation on the sale of property would occur in accordance with Councils Significance and Engagement policy.

A review of market conditions will be undertaken where practicable to ensure that land is sold at the optimum time to most benefit Council and the community, subject to relevant legal requirements.

In the case of minor or hard to sell properties, the cost of disposal relative to the ongoing cost of ownership might be a factor.

9 Property Management

All properties should be managed and maintained to be fit for purpose and deliver affordable levels of service. As a land owner, the management of property is critical to maintaining the value of the asset and optimising its life. Council has responsibilities under legislation, including that buildings and structures meet health and safety requirements and are compliant with the Building Code. This requires robust record keeping, to be able to quickly assess the status of each building.

Data capture and management is critical to enable the ongoing assessment of council's property portfolio. Council will use a data management system for the creation, management and review of leases, land and buildings and, as an evidence base to support Council's decision-making processes. Council will also need to develop delegations that support the efficient management of the portfolio.

10 Risk management

Risk comes in many forms, whether it is financial, through redevelopment, entering into partnerships or in holding property that may be earthquake prone or subject to other hazards. There can be significant reputational, health and safety and financial risk to Council in property dealings.

Council will seek to minimise risk through the decisions it makes on the acquisition, disposal, leasing and management of property and the costs and benefits associated with each property. The benefits

and risks of owning existing properties will be assessed on a similar bases to those outlined in 6.2 above, and will also consider the cost and benefits of delivering services from building assets other than those owned by Council. Ultimately, decisions will be made in accordance with Council's risk policy.

11 Specific property objectives for activities

Council has seven activity groups which cover the services it delivers. They are:

1. Water
2. Waste
3. Transport
4. Community Facilities
5. Planning and Regulatory
6. Leadership and Governance
7. Corporate Functions

Property is an integral part in delivering each of these activity groups. As this strategy is to ensure Council has the right property for the right purpose in the right place at the right time, consideration should be given to the Property Strategy when delivering on each activity group. Objectives to address each activity group in the absence of an overarching strategy are included in Appendix A.

12 Glossary

Asset	A physical component of a facility, or a collective or network of physical assets, which has value, enables services to be provided and has an economic life of greater than 12 months.
Asset management plan (AMP)	A plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical and financial) over the life cycle of the asset in the most cost-effective manner to provide a specified level of service. A significant component of the plan is a long term cash flow projection for the activities.
Fit for purpose	A suitable quality, standard or type to meet he required (and stated) purpose.
Levels of Service (LoS)	The defined service quality for a particular activity (e.g. parks and reserves) or service area (e.g. playgrounds) against which service performance may be measures. LoS usually relate to quality, quantity, reliability, responsiveness, environmental acceptability and cost.
Non-service property	Property that is not used to deliver council services.
Optimisation	To have a service or facility operate at the highest standard and greatest efficiency possible.
Property	Land, buildings and other structures used to deliver council services.
Renewal	Works to upgrade, refurbish, rehabilitate or replace existing facilities with facilities of equivalent capacity or performance capability.

Service property	Property that is used to deliver a council service.
Whole of life costs	The total cost of an asset though its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.

Appendix A – Specific objectives

These draft objectives should be seen as a starting point. They will need to be reviewed and workshopped internally to make sure that they align with work WDC is are currently doing on the LTP and Activity Management Plans.

Water Services (water supply, stormwater and wastewater)

Council continues to run and operate water supply, stormwater and wastewater systems and networks in the district that meet legislative and statutory requirements.

The location and maintenance of water, stormwater and wastewater networks and treatment plants will protect public health and safety.

To undertake strategic planning for the management of our aging stormwater and wastewater infrastructure.

Water

To have a functional water reticulation network that provides the required water quality and quantity at all times.

Future water storage demand is planned for to meet the needs of the district.

Stormwater

To assess public safety of the open stormwater network in association with planned connections, walkways and cycleways, and take action where safety improvements are required.

Wastewater

To identify additional potential property requirements resulting from the expiry of the Wairoa treatment plan discharge consent.

Waste

Waste services such as landfills and recycling centres provided are accessible to encourages positive waste minimisation behaviour from Council and the community.

To provide waste services that are sustainable that meet current and future needs of the community.

Transport

Land Transport

The Council will optimise current land holdings and acquire additional land where required to facilitate desired outcomes on identified projects. *Do you want to provide a list of priority projects here or not?*

To maximise the use and opportunity of the road corridor in providing walking and cycleway connections in alignment with economic development objectives and opportunities.

Council will proactively seek to deliver safe cycle and walkway connections to deliver economic and community outcomes through working with Adventure Wairoa Inc.

Council will maintain the ability to have connectivity between the airport and rail-line to provide opportunities for connections with district cycle trails.

Provide a safe and affordable land transport network that contributes to the outcomes of the Land Transport Management Act and the objectives of the Regional Land Transport Strategy.

Council will proactively engage with the tourism sector in the delivery of cycle and walkway links across the district.

Airport

Council will strengthen the transport network to ensure that the airport and its supporting facilities are able to service the medical, tourism and disaster response needs of the district.

Community Facilities

To identify opportunities for the acquisition and disposal of land that will best meet future needs of the district.

To provide additional support services and facilities (e.g. public toilets, litter bins) to support economic development initiatives.

Cemeteries

Council will periodically review the portfolio to ensure that it has sufficient capacity to meet demand for cemeteries in the district.

To provide adequate and appropriate facilities for the delivery of community services that will meet the needs of its citizens now and in the future.

Parks and reserves

Council will ensure that it has sufficient land to be able to provide parks and reserves to support better health and recreation outcomes for the community.

Council will ensure that all reserves have reserve management plans as required under the Reserves Act 1977.

Libraries

To continue to provide a library within the Wairoa town centre to enhance the social and cultural wellbeing of the Community.

Planning and Regulatory

Council will continue to lease land for a dog pound at the Quality Roading and Services depot.

Leadership and Governance

Council will acquire property in strategic locations and in alignment with Councils investment policy to facilitate economic development.

Economic Development

Council will identify the necessary and appropriate steps in can take to achieve the objectives of the Hawkes Bay Regional Economic Development Strategy

Council will maximise the opportunity that Rocket Lab provides in tourism and employment opportunities.

Council will use its property as a catalyst for increased business, employment and tourism development and investment opportunities to support a diverse local economy.

Council will consider lease and lease-to-buy opportunities of Council owned land for the community or private sector to support economic development initiatives that might otherwise be perceived as having a higher level of risk.

Corporate Functions

Property

To undertake a strategic review of the property portfolio using a service network approach to assess how council owned property is performing to inform strategic decisions on future acquisition and disposal of property.

Council will acquire, dispose and manage property in a financially astute manner in all its property dealings.

Council will continue to provide affordable social and staff housing at the current level. *Confirm current level is to be retained rather than increased.*

To assess the options and feasibility of appropriate Council land to be used as a campground, if the Mahia campground is closed.

Council owned property is optimised through the co-location of services, redevelopment, leasing arrangements and acquisition and disposal.

Council will ensure that Property is used in the most efficient way to deliver services to the community.

All Council owned property is fit for purpose.

Council will dispose of land that has been assessed as no longer being required for the provision of a service now or in the future in alignment with current council strategies (e.g. infrastructure strategy).

Corporate Funds and management

Council will invest in property as part of our broader investment policy with the aim of maximising returns.

8.2 CCTV PROGRAMME UPDATE

Author: **Luke Knight, Property Manager**

Authoriser: **Jamie Cox, Engineering Manager**

Appendices: **Nil**

1. PURPOSE

1.1 The purpose of this report is to provide an update to council on the provision of CCTV in Wairoa.

RECOMMENDATION

The Property Officer RECOMMENDS that Council receives the report and makes recommendations or offers direction as it considers appropriate.

2. BACKGROUND

2.1 Council adopted a CCTV policy in 2015 and invested in the installation of CCTV for the purposes of public safety and security in the CBD area of Wairoa.

2.2 Council currently has 5 CCTV cameras installed in the CBD and one at the Wairoa Airport. The data from these cameras is fed back to the Wairoa Police control room, where they are monitored and recorded. Signage of the CCTV network has also been installed.

2.3 Council supports the community patrol which also uses the CCTV as a monitoring tool

2.4 Liaison meetings are held between WDC property staff ,police and community patrol members regarding the CCTV operational effectiveness

3. RESULTS

3.1 Although there have been some teething problems, the installations are operating as planned. The effectiveness of the cameras as a deterrent, for predictive policing or for reactive policing is yet to be determined. A level of communication has been established between the three parties involved with the system i.e. Police, WDC property management and Community patrol

3.2 Results have included the following:

3.2.1. Recovery of a scooter stolen from in front of the library. In this instance, police were able to view CCTV footage and immediately identify the perpetrator leading to the successful retrieval of the scooter.

3.2.2. Graffiti on library green tables. Cameras recorded the tags on the tables as well as recording perpetrators walking along Marine Parade, this enabled identification by the police.

3.2.3. Christmas lights on library green. Cameras recorded damage to installed lights, this was shared with police and the installation of CCTV was publicised on council's social media accounts, there was minimal repeated damage.

3.2.4. Arrest warrant at skate bowl. Live streams of CCTV footage enabled the police to successfully identify an individual and action an arrest warrant.

3.2.5. Manually controlled cameras. The manually controlled zooming cameras have been used by police control to direct officers to incidents within the recorded area.

4. KNOWN ISSUES

4.1 The placement and quantity of cameras needs to be reviewed for effectiveness.

4.2 The monitoring system needs to be reviewed for its effectiveness

5. OPTIONS

5.1 The options identified are:

a. Continue with the existing system and further develop in an internal continuous improvement process.

b. Outsource a professional review of the existing system of cameras and monitoring. Bring the review back to Council for decision-making in time for possible inclusion in the LTP

5.2 The system has been in place for approximately a year and essentially Council should consider whether it is satisfied with the current progress and we continue with an internal process of incremental improvement or carry out a professional security review of the entire system with the recommendations being utilised in the LTP process

5.3 The preferred option is b, this meets the purpose of local government as it will help meet the current and future needs of communities for local public services, in a way that is most cost-effective for households and businesses.

6. CONCLUSION

6.1 Council's initial investment in an urban CCTV programme has been implemented and it is appropriate to consider the next steps.

7. CORPORATE CONSIDERATIONS

What is the change?

7.1 NA

Compliance with legislation and Council Policy

7.2 The current CCTV programmes complies with Council's CCTV policy and was approved in the previous annual plan

What are the key benefits?

7.3 Community wellbeing

What is the cost?

7.4 Under current budgets

What is the saving?

7.5 NA

Who has been consulted?

7.6 NA

7.7 Culturally Neutral

Service delivery review

7.8 NA

Maori Standing Committee

7.9 Culturally neutral

8. SIGNIFICANCE

8.1 NA

9. RISK MANAGEMENT

9.1 The strategic risks (e.g. publicity/public perception, adverse effect on community, timeframes, health and safety, financial/security of funding, political, legal – refer to S10 and S11A of LGA 2002, others) identified in the implementation of the recommendations made are as follows:

a. Community wellbeing is at the core of the CCTV system. Any improvement in the CCTV system benefits community wellbeing- likewise risks relate to less community wellbeing

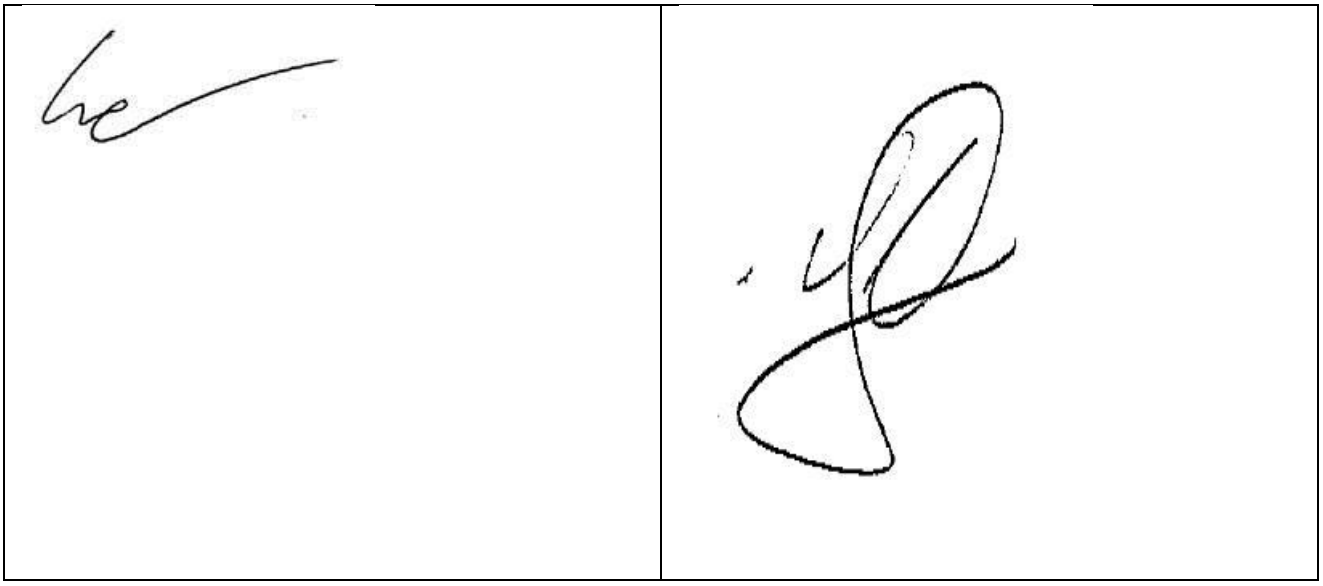
Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,

b. is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories



Author	Approved by
Luke Knight	Jamie Cox

8.3 AUDIT FEES 2017-2019

Author: **Gary Borg, Chief Financial Officer**

Authoriser: **Fergus Power, Chief Executive Officer**

Appendices: **1. Audit Proposal ⇩**

1. PURPOSE

1.1 The purpose of this report is to seek Council approval of proposed audit fees for the Annual Reports for the years ending 30 June 2017, 2018 and 2019.

RECOMMENDATION

The Chief Financial Officer RECOMMENDS that Council approves the proposed Annual Report audit fees and disbursements of $286,198 for the three years ending 30 June 2017-2019.

EXECUTIVE SUMMARY

[Type here]

2. BACKGROUND

2.1 This matter is referred to Council because the financial commitment proposed exceeds officer delegation.

2.2 The Auditor-General appoints auditors to councils, typically for two terms of three years.

2.3 The fees are generally set by agreement for each term.

2.4 The proposal from Council's auditor is attached as **Appendix 1**. This explains the variations from the previous term, in the context of changes to the reporting environment and recent experience with Council and the sector.

2.5 This proposal concerns the audit of annual reports only, the audit of the Long-term Plan 2018-28 will be a separate matter, albeit with the same auditor.

3. OPTIONS

3.1 The options identified are:

a. Approve the fees as proposed

b. Seek arbitration from the Auditor-General

3.2 Included in the proposal is an explanation of the delta between costs historically incurred versus those invoiced. The hours proposed appear to be a reasonable compromise between these points, and reflect an expectation that Council's financial and performance management and reporting processes will continue to improve.

3.3 The amount proposed is an increase of 11% on the fee charged for 2016 and gives rise to a small variance against the Annual Plan 2017-18. The timing of the receipt of the proposal precludes any adjustment to the budget and Council may wish to refer the matter to the Auditor-General.

3.4 The proposal declares that hours incurred on the audit for the year ended 30 June 2016 were more than 50% higher than anticipated and were absorbed by the auditor. For the

year ended 30 June 2015 additional hours were invoiced to Council and the total audit cost was $110,325. It is conceivable that a determination by the Auditor-General may not be in Council's favour.

3.5 The preferred option is to approve the fees as proposed, this meets the purpose of local government as it will help meet the current and future needs of communities for the performance of regulatory functions in a way that is most cost-effective for households and businesses.

4. CONCLUSION

4.1 Council and its auditors have a shared obligation to ensure that public accountability is delivered in the most cost effective manner possible.

4.2 This will be achieved through the continuous development of processes, systems and people.

5. CORPORATE CONSIDERATIONS

What is the change?

5.1 This matter represents a status quo position.

Compliance with legislation and Council Policy

5.2 s99 LGA requires a council's annual report to be audited.

5.3 As referenced in **Appendix 1**, the other statutory provisions are contained in the Public Audit Act 2001.

What are the key benefits?

5.4 Since an audit is a statutory requirement, and auditors are appointed by the OAG, this report considers the quantum of fees only.

What is the cost?

5.5 The proposed fee for the year ending 30 June 2017 is $87,400 plus disbursements of $10,000. This exceeds the budget in the Annual Plan 2017-18 by $7,400. This variance will need to be funded through other operational savings.

What is the saving?

5.6 Section 6.1 of **Appendix 1** indicates that the fees proposed are net of a discount of $14,850 against the fully costed billable hours.

Who has been consulted?

5.7 This matter is administrative and does not require consultation.

Service delivery review

5.8 This matter has no implications for levels of service or mode of service delivery.

Māori Standing Committee

5.9 This matter is of an administrative nature and has no specific implications for Māori.

6. SIGNIFICANCE

6.1 In accordance with Council's Significance and Engagement Policy this matter is assessed as being of low significance.

7. RISK MANAGEMENT

7.1 The strategic risks (e.g. publicity/public perception, adverse effect on community, timeframes, health and safety, financial/security of funding, political, legal – refer to S10 and S11A of LGA 2002, others) identified in the implementation of the recommendations made are as follows:

a. There are no discernible risks beyond the financial variance discussed in **3**.

References (to or from other Committees)

This is the first presentation of the matter relating to audit fees to Council. Other matters relating to audit plans, procedures and reports have been previously presented to Council's Finance, Audit and Risk Committee.

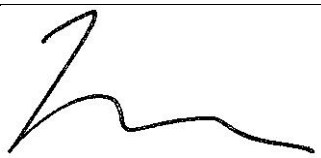
Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,

b. is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories

	
Author Gary Borg	Approved by Fergus Power

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26 June 2017 Ref: 60433692

Fergus Power
Chief Executive Officer
Wairoa District Council
PO Box 54
Wairoa 4160

Copy: Director Auditor Appointments
Office of the Auditor–General
PO Box 3928
Wellington

Dear Fergus

Proposal to conduct the audit of Wairoa District Council and subsidiaries on behalf of the Auditor-General for the 2017, 2018 and 2019 financial years

1 Introduction

The Auditor-General proposes to appoint me to carry out the audit of your organisation for the next three years. As required by the Office of the Auditor-General (OAG), I set out below information relating to the audit for the three financial years ending 30 June 2017, 2018 and 2019. The purpose of this proposal is to provide information on:

- the statutory basis for the audit and how audit fees are set;
- the entities covered by this proposal;
- key members of the audit team;
- the hours we plan to spend on the audit and reasons for any change in hours;
- our proposed fees for the audit for the financial years ending 30 June 2017, 2018 and 2019 and reasons for any change;
- assumptions relating to the proposed audit fees, including what we expect of your organisation;
- what the OAG overhead charge provides;
- certification required by the Auditor-General; and
- our commitment to conduct the audit in accordance with the Auditor-General's Auditing Standards.

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2 Statutory basis for the audit and how audit fees are set

The audit of your organisation is carried out under Section 15 of the Public Audit Act 2001, which states that "the Auditor-General must from time to time audit the financial statements, accounts, and other information that a public entity is required to have audited".

Fees for audits of public entities are set by the Auditor-General under section 42 of the Public Audit Act 2001. However, you and I have the opportunity to reach agreement first and recommend those fees for approval. The Auditor-General, with assistance from the OAG, will set audit fees directly only if we fail to reach agreement.

Our proposed audit fees are set out in this letter and include an estimate of the reasonable cost of disbursements (including travel and accommodation where necessary).

3 Entities covered by this proposal

This proposal covers the audits of Wairoa District Council and Group and reporting to the Trustee pursuant to the Debenture Trust Deed dated 10 September 2013.

We have provided a separate letter of proposal to Quality Roading and Services (Wairoa) Limited which has been approved by the company's Board for the period 30 June 2017 to 30 June 2019.

4 Key members of the audit team

Appointed Auditor	Stuart Mutch
Audit Manager	Ahmed Sofe
Technical Accounting Specialist	Lara Truman
IT Assurance Specialist	Dinesh Manicckam

5 Estimated audit hours

We estimate that the following hours will be required to carry out the audits (compared to budgeted and actual data from the previous financial year):

Audit team member	2016 budget	2016 actual	2017	2018	2019
Appointed Auditor	24	56	45	40	40
Review Partner	0	0	0	0	0
Audit Manager	40	73	65	60	60
Other CA qualified staff	130	160	155	145	145
Non CA qualified staff	191	349	260	250	250
Other specialists (IT and Technical)	10	9	10	10	10
Total audit hours	**395**	**647**	**535**	**505**	**505**

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Our actual hours for 2016 audit were higher than the budgeted hours set out in the 2014 to 2016 audit proposal letter due to:

- Budgeted hours for the 2016 audit incorporated anticipated reductions in hours based on WDC's commitment to perform particular procedures in order to be better prepared for the audit. During 2015 and 2016 Council faced significant challenges and delays in the preparation of its financial statements and service performance information which resulted in significantly more time being spent by the audit team to complete the audit than expected or hoped. This included reviewing multiple versions of the annual report. Additional costs were sought and recovered in 2015. In 2016 we did not seek to recover the costs associated with the additional 2016 hours required beyond those budgeted.

- Additional time was required for Stuart Mutch as the audit partner to transition into the role and build an understanding of the organisation for the year ended 30 June 2016. We absorbed this cost as it is not a cost that should be borne by the organisation. However, we note that we have sought to reflect hours for partner involvement in the engagement going forward that align with the nature of the organisation.

- The complexities of local authority reporting and of Councils wide range of services requires a more extensive programme of audit work.

- Time spent auditing additional financial and non-financial reporting requirements set out in new legislation and regulation as explained in point 5.1 below. This is expected to be an ongoing cost and is factored into our fees for the 2017 to 2019 period.

5.1 Reasons for changes in audit hours

The major reasons for the changes in hours for your organisation's audit are:

Reasons for increased or decreased audit hours compared to previous period budgeted hours:	**2017**	**2018**	**2019**
Increased legislative reporting requirements: Appropriately reflecting impact of Prudence Regulations and the mandatory service performance targets	20	0	0
Impact of an Infrastructure revaluation as at 30 June 2017	30	-30	0
Re-alignment of audit hours base to reflect historical hours incurred given complexity of engagement and nature of financial statement close process	90	0	0
Total increase (decrease) in audit hours	**140**	**-30**	**0**

Increased legislative reporting requirements

Based on our experience over the course of the last three years additional time is required by the engagement team to audit the disclosures under the amendments to

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Part 3 of Schedule 10 of the Local Government Act 2002 and the introduction of Local Government (Financial Reporting and Prudence) Regulations 2014. Some costs related to this matter were anticipated in the 2014 to 2016 audit proposal letter. However, our experience has reflected that more time was required to complete these procedures than anticipated in that proposal letter. In addition to these matters a number of key performance measures have been introduced by the Crown which have required additional audit focus. The increase in the budgeted hours for 2017 to 2019 reflects the actual time required to complete these procedures.

Infrastructure Revaluation

Council revalues its asset base at least once every three years. 2017 is a year in which these revaluations will be undertaken. This will have an impact on the amount of audit effort required to complete the 2017 audit. We then expect that once these revaluations are recorded in 2017 there will be less effort required in 2018. The Councils last revaluation generated significant challenges for management and the audit team. We expect this to improve in 2017 but we do not expect this additional time to be fully absorbed within our expected hours.

Re-Alignment of contract audit hours to reflect Actual Historic Performance

During the course of our recent audits of Wairoa District Council and other local authorities it has become clear that the level of audit engagement time required to effectively meet professional standards continues to rise. In recent years this has been exacerbated by the non-timely preparation of financial and non-financial information at Wairoa District Council. In 2015 these challenges required us to recover cost overruns from Council. In 2016, whilst the statutory deadline for the approval of the Councils annual report was achieved, it required significantly more effort from both Councils team and our own. We have decided that it is appropriate to re-assess the benchmark number of hours that are required to be committed to the audit of Wairoa District Council should Councils annual report be prepared in an efficient and accurate manner. However, we have decided to absorb these hours from a cost perspective. However, we will look to use this estimate of audit effort as the benchmark to measure future audits against.

6 Proposed audit fees

Our proposed fees for the next three audits (compared to budgeted and actual data from the previous financial year) are:

Structure of audit fees	2016 budget $	2016 actual $	2017 $	2018 $	2019 $
Net audit fee (excluding OAG overhead and disbursements)	73,000	73,000	81,250	77,518	78,680
OAG overhead charge	5,800	5,800	6,150	6,250	6,350
Total audit fee (excluding disbursements)	**78,800**	**78,800**	**87,400**	**83,768**	**85,030**

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Structure of audit fees	2016 budget $	2016 actual $	2017 $	2018 $	2019 $
Estimated Disbursements	10,000	10,000	10,000	10,000	10,000
Total billable audit fees and charges	**88,800**	**88,800**	**97,400**	**93,768**	**95,030**
GST	13,320	13,320	14,610	14,065	14,254
Total (including GST)	**102,120**	**102,120**	**112,010**	**107,833**	**109,284**

Disbursements in 2016 amounted to $12,177. However, a portion of this was attributable to the cost of our partner transition. We did not seek to recover this and will continue to cap disbursements unless a special event arising at which time it will be discussed with Council.

Our fee structure proposal for the next three years seeks to more appropriately reflect the hours we expect to incur on the audit but also seeks to reflect the Council's economic environment. These factors require us to drive efficiencies and not pass on cost overruns against expectations unless they are generated directly by a significant events or a reporting related issues. However, we also expect that the Council should continue to focus on improving their own processes going forward. We note that our examination of audit fees to other Councils of a similar size and scale of complexity of Wairoa District Council reflects that the proposed fee remains beneficial to Council.

The audit fees allow for the audit team to carry out specific tasks identified in the OAG Sector Brief and for the OAG overhead charge. We have also estimated the reasonable cost of disbursements (including travel and accommodation where necessary). Disbursement costs are indicative only and will be charged on an actual and reasonable basis.

6.1 Reasons for changes in audit fees

The main changes in cost components for future audits are:

Reasons for increased or decreased audit fees compared to previous period budgeted fees.	2017 $	2018 $	2019 $
Predicted staff salary cost movements (1.5%)	0	1,218	1,162
Increased legislative reporting requirements: Appropriately reflecting impact of Prudence Regulations and mandatory service performance measures	3,300	0	0
Impact of Reflecting actual hours required to complete audit based on sector an recent Wairoa experience.	14,850	0	0
Discounting of hourly rate to provide economic offset of real costs to Council	-14,850	0	0

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Reasons for increased or decreased audit fees compared to previous period budgeted fees.	2017 $	2018 $	2019 $
Revaluation of Infrastructure Assets	4,950	-4,950	0
Total increase (decrease) in audit fees	**8,250**	**-3,732**	**1,162**

Predicted staff salary cost movements

We have forecast an expected movement in staff cost of 1.5% per annum for the three year period.

Other movements

Other movements are discussed in detail within section 5 above.

7 Assumptions relating to our audit fee

Our proposed audit fees are based on the following assumptions that:

- You will provide to us in a timely manner the complete information required by us to conduct the audit.
- Your staff will provide us with an appropriate level of assistance.
- Your organisation's annual report and financial statements (including Statements of Service Performance) will be subject to appropriate levels of quality review before being submitted to us for audit.
- Your organisation's financial statements will include all relevant disclosures.
- We will review up to two sets of draft annual reports, one printer's proof copy of the annual report, and one copy of the electronic version of the annual report (for publication on your website).
- There are no significant changes to the structure and/or scale of operations of the entities covered by this proposal (other than as already advised to us).
- There are no significant changes to mandatory accounting standards or the financial reporting framework that require additional work.
- There are no significant changes to mandatory auditing standards that require additional work other than items specifically identified in the tables above.
- There are no significant changes to the agreed audit arrangements (set out in an annual letter we will send you) that change the scope of, or disbursements related to, this audit.

If the scope and/or amount of work changes significantly, we will discuss the issues with you and the OAG at the time.

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8 What the OAG overhead charge provides

Parliament has indicated that it expects the full cost of annual audits under the Public Audit Act (including an OAG overhead charge) to be funded by public entities.

The OAG overhead charge partially funds a range of work that supports auditors and entities, including:

- development and maintenance of auditing standards;
- technical support for auditors on specific accounting and auditing issues;
- ongoing auditor training on specific public sector issues;
- preparation of sector briefs to ensure a consistent approach to annual audits;
- development and maintenance of strategic audit plans; and
- carrying out quality assurance reviews of all auditors, and their audits and staff on a regular (generally, three-year) cycle.

Appointed Auditors are required to return the OAG overhead charge portion of the audit fee, to the OAG.

9 Certifications required by the Auditor-General

We certify that:

- the undertakings, methodology, and quality control procedures that we have declared to the OAG continue to apply;
- our professional indemnity insurance policy covers this engagement; and
- the audit will be conducted in accordance with the terms and conditions of engagement set out in the audit engagement agreement and schedules.

10 Conclusion

As the Appointed Auditor, I am committed to providing you and the Auditor-General with the highest level of professional service. I intend to work with you, the OAG, and the Auditor-General in a partnership environment to resolve any issues that may arise.

If you require any further information, please do not hesitate to contact me.

Building a better working world

Please counter-sign this letter (below) to confirm that you, and the governing body of your organisation, agree with its contents. This letter will then form the basis for a recommendation to the Auditor-General on the audit fee that should be set. The schedules of audit hours and fees will also be incorporated into my audit engagement agreement with the Auditor-General to carry out the audit of your organisation as the agent of the Auditor-General.

Yours sincerely

Stuart Mutch
Ernst & Young

8.4 MATARIKI REGIONAL ECONOMIC DEVELOPMENT STRATEGY (REDS) GOVERNANCE STRUCTURE

Author: **Kitea Tipuna, Economic Development and Engagement Manager**

Authoriser: **Fergus Power, Chief Executive Officer**

Appendices: **Nil**

1. PURPOSE

1.1 To endorse the governance structure, delivery and funding model for Mataraki – Hawke's Bay Regional Economic Development Strategy.

RECOMMENDATION

The Economic Development & Engagement Manager RECOMMENDS that Council endorse the governance structure, delivery and funding model for the Matariki Regional Economic Development Strategy , but amended so that Wairoa District Council is a permanent member of the governance structure

2. BACKGROUND

2.1 The Matariki Regional Economic Development Strategy (REDS) for Hawke's Bay – Matariki - was launched by Government Ministers on 27 July 2016. This announcement was the culmination of nearly two years' work with broad and deep regional engagement with the strategy developed in partnership, as aspired for in the principles of Te Tiriti o Waitangi. Matariki REDS has a vision of 'Every household and every whānau is actively engaged in, contributing to and benefiting from, a thriving Hawke's Bay economy'. Our Council adopted Matariki REDS on the 23rd of August 2016.

2.2 Action 1.1 within the strategic framework required a stocktake of the organisation involved in economic development in the region and to recommend the regional economic development delivery model to give effect to Matariki REDS. The governance group overseeing Matariki REDS commissioned Martin Jenkins to draft a report on alternative governance structures, delivery and funding models. The Martin Jenkins report identified some options but the Matariki REDS Governance Group did not believe they provided the right framework to ensure Hawke's Bay continued to move forward and embrace the partnerships that had been developed. The delivery model was further developed through engagement with key stakeholders.

2.3 It was agreed that the proposed structure would enable flexible governance that would be able to accommodate existing and future regional collective action, while at the same time allowing organisations, as appropriate, to have an input into critical regional decision-making. The structure is required to provide ability for central government input in order to ensure that the Matariki REDS strategy is consistent with central government regional economic growth strategy intentions. The proposed structure is also intended to recognise the desire to merge the functions and governance of Matariki REDS and the Regional Social Inclusion Strategy that is currently being developed under the auspices of the Intersectoral Leaders Forum. Finally, any structural solution would provide agility, via an open and transparent governance structure, whereby access to resources by those

charged with project implementation is able to be willingly aided by those with available and appropriate skill-sets.

2.4 The essential elements of the proposed structure are:

2.4.1. Flexible governance arrangement

2.4.2. Meaningful iwi and hapū participation

2.4.3. Business engagement and participation

2.4.4. Social and economic inclusion

2.4.5. Robust management overview of identified projects

2.4.6. Resourced project management and delivery function

2.4.7. Project initiation and review structure

2.4.8. Recognition of democratic process and funding realities

2.4.9. A distributed and collaborative approach which involves all partners and agencies delivering their contributions

3. SOCIAL INCLUSION INTERGRATION

3.1 Hawke's Bay has for a few years had two groups operating with one focusing on economic development (Matariki REDS) and the second at improving our social outcomes (this group operates under the name HB LIFT). It was recognised during this review that by focusing on economic inclusion in the growing economy of Hawke's Bay, the opportunity to improve the lives of individuals, households and whānau is genuine and tangible. The work required to deliver this strategy requires all the partners to participate for a shared success. There is therefore an opportunity and a need to bring the components of Matariki and Social Inclusion together to drive equity across Hawke's Bay and to develop integrated pathways between projects, partnerships and results.

3.2 Social inclusion is the ability of all individuals, households, whānau and communities to participate in the economic, social, cultural and political life of the community in which they live. This means people have access to some very basic but important things, including enough income to sustain an ordinary life, a safe place to live, an education, the opportunity to develop skills that are valued and services that support their health. Collectively these form the basis of the resources and opportunities to progress through life in a way that creates wellbeing for individuals, families, whānau, households and communities.

3.3 Recognising that adequate income is a significant enabler for social, cultural and civic participation, the central focus of '*Successful Together',* a social inclusion strategy for Hawke's Bay is on economic inclusion and participation to generate improvements in social inclusion.

4. STRUCTURE AND REPRESENTATION OF VARIOUS STAKEHOLDERS

4.1 The proposed structure provides for the creation of an expansive group of stakeholders to provide meaningful engagement to occur between the Matariki Board and the key stakeholder groups.

4.2 It is proposed that a Forum be created that operates under the name of Matariki Forum be established that recognises all stakeholders with a vested interest in the successful

outcome of Matariki are required to be actively engaged and openly participate in project outcomes. Therefore, the ultimate objective of the Forums creation is to provide a sense of trust between all participating group partnership members. The Forum will provide, via the Governance Group[1], with both regular formal and informal communication regarding the status of Matariki projects. This Forum will meet twice a year to debate new project initiatives considered for inclusion under the Matariki umbrella.

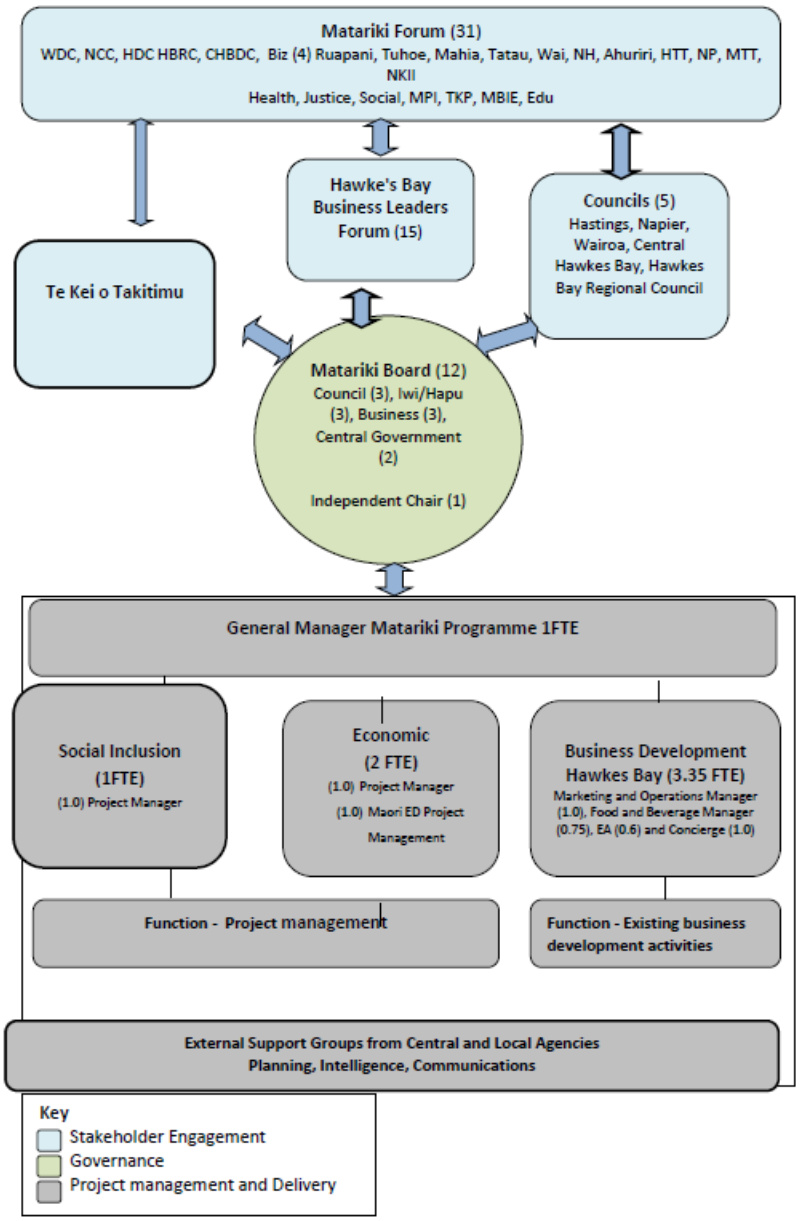
4.3 One of the central thrusts of the proposal is to incorporate a unified governance structure to oversee and monitor the progress being made (or not) on each of the identified projects. The process recognises the importance of ongoing coordination, communication and evolution of each project. The entity responsible for the transparent communication of project progress to governors across partnership organisations is the Matakiki Board. The Matakiki Board will comprise up to 12 participants. These include 3 participants from council, 3 from business, 3 iwi/hapu, 2 from central government and an independent chair (see Table 1 below). It is proposed that selection of the governance board be managed by the respective stakeholder groups.

4.4 Other governance groups that will provide input to the Matariki Board are: Te Kei o Takitimu; Hawke's Bay Business Leaders Forum; and the five Councils.

4.5 Delivery of the strategy will require the ongoing support of councils, while recognising that no one single agency will be responsible for delivery all of the strategy. It will require a networked approach. The delivery of REDS will not require councils to give up their own economic development activities, but will allow councils to leverage off REDS' regional initiatives and the central Government financial support attached to many of the proposed actions. Councils will continue to provide economic development services to their own communities.

[1] Note: The Governance Board does not report to the Matatiki Forum but is responsible for regular communication updates and liaison.

Table 1: Proposed Matariki Governance Framework



5. STRUCTURE AND REPRESENTATION OF VARIOUS STAKEHOLDERS

5.1 The Matariki REDS governance group was in effect a transitional arrangement as to such time a regional delivery model was established under action 1.1. A Programme manager was employed on a contract basis to help oversee the actions and develop a reporting framework for Matariki REDS. Discussions have also occurred with Business Hawke's Bay to enable this transition to occur. It is envisaged that this new model could be in place in September / October 2017.

6. OPTIONS

6.1 The options identified are:

a. Status quo – do not endorse the REDS governance structure, delivery and funding model at this time;

b. Endorse the REDS governance structure, delivery and funding model;

c. Endorse the REDS governance structure, delivery and funding model, but amended so that Wairoa District Council is a permanent member of the governance structure.

6.2 The preferred option is Option (c). The Wairoa District Council has previously resolved that Council remain a permanent member of the Governance Group.

6.3 This meets the purpose of local government as it will help meet the current and future needs of communities for good-quality infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.

7. CORPORATE CONSIDERATIONS

What is the change?

7.1 Nothing will change because of this decision. Essentially business as usual will continue in terms of the delivery of economic development activities.

7.2 This will not trigger a 17a review.

Compliance with legislation and Council Policy

7.3 This decision complies with relevant legislation and Council Policy, in particular, The Annual Plan, The Long Term Plan and the Draft Wairoa District Council Economic Development Plan.

What are the key benefits?

7.4 Regional alignment is current Council policy and ensuring that the Wairoa District Council is actively participating in regional strategies and initiatives is important to the district and to the region as a whole.

What is the cost?

7.5 Councils currently provide funding to Business Hawke's Bay and to the HB LIFT programme. It is proposed that this funding remain in place to support this new delivery model. There is also the opportunity for funding to be allocated through other funding streams, which will be developed over future months. The funding levels to Business Hawke's Bay and Matariki REDS are as shown on Table 2 below.

Table 2: Current cost versus proposed cost

Existing structures	BHB (000)	Matariki (000)	Additional Required	Proposed structures	Matariki (000)
Cost				**Costs**	
Core	431.0			Core including Matariki	735.0
F & B	100.0			F & B	103.0
B/Hub	256.0			B/Hub	255.0
Total cost	**787.0**				**1093.0**
Funding				**Funding**	

Council	335.5	140.0	11.5	Council	487.0
Sponsor	155.0			Sponsor	155.0
MBIE*	70.0	65.0	40.0	MBIE	175.0
B/Hub	238.0			B/Hub	238.0
Other agency funding			38.0	Other agency funding	38.0
Total funding	**798.5**	**205.0**	89.5[2]	**Total funding**	**1093**
Total		**1003.5**		**Total**	**1093**

As a living document, the action plan is likely to change in the future as new action items are added. Individual items in the current action plan that are linked to councils will require a commitment at a future date with integration into Long Term Plans / Annual Plans through the usual council planning processes.

What is the saving?

7.6 Not applicable.

Who has been consulted?

7.7 There has been no formal public consultation on this particular matter, however, Council has been consulted on Matariki REDS in the past, as noted by Council's endorsement of Matariki REDS on the 23rd of August 2016.

7.8 There was extensive consultation during the REDS process beginning with an engaged scoping process; the development of a detailed survey; over one hundred interviews with key regional stakeholders and businesses; two workshops, the second of which was designed to capture the thinking and aspirations of younger business owners and entrepreneurs in the region; and, importantly a co-designed strategy and action plan with Māori groups, additionally presentations to Hawke's Bay Councils were made in July 2016.

Maori Standing Committee

7.9 The Māori Standing Committee has been consulted on this particular matter and have noted (through recommendation), that "That the Māori Standing Committee has an expectation that the Wairoa District Council have direct participation (in particular, decision making rights) on the leadership and governance groups for the Regional Economic Development Strategy (REDS) [Māori Standing Committee Minutes, 17 February 2017].

References (to or from other Committees)

- RED Adoption (Late item): Council Meeting, 23 August 2016
- Regional Economic Development Strategy: Māori Standing Committee Minutes, 14 February 2017

Confirmation of statutory compliance

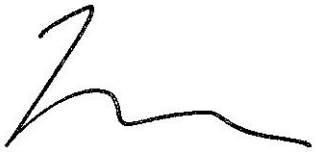
In accordance with section 76 of the Local Government Act 2002, this report is approved as:

[2] This figure represents a funding shortfall (differential between current state and the proposed structure). Assumptions include additional council funding (11.5k), MBIE funding (40.0K) and TBA (38.0k).

a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,

b. is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories

	
Author Kitea Tipuna	Approved by Fergus Power

8.5 DRAFT WAIROA DISTRICT COUNCIL ECONOMIC DEVELOPMENT PLAN

Author: **Kitea Tipuna, Economic Development and Engagement Manager**

Authoriser: **Fergus Power, Chief Executive Officer**

Appendices: **1. Draft Wairoa District Council Economic Development Plan 2017** ⇩

1. PURPOSE

1.1 To present to Council the draft Wairoa District Council Economic Development Plan for approval.

EXECUTIVE SUMMARY

The draft Wairoa District Council Economic Development Plan provides the vision and actions for economic development across the district.

2. BACKGROUND

2.1 Following the launch and implementation of Matariki – the Hawke's Bay Regional Economic Development Strategy (HBREDS), (launched July 2016) and He Huarahi Hei Whai Oranga - the Tairāwhiti Economic Development Plan (launched February 2017), the draft Wairoa District Council Economic Development Plan has been developed ensuring appropriate alignment.

2.2 Following a Council meeting (24 November 2015) it was resolved *"THAT a workshop on the Draft Economic Development Strategy be included on the next Forum agenda."* This workshop was held and Councillors asked that a plan be developed following the launch and implementation of regional economic development strategies.

2.3 The draft Wairoa District Council Economic Development Plan now takes into account regional strategies and provides direction for the economic development vision and activities going forward.

2.4 This plan will be an organic document with the intent that it be adjustable subject to local, regional and national priorities, funding streams that become available, and partnership opportunities as they arise.

2.5 Regional economic development strategies have for allowed for and encourage increased collaboration and connection locally, regionally and nationally and this draft plan demonstrates linkages where the Wairoa district is able to leverage off local, regional and national economic development strategies and priorities.

2.5 This draft plan has gone through an iterative process before being tabled at this Council meeting.

2.5.1 First draft tabled at the 27 June 2017 Economic Development Committee and feedback sought from members.

2.5.2 Updated draft tabled at the 13 July 2017 Māori Standing Committee meeting and feedback sought from members.

2.5.3 This final draft has taken into consideration feedback from the Economic Development Committee and the Māori Standing Committee.

3. OPTIONS

3.1 The options identified are:

a. Do nothing

b. To approve the draft Wairoa District Council Economic Development Plan.

3.2 The preferred option is to approve the draft Wairoa District Council Economic Development Plan, this meets the purpose of local government as it will help meet the current and future needs of communities for good-quality infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.

4. CORPORATE CONSIDERATIONS

What is the change?

4.1 No changes as the draft Wairoa District Council Economic Development Plan will provide direction for the district in terms of economic development now and into the future.

Compliance with legislation and Council Policy

4.2 Annual Plan 2017 -2018.

4.3 Long Term Plan 2015 – 2025.

What are the key benefits?

4.4 The plan sets out the direction for the district as it relates to economic development and is now aligned to regional economic development strategies.

What is the cost?

4.5 As noted in the draft plan.

Who has been consulted?

4.6 This draft plan has taken into consideration activities and the work programme being undertaken by Te Mātārae o Te Wairoa Trust, the Wairoa economic development trust. Actions being led by Te Mātārae o Te Wairoa Trust have also been included and incorporated where appropriate.

4.7 This draft plan has been tabled at two Council committee meetings prior to coming to Council. These include the Economic Development Committee (27 June 2017) and the Māori Standing Committee (13 July 2017). Feedback was requested from members and this has now been incorporated into this final version.

Maori Standing Committee

4.8 The draft Wairoa District Council Economic Development Plan was tabled at the 13 July 2017 Māori Standing Committee meeting and views of members have been incorporated in this final draft.

Further Information

- Matariki – Hawke's Bay Regional Economic Development Strategy http://www.hbreds.nz/matariki/action-plan.pdf

- He Huarahi Hei Whai Oranga – Tairāwhiti Economic Action Plan
  http://www.activatetairawhiti.co.nz/assets/Uploads/He-huarahi-hei-whai-oranga-tairawhiti-economic-action-plan-.pdf
- Kimihia He Oranga – Tairāwhiti Māori Economic Development Report
  http://www.tpk.govt.nz/en/mo-te-puni-kokiri/our-stories-and-media/tairawhiti-maori-economic-development-report#.WUhCh-uGNEZ
  [List any websites or papers where people interested could read more on this topic]

References (to or from other Committees)

Economic Development Committee, 27 June 2017

Māori Standing Committee, 13 July 2017

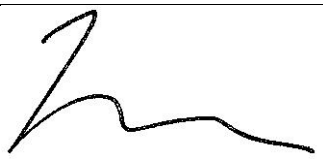
Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,

b. is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories

	
Author Kitea Tipuna	Approved by Fergus Power

DRAFT WAIROA DISTRICT COUNCIL ECONOMIC DEVELOPMENT PLAN 2017

TE WAIROA
WAIROA DISTRICT

DRAFT WAIROA DISTRICT COUNCIL ECONOMIC DEVELOPMENT PLAN – AUGUST 2017

Vision:

To work together to grow and develop a robust, sustainable economy so that every household and every whanau is actively engaged in, contributing to and benefiting from a thriving Wairoa District economy.

Principles:

The principles behind this document are drawn from Matariki's seven-star framework used in the Hawke's Bay Regional Economic Development Strategy.

Principle	Explanation
Partnership by co-design	Values and worldview underpinning the strategy and its actions are an expression of co-design, and the implementation and monitoring are an inclusive collaboration. A treaty principle.
Outcomes for every household and every whanau	All actions, initiatives and projects in the Action Plan must provide outcomes in line with this vision.
Build our people's capability	There must be an emphasis on developing our people alongside infrastructure, assets and businesses.
Equality	A treaty principle, this requires reflection on who the intended audience and beneficiaries are, and a commitment to that being inclusive and equitable.
Business Growth Agenda 2015 He kai kei aku ringa	Our actions are designed to be as consistent as possible with both national economic strategies.
Whai rawa	Optimising assets in a full, holistic and sustainable way.
Potikitanga	Developing an enterprise mindset. Driving the thinking that goes behind business growth.

Strategic Outcomes:

The future actions undertaken by Council will be based on eight key strategic outcomes aimed to improve the economic profile of the district.

Outcome	Breakdown
1. Population decline is halted or reversed by 2018	- Natural growth - New businesses - New residents - Increased staffing numbers for existing businesses
2. Wairoa increases its share of the national tourism GDP by 2018	- Grow our network of tourism industry operators and support organisations - Support tourism operators to grow their existing businesses - Create full-time employment opportunities in this sector of our economy - Actively market our district to domestic and international visitors - Ensure a focus on sustainable tourism is adopted wherever possible and appropriate - Celebrate our local culture, character, stories and geographical beauty and diversity of the district and share these with our visitors

3. Increase the Wairoa district's Maori Economy by 2018	- Opportunities for marae-based business - Opportunities for under-utilised multiple-owned Maori land - Opportunities for post treaty settlements
4. Support existing businesses and community organisations	- Funding - Business Support - Business-friendly Council processes - 'Green Carpet' approach to new and existing businesses - Networking - Business forums and workshops
5. Regional collaboration to achieve better outcomes for our district	- Matariki - Tairawhiti Economic Action Plan - Networking - Upstream Wairoa - Te Matarae o Te Wairoa Trust - RTO
6. Decrease in the percentage of our working population that are unemployed 2019	- Increased training opportunities - Increase in total job numbers - Expansion of existing businesses
7. Increase our share of the national GDP by 2019	
8. Provision of sustainable, high quality infrastructure to meet our current and future needs	- Wifi and broadband access - Mobile phone black spots - Transport network

Actions:

Māori Economic Development

Issue	Initiative	Timeframe	Funding	Responsibility
Response to Treaty settlement process	Collaborate with and assist Post Settlement Entity Groups	2017 Onwards	Within current budget	Māori Standing Committee, Economic Development & Engagement (ED&E)
Māori community support and consultation	Develop relationships with, and support where able: • Te Wairoa Taiwhenua • Te Uru Taumatua • Ngati Pahauwera • Ngai Tāmanuhiri • Rongomaiwahine • Tatau Tatau o Te Wairoa • et al	2017 Onwards	Within current budget	Māori Standing Committee, Economic Development & Engagement (ED&E)
Māori business development	Collaborate with relevant partners to identify business development and land utilisation opportunities	2017 Onwards	Within current budget, discrete projects may require grant funding	WDC and Te Mātārae o Te Wairoa Trust[1]

Infrastructure

Issue	Initiative	Timeframe	Funding	Responsibility
Road transport	Seal SP38/Lake Road to Aniwaniwa	2017 Onwards	NZTA application process	Engineering
Road transport	Upgrade of SH2, Napier to Wairoa	2017 Onwards	NZTA project	NZTA
Road transport	Access to Mahia – coastal and roadworks at Black's Beach	2017 Onwards	NZTA application process	Engineering
Rail transport	Continue to collaborate with HBRC on the future of the Napier to Wairoa rail line	2017 Onwards	Consultation covered within current budget	Lead by HBRC with WDC
Rail transport	Collaborate with Activate Tairawhiti and Railbike	2017 Onwards	Consultation covered within	WDC and Activate Tairawhiti

[1] Consultation is required between the Council and Te Mātārae o Te Wairoa Trust to further develop and agree this action plan and respective responsibilities.

	Adventures on the future of the Wairoa to Gisborne rail line		current budget	
Wairoa Airport	Collaborate with regional and central government to ensure support for the Wairoa Airport runway extension	2017 Onwards	External funding to be sourced to supplement WDC 2017/2018 Annual Plan contribution	WDC, Matariki REDS, External partners
Water supply	Replacement reservoir for the Wairoa and Frasertown water supply network	2016	Included in the current LTP	Engineering
Sewage system	Upgrade and re-consenting of the Wairoa urban sewerage system to improve the water quality at the outlet and in the estuary	2019	Included in the current LTP	Engineering
Broadband access	Collaborate with the Region's councils and government agencies to improve connectivity to, and within Wairoa	UFB 2 rollout June 2018 – July 2019	Central Government funded programme	WDC, Crown Fibre and Chorus
Broadband access	Continue to develop the proposal for the Wairoa Township Wi-Fi initiative	Preliminary work started 2014. Timeframe for future work to be determined as resources allow	No funding beyond 2017	Corporate Services (Russell)
Broadband access	Continue to develop the Marae WiFi project	2017 onwards	Seeking external funding (Central Government or private funding)	Economic Development and Engagement
Pedestrians and cyclists	Continuation/creation of the Wairoa Riverbank, Whakamahia and Mahia/Opoutama walkways	2017 onwards	Combination of existing budget, grant funding and other sources	Engineering

Location Developments

Issue	Initiative	Timeframe	Funding	Responsibility
River development	Landscaping of the Wairoa River bank and adjoining reserve	2017 Onwards	Grants and HBRC/WDC budgets	HBRC, WDC
Coastal development	Landscaping of the Whakamahia area and adjoining wetland	2017 Onwards	Grants and HBRC/WDC/DoC budgets	WDC, DoC
CBD Enhancement	Develop CBD Enhancement programme	2017	Investigation phase – 2017 Annual Plan	WDC, Te Mātārae o Te Wairoa Trust, Upstream Wairoa

Facilities

Issue	Initiative	Timeframe	Funding	Responsibility
Community entertainment	Continue to operate the Gaiety Theatre	2017 Onwards	Wairoa Economic Development Strategy	Te Mātārae o Te Wairoa Trust
Community recreation	Destination Playground	2017 Onwards	Funds secured, work to begin	Engineering, Economic Development & Engagement, Wairoa Young Achievers Trust
Community arts and recreation	Develop a market and arts space	2017 Onwards (Summer)	To be found	Economic Development & Engagement
Community health & wellbeing	Support the delivery of rural health initiatives by collaborating with NZ medical schools	2017 Onwards	To be found	WDC, Medical schools
Housing	Deliver the Affordable Housing Initiative	2017 Onwards	Budgets in the 2017/2018 Annual Plan	WDC and partners
Housing	Work with communities of interest to develop Papakainga development within the district	2017 Onwards	Development phase within existing budgets	WDC, Te Mātārae o Te Wairoa Trust, TPK, Māori Land Court and other relevant partners

Business support

Issue	Initiative	Timeframe	Funding	Responsibility
Business resilience	Continue introduction of existing and new business owners to The Icehouse to help create a stronger business community and connected alumni	2017 Onwards	Within existing budget	Te Mātārae o Te Wairoa Trust and the Icehouse
Business resilience	Establish an agreed schedule with regional business partners to enable business people to book time in advance and supplement this with a virtual branch of Hawke's Bay Business Hub in Wairoa	2017 Onwards	To be found	ED&E, Te Mātārae o Te Wairoa Trust, Business Hawke's Bay,
Business resilience	Work with relevant partners to develop appropriate business clusters throughout the district	2017 Onwards	To be confirmed	ED&E, Te Mātārae o Te Wairoa Trust
Employment	Support local initiatives to support increasing employment opportunities i.e. Matariki REDS, Project 1000	2017 Onwards	Within existing budgets	ED&E, Matariki
Agribusiness and Agricultural training	Work with relevant partners to establish an agricultural training academy in Wairoa	2017 Onwards	To be confirmed	ED&E, Relevant education providers and partners
Business-Council relationships	Establish regular engagement opportunities between Council and major employers	2017 Onwards	Within existing budget	Office of the CEO
Business-Council relationships	Establish business breakfast meeting series with visiting speakers	2017 Onwards	Within existing budget	Office of the CEO, ED&E

Business attraction

Issue	Initiative	Timeframe	Funding	Responsibility
Lead identification	Participate at the Business Hub one day a week to build and sustain relationships and also to identify opportunities that make	2017 Onwards	Budget provision for a 'one-day-a-week' seat and the Hub	WDC and Business Hawke's Bay

	sense for the Wairoa district			
Identification of district strengths and opportunities	Continue to work with Matariki REDS and Activate Tairawhiti to develop a stronger relationship and also to transfer knowledge about the Wairoa district and the opportunities of the district	2017 Onwards	Within existing budgets	Te Mātārae o Te Wairoa Trust and WDC
Agricultural lead identification	Develop relationships with relevant commercial sector influencers in the Hawke's Bay and Tairawhiti agribusiness space and host district tours to highlight opportunities in Wairoa district	2017 Onwards	Within existing budget	ED&E Te Mātārae o Te Wairoa Trust, Business Hawke's Bay, Activate Tairawhiti
Regional collaboration	Support the implementation of Matariki – the Hawke's Bay Regional Economic Development Strategy and the Tairawhiti Economic Development Action Plan	2017 Onwards	Within existing budget	WDC, Matariki REDS, Tairawhiti Economic Development Plan (Activate Tairawhiti and GDC)
Regional collaboration	Participate in region-wide opportunities as appropriate	2017 Onwards	Within existing budget	All councils, Business Hawke's Bay, Activate Tairawhiti

Tourism

Issue	Initiative	Timeframe	Funding	Responsibility
'Rocket tourism'	Research the tourism opportunity related to Rocket Lab and launches at Mahia	2017 Onwards	Within existing budget, Action 6.1 in Matariki REDS	ED&E
Development of Māori Tourism Opportunities	Work with land owners, trusts, marae and iwi and other relevant partners to explore Māori Tourism opportunities for the district	2017 Onwards	Within existing budgets	ED&E

Walking, mountain biking and horse riding	Work with land owners, Iwi and the Department of Conservation to develop existing trails and establish new ones	2017 Onwards	Within existing budget	ED&E
Tourism strategy	Work in conjunction with Tourism Hawke's Bay and Activate Tairawhiti, to develop and implement a Wairoa Tourism Strategy	2017 Onwards	Within existing budget	ED&E

District Promotion

Issue	Initiative	Timeframe	Funding	Responsibility
Increase knowledge of the Wairoa district outside of the district	Proactively provide imagery and information resources to relevant partners on Wairoa opportunities	2017 Onwards	Within existing budgets	ED&E
Increase knowledge of the Wairoa district outside of Wairoa	Take advantage of opportunities to increase and develop the district's reach through social media	2017 Onwards	Within existing budgets	ED&E
Promotion to the farming community	Work with the A & P Society on promotional opportunities at the Wairoa Show and East Coast Farming Expo	2017 Onwards	Within existing budgets	ED&E
Business promotion	Support the launch and celebration of new businesses in the district including media coverage – "Better Business, Better People	2017 Onwards	Within existing budgets	Te Mātārae o Te Wairoa Trust with ED&E
Signage	Develop Signage Strategy	2017 Onwards	Within existing budgets	Engineering, ED&E

Leverage

Issue	Initiative	Timeframe	Funding	Responsibility
Rocket Lab Ltd	Establish an agreed relationship management process with Rocket Lab to identify shared goals and to support the opportunities for partnership with the Council and community	2017 Onwards	Within existing budget	Office of the CEO, ED&E

Gaiety Theatre	Work with relevant partners to identify and pursue opportunities that arise from the redevelopment of the Gaiety Theatre and the choice of the Wairoa district for their location	2017 Onwards	Grants, sponsorship and existing budget	Te Mātārae o Te Wairoa Trust, ED&E
Dairy	Leverage off Wairoa's dairy heritage and suitable land resources to establish local processing and farm conversion where appropriate	Preliminary work started 2015. Reactivate for 2017 onwards	External funding to be found	WDC with relevant partners

Events

Issue	Initiative	Timeframe	Funding	Responsibility
Event calendar	Develop and maintain a calendar of district events	2017 Onwards	Within current budget	ED&E
Event attraction and scheduling	Develop a Wairoa district events strategy	2017 Onwards	Within current budget	ED&E

Regulation

Issue	Initiative	Timeframe	Funding	Responsibility
District plan	Review the current District Plan and seek where possible and practical alignment with neighbouring councils	3+ years	In the current budget	Regulatory
Bylaws	Ensure that the Council's bylaws are regularly updated and fit for purpose	BAU	As budgets allow	Regulatory

8.6 PROCUREMENT STRATEGY

Author: **Jamie Cox, Engineering Manager**

Authoriser: **Fergus Power, Chief Executive Officer**

Appendices:
1. **2017 Procurement Strategy ⇩**
2. **Procurement Strategy Review 2016 ⇩**

1. PURPOSE

1.1 To present, for approval in principal, the 2017 business-wide Procurement Strategy attached as Appendix 1.

RECOMMENDATION

The Engineering Manager RECOMMENDS that Council receive the report and approve, in principle, the Wairoa District Council 'Procurement Strategy 2017' to be submitted for NZTA endorsement (in relation to roading activities) prior to adoption by Council.

2. BACKGROUND

2012 Procurement Strategy

2.1 A Procurement Strategy, endorsed by the New Zealand Transport Authority (NZTA), was prepared in 2012 covering only the roading activity. This was developed to meet the requirements of the Land Transport Management Act 2003 (section 25) and the NZTA Procurement Manual Reviews and NZTA endorsement of the Procurement Strategy is a requirement for continued funding of roading activities.

2.2 An independent review of the 2012 Procurement Strategy was undertaken in 2016 (review included as Appendix 2).

FARC Resolution September 2016

2.3 The independent 2016 Procurement Strategy review was submitted to FARC with a recommendation to update the Strategy in relation to the roading activity and expand to include all engineering activities.

2.4 Council's Finance Audit and Risk Committee (FARC) resolved 6th September 2016:

1. *That the Procurement Strategy be updated in relation to the Roading Activity*
2. *That the Procurement Strategy be expanded to provide for all Council activities*
3. *That the process for determination of the Supplier Selection Method be documented for all Council activities*
4. *That an 'Internal Procurement Procedures Manual' be developed to outline the process to be followed in engaging services*

The Procurement Strategy 2017 addresses items 1 to 3 with item 4 being progressed separately.

Contribution to Council Vision and Outcomes

2.5 WDC acknowledges the significant role of its Activities in the achievement of Council's Vision and Community Outcomes. To support this, each activity has a Strategic Goal or "Why we do it"; this is an important component in the procurement frameworks.

2.6 Meeting the Activity Goals is partly dependent on appropriate and effective procurement processes.

3. PROCUREMENT POLICY

3.1 In conjunction with its review of the Procurement Strategy, Council is developing a Procurement Policy, the purpose of which is to set its procurement objectives and to enhance its professional integrity, accountability and probity across all Council activities.

4. THE 2012 PROCUREMENT STRATEGY

4.1 The 2012 Procurement Strategy is generally in line with the requirements of Chapter 4 of the NZTA Procurement Manual 'Strategic Approach to Procurement'. However, there are areas that require updating and areas that could be expanded upon to better promote procurement efficiency.

4.2 As such, the 2017 Procurement Strategy better addresses:

- Procurement Objectives;
- Procurement Principles;
- Procurement Planning;
- Supplier Selection Methods;
- Procurement Risk.

4.3 It is appropriate that the Engineering Department have in place a Procurement Strategy for all activities at a level of detail suitable for each of those activities.

4.4 It is noted that the NZTA procurement manual also endorses the benefits of developing and implementing a Business-Wide Procurement Strategy, of which the roading activity would form part.

5. PROCUREMENT PROCEDURES

5.1 In support of the procurement procedures for tendering that are being developed separate to this Strategy, the Procurement Strategy should outline how the supplier selection method is to be determined for greater clarity and certainty. This is especially important for an organisation such as Council where there is a Council Controlled Trading Organisations (CCTO) with interest in undertaking infrastructure works.

6. OPTIONS

6.1 The options identified are:

a. Do Nothing;

b. Consider but not approve the proposed Strategy; or

c. Approve, in principal, the business-wide Procurement Strategy 2017 for submission to NZTA for endorsement in relation to the roading activity and subsequent Council adoption.

6.2 The preferred option is 'c';

- The NZTA Procurement Manual recommends that the Procurement Strategy be reviewed at least every three (3) years to ensure currency, particularly in line with funding (this is the first review of the 2012 Strategy).

7. CORPORATE CONSIDERATIONS

What is the change?

7.1 The 2012 procurement strategy will be updated and will expanded to be a business -wide strategy, not just related to the roading activity.

7.2 The procurement process will be aligned with the procurement principles of:

- Value for Money;
- Openness, transparency and fairness;
- Accountability and integrity;
- Lawfulness;
- Sustainability.

7.3 Changes will not trigger a s17A review.

Compliance with legislation and Council Policy

7.4 Annual Plan – nil effect.

7.5 Long Term Plan – nil effect.

7.6 District Plan – nil effect.

7.7 Economic Development Strategy – nil effect.

7.8 Other Council Policies – will give effect to the proposed Procurement Policy.

7.9 Relevant legislation – s25 Land Transport Management Act (LTMA) compliance.

7.10 Other Policies – compliance with the NZTA Procurement Manual.

What are the key benefits?

7.11 Increased robustness and transparency of procurement processes.

7.12 More cost-effective procurement of goods and services across all Council's Activities.

What is the cost?

7.13 There are no cost implications in the implementation of this Strategy – costs will be contained within existing budgets

What is the saving?

7.14 Cost savings will be gained through cost-effective procurement of goods and services.

Who has been consulted?

7.15 No formal information on the community view has been sought.

7.16 No consultation has been undertaken on the 2017 Procurement Strategy although the 2012 Strategy was endorsed by NZTA for roading activities.

7.17 Risk and value to the ratepayer are primary community considerations when reviewing procurement processes.

7.18 It is not anticipated that further consultation will be required although NZTA endorsement will be sought in relation to the roading activity.

7.19 This is not generally considered to be an issue that is specific to tangata whenua.

Service delivery review

7.20 A s17a service delivery review has not been undertaken for procurement services.

7.21 A s17a review has not yet been scheduled for the procurement activity.

Maori Standing Committee

7.22 This matter has not been referred to the Maori Standing Committee.

8. SIGNIFICANCE

8.1 It is not anticipated that any significant impacts will arise out of decisions made from this report.

8.2 The history of public interest in this subject generally is confined to contractors assessing procurement pathways.

8.3 There is minimal impact on the council budget or capacity; procurement is allowed for under existing budgets.

8.4 Any decision, policy or proposals can generally be reversed.

8.5 No alteration of service levels is anticipated for any council significant activity.

8.6 No impact is expected on any council strategic assets.

8.7 Any decisions as a result of this report are unlikely to change the way in which a significant activity is delivered.

9. RISK MANAGEMENT

9.1 The strategic risks (e.g. publicity/public perception, adverse effect on community, timeframes, health and safety, financial/security of funding, political, legal – refer to S10 and S11A of LGA 2002, others) identified in the implementation of the recommendations made are as follows:

a. Planning risks – not fully understanding the need / inadequate funding sourced / inappropriate selection methods.

b. Inappropriate procurement procedures and the selection of inappropriate suppliers may result in budget over-runs and projects not being completed.

c. Council reputation through transparency and fairness.

9.2 Updating of procurement processes to continually improve and stay abreast of NZTA procurement philosophies is a mechanism to mitigate any risks associated with our relationship with our transport co-funder NZTA.

Further Information

Appendix 1 – Wairoa District Council Procurement Strategy 2017

Appendix 2 – Procurement Strategy Review April 2016

http://www.nzta.govt.nz/resources/procurement-manual/

http://www.oag.govt.nz/2008/procurement-guide/docs/procurement-guide.pdf

References (to or from other Committees)

Engineering Manager Report to FARC 13/7/16 – WDC Procurement Review 2016

FARC Resolution 6th September 2016

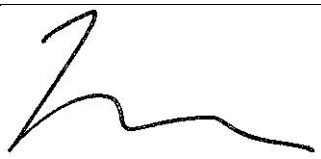
Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,

b. is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories

	
Author Jamie Cox	Approved by Fergus Power

Wairoa District Council

PROCUREMENT STRATEGY 2017

WAIROA DISTRICT COUNCIL

July 2017

Wairoa District Council

PROCUREMENT STRATEGY 2017

Prepared By _____

Linda Cook

Consultant Engineer

Approved By

Jamie Cox

Engineering Manager (Wairoa District Council)

Date:July 2017

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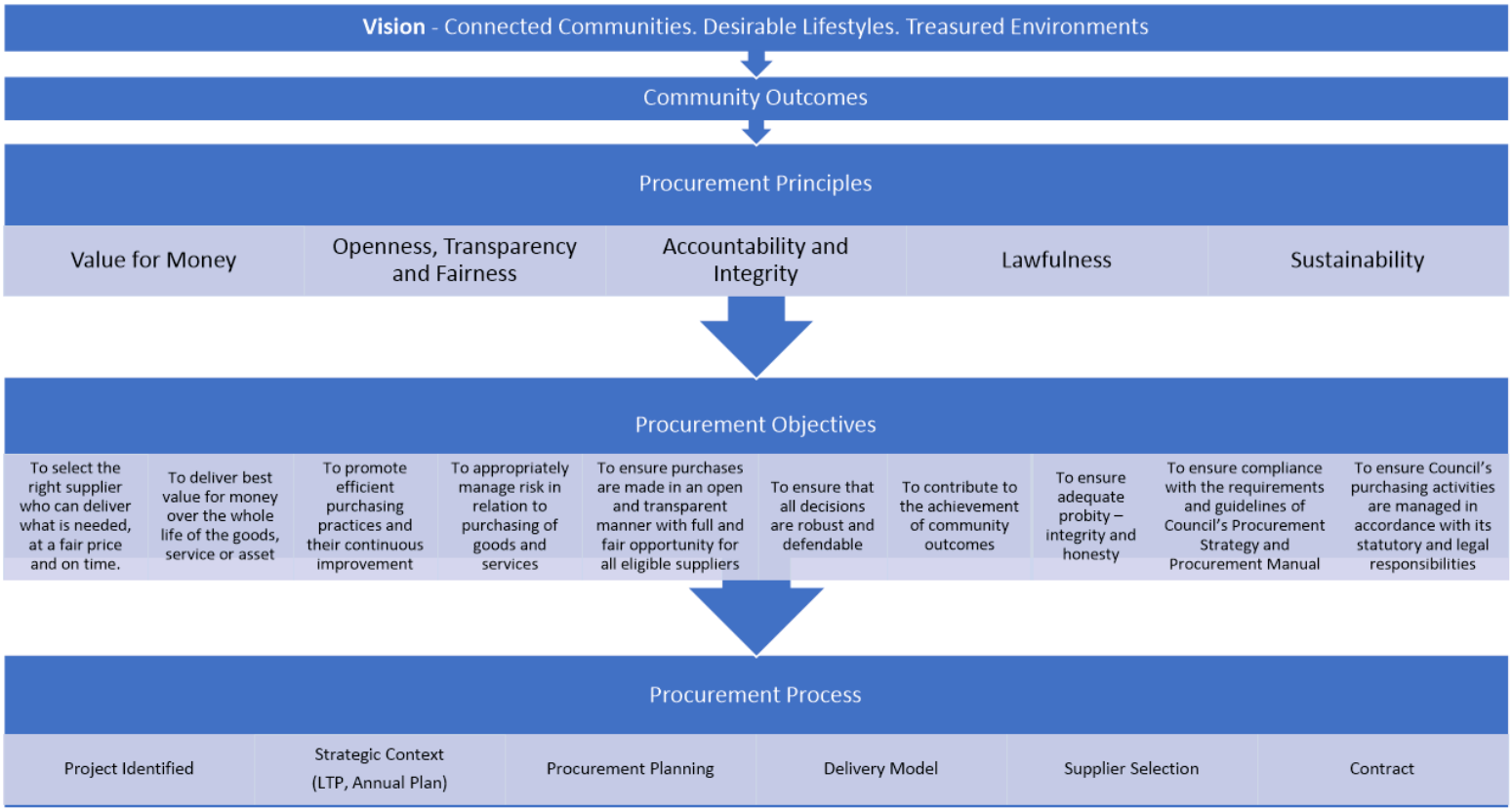
PROCUREMENT SUMMARY



1. OVERVIEW

1.1 INTRODUCTION & EXTENT OF STRATEGY

Procurement is 'the act of obtaining or buying goods or services or works from an external source'[1], often via a tendering or competitive bidding process. The term 'procurement' covers all aspects of the acquisition and delivery of goods or services, from the identification of needs to the end of a contract, or the end of the useful life and subsequent disposal of an asset.

Council procures works, goods and services to sustain the community and meet the changes in demand under all Activity Groups from the purchase of stationery and IT services through to maintenance and capital works for its core infrastructure activities.

Accordingly, the approach to procurement will vary depending on scale, complexity and risk.

While applicable to all of the organisation's operations, this strategy is consequently primarily focussed on the infrastructure activities, which include:

Core Activities

1. Transportation (a focus of this Strategy to comply with NZTA requirements)
2. Three Waters Services (water supply, wastewater and stormwater)
3. Waste Management

Non-Core Infrastructure Activities

4. Property including
    - Parks and Reserves
    - Airport
    - Cemeteries
    - Buildings

In 2012, Council adopted its Procurement Strategy for land transport activities. This was introduced to ensure compliance with New Zealand Transport Agency (NZTA) requirements.

Council's Finance Audit and Risk (FAR) Committee resolved 6th September 2016:

- *That the Procurement Strategy be updated in relation to the Roading Activity*
- *That the Procurement Strategy be expanded to provide for all Council activities*
- *That the process for determination of the Supplier Selection Method be documented for all Council activities*
- *That an 'Internal Procurement Procedures Manual' be developed to outline the process to be followed in engaging services*

[1] as outlined by the Office of the Auditor General - Procurement Guidance for Public Entities - Good Practice Guide, June 2008; and reinforced in the NZ Transport Agency's Procurement Manual

1.2 VALUE FOR MONEY

The key criteria to successful procurement and the successful delivery of services requires a whole-of-life approach implementing good asset management planning including lifecycle management planning and modelling.

The key components of value for money are regarded as:

- Robust planning to identify an effective work plan
- Appropriate, efficient and compliant supplier selection procedures
- Maintaining capacity and competitiveness in the local market
- Successful delivery of works and services (the right outcome on time and within budget)

This broad, long-term, perspective commits the Council to seeking sustainable options and not necessarily the lowest cost ones.

1.3 ENDORSEMENT & REVIEW

Subject to the endorsement of the NZTA (specific to the roading activity), the Procurement Strategy will be adopted by Council.

Responsibility for the Strategy and its currency primarily lies with the Engineering Manager, who is also responsible for the continuity of subsidised transport funding.

Reviews and NZTA endorsement of the procurement strategy is a requirement for continued funding.

As such, this Strategy will be reviewed on a triennial basis.

As part of this overall review of procurement processes, Council's Tender Evaluation procedures are also being updated.

2. STRATEGIC GOALS AND COMMUNITY OUTCOMES

WDC acknowledges the significant role of its Activities in the achievement of Community Outcomes. To support this, each activity has a Strategic Goal or *"Why we do it";* this is an important component in the procurement frameworks.

Meeting the Activity Goals is dependent on appropriate and effective procurement processes.

The table below shows how each activity contributes to the adopted Community Outcomes and shows the Strategic Goal for each Activity.

ACTIVITY GROUP	ACTIVITY	ACTIVITY GOAL
Water Services	Water Supply	To comply with the New Zealand Drinking Water standards
	Stormwater	Effective and efficient management of the collection and disposal of stormwater to ensure that the capacity of available facilities is optimised and that the environment is not compromised
	Wastewater	Reliable and safe collection and disposal of sewage
Waste Management		Reliable and safe collection and disposal of waste
Transport	Land Transport	Provision of a safe and affordable land transport network that contributes to the outcomes of the Land Transport Management Act and the objectives of the Regional Land Transport Strategy
	Airport	To provide a safe and cost-effective facility to meet current needs
Community Facilities	Cemeteries	Reliable and safe management and operation of public cemeteries
	Library	to promote the library to the wider community as a centre for information, ideas and works of the imagination
Community Facilities	Parks & Reserves	Continued access to and sustainable management of parks & reserves
Regulatory & Planning	Resource Planning	to ensure that relevant legislation, regulations and bylaws are monitored and enforced such that Council meets its requirements
	Environmental Health	to ensure that relevant legislation, regulations and bylaws are implemented such that Councils meets its requirements and statutory obligations
	Building Control	to provide an acceptable standard of building development within the district through the positive application of the Building Act 2004 and Act processes
	Bylaw compliance	to ensure that relevant legislation, regulations and bylaws are monitored and enforced such that Council meets its requirements
	Emergency Management	to ensure that relevant legislation, regulations and bylaws are monitored and enforced such that Council meets its requirements

3. PROCUREMENT OBJECTIVES

In conjunction with its review of the Procurement Strategy, Council is developing a Procurement Policy, the purpose of which is to set its procurement objectives and to enhance its professional integrity, accountability and probity across all Council activities.

The table below outlines Council's procurement objectives and how these can be achieved:

PROCUREMENT OBJECTIVE	HOW OBJECTIVE CAN BE MET
To select the right supplier who can deliver what is needed, at a fair price and on time.	Understand the need and desired outcomes. Understand the market environment and potential suppliers Develop accurate scope, specification and schedule (including review) Evaluate options for the most appropriate form of delivery Tender documents to be clear and concise with tender evaluation criteria included
To deliver best value for money over the whole life of the goods, service or asset	Understand whole-of-life costs of the goods / asset. Promoting longer construction periods for maintenance contracts to encourage establishment. Balancing the bundling of work to suit local procurement environment and geographic area. Identify areas where levels of service are not being met and propose solution. Contract performance reviews
To ensure purchases are made in an open and transparent manner with full and fair opportunity for all eligible suppliers	Ensure appropriate tender / procurement procedures are implemented in accordance with Council's Procurement Strategy with all decisions documented in writing. Works above $200,000 to be open tender. Compliance with the procedures within the NZTA Procurement Manual for all subsidised roading works Set financial thresholds for selection methods
To appropriately manage risk in relation to purchasing of goods and services	Understand procurement risks and how to manage them. Establish a risk matrix and determine the appropriate risk transfer mechanism and the type of services to be procured e.g. High risk needs specialised professional design service.
To promote efficient purchasing practices and their continuous improvement	Regular audits / reviews including Tri-annual review of Procurement Strategy. Staff training on the full procurement process Follow industry best-practice Seek feedback from suppliers
To ensure that all decisions are robust and defendable **To ensure adequate probity – integrity and honesty**	Procurement strategy and tender procedures to be followed Staff training on the full procurement process All decisions to be documented NZTA Procurement Manual to be complied with for all NZTA funded works. TET to include certified tender evaluator
To contribute to the achievement of community outcomes	Community outcomes and related activity goals to be considered in the development of any scope of works, goods or services to be procured. Bundles of work to be structured as appropriate to ensure a good mix of suppliers, including local suppliers whilst still being effective.

PROCUREMENT OBJECTIVE	HOW OBJECTIVE CAN BE MET
To ensure compliance with the requirements and guidelines of Council's Procurement Strategy and Procurement Manual	Ongoing staff training Regular review of procurement practices including seeking feedback on procurement procedures from suppliers NZTA audit processes
To ensure Council's purchasing activities are managed in accordance with its statutory and legal responsibilities	**Continuous review of legal and regulatory requirements** **Staff Training** **Compliance with NZTA regulations such as the NZTA Procurement Manual and funding application requirements**

4. LEGISLATION & REGULATORY REQUIREMENTS

4.1 GENERAL

Council must be aware of, and comply with, all applicable legislation (and amendments) when it funds or procures works, goods or services. Key legislation includes:

- the Local Government Act 2002
- the Official Information Act 1982
- the Local Government Official Information and Meetings Act 1987
- the Commerce Act 1986
- the Fair Trading Act 1986
- the Land Transport Management Act 2003.

Council has public law obligations that could apply to aspects of a procurement process. Council's fundamental public law obligation is always to act fairly and reasonably, and in keeping within the law.

It is also good practice to consider guidance such as OAG procurement guidelines for Public entities.

4.2 LOCAL GOVERNMENT ACT 2001 (LGA)

The purchase of goods or services must be consistent with the principles of the LGA. Under s14 and ss77-81 of the LGA, local authorities are required to:

- Conduct business in an open, transparent and democratically accountable manner;
- undertake commercial transactions in accordance with sound business practice; and
- in the course of decision-making:
  - seek to identify all reasonable practical options for the achievement of meeting objectives for a decision
  - assess the options in terms of their advantages and disadvantages

4.3 NZTA FUNDED TRANSPORT ACTIVITIES

4.3.1 Land Transport Management Act 2003

A Procurement Strategy is required by NZTA for funded land transport activities as part of meeting the requirements of Section 25 of Land Transport Management Act 2003 (LTMA).

Section 25: Procurement Procedures:

(1) ……. the Agency must approve 1 or more procurement procedures that are designed to obtain the best value for money spent by the Agency and approved organisations, having regard to the purpose of this Act.

(2) In approving a procurement procedure, the Agency must also have regard to the desirability of—

a. enabling persons to compete fairly for the right to supply outputs required for approved activities, if 2 or more persons are willing and able to provide those outputs; and

b. encouraging competitive and efficient markets for the supply of outputs required for approved activities.

(3) Every approved procurement procedure must specify how procurement is to be carried out (which may differ for different kinds of procurement)

The purpose of the LTMA, under Section 3 is '*to contribute to an effective, efficient, and safe land transport system in the public interest*'

The NZTA requires that all approved organisations (Council) have a procurement strategy that documents an approved organisation's long-term integrated approach to the procurement of transport sector activities funded under Section 20 of the LTMA.

4.3.2 NZTA Procurement Manual

Chapter 4 of the NZTA procurement Manual 'Strategic Approach to Procurement' states the following:

- a procurement strategy documents an approved organisation's long-term integrated approach to the procurement of transport sector procurement activities funded under s20 of the LTMA
- the planning for all procurement activities should involve a process of identifying and understanding the objectives of the activity, the relevant supplier market, the associated risks and the nature and quality of the goods and services to be purchased. This understanding must then be documented in a strategy
- A procurement strategy will ..... explain an approved organisation's approach to the purchase of goods and services to suppliers, the NZTA and other stakeholders

This procurement strategy is designed to link WDC strategic goals and objectives with the procurement context of the LTMA, specifically value for money, fairness, competition and efficiency

4.4 GOVERNMENT RULES OF SOURCING - 2015

The New Zealand Government – Procurement published the document 'Government Rules of Sourcing - Rules for Planning your Procurement, Approaching the Market and Contracting in 2015. This document is relevant to Council's operations.

This document requires each agency (which includes local government organisations) to have policies in place that incorporate the five Principles of Government Procurement which are:

1. Plan and Manage for Great Results
2. Be fair to all suppliers
3. Get the Right Supplier
4. Get the Best Deal for Everyone
5. Play by the Rules

4.5 OFFICE OF THE AUDITOR GENERAL - PROCUREMENT GUIDANCE FOR PUBLIC ENTITIES: GOOD PRACTICE GUIDE

Published in 2008, the guidelines outline '*good practice that public entities should use to procure goods or services*'.

This includes the development of Procurement Strategies as well as various procurement processes.

5. PROCUREMENT ENVIRONMENT

5.1 PHYSICAL ENVIRONMENT

Wairoa's remote geographic location impacts on our procurement environment. To attract non-resident contractors, consultants and other suppliers to tender for work where appropriate, smart packages must be developed with regard to optimising quantum and type of work to align with marketplace capabilities and establishment economies.

5.2 MARKET ENVIRONMENT

5.2.1 Physical Works Providers

Wairoa District Council is served by a range of competent suppliers. Some of the large national organisations have bases in Hawkes Bay and Gisborne, and there are various smaller companies based in the District.

While our geographic location ay create an impediment to outside contractors, we can maintain a competitive market for general civil works with a range of local contractors capable of supplying the full range of services we need to procure. Efforts to nurture this marketplace include unbundling work packages, maintaining a regular work flow by softening out peaks where possible i.e. weather dependant work not conflicting with civil works, and communicating work flow annually with adequate notice.

Diversity and competition is less evident in specialised areas such as streetlight maintenance and road-marking, so careful attention is needed in these areas to ensure value for money – where direct competition is less likely to contribute to that goal.

Overall, Council considers that there is sufficient level of interest in tenders and competition between suppliers.

5.2.2 Professional Services Providers:

The WDC Infrastructure Business Unit (IBU), formed in 2010, provides professional engineering and management services to all asset based activities. Council's asset manager and area engineers are tasked with managing physical works contracts and collecting information regarding the cost to maintain Council's road assets, to ensure that decision-making is optimised.

The in-house team are complemented when necessary by a range of professional services providers. Design and planning inputs for construction projects are largely outsourced.

5.2.3 Specialist Suppliers

Council is also reliant on a number of specialists such as Information Technology providers, being more specialised areas that extend beyond Council's skills and equipment.

It is acknowledged that there are real costs in changing providers of specialist services, including the loss of institutional knowledge and business continuity; and this should be reflected in Council's procurement processes.

5.2.4 Council Controlled Organisations

The Local Government Act 2002 defines CCOs as entities in which the Council has more than 50% shareholding, or the ability to appoint more than 50% of the directors.

Council believes that it is important to maintain expertise in construction, roading and maintenance work in the Wairoa district, and to reduce costs to the ratepayer by providing effective competition.

Quality Roading and Services (Wairoa) Ltd

Quality Roading and Services (Wairoa) Ltd (QRS) is a Council Controlled Trading Organisation (CCTO), 100% owned by the Wairoa District Council since 1994.

QRS specialises in construction and maintenance of all types of civil construction, infrastructure and roading and provides such services to Council through maintenance and capital works contracts.

QRS, as a CCO, is subject to the same procurement procedures as other organisations working in the District and Council needs to maintain rigorous adherence to NZTA guidelines to ensure these are not compromised .

5.2.5 Other Agencies / Sectors

Other agencies that impact on our markets include NZTA (Highway Managers), Hastings District Council and Gisborne District Council operating to the northern and southern boundaries of the Wairoa district. These agencies, along with local farming and forestry companies, provide a base load of work which complements the ability of local contractors to service the district infrastructure needs.

The ability to collaborate with other TLA's is especially relevant for the land transport activity on the borders of our unsealed network (e.g. Whakatane District Council on the S.H.38-S.P.38 route) and NZTA within our sealed road environment.

Council currently has shared services agreement in place with Napier City Council for HR Services, payroll and Health and Safety support and is also part of a regional electricity deal with Hawkes Bay Councils.

6. PROCUREMENT PRINCIPLES

Council has identified a number of 'procurement principles' which are in general accordance with those included in the 'OAG: Procurement Guidelines for Public Entities' and Council's Procurement Policy.

Principle		Council Will:
Value for Money	The key components of value for money are regarded as: • Robust planning to identify an effective work plan • Appropriate and efficient supplier selection procedures • Maintaining capacity and competitiveness in the local market • Successful delivery of works and services (on time and within budget)	• Use resources effectively, economically and without waste • Have due regard for total costs and benefits of a contract and contribution to the outcomes in the Long Term Plan (LTP) and Annual Plan • Select the best possible outcome for the total cost of ownership or whole-of-life cost (not necessarily lowest price). • Engage with other departments, councils and organisations where possible in order to leverage supply requirements • Assess continuous improvement in the provision of services • Consider amounts involved, complexity and level of risk when determining the requirements for the procurement process
Openness, Transparency & Fairness	Gives confidence to suppliers and reduces probity risks.	• Be impartial in decision-making –treating all suppliers equally and fairly • Ensure suppliers have full and fair opportunity to compete and participate, including local suppliers • Observe ethical standards, principles and behaviour throughout the procurement process • Provide responses to any mid-procurement process questions to all confirmed participants and in an equal, timely and transparent fashion • Consider sub-contracting various pieces of work in big projects • Provide clarity around assessment processes and procurement tools, such as tender evaluation matrices
Accountability and Integrity	Every person involved with a contract will ensure the most favourable terms possible, with appropriate priority and balance being given to specified qualitative and other non-price and price attributes Projects shall not arbitrarily be separated into discrete parts so as to avoid the necessity for entering into a particular procurement process	• Be accountable for performance and be able to provide a complete and accurate account of the use of public funds; • Assess and document effectiveness, efficiency and value for money; • Follow suitable governance and management processes, including adherence to good administrative practice, legislation, ethical requirements and other policies • Maintain appropriate records relating to procurement activities that allow for subsequent review of the decision-making process • Be aware of requirements related to conflicts of interest - Identify, notify and manage any conflicts of interest using sound judgement practice • Apply confidentiality obligations throughout the entire procurement process and also after the contract has terminated or expired.

Principle		Council Will:
		• Meet regulatory standards
Lawfulness		• Council will act within the law and meet its legal obligations
Sustainability	Sustainability is a statutory or strategic requirement for councils. For example, the Local Government Act 2002 requires local authorities to take a sustainable development approach, by taking into account the social, economic, environmental, and cultural wellbeing of people and communities, the need to maintain and enhance the quality of the environment, and the needs of future generations	• Minimise environmental footprint by purchasing goods and services with less harmful impacts on the environment whenever practicable; • Consider economic, environmental and social impacts over the life cycle of goods or services; • Ensure resources are used efficiently and effectively to improve the overall quality of life of people in the local community. • Have due regard to the sustainability of the marketplace

7. PROCUREMENT RISK

Council aims to get the right balance between risk and expected benefit – to be risk aware, not necessarily risk averse.

For infrastructure activities, specific risks relating to the Activity can be found in the relevant Activity Management Plan.

The table below outline potential risks associated with the procurement process, the likely consequences of that risk and identifies action that can be taken to eliminate, isolate or minimise that risk.

Key to most risks is staff development and training in procurement procedures

PROCUREMENT RISK	LIKELY CONSEQUENCES	ACTION
Identifying the Need / Planning		
Not fully understanding the need	• Purchase of unsuitable product or service • Money wasted • Lack of tenders	• Analyse need accurately • Develop clear scope of work / outcomes • Set appropriate timeframes • Consult with users
Insufficient funding	• Delay in making the purchase • Additional costs for re-tender	• Obtain appropriate approvals before undertaking process • Improve planning
Selecting the Form of Delivery / Method of Selection		
Failure to identify potential sources / suppliers	• Lack of offers from suitable tenderers	• Improve procurement planning processes • Improve market knowledge • Seek industry participation
Inappropriate form of delivery or selection method used	• Need to seek offers again • May not achieve outcomes • Possible cost variations • Failure to obtain value for money	• Improve implementation of procurement policies, guidelines and practices • Forward planning • Seek review of selection method
Contract Documentation		
Inadequate scope / specification / schedule Providing inadequate information	• Inadequate responses from tenderers • Outcomes not met • Variety of offers (difficult to evaluate) • Loading of costs in offers • Having to provide clarifying information, causing delays in tender closing • Additional tender costs	• Ensure specification is consistent with needs • Use functional and performance specifications • Staff training in contract documentation preparation • Review tender documents before issuing • include evaluation criteria
Terms and conditions unacceptable to tenderers	• Loading of costs in offers • Having to modify tender terms and conditions • Low response	• Use standard conditions of contract (eg NZS3910 for construction contracts) • Select appropriate documentation / specifications for goods and services
Expectations of buyer and tenderer not matching	• Contract disputes • Delivery delays • Cost variations • Reduction in value for money • Purchase of less suitable product	• Improve communication • Document review prior to release • Conditions of Contract / Terms of Agreement to form part of RFT • Record each party's obligations • Clarify all ambiguities before signing contract

PROCUREMENT RISK	LIKELY CONSEQUENCES	ACTION
	• Inefficient use of resources	
Tender Procedures		
Insufficient number of responses	• Re-tender • Increased costs • Delayed delivery to the client • Poor value for money due to limited competition	• Assess advertising methods • Improve market knowledge • Provide potential tenderers with advance notice of tender requests • Improve tender documentation and specifications • Allow sufficient time for tenderers to respond • Seek feedback from known suppliers on their non-response
Failure to fully follow evaluation procedures	• Inconsistent evaluations • Possible complaints from tenderers • Subjective not objective evaluation of offers • Probity Issues	• Improve tender assessment and evaluation processes through staff training • Maintain, audit and review evaluation procedures • Ensure that TET Understand confidentiality obligations
Selecting an inappropriate supplier	• Failure to fulfil the contract	• Evaluation review prior to award • Minimum 2 people on TET • NZTA certified tender evaluator to be part of TET for contracts with an estimate > $200,000 • include appropriate and measurable evaluation criteria • Reject unacceptable offers
Local supplier not successful	• Public perception and reality of loss to local economy	• Management of local economy issues within the contract document
Contract Management		
Variations	• Unanticipated cost increases • Delays in delivery • Contract disputes	• Review contract document prior to release • Identify potential variations in advance • Accurate records • Include process for assessing variations
Failure of either party to reflect the terms offered and agreed in the contract	• Contract disputes • Delays in delivery • Legal action • Poor supplier/customer relationship	• Ensure good contract administration • Performance management • Staff training • Hold regular inspections / meetings and ensure progress reports • Good record keeping and documentation
Inadequately administering the contract	• Cost increases • Outcomes not achieved • Delivery of unsatisfactory product / service • Contract/supply disputes	• Maintain good practice • Staff know responsibilities and accountabilities and are suitably trained & experienced in contract management • Engage external support where insufficient in-house capacity / capability
Commencement of work by the supplier before contract in place	• Potential liability to pay for unauthorised work • Possibility of legal action for perceived breach of contract	• Accept all contracts in writing • Ensure approvals are received before allowing work to start
Key personnel not available	• Outcomes not met • Progress disrupted • Less expertise	• Include requirement in specification and ensure compliance

8. PROCUREMENT PROGRAMME

8.1 OVERVIEW

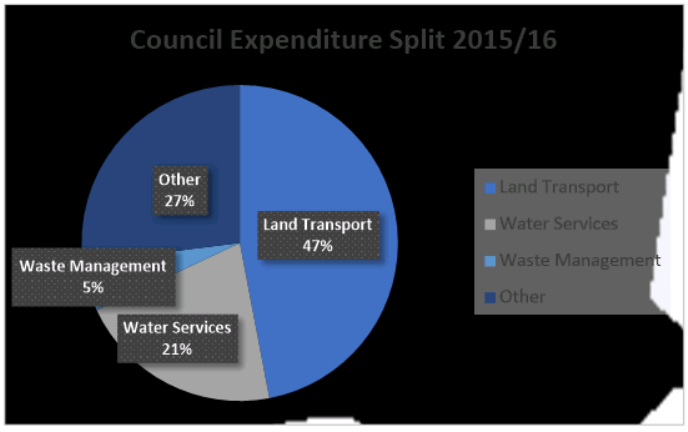
The 10 year procurement programme for Council Activities is outlined in the Wairoa District Council Long Term Plan (LTP) with the Infrastructure Strategy providing a 30 year assessment of significant issues and planning for Council's core activities of roading, the three waters and waste management.

Issues that affect the accuracy and validity of the programme include:

- Years two and three of the LTP may be modified by Council through the annual plan process; years four to ten are only indicative, as modification is likely through the subsequent updated Annual Plans and LTP.
- Roading Activity - The approval and finalisation of the subsidised Transportation programme through the Regional Land Transport programme (RLTP) and the National Land Transport Programme (NLTP)

Council expenditure is dominated by the core infrastructure activities which account for around 73% of Council expenditure as shown in the table and chart below:

Activity	Expenditure 2015-2016		
	Expenditure	% of Total Split	
Water Services	$4,606,000	21%	73%
Solid Waste	$1,111,000	5%	
Transport	$10,451,000	47%	
Other	$6,286,000	27%	



8.2 LAND TRANSPORT ACTIVITY

8.2.1 NZTA Specific Requirements – Land Transport

Where NZTA has a role as a funding partner, regional alignment and prioritisation of subsidised transport activities is undertaken through the Regional Land Transport Programme which is then submitted for funding to

the National Land Transport Programme managed by NZ Transport Agency. Activities that are approved for funding are then implemented by Council utilising the appropriate delivery model and supplier selection method to suit the task

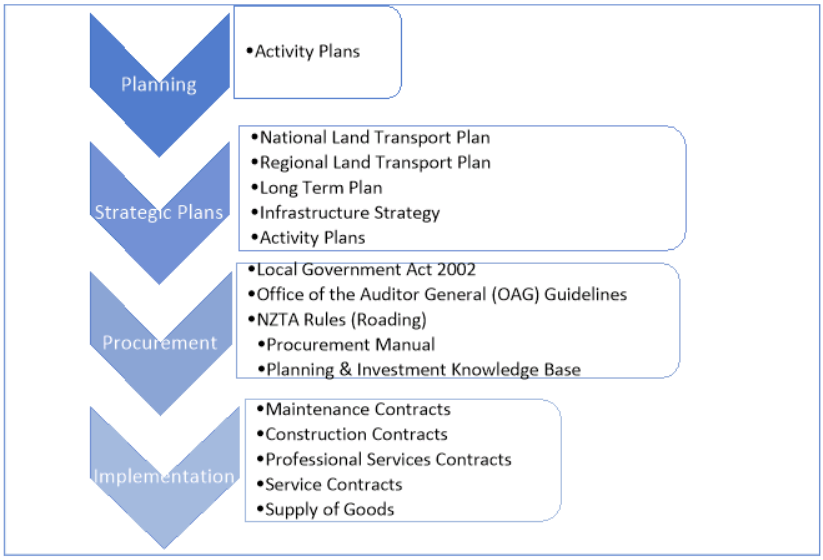
For all financially assisted roading contracts, the procedures shall be in accordance with the provisions of the New Zealand Transport Agency Procurement Manual and the NZTA Planning and Investment Knowledge Base (http://www.nzta.govt.nz/resources/planning-and-investment-knowledge-base/). Any deviations should be outlined in a Procurement Plan, documenting the reasoning for any departure from the Policy.

For large projects where tendering costs are likely to be high, a two-part selection process may be used. Where a two-part tendering process is used the short listing procedure will be in accordance with the provisions in the NZTA Procurement Manual or as promulgated in the request for tender.

9. PROCUREMENT OF COUNCIL ACTIVITIES

9.1 GENERAL

The diagram below outlines the procurement process from the identification of works through the specific Activity Plans through to implementation of the projects.



PLANNING AND IMPLEMENTATION FRAMEWORK

9.2 PROCUREMENT OF ROADING WORKS

The table below outlines the current process for the procurement of roading services.

WORKS	FORM OF DELIVERY & SUPPLIER SELECTION	DISCUSSION
General Maintenance & Operations	Traditional *Lowest Price Conforming* *Price Quality*	This is the most significant component of our procurement of subsidised roading services. These needs are currently serviced through two separate activity-based contracts: • Sealed pavement maintenance (programme developed by Council) • Unsealed pavement maintenance and renewals (outcomes-based contracts) This format of the contracts was implemented in 2013 and is already showing cost-savings over the previous area-wide contracts.
Surfacing Renewals	Traditional *Lowest Price Conforming* *Price Quality*	in the recent past, NZTA has implemented WDC's annual resurfacing programme, however more recently WDC has seen an ownership and financial advantage in managing this internally . Advantages include: • Ability to scope marketplace more effectively.

WORKS	FORM OF DELIVERY & SUPPLIER SELECTION	DISCUSSION
		• A higher level of control and ability to optimise failure profiles. • A tighter alignment with internal staff leading to lower overall costs of the network maintenance programme.
Annual Programmes of Works	Traditional *Lowest Price Conforming* *Negotiation*	Annual Programmes of Work may include: • Area Wide Treatment Programmes • Unsealed pavement renewals • Structures maintenance and Renewals - works are identified through a matrix used by consultant to prioritise works to an annual budget • Minor safety / improvement works Where appropriate and within financial limits, components of the annual programme may be negotiated through existing maintenance contracts.
Street Lighting	Traditional *Lowest Price Conforming*	A direct appointment may be made for streetlight maintenance in the future, should approval be gained for this approach due to lack of resources
Professional Services	Traditional Direct appointment *Lowest Price Conforming* *Price Quality*	Professional services are generally outsourced to preferred providers supplying technical expertise with works within specified financial thresholds. Larger commissions are often sought through competitive tendering procedures, typically using using a price quality method of selection. Target price methods of procurement may be utilised such as where scope cannot be fully defined at time of tender or where innovation is to be encouraged.
Flood Damage Repairs	In a typical year, Wairoa experiences flood damage in the order of $2 - $4 Million. The approach for this work is one that is designed very much around value for money principles. Area Engineers, Contractor representatives and Council staff assess the damage and collate the individual sites. The procurement method selected will depend on risk and criteria such as: • Risk to the public • Scale of works • Complexity of works	
	Low Risk *Non-complex works*	Either no design required or specific design and low value. Generally undertaken through negotiation with maintenance contractor/s or as invited tenders (for works < $200,000) using lowest price conforming method of selection – benefits of bundling works / sites into a single contract considered on a case by case basis WDC is guided by NZTA rules, guidelines and advice when assessing benefits of negotiation versus tendering

WORKS	FORM OF DELIVERY & SUPPLIER SELECTION	DISCUSSION
	Medium to High Risk *Complex works such as costal / river works*	Full engineering design required and resource consent and / or building consent may be required. Projects may be bundled based on construction type, location and timing in order to deliver most effective solution. Generally procured through open tender or may use invited tenders for works <$200,000.

9.3 THE 3-WATERS – WATER SUPPLY, WASTEWATER AND STORMWATER

9.3.1 Routine Maintenance and Operations

To date, maintenance contracts for the water activities have been undertaken in the following format:

- Water supply reticulation maintenance – within the urban limits of Wairoa and Frasertown
- Wastewater and stormwater maintenance – within the urban limits of Wairoa

Council has recently re-tendered these contracts as a combined 3-waters maintenance contract which is common practice across New Zealand. The selection method used was a Price-Quality basis of evaluation, seeking innovation in delivery of the combined service.

This new contract will start 1st July 2017 and will have a two year term with provision for two 2-year roll-overs at the discretion of the Principal.

The following key changes are anticipated to improve overall maintenance of the systems and delivery of the service:

- More ownership of the assets by Council staff through greater monitoring, inspections and programme development;
- Combining of the contracts will have cost savings in the management of the contracts;
- Efficiencies across the contract by combining water supply, wastewater and stormwater maintenance with provision for renewals;
- A larger contract will encourage more competition in the tender phase.
- Asset management planning is enhanced

The operation and maintenance of the Frasertown water Treatment Plant is excluded from the contract; the treatment plant is managed and operated by Council staff with specialist services engaged as required.

The Mahia Wastewater contract is due to be procured in 2017, following expiry of the defects liability period. The proposed format is still to be determined.

9.3.2 Capital Works / Renewals

Capital and renewals works for the water, wastewater and stormwater assets has traditionally been tendered as separate packages of work.

The new 3-waters operations and maintenance contract has provision for negotiation with the maintenance contractor to undertake renewals works (only as directed by the Engineer and within appropriate procurement financial limits)

9.4 WASTE MANAGEMENT

The current waste management contract has been in place for in the order of 10 years and is currently in a roll-over status.

The contract is both an operational and maintenance contract:

- Waste and recycling collection and disposal in Wairoa, Frasertown and Mahia
- Operation and maintenance of the Wairoa landfill

The option of a regional landfill operation has been investigated and proposed in the past with the aim of increasing the sustainability of the landfill as general practice reduces the amount of waste (per household) being disposed is reducing in line with the Waste Management and Minimisation Act 2008.

Although a trial of this option showed positive results, support could not be secured through neighbouring councils.

The Waste Management activity is currently subject to a a17A Service Delivery Review to assist in determining the most appropriate way forward.

9.5 OTHER INFRASTRUCTURE ASSETS

Other infrastructure assets include:

- Parks and reserves
- Cemeteries
- Airport
- Property

Various maintenance contracts are in place for each of these activities, typically for a three-year term with the provision for 2 x 1 year roll-overs.

Contracts are generally procured through open tender on a lowest-price conforming basis, being non-complex and relatively low value.

Local contractors are encouraged to tender for these works.

9.6 NON-ASSET ACTIVITIES

9.6.1 All of Government Contracts / Standing Agreements

'All of Government' contracts are procurement arrangements where Council buys directly from suppliers for an agreed period of time. These arrangements are appropriate for goods of low value, have no special requirements, are easy to specify and have common standards.

Implemented by New Zealand Government – Procurement, the 'All of Government Contracts' use the collective power of Government by establishing supply agreements for selected common goods and services.

Council currently follows the All of Government Contracts for the following activities:

- Air travel
- Banking services
- IT Hardware
- Mobile, voice and data services
- Office supplies
- Rental vehicles
- vehicles

Council is also an 'N3' customer. This arrangement offers supplier discounts across a number of organisations covering:

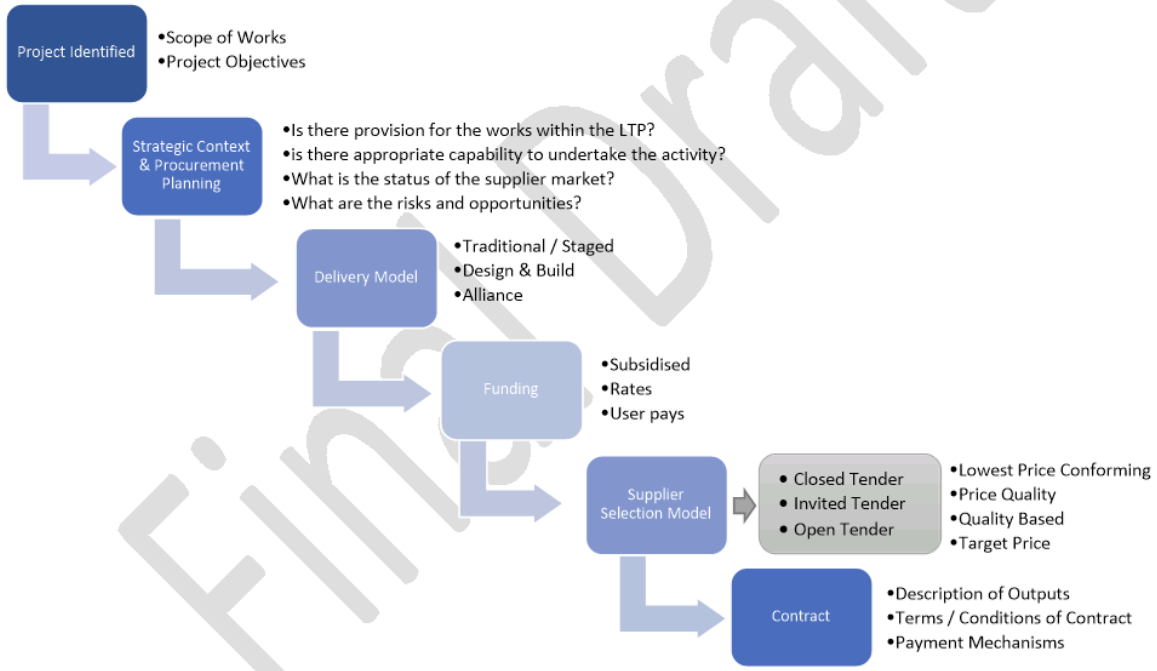
- trade and maintenance
- business essentials

- vehicles and fuel
- health and safety
- technology and communications

10. GENERAL PROCUREMENT APPROACH

10.1 OVERVIEW

The diagram below outlines the stages of procurement, of particular relevance to infrastructure works for Wairoa, but applicable to all activities.



10.2 PROCUREMENT PLANNING - GENERAL

Prior to the engagement of any supplier of goods or services, some form of procurement planning is required to ensure the best value for money.

Such a process is relevant for any scale and complexity of contract but should be tailored appropriately.

The procurement planning process should include, as a minimum:

1. A review of the current contract:
    a. Is it delivering on its objectives?
    b. Are the appropriate levels of service being met?
    c. Are the agreed community outcomes being met?
2. Consideration of the Strategic Context:
    a. Market circumstances;
    b. Risks and comity of the proposal;
    c. Opportunities for innovation;
    d. Potential to integrate across other activities;
    e. Capacity and capability of Council officers to manage and deliver the procurement programme;
    f. Use s20 process of the LTMA for funded projects in terms of strategic procurement objectives.
3. How can delivery be improved?
    a. Scope and cost of delivery;
    b. Potential 'bundling' of works;
    c. Length of contract;
    d. Potential for local involvement
4. Determination of the preferred Format of Contract Delivery – *what type of contract will the works / services be delivered under?* (refer 10.3 below)
5. Determination of appropriate Selection Procedure – *how will the preferred supplier be decided?* (refer 10.4 below)

It is proposed that the Council infrastructure committee will be fully involved in the procurement planning

10.3 PROCUREMENT PLANNING – ROAD MAINTENANCE

10.3.1 Background

In 2011, the Road Maintenance Task Force, engaged by the Government, identified that Road Controlling Authorities need to be 'Smart Buyers'.

Note, these principles can be used across all Council Activities.

Smart Buyers have:

- *Improved understanding of costs that better inform their decisions*
- *Understanding of the impact delivery models and supplier selection criteria can have on the value of contracts*
- *Robust forward work programmes that are communicated to the industry and supported by budgets that allows the work to be completed*

- *Knowledge of the network to determine treatments required based on physical evidence and supported by knowledge of the costs involved*
- *In house expertise that aids the decision making process and allows acceptance of innovative solutions possibly with or without the involvement of consultants*
- *A clear understanding of risk and how it is allocated and managed*
- *An understanding that lowest price will not always deliver desirable outcomes*
- *An understanding that being prepared to pay more may result in enhanced whole of life value for money*

Not so Smart Buyers:

- *Award contracts predominately based on price – with little appreciation of any risk to best value for money*
- *Outsource work to the detriment of asset knowledge*
- *Choose contract forms that are fashionable, not well understood and poorly managed*
- *Lack technical and contractual management skills*
- *Lack asset management skills – prevents the development of robust forward work programmes*
- *Do not support forward work programmes with appropriate budgets*

10.3.2 Road Maintenance Procurement: Delivery Model Guidelines 2016

Folllowing on from the Road Maintenance Task Force, the Road Efficiency Group, developed by NZTA, have produced a report 'Road Maintenance Procurement: Delivery Model Guidelines' to assist in making and improving road maintenance delivery model decisions which should be considered as part of the process.

The guidelines present a selection matrix of key client drivers to help determine and plan for a preferred road maintenance delivery model.

It is important for Council to understand the importance of key 'client drivers' and the characteristics of the various delivery models in order to use the matrix proposed in the report to deliver the best road maintenance delivery model.

The Guidelines also introduces alternative delivery models which should be considered for future road maintenance contracts:

- Traditional / Staged
- Performance
- Alliance / Collaborative
- Framework (relatively new concept in NZ and is untested)

10.3.3 Key Drivers

The following key drivers affect WDCs method of procurement and delivery for all activities:

- WDC staff Smart Buying capability and capacity
- WDC availability of resources including asset data
- Desired level of control and involvement in the work programme
- Supplier market for the works / services including capability and number of potential suppliers
- Risk appetite
- Appetite for improved value for money and continuous improvement

Other drivers for WDC include:

- Ability to decide all requirements prior to tendering
- Whether cost can be determined prior to committing to tender
- Scale and Complexity of Works

10.4 FORMS OF DELIVERY MODEL

The generally accepted Forms of Delivery comprise the models outlined in the table below which identifies typical characteristics for the key Forms of Delivery for infrastructure projects.

	Staged / Traditional
Potential for Innovation Increases	Where the client wants to retain control over the programme of works, where delivery likely to be on a measure and value basis and where the client wants to encourage a healthy market environment with limited suppliers • The Client has scope, schedule and programme certainty • Contract is simple / non-complex / low risk • Small to medium sized contracts • Short, medium or long term contract duration with potential rollover • Direct negotiation / lowest price conforming / price-quality methods of procurement • Method of payment typically measure and value
	Design and Build
	Where the client wants to set performance measures and hold the contractor accountable for delivering them • To encourage innovation • Contract more complex • Medium to large sized contracts • Typically price-quality methods of procurement • Client has sufficient asset information for contractor to price contract • Self-certification with client controlled checks • A well-balanced risk profile • Certainty in expenditure and rates
	Alliance / Collaborative model
	This form of delivery provides flexibility and risk sharing in a formalised 'team approach' with the contractor focused on network outcomes • Flexibility and risk sharing • Client wants to and has the capability to be directly involved in the contract • Client is uncertain of contract scope, required performance and programme and/or needs to make significant cost savings • Large / complex contracts • Longer term contract duration with potential rollover • Price-quality methods of procurement • Sharing knowledge and experience • The Asset has a high rate of change

10.5 SUPPLIER SELECTION METHODS

10.5.1 General

There is no "one size fits all" approach to procurement and Councils favours a range of methods including:

- Comprehensive long term contracts for maintenance works which require high levels of capacity, capability and certainty
- Smaller packages to enable smaller local suppliers to supply services to Council and their community
- Larger packages for capital projects involving complex design, project management and construction
- The acknowledgement of the roles of specialists

When choosing the appropriate procurement method, it is noted that some methods are governed by legislation. For example, the Land Transport Management Act 2003 requires certain procedures to be used for approved activities relating to transport.

10.5.2 Expression / Registration of Interest

The tender process may, depending on the scale and complexity of the goods or services being purchased, include an initial Registration of Interest (ROI) or Expression of Interest (EOI) phase as a means of establishing more information about the goods or services, the market and the capability of suppliers to satisfy the procurement need.

It may also be used a means of selecting a short-list of organisations for the RFT/RFP phase.

This stage would be followed by a Request for Proposal (RFP) or Request for Tender (RFT).

10.5.3 Register of Preferred Suppliers

This essentially comprises two categories:

- standing arrangements for supply of recurring purchases each of a relatively low value;
- panel arrangements where a contractual arrangement is made with a group of suppliers to provide services as and when required based on agreed prices / rates.

With a relatively small marketplace, the establishment of such a register, typically using a pre-qualification process, may facilitate the assignment of minor works to local contractors, in particular for the non-core activities such as trades (plumbing and electrical works).

A Register of Preferred Suppliers reduces the need for repeated processes in selecting suppliers with associated time and cost savings to all parties.

Such an arrangement is effectively in place for many suppliers through the 'All of Government Contracts' process used by Council.

Larger contractors, including local, regional and national contractors, would be encouraged for larger scale core activity works such as road and water maintenance contracts.

Hence, the extent of such a panel/s and the type of works to be included would need to be assessed and agreed. A pre-qualification process would need to be undertaken to enable organisations to be included in the register/s for specific works.

NZTA Funded Works

A separate NZTA approval will be required if this option is pursued.

10.5.4 Financial Thresholds & Descriptions

WDC standard procurement processes are based primarily on monetary thresholds. The table below summarises the typical procurement options and thresholds:

CONTRACT VALUE / METHOD OF SELECTION	$0 - $100,000	$100,000 - $200,000	OVER $200,000	GENERAL DESCRIPTION	
DIRECT APPOINTMENT / PREFERRED SUPPLIER	√	x	x	In some circumstances, goods, works and services may be secured through direct negotiation typically based on tendered rates where available. Such options may be provided for through other contracts such as renewals works being procured through maintenance contracts. Direct negotiations and appointments may also be made where there is a monopoly supplier or where the costs and benefits of competition may not provide value for money.	
CLOSED CONTEST / INVITED TENDER	√	√	x	An invited or closed tender is the same as a public tender with the exception that the invitation to tender is limited to a selected panel of potential tenderers / proposers. All contracts for the supply of works and services likely to involve expenditure up to $200,000 shall be submitted to a minimum of two but preferably three selected / suitable contractors / suppliers. Where a register of preferred suppliers is in place, invitations to participate in a closed tender must be sent to all current suppliers on the register. *If only one supplier is identified, the Counicil may negotiate the terms, including price, of a contract with that supplier using the direct appointment supplier selection method*	*Methods of Evaluation* • *Lowest Price Conforming* • *Price Quality* • *Quality Based* • *Target Price*

CONTRACT VALUE / METHOD OF SELECTION	$0 - $100,000	$100,000 - $200,000	OVER $200,000	GENERAL DESCRIPTION	
PUBLIC (OPEN) TENDER	√	√	√	All contracts for the supply of works and services that are likely to involve the Council in expenditure of $200,000 or more shall be put to open tender. Tenders will comprise a Request for Proposal (RFP) or Request for Tender (RFT). An RFP is typically used where the outcome desired can be specified but Council is willing to accept alternatives methods of achieving the outcome and is seeking innovation on the part of the suppliers. An RFT is used where the specification or requirements are clearly defined and there is little room for flexibility or innovation. *For reinstatement works after an emergency (such as flooding events), Council may call for quotations or order the work directly in lieu of inviting tenders under this strategy. Under the NZTA Procurement Manual, for roading activities, this is permitted providing that permanent reinstatement / solutions are subject to the normal procurement processes.*	*Methods of Evaluation* • *Lowest Price Conforming* • *Price Quality* • *Quality Based* • *Target Price*
Approved Procurement Plan	√	√	√	Where an officer assesses that the procurement processes in this Strategy are not appropriate for a project; for example there are insufficient qualified suppliers available to undertake a tender pursuant to this Strategy (or in accordance with the NZTA Procurement Manual for funded roading projects), or the matter involves proprietary products that are not amenable to tender, then a procurement plan will be prepared outlining the approach proposed to obtain the best overall result for WDC. This plan must be approved in accordance with WDC delegations and by NZTA for funded projects.	

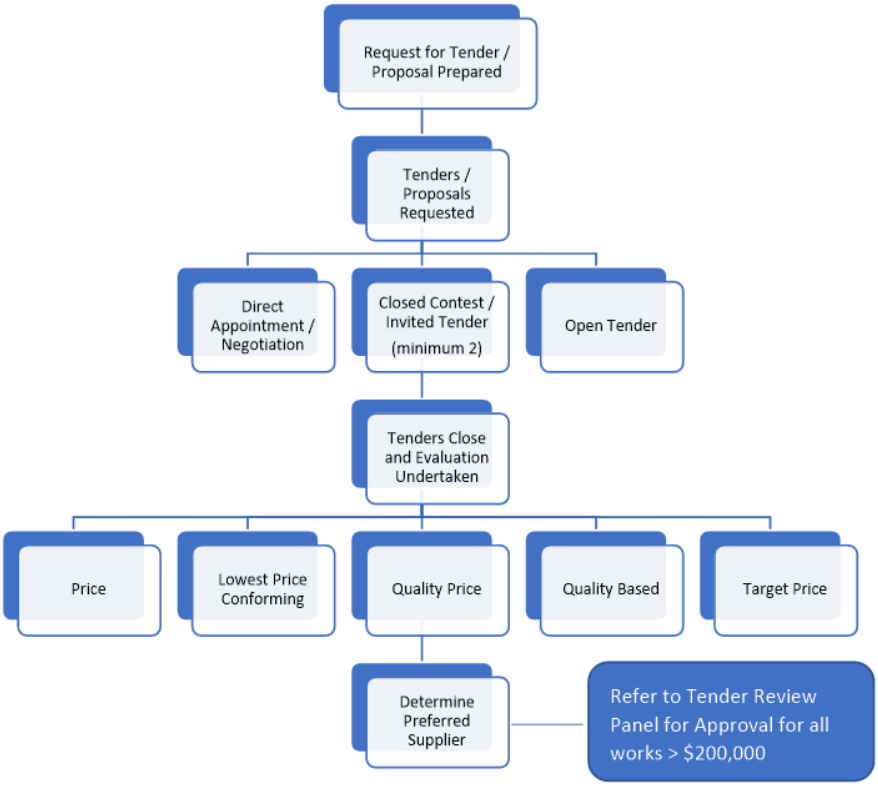
10.6 TENDER PROCEDURES

10.6.1 General

Council's tender documents / requests for proposals should include, but not be limited to:

- Scope / Specification of works, services or goods
- Payment schedule and payment mechanisms
- Duration of contract
- Conditions of contract / Terms of Agreement
- Evaluation criteria
- Time of closing of tender / proposal.

10.6.2 Flow Chart of the Tender Process



10.6.3 Methods of Evaluation

Refer to WDC Tender Evaluation Manual (in the process of development at the time of writing) which outlines the process to be followed in the evaluation of tenders / proposals.

For all subsidised roading contracts, the NZTA Procurement Manual should be complied with.

A number of evaluation methods are used as generally outlined below:

Negotiation	Works < $100,000 Low risk / small scale / non-complex works
Lowest Price Conforming	Low risk / non-complex works Lowest price conforming should be used where it is determined that best value for money will be obtained by having suppliers compete on price alone. The preferred supplier is the supplier that offers the lowest price and meets all the minimum requirements specified
Quality Price	The quality attributes of suppliers are scored and balanced against price through a specified formula to determine the preferred supplier. Council is effectively willing to pay a premium for a higher quality service.
Quality Based	The preferred supplier is selected solely on quality through non-price attributes. A price is then negotiated with the preferred supplier, based on their price proposal, submitted with the tender. The quality based method should be used where it has been determined that the best value for money will be obtained by selecting the supplier on the basis of supplier quality alone. There is no competition on price.
Target Price	Where Council is unable to specify the outputs required but has a budget and can specify the desired outcomes Best value for money is then obtained by selecting the supplier that provides the best proposal for the price set out in the RFP

11. MANAGEMENT & IMPLEMENTATION

11.1 TENDER REVIEW PANEL

All tenders with an estimated expenditure in excess of $200,000 shall be subject to the approval of the Tender Review Panel.

The Tender Review Panel will comprise elected members of:

- The Infrastructure Committee and/or the
- Financial, Audit and Risk Committee.

11.2 CONDITIONS OF CONTRACT

Infrastructure contracts are generally based on the NZS 3910 framework being widely understood in the market and so creating a level of certainty and comfort.

11.3 HEALTH AND SAFETY

The health and safety implications of any proposed procurement should be assessed before, during and after the procurement with particular emphasis on the following:

- Ensure the importance of workplace safety is reflected in all procurement and selection criteria and/or decisions where appropriate;
- During procurement, identify hazards and risks associated with the works, goods or services.

Health and safety standards shall be set for each contract with minimum standards relative to the risk of the project.

Costs will only take precedence over health and safety, when the cost of eliminating a health and safety risk is "grossly disproportionate" to the risk itself.

11.4 CONTRACT MANAGEMENT APPROACH

WDC is a small sized local authority with capable but limited resources. Council is continually working towards upskilling and retaining staff.

Council uses a mix of its own staff and external resources (where appropriate) to deliver levels of service and achieve associated planning and programmes.

Physical Works Contracts and Asset Management are generally managed through Council staff. Suppliers with quality systems and self-auditing processes enable Council to be assured quality is not compromised with less supervision.

11.5 COMMUNICATION

11.5.1 Elected Members

Formal reports are provided when decisions are required relating to funding or policy matters. The key reports from a procurement perspective are the Long Term Plan and Activity Management Plan that sets the scene for the ensuing 10 years. Monthly updates are provided.

The Infrastructure Committee of Council will be responsible for the procurement of works and services.

Specific pre and post-procurement council involvement is to be determined through the Infrastructure Committee on a regular basis.

11.5.2 WDC Management

Management and other staff have access to all the same reports as Councillors including detailed Asset Management Plans.

The size of our organisation is such that most communication between staff and departments is informal, with regular team meetings, and email the most common form of written communication.

11.5.3 Other Approved Organisations & Suppliers

WDC maintains extensive engagement with NZTA (State Highways), Hastings, Central Hawke's Bay, Napier and Gisborne councils through Regional Land Transport and Utility operator liaison groups.

Council staff communicates with other approved organisations and suppliers through a range of forums such as RCA Forum, LGNZ, IPWEA, IPENZ and numerous courses, presentations etc throughout the year.

Council staff (and consultants/contractors) are encouraged to gain knowledge and share experiences from outside the region, such as involvement on reference groups, working parties etc.

Formal communication to the market of proposed programmes is through the Long Term Plan.

11.6 DELEGATIONS

No person shall enter into a contract or funding arrangement (including purchasing of goods and services) on behalf of Council unless:

- they have specific delegation to do so;
- The works, goods and / or services are within budget as set out in the LTP / Annual Plan or by formal resolution of Council.

11.7 INTERACTION WITH OTHER DOCUMENTATION

This Procurement Strategy is linked to Council and the NZTA's wider planning framework as well as implementation rules and guides including:

- Financial delegations
- NZTA Programming Planning and Funding Manual
- NZTA Procurement Manual
- Council Tender Evaluation Procedures Manual.

11.8 REVIEW AND IMPROVEMENT

Council acknowledges there are opportunities to improve this strategy and Councils procurement processes.

The following procurement items have been identified as future actions:

- Continued staff development, in particular in the areas of procurement and asset knowledge;
- Tender Evaluation Procedures Manual is being updated and developed;
- Council's Delegations Manual is being developed;
- This Procurement Manual will be reviewed on a tri-annual basis;
- Recommendations from s17A service delivery reviews will be incorporated as they are undertaken and as appropriate.

Wairoa District Council

Procurement Strategy Review

April 2016

PEMBROKE
ADVISORY SERVICES

Document Title:

Wairoa District Council

Procurement Strategy Review – April 2016

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Wairoa District Council
Procurement Strategy Review 2016

Executive Summary

Wairoa District Council (Council) adopted its Procurement Strategy, endorsed by NZTA, in 2012 to meet the requirements of the New Zealand Transport Agency (NZTA) and in response to Section 25 of the Land Transport Management Act 2003 (LTMA).

The 2012 Procurement Strategy focused on the provision of roading services to the District and addressed the whole process from development of works programmes through to the engagement of suppliers.

Having been in place for more than three (3) years, a review is now required. The provision for other engineering activities has also been considered as part of the review.

The 2012 Procurement Strategy is generally in line with the requirements of the NZTA Procurement Manual but is now out of date in some regards with Council's Long Term Plan having been reviewed in 2015.

There is currently no such Strategy in place for other activities managed by the Engineering Department. To ensure an open, fair and transparent process in the procurement of services across the department, such a document would provide for this and would be in keeping with Central Government requirements for procurement.

Key to the procurement of services is the tendering and engagement process. Council has no current, formal procedures in place for the selection of service providers although, for most cases where services are tendered, the NZTA Procurement Manual is used as a basis for the evaluation of tenders. An 'Internal Procurement Procedures Manual' for the selection and engagement of service providers would be applicable to all engineering activities and, in particular, would provide a step by step process for the evaluation of tenders.

The following recommendations are made:

- That the Procurement Strategy be updated in relation to the Roading Activity
- That the Procurement Strategy be expanded to provide for all engineering activities
- That the process for determination of the Supplier Selection Method be documented for all engineering activities
- That an 'Internal Procurement Procedures Manual' be developed to outline the process to be followed in engaging services

Contents

Attachment 1: NZTA Procurement Manual – Procurement Strategy Checklist

Attachment 2: Recommended Procurement Strategy Update Actions

1 BACKGROUND

Wairoa District Council adopted its Procurement Strategy for roading services in 2012, as required for NZTA in response to section 25 of the Land Transport Management Act 2003 (LTMA).

The 2012 Procurement Strategy addresses the following areas

- Goals and objectives for the roading activity and how it is proposed to meet those objectives
- Council's 'Procurement Environment' – physical, market and suppliers
- Council's Planned Procurement Programme including annual expenditure, proposed delivery models and proposed supplier selection methods
- Management and Implementation including contract management, communications, performance management and capabilities

Council is now looking to ensure the currency of the Strategy with regard to the roading activity and also to further develop the Strategy, as appropriate, to address all engineering services.

2 SCOPE OF WORKS

This report reviews the 2012 Procurement Strategy in order to assess the need to update in relation to the roading activity. The NZTA Procurement Manual states that the '*Procurement Strategy should be dynamic and updated at least every three years .....*'

This report also addresses the need for a Procurement Strategy for all other engineering activities within Council. The NZTA Procurement Manual states '*The NZTA strongly recommends that a strategy for the procurement of activities funded under s20 of the LTMA be aligned with an approved organisation's business-wide procurement strategy*'. It also states '*A business-wide procurement strategy will raise the profile of procurement practice in an approved organisation. It should be documented and it should cover all purchasing that is undertaken'.*

In light of a recent independent review of a tender evaluation undertaken by Brian Smith Advisory Services (February 2016), the scope also includes a review of current tender procedures and the need to document such procedures.

3 LEGISLATION AND REGULATORY REQUIREMENTS

3.1 LAND TRANSPORT MANAGEMENT ACT 2003 (LTMA)

A Procurement Strategy is required by NZTA as part of meeting the requirements of Section 25 of Land Transport Management Act 2003 (LTMA).

Section 25: Procurement Procedures:

(1) ..... the Agency must approve 1 or more procurement procedures that are designed to obtain the best value for money spent by the Agency and approved organisations, having regard to the purpose of this Act.
(2) In approving a procurement procedure, the Agency must also have regard to the desirability of—

a. *enabling persons to compete fairly for the right to supply outputs required for approved activities, if 2 or more persons are willing and able to provide those outputs; and/*
b. *encouraging competitive and efficient markets for the supply of outputs required for approved activities.*

(3) *Every approved procurement procedure must specify how procurement is to be carried out (which may differ for different kinds of procurement)*

The purpose of the LTMA, under Section 3 is

'The purpose of this Act is to contribute to an effective, efficient, and safe land transport system in the public interest'

The NZTA requires that all approved organisations have a procurement strategy that documents an approved organisation's long-term integrated approach to the procurement of transport sector activities funded under Section 20 of the LTMA.

Section 20: Approval of activities and combinations of activities

(1) *The Agency may approve an activity or combination of activities as qualifying for payments from the national land transport fund*

Where:

Agency means New Zealand Transport Agency

a. ***Agency** means **New Zealand Transport Agency***
b. ***Approved Organisation** means: c) territorial authority (in this case **Wairoa District Council**)*

3.2 REGULATORY REQUIREMENTS

3.2.1 NZTA Procurement Manual

Under Section 25 of the LTMA, NZTA *'must approve 1 or more procurement procedures that are designed to obtain the best value for money spent by the Agency and approved organisations ….'*

Chapter 4 of the NZTA procurement Manual 'Strategic Approach to Procurement' states the following:

- *a procurement strategy documents an approved organisation's long-term integrated approach to the procurement of transport sector procurement activities funded under s20 of the LTMA*
- *the planning for all procurement activities should involve a process of identifying and understanding the objectives of the activity, the relevant supplier market, the associated risks and the nature and quality of the goods and services to be purchased. This understanding must then be documented in a strategy*
- *A procurement strategy will …… explain an approved organisation's approach to the purchase of goods and services to suppliers, the NZTA and other stakeholders*
- *…. critical area of consideration for the NZTA's purposes is an approved organisation's approach to its programme of transport sector procurement activities funded under s20 of the LTMA. This includes how to deliver a programme of activities, across different market*

segments, in a way that obtains the best value for money spent and how the approved organisation will address the requirements and considerations of s25

This procurement strategy is designed to link WDC strategic goals and objectives with the procurement context of the LTMA, specifically value for money, fairness, competition and efficiency.

3.2.2 Government Rules of Sourcing - 2015

The New Zealand Government – Procurement published the document '*Government Rules of Sourcing - Rules for planning your procurement, approaching the market and contracting*' in 2015. This document is relevant to Council's operations.

This document requires each agency (which includes local government organisations) to have policies in place that incorporate the five *Principles of Government Procurement which are:*

1. Plan and Manage for Great Results
2. Be fair to all suppliers
3. Get the Right Supplier
4. Get the Best Deal for Everyone
5. Play by the Rules

4 DISCUSSION

4.1 EXTENT OF CURRENT PROCUREMENT STRATEGY

4.1.1 Engineering Activities

The 2012 Procurement Strategy was reviewed for relevance to the whole Engineering Activity within Council.

The NZTA Procurement Manual discusses the importance of having a *'business-wide procurement strategy …… should be documented and it should cover all purchasing that is undertaken'.*

The 2012 Strategy does not provide for any activity other than roading although several sections are considered to be generic across all activities.

Other activities managed and operated by the Engineering Department include:

- Water supply
- Wastewater including treatment and discharge
- Stormwater
- Waste Management
- Parks and Reserves
- Cemeteries
- Property
- Airport

These activities should be incorporated to ensure and improve consistency in overall practice.

4.1.2 Internal Procurement Procedures

Specifically, this relates to the procurement of services, essentially the tendering process.

The current Strategy is limited in this regard, identifying the supplier selection methods typically used but not the process followed in determining which method to use or the evaluation of tenders.

Typically, Council uses the following methods of supplier selection:

- Invited tenders (dependent on value of works and delegations)
- Lowest Price Conforming (most common form of selection for non-complex works)
- Price Quality Methods for more complex works where Council is willing to effectively pay a 'premium' for a higher quality proposal.

Council currently has delegations in place which are related to approval of works to a limited dollar value for different levels of management within Council without the need to gain Council approval.

There is no policy in place regards the decision process on the method of supplier selection. This is currently considered on a case by case basis, dependent on scale and complexity of works, within the Engineering Department.

4.2 ROADING ACTIVITY

The 2012 Procurement Strategy was reviewed, taking into account a number of areas in relation to the Roading Activity:

- Currency / changes since 2012
- does the Strategy meet the requirements of Chapter 4 of the NZTA Procurement Manual 'Strategic Approach to Procurement'?
- Is the Strategy in keeping with the 2015 Asset Management Plan and Infrastructure Strategy?

4.2.1 Currency of 2012 Procurement Strategy

The 2012 Strategy has been reviewed to determine if it is still 'current'.

Asset Management Plans (AMPs) and the Long Term Plan (LTP) have all been updated since the 2012 Strategy and the Infrastructure Strategy introduced. There have also been changes in NZTA funding.

The table below summarises each section of the 2012 Strategy and outlines the currency of the statement made.

2012 Procurement Strategy Section	Summary	Currency
A1 Legislative Context	Sections 25 and 20 of the LTMA are applicable	LTMA amended 2013 but no impact on requirements for Procurement Strategy
A2 Regulatory Context	NZTA requirements with respect to LTMA	▪ No changes to NZTA requirements since 2012 Strategy ▪ In 2015, Central Govt introduced *'Government Rules of Sourcing - Rules for planning your procurement, approaching the market and*

2012 Procurement Strategy Section	Summary	Currency
		contracting' which is applicable for a business-wide procurement strategy
	Strategic Goals and Objectives How the roading activity contributes to Community Outcomes and objectives to meet those outcomes	Goals and objectives from draft 2012 LTP. Community Outcomes have not changed in 2015 LTP. LTP links the roading activity to all outcomes (procurement strategy only links to economic outcomes)
	Specific Procurement Objectives (roading)	▪ Still valid objectives ▪ Community Outcomes are council-wide but objectives currently limited to the roading activity. ▪ Levels of Service changed with the 2015 LTP.
B1 Physical Environment	Remote nature of the district has an impact on procuring services / suppliers	Still valid and generic across all activities
B2 Market Environment	Service providers and how to encourage interest in the Wairoa market, both physical works and professional services	Discussion still valid and generic across all activities
B3 Supplier Relationships	▪ Outline of procurement procedures – mainly Lowest Price Conforming with pass/fail threshold ▪ Annual pre-qual process for physical works a possibility	▪ Discussion still valid and generic across all activities ▪ The benefits of pre-qual process to be considered further for specific activities
C Planned Procurement Programme	C1 General Maintenance and Ops ▪ Most significant component of subsidised roading services ▪ Outlines annual expenditure, types of activity and forms of contract. ▪ Also discusses rationalisation options for the roading activity	▪ Comments still valid ▪ No discussion on proportion of expenditure that is subsidised ▪ Maintenance contracts for roading have been reviewed with changes implemented in 2014. ▪ Bridge asset mgt consultant engaged 2015
	C2 Site Specific Trial Solutions Outlines examples of previous trials, annual expenditure and forms of contract (typically direct negotiation with road maintenance contractor)	Trial solutions still undertaken to improve delivery
	C3 Surfacing Renewals Outlines annual expenditure and forms of contract.	Council now undertakes the surfacing renewals contracts on local roads, was previously implemented through NZTA, tied in with their State Highway works.
	C4 Pavement Renewals Outlines annual expenditure and forms of contract (tendered or direct negotiation with roading maintenance contractor where part of trials or relatively small scale)	Comments still valid
	C5 Structures Maintenance and Renewals Annual programme of works tendered. Outlines annual expenditure and forms of contract	▪ Has been a rolling condition assessment for bridges and structures in the past. ▪ Asset Mgt Professional Services Contract now in place for bridges with

2012 Procurement Strategy Section	Summary	Currency
		an aim to develop more cost-effective works programmes through condition assessments etc.
	C6 Associated Improvements ▪ Typically minor safety works ▪ Where scale small enough, tend to use closed / invited tender process	Discussion still valid
	C7 Professional Services ▪ Low to medium flood risk damage repairs outsourced through number of selected consulting firms ▪ Higher risk repairs will be sourced through wider market	▪ Discussion still valid ▪ Some low risk works now designed in-house using standard designs
	C8 Flood Damage Repairs ▪ Outlines the various types of work and how each is resourced. ▪ Recognises more specialist nature of some work such as those immediately adjacent to rivers	Comments still valid, in particular the Strategy Goal '*Mix of Service Providers to Best Suit the Range of Technical Skill and/or Activity Risks Required*'
D1 Approach to Contract Management	▪ Generally NZS3910 ▪ Drive for collaboration	Discussion still valid but could be expanded Does not specifically link to delivery of works programmes
D2 Communication Strategy	▪ Council members – formal reports ▪ Management – formal reports as well as regular team meetings / informal correspondence suitable for organisation of this size ▪ Others such as NZTA, TLAs – Regional Land Transport group	▪ Discussion still valid and is generic across all activities ▪ Minimal discussion on communication with supplier and customers / users
D3 Performance Management and Success Measures	▪ Council relies on NZTA audits ▪ LTP reporting	▪ Also use Annual Reports ▪ Accountability?
D4 Capability	In-house capabilities outlined	Limited discussion, to be expanded including risks related to procurement

SPECIFIC PROCUREMENT OBJECTIVES – 2012 PROCUREMENT STRATEGY

The table below lists the Specific Procurement Objectives included in the 2012 Procurement Strategy for the Roading activity and comments on achievement of those objectives. This allows an assessment of whether the objectives set are appropriate, measurable and achievable whilst being challenging in terms of searching for cost-effective procurement.

2012 Procurement Strategy (Roading)		Are we Achieving?	Comment / Recommendation
Specific Procurement Objectives	How we Achieve these Objectives		
Ensure risk is appropriately managed by the party best placed to do so	Establish a risk matrix and determine the appropriate risk transfer mechanism and the type of services to be procured e.g. High risk needs specialised professional design service	Developing	Risk management is addressed in the 2015 AMP but is an area for further development. Council recognises when specialist input is required
Ensure fair and transparent procurement processes that give confidence to the market	Projects of value greater than $200,000 to be publicly tendered. Works will be generally unbundled to ensure a good mix of suppliers. Physical works; Lowest price conforming or Price/Quality where premiums in whole life benefits can be demonstrated. Professional services; Preferred supplier panel developed.	Yes	Ensure procurement processes documented (including 'Procedures Manual') to demonstrate clear and transparent processes – for each project. Documented decision making process for supplier selection method within the Strategy will demonstrate Council endorsement of such decisions
Encouraging long term thinking about procurement processes to nurture sustainable marketplace	Balancing the bundling of work to suit local procurement environment. Promoting longer construction periods. The programmed tenders start early in the construction season and continue in a steady stream of contracts that align with seasonal weather changes	Yes	S17A service delivery reviews underway – will review the way works packages are put together.
Procurement philosophy reflects a more aligned customer focus.	Where appropriate contracts be more activity based to discourage dilution of focus. In order to maintain the benefits of scale for some activities this may mean a shift to larger geographic bundles	Yes - Projects assessed on a case by case basis	Need to balance this objective where works are 'bundled' to 'unbundling' of works packages as above
Work toward rationalisation of maintenance contracts in 2013/14 to achieve improved focus in service delivery	Move to activity based contracts covering a wider area	Yes – changes made to roading contracts	Review success of these changes - $ and LoS
Link grading and metalling with LOS and asset value.	A new unsealed pavement contract model	Yes – changes made to roading contracts	Review success of these changes - $ and LoS
A focus on 'best fit' procurement which particularly discourages 'overbuying'	Creating an environment where WDC understands the cost of risk and is prepared to engage in the iterations which involve accepting engineering risk	Risk management addressed in the 2015 AMP	S17A service delivery reviews underway – will review the way works packages are put together

2012 Procurement Strategy (Roading)		Are we Achieving?	Comment / Recommendation
Specific Procurement Objectives	How we Achieve these Objectives		
Incorporating asset management drivers into maintenance contracts, to bring asset management closer to operations.	Area engineers taking more active role in managing risk and leading maintenance activities	Yes	Has been achieved more through the provision of condition assessment programmes under the 2015 LTP. Allows more effective renewals and remedial works planning
Flexibility to 'fast-track' some work through direct appointment	Works under $100,000 can in some circumstances be negotiated with an approved supplier. Works between $100,000 to $200,000 may be procured through invited prices (minimum of three).	Yes	Document such decisions as part of procurement procedure.
Explore new initiatives to identify areas for adding value	Initiate a trial system with a robust evaluation structure and review period e.g. Metal attrition study	Yes	Trials, in particular for unsealed roads, is an ongoing activity
Flexibility to meet unique or specific needs of isolated areas which do not fit conventional contract models	Identify specific areas which fall below agreed LOS, or are uniquely costly to deliver, and propose remedy e.g. local 'roadman' contracts	Roadman Contract in place for Kinikini Road	Consider further areas following the successful implementation of this initial contract

4.2.2 NZTA Procurement Manual - Chapter 4 Requirements

The table below outlines some of the key requirements for a Procurement Strategy as given in the NZTA Procurement Manual and whether Council is addressing all those required areas.

Section of NZTA Procurement Manual		Comment
Encouraging Improvement	*The strategy should describe how procurement procedures can provide incentives for the approved organisation and its suppliers to continually innovate and work to improve people, practices, goods and services.*	Performance addressed but not specifically towards incentives
Creating Certainty through Clear Communication	*An approved organisation will use its procurement strategy to document its procurement objectives and how it intends to achieve them*	Included
Identifying and managing risks	*A procurement strategy describes the particular risks an approved organisation faces with regard to procurement. ..... each approved organisation can plan ahead to avoid and manage all risks*	Areas of risk very generally addressed throughout the Strategy. Risk in relation to procurement not specifically addressed
Introduction	*The NZTA strongly recommends that a strategy for the procurement of activities funded under s20 of the LTMA be aligned with an approved organisation's business-wide procurement strategy*	WDC Procurement Strategy addresses only the roading activity – no consideration of other activities
Business Wide Procurement	*A business-wide procurement strategy will raise the profile of procurement practice in an approved organisation. It should be documented and it should cover all purchasing that is undertaken*	No business-wide Procurement strategy in place

Section of NZTA Procurement Manual		Comment
	The procurement strategy should be aimed at those who are responsible for budgets, operations and service delivery	Useable by WDC staff To be endorsed by Council
Transport Sector Procurement	*Approved organisations must meet the requirements under s25 of the LTMA*	2012 Procurement Strategy endorsed by NZTA.
Introduction	*Approved organisations should outline their procurement programme (ie what they intend to purchase and when) for the next three to five years, and indicate the category of delivery model that they intend to use for the groups of activities within the programme*	Included under Part C: Planned Procurement Programme – includes approx. annual expenditure and firm of service delivery.
	An approved organisation's procurement strategy should be dynamic and updated at least every three years to ensure alignment with the NZTA's activity funding cycle	No review of Strategy since adopted in 2012
	….. *the areas that should be considered include:* ▪ *What is being purchased and why?* ▪ *What is the extent of competition in the market?* ▪ *What is the capacity and capability of the market to deliver the outputs?* ▪ *What is the capacity and capability of the approved organisation to manage the procurement activity?* ▪ *How is it to be purchased, including the selection of a procurement procedure and its components (ie delivery model and supplier selection method)?*	All areas generally covered Selection of procurement procedures should be outlined and endorsed by Council
Step 1 – Document the Policy Context	The procurement strategy must detail how the approved organisation will monitor the outcome of the value for money initiatives …….	▪ How objectives can be achieved is included. ▪ Monitoring of this not specifically addressed but reference made to annual NZTA audits, PACE evaluation of service providers and Council's annual reporting process.
Step 2 – Document the Procurement Programme	Procurement programme for the next 3 yrs Capital and operational works '….. *the approved organisation must plan its upcoming procurement programme. Understanding the volume, nature and timing of the goods and services it is likely to require enables effective long-term planning of its procurement strategy'*	▪ Procurement Strategy gives an approx Annual Expenditure but does not spilt into separate years – typically constant across years. ▪ How works are programmed could be expanded – as a minimum with reference to AMP which outlines this
Step 3 - Document the approved organisation's understanding of the procurement environment	Including ▪ Supplier market ▪ Supplier relationships and spends ▪ Supplier market / procurement programmes for other organisations	Strategy currently outlines the supplier market and relationships in terms of how works procured No discussion on other programmes in the area – area for further discussion

Section of NZTA Procurement Manual		Comment
Step 4 - Develop an approach to delivering the work programme	Including ▪ specific long-term objectives in relation to each segment of its work ▪ indicative delivery models and supplier selection methods ▪ contract management	▪ All areas outlined ▪ AMP reference would provide more detail
Step 5 - Implement the procurement strategy	Including ▪ organisation's capability and capacity to deliver ▪ internal procurement processes (tender procedures) ▪ performance monitoring and measurement ▪ Comms strategy	▪ All areas outlined briefly ▪ Need to expand tender procedures (Manual?) and monitoring / measures of achievement

Attachment 1 includes a checklist of suggested contents for the Procurement Strategy provided in Appendix 1 of the NZTA Procurement Manual.

4.3 TENDER EVALUATION REVIEW

Brian Smith Advisory Services undertook an 'Independent Review of the Procurement Process for WDC's 2015/16 Sealed Road Maintenance Contract' in February 2016 to ensure that Council was following appropriate procedures.

In conclusion, the review found that:

'..... the tender process for Wairoa District Council's 2015/16 Sealed Road maintenance contract;

- *Has been conducted appropriately and in accordance with NZTA procedures*
- *Used an appropriate method of evaluation (lowest price conforming)*
- *Was conducted without bias or favouritism'*

However, a number of recommendations and 'lessons to be learnt' were also suggested as part of the review, in particular:

- *'There needs to be a better check of tender documents before they are released to market.*
- *Communication with intending contractors should be enhanced through tenderer briefings*
- *Evaluations should be undertaken by more than one person*
- *A clearer delineation of roles between the evaluation team and the Engineering Manager*
- *Preparation of Conflict of Interest declarations*
- *Clarity on the delegations to approve contracts'*

It is therefore recommended that the internal tender evaluation process be documented as 'Procedures' to ensure consistency in evaluation, openness fairness and transparency.

As previously noted, Council typically uses the procedures outlined in the NZTA Procurement Manual for the evaluation of tenders.

The review also noted a report issued by the Auditor General in 2015 with regard to Council Controlled Organisations. This is applicable to Wairoa with Quality Roading and Services (Wairoa) Ltd being a

Council Controlled Trading Organisation and having interest in infrastructure works. The report *'Governance and Accountability of Council Controlled Organisations'* (www.oag.govt.nz) states;

> *'The local authority's procurement policy should cover contracting with CCOs and how it fits in with the local authority's overall policy and strategy. In some instances local authorities might have strategic reasons for giving their CCOs work, such as ensuring their financial viability. However controversy can arise if it appears that the local authority favours its CCO by awarding contracts to them or subsidising their operations'*

This should be addressed as part of a Procurement Strategy review, in particular determination of the Supplier Selection Method.

5 GENERAL FINDINGS & CONCLUSIONS

5.1 GENERAL

Council's' 2012 Procurement Strategy has been reviewed to determine the need for its updating.

The 2012 Strategy was endorsed by NZTA and adopted by Council.

A review has not been undertaken to date although the NZTA Procurement Manual recommends it be reviewed at least every three (3) years to ensure currency, particularly in line with funding.

The current Procurement Strategy only considers the Roading Activity and the need, or benefits, for inclusion of other engineering activities has been assessed.

5.2 ROADING ACTIVITY

Section 4 of this report confirms that the 2012 Procurement Strategy is generally in line with the requirements of Chapter 4 of the NZTA Manual 'Strategic Approach to Procurement'. However, there are areas that require updating and areas that could be expanded upon to better promote procurement efficiency. These areas include:

- Monitoring of the achievement of objectives
- Inclusion of procurement procedures for tendering

5.3 OTHER ENGINEERING ACTIVITIES

The NZTA Manual also endorses the benefits of developing and implementing a Business-Wide Procurement Strategy, of which the Roading Activity would form part.

It is logical that the Engineering Department have in place a Procurement Strategy for all activities at a level of detail suitable for each of those activities.

A single Procurement Strategy for the Engineering Department with specifics for each activity, in particular roading, is considered appropriate at this stage.

5.4 PROCUREMENT PROCEDURES

Following the independent audit of the procurement process for a roading contract earlier this year, we can confirm that appropriate procedures are being followed.

However, improvements can be made, particularly in the documentation of those procedures. This can be generic to all activities within the Engineering Department.

A documented 'Internal Procurement Procedures Manual' that is clear and concise will ensure an open, fair and transparent process and will enable Council staff to efficiently implement contract procurement including evaluation of tenders.

In support of these internal procedures, the Procurement Strategy should outline how the supplier selection method is to be determined for greater clarity and certainty. This is especially important for an organisation such as Council where there is a CCTO with interest in undertaking infrastructure works.

6 RECOMMENDATIONS

Further to a general overview of the 2012 Procurement Strategy with reference to the NZTA Procurement Manual and the independent audit results of a procurement process earlier this year, the following recommendations are made:

- That the Procurement Strategy be updated in relation to the Roading Activity
- That the Procurement Strategy be expanded to provide for all engineering activities
- That the process for determination of the Supplier Selection Method be documented for all engineering activities
- That an 'Internal Procurement Procedures Manual' be developed to outline the process to be followed in engaging services

The table in Attachment 2 outlines the consequent recommended actions for updating Wairoa District Council's Procurement Strategy as a whole-of-Engineering Department document, taking into account the comments made throughout this report.

Attachment 1

NZTA Procurement Manual – Procurement Strategy Checklist

NZTA Procurement Manual – Procurement Strategy Checklist

Procurement Strategy Checklist - Sections	WDC 2012 Procurement Strategy Compliance	Recommendation
1. Executive summary		
1.1 Summary statements of key issues and opportunities to obtain value for money. *1.2 Recommendations (where relevant) for Transport Agency endorsements* *1.3 Evidence of corporate ownership or internal endorsement of the procurement strategy*	Not included	Exec Summary to be included in updated Strategy
2. Policy context of the approved organisation		
2.1 Strategic objectives and outcomes. *2.2 Objectives and outcomes for the procurement strategy.* *2.3 The Transport Agency's procurement requirements and what they mean for the approved organisation:* • *value for money* • *competitive and efficient markets* • *fair competition among suppliers.* *2.4 Other relevant factors, such as organisational policies, wider organisational procurement plans or the regulatory environment.*	2.1 to 2.3 generally covered 2.4 to be expanded	Expand Strategy to include all engineering activities and to ensure all required parts are covered (2.1 – 2.4)
3. Procurement programme		
3.1 Procurement programme, segmented by: • *size, type or duration* • *complexity, scale, timing, innovation potential, risk and an assessment of the supplier market* • *need **for specialised skills.*** *3.2 Identification (where relevant) of any pending high-risk or unusual procurement activities*	Generally covered Need to consider 3.2	Expand to include all engineering activities and also to address 3.2 as appropriate
4. Procurement environment		
4.1 Analysis of supplier market. *4.2 Analysis of the approved organisation's current procurement spend and profile.* *4.3 Analysis of the impact of the procurement programmes of other approved organisations and other entities.*	4.1 and 4.2 generally covered 4.3 not addressed	Expand to include all engineering activities and also to address 4.3
5. Approach to delivering the work programme		
5.1 Confirmation of specific strategic objectives. *5.2 The procurement approach. For each segment of the work programme, the procurement strategy should identify the optimal procurement options as they relate to the strategic objectives. Consider:* • *key attributes and value for money strategy* • *the nature of the activities for each segment of work (eg complexity, scale, timing, innovation potential, risk and an assessment of the supplier market)* • *aggregation, bundling and the term of term service contracts* • *proposed delivery model(s) and supplier selection method(s)*	Specific procurement objectives for roading and how these can be achieved is included Procurement Approach addressed but not in detail No consideration of advanced procurement	General expansion of this section, also providing for other engineering activities Should include determination of supplier selection method Roading to be addressed separately to other activities due to NZTA funding

Procurement Strategy Checklist - Sections	WDC 2012 Procurement Strategy Compliance	Recommendation
• *impact of the preferred approach on value for money, fair competition, and competitive and efficient markets* • *risk identification and management* • *approach to contract management.* *5.3 Analysis of whether advanced components, customised procurement procedures or variations to procurement rules are required and why*		
6. Implementation		
6.1 Capability and capacity: • *description of the current and desired state, including current structure, and roles and responsibilities within the wider organisational structure* • *identification of any capability or capacity gaps* • *plan to fill the gaps.* *6.2 Internal procurement processes.* *6.3 Performance measurement and monitoring:* • *Transport Agency KPIs* • *additional KPIs* • *internal reporting, review and feedback process* *6.4 Communication plan:* • *internal stakeholders* • *other approved organisations and entities* • *supplier market* • *the Transport Agency.* *6.5 Implementation plan.* *6.6 Corporate ownership and internal endorsement*	6.1 – included but limited 6.2 – internal procurement processes not included other than identifying the types of contract and method of procurement – should reference appropriate documented procedures including how selection method determined 6.3 – Performance discussed briefly 6.4 – Communication Plan included although no consideration of the community / ratepayers as stakeholders 6.5 – Implementation Plan – addressed through other sections 6.6 – need formal endorsement within the Strategy	General expansion of this section, also providing for other engineering activities

Attachment 2

Recommended Procurement Strategy Update Actions

Recommended Procurement Strategy Update Actions

Current Section of 2012 Procurement Strategy Summary of Content	Comment	Recommended Update / Review
PART A: Context		
A1. Legislative Context Procurement Strategy is required by NZTA as part of meeting requirements of Section 25 of Land Transport Management Act 2003 (amended 2008).	Roading Focus only	Confirm any other relevant legislation
A2. Regulatory Context LTMA Section 25 requirements Procurement strategy designed to link WDC strategic goals and objectives with the procurement context of the LTMA, specifically value for money, fairness, competition and efficiency	Roading Focus only	▪ Include other relevant Central Government requirements such as 'Government Rules of Outsourcing – 2015'. ▪ Ensure compliance with other Council Policy etc in particular the LTP
Table of Strategic Goals & Objectives ▪ Community Outcomes ▪ How the Roading Activity Contributes ▪ Principal Objectives for Roading Activity	▪ Roading Focus only ▪ Community Outcomes are still relevant but have ben changes to levels of service etc	▪ Expand to include all engineering activities and update as appropriate (in particular, reference to 2015 LTP and AMPs) ▪ Ensure 'value for money' type objectives in place
Table of Procurement Objectives ▪ Specific Procurement Objectives ▪ How we Achieve these Objectives	▪ Objectives specific to Roading activity ▪ Taken from LTP (draft 2012)	▪ Expand to all engineering activities ▪ Update with reference to 2015 LTP ▪ Include additional column on how we can measure achievement ▪ Have we been achieving to date?
PART B: Procurement Environment		
B1. Physical Environment Geographic nature of the District – remoteness etc	▪ Generic ▪ Applies to all activities	General review for currency required
B2. Market Environment General outline description of: ▪ Physical Works Providers ▪ Professional Services providers ▪ Other Providers	▪ Generic ▪ Applies to all activities	▪ General review for currency required ▪ Include discussion on other supplier markets that may affect Wairoa eg neighbouring state highway contracts
B3. Supplier Relationships	▪ Generic discussion ▪ Benefits of pre-qual process outlined	General review for currency required

Current Section of 2012 Procurement Strategy Summary of Content	Comment	Recommended Update / Review
PART C: Planned Procurement Programme		▪ Include, possibly as an Appendix or a separate document, Procurement Procedures (tender evaluation procedures) applicable to all engineering activities ▪ Internal Procurement Procedures should include documenting how the supplier selection method has been determined ▪ Separate sections for separate activities as appropriate, in particular Roading would be included as a stand-alone section ▪ Risks specific to procurement to be addressed in more detail with reference as applicable to AMPs
C1. General Maintenance and Operations ***C2. Site Specific Trial Solutions*** ***C3. Surfacing Renewals*** ***C4. Pavement Renewals*** ***C5. Structures Maintenance and Renewals*** ***C6. Associated Improvements*** ***C7. Professional Services*** ***C8. Flood Damage Repairs***	Specific to roading contracts only. Each subsection includes: ▪ General approach and/or outline of contracts ▪ Approx annual expenditure ▪ Forms of contract ▪ Service provider selection method	▪ All engineering activities to be addressed. ▪ Roading to be addressed as a stand-alone section ▪ Other activities to be addressed either as stand-alone sections or grouped as appropriate / agreed (eg core & non-core activities / activities with similar maintenance tasks such as mowing) ▪ Funding sources to be identified ▪ More detail on programme development with reference to AMPs as appropriate / Identify any significant projects for next three years Identify any significant projects for next three years ▪ Show variation in scale of works ▪ Planned significant procurement programmes over next 3 years and any potential associated procurement issues / risks
PART D: Management and Implementation		
D1. Approach to Contract Management ▪ NZS 3910 ▪ Collaborative approach favoured	▪ Briefly covered ▪ Generic across all activities	▪ General review and expansion ▪ Better link to delivery of works programmes ▪ Recognise different scale of works across activities

Current Section of 2012 Procurement Strategy Summary of Content	Comment	Recommended Update / Review
D2. Communication Strategy Outline of communication methods with ▪ Councillors ▪ Staff ▪ Other stakeholders	▪ On the whole, generic across all activities	▪ Review and expand ▪ Communication with supplier market ▪ Communication with users / ratepayers (such as LTP) ▪ Specific requirements / reporting to be outlined eg NZTA
D3. Performance Management & Success Measures ▪ NZTA audits ▪ PACE methods for contractors ▪ Reporting against measure in LTP and Annual Plan	Does not include how success in achieving procurement objectives will be measured	▪ Legal / regulatory monitoring eg roading / water / wastewater ▪ How are objectives / achievements measured? ▪ How is non-performance addressed? ▪ How can performance be incentivised for staff and suppliers to continually innovate and work to improve people, practices, goods and services
D4. Capability Brief outline of employment protocols for Council staff	▪ Generally in-house ▪ Employment of suitably qualified staff ▪ Use consultants where more specialised skills required.	▪ Organisation / Engineering Dept structure and roles / responsibilities (will link to contract management). ▪ Links to procurement processes

8.7 INSURANCE TERMS 2017-18

Author: Gary Borg, Chief Financial Officer

Authoriser: Fergus Power, Chief Executive Officer

Appendices:
1. **Report to Finance, Audit & Risk Committee** ⇩
2. **Insurance Terms Report 2017** ⇩
3. **Forestry Insurance Terms 2017** ⇩

1. PURPOSE

1.1 The purpose of this report is to seek Council's approval of insurance terms for the year ending 30 June 2018

RECOMMENDATION

The Chief Financial Officer RECOMMENDS that Council approves the terms attached as Appendices 2 & 3 and the associated expenditure of $283,087.37 for insurance premiums for the year ending 30 June 2018.

EXECUTIVE SUMMARY

[Type here]

2. BACKGROUND

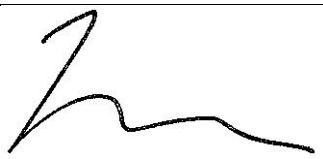
2.1 This matter is referred to Council because the financial commitment proposed exceeds officer delegation.

2.2 The recommendation was endorsed by the Finance, Audit and Risk Committee at its meeting of 04 July 2017, on the proviso that extended options relating to breaches of the Resource Management Act within Statutory Liability Insurance continue to be explored.

2.3 All other elements, including options, are as described in the report to the Committee, attached as Appendix 1.

2.4 The full renewal reports from Council's brokers are attached as Appendices 2 and 3.

Signatories

	
Author Gary Borg	Approved by Fergus Power

8.2 INSURANCE 2017-18

Author: **Gary Borg, Chief Financial Officer**

Authoriser: **Fergus Power, Chief Executive Officer**

Appendices:
1. **Insurance Terms 2017-18**
2. **Forestry Terms 2017-18**

1. PURPOSE

1.1 The purpose of this report is to seek the Committee's endorsement of insurance terms for the year ending 30 June 2018.

RECOMMENDATION

The Chief Financial Officer RECOMMENDS that the Committee recommends to Council the approval of insurance terms attached as Appendices.

EXECUTIVE SUMMARY

2. BACKGROUND

2.1 Insurance as a risk management option is included in the Committee's terms of reference. This report considers all insurances except that for underground infrastructure, public liability and professional indemnity. These were separately considered by the Committee at previous meetings.

2.2 Council annually reviews its insurance terms. Officers from each of the five Hawke's Bay councils conducted a combined review of terms proposed for the year.

2.3 At its meeting on 23 May 2017 the Committee approved a proposal to obtain professional indemnity and public liability insurance through Council's broker, following the exit from that market by Civic Financial Services.

2.4 Council, in collaboration with the four other Hawke's Bay local authorities, undertook a review of its insurances between February 2017 and June 2017.

2.5 Provisional terms received from the incumbent insurer in June 2017 were considered uncompetitive, notwithstanding the acknowledged hardening of the market for the sector following the impact of the North Canterbury earthquake in November 2016. In particular the proposed premium for material damage insurance was quoted at $40,000 higher (20%) than the previous year.

2.6 Consequently Council's broker was instructed to seek terms from alternative providers.

3. CURRENT SITUATION

3.1 Alternative terms are attached as Appendices 1 & 2.

4. OPTIONS

4.1 The options identified are:

a. Do not advocate reinsurance;

b. Endorse the terms presented; or

c. Propose alternative levels of cover.

4.2 Under option (a) Council's risk protection would be severely compromised. Council insures $83 million of assets under its material damage policy and is exposed to myriad risks by virtue of the regulatory and legislative environment in which it operates, and the diverse range of channels through which the community depends and relies on Council's activities and expertise. The cost of the premiums would be avoided.

4.3 Under option (b) Council's assets and critical operations would continue to be insured at the levels described, adjusted for updated asset schedules, claims experience and current risk assessment.

4.4 Under option (c) Council would have the opportunity to add, exclude and adjust what events and assets are insured, and to what extent. However, much of this work was undertaken at the beginning of the review period, and since Council's risk profile has not materially changed there would be little value in re-traversing this.

4.5 The preferred option is Option (b) *endorse the terms presented*. This meets the purpose of local government as it will help meet the current and future needs of communities for good-quality infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.

5. CORPORATE CONSIDERATIONS

What is the change?

5.1 This report recommends status quo. A variation may have implications for the management and mitigation of Council's risks.

What are the key benefits?

5.2 The key benefit is the mitigation of material financial risks, through loss or liability.

What is the cost?

5.3 The total cost is $282,675.65, representing an increase of 11% on the amount for 2016/17.

5.4 The like for like change is 13%, mitigated by the centralisation of rural fire costs.

5.5 There is an additional premium of $411.72 to insure Council's forestry assets.

Who has been consulted?

5.6 Since this report recommends status quo no consultation has been undertaken.

5.7 Should a different option be preferred that would materially impact on Council's risk profile, consultation may be appropriate.

Service delivery review

5.8 This matter does not directly affect service delivery.

Maori Standing Committee

5.9 This matter relates to all of Council's assets and operations, but is administrative and does not require referral to the Maori Standing Committee.

6. SIGNIFICANCE

6.1 The renewal of insurance is administrative and is assessed as being of low significance.

7. RISK MANAGEMENT

7.1 The strategic risks (e.g. publicity/public perception, adverse effect on community, timeframes, health and safety, financial/security of funding, political, legal – refer to S10 and S11A of LGA 2002, others) identified in the implementation of the recommendations made are as follows:

a. Insurance is utilised to mitigate significant financial risks.

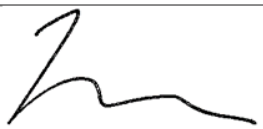
Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,

b. is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories

	
Author Gary Borg	Approved by Fergus Power

INSURANCE TERMS REPORT 2017

HAWKES BAY COUNCILS

TABLE OF CONTENTS

INTRODUCTION

IMPORTANT INFORMATION:

Set out in this report is a summary of terms we have received form insurers regarding the groups various insurance arrangements for the period 01 July 2017 to 01 July 2018.

The Duty of Disclosure

A reminder that you continue to have a duty to disclose to the Insurer everything you know, or can reasonably be expected to know, that is relevant to the Insurer's decision on the acceptability of the risk of insurance and the terms the Insurer would require in accepting that risk. These are 'Material Facts'.

This Duty of Disclosure continues though-out the term of the policy and at renewal. You must advise of any new information or changes (Material Changes).

Where there is the slightest doubt whether any information is relevant, the best policy is declare it, or contact Jardine Lloyd Thompson for guidance. If you fail to meet your duty of disclosure or are in breach of any of the policy conditions of warranty, the consequences can be serious. Policies may become null and void and unenforceable.

Renewal Terms & Placement Instruction

Overleaf we set out renewal terms & alternative quotations that we have received from insurers for the 2017 policy period. The report also includes a policy outline based on the expiring Insurance Programme.

We require you to confirm your placement instructions prior to the renewal date in order to allow us sufficient time to place your cover with insurers accordingly.

Credit Terms

Our credit terms are strictly full payment of invoiced premiums to be paid no later than 30 days after policy inception or renewal date.

Advice Caveat

Any advice or recommendations contained in this report have been made in our capacity as your Insurance Advisor and is restricted to insurance matters only. Any liability in respect of legal issues is specifically disclaimed and should be referred to your Legal Advisors.

Limitation of Our Liability

For the purposes of this clause;

i. "we" shall mean Jardine Lloyd Thompson Limited and any other company in the JLT Group.

ii. "Services" means, any and all services provided to you or your affiliates by us or any of our affiliates under this document and includes any additional services and any amendments or variations to those services whether expressly or impliedly agreed;

To the extent permitted by applicable laws, regulations or rules:

1. any liability we may incur to you arising out of or in connection with the Services that we provide, whether in contract, tort (including but not limited to negligence), under the law of trusts or otherwise shall be limited;
   i. to reflect only that part of any loss or damage to you which we caused, taking into account any contribution which other people may also have had in causing that loss or damage; and in any event;
   ii. in aggregate to a maximum of NZD 100 million, or other amount specifically agreed by us in writing.
2. we will not be liable to you for any indirect or consequential loss (including but not limited to loss of goodwill, loss of business, loss of profit or loss of savings) arising out of or in connection with our Services;
3. notwithstanding the above, no limit of liability shall apply in the case of death or personal injury caused by our negligence, or in respect of any loss caused by our fraud; and
4. you agree that, given the level of our remuneration for the Services we provide to you and the level of risk accepted by us, it is fair and reasonable for us to limit our liability in accordance with these provisions.

JLT NZ Remuneration

Our remuneration in acting as your insurance consultants and advisors is by either:-

(a) Commission or Brokerage paid by the Insurer, or;

(b) A Broker Fee as agreed between us. Where you require JLTNZ to arrange additional policies during the forthcoming year or to provide additional services not previous previously agreed, JLTNZ reserve the right to either:-

   i. accept brokerage from the Insurer for those additional services, or;

   ii. negotiate an additional fee with you.

In some cases an Administration Fee may be charged when a Policy is finalised, this will appear separately on the Tax Invoice.

JLT NZ reserves the right to retain our full remuneration where a policy is cancelled or amended during its period of insurance.

From time to time, JLT NZ may also earn income, commissions or interest for the provision of some services to the Insurer. These services could involve: claims processing; portfolio management; or premium payment arrangements as set out in the Insurance Intermediaries Act 1994.

JLT Broking FEE

As previously agreed the premiums quoted are net of and do not include any brokerage. A separate fee is negotiated agreed each year regarding the provision of insurance broking & advisory services related to the policies outlined in this report.

JLT Broking Fee for the Period 01 July 2017 to 01 July 2018: **$85,000.00**

SUMMARY OF TERMS

Summary of Insurers terms & comparison to last year				
	Sum Insured	**2016-17**	**2017-18**	**Insurer**
Material Damage - Commercial				
Central Hawkes Bay DC	$66,485,637	$149,075.15	$171,574.49	QBE &
Hastings District Council	$285,296,513	$536,364.28	$611,790.12	AIG
Hawkes Bay Regional	$38,924,700	$86,001.23	$99,416.24	
Napier City Council	$382,468,450	$824,139.20	$960,385.02	
Wairoa District Council	$82,716,506	$201,359.04	$229,960.40	
	$855,891,806	**$1,796,938.90**	**$2,073,126.26**	
Material Damage - Residential				
Central Hawkes Bay DC	$5,971,000	$15,278.69	$17,101.76	QBE &
Hastings District Council	$29,409,307	$64,224.90	$72,867.62	AIG
Hawkes Bay Regional	$719,700	$1,211.04	$1,317.16	
Napier City Council	$69,092,200	$126,722.34	$145,088.03	
Wairoa District Council	$4,428,200	$11,514.13	$12,503.00	
	$109,620,407	**$218,951.10**	**$248,877.57**	
Business Interruption				
Additional Expenses - Shared	$20,000,000	*$42,000.00*	*$46,080.00*	QBE &
Claims Prep Costs - Shared	$100,000	*$210.00*	*$230.40*	AIG
Central Hawkes Bay DC	$210,000	$2,973.60	$4,081.23	Splits
Hastings District Council	$3,530,000	$20,696.67	$21,783.70	Including
Hawkes Bay Regional		$2,110.50	$2,106.13	Additional
Napier City Council	$12,896,800	$42,015.29	$46,346.25	Expenses
Wairoa District Council		$4,221.00	$4,475.61	& Claims
		$72,017.06	**$78,792.92**	Prep above
Motor Vehicle				
Central Hawkes Bay DC		$7,830.66	$7,708.00	Vero
Hastings District Council		$54,604.43	$53,745.76	
Hawkes Bay Regional		$40,272.85	$40,280.67	
Napier City Council		$65,364.14	$64,340.14	
Wairoa District Council		$14,259.26	$14,441.07	
		$182,747.82	**$180,515.64**	
Alternative Quote			$188,395.64	QBE
Alternative Quote			$244,395.64	Ando

	Sum Insured	2016-17	2017-18	Insurer
Marine Hull				
Hawkes Bay Regional	$171,000	$2,493.37	$2,532.51	Vero
Napier City Council	$79,000	$1,146.29	$1,169.99	Vero
Art & Museum Collections				
Hawkes Bay Museums Trust	$44,451,656	$76,055.78	$89,347.83	Axa Art
Hastings Art Gallery	$1mil	$2,380.00	$2,530.00	Catlin
Standing Timber/Forestry				
Hastings District Council	$432,962	N/A	$917.38	IF
Hawkes Bay Regional	$7,306,407	$10,239.17	$11,263.00	IF
Wairoa District Council	$81,416	$411.72	$411.72	Primacy
Contract Works				
Hawkes Bay Regional	$250,000	$1,500.00	$2,670.00	Vero
Adjustment rate		0.445%	0.445%	
Adjustment for 2016-17		$1,701.34		
Crime (Employee Theft)				
Central Hawkes Bay DC	$1,000,000	$4,500.00	$4,500.00	AIG
Hastings District Council	$1,000,000	$12,750.00	$17,850.00	
Hawkes Bay Regional	$1,000,000	$8,250.00	$8,450.00	
Napier City Council	$1,000,000	$16,650.00	$17,025.00	
Wairoa District Council	$500,000	$4,500.00	$4,500.00	
Personal Accident				
Hastings District Council	Various	$1,238.32	$1,516.94	AIG
Hawkes Bay Regional	Various	$3,388.61	$7,718.26	
Wairoa District Council	Various	$1,197.31	$1,197.31	
Business Travel				
Central Hawkes Bay DC	Various	$65.00	$71.50	Chubb
Hastings District Council	Various	$280.00	$509.14	
Hawkes Bay Regional	Various	$280.00	$200.02	
Napier City Council	Various	$250.00	$181.84	
Wairoa District Council	Various	$65.00	$71.50	
		$940.00	**$1,034.00**	

	Limit of Indemnity	2016-17	2017-18	Insurer
Public Liability				
Central Hawkes Bay DC	$300,000,000	$13,555.00	$13,555.00	London
Hastings District Council	$300,000,000	$37,954.00	$37,954.00	Markets
Hawkes Bay Regional	$300,000,000	$23,857.00	$23,857.00	
Napier City Council	$300,000,000	$36,327.00	$36,327.00	
Wairoa District Council	$300,000,000	N/A	Quoted	
Professional Indemnity				
Central Hawkes Bay DC	$300,000,000	Inc in above	Inc in above	London
Hastings District Council	$300,000,000	Inc in above	Inc in above	Markets
Hawkes Bay Regional	$300,000,000	Inc in above	Inc in above	
Napier City Council	$300,000,000	Inc in above	Inc in above	
Wairoa District Council	$300,000,000	N/A	Quoted	
Harbourmasters Liability & Wreck Removal				
Hawkes Bay Regional	$25,000,000	Inc in above	Inc in above	as above
Excess Layer	$75,000,000	$64,125.00	*$60,918.75*	Munich Re
Statutory Liability				
Central Hawkes Bay DC	$2,000,000	$2,639.87	$5,272.99	Vero L
Hastings District Council	$2,000,000	$8,916.06	$21,279.60	
Hawkes Bay Regional	$2,000,000	$3,959.81	$9,176.13	
Napier City Council	$2,000,000	$8,509.42	$18,277.19	
Wairoa District Council	$2,000,000	$2,374.84	$4,794.09	
		$26,400.00	**$58,800.00**	
Employers Liability				
Central Hawkes Bay DC	$1,000,000	$350.00	$566.88	Vero L
Hastings District Council	$1,000,000	$1,930.00	$3,689.36	
Hawkes Bay Regional	$1,000,000	$935.00	$1,672.76	
Napier City Council	$1,000,000	$2,400.00	$5,297.06	
Wairoa District Council	$1,000,000	$230.00	$473.95	
		$5,845.00	**$11,700.00**	
Defence Costs (SL & EL)				
Hawkes Bay Regional		$1,150.00	$2,300.00	Vero L

	Limit of Indemnity	2016-17	2017-18	Insurer
Hall Hirers Public Liability				
Central Hawkes Bay DC	$1,000,000		$500.00	Vero L
Napier City Council	$5,000,000	$5,750.00	$5,750.00	
Wairoa District Council	$1,000,000	$250.00	$250.00	
Forest & Rural Fire Costs				
Hastings District Council	$250,000	$9,565.00	N/A	AIG
Wairoa District Council	$250,000	$4,590.00	N/A	
Airport Owners & Operators Liability				
Wairoa District Council	$10,000,000	$775.00	$775.00	AIG
				Singapoure
Trustees Liability				
Hawkes Bay Museums Trust	$5,000.00	$2,575.00	$2,575.00	Vero L

JLT Insurance Broking & Service Fee

		2016-17	2017-18	
Central Hawkes Bay DC		$8,822.00	$8,822.00	
Hastings District Council		$20,216.00	$20,216.00	
Hawkes Bay Regional		$12,405.00	$12,405.00	
Napier City Council		$34,735.00	$34,735.00	
Wairoa District Council		$8,822.00	$8,822.00	
		$85,000.00	**$85,000.00**	

CURRENT INSURANCE POLICIES

Material Damage – Commercial

Sum Insured (as per 'Schedule of Insured Property)	
Central Hawkes Bay District Council	$66,485,637
Hastings District Council	$285,296,513
Hawkes Bay Regional Council	$38,924,700
Napier City Council	$382,468,450
Wairoa District Council	$82,716,506
Sub-Limits	
Capital Additions	$2,000,000
Contamination Costs (P-Lab's)	$50,000
Contract Works	$2,000,000
Hazardous Substance Emergency	$100,000
Landslip/Subsidence (Combined MD/BI Limit)	$2,000,000
Mechanical Breakdown	$25,000
Money (Section B – $10,000)	$250,000
Protection Costs	$500,000
Transit	$500,000
Works of Art	$250,000
Policy Deductibles	
Natural Disaster/Earthquake	Combined for all MD/BI losses
- Buildings pre 1936	10% of Site Value, minimum $10,000
- CHB, Napier & Wairoa Councils	2.5% of Site Value, minimum $5,000
- All other Councils	5% of Site Value, minimum $5,000
Landslip/ Subsidence	$50,000
All other claims;	
Central Hawkes Bay District Council & Wairoa District Council	$5,000
Hastings District Council, Hawkes Bay Regional Council & Napier City Council	$10,000

Insurer terms

Insurer:	QBE Insurance (Australia) Limited
Premium:	**$2,072,372.79** (ex GST) including Fire Service Levies
2016-17 Premium:	$1,796,938.90 based on current Sum Insured
	- $1,711,326.31 actual based on $814,414,060 Sum Insured
	- Fire Service Levy $407,791.23 ($294,659.06 last year)
Terms & Conditions:	JLT agreed 2016 Material Damage wording, and expiring endorsements
Subjectivities:	Terms Valid to 01 July 2017

Material Damage – Residential

Sum Insured – Residential (as per 'Schedule of Insured Property)	
Central Hawkes Bay District Council	$5,971,000
Hastings District Council	$29,409,307
Hawkes Bay Regional Council	$719,700
Napier City Council	$69,092,200
Wairoa District Council	$4,428,200

Sub-Limits	
Capital Additions	$2,000,000
Contamination Costs (P-Lab's)	$50,000
Contract Works	$2,000,000
Hazardous Substance Emergency	$100,000
Landslip/Subsidence (Combined MD/BI Limit)	$2,000,000
Mechanical Breakdown	$25,000
Money (Section B – $10,000)	$250,000
Protection Costs	$500,000
Stolen Keys	$30,000
Transit	$500,000
Works of Art	$250,000

Policy Deductibles	
Natural Disaster/Earthquake	Combined for all MD/BI losses, less EQC excess
- Buildings pre 1936	10% of Site Value, minimum $10,000
- CHB, Napier & Wairoa Councils	2.5% of Site Value, minimum $5,000
- All other Councils	5% of Site Value, minimum $5,000
Landslip/ Subsidence	$50,000
All other claims;	
Central Hawkes Bay District Council & Wairoa District Council	$5,000
Hastings District Council, Hawkes Bay Regional Council & Napier City Council	$10,000

Insurer terms

Insurer:	QBE Insurance (Australia) Limited
Premium:	**$248,877.57** (ex GST) including EQC & Fire Service Levies
2016-17 Premium:	$218,910.54 based on current Sum Insured
	- $216,543.15 based on $101,011,300 Sum Insured
	- Fire Service Levy $73,245.47 ($52,877.46 last year)
Terms & Conditions:	JLT agreed 2016 Material Damage wording, and expiring endorsements
Subjectivities:	Terms Valid to 01 July 2017

Business Interruption

Sum Insured	
Additional Expenses – Shared Limit	$20,000,000
Claims Preparation Costs – Shared Limit	$100,000
Revenue/Rentals – Central Hawkes Bay District Council	$210,000
Revenue/Rentals – Hastings District Council	$3,530,000
Revenue/Rentals – Hawkes Bay Regional Council	$0
Revenue/Rentals – Napier City Council	$12,896,800
Revenue/Rentals – Wairoa District Council	$0
Indemnity Periods	
Additional Expenses	36 months
Revenue/Rentals	Various as individually declared
Extension Sub-limits	
Acts of Civil Authorities	10%
Compulsory Closure	10%
Dependency	10%
Entanglement	10%
Fumes Gases & Toxic Chemicals	10%
Deductibles	
Extensions – Natural Disaster	14 days
Extensions – Non-natural Disaster	
Acts of Civil Authorities	24 hours
Compulsory Closure	24 hours
Dependency	24 hours
- Damage to Airports, Ports & Rail	7 days
Entanglement	24 hours
Fumes Gases & Toxic Chemicals	24 hours
Extensions – All	maximum limit $1,000,000

Insurer terms

Insurer:	QBE Insurance (Australia) Limited
Premium:	**$78,792.92** (ex GST)
2016-17 Premium:	$72,017.06 based on current Sum Insured
Terms & Conditions:	JLT agreed 2016 Business Interruption wording, and expiring endorsements
Subjectivities:	Terms Valid to 01 July 2017

Motor Vehicle

Sum Insured	
Own Damage (Section 1) as per 'Schedule of Insured Vehicles'	Market Value
Limits of Indemnity	
Third Party Damage (Section 2)	$10,000,000
- Airside Liability	$2,000,000
- Exemplary Damages (aggregate limit $1mil)	$500,000
- Vibration/Weight Damage	$500,000
Extensions / Sub-Limits	
Additions & Deletions	$150,000
Claims Preparation Costs	$5,000
Goods in transit, (fire, collision, overturning)	$5,000
Hazardous Substances	$5,000
Keys & Locks (aggregate limit $10,000l)	$2,500
Removal of Debris	$20,000
Rental Vehicles (consequential loss $75,000)	$150,000
Return Home Costs	$5,000
Deductibles	
Own damage (section 1)	$1,000
Exemplary Damages	10% of claim, min $5,000
Vibration and Weight damage	$5,000
Windscreens	$1,000

Insurer terms	
Insurer:	Vero Insurance New Zealand Limited
Premium:	**$172,120.00** (ex GST) plus **$8,395.64** Fire Service levy
	- Currently 697 vehciles with Market Value of $20,203,954
	- Claims have deteriorated to $107,974.27
2016-17 Premium:	$175,000.00 + $7,747.82 FSL based on 884 vehciles & MV $24,186,010
Terms & Conditions:	JLT/Vero agreed Motor Vehicle wording JLT Vero MV (2010)
Subjectivities:	Nil

Marine Hull

Sum Insured – Napier City Council

2012 Mclay 600 Fisherman (inc trailer, motor & fixtures)	$79,000

Protection & Indemnity

Any one loss	$1,000,000

Deductibles

Any one loss	$500

Territory: New Zealand Coastal & Inland waterways

Insurer terms

Insurer:	Vero Insurance New Zealand Limited
Premium:	**$1,169.99** (ex GST) including Fire Service Levies ($83.74)
2016-17 Premium:	$1,146.29 (ex GST) including Fire Service Levies ($60.04)
Terms & Conditions:	Vero Commercial Hull wording 15002799
Subjectivities:	Nil

Sum Insured – Hawkes Bay Regional Council

Weed boat (inc trailer, motor & fixtures)	$80,000
Weed boat (inc trailer, motor & fixtures)	$80,000
Ramco Boat (inc trailer, motor & fixtures)	$11,000

Protection & Indemnity

Any one loss	$1,000,000

Deductibles

Any one loss	$500

Territory: New Zealand Coastal & Inland waterways

Insurer terms

Insurer:	Vero Insurance New Zealand Limited
Premium:	**$2,532.51** (ex GST) including Fire Service Levies ($181.26)
2016-17 Premium:	$2,493.37 (ex GST) including Fire Service Levies ($142.12)
Terms & Conditions:	Vero Commercial Hull wording 15002799
Subjectivities:	Nil

Fine Art & Museum Collections

Sum Insured – Hawkes Bay Museums Trust

Art & Museum Collection	$44,451,656

Extension / Sub-Limits

Whilst at any other location (undeclared limit)	$1,000,000
For Temporary Loans & Inward Exhibitions (undeclared limit)	$3,000,000
Whilst in Transit both Domestic & International (undeclared limit)	$4,000,000

Deductibles

Earthquake	$25,000
Temporary Loans & Inward Exhibitions	$500
All other claims	$2,500

Insurer terms

Insurer:	Axa Art London (100%)
Premium:	**$89,347.83** (ex GST) including Fire Service Levies ($47,118.76) - 5% NDC available upon expiry - $86,180.65 3 year LTA (7.5% premium discount)
2016-17 Premium:	$75,134.02 (ex GST) based on SI $43,498,705 (FSL $33,059.02)
Terms & Conditions:	London Fine Arts Wording
Subjectivities:	Terms valid until 30 June 2017

Sum Insured – Hastings Art Gallery

Art & Museum Collection	Nil

Extension / Sub-Limits

Whilst at any other location (undeclared limit)	Not Insured
For Temporary Loans & Inward Exhibitions (undeclared limit)	$1,000,000
Whilst in Transit both Domestic & International (undeclared limit)	$2,000,000

Deductibles

Earthquake	$25,000
All other claims	Nil

Insurer terms

Insurer:	Catlin Australia
Premium:	**$2,530.00** (ex GST) including Fire Service Levies ($530.00) - Rates: Static .175%, Domestic Transit .0325% & Internation Trabsit .065%
2016-17 Premium:	**$2,380.00** (ex GST) including Fire Service Levies ($380.00) - Adjustment $2,816.05 (FSL $585.01) - Rates as above
Terms & Conditions:	Catlin Fine Arts Wording
Subjectivities:	Terms are valid for 14 days from 16 June 2017

Standing Timber / Forestry

Hastings District Council

Sum Insured	
As per 'Schedule of Insured Trees'	$432,962.01
Extensions / Sub-Limits	
Claims Preparation Costs	$5,000
Earthquake (including landslip)	Not Insured
Fire Fighting Charges & Expenses	$100,000
Hail Strike	$20,000
Harvested Timber	Not Insured
Infrstructure	Not Insured
Landslip (weather)	Not Insured
Re-establishment Costs & Removal of Debris	$60,000
Windstorm	Not Insured
Volcanic Eruption	Not Insured
Deductibles	
Each & every event	$5,000

Insurer terms

Insurer:	Insurance Facilitators (Catlin Australia – 100%)
Premium:	**$917.38** (ex GST)
2016-17 Premium:	$1,610.45 based on Sum Insured $938,951
Terms & Conditions:	Plantation Timber wording 2017-18
Subjectivities:	Quotation valid until expiry 30 June 2017 (4pm) Signed Quote form required

Hawkes Bay Regional

Sum Insured	
As per 'Schedule of Insured Trees'	$7,306,407
Extensions / Sub-Limits	
Claims Preparation Costs	$15,000
Earthquake (including landslip)	Not Insured
Fire Fighting Charges & Expenses	$500,000
Hail Strike	Not Insured
Harvested Timber	Not Insured
Infrstructure	Not Insured
Landslip (weather)	Not Insured
Re-establishment Costs & Removal of Debris	$1,703,413

Windstorm	$250,000
Volcanic Eruption	Not Insured

Deductibles

Each & every event	$5,000

Insurer terms

Insurer:	Insurance Facilitators (Catlin Australia – 100%)
Premium:	**$11,263.00** (ex GST)
2016-17 Premium:	$10,239.17 (ex GST)
Terms & Conditions:	Plantation Timber wording 2017-18
Subjectivities:	Quotation valid until expiry 30 June 2017 (4pm) Signed Quote form required

Wairoa District Council

Sum Insured

As per 'Schedule of Insured Trees'	$81,416

Extensions / Sub-Limits

Claims Preparation Costs	$5,000
Earthquake & EQ Landslip	Not Insured
Fire Fighting Charges & Expenses	$40,708
Hail Strike	$20,000
Replanting Costs	$40,708
Removal of Debris	$2,500
Planation Infrastructure	$2,500
Windstorm	Not Insured
Volcanic Eruption	Not Insured
Weather Landslip	Not Insured

Deductibles

Each & every event	1.5% of sum insured, minimum $2,500

Insurer terms

Insurer:	Primacy Underwriting (Allianz Australia Insurance Ltd – 100%)
Premium:	**$411.72** (ex GST)
2016-17 Premium:	$411.72 (ex GST)
Terms & Conditions:	Plantation Timber wording 2017-18 (summary of changes attached)
Subjectivities:	Quotation valid until expiry 30 June 2017 (4pm) Signed Quote form required

Contract Works

Insured

Hawkes Bay Regional Council & Hastings District Council

Sum Insured

Maximum Contract Price	$250,000
Maximum Contract Period	12 months
Maximum Defects/Maintenance Period	6 months

Extensions / Sub-Limits

Professional Fees & Costs	10%
Demolition, Debris Removal and Other Costs	10%
Principles Existing Structure or Supplied Material/Property	Not Insured
Increased Costs during Construction	10%
Increased Costs during Reconstruction	10%
Protection Costs	$25,000

Deductibles

Natural Disaster/Earthquake	5% of the value of work completed, min $5,000
All other claims	$5,000

Insurer terms

Insurer:	Vero Insurance New Zealand Limited
Premium:	**$2,670.00** (ex GST) excluding Fire Service Levies (which are paid with teh adjustment). Adjustment Rate 0.445%
2016-17 Premium:	$1,500.00 deposit premium, adjustable at rate of .445% - Adjustment due $1,701.34 based on $662,803 turnover
Terms & Conditions:	Vero/JLT agreed Contact Works Annual wording JLT LG CWA 2010
Subjectivities:	Nil

Crime (Employee Theft)

Limit of Indemnity

Any one claim and in the aggregate for all continuous Periods of Insurance;

Central Hawkes Bay District Council	$1,000,000
Hastings District Council	$1,000,000
Hawkes Bay Regional Council	$1,000,000
Napier City Council	$1,000,000
Wairoa District Council	$500,000

Excess/Deductible

Each and every claim	$25,000

Employees Covered All employees of the Insured

Insurer terms

Insurer:	AIG Insurance New Zealand Limited
Premium:	CHB **$4,500.00** (ex GST) - $6,250.00 to increase limit to $2,000,000 HBRC **$8,450.00** (ex GST) - $11,660.00 to increase limit to $2,000,000 HDC **$17,850.00** (ex GST) - TBA to increase limit to $2,000,000 NCC **$17,025.00** (ex GST) - $21,635.00 to increase limit to $2,000,000 WDC **$4,500.00** (ex GST) - $7,600 to increase limit to $1,000,000 - $10,600 to increase limit to $2,000,000
2016-17 Premium:	As per summary
Terms & Conditions:	AIG Gold Complete Insurance policy wording;
Subjectivities:	Quotation valid until expiry 30 June 2017 (4pm)

Personal Accident

Hastings District Council

Insured Persons/Capital Benefit

1.	Mayor (1), Councillors (14)	(was $50k)	$100,000
2.	Chief Executive (1)		$250,000
3.	Executives (8)		$175,000

Scope of Cover

24 hours worldwide

Hawkes Bay Regional Council

Insured Persons/Capital Benefit

1.	Elected Members (9)		$65,000
2.	Maori Members (12)		$65,000
3.	Regional Planning Committee Members (9)		$65,000
4.	All Employees (169)	2x Salary, min $65,000 and max	$350,000

Scope of Cover

Worldwide whilst on the business of the insured including commuting to and from work

Wairoa District Council

Insured Persons/Capital Benefit

1.	Executives (5)	$130,000
2.	All other employees (45)	$50,000

Scope of Cover

1. 24 hours worldwide
2. Worldwide whilst on the business of the insured including commuting to and from work

Deductibles - each and every claim Nil

Aggregate Limits of Liability

Any one Period of Insurance	$2,000,000
Non-scheduled Flights	$1,000,000

Insurer terms

Insurer:	AIG Insurance New Zealand Limited
Premium:	HDC – **$1,516.94** (ex GST)
	HBRC – **$7,718.26** (ex GST)
	WDC – **$1,197.31** (ex GST)
2016-17 Premium:	As per summary
Terms & Conditions:	AIG Group Injury & Sickness Insurance policy wording
Subjectivities:	Quotation valid until expiry 30 June 2017 (4pm)
	Subject to know material changes in risk including claims prior to inception

Business Travel

Travel Benefits

Personal Accident (Children U16, Benefit 1 reduces to $25,000)	$250,000
Kidnap & Ransom	$500,000
Hijack & Detention per day (Max 15 days – Legal Costs $50,000)	$1,000
Medical & Additional Expenses	Unlimited
Loss of Deposits	$30,000
Alternative Employee	$20,000
Baggage, Business Property, Money/Travel Documents	$25,000
Personal Liability	$5,000,000
Rental Vehicles Excess Waiver	$5,000
Search & Rescue (Aggregate Limit $100,000)	$20,000
Political & Natural Disaster Evacuation (Aggregate Limit $100,000)	$20,000

Excess/Deductible

Medical & Additional Expenses, Loss of Deposits, Baggage & Business Property (was $25) $100	
- Except leisure travel	$500
Electronic Equipment	$250

Aggregate Limits of Liability

Any one Period of Insurance	$2,500,000
Non-scheduled Flights	$1,000,000

Insurer terms

Insurer:	Chubb Insurance New Zealand Limited
Premium:	**$1,034.00** (ex GST) Deposit premium based on estimated overseas travel itinerary
	- Adjustable at $5.17 per person, per travel day
2016-17 Premium:	$940.00 (ex GST) adjustable at $4.70 per person, per travel day
Terms & Conditions:	Chubb Corporate Travel Insurance policy wording
Subjectivities:	Quotation valid until expiry 30 June 2017 (4pm)
	Subject to know material changes in risk including claims prior to inception

Public Liability

Limit of Indemnity	
Any one Occurrence and aggregate for Products;	
Central Hawkes Bay District Council	(was $200mil) $300,000,000
Hastings District Council	(was $200mil) $300,000,000
Hawkes Bay Regional Council	(was $200mil) $300,000,000
Napier City Council	(was $200mil) $300,000,000
Wairoa District Council	(was $200mil) $300,000,000
Extension Sub-limits	
Drone (UAV) Liability	Included
Employees Property	$1,000,000
Environmental Impairment Liability (excess $25,000)	$500,000
Forest & Rural Fires Act	$1,000,000
Property in Care Custody or Control	$1,000,000
Wreck Removal (except HBRC which is Nil)	$1,000,000
Service & Repair	$1,000,000
Punitive & Exemplary Damages	$1,000,000
Excess/Deductible	
Per occurrence, cost exclusive	$5,000
Territory & Jurisdiction	New Zealand & Australia

Insurer terms

Insurer:	Various London Markets
Premium:	CHB **$13,555.00** (ex GST)
	HBRC **$23,857.00** (ex GST)
	HDC **$37,954.00** (ex GST)
	NCC **$36,327.00** (ex GST)
2016-17 Premium:	Same as last year
Terms & Conditions:	LG London Public & Professional Indemnity wording
Subjectivities:	Nil

Professional Indemnity

Limit of Indemnity

Any one Occurrence and aggregate for Products;	
Central Hawkes Bay District Council	(was $200mil) $300,000,000
Hastings District Council	(was $200mil) $300,000,000
Hawkes Bay Regional Council	(was $200mil) $300,000,000
Napier City Council	(was $200mil) $300,000,000
Wairoa District Council	$300,000,000

Extension Sub-limits

Waiver of Subrogation Against Employees
Defamation, liable & slander
Fraud & Dishonesty
Loss of Documents
Maritime Functions
Continuity

Excess/Deductible

Per occurrence, cost exclusive	$10,000

Territory & Jurisdiction	New Zealand & Australia

Insurer terms

Insurer:	Various London Markets
Premium:	CHB – **Included in the Public Liability premium above**
	HBRC – **Included in the Public Liability premium above**
	HDC – **Included in the Public Liability premium above**
	NCC – **Included in the Public Liability premium above**
2016-17 Premium:	Same as last year
Terms & Conditions:	LG London Public & Professional Indemnity wording
Subjectivities:	Nil

Harbourmasters Liability & Wreck Removal

Insured

Hawkes Bay Regional Council

Limit of Indemnity

Harbourmasters Liability	
Primary Limit – any one claim and in the aggregate	$25,000,000
Excess Layer – any one claim and in the aggregate in excess of primary	$75,000,000
Wreck Removal Costs - any one claim and in the aggregate	$25,000,000

Excess/Deductible

Harbourmasters Liability	$10,000
Wreck Removal Costs	$25,000

Insurer terms – Primary Layer

Insurer:	Various London Markets
Premium Primary:	**Included in the Public Liability premium above**
2016-17 Premium:	Same as last year
Terms & Conditions:	LG Harbourmasters Liability & Wreck Removal wording
Subjectivities:	Nil

Insurer terms – Excess Layer

Insurer:	Munich Re (Lloyds cyndicate) (100%)
Premium:	**$60,918.75**
2016-17 Premium:	$64,125.00 (inc RWT)
Terms & Conditions:	Following LG Harbourmasters Liability & Wreck Removal wording
Subjectivities:	Terms valid until 01 July 2017 4pm
	Subject to no material change to the risk including claimsor circumstances prior to acceptance of the risk

Statutory Liability

Limit of Indemnity

All Councils - any one claim and in the aggregate, costs inclusive $4,000,000

Excess/Deductible

Each and every claim, costs inclusive $5,000

Territorial Limits New Zealand

Retroactive Date (excluding known claims or circumstance) 15 July 1994

Extensions

Health & Safety in Work Act 2015 (Defence Costs & Reparations)

Insurer terms

Insurer:	Vero Liability Insurance Limited
Premium:	**$58,800.00** (ex GST)
2016 Premium:	$26,400.00 (ex GST)
Wording:	VL Statutory Liability wording VL POL STAT-052016
	- RMA restricted to officers only not cover for the entities/Councils
Subjectivities:	Quotations valid for 30 days from 08 June 2017

Employers Liability

Limit of Indemnity

All Councils - any one claim and in the aggregate, costs inclusive $1,000,000

Excess/Deductible

Each and every claim, costs inclusive $5,000

Territorial Limits New Zealand

Retroactive Date (excluding known claims or circumstance) 15 July 1994

Insurer terms

Insurer:	Vero Liability Insurance Limited
Premium:	**$11,700.00** (ex GST)
2016 Premium:	$5,845.00.00 (ex GST)
Wording:	VL Employers Liability wording VL POL ELC-0903
Subjectivities:	Quotations valid for 30 days from 08 June 2017

Defence Costs

Insureds

Hawkes Bay Regional Council

Limit of Indemnity

Any one claim and in the aggregate, costs inclusive	$500,000

Underlying Policies

Statutory Liability	HO-LST-6105590
Employers Liability	HO-LEL-6105591

Excess/Deductible	**as per Underlying Policy**

Insurer terms

Insurer:	Vero Liability Insurance Limited
Premium:	**$2,300.00** (ex GST)
2016 Premium:	$1,150.00 (ex GST)
Wording:	VL Defence Costs wording VL POL DC-102014
Subjectivities:	Quotations valid for 30 days from 08 June 2017

Hall Hirers Public Liability

Limit of Indemnity

Any one occurrence;	
Napier City Council - Municipal & WMC Centre, Centennial Hall & Aquarium	$5,000,000
Wairoa District Council – all venues	$1,000,000

Extensions/Sub-limits

Goods in Care Custody or Control	$50,000
Forest & Rural Fires Act	$250,000
Punitive & Exemplary Damages (NZ only, retro 23/09/2005)	$1,000,000

Excess/Deductible

Per occurrence, cost exclusive	$500

Territorial Limits	New Zealand

Insurer terms

Insurer:	Vero Liability Insurance Limited
Premium:	**$6,000.00** (ex GST) - $500.00 to add Central Hawkes Bay with $1mil limit
2016 Premium:	$6,000.00 (ex GST)
Wording:	VL Public Liability wording VL POL PL-6105589
Subjectivities:	Quotations valid for 30 days from 08 June 2017

Forest & Rural Firers Costs

Limit of Indemnity

Any one claim and in the aggregate;	
Hastings District Council	$250,000
Wairoa District Council	$250,000

Excess/Deductible

Each and every claim	$5,000

Territorial Limits	New Zealand

Insurer terms

Insurer:	AIG Insurance New Zealand Limited
Premium:	**Responsibility no longer with Councils so cover no longer required**
2016-17 Premium:	HDC - $9,565.00
	WDC - $4,590.00
Terms & Conditions:	N/A
Subjectivities:	N/A

Trustees Liability

Insured
Hawkes Bay Museum Trust

Limit of Indemnity	
Any one claim and in the aggregate	$5,000,000
Extension Sub-limits	
Compensation for Court Attendance $300 per day limited to	$10,000
Official Investigations & Enquiries aggregate limit	$250,000
Excess/Deductible	
Trust Reimbursement, each and every claim cost inclusive	$5,000
Individual Trustees, each and every claim cost inclusive	Nil
Territory/Jurisdiction	New Zealand
Retroactive Date (excluding known claims or circumstance)	22 September 1999

Insurer terms

Insurer:	Vero Liability Insurance Limited
Premium:	**TBA** (ex GST)
2016 Premium:	$2,575.00 (ex GST)
Wording:	VL Trustees Liability wording VL POL TL-0508
Subjectivities:	Terms valid for 30 days from 14 June 2017

Airport Owners & Operators Liability

Insured
Wairoa District Council – Wairoa Airfield

Limits of Indemnity	
Any one occurrence and in the aggregate	$10,000,000
Excess/Deductible	
Property Damage, cost exclusive	$2,500
Territorial Limits	New Zealand

Insurer terms

Insurer:	AIG Asia Pacific Insurance Pte Ltd (Singapore)
Premium:	**$775.00** (Ind NRT)
2016 Premium:	$775.00 (ex GST)
Wording:	AIG Airport Owners & Operators Liability wording
Subjectivities:	Terms valid to 30 June 2017
	Subjuct to no losses prior to inception

INSURER RATINGS

In accordance with the Insurance Companies (Ratings and Inspections) Act 1994 insurers are independently rated for the financial "Claim Paying Ability".

That rating is provided by either Standard & Poor's (Australia) Pty Ltd and/or A M Best Company Inc under the following rating guides:

Standard & Poor's (Australia) Pty Ltd		A M Best Company, Inc	
AAA	Extremely Strong	A++ and A+	Superior
AA	Very Strong	A and A-	Excellent
A	Strong	B++ and B+	Very Good
BBB	Good	B and B-	Adequate
BB	Marginal	C++ and C+	Fair
B	Weak	C and C-	Marginal
CCC	Very Weak	D	Very Vulnerable
CC	Extremely Weak	E	Under Supervision
R	Regulatory Action	F	In Liquidation

(+ / - used to indicate standing within rating category)

NB: pi rating is based on published financial information and is less comprehensive that the ratings without the pi.

The rating (claims paying ability) for the insurers involved in your insurance programme are set out below:

INSURER	RATING	AGENCY
AIG Insurance NZ Limited	A	Standard & Poor's
Allianz Australia Insurance Ltd	AA-	Standard & Poor's
Chubb Insurance NZ Ltd	AA-	Standard & Poor's
Lloyds of London	A	A M Best
QBE Insurance (International) Ltd	A+	Standard & Poor's
Vero Insurance New Zealand Ltd	A+	Standard & Poor's
Vero Liability Insurance Ltd	A+	Standard & Poor's

CONTACT

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martin.holden@jlt.co.nz

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Forestry Plantation Timber Insurance Renewal Quotation

Quote No : 568150

Details of The Insured

The Insured	Wairoa District Council		
Postal Address	C/- JLT PO Box 11145, Wellington, NZ	**Phone** **Fax**	00 0044 9500 00 0044 9177
GST No		**Mobile**	0274 834 250
Client Ref No	W3635		

Period of Insurance and Important Dates

Period of Insurance

Commencement Date	4pm Local Time on 1 July 2017
Expiry Date	4pm Local Time on 01 July 2018

Details of Insurance (for Plantation details, please refer to the Plantation Schedule)

Total Policy Declared Value	**$81,416**
Total Policy Declared Area (ha)	**30.10**
Aggregate Limit of Liability	**$172,832**
Insured Event(s)	**Insured Event Limit**
Fire (including Backburning), Malicious Act(s) & Impact	$81,416
Hail	$20,000
Windstorm (including Remediation Works)	Not Taken
Earthquake and/or volcanic eruption	Not Taken
Additional Benefits	**Additional Benefit Limit**
Claims Preparation Costs	$5,000
Replanting Costs	$40,708
Removal of Debris	$2,500
Plantation Infrastructure	$2,500
Optional Insurance Cover	**Optional Insurance Cover Limit**
Firefighting expenses	$40,708

Excess

Excesses apply to this Policy. The Excess applicable to each Loss Occurrence Period is detailed in the Plantation Schedule.

If multiple Plantation(s) are affected in the same Loss Occurrence Period, the Excess applicable will be the higher Excess of all affected Plantation(s).

A separate Excess of $1,000 is applicable to Firefighting expenses per Loss Occurrence Period (refer to the Policy wording for full details).

Allianz Australia Insurance Limited ABN 15 000 122 850 (Incorporated in Australia) trading as Allianz New Zealand
Level 11, Tower 1, 205 Queen Street, Auckland 1010
Primacy Underwriting Management Limited (Company No 689339) acting as agent of the insurer named above
P O Box 300-767, Albany, Auckland 0752, New Zealand
Ph: +64 9 354 2923 Fax: +64 9 354 2918 email: primacy@pum.co.nz website: http://www.pum.co.nz

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Forestry Plantation Timber Insurance Renewal Quotation

Quote No : 568150

Special Comments

Details of Other Interested Parties

None Advised

Premium Details

Premium Payment Terms: Total amount payable is due no later than Thirty (30) days after the Policy is issued.

	Premium $	GST $	Amount Payable $
Wairoa District Council	411.72	61.76	473.48
Totals $	**411.72**	**61.76**	**473.48**
		Total Amount Payable $	**473.48**

Details of Intermediary

Intermediary	Jardine Lloyd Thompson New Zealand	**Phone**	+64 (0)4 495 8210
Contact Name	Matt Meacham	**Office**	Wellington

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Forestry Plantation Timber Insurance Renewal Quotation

Quote No : 568150

Declaration and Acceptance

I declare that I have:

- read and understood the Duty of Disclosure notice set out on the Policy wording and Application form Notices section and have complied with my duty;
- received, read and understood the Policy wording and agree to terms and conditions of the Policy;
- read and understood the Privacy information notice set out in the Policy wording and consent to the uses of personal information contained therein;
- obtained the consent of any other party(ies) on whose behalf personal information has been provided;
- answered every question honestly, fully and frankly; and
- completed the Application personally, or have had it completed by someone else but I/We have checked that all the questions have been answered fully and accurately.

By signing the Application I authorise Primacy and Allianz to:

- obtain any information they may need about my claims history from my insurance broker and/or my previous insurer(s) and any other information they may require to decide whether to provide cover and on what terms;
- make enquiries from third parties to verify claims history and other information I have provided; and
- disclose my claims history to any insurance broker I appoint or to any of my previous insurer(s) or a future insurer(s).

Applicant's signature: _____ Date: 27/6/2017

Insurer Financial Strength Rating

Allianz Australia Insurance Limited has an AA- insurer financial strength rating given by Standard & Poor's (Australia) Pty Limited.

The rating scale* in summary form is:

AAA	**Extremely Strong**	**B**	**Weak**
AA	**Very Strong**	**CCC**	**Very Weak**
A	**Strong**	**CC**	**Extremely Weak**
BBB	**Good**	**R**	**Regulatory Action**
BB	**Marginal**		

Plus (+) or minus (-): Ratings from "AA" to "CCC" may be modified by the addition of a plus (+) or minus (-) sign to show relative standings within the major rating categories.
*A full description of the rating scale is available at www.allianz.co.nz/insurer-rating.

An overseas policyholder preference applies. Under Australian law, if Allianz Australia Insurance Limited is wound up, its assets in Australia must be applied to its Australian liabilities before they can be applied to overseas liabilities. To this extent, New Zealand policyholders may not be able to rely on Allianz Australia Insurance Limited's Australian assets to satisfy New Zealand liabilities.

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Forestry Plantation Timber Insurance Quotation
Quote No: 568150 - Plantation Schedule

Insured Property

Plantation Name	Wairoa District Council		
Plantation Address	C/- JLT PO Box 1145	**Region**	Hawkes Bay Region
	Wellington, NZ 6142	**Zone**	Hawkes Bay Region
Latitude	-39.52	**Longitude**	176.55

Cover Details

Intended Purpose	Sawlogs	**Plantation Declared Value**	$81,416
High Altitude \ Inaccessible	No		

Excess

The Excess is 1.5% of the sum of the Block Declared Value of all affected Block(s) subject to a minimum per Loss Occurrence as detailed below.

Excess per Period Excess Loss Occurrence Period $2,500

Plantation Details

Year Planted	Trees/Species	Insured Block / Location	Area (ha)	Value per Hectare ($ / ha)	Block Declared Value ($) **
2013	Pinus Radiata	Omahanui	6.60	1,060.00	6,996
2003	Pinus Radiata	Landfill Wairoa	22.00	2,520.00	55,440
1986	Pinus Radiata	Terapatiki	1.50	12,653.00	18,980
		Totals	**30.10**		**81,416**

** H = Harvested, S = Sold, Blank = Insured

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8.8 TE MĀTĀRAE O TE WAIROA TRUST - MĀORI LAND DEVELOPMENT PROJECT MANAGER

Author: **Kitea Tipuna, Economic Development and Engagement Manager**

Authoriser: **Fergus Power, Chief Executive Officer**

Appendices:
1. **Maori Land Development and Commercialisation Project ⇩**
2. **Proposal for a Maori Land Development Project Manager ⇩**

1. PURPOSE

1.1 To brief Council on Te Mātārae o Te Wairoa Trust's proposal for a Māori Land Development Project Manager.

RECOMMENDATION

The Economic Development and Engagement Manager RECOMMENDS that Council supports Te Mātārae o Te Wairoa Trust's proposal for the establishment of a Māori Land Development Project Manager.

EXECUTIVE SUMMARY

Te Mātārae o Te Wairoa Trust's proposal for the establishment of a Māori Land Development Project Manager seeks to assist Māori landowners to develop non-productive and under-producing Māori land.

Te Mātārae o Te Wairoa Trust's proposal for a Māori Land Development Project Manager also seeks to promote best land-usage, profitability, bio-diversity, mātauranga (retention of knowledge), and sustainability by Māori land-owners, leading to employment, job-training and increased community well-being.

2. BACKGROUND

2.1 This proposal is part of the wider Māori Land Commercialisation Project, which the Trust has sought to champion. The Trust has also been in discussions with Matariki REDS and has sought alignment with regional strategies. The Māori Land Development Project Manager will engage with Māori land-owners throughout the Wairoa district to determine their aspirations, management status, and current productivity status of their land-blocks. It will also encourage Māori land-owners to set up management structures and become pro-active and productive with their land.

2.2 If necessary, the project will assist Māori land-owners through the process of forming an authorised management structure, and assisting in their applications to the Māori Land Court.

2.3 The project also aims to facilitate joint co-operative projects and applications where necessary.

2.4 Because there is alignment to statute barred rates, this role will also liaise with the Wairoa District Council to identify potential Māori land blocks with rating debt to assess possible land productivity options.

3. OPTIONS

3.1 The options identified are:

a. Do nothing;l or

b. Support Te Mātārae o Te Wairoa Trust's proposal for a Māori Land Development Project Manager.

3.2 The preferred option is to support Te Mātārae o Te Wairoa Trust's proposal for a Māori Land Development Project Manager. This meets the purpose of local government as it will help meet the current and future needs of communities for good-quality infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.

Compliance with legislation and Council Policy

3.3 Annual Plan 2017/2018

3.4 Long Term Plan 2015-2025

3.5 Draft Wairoa District Council Economic Development Plan

What are the key benefits?

3.6 Development of underutilised land.

3.7 Increased capability of Māori land owners and the formation of management structures to enable the development to proceed with the correct governance.

3.8 Increase in jobs and opportunities for internships and on-the-job training.

3.9 Investment back into local business.

3.10 Start-up of new business with the right structure, commercial business plans and market validation.

3.11 Access to government support and funding.

3.12 Active database of the critical land information and development plans

What is the cost?

3.13 This is not included in the Annual Plan, but $60,000 of surplus salary funding from the 2016/2017 financial year was set aside by resolution of Council in a restricted reserve as the Wairoa District Council contribution to support this proposal and initiative on the condition that Council receive an appropriate briefing of the project.

What is the saving?

3.14 It is anticipated that savings will come from work alignment that seeks to reduce the quantum of statute-barred rates on multiply-owned Māori freehold land, which also makes up 95% of total land parcels noted in statute barred rates.

Who has been consulted?

3.15 The Māori Standing Committee has been consulted on this matter as a presentation was made at their 13 July 2017 meeting by Te Mātārae o Te Wairoa Trust trustee, Richard Allen.

3.16 It was important to consult with the Māori Standing Committee as tangata whenua views are important given that multiply-owned Māori freehold land make up 95% of the total land parcels that are affected by statute-barred rates.

3.17 The Economic Development Committee has also been consulted and initiated the recommendation for Council to support the Trust's proposal by making a financial contribution of $60,000 to the project.

Maori Standing Committee

3.18 The Māori Standing Committee has been consulted.

3.19 This proposal was also supported by the Māori Standing Committee member on the Economic Development Committee.

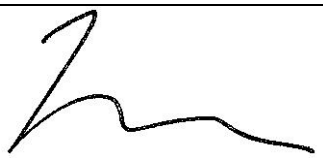
Confirmation of statutory compliance

In accordance with section 76 of the Local Government Act 2002, this report is approved as:

a. containing sufficient information about the options and their benefits and costs, bearing in mind the significance of the decisions; and,

b. is based on adequate knowledge about, and adequate consideration of, the views and preferences of affected and interested parties bearing in mind the significance of the decision.

Signatories

	
Author Kitea Tipuna	Approved by Fergus Power

Māori Land Development and Commercialisation Project

The Wairoa Horizon Trust
Te Mātārae o Te Wairoa Trust

Project Objective:

1. To assist Māori landowners to develop non-productive and under-producing Māori land (50,000 ha).
2. To promote best land-usage for the purpose of sustainable commercialisation.
3. Develop businesses with a focus on bio-diversity, matauranga (retention of knowledge), and sustainability by Māori land-owners.
4. Create employment opportunities and on-the-job-training.
5. Improve community well-being.

Funding
$120,000 p.a plus administration costs of $1,000 per month

Team/Stakeholders

1. Matariki Governance Team
2. Te Puni Kokiri
3. Māori Land Owners
4. Ministry of Business Innovation and Employment (MoBIE)
5. Te Mātārae O Te Wairoa Economic Development Trust. (Wairoa Horizons Trust)

Start Date
1 March 2017

Expected Outcome:

1. Development of underutilised land.
2. Increased capability of Māori Land Owners and the formation of Management structures to enable the development to proceed with the correct governance.
3. Increase in jobs and opportunities for internships and on-the-job training.
4. Investment back into local business.
5. Start-up of new business with the right structure, commercial business plans and market validation.
6. Access to government support and funding.
7. Active database of the critical land information and development plans

Wairoa Horizon Trustees:
Karen Burger
Richard Allen
Dean Whaanga

Reporting	• Monthly reporting to the Wairoa Horizons Trust. • Regular reporting to the Wairoa District Council through the Trust reporting mechanism through the Economic Development Committee
Contract Lead	To be appointed.

Resourcing	There is the potential to improve productivity on approximately 50,000 ha of Māori-owned land in the Wairoa District. There is no singular organisation co-ordinating the potential development and commercialisation of this land Horizons Trust will play a pivotal role in the co-ordination of this project and delivering on the expected outcomes above. **Year one resourcing requires:** One full time Business Development Manager who will be responsible for: • Developing a database of the 1,783 parcels of Māori land, approximately 90,000 ha. • Supporting the development of the potential 1213 parcels to establish an appropriate management structure. • Work with Ministry of Business, Innovation and Employment organisations and Te Puni Kokiri, to allocate resources to development-ready land owners who have the right Management structure in place. • Where management is in place, support the development of a plan for the managed and un-managed blocks that are unproductive or under-utilised. • Stay connected to the management teams to review progress and assess additional support mechanisms that will assist with timely implementation of the development plans. • Report progress as above.

Resource and Strategic Partners	Ngāti Kahungunu Wairoa Taiwhenua Ngāti Pahuwera New Zealand Trade and Enterprise Te Puni Kokiri Ministry of Primary Industries New Zealand Food Innovation Network Export New Zealand Regional Business Partners Capability Voucher Scheme Massy University Lincoln University Waikato University Wairoa District Council Business Hawke's Bay

Please note: This Project Scope is supported by the information contained in the attached document: Background Information for Māori Land Development and Commercialisation Project as written by Richard Allen (Trustee).

SUBMISSION FOR FUNDING FOR A PROJECT MANAGER FOR TE MĀTĀRAE O TE WAIROA TRUST MĀORI LAND DEVELOPMENT PROJECT.

The Objective of the Project:

To assist Māori landowners to develop non-productive and under-producing Māori land. To promote best land-usage, profitability, bio-diversity, mātauranga (retention of knowledge), and sustainability by Māori land-owners, leading to employment, job-training and increased community well-being.

The Purpose of this submission:

To source funding to engage a project manager to continue the progress already underway, and to accomplish the above objective.

The role of Te Mātārae O Te Wairoa Economic Development Trust in relation to Māori Land Development:

- Te Mātārae's role is to facilitate and to assist.
- We do not become involved in management of land blocks.
- We do not make decisions about how Māori land-owners use their land.
- We will provide assistance to Māori land-owners who wish to apply to the Māori Land Court to form authorised management structures.
- We will provide assistance to Māori land-owners who wish to engage with the Ministry for Primary Industries, Te Puni Kokiri, the Ministry of Business, Innovation and Employment, or other National, Regional or Local Government, or non-Government agencies.
- We will endeavour to provide access to business mentoring for Māori land-owners.
- We will seek out and appraise new opportunities and options for land-use.
- We will facilitate meetings between Māori land-owners and industry organisations.
- We will facilitate meetings between Māori land-owners and service providers.
- We will facilitate meetings between Māori land-owners and funding providers.

Guiding Principles:

- In terms of Māori land, we can only work with the willing.
- There are different levels of readiness and willingness amongst Māori land-owners.
- There is no one-size-fits-all solution. Each block has its individual *mauri* (vital essence), its own unique characteristics.
- Each group of owners has different dynamics, expectations and personalities.
- Each block that is moving forward has a *kaihautu* (person who takes the lead). That *kaihautu* needs to be identified and engaged to facilitate progress.
- Development of individual holdings leads to volume of production, which is the basis for establishment of a localised processing unit, further employment and job-training, and retention of benefits within the district.
- *Mātauranga* "retention of traditional knowledge" is an under-pinning principle. Therefore projects which involve traditional methods (eg. rongoa, native plant nurseries) or traditional food sources (eg. fresh-water koura) will be highly regarded and thoroughly considered.
- We will build a detailed knowledge base of Māori land-owners and their holdings.
- We will endeavour to work with, and form strategic partnerships and alliances with organisations that have parallel objectives or can assist in attaining our objectives.

SUBMISSION FOR FUNDING FOR A PROJECT MANAGER FOR TE MĀTĀRAE O TE WAIROA TRUST MĀORI LAND DEVELOPMENT PROJECT.

Background Information:

- In the Wairoa District there are 1783 parcels of Māori land, approximately 90,000 ha.
- The average size per block is 58 ha.
- Of those 1783 parcels, only 570 have management structures.
- Therefore 1213 do not have a management structure. 850 of these un-managed blocks are unproductive or under-utilised. Some blocks that have management structures are also non-productive or under-producing, or being utilised by parties other than the owners.
- Therefore, there is the potential to improve productivity on approximately 50,000 ha of Māori-owned land in the Wairoa District.
- Successful pilot models have already been established in the Raupunga area over the last three years, leading to conversion of gorse and blackberry-covered land into horticulturally productive units, and upscaling of previously under-producing land. This spring, 2016, approximately 250 ha of Māori land in Raupunga will be engaged in horticulture. Four years ago there was none.

1. May 2013 - Approx. 1 ha of Mohaka A50 covered in blackberry. 5 ha in pasture.

2. March 2014 - 5 ha. Of the same block planted in maize. Blackberry still there around edges.

3. June 2016 - The same aspect as in 1 above, with new riparian fences, 2000 native trees being planted along the waterway. Blackberry all gone.

SUBMISSION FOR FUNDING FOR A PROJECT MANAGER FOR TE MĀTĀRAE O TE WAIROA TRUST
MĀORI LAND DEVELOPMENT PROJECT.

4. Nov 2016 - 5 ha of Mohaka A50 now planted in apples under a 15-year joint venture with Cedenco for pulping apples.

Agricultural crops already involved (or tried):

- Maize
- Peas
- Sweet corn
- Apples

Apples:

Discussions are well under-way with Pipfruitnz, MPI, and Business Hawkes Bay, and has involved representatives of the HB REDS, about developing a unique brand of high-end eating apple, grown in Wairoa for export, especially to the developing Asian market. This unique brand would carry an authentic Wairoa whakapapa that would be communicated in such a way to engage with other cultures. Traci Houpapa, on the Prime Minister's Trade Delegation to India said *"One of the key themes that is coming through all of the conversations that I'm having with Indian businessman and India industry leaders is the importance of culture and the connection between Māori and India. It's increasingly important for our government to start thinking about trade in terms of relationships with people."*

A whānau group has secured funding for a best land-use feasibility study from MPI, and have indicated that they will include apples in their study, and thus provide the framework for a joint-venture agreement. It is hoped this agreement can be produced to enable initial planting during winter, 2017. The findings from this feasibility study can then be applied to other blocks. Pipfruitnz expects planted area to increase by about 1700 hectares by 2020, with most of the growth focused in Hawke's Bay. However, we know that land is scarce in HB and land suitable for apple-growing is leasing at $5,000+ per hectare. A large percentage of that 1700 hectares could be in Wairoa.

SUBMISSION FOR FUNDING FOR A PROJECT MANAGER FOR TE MĀTĀRAE O TE WAIROA TRUST MĀORI LAND DEVELOPMENT PROJECT.

Discussions are on-going with Cedenco in Gisborne re their requirements for 2017/2018. They have indicated that they will be keen to expand on their existing activities in the Wairoa District.

Discussions have commenced with Wairoa Taiwhenua about defining the whakapapa and the tikanga around the mauri of the Wairoa-grown product. Once that whakapapa has been agreed upon, the next step would be to engage with someone like Ian Taylor to produce the graphics and develop the presentation.

Pipfruitnz are developing a Primary Growth Partnership (PGP), which is a government-industry initiative that will invest in significant programmes of research and innovation to boost the economic growth and sustainability of New Zealand's primary, forestry and food sectors. The PGP aims to:

- boost productivity, value and profitability in the primary sector
- deliver long-term economic growth and sustainability across primary industries, from producer to consumer
- encourage more private investment in research and development in New Zealand.

The PGP is an initiative that is aimed at helping primary industries to reach their maximum potential and to work towards goals like doubling the value of apple exports by 2025. A PGP involving uniquely-branded, Wairoa-produced, high-end apples for the overseas market could constitute a significant component of the national PGP initiative.

Also currently under consideration:

- Feijoas
- Limes
- Olives
- Avocados
- Macadamia nuts
- Fodder beet
- Lucerne
- Kiwifruit
- Kōura (fresh-water crayfish)

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Kōura: (see separate submission on kōura)
MPI have funded a 3-year study for Earnslaw Forests in Otago to produce a best-practice aquaculture guide for farming of fresh-water crayfish. This study was completed this year and the report was released in July, 2016. Kōura farming is considered a unique opportunity for Māori land-owners to diversify by value-adding to their existing operations, or, alternatively as a stand-alone venture. Kōura farming provides an opportunity to create additional revenue without impacting on existing land use activities.
Other considerations:

- Matauranga – retention of traditional knowledge.
- Retention of traditional customary practices relating to koura.
- Sustainability of a traditional food source which is classified as "*At risk – declining"* by the New Zealand Threat Classification System.
- Kōura were once plentiful throughout the Wairoa District, and are still present in reduced numbers, so we know that local conditions can be favourable to kōura.
- Kōura are a feature of healthy waterways.
- Kōura farming is a clean/green operation, which has market appeal.
- Opportunity to be at the forefront in a developing, profitable, high-end niche market with untapped global potential.
- Opportunity to develop another unique brand of "*only grown in Wairoa*" product with its own whakapapa and marketing advantages.
- Opportunity to participate in a primary growth partnership agreement (PGP) in a developing industry.

Initial discussions have taken place, and a site visit has been undertaken to Otago in November, 2016 for further discussions, and to view Earnslaw's operation.

Whānau groups, Rongomaiwahine, Te Whakaari Corporation and Anewa Corporation have indicated that they would be willing to take a lead role in applying to MPI for a feasibility

study. There are a number of other interested parties who are willing to support Te Whakaari's application.

Waikato University:
We have been fortunate to secure the services of a student from Waikato University who is undertaking a degree course and is actively working with Te Mātārae O Te Wairoa, compiling data with the objective of identifying opportunities for a range of crops that have the potential for development of more intensive land use that could provide increased employment and income to the district. Climate monitoring equipment is being installed on 17 Māori land blocks and will be monitored over the next 12 months.
Potential specific objectives include:

- Investigating requirements for a range of crops including rongoa plants.
- Climate analysis
- Soil/water balance
- Developing crop suitability maps based on soil/land use capability analysis.

To be considered (but not limited to):

- Fruits, berries, citrus, figs etc.
- Nuts
- Viticulture, biofuel crops, tea, hops, olives, ginseng, hemp.
- Fodder crops and baleage crops.
- Honey
- Rongoa (traditional medicine).
- Aquaponics. Aquaponics is defined as a combination of aquaculture (growing fish in tanks) and hydroponics (growing plants in water). The nutrient produced from the fish waste is used for growing plants and the plants help purify the water for the fish. Aquaponics may be able to be used in conjunction with kōura farming.

Alliances at Memorandum-of-Understanding Level:

- Wairoa Tai Whenua
- Wairoa District Council

Other Associations and potential Alliances:

- Ministry for Primary Industries
- Te Kahui Ōhanga o Takitimu. (Hawkes Bay Regional Economic Development Strategy and Action Plan.)
- Māori Land Court.
- Ministry of Business, Innovation and Employment.
- HB Regional Council
- Wairoa District Council
- Te Puni Kokiri.
- The proposed Māori Land Service. (Te Ture Whenua)
- Activate Tairawhiti.
- Business Hawkes Bay.
- Lincoln University.
- Massey University.

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- Waikato University.
- Pipfruit NZ.
- Cedenco Foods New Zealand.
- Ngati Pahauwera Development Trust
- Tatau Tatau O Te Wairoa.
- Sharecroppers and other contractors.
- Te Tumu Paeroa.
- Others

Responsibilities of Project Manager:

1. Engage with Māori land-owners throughout Wairoa District to determine their aspirations, management status, and current productivity status of their land-blocks.
2. Encourage Māori land-owners to set up a management structure and become pro-active and productive with their land.
3. Assist Māori land-owners to move to a point of readiness.
4. If necessary, assist Māori land-owners through the process of forming an authorised management structure, and assisting in their applications to the Māori Land Court.
5. Direct Māori land-owners to appropriate Government agencies or Industry organisations, depending upon their aspirations and level of readiness.
6. Facilitate joint co-operative projects and applications where necessary.
7. Follow up on groups as in points 1 to 6 above, monitor progress and provide assistance where necessary.
8. Research and keep abreast of new development possibilities.
9. Keep detailed project records and statistics and report regularly to Te Matarae O Te Wairoa Economic Development Trust.
10. Develop project mapping.
11. Keep regular contact, and communicate with strategic alliance partners and other agencies.
12. Liaise with the Wairoa District Council to identify potential land blocks with rating debt to assess possible land productivity options.

Key Performance Indicators:

- Initial engagement with minimum 100 Māori land-owner groups in 12-month period.
- Demonstrated assistance to minimum 50 Māori land-owner groups in 12-month period, assisting them to a point of readiness to engage with funding agencies or industry groups and move into agricultural productivity or an enhanced level of agricultural productivity.
- If 50 Māori land-owner groups become productive or upgrade their productivity, this could translate to a productivity upgrade target of up to 2,500 hectares of Māori-owned land in the first 12 months.

Timeline:

This project is alive and moving now. The project manager is needed as soon as possible to take over the current workload from the Trustees of Te Mātārae and move the project forward over the next 12 months. That is the short-term aim. The entire project could spread over the next few years and it is anticipated that once there is tangible evidence of

agricultural activity, the community willingness to become engaged will move to another level. That has been our experience. When people see tractors and trucks operating, new fences, and crops growing, they want to know what is going on, and they want to be a part of the movement. Therefore we would like to see the door left open for re-negotiation of an extension and follow-up agreement towards the end of the first 12 months.

Funding required:
$100, 000 plus $20,000 to cover book keeping, administration, travel/accommodation etc.

9 RECEIPT OF MINUTES FROM COMMITTEES/ACTION SHEETS

9.1 MINUTES OF ECONOMIC DEVELOPMENT COMMITTEE MEETING - 27 JUNE 2017

Author: **Emmanuel Guzman, Governance Advisor**

Authoriser: **Fergus Power, Chief Executive Officer**

Appendices: **1. Minutes of Economic Development Committee Meeting - 27 June 2017**

RECOMMENDATION

1. That the Minutes of the Economic Development Committee Meeting held on Tuesday 27 June 2017 be received and the recommendations therein be adopted.

MINUTES OF WAIROA DISTRICT COUNCIL
ECONOMIC DEVELOPMENT COMMITTEE MEETING
HELD AT THE COUNCIL CHAMBER, WAIROA DISTRICT COUNCIL, CORONATION SQUARE, WAIROA
ON TUESDAY, 27 JUNE 2017 AT 1.30PM

PRESENT: Cr Denise Eaglesome-Karekare (Deputy Mayor), Cr Michael (Min) Johansen, Mr Paul Kelly, Ms Karen Burger

IN ATTENDANCE: F Power (Chief Executive), G Borg (Chief Financial Officer), K Tipuna (ED&E Manager), C Knight (GAPS), E Guzman (Governance Advisor), A King (Comms)

1 KARAKIA

The karakia was led by Mr Paul Kelly.

2 APOLOGY FOR ABSENCE

APOLOGY

COMMITTEE RESOLUTION 2017/03

Moved: Mr Paul Kelly
Seconded: Ms Karen Burger

That the apology received from His Worship the Mayor Craig Little be accepted.

CARRIED

3 DECLARATION OF CONFLICT OF INTEREST

None.

4 CHAIRPERSON'S ANNOUNCEMENTS

None.

5 LATE ITEMS OF URGENT BUSINESS

Proposed Joint Purchase of Mahia Camping Ground

6 PUBLIC PARTICIPATION

Zach Stark – Emerging economic situation n Wairoa around the commercial property market.

RESOLUTION

COMMITTEE RESOLUTION 2017/04

Moved: Cr Michael (Min) Johansen
Seconded: Mr Paul Kelly

That the Chief Executive initiate a project involving a joint approach to development of a commercial property lease and purchase strategy.

CARRIED

7 MINUTES OF THE PREVIOUS MEETING

COMMITTEE RESOLUTION 2017/05

Moved: Mr Paul Kelly
Seconded: Cr Michael (Min) Johansen

That the minutes of the Ordinary Meeting held on 16 May 2017 be confirmed.

CARRIED

8 GENERAL ITEMS

8.1 ECONOMIC DEVELOPMENT & ENGAGEMENT MANAGER'S REPORT

COMMITTEE RESOLUTION 2017/06

Moved: Cr Michael (Min) Johansen
Seconded: Mr Paul Kelly

That the Committee receive the report of the Economic Development & Engagement Manager.

CARRIED

COMMITTEE RESOLUTION 2017/07

Moved: Cr Denise Eaglesome-Karekare
Seconded: Cr Michael (Min) Johansen

That the Committee endorse further investigation into the development of Blucks Pit in consultation with the Nuhaka community.

CARRIED

8.2 CHAIR OF TE MATARAE O TE WAIROA TRUST REPORT

COMMITTEE RESOLUTION 2017/08

Moved: Cr Michael (Min) Johansen
Seconded: Mr Paul Kelly

That the Committee receive the report of the Chairperson of Te Mātārae o Te Wairoa Trust.

CARRIED

COMMITTEE RESOLUTION 2017/09

Moved: Cr Michael (Min) Johansen
Seconded: Cr Denise Eaglesome-Karekare

That the Committee instruct the Chief Executive to identify savings in the current operational budget for the purpose of allocating funds to Te Mātārae o Te Wairoa Trust with the objective of reducing the quantum of statute-barred rates.

CARRIED

8.3 DRAFT WDC ECONOMIC DEVELOPMENT PLAN

COMMITTEE RESOLUTION 2017/10

Moved: Cr Denise Eaglesome-Karekare
Seconded: Ms Karen Burger

That the Committee receive the report of the draft WDC Economic Development Plan and provide feedback.

CARRIED

9 PUBLIC EXCLUDED ITEMS

RESOLUTION TO EXCLUDE THE PUBLIC

COMMITTEE RESOLUTION 2017/11

Moved: Cr Denise Eaglesome-Karekare
Seconded: Cr Michael (Min) Johansen

That the public be excluded from the following parts of the proceedings of this meeting.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution
9.1 - Late item - Proposed Joint Purchase of Mahia Camping Ground	s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7

CARRIED

2:12PM PUBLIC EXCLUDED START

COMMITTEE RESOLUTION 2017/12

Moved: Cr Denise Eaglesome-Karekare
Seconded: Cr Michael (Min) Johansen

That Council moves out of Closed Council into Open Council at 2:38PM.

CARRIED

The Meeting closed at 2:40PM.

The minutes of this meeting were confirmed at the Economic Development Committee Meeting held on 8 August 2017.

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CHAIRPERSON

10 PUBLIC EXCLUDED ITEMS

RESOLUTION TO EXCLUDE THE PUBLIC

RECOMMENDATION

That the public be excluded from the following parts of the proceedings of this meeting.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution
10.1 - Frasertown Hall	s7(2)(i) - the withholding of the information is necessary to enable Council to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7