



Office Use Only Application Number:

APPLICATION FOR RESOURCE CONSENT OR FAST-TRACK RESOURCE CONSENT

(Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA))

(If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of Form 9)

Prior to, and during, completion of this application form, please refer to Resource Consent Guidance Notes and Schedule of Fees and Charges – both available on the Council’s web page.

1. Pre-Lodgement Meeting

Have you met with a Council Resource Consent representative to discuss this application prior to lodgement? ~~Yes~~ / **No**

2. Type of Consent being applied for (more than one circle can be ticked):

- Land Use
- Fast Track Land Use*
- Subdivision
- Discharge
- Extension of time (s.125)
- Change of conditions (s.127)
- Change of Consent Notice (s.221(3))
- Consent under National Environmental Standard (e.g. Assessing and Managing Contaminants in Soil)
- Other (please specify)

***The fast track for simple land use consents is restricted to consents with a controlled activity status and requires you provide an electronic address for service.**

3. Would you like to opt out of the Fast Track Process? ~~Yes~~ / **No**

4. Applicant Details:

Name/s: Waipapa Pine Limited



Postal Address: _____
(or alternative method of service under section 352 of the Act) _____
Post Code: _____

5. Address for Correspondence: Name and address for service and correspondence (if using an Agent write their details here).

Name/s: Nicola Cowley

Electronic Address for Service (E-mail): nicola.cowley@wwla.kiwi

Phone Numbers: Work: 021 243 6095 _____ Home: _____

Postal Address: 10/1 Putaki Drive, Kumeu, Auckland
(or alternative method of service under section 352 of the Act) _____
Post Code: 0810

All correspondence will be sent by email in the first instance. Please advise us if you would prefer an alternative means of communication.

6. Details of Property Owner/s and Occupier/s: Name and Address of the Owner/Occupiers of the land to which this application relates (where there are multiple owners or occupiers please list on a separate sheet if required)

Name/s: Waipapa Pine Limited

Property Address/
Location: 1945B State Highway 10, Waipapa

7. Application Site Details:

Location and/or Property Street Address of the proposed activity:

Site Address/
Location: 1945B State Highway 10, Waipapa

Legal Description: LOT 3 DP 343062, LOT 2 DP 376253, Lot 1 DP 376253 Val Number: _____

Certificate of Title: 306630 and 306629

Please remember to attach a copy of your Certificate of Title to the application, along with relevant consent notices and/or easements and encumbrances (search copy must be less than 6 months old)

Site Visit Requirements:

Is there a locked gate or security system restricting access by Council staff? Yes / No

Is there a dog on the property? ~~Yes/~~ No

Please provide details of any other entry restrictions that Council staff should be aware of, e.g. health and safety, caretaker's details. **This is important to avoid a wasted trip and having to re-arrange a second visit.**

Please contact the Agent to arrange a site visit

8. Description of the Proposal:

Please enter a brief description of the proposal here. Attach a detailed description of the proposed activity and drawings (to a recognized scale, e.g. 1:100) to illustrate your proposal. Please refer to Chapter 4 of the District Plan, and Guidance Notes, for further details of information requirements.

To undertake earthworks on the site (5000m³ over an area of 2600m²) to remove an existing earthworks bund. Once the bund is removed, the area will have new drainage installed and will be surfaced in clean imported hardfill, which will increase the impervious area of the site.

If this is an application for an Extension of Time (s.125); Change of Consent Conditions (s.127) or Change or Cancellation of Consent Notice conditions (s.221(3)), please quote relevant existing Resource Consents and Consent Notice identifiers and provide details of the change(s) or extension being sought, with reasons for requesting them.

9. Would you like to request Public Notification

~~Yes/~~No

10. Other Consent required/being applied for under different legislation (more than one circle can be ticked):

- Building Consent (BC ref # if known) Regional Council Consent (ref # if known)
- National Environmental Standard consent Other (please specify)

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

The site and proposal may be subject to the above NES. In order to determine whether regard needs to be had to the NES please answer the following (further information in regard to this NES is available on the Council's planning web pages):

Is the piece of land currently being used or has it historically ever been used for an activity or industry on the Hazardous Industries and Activities List (HAIL) yes no don't know

Is the proposed activity an activity covered by the NES? (If the activity is any of the activities listed below, then you need to tick the 'yes' circle). yes no don't know

- Subdividing land Changing the use of a piece of land
- Disturbing, removing or sampling soil Removing or replacing a fuel storage system

12. Assessment of Environmental Effects:

Every application for resource consent must be accompanied by an Assessment of Environmental Effects (AEE). This is a requirement of Schedule 4 of the Resource Management Act 1991 and an application can be rejected if an adequate AEE is not provided. The information in an AEE must be specified in sufficient detail to satisfy the purpose for which it is required. Your AEE may include additional information such as Written Approvals from adjoining property owners, or affected parties.

Please attach your AEE to this application.

13. Billing Details:

This identifies the person or entity that will be responsible for paying any invoices or receiving any refunds associated with processing this resource consent. Please also refer to Council's Fees and Charges Schedule.

Name/s: (please write all names in full) _____

Email: _____

Postal Address: _____

Phone Numbers: _____

Fees Information: An instalment fee for processing this application is payable at the time of lodgement and must accompany your application in order for it to be lodged. Please note that if the instalment fee is insufficient to cover the actual and reasonable costs of work undertaken to process the application you will be required to pay any additional costs. Invoiced amounts are payable by the 20th of the month following invoice date. You may also be required to make additional payments if your application requires notification.

Declaration concerning Payment of Fees: I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application. Subject to my/our rights under Sections 357B and 358 of the RMA, to object to any costs, I/we undertake to pay all and future processing costs incurred by the Council. Without limiting the Far North District Council's legal rights if any steps (including the use of debt collection agencies) are necessary to recover unpaid processing costs I/we agree to pay all costs of recovering those processing costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.

Name: _____ (please print)

Signature: _____ (signature of bill payer – **mandatory**) Date: 5/12/23

14. Important Information:

Note to applicant

You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.

You may apply for 2 or more resource consents that are needed for the same activity on the same form.

You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application

Under the fast-track resource consent process, notice of the decision must be given within 10 working days after the date the application was first lodged with the authority, unless the applicant opts out of that process at the time of lodgement. A fast-track application may cease to be a fast-track application under section 87AAC(2) of the RMA.

Privacy Information:

Once this application is lodged with the Council it becomes public information. Please advise Council if there is sensitive information in the proposal. The information you have provided on this form is required so that your application for consent pursuant to the Resource Management Act 1991 can be processed under that Act. The information will be stored on a public register and held by the Far North District Council. The details of your application may also be made available to the public on the Council's website, www.fndc.govt.nz. These details are collected to inform the general public and community groups about all consents which have been issued through the Far North District Council.

Declaration: The information I have supplied with this application is true and complete to the best of my knowledge.

Name:  (please print)

Signature:  (signature)

Date: 5/12/2023

(A signature is not required if the application is made by electronic means)

Checklist (please tick if information is provided)

- Payment (cheques payable to Far North District Council)
- A current Certificate of Title (Search Copy not more than 6 months old)
- Copies of any listed encumbrances, easements and/or consent notices relevant to the application
- Applicant / Agent / Property Owner / Bill Payer details provided
- Location of property and description of proposal
- Assessment of Environmental Effects
- Written Approvals / correspondence from consulted parties
- Reports from technical experts (if required)
- Copies of other relevant consents associated with this application
- Location and Site plans (land use) AND/OR
- Location and Scheme Plan (subdivision)
- Elevations / Floor plans
- Topographical / contour plans

Please refer to Chapter 4 of the District Plan for details of the information that must be provided with an application. Please also refer to the RC Checklist available on the Council's website. This contains more helpful hints as to what information needs to be shown on plans.

Only one copy of an application is required, but please note for copying and scanning purposes, documentation should be:

UNBOUND

SINGLE SIDED

NO LARGER THAN A3 in SIZE



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD**

**Guaranteed Search Copy issued under Section 60 of the Land
Transfer Act 2017**




R.W. Muir
Registrar-General
of Land

Identifier 306629
Land Registration District North Auckland
Date Issued 08 December 2006

Prior References
NA138C/332

Estate Fee Simple
Area 4.3280 hectares more or less
Legal Description Lot 1 Deposited Plan 376253

Interests

Land Covenant in Easement Instrument 9424933.1 - 26.6.2013 at 4:18 pm
Land Covenant in Easement Instrument 9424933.2 - 26.6.2013 at 4:18 pm
Subject to a right to drain water and sewage over part marked S on DP 480496 created by Easement Instrument 9862386.1 - 13.11.2014 at 4:10 pm
Land Covenant in Easement Instrument 9571379.1 - 19.8.2016 at 4:16 pm
Land Covenant in Easement Instrument 9571379.2 - 19.8.2016 at 4:16 pm
Appurtenant hereto is a right of way created by Easement Instrument 9571379.3 - 19.8.2016 at 4:16 pm
Subject to a right of way over part marked A on DP 518189 created by Easement Instrument 11076582.1 - 11.4.2018 at 11:53 am
Subject to a right (in gross) to convey electricity over part marked A on DP 549010 in favour of Top Energy Limited created by Easement Instrument 11831267.1 - 21.8.2020 at 4:57 pm
12701841.1 CERTIFICATE PURSUANT TO SECTION 77 BUILDING ACT 2004 THAT THIS RECORD OF TITLE IS SUBJECT TO THE CONDITION IMPOSED UNDER SECTION 75(2) (ALSO AFFECTS 306630) - 30.3.2023 at 7:00 am

Appendix B. Application Forms



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD**

**Guaranteed Search Copy issued under Section 60 of the Land
Transfer Act 2017**




R.W. Muir
Registrar-General
of Land

Identifier **306630**
Land Registration District **North Auckland**
Date Issued 08 December 2006

Prior References

176694 NA138C/332

Estate Fee Simple
Area 6.5280 hectares more or less
Legal Description Lot 2 Deposited Plan 376253 and Lot 3
Deposited Plan 343062

Interests

573901.1 Gazette Notice (NZ Gazette No.102 23.11.1978 p.3210) declaring the adjoining State Highway No.10 to be a limited access road - 31.1.1979 at 10:51 am (affects Lot 3 DP 343062)

Appurtenant hereto is a drainage right specified in Easement Certificate B199494.4 - 28.7.1983 at 9.03 am (affects Lot 3 DP 343062)

Some of the easement specified in Easement Certificate B199494.4 will be subject to Section 309 (1) (a) Local Government Act 1974 (See DP 99619)

6399465.3 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 28.4.2005 at 9:00 am (affects Lot 3 DP 343062)

Appurtenant hereto is a right to convey electricity, telecommunications and computer media and drain water created by Easement Instrument 6399465.6 - 28.4.2005 at 9:00 am (affects Lot 3 DP 343062)

The easements created by Easement Instrument 6399465.6 are subject to Section 243 (a) Resource Management Act 1991

6444692.1 Variation of the conditions/covenants created by Easement Instrument 6399465.6 - 2.6.2005 at 9:00 am

Subject to Section 241(2) and Sections 242(1) and (2) Resource Management Act 1991(affects DP 376253)

Land Covenant in Easement Instrument 9424933.1 - 26.6.2013 at 4:18 pm (affects Lot 2 Deposited Plan 376253)

Land Covenant in Easement Instrument 9424933.2 - 26.6.2013 at 4:18 pm

9553856.1 Notification that a building consent issued pursuant to Section 72 Building Act 2004 identifies inundation as a natural hazard - 25.10.2013 at 7:00 am

Appurtenant hereto is a right to drain water and sewage created by Easement Instrument 9862386.1 - 13.11.2014 at 4:10 pm

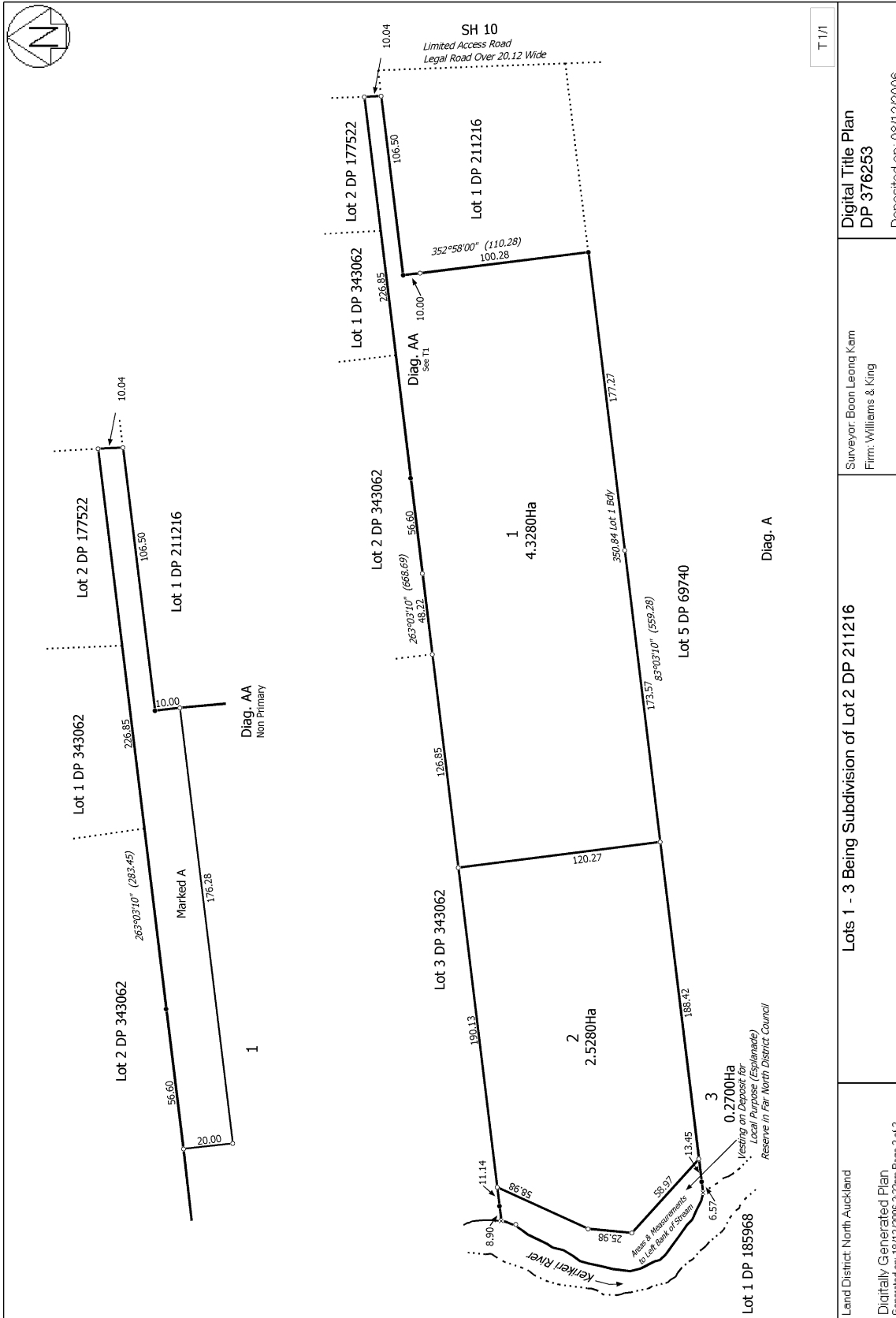
Land Covenant in Easement Instrument 9571379.1 - 19.8.2016 at 4:16 pm

Land Covenant in Easement Instrument 9571379.2 - 19.8.2016 at 4:16 pm

Appurtenant hereto is a right of way created by Easement Instrument 9571379.3 - 19.8.2016 at 4:16 pm

Appurtenant to Lot 3 DP 343062 is a right of way created by Easement Instrument 11076582.1 - 11.4.2018 at 11:53 am

12701841.1 CERTIFICATE PURSUANT TO SECTION 77 BUILDING ACT 2004 THAT THIS RECORD OF TITLE IS SUBJECT TO THE CONDITION IMPOSED UNDER SECTION 75(2) (ALSO AFFECTS 306629) - 30.3.2023 at 7:00 am





Assessment of Environmental Effects

Removal of Earthworks Bund 1945B State Highway 10, Waipapa

WAIPAPA PINE LIMITED

WWLA0998 | Rev. 2

6 December 2023



Project no: WWLA0998
Document title: Assessment of Environmental Effects
Revision: 2
Date: 6 December 2023
Client name: Waipapa Pine Limited
Project manager: Shane Moore
Author(s): Nicola Cowley
File name: G:\Shared drives\Projects\Fletcher Building Ltd\WWLA0998_Waipapa Sawmill Bund Removal\Deliverables\Reports\AEE_1945B State Highway 10_Waipapa Pine Bund removal_291123.docx

Williamson Water & Land Advisory

P.O. Box 314
Kumeu
New Zealand
www.wwla.kiwi

Document history and status

Rev	Date	Description	By	Review	Approved
1	30 November 2023	Assessment of Environmental Effects	Nicola Cowley	Laila Alkamil	Shane Moore
2	6 December 2023	Assessment of Environmental Effects	Nicola Cowley	Laila Alkamil	Shane Moore

Distribution of copies

Rev	Date issued	Issued to	Comments
1	30 November 2023	Fletcher Development Ltd	For client review
2	6 December 2023	Far North District Council	For resource consent lodgement
2	6 December 2023	Northland Regional Council	For resource consent lodgement

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1. Introduction

1.1 Overview

This Assessment of Environmental Effects (AEE) report has been prepared on behalf of Waipapa Pine Limited (the Applicant). The AEE supports a resource consent application to Far North District Council (FNDC) and Northland Regional Council (NRC) for the removal of an earthworks bund and an increase in impervious area on the site. The earthworks bund is currently located on the site located at 1945B State Highway 10, Waipapa (the site).

This report has been prepared in fulfilment of section 88 of the Resource Management Act 1991 (RMA).

1.2 Applicant and Property Details

Table 1. Applicant and property details

Applicant	Waipapa Pine Limited
Site address	1945B State Highway 10, Waipapa
Owner of application site	Waipapa Pine Limited
Site area	10.8 ha
Legal Description	LOT 3 DP 343062 LOT 2 DP 376253 LOT 1 DP 376253
Record of Title reference	306630 and 306629
District Council Plan	Far North District Council Proposed District Plan 2023 Operative Far North District Plan 2009
District Plan Zoning	Proposed District Plan 2023 – Heavy Industrial Operative Far North District Plan 2009 – Rural Production
District Plan Overlays	Proposed District Plan 2023 – The rear part of the site is subject to River Flood Hazard Zone (100 Year ARI Event) and River Flood Hazard Zone (10 Year ARI Event) Operative Far North District Plan 2009 – No identified overlays
Regional Council	Northland Regional Council
Regional Council Overlays	River Flood Hazard Zone – Priority Rivers (100 year and 50 year) over part of the site
Address for service during consent processing	Williamson Water & Land Advisory Attention: Nicola Cowley Email: nicola.cowley@wwla.kiwi Ph: 021 243 6095
Address for service during consent implementation and invoicing	Fletcher Development Limited Attention: Scott Williams Email: Scott.Williams@fbu.com

The Record of Title and relevant Interests, and Council application forms are included in **Appendix A** and **Appendix B** respectively.

1.3 Overview of Resource Consent Requirements

Resource consent is sought for the following reasons:

- Far North District Council – Consent is sought to increase the impervious surface of the site by 2,600 m² as a **discretionary activity** in accordance with rule 8.6.5.4.
- Northland Regional Council – Consent is sought for more than 100 m³ of earthworks to be moved or placed in a 12-month period and diversion / discharge of stormwater under rule C.8.3.3 as a **controlled activity**.

1.4 Consent Duration

Resource consent is sought for a duration of 5 years for the Regional Consent to run concurrently with the Land Use Consent, given that works are proposed to start in the earthworks season of 2024.

2. Site Description and Environmental Setting

2.1 Site Description - General

The site is located on State Highway 10, Waipapa (refer to **Figure 1**).

The site encompasses an area of approximately 10.8 ha and contains a sawmill, continuous dry kilns, and timber stacking equipment. The Waipapa Pine Ltd Sawmill occupies the site and processes logs to produce a range of industrial and structural grade sawn timber products. The mill's primary product is high grade framing timber for new house construction market in the North Island. The facility currently processes Radiata Pine with a single-shift processing capacity of 120,000 tons of logs annually.

The property does not contain any Outstanding Natural Landscapes or Outstanding Natural Features. The site is not identified on the NRC maps as containing wetlands.

The application site is mapped by Manaaki Whenua Landcare Research as having LUC Class 3 soils, along with most of the surrounding sites.

The Kerikeri River runs along the western boundary of the site. There is a piece of esplanade reserve located adjacent to the river running along the rear of part of the site. Part of the site is subject to natural hazards in the form of flooding. The 100-year extent is identified in the site plan below in **Figure 1**.



Figure 1. Site Location Plan. (Source: WWLA, 2023).

The surrounding properties are occupied by predominantly light and heavy industrial activities. The nearest residential dwellings are located more than 300 m to the east of the site (bund) and are surrounded by commercial / industrial land uses.

Vehicle access to the site is via a private accessway located to the south of the site, which has been named Industrial Way.

2.2 Far North District Plan Zoning

2.2.1 Far North Operative District Plan 2009

Within the operative plan, the site is zoned Rural Production. There are no flooding or other hazards or constraints identified for the site.

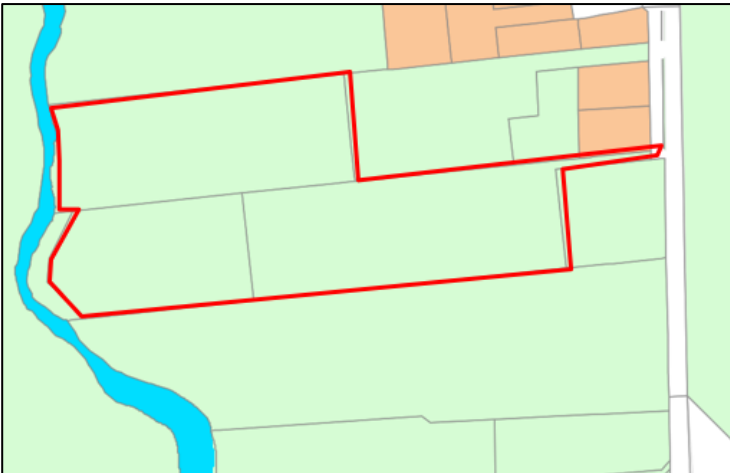


Figure 2. Zoning of the site under the Operative District Plan

2.2.2 Far North District Council - Proposed District Plan

Within the proposed plan, the application site is zoned heavy Industrial, as shown in **Figure 3** below. The area of the site closest to the river is also subject to Flood Hazards.

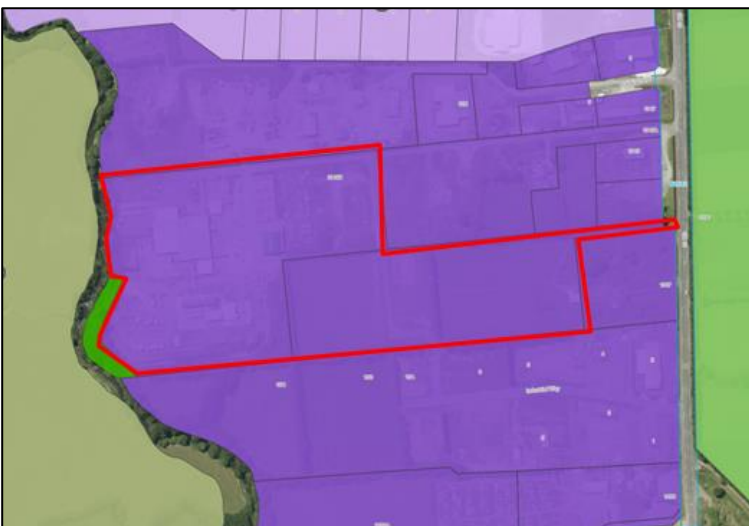


Figure 3. Zoning of the site under the Proposed District Plan

2.3 Earthworks Bund

The earthworks bund (which is the subject of this resource consent) is located towards the centre of the site, as illustrated in **Figure 1** above. The bund was likely formed from the stripping of topsoil from parts of the site during development of the site for saw milling activities. The earthworks bund has been on the site for approximately 15 - 20 years.

The site was visited by a Contaminated Land Specialist / SQEP from WWLA on 25 October 2023. Key features of the earthworks bund are shown in the photographs and described in the Contamination Assessment located in **Appendix E**, and summarised below:

- The bund is located at the southern part of the sawmill site, where it runs perpendicular to, and abuts, the southern boundary, between Lots 1 and 2 of DP 376253.
- The bund ranges from 2 to 4 metres in height and is approximately 60 metres long by 25 metres wide at the base. This is shown in Photograph 3 to Photograph 6 located within the Contamination Assessment in **Appendix E**. It is steep sided and approximately 4 to 6 metres wide at the crest.
- The bund is covered by non-native invasive vegetation including large, woody woolly nightshade, mature bamboo, with ground cover including dense kikuyu and tradescantia.
- At the northern end of the bund (Photograph 5 and Photograph 6 located in **Appendix E**) wood ash from the drying kilns is temporarily stockpiled prior to removal by local landscape gardening suppliers.
- An open stormwater drain (which flows to the south) is located along the western foot of the bund (Photograph 3 located in **Appendix E**). This drain discharges to a stormwater retention pond that runs parallel with the southern boundary of the site. The pond discharges to the Kerikeri River.

2.4 Contamination

Far North District Council (FNDC) and Northland Regional Council (NRC) identify the wider site as a "Verified HAIL", under category "A18. Wood treatment or preservation or bulk storage of treated timber". As a result, removal of the bund may trigger the need for resource consent under the Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations (2011) (NESR). This matter is assessed within **Section 5.3** of this report.

2.5 Geological Setting

The area is predominantly covered by the volcanics of the Kerikeri Volcanic Group, Kaikohe-Bay of Islands Volcanic Field and consist of older basalt flows (^vb) and scoria cones (^vs) as well as a Rhyolite dome (^vr) towards the southwest of Waipapa. The volcanic fields originate from numerous, relatively small, monogenetic volcanoes of intraplate type, producing plateau-forming lava flows, thick valley-fill flows and prominent scoria cones. The older basalt of the Kaikohe-Bay of Islands Volcanic Field is extensive and several scoria cones are indicated around Waipapa, towards the north, south, northwest and southwest.

2.6 Natural Hazards

As identified in **Figure 1**, part of the site is located within a mapped flood hazard area. This includes a portion of the earthworks bund proposed to be removed. To assess this, a Flood Hazard Area assessment has been undertaken and is located in **Appendix F**.

3. Background information

3.1 Record of Title (ROT)

The Records of Title (ROT) for the application site are located within **Appendix A**. The titles contain land covenants and a gazette notice. In addition, the titles are subject to several easement certificates relating to drainage, access, and services.

Consent Notice 6399465.3 relates to Lot 3 DP343062 and relates to residential buildings and habitable buildings.

It is not considered that any of the instruments listed on the ROT will restrict the proposed development.

3.2 Recent resource consents

Recent resource consents on the application site and neighbouring sites which have relevance to the current proposal are identified as follows:

- Resource consent was approved by NRC on 21st November 2023 to take water from a bore for use in a sawmill operation (reference AUT.045170.01.01). *This consent relates to the application site and is valid until 31st October 2038.*
- A Notice of Deemed Permitted Marginal or Temporary Activity was approved by NRC on 12th April 2023 to divert and discharge stormwater to the Kerikeri River from properties (Lot 3 DP343062 and Lot 2 DP376253) that are used by Waipapa Pine Ltd for sawmilling operations. A copy is attached as **Appendix D**.
- An application for resource consent has been submitted by Kainui Pack and Cool Ltd on the neighbouring site (1954A State Highway One, Lot 2 DP 343022). The consent sought relates to a packhouse which has been constructed and a new land use consent to make amendments to the land use arrangement. *It is not considered this resource consent has a bearing on the current application.*
- Consent was approved by FNDC pursuant to s127 on 9th August 2022 to change conditions of RC2150320 (reference 2150320-RMAVAR/A). *This consent updated the site layout plan for the site and included the establishment of the pellet plant and boron treatment plant.*
- Consent was approved by NRC on 19th May 2015 for the following:
 - AUT.031351.02.01 Land use consent – to carry out earthworks associated with the construction of stormwater management facilities.
 - AUT.031351.03.01 Discharge Permit – To discharge stormwater to land and water from land disturbance activities.
 - AUT.031351.04.01 Water Permit – To divert stormwater associated with land disturbance activities.The resource consent expired on 31st May 2020. A copy of this decision notice is attached as **Appendix D**.
- Consent was approved by Far North District Council on 8th April 2016 for the use and expansion of an existing sawmill business (2150320- RMALUC). A copy of this decision notice is attached as **Appendix D**.

The Overall Stormwater Plan drawing PP1 (Sheet 1 of 11) prepared by Haigh Workman approved under AUT.031351.02.01 and 2150320-RMALUC both indicated that the earthworks bund and associated open drain would be removed (which are the subject of this consent). However, acknowledging that the consent approved by NRC may have expired in 2020. Given that consent is needed from FNDC for the impervious area to be created by the removal of earthworks bund, the current application has been prepared taking a conservative approach rather than relying on the previous consents.

4. Description of the Proposal

4.1 Overview

The Applicant is seeking to undertake earthworks to remove an existing earthworks bund from the site. The details are shown in the Site Plan located in **Appendix C**, and an extract provided below in **Figure 4**. Further development of the wider site is planned, and the removal of the bund will create useable space to support site activities. The bund removal and yard extension work comprise the removal of the bund, minor recontouring, installation of new drainage (to replace an existing open drain along the western edge of the bund) and placing clean imported hardfill to create a new yard area.

The proposed development involves earthworks with a volume of approximately 5000m³ over an area of 2,600m². The earthworks within the Flood Hazard Area consists of approximately 300m³.

As a result of the proposal, an additional area of impervious surface (approximately 2,600m²) will result on the site.

The soil is proposed to be removed from the site and taken to a receiving site, possibly to a Landscape Supplier. The receipt of the earthworks does not form part of this application, which will be addressed separately if consent is required.



Figure 4. An extract of the Site Plan contained in Appendix C

5. Resource Consent Requirements

5.1 Operative Far North District Plan 2009

The proposal is assessed against the provisions of the Operative District Plan as follows:

Table 2. Chapter 8 – Rural Environment – Permitted Activities

Rule 8.6.5.1 Rural Production Zone – Permitted Activities	Comment
8.6.5.1.1 Residential Intensity	N/A as no residential development is proposed.
8.6.5.1.2 Sunlight	N/A as no building is proposed
8.6.5.1.3 Stormwater Management	The impervious surfaces on the site currently exceed 15% of the site as previously consented. Approximately 2600m ² of new hardstand is proposed once the earthworks bund has been removed.
8.6.5.1.4 Setback from Boundaries	N/A as no buildings are proposed.
8.6.5.1.5 Transportation	N/A as no new parking or access areas are proposed.
8.6.5.1.6 Keeping of Animals	N/A
8.6.5.1.7 Noise	The machinery used to undertake the earthworks will comply with the noise standards.
8.6.5.1.8 Building Height	N/A as no buildings are proposed
8.6.5.1.9 Helicopter Landing Area	N/A
8.6.5.1.10 Building Coverage	N/A as no buildings are proposed.
8.6.5.1.11 Scale of Activities	There is no change from existing.
8.6.5.1.12 Temporary Events	N/A

Table 3. Chapter 8 – Rural Environment – Discretionary Activities

Rule 8.6.5.4 - An activity is a discretionary activity in the Rural Production Zone if:	Comment
(a) it complies with Rules 8.6.5.4.1 Residential Intensity; 8.6.5.4.2 Integrated Development; 8.6.5.4.3 Helicopter Landing Area and/or 8.6.5.4.4 Scale of Activities below; and	The proposal complies.
(b) it complies with the relevant standards for permitted, controlled, restricted discretionary or discretionary activities set out in Part 3 of the Plan - District Wide Provisions unless it is an Integrated Development pursuant to Rule 8.6.5.4.2 below; but	The proposal complies (Part 3 – Chapter 12 Natural and Physical resources) is assessed below.
(c) it does not comply with one or more of the other standards for permitted, controlled or restricted discretionary activities in this zone as set out under Rules 8.6.5.1; 8.6.5.2 and 8.6.5.3 above.	The impervious surfaces on the site currently exceed 15% (permitted standard) and 20% (controlled activity standard) of the site. Approximately 2600m ² of new hardstand is proposed once the earthworks bund has been removed. Therefore, consent is required as a discretionary activity under rule 8.6.5.4(c).

Table 4. Chapter 12 – Natural and Physical resources – Soils and Minerals

12.3 Soils and Minerals Rule 12.3.6.1.1 - An activity is a permitted activity if:	Comment
12.3.6.1.1 Excavation and / or filling in the rural production zone	Excavation of the bund is proposed to be approximately 5000m ³ . Therefore, this meets permitted standard (a) as it will not exceed 5000m ³ in any 12 month period. The earthworks bund is currently over 4 m in height. However the whole bund is to be removed with no earthworks left, therefore a 'cut' face will not be created, as there will be no vertical exposed face resulting from the earthworks (as per the definition of cut/fill face within the Operative District Plan). Therefore this meets permitted standard (b).
12.3.6.1.4 Nature of Filling Material in all zones	Any filling proposed will be minor and will comply with the requirements of 12.3.6.1.4.

Table 5. Chapter 12 – Natural and Physical resources – Lakes, Rivers, Wetlands and the Coast

12.7 Lakes, Rivers, Wetlands and the Coast Rule 12.7.6.1 - Permitted Activities	Comment
12.7.6.1.1 Setback from Lakes, rivers and the coastal marine area	The impervious area proposed is setback approximately 200 m from the river adjacent to the western boundary of the site, and therefore more than 30 m.

Therefore resource consent is required from FNDC for the following:

- Providing an area of impervious surface with an area of 2,600 m² as a *discretionary activity* in accordance with rule 8.6.5.4.

5.2 Proposed Far North District Plan

Most of the rules in the Proposed Plan will not come into effect until after the council has released decisions, which has not yet occurred. Until then, current rules in the operative District Plan apply. However, some proposed rules (which have immediate legal effect) do apply as soon as the Proposed Plan is notified. In this case, it is noted that the application site does not contain any 'sites and areas of significance to Māori', heritage areas, historic heritage (identified and listed within the Proposed Plan), or notable trees. The relevant provisions of the Proposed District Plan are as follows:

The relevant sections of the Proposed FNDC are assessed as follows:

- Area and volume of earthworks proposed (EW) - The proposal exceeds the permitted earthworks threshold for sites in the Heavy Industrial zone under EW-S1 given that the earthworks exceed 200m³ and an area of 2500m². Therefore, rule EW-R14 is applicable to this proposal which provides for activities not otherwise listed in this chapter. However, it is acknowledged that this rule is not currently operative.
- Natural Hazards (NH) – it is noted that part of the earthworks bund is located within the River Flood Hazard Zone (100 Year ARI Event) and River Flood Hazard Zone (10 Year ARI Event). However, as the earthworks bund is not defined as a 'structure' under the plan, and none of the Natural Hazard rules are currently operative, this does not form a reason for consent.
- Heavy Industrial Zone (HIZ) – none of the provisions in this zone are currently operative. Therefore this has not been assessed any further.

As a result there are no reasons for consent under the Proposed Far North District Plan.

5.3 National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) Regulations (2011).

Part 9 of Regulation 5 of the NESCS states that “these regulations do not apply to a piece of land... about which a detailed site investigation exists that demonstrates that any contaminants in or on the piece of land are at, or below, background concentrations”. As discussed in the Contamination Assessment (contained in **Appendix E**), it is considered that the investigations undertaken in relation to the bund constitute a Detailed Site Investigation. In addition, it is considered that the contaminants which are present at or below expected background concentrations.

On this basis the NESCS does not apply to the proposal to remove the bund, and there are no reasons for consent in this regard.

5.4 Proposed Regional Plan – Northland (Appeals version 2023) (PRPN)

The PRPN defines potentially contaminated land as that on which a HAIL activity is or has been undertaken. As described in the preceding section, while HAIL activities have occurred on the wider site these have not encroached upon the bund. This conclusion is supported by soil sampling which identifies that contaminants are present at or below expected background concentrations. Therefore, the contaminated land rules of the PRPN do not apply to the proposal to remove the bund.

As the bund is located within a mapped flood hazard area, and removal of the bund will require greater than 100m³ of earthworks to be moved or placed in a 12-month period, consent is required for this matter. It is proposed to undertake approximately 300m³ of earthworks with the flood hazard area. Therefore, resource consent is required under the following rule:

- C.8.3.3 earthworks in a flood hazard area that involve more than 100 cubic metres, but not more than 1,000 cubic metres, of earth being moved or placed in any 12-month period, and any associated damming and diversion of stormwater and discharge of stormwater onto or into land where it may enter water, are *controlled activities*.

5.5 Summary of reasons for consent

Resource consent is sought for the following reasons:

- Far North District Council – Consent is sought for an additional area of impervious surface with an area of 2,600m² as a **discretionary activity** in accordance with rule 8.6.5.4.
- Northland Regional Council – Consent is sought for more than 100m³ of earthworks to be moved or placed in a 12-month period and diversion / discharge of stormwater under rule C.8.3.3 as a **controlled activity**.

6. Assessment of Effects on the Environment

6.1 Introduction

The following assessment is undertaken in accordance with s95A and s104(1)(a) and identifies and assesses the types of the effects that may arise from the proposed works. This assessment also outlines the measures the Applicant proposes to avoid, remedy or mitigate any actual potential adverse effects on the environment.

Actual and potential effects on the environment associated with the land disturbance include the following:

6.2 Positive Effects

The removal of the existing earthworks bund will result in a positive effect on the site. The bund is formed of excess soil from earthworks on the site historically. Its removal will enable the site to be used more efficiently to enable the sawmill to expand operations to serve the local building industry. The removal of the earth bund and the installation of drainage will improve the stormwater efficiency in this part of the site.

6.3 Soil Disturbance

6.3.1 Contamination

Soil testing was undertaken on the bund and the results are provided in **Appendix E**.

The site history review confirmed that HAIL activities (those with potential to cause ground contamination as listed on the Ministry for the Environment's Hazardous Activities and Industries List) have occurred on the wider site but these activities have not encroached on the bund.

Intrusive investigations identified that the concentration of metals, organochlorine pesticides (OCPs), total petroleum hydrocarbons (TPH) and polycyclic aromatic hydrocarbons (PAHs) in the bund materials and associated stockpiles of wood ash fall within expected background ranges. As the identified contaminants of concern are not present above expected background concentrations the bund materials and wood ash can be reused without constraint or if necessary, disposed of as cleanfill.

No specific ground contamination controls apply to disturbing or reusing the bund materials and wood ash. These materials can be removed and reused under standard earthworks controls.

For these reasons, it is considered that any adverse effects arising from soil contamination, will be less than minor.

6.3.2 Natural Hazards

Under the Proposed Regional Plan for Northland (PRPN), a flood hazard area is defined as land that has a one percent chance in any year of being inundated due to high river flows. It is proposed undertake approximately 300 m³ of earthworks within part of the site identified as the flood hazard area. To assess any adverse effects arising from this, a Flood Hazard Assessment has been undertaken and is located in **Appendix F**.

Northland Regional Council (NRC) commissioned hydraulic flood modelling to determine flood hazard areas. The modelled flood hazard area for the Waipapa area is defined by the Priority Rivers 100-year Average Recurrence Interval (ARI) with climate change (CC) inundation extent. As seen in **Figure 1**, the modelled flood inundation from the Kerikeri River (located along the western boundary of the site) extends along the southern boundary of the site unit it intersects the western side of the bund. The bund prevents flood waters from propagating further eastward (inland).

It is proposed to remove the bund and flatten the area to tie into existing ground levels on either side of the bund. If the bund was removed flood water would propagate further eastward than currently modelled for the 100-year ARI + CC flood event. As it is only the distal end of the inundation extent that currently intersects the

bund, in our professional opinion, inundation would not be expected to flow much further eastward or result in widespread flooding (i.e., only a minor change in inundation extent).

It is noted that:

- Once the bund is removed, the ground below will be slightly graded in a south-westerly direction to enable drainage of stormwater.
- While the inundation extent associated with a 100-year ARI + CC flood event may extend further eastward, it will not increase the natural hazard risk on other property, as the land parcel to the east of the bund is also part of the Waipapa Sawmill.

For these reasons, it is considered that the removal of the bund will only result in a minor change in inundation extent and will not result in an increase in flood hazard risk on any other property.

6.3.3 Erosion and Sediment Control

As concluded within the contamination assessment, the bund materials and wood ash can be removed and reused under standard earthworks controls. Given that the soil will be removed from the site and is not a large quality, the standard erosion and sediment controls will be applied, including perimeter silt fences to contain any runoff material.

6.4 Stormwater

Resource consent has been approved in the past for buildings and impervious surfaces on the site which exceed the permitted standard of 15%. The current proposal will increase this by approximately 2,600m².

A stormwater management plan for the site was consented in 2015/2016 by NRC and FNDC, as shown by the approved drawings contained in **Appendix D**. The FNDC consent was amended in 2022. More recently the diversion and discharge of stormwater into the Kerikeri River was assessed by NRC (AUT.201634.01.01) and a notice of deemed permitted marginal or temporary activity was issued on 12th April 2023 (a copy is located in **Appendix D**).

The site is split into three stormwater catchments that discharge via ponds and three outlets into the Kerikeri River. The new stormwater pipe which is proposed to be installed as part of the current proposal and shown on the proposed site plan located in **Appendix C** will connect into this existing network. It is noted that much of the runoff from the existing earthworks bund currently settles in an existing drain which runs alongside the bund. It is considered that the installation of the new stormwater pipe as part of the proposed impervious surface will improve the stormwater disposal in this part of the site and reduce risks of localised ponding.

6.5 Conclusion – Actual and Potential Effects

As a result of the above discussion, it is considered that any actual or potential adverse effects arising from the removal of the earthworks bund and the extension of the impervious surface in this location, will be less than minor.

7. Statutory Assessment

7.1 Part 2 Matters

Part 2 of the RMA sets out the purpose and principles of the Act. The purpose of the Act is to promote the sustainable management of natural and physical resources.

The Court of Appeal decision in *RJ Davidson Family Trust v Marlborough District Council* [2018] NZCA 316 clarifies that if a plan has been “competently prepared” under the RMA then it may be that in many cases the consent authority will feel assured in taking a view that there is no need to refer to Part 2 as it would not add anything to the evaluation exercise. The PRPN and FNDC Operative Plan are considered to contain provisions prepared having regard to Part 2. Therefore, it is considered that an assessment against Part 2 therefore adds little, if any value, to the overall evaluation.

Based on the assessment of the proposal against the objectives and policies set out in **Section 7.4**, the proposal is considered to be consistent with Part 2 of the RMA.

7.2 National Policy Statements

7.2.1 National Policy Statement for Highly Productive Land (NPS-HPL)

The NES aims to protect Highly Productive Land for use in land-based primary production both now and for future generations. The application site is mapped by Manaaki Whenua Landcare Research as having LUC Class 3 soils, along with the majority of the neighbouring properties.

As mentioned earlier, a large proportion of the site is currently covered in impervious surfaces, with a greater quantity of impervious surfaces on the surrounding sites. While the site is currently zoned Rural Production under the Operative District Plan, this is proposed to change to Heavy Industrial under the Far North Proposed District Plan. With a Heavy Industrial zoning there is a greater expectation of large impervious areas and little primary production on the site.

For these reasons, it is considered that consent can be granted under section 3.9 of the NPS-HPL for the following reasons:

3.9 (2)(g) It is a small-scale or temporary land-use activity that has no impact on the productive capacity of the land. *The small 2600m² area is surrounded by existing impervious surfaces which are used for timber production. The site has been classified as a HAIL site which is unsuitable for primary production. In addition, primary production activities are very unlikely to occur on the existing bund given its steep contours. Furthermore, the future zoning of the site is for Heavy Industrial uses.*

7.3 National Environmental Statements

7.3.1 National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NESC) Regulations (2011).

Part 9 of Regulation 5 of the NESC states that “these regulations do not apply to a piece of land... about which a detailed site investigation exists that demonstrates that any contaminants in or on the piece of land are at, or below, background concentrations”. As discussed in the Contamination Assessment (contained in **Appendix E**), it is considered that the investigations undertaken in relation to the bund constitute a detailed site investigation. In addition, it is considered that the contaminants which are present at or below expected background concentrations.

On this basis the NESC does not apply to the proposal to remove the bund.

7.4 Operative Far North District Plan

An assessment against the Operative Far North District Plan and Proposed Northland Regional Plan has provided in **Tables 6** and **7** below. Overall, the proposal is considered to be consistent with the relevant provisions of these plans.

Table 6. Operative Far North District Plan - Objectives and Policies Assessment.

Objective / policy	Comment
Objective 8.3.2 To ensure that the life supporting capacity of soils is not compromised by inappropriate subdivision, use or development.	The site has already been developed as a sawmill and the removal of the earthworks bund and creation of a 2,600m ² impervious area is a small-scale activity that has no material impact on the life supporting capacity of the soils in this context. This small area is surrounded by existing impervious surfaces which are used for timber production. The site has been classified as a HAIL site which is currently unsuitable for primary production.
Policy 8.4.2 That activities be allowed to establish within the rural environment to the extent that any adverse effects of these activities are able to be avoided, remedied or mitigated and as a result the life supporting capacity of soils and ecosystems is safeguarded and rural productive activities are able to continue.	The site has already been developed as a sawmill and the removal of the earthworks bund and creation of a 2,600m ² impervious area is a small-scale activity that has no impact on the life supporting capacity of the soils in this context.
Policy 8.4.4 That development which will maintain or enhance the amenity value of the rural environment and outstanding natural features and outstanding landscapes be enabled to locate in the rural environment.	The earthworks bund is located within an industrial site and is currently vegetated with weedy vegetation and does not provide any contribution to the amenity value of the rural environment.

Table 7. Northland Regional Council – Proposed Regional Plan (October 2023)

Objective / policy	Comment
<p>F.1.10 Natural hazard risk</p> <p>The risks and impacts of natural hazard events (including the influence of climate change) on people, communities, property, natural systems, infrastructure and the regional economy are minimised by:</p> <ol style="list-style-type: none"> 1) increasing the understanding of natural hazards, including the potential influence of climate change on natural hazard events and the potential impacts on coastal biodiversity values, and 2) becoming better prepared for the consequences of natural hazard events, and 3) avoiding inappropriate new development in 100 year flood hazard areas and coastal hazard areas, and 4) not compromising the effectiveness of existing natural and man-made defences against natural hazards, and 5) enabling appropriate hazard mitigation measures to be implemented to protect existing vulnerable development, and 6) promoting long-term strategies that reduce the risk of natural hazards impacting on people, communities and natural systems, and 7) recognising that in justified circumstances, critical infrastructure may have to be located in natural hazard prone areas, and 8) anticipating and providing for, where practicable, landward migration of coastal biodiversity values affected by sea level rise and natural hazard events. 	<p>The removal of the earthworks bund and the installation of the stormwater pipe results in approximately 300m³ of earthworks within the flood hazards area identified on the site. A Flood Hazard Assessment has been undertaken and is contained in Appendix F. As a result of this assessment, it is concluded that removal of the bund will only result in a minor change in inundation extent and will not result in an increase in flood hazard risk on any other property.</p>

7.5 Public Notification Assessment (Sections 95A, 95C and 95D)

7.5.1 Assessment of Steps 1 to 4 (Section 95A)

Section 95A specifies the steps the Council is to follow to determine whether an application is to be publicly notified. These are addressed in statutory order below.

Step 1: Mandatory Notification is required in certain circumstances

Step 1 requires public notification where this is requested by the applicant; public notification is required under s95C; or the application is made jointly with an application to exchange of recreation land under Section 15AA of the Reserves Act 1977.

The above does not apply to the proposal.

Step 2: If not required by Step 1, public notification precluded in certain circumstances

Step 2 describes that public notification is precluded where all applicable rules and national environmental standards preclude notification, or where an application is for a controlled activity or boundary activity.

The above does not apply to this proposal.

Step 3: If not required by Step 2, public notification required in certain circumstances

Step 3 describes that where public notification is not precluded by Step 2, it is required if the applicable rules or national environmental standards require public notification, or if the activity is likely to have adverse effects on the environment that are more than minor.

As noted in Step 2, public notification is not precluded, and an assessment of adverse effects in accordance with s95A is required. This is set out in **Section 6.1 to 6.4** above and concludes that adverse effects will be less than minor.

Step 4: Special Circumstances

If an application is not required to be publicly notified as a result of any of the previous steps, then the council is required to determine whether special circumstances exist that warrant it being publicly notified.

- Special Circumstances are those that are:
- Exceptional or unusual, but something less than extraordinary;
- Outside of the common run of applications of this nature; or
- circumstances which make notification desirable, notwithstanding the conclusion that adverse effects will be no more than minor.

In this case, the proposal is for land disturbance within the site. It is considered that the proposal cannot be described as out of the ordinary or giving rise to special circumstances.

7.5.2 Section 95D Statutory Matters

In accordance with Step 3 from the previous section, in determining whether to publicly notify an application, section 95D specifies a council must decide whether an activity will have, or is likely to have, adverse effects on the environment that are more than minor.

In determining whether adverse effects are more than minor:

- Adverse effects on persons who own or occupy the land where the activity will occur, and any land adjacent that land, must be disregarded.

- Adverse effects permitted by a rule in a plan or national environmental standard (the 'permitted baseline') may be disregarded. In this case, earthworks up to 5000 m³ in any 12 month period are permitted and form the permitted baseline to this proposal. In addition, earthworks up to 100 m³ can be undertaken within a Flood Hazard Area.
- Trade competition effects must be disregarded. This is not considered to be a relevant matter in this case.
- The adverse effects on those persons who have provided their written approval must be disregarded. No persons have provided their written approval to the proposal.
- Any adverse effects arising from the proposed earthworks and extension to the impervious surface has been assessed in **Section 6**. It is concluded that any adverse effects on the wider environment are considered to be less than minor.

7.5.3 Public Notification Conclusion

Overall, it is considered that any adverse effects on the environment relating to the proposal will be less than minor and based on this assessment we consider that this proposal meets the tests of the RMA to be processed without public notification.

7.6 Limited Notification Assessment (Sections 95B, 95E to 95G)

7.6.1 Assessment of Steps 1 to 4 (Section 95B)

If the application is not to be publicly notified under section 95A, the council must follow the steps set out in section 95B to determine whether to limited notify the application. These steps are addressed in statutory order below.

Step 1: Certain affected protected customary rights groups must be notified

Step 1 requires limited notification where there are any affected protected customary rights groups or customary marine title groups, or affected persons under a statutory acknowledgement affecting the land.

The above does not apply to this proposal.

Step 2: Notification precluded in certain circumstances

Step 2 describes that limited notification is precluded where all applicable rules and national environmental standards preclude limited notification; or the application is for a controlled activity (other than for subdivision of land).

The above does not apply to this proposal.

Step 3: If not precluded by step 2, certain other affected persons must be notified

Step 3 requires that, where limited notification is not precluded, a determination must be made as to whether any of the following persons are affected persons:

- In the case of a boundary activity, an owner of an allotment with an infringed boundary;
- In the case of any other activity, a person affected in accordance with s95E.

In this case, the application is not for a boundary activity and an assessment of effects on person is carried out in **Section 6.1 to 6.4** above and **Section 7.6.2** below.

Overall, it is considered that any adverse effects on adjacent properties will be less than minor.

Step 4: Further notification in special circumstances

In addition to the findings of previous steps the council is required to determine whether special circumstances exist in relation to the application that warrant notification of applications to any other persons not already determined as eligible by previous steps.

As discussed earlier, the application is for earthworks and an increase to an existing impervious surface. For this reason, special circumstances are not considered to apply to this proposal.

7.6.2 Section 95E Matters

If the application is not publicly notified a council must decide if there are any affected persons and give limited notification to those persons. A person is affected if the effects of the activity on that person are minor or more than minor (but not less than minor).

In deciding who is an affected person under section 95E:

- Adverse effects permitted by a rule in a plan or national environmental standard may be disregarded;
- In the case of controlled or restricted discretionary activities, only those effects that relate to a matter of control or discretion can be considered; and
- The adverse effects on persons who have provided their written approval must be disregarded.

As discussed in **Section 6.1 to 6.4** above, any adverse effects associated with the removal of the earth bund and the increase in impervious surface on the site be less than minor. It is considered that any effects will be internalised within the site and mitigated, no neighbouring persons will be able to view the increase in the impervious area. In addition, it is considered that the removal of the bund will only result in a minor change in inundation extent and will not result in an increase in flood hazard risk on any other property.

On that basis, no persons are considered to be adversely affected by the proposal.

7.6.3 Limited Notification Conclusion

It is considered, therefore, that there are no adversely affected persons in relation to this proposal. Therefore, it is recommended that this application be processed without limited notification.

8. Conclusion

This Assessment of Environmental Effects report has been prepared on behalf of Waipapa Pine Limited. The removal of the earthworks bund and increase to impervious surfaces is to support the operation of the Waipapa Sawmill.

Based on the above report it is considered that:

- Public notification is not required as adverse effects on the environment will be less than minor;
- Limited notification is not required as no persons will be adversely affected by removal of the earthworks bund;
- Any adverse effects in relation to removal of the earthworks bund will be overall be less than minor and will provide benefits in relation to enabling the sawmill operations on the site currently as well as its future expansion;
- The proposal accords with the relevant objectives and policies of the NESCS, NPS- HPL, NRC PRPN; and FNDC Operative Plan; and
- The proposal is considered to be consistent with Part 2 of the Act.

It is therefore concluded that the proposal satisfies all matters the consent authority is required to assess, and that it can be granted on a non-notified basis.

We would appreciate the opportunity to review draft conditions.

Waipapa Pine Limited

Removal of Earthworks Bund - 1945B State Highway 10, Waipapa



Appendix A. Record of Title

Application for a Resource Consent – Resource Management Act 1991

This application form must be provided with applications to the council for new and replacement resource consents, and changes to the conditions on an existing resource consent.

If you would like to talk or meet with a consents officer to discuss your application prior to lodging with the council, please phone **0800 002 004** or email request to info@nrc.govt.nz.

PART 1: Administration Matters

1 Full Name of Applicant(s) *(the name(s) that will be on the resource consent document)*

Surname:

First Names:

OR

If the application is being made on behalf of a trust, the Trustee(s) who has/have signing authority for the trust must be named.

Trust Name:

Trustee's Name(s):

OR

Company Name: Waipapa Pine Limited

Contact Person: Scott Williams

Email address: scott.williams@fbu.com

Please Note: *If an email address is provided, then all correspondence for this application will be via email.*

Postal address:

Telephone: *(please tick preferred contact number)*

Residential

Business

Mobile 027 0279 6058

2 Details of the Address for Service of documents if different from the Applicant (e.g. Consultant). This address will be used for all documents if completed.

Company Name: Williamson Water and Land Advisory

Contact Person: Nicola Cowley

Email address: nicola.cowley@wwla.kiwi

Please Note: If an email address is provided, then all correspondence for this application will be via email.

Postal address:

Telephone: (please tick preferred contact number)

Residential Business

Mobile 021 243 6095

3 Invoices

Charges relating to the processing of this resource consent application should be sent to:

Applicant Address for service

Charges relating to the ongoing monitoring of a resource consent should be sent to:

Applicant Address for service

4 Name and Address of all Owners/Occupiers of the Site relating to Application if different from the Applicant

Owner(s):

Postal Address:

Telephone: (please tick preferred contact number)

Residential Business

Mobile

Occupier(s):

Postal Address:

Telephone: (please tick preferred contact number)

Residential Business

Mobile

Please Note: If the applicant is not the owner of the land to which the activity relates, then it is good practice to submit the application with written approval from the landowner.

5 Extending Timeframes

The Resource Management Act 1991 (RMA) specifies timeframes for processing resource consent applications (e.g. 20 working days for a non-notified application); however, these timeframes can be extended, if necessary, with the Applicant's agreement. If the council does not meet these timeframes, then it is required to refund 1% of the total processing cost of the application for each day it exceeds the timeframe up to a maximum of 50%.

Do you agree to the council extending RMA resource consent processing timeframes?

- Yes**, provided that I can continue to exercise my existing resource consent until processing of this application is completed.
(Replacement application only. No refund is required to be paid until after the existing resource consent expires.)
- Yes**, provided that the extension is for the specific purpose of discussing and trying to agree on resource consent conditions.
- Yes**, provided that the application process is completed before this date (dd/mm/yy):
- No**.

6 Deposit Fee

An initial minimum fee is payable with this application. These fees can be found on the council's website www.nrc.govt.nz – [Schedule of Minimum Estimated Initial Fees](#) information. Please contact council consents staff if you need assistance with determining the correct minimum initial fee.

Unless agreed to prior to lodging your application, the council will not commence processing your resource consent application until payment of the minimum initial fee is received (i.e. the statutory processing time for the application will not start).

This minimum initial fee may be paid online, by cheque, or by EFTPOS at one of the council's offices.

Instructions for paying online can be found on the council's website at "[Pay online](#)". Please use either the first six numbers of your resource consent (e.g. CONXXXXXX or AUT.XXXXXX), if known, or the Applicant's name as the Reference/Customer number when paying online.

If you do pay online, then please enclose evidence of payment so that the council is aware that the payment has been made.

If the costs of processing the resource consent application are greater than the minimum estimated initial fee, then the applicant will be required to pay the additional actual and reasonable costs of processing the application.

Note: Annual User Charges for Resource Consent Holders

Holders of resource consents will in most cases be required to pay a "Minimum Annual Charge" for administration of the resource consent once issued. There is also likely to be additional annual charges for the monitoring of the resource consent, which will be dependent on the type of activity the resource consent is for. These charges are detailed on the council's website www.nrc.govt.nz in the Annual Charges section of the council's [Charging Policy](#).

7 Applications for Activities within the Coastal Marine Area (CMA)

Prior to lodging an application with the council to undertake any activity in the coastal marine area (CMA), the applicant is required under the Marine and Coastal Area (Takutai Moana) Act 2011 to notify the application to all groups who have applied for customary marine title in that location, and seek their view on the application. This notification should, as a minimum, include a summary of the application that provides sufficient detail for a group to understand what is being proposed

The council cannot accept an application to undertake an activity in the CMA unless the applicant for the resource consent provides evidence of this notification occurring. A response from customary marine title groups is not required by the council.

To ensure you meet the above requirement, you are advised to contact council consents staff to obtain a list of all of the current customary marine title applicant groups within the area where you are proposing to apply for a resource consent.

Information on customary marine titles is available on the [Ministry of Justice/Marine and Coastal Area Applications](#) website.

8 Consultation

The RMA does not require any person, including the applicant or council, to consult with anyone. It is, however, best practice to do so and will allow the council to make a more informed decision.

It is important to remember that consultation does not require reaching an agreement – it is to allow you and the council to be informed about a person’s views. If you do consult, and there are concerns raised that cannot be resolved and you still want to go ahead with your application, then you should have made a genuine attempt to consult with that person(s) in an open and honest manner. Their views should be recorded so they can be taken into account by the council when considering your resource consent application.

PART 2: Application Details

1 Description of Activity

Please describe in detail the activity for which resource consent is being sought.

To undertake earthworks within a Hazard Flood Area (300m3) with associated discharge of stormwater

.....

.....

2 Location Description of Activity

Site Address: 1945B State Highway 10, Waipapa

.....

Legal Description: LOT 3 DP 343062 LOT 2 DP 376253 LOT 1 DP 376253

.....

(Legal description can be obtained from your Certificate of Title, valuation notice, or rates demand)

3 Site Plan

On a separate page (*minimum A4 size*), please provide a site plan showing the location of the activity, site layout, and surrounding environment in relation to property boundaries. Please include any buildings or developments on the site.

These plans should be provided electronically and be of good quality, to enable use in resource consent documentation.

If you do not have access to mapping software, we recommend you use the council's "[Property and Boundaries](https://localmaps.nrc.govt.nz/LocalMapsGallery/)" map available on our website <https://localmaps.nrc.govt.nz/LocalMapsGallery/>.

This council map contains aerial photography and shows property boundaries and details. You can carry out a property search and print maps of aerial photography.

4 Resource Consent(s) being Applied for

Coastal Permit

Mooring

Marine Farm

Structure

Pipeline/Cable

Other (*specify*)

Land Use Consent

Quarry

Earthworks

Dam Structure

Vegetation Clearance

Construct/Alter a Bore

Structure in/over Watercourse

Other (*specify*)

Water Permit

- Stream/Surface Take Damming Groundwater Take
 Diverting Water Other (specify)

Discharge Permit

- Domestic Effluent to Land General Discharge to Land Farm Dairy Effluent to Land/Water
 Air Water Other (specify)

5 Is this application to replace an existing or expired resource consent(s)? Yes No

If Yes:

(a) Please state the resource consent number(s):

.....

(b) Do you agree to surrender the existing resource consent once a new one has been issued:

- Yes No

6 Is this application to change a condition of an existing resource consent? Yes No

If Yes, please state the resource consent number(s):

.....

**7 Please specify the duration sought for your resource consent(s) –
 Only for new or replacement applications.**

5 years months

8 Do you also require consent(s) from a district council? Yes No

If Yes, please complete the following:

Type of consent required? Land use consent to increase the impervious surfaces

Has it been applied for? Yes No

Has it been granted? (If Yes, please attach) Yes No

PART 3: Assessment of Environmental Effects (AEE)

1 An AEE must be provided with your application that has been completed in accordance with the requirements of [Schedule 4 of the RMA](#).

As a minimum, your AEE must include the following:

- Description of the environmental effects of the activity.
- Description of ways in which adverse environmental effects can be avoided, remedied or mitigated.
- Names of people affected by the proposal.
- Record of any consultation you have undertaken, including with affected persons (if any).
- Discussion of any monitoring of environmental effects that might be required.
- An assessment of the activity against any relevant objectives, policies, or rules in the Regional Plans.
- For a coastal permit, an assessment of your activity against any relevant objectives and policies of the New Zealand Coastal Policy Statement.
- An assessment of effects on tangata whenua and their taonga.

This AEE needs to be provided in a separate document attached to this application form.

Any activity needing a resource consent will have some environmental effects. The council will not accept an AEE that says there are no environmental effects from the activity.

You will need to complete the AEE at a level that corresponds with the scale and significance of the effects that the activity may have on the environment. Depending on the scale of the activity, you may need to get help from an expert(s) to prepare your AEE.

The council has a set of standard AEE forms for a selection of common activities. These AEE forms do not cover the relevant objectives, policies, or rules in the Regional Plans nor effects on tangata whenua. If you use one of these forms, then you will need to provide a separate assessment of these matters. These AEE forms can be found on the council's website www.nrc.govt.nz – “Forms and Fees”.

It is important that you provide the council with a complete and well-prepared AEE, otherwise the council may not accept your application.

If your application is for a change to a condition of resource consent under Section 127 of the RMA, then your AEE only needs to cover the effects of the change being requested.

2 Assessment of Effects on tangata whenua and their taonga

The Regional Plan for Northland requires that an AEE must also include an assessment of the effects on tangata whenua and their taonga if one or more of the following is likely:

- Adverse effects on [mahinga kai](#) or access to [mahinga kai](#); or
- Any damage, destruction or loss of access to [wāhi tapu](#), sites of customary value and other ancestral sites and [taonga](#) with which Māori have a special relationship; or

- Adverse effects on indigenous biodiversity in the beds of waterbodies or the coastal marine area where it impacts on the ability of tangata whenua to carry out cultural and traditional activities; or
- Adverse effects on [taiāpure](#), [mātaītai](#) or Māori non-commercial fisheries; or
- Adverse effects on protected customary rights; or
- Adverse effects on sites and areas of significance to tangata whenua mapped in the Regional Plan for Northland (refer [Maps | Ngā mahere matawhenua](#)).

Your AEE must include an assessment of whether any of the above affects are likely to occur.

If they are likely to occur, then you will need to complete a Cultural Impact Assessment (CIA) and provide this with your resource consent application. The Regional Plan for Northland provides details of what must be included in this CIA, and should be referred to.

The best way to find out what the effects of your proposal may be on tangata whenua is to contact local iwi/hapū groups (who represent tangata whenua) and discuss your proposal with them. Council consents staff can provide a list of contact details for local iwi/hapū groups in the area of your proposal. You can then send a copy of your proposal to these groups and seek feedback from them prior to lodging your application. Some iwi/hapū have also developed iwi/hapū Environmental Management Plans that are useful documents that can assist to identify issues of concern to those iwi/hapū for activities occurring in their rohe. The iwi/hapū Environmental Management Plans can be obtained directly from the iwi/hapū or from the council upon request.

3 Assessment of Affected Persons

If the adverse effects of your activity on a person are likely to be minor, or more than minor, then that person is deemed to be an “affected person” for your resource consent application.

An affected person may include neighbouring land owners and occupiers, and/or organisations such as the Department of Conservation, Land Information New Zealand (LINZ), Fish and Game Council, Iwi and Hapū, and community groups.

If you do not think there will be any affected persons for your resource consent application, then you do not need to provide any details on this matter in your AEE. However, the council will still undertake an assessment of whether there are any affected persons as part of processing the resource consent application.

If there are persons you have identified who may be affected, and you have discussed your proposal with these persons, please record any comments made by them and your response, and include this information with your application. If you have written approvals from these parties, then these should be provided as well. The council has a written approval form that can be used for this purpose.

Iwi Settlement Acts

If there is an **Iwi Settlement Act** that covers the area of your application, then there may be “Statutory Acknowledgement” areas which could be adversely affected by your activity. If the location of your activity is within, adjacent to, or may have an adverse effect on, a Statutory Acknowledgement area, then you will need to assess whether the trustees of the Statutory Acknowledgement are affected persons. Information about Statutory Acknowledgements in Northland can be found on the council’s webpage at [“Statutory Acknowledgements in Northland”](#).

Checklist

The following information **must** be included in your application to ensure that is not returned as incomplete under Section 88 of the RMA.

- All applicable application form details have been completed.
 - Assessment of Environmental Effects in accordance with Schedule 4 of the RMA.
 - Assessment of effects on tangata whenua and their taonga.
 - Site plan(s). These are required to be of good quality, and preferably electronically, to enable use in resource consent documentation.
 - Evidence of payment of the required minimum estimated initial fee.
 - If you are applying for a coastal permit, evidence that you have provided notice of your application to all groups who have applied for customary marine title in the location of your application and that you have sought their view on the application. The council cannot legally accept an application without evidence of this.
-

Information Privacy Issues

The information you provide in this application is regarded as official information. It is required under the provisions of the Resource Management Act 1991 to process this application. The information will be held by the council and is subject to the provisions of the Local Government Official Information and Meetings Act 1987, and the Privacy Act 1993. The information you provide in this application will generally be available to the public.

Under Section 88 and/or 127 of the Resource Management Act 1991 (RMA), the undersigned makes this application for resource consent(s).

- 1 I/We confirm that I have authority to sign on behalf of the person(s) named as the applicant(s) for this application for resource consent.**
- 2 I/We have read, and understand, all of the information contained within this application form, including the requirement to pay any additional actual and reasonable costs for the processing of the application.**
- 3 I/We confirm that all of the information provided is true and correct and I understand that any inaccurate information provided could result in my resource consent (if granted) being cancelled.**

Signature(s):

Date:

Signature(s):

Date:

Signature(s):

Date:

Please note that a signature is not required if submitting application electronically.



Part B: Assessment of Environmental Effects Earthworks (Minor Effects)

This application is made under Section 88/Section 127 of the Resource Management Act 1991

To: Consents Department
Northland Regional Council
Private Bag 9021
Te Mai
Whangārei 0143

Whangārei office: 09 470 1200
0800 002 004
Email: info@nrc.govt.nz
Website: www.nrc.govt.nz

PART B – ASSESSMENT OF ENVIRONMENTAL EFFECTS

Your application must include an Assessment of Effects on the Environment. This form is a guide to help you prepare it.

An assessment of effects is required so that you and others can understand what happens to the environment when you undertake earthworks (i.e. building site works, roading and tracking, quarrying and mining). This will help you to propose ways to minimise those effects to the council’s satisfaction.

The degree of detail required is in proportion to the scale of the environmental effects of your proposal. If the size of your proposed activity or the scale of its potential effects is significant, a report by a professional advisor in support of your application may be required.

Please note that the word “environment” includes the surrounding coastal water, adjoining land, any surrounding resource users, and local iwi.

The diversion and discharge of stormwater runoff from earthworks activities may also require permits from the council.

It is advised that you make an appointment with an appropriate council officer to discuss your application prior to lodging it. This will help you supply all the required information at the onset and ensure the efficient processing of your application.

A. Description of the Proposed Activity

A.1 Describe the type of earthworks you propose to carry out. *(use an additional sheet if required)*

Removal of an existing earthbund - details are in the AEE

Earthworks (Minor Effects) – AEE 6

A.2 How will the work be carried out (i.e. what machinery will be used)?

To be determined by contractor appointed

A.3 Who will be undertaking the work?

Contractor to be appointed

A.4 What date do you propose to start the earthworks?

2024

A.5 When do you expect to complete the earthworks?

2025

A.6 Will the work be carried out in stages?

No

Yes, describe each stage and indicate the number of weeks required for the completion of each stage.

A.7 What is the approximate volume of the proposed earthworks? 5000 cubic metres

A.8 What is the approximate area that the earthworks will affect? 2600 square metres

A.9 Describe any cut or fill batters, or both (include height of batter, depth of excavation or fill, slope of batter and extent)

The existing bund ranges in height from 2 to 4 metres

A.10 Will you be stockpiling any material?

No

Yes, describe the dimension, location and duration of stockpiles.

If your proposed earthworks are associated with a minor quarrying or mining operation, provide the following details in A.11 to A.14, otherwise go to Section B – Site Details.

A.11 What is the volume of overburden to be removed annually? _____ m³/year

A.12 How much of this material is to be retained within the quarry area? _____ m³

A.13 If overburden is to be removed from the site, please provide details of the likely placement of this material (e.g. sold offsite or spread on paddocks etc).

A.14 What is the estimated maximum volume of rock to be extracted per year? _____ m³/year

B. Site Details

B.1 You **must** attach a map that shows the following:

- The location of the proposed earthworks showing any face heights and bench widths, access roads and tracks.
- The legal boundaries of the property and the proposed separation distance from the proposed activity.
- The location of any springs, wetlands and surface water resources (including coastal water) within 500 metres of the proposed earthworks.

B.2 You **must** attach a detailed plan of the proposed earthworks which shows the:

- Location and dimensions of any cut and fill areas.
- Location and dimensions of any proposed overburden dump site(s).
- Location and dimensions of proposed sediment detention ponds, plus any other sediment control works (e.g. diversion drains).
- An indication of the proposed overland flow pathways of any surface runoff from all working areas.
- Areas of instability and areas affected by flooding.

B.3 What is the topography of the area (e.g. flat, rolling or steep)?

Please refer to the attached AEE

Earthworks (Minor Effects) – AEE 6

B.4 What is the soil/rock type?

Please refer to the attached AEE

B.5 What type of vegetation currently covers the site?

Please refer to the attached AEE

B.6 Is the proposed site of the earthworks located in an area that is likely to flood (i.e. within a floodplain)?

Yes

No

B.7 What is the approximate catchment area draining onto or through the proposed earthworks site?

_____ m²

B.8 Is there a watercourse or wetland within 200 metres of the site?

No, go to **Section C – Assessment of Effects.**

Yes, provide details on the following:

What is the approximate distance of the watercourse(s) or wetlands from the site of the earthworks activity? 200 metres

What is the name of the watercourse(s), or the name of the stream into which it flows?

Kerikeri River

Does this watercourse flow for most of the year? Yes No

C. Assessment of Effects on the Environment

An assessment of effects should be proportional to the scale and significance of the proposed activity. Where the proposed earthworks could have an adverse effect on the environment, a detailed environmental assessment is required.

C.1 Affected Parties

Will the proposed earthworks have an effect on any other people in the surrounding area e.g. land movements on adjacent properties, silt affecting downstream water users, or dust blowing onto other properties?

No, why not?

Please refer to the AEE

Yes, provide details of the affected people/parties and how the proposed activity may affect them.

If written approvals are obtained from all parties that may be affected by the earthworks, and the effects of your proposed earthworks are minor, then the council is likely to process your application without public notification.

If written approval cannot be obtained, suggest ways to reduce the effect on neighbours (mitigation measures).

C.2 Consultation

If written approvals are obtained from all parties that may be affected by the earthworks and the effects of the proposed works are minor, then the council is likely to process your application without public notification.

Written approvals regarding your proposal are normally required from the adjoining landowners/occupiers and others who may be affected by your works.

Please see attached explanatory notes for details of who needs to be consulted.

The council can supply you with written approval forms to aid you with the consultation.

Have you consulted with any of the following potentially affected parties?

	Yes	No
Neighbours	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other nearby people who may be affected	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Department of Conservation <i>(if relevant)</i>	<input type="checkbox"/>	<input type="checkbox"/>
Fish and Game Council <i>(if relevant)</i>	<input type="checkbox"/>	<input type="checkbox"/>
Local iwi <i>(specify):</i> _____	<input type="checkbox"/>	<input type="checkbox"/>
Other <i>(specify):</i> _____	<input type="checkbox"/>	<input type="checkbox"/>

Any letters of concern/support or comment from persons consulted should be attached to this application form.

Earthworks (Minor Effects) – AEE 6

C.3 Effects on Nearby Waterways

Please ensure that all waterbodies (springs, streams, lakes and rivers) and/or wetlands within 200 metres of your proposed earthworks are shown on the location map. Measure accurately the distance between your proposed earthworks site and any waterbodies and show the distances on the map.

Are there any of the following in the waterbodies in the vicinity of the proposed earthworks activity?

	Present	
	Yes	No
Obvious signs or known aquatic biota (e.g. eels, other fish, insects, aquatic plants)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Areas where food is gathered (e.g. watercress, eels, wildfowl)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Waste discharges (e.g. dairy sheds, industrial, treatment plants)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Recreational activities (e.g. swimming, fishing, canoeing)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Areas of special aesthetic value (e.g. waterfalls)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Areas of significance to iwi	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If you have answered **Yes** to any of the above, describe what effect the proposed earthworks may have and the steps you propose to take to minimise (i.e. mitigate) these effects (attach a separate sheet if necessary).

Please refer to AEE

C.4 Effects on Land

Are there any of the following in the vicinity of the proposed earthworks?

	Present	
	Yes	No
Areas of indigenous vegetation or habitats of indigenous fauna	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Areas of significance to iwi	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Areas of slope instability	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If you have answered **Yes** to any of the above, describe what effect your proposed earthworks may have and the steps you propose to take to minimise (i.e. mitigate) these effects (attach a separate sheet if necessary):

Please refer to AEE

C.5 Are you proposing to topsoil and revegetate bare areas of land at the completion of earthworks?

- No
- Yes, propose details of the revegetation and time frames

C.6 Are you proposing any sediment retention or sediment control methods?

- No
- Yes, provide details of proposed control methods including dimensions

Please refer to the AEE

C.7 Other Adverse Effects

Will your earthworks have any other adverse effects on the environment (i.e. noise and dust generation)?

- No, why not?

Please refer to the AEE

- Yes, how will these effects be mitigated?

C.8 Positive Effects

What positive effects will the proposed earthworks have?

Please refer to AEE

Earthworks (Minor Effects) – AEE 6

C.9 Alternative Earthworks

Have you considered any alternative method or sites for the proposed earthworks?

- No
 Yes, provide details

C.10 Monitoring

What, if any, monitoring do you propose to carry out to ensure that the proposed earthworks does not have any adverse effect on the environment?

Please refer to AEE

Please ensure that all of the relevant questions on this form have been answered fully.

If you have any queries relating to information requirements or wish to meet with a council consents officer, please contact a Duty Planner at the Northland Regional Council.

Northland Regional Council offices:

Whangārei Office

36 Water Street
Whangārei 0110

P 0800 002 004

E info@nrc.govt.nz

www.nrc.govt.nz

Dargaville Office

Ground Floor
32 Hokianga Road
Dargaville 0310

P 09 439 3300

Kaitiāia Office

192 Commerce Street
Kaitiāia 0410

P 09 408 6600

Waipapa Office

Shop 9
12 Klinac Lane
Waipapa 0295

P 0800 002 004

Appendix C. Drawings



EXISTING SUMP TO REMAIN

REMOVE EXISTING PIPE

BACKFILL EXISTING DRAIN

FLOOD HAZARD ZONE

REMOVE EXISTING CULVERT

EXISTING STORMWATER POND

~2,600m² NEW HARDSTAND TO INFILL AREA BETWEEN EXISTING HARDSTAND AREAS

INSTALL NEW STORMWATER PIPE

INSTALL MANHOLE WITH GRATED LID

INSTALL MANHOLE WITH GRATED LID

LEGEND

	OVER 4m CUT
	UP TO 2m CUT
	UP TO 2m FILL
	RECONTOUR IF REQUIRED

APPROXIMATELY 4,100m³ OF MATERIAL TO REMOVED (ASSUMES 300mm UNDERCUT FOR PAVEMENT)

CUT/FILL PLAN

SITE PLAN



Title:

Client:

WILLIAMSON WATER AND LAND ADVISORY

Location:

INDUSTRIAL WAY, WAIPAPA

Project Name:

WAIPAPA PINE EARTH BUND REMOVAL

Project Number:

Drawn:

C. FROST

Date:

28/11/2023

Sheet:

1 OF 1

Version:

V0

Waipapa Pine Limited

Removal of Earthworks Bund - 1945B State Highway 10, Waipapa



Appendix D. Previously approved consents

Notice of Deemed Permitted Marginal or Temporary Activity

Notice Number: AUT.201634.01.01

Applicant Name: Waipapa Pine Limited

Location Details: State Highway 10, Waipapa

Pursuant to Section 87BB(1)(d) of the Resource Management Act 1991 (the Act), Northland Regional Council (the council) hereby gives notice that the activity described below is a Deemed Permitted Marginal or Temporary Activity and therefore may be undertaken without the need for resource consent.

Description of Activity and Site Details

The proposal is to divert and discharge stormwater to the Kerikeri River from properties (Lot 3 DP 343062 and Lot 2 DP 376253) that are used by Waipapa Pine Limited for sawmilling operations. The sawmill previously treated timber on site with the use of antisapstain (propiconazole), however those timber treatment operations ceased in 2017. After the propiconazole unit was removed in 2017, soils in the immediate vicinity of the spray unit and the treated timber storage area were removed. The locations of the treatment and storage areas have since been concreted and built over. Due to the cessation of the timber treatment and storage activities, and the subsequent remediation of potentially contaminated areas the site is no longer considered to be a “High Risk Trade and Industrial Premise” as defined in the Proposed Regional Plan for Northland (PRP).

The discharge does not meet Clause 5 of Rule C.6.4.2 (other stormwater discharges – permitted activity) of the PRP as the land meets the definition of ‘potentially contaminated land’ due to the activities previously undertaken on the site. The applicant has monitored surface water quality in a drain on the property and the Kerikeri River for the past 10 years, without propiconazole being detected, i.e. the concentrations of propiconazole, if any, in receiving water samples were below the level of detection for the laboratory test method used.

Reasons

It has been determined that:

- (1) The activity is able to meet all the other permitted activity criteria of the permitted activity rule C.6.4.2 of the PRP. The breach of a condition of the rule is therefore only a marginal non-compliance.

- (2) The adverse environmental effects of the activity have been assessed to be no different in character, intensity, or scale than they would be in the absence of the marginal non-compliance with the Proposed Regional Plan.
- (3) The adverse effects of the activity on any other person have been assessed to be less than minor.

The information relied upon for considering that the activity meets the above criteria was supplied to the council by the owner and operator of the sawmill.

Advice Note

- 1 This notice is valid only for the activity described above. Any activities not included in this notice must either comply with the Regional Plans, be allowed by the Resource Management Act 1991, or be authorised by a separate resource consent.

**Name and Signature of
Authorised Person:**



Colin Dall
Group Manager – Regulatory Services

Date: 12 April 2023



File: 31351
(02-04)
New

Document Date: 19.05.2015

Resource Consent

Pursuant to the Resource Management Act 1991, the Northland Regional Council (hereinafter called "the Council") does hereby grant a Resource Consent to:

WAIPAPA PINE LIMITED, PO BOX 11024, WHANGAREI 0148

To undertake the following activities associated with expanded operations at a sawmill State Highway 10, Waipapa within the catchment of the Kerikeri River on Lot 3 DP 343062 and Lots 1 & 2 DP 376253 at or about location co-ordinates 1683290E 6102700N.

Note: All location co-ordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection.

- AUT.031351.02.01** **Land Use Consent:** To carry out earthworks associated with the construction of stormwater management facilities.
- AUT.031351.03.01** **Discharge Permit:** To discharge stormwater to land and water from land disturbance activities.
- AUT.031351.04.01** **Water Permit:** To divert stormwater associated with land disturbance activities.

Subject to the following conditions:

1. The Consent Holder shall undertake the activities generally in accordance with the **(attached)** Haigh Workman Civil & Structural Engineers plans entitled:
 - (a) "Overall Stormwater Plan"; Project No: 12 102, Drawing No: PP1, Sheet 1 of 11; dated 03/10/2014.
 - (b) "Stormwater Plan - Sheet 1 of 2"; Project No: 12 102, Drawing No: PP2 , Sheet 2 of 11; dated 03/10/2014.
 - (c) "Stormwater Plan - Sheet 2 of 2"; Project No: 12 102, Drawing No: PP3, Sheet 3 of 11; dated 03/10/2014.
 - (d) "Proposed Pond A Plan"; Project No: 12 102, Drawing No: PP4, Sheet 4 of 11; dated 03/10/2014.
 - (e) "Proposed Pond C Plan"; Project No: 12 102, Drawing No: PP5, Sheet 5 of 11; dated 03/10/2014.
 - (f) "Stormwater Longitudinal Section"; Project No: 12 102, Drawing Nos: PLS1 and PLS2, Sheets 6 & 7 of all; dated 03/10/2014.

- (g) "Proposed Pond A Section Detail"; Project No: 12 102, Drawing Nos: PD1 and PD2, Sheets 8 & 9 of 11; dated 03/10/2014.
- (h) "Proposed Pond C Details"; Project No: 12 102, Drawing No: PD3, Sheet 10 of 11; dated 03/10/2014.
- (i) "Proposed Pond Details"; Project No: 12 102, Drawing No: PDP4, Sheet 11 of 11; dated 03/10/2014.

2. The Consent Holder shall notify the Council's Monitoring Manager in writing of the date that earthworks are intended to commence, at least two weeks beforehand. The Consent Holder shall arrange for a site meeting between the Consent Holder's principal earthmoving contractor and the Council's assigned monitoring officer, which shall be held on site prior to any earthworks commencing. No works shall commence until the Council's assigned monitoring officer has completed the site meeting.

Advice Note: Notification of the commencement of works may be made by email to mailroom@nrc.govt.nz.

3. The Consent Holder shall, at least two weeks prior to the commencement of any earthworks, prepare and submit an Erosion and Sediment Control Plan (ESCP) in accordance with Condition 5 of this consent that sets out the practices and procedures to be adopted in order that compliance with the conditions of this consent is achieved.

As a minimum the ESCP shall include the following:

- (a) The expected duration (timing and staging) of the earthworks operations, drainage works, disposal sites for unsuitable materials, and clean water diversions.
- (b) Diagrams and/or plans, of a scale suitable for on-site reference, showing the locations of the earthworks operations, disposal sites for unsuitable materials, erosion and silt control structures/measures.
- (c) Details of erosion and sediment controls.
- (d) Supporting calculations and catchment boundaries for the erosion and sediment controls.
- (e) The commencement and completion dates for the implementation of the proposed erosion and sediment controls.
- (f) Measures to control the effects of dust during construction and operation.
- (g) Details of surface revegetation of disturbed sites and other surface covering measures to minimise erosion and sediment runoff following construction.
- (h) Measures to minimise sediment being deposited on public roads.
- (i) Measures to ensure dust discharge from the earthworks activity does not create a nuisance on neighbouring properties.
- (j) Monitoring procedures to ensure adverse effects on water quality in the Kerikeri River are minimised.
- (k) Measures to prevent spillage of fuel, oil and similar contaminants.
- (l) Contingency containment and clean-up provisions in the event of accidental spillage of hazardous substances.

- (m) Means of ensuring contractor compliance with the ESCP.
 - (n) The name and contact telephone number of the person responsible for monitoring and maintaining all erosion and sediment control measures.
 - (o) Contingency provisions for the potential effects of large/high intensity rain storm and flood events.
4. No earthworks shall be carried out between 1 May and 30 September in any year unless the prior written agreement of the Council's Monitoring Manager has been obtained.
 5. Sediment control measures shall be constructed and maintained in accordance with the principles and practices contained within the document entitled "Erosion and Sediment Control – Guidelines for Land Disturbing Activities", Auckland Regional Council Technical Publication No. 90, dated March 1999 (TP 90), including December 2007 updates.
 6. The Consent Holder shall minimise contamination of surface water by ensuring that slash, soil, debris and detritus associated with the exercise of these consents, is not placed in a position where it may be washed into the downstream water body
 7. All off-site stormwater shall be directed away from earthworks areas and no drainage pathways shall be constructed or permitted to flow over fill areas in a manner that creates erosion of the fill material.
 8. All bare areas of land shall be covered with aggregate, or top soiled and established with a suitable grass/legume mixture to achieve an 80% groundcover within three months of the completion of earthworks in each construction season, whichever is the sooner. Temporary mulching or other suitable ground cover material shall be applied to achieve total ground cover of any areas unable to achieve the above requirements.
 9. Refuelling and servicing of machinery shall not be carried out in such a way that soil or water at the site is contaminated. Where an accidental spillage to land occurs all contaminated soil shall be collected and removed to a disposal site that is authorised to accept such material. Where an accidental spillage to water occurs, the Consent Holder shall:
 - (a) Immediately take such action, or execute such work as may be necessary, to stop and/or contain such escape; and
 - (b) Immediately notify the Council by telephone of an escape of contaminant; and
 - (c) Take all reasonable steps to remedy or mitigate any adverse effects on the environment resulting from the escape; and
 - (d) Report to the Council's Monitoring Manager in writing within one week on the cause of the escape of the contaminant and the steps taken or being taken to effectively control or prevent such escape.

In regard to telephone notification during the Council's opening hours, the Council's assigned monitoring officer for these consents shall be contacted. If that person cannot be spoken to directly, or it is outside of the Council's opening hours, then the Environmental Hotline shall be contacted.

Advice Note: *The Environmental Emergency Hotline is a 24 hour, seven day a week, service that is free to call on 0800 504 639.*

10. The discharge from the land disturbance activity shall not cause any of the following effects on the water quality of the Kerikeri River 10 metres downstream of Lot 2 DP 376253, compared to a site upstream of all land disturbance activities during the same sampling event:
- (a) The production of any conspicuous oil or grease films, scums or foams, floatable or suspended materials, or emissions of objectionable odour.
 - (b) An increase in suspended solids concentration greater than 100 grams per cubic metre.
 - (c) pH outside the range 6.5 to 9.0 units.
 - (d) A reduction in visual clarity of more than 40%, as measured using black disc method or a council approved alternative method.
 - (e) A reduction in natural hue by more than 10 Munsell units.
11. In the event of archaeological sites or koiwi being uncovered, activities in the vicinity of the discovery shall cease and the Consent Holder shall contact Heritage New Zealand Pouhere Taonga. Work shall not recommence in the area of the discovery until the relevant Heritage New Zealand Pouhere Taonga approval has been obtained.

Advice Note: *The Heritage New Zealand Pouhere Taonga Act 2014 makes it unlawful for any person to destroy, damage or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga.*

12. The Council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions annually during the month of May for any one or more of the following purposes:
- (a) To deal with any adverse effects on the environment that may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
 - (b) To require the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

The Consent Holder shall meet all reasonable costs of any such review.

Advice Note: *The Council may, in accordance with Section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions any time for the following purposes:*

- (a) *To provide for compliance with rules relating to minimum standards of water quality in any regional plan that has been made operative since the commencement of the consent; or*
- (b) *To provide for compliance with any relevant national environmental standards that have been made; or*

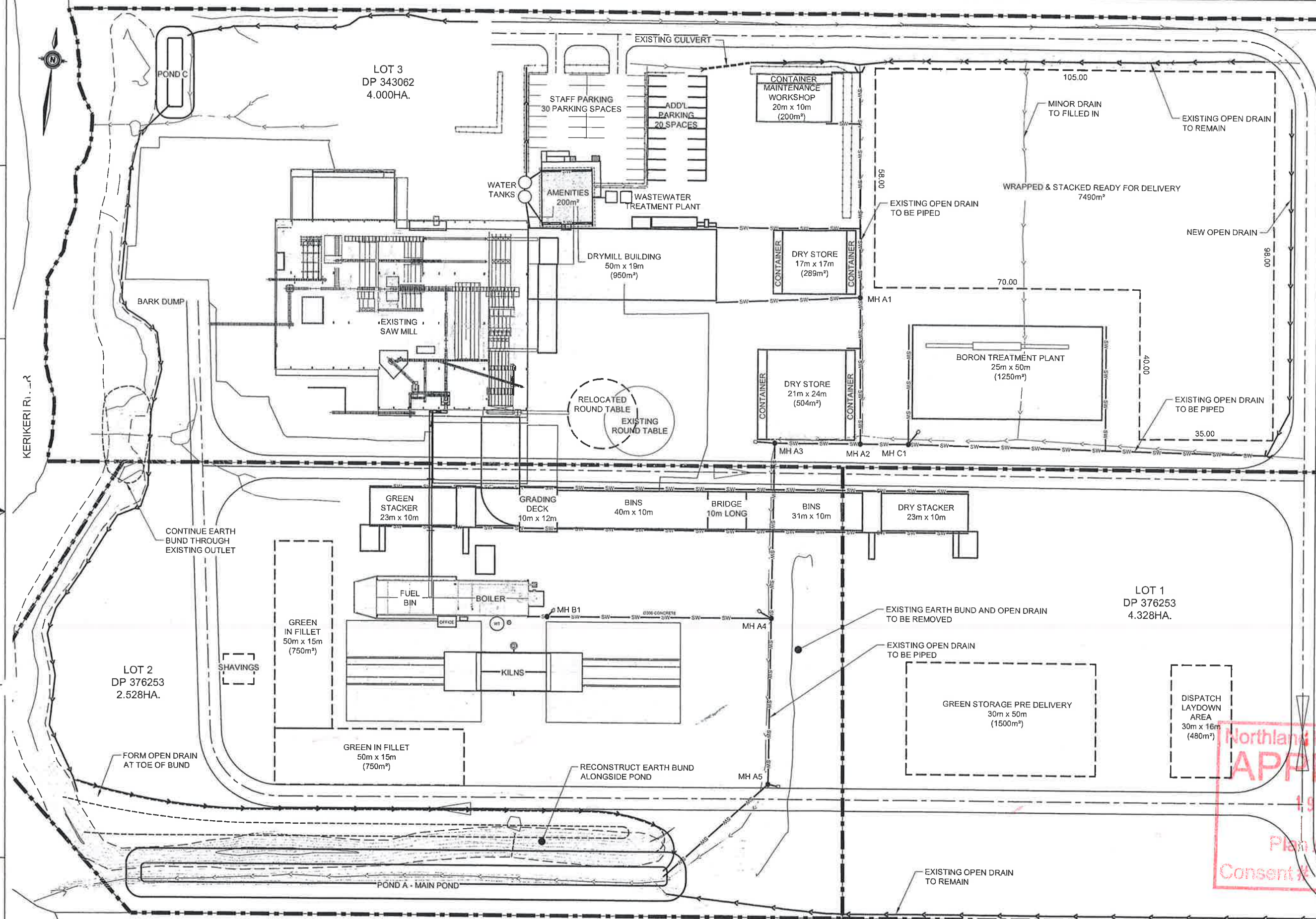
- (c) *Where there are inaccuracies in the information made available with the application that materially influenced the decision on the application and where the effects of the exercise of consent are such that it is necessary to apply more appropriate conditions.*

EXPIRY DATE: 31 MAY 2020

This consent is granted this Nineteenth day of May 2015 under delegated authority from the Council by:



Allan Richards
Consents Programme Manager – Coastal & Works



LEGEND:

- COVERED AREA
- UNCOVERED AREA
- CONCRETE
- EXISTING COVERED AREA

COVERED AREAS:

EXISTING STRUCTURE	3881
AMENITIES	200
DRYMILL BUILDING	950
MAINTENANCE SHOP	249
DRY STORE	993
STACKERS	1800
FUEL BIN & BOILER	372
KILN	376
BORON TREATMENT PLANT	1250
TOTAL	10071

FOOTPRINT AT DEVELOPMENT:

LOT 1	21000
LOT 2	25280
LOT 3	40000
TOTAL	86280
% IMPERMEABLE	20%

CONCRETE AREAS:

EXISTING CONCRETE SLAB	4949
KILN CONCRETE	1990
TOTAL	6939

Northland Regional Council
APPROVED
 19 MAY 2015
 Plan / Document
 Consent # 31351

Issue	Date	Revision
-	18/07/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG Overall Stormwater Plan

Scale 1:1000 @A3

Drawn AP Checked JP Approved

Date 18/07/2013

File Z:\112 JOBS\112 102 WAIAPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN.DWG

HAIGH WORKMAN
Civil & Structural Engineers

310 Kerikeri Road, Kerikeri, B.O.I.
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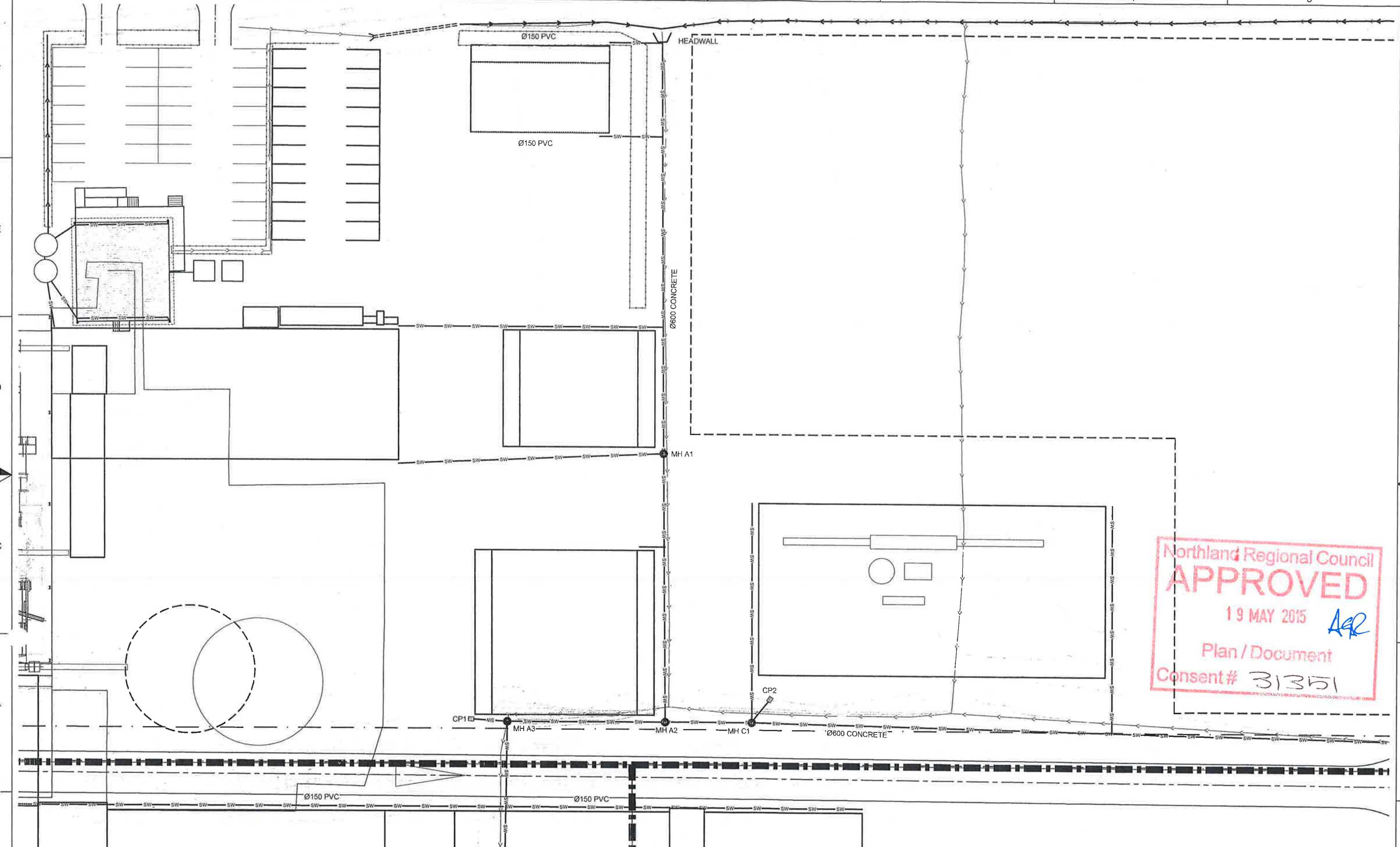
Project Proposed Plant Expansion

Client Waipapa Pine Ltd.

Project No. 12 102 RC no.

DWG No. **PP1**

Sheet No. **1 of 11**



Northland Regional Council
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 19 MAY 2015 *AAR*
 Plan / Document
 Consent # 31351

Issue	Date	Revision
-	18/07/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG **Stormwater Plan**
Sheet 1 of 2

Scale 1:500 @A3

Drawn AP Checked JP Approved

Date 18/07/2013

File Z:\112 JOBS\112 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN DWG

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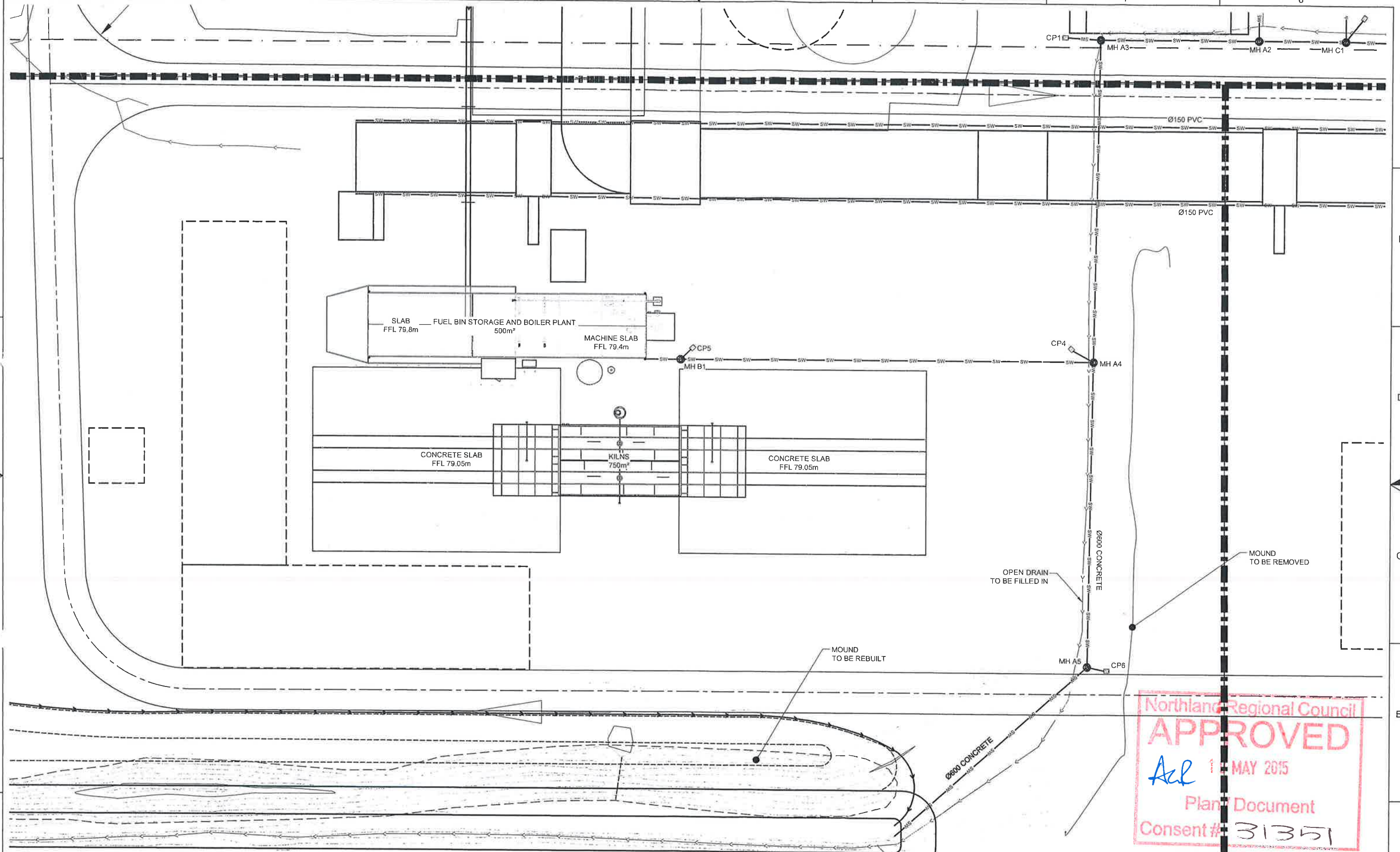
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Project	Proposed Plant Expansion	
Client	Waipapa Pine Ltd.	
Project No.	12 102	RC no.

DWG No.	PP2
Sheet No.	2 of 11



Northland Regional Council
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 Acl 1 MAY 2015
 Plan Document
 Consent # 31351

Issue	Date	Revision
-	18/07/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG Stormwater Plan Sheet 2 of 2

Scale 1:500 @A3

Date 18/07/2013

Drawn AP Checked JP Approved

File Z:\112 JOBS\112 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN.DWG

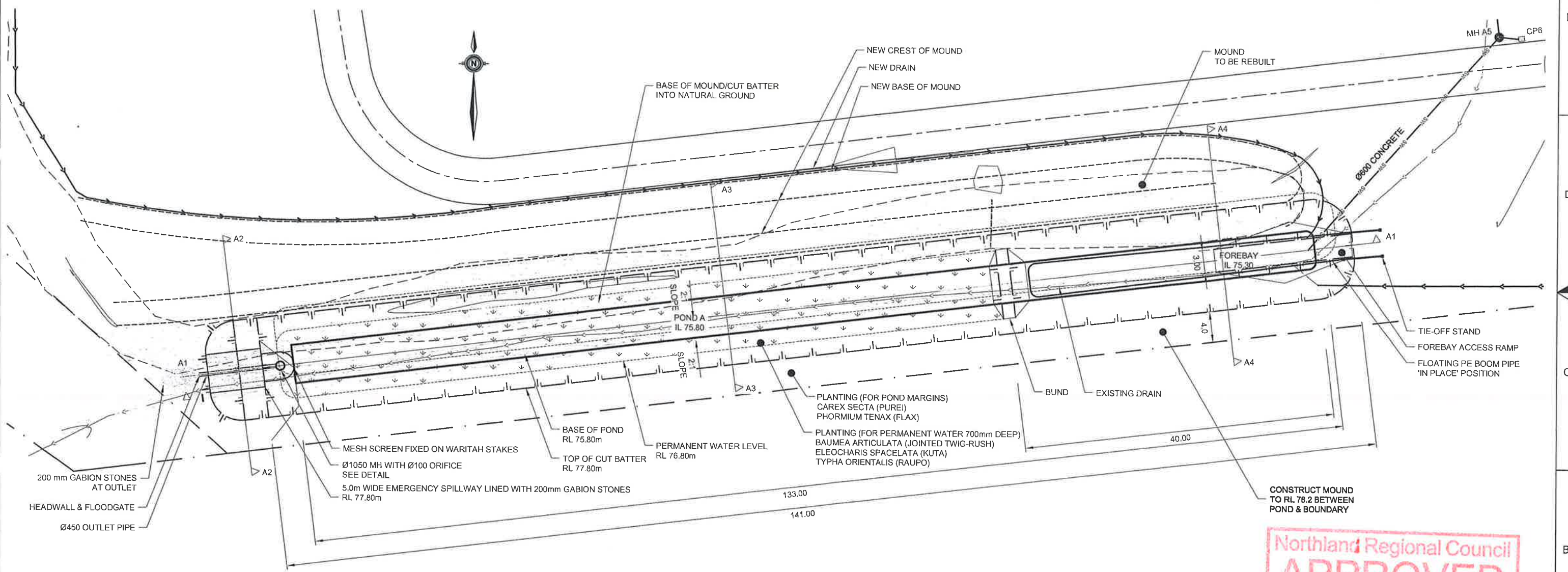
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Project	Proposed Plant Expansion	
Client	Waipapa Pine Ltd.	
Project No.	12 102	RC no.

DWG No.	PP3
Sheet No.	3 of 11



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ACL 19 MAY 2015
 Plan / Document
 Consent # 31351

Issue	Date	Revision
-	18/09/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG Proposed Pond A Plan

Scale 1:500 @A3

Drawn AP Checked JP Approved

Date 18/09/2013

File 2:12 JOBS112 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN.DWG

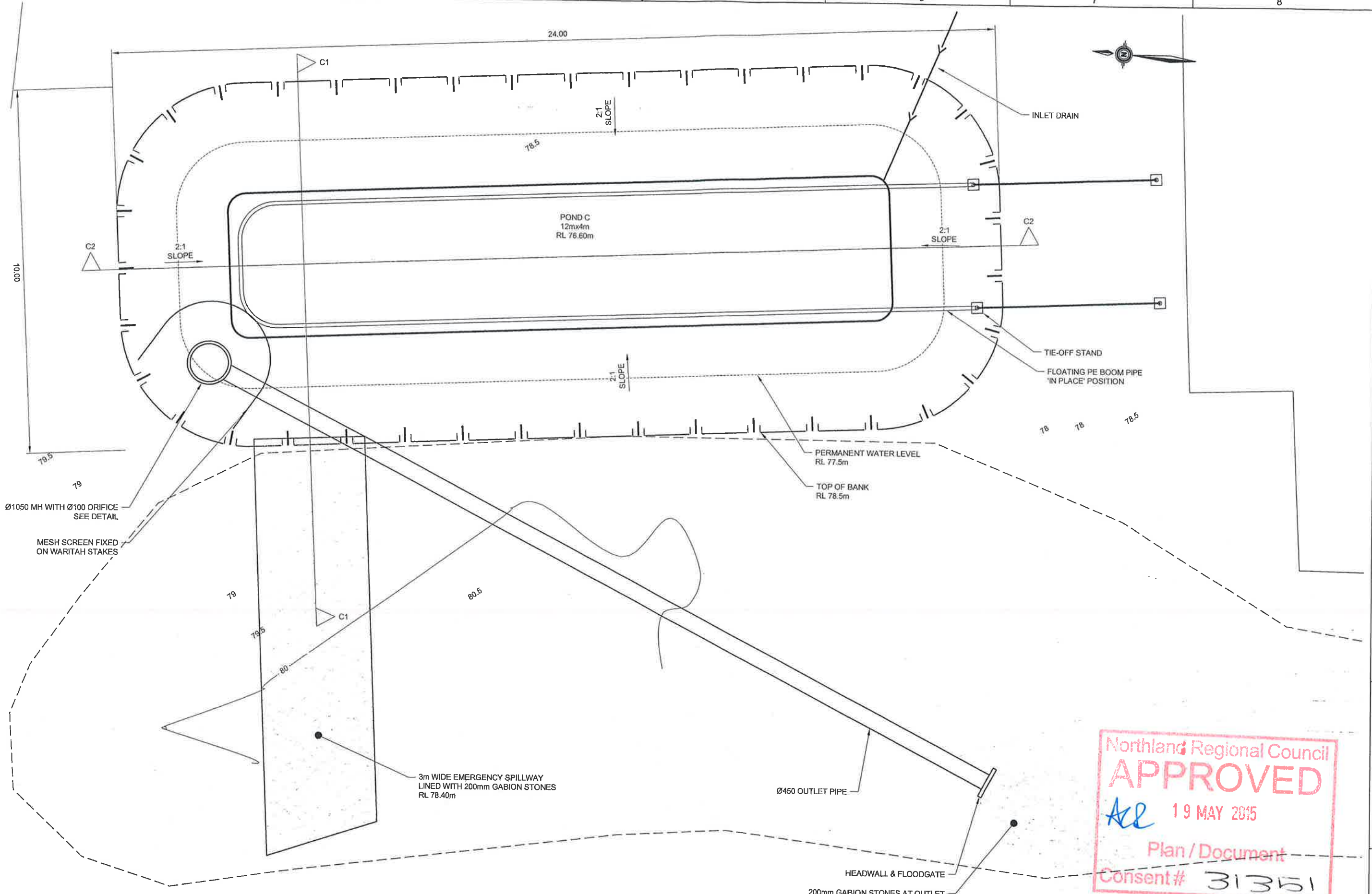
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Project	Proposed Plant Expansion
Client	Waipapa Pine Ltd.
Project No.	12 102
RC no.	

DWG No.	PP4
Sheet No.	4 of 11



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APL 19 MAY 2015
 Plan / Document
 Consent # 31351

Issue	Date	Revision
-	18/09/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG **Proposed Pond C Plan**

Scale 1:100 @A3

Drawn AP Checked JP Approved

Date 18/09/2013

File Z:\112 JOBS\112 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN.DWG

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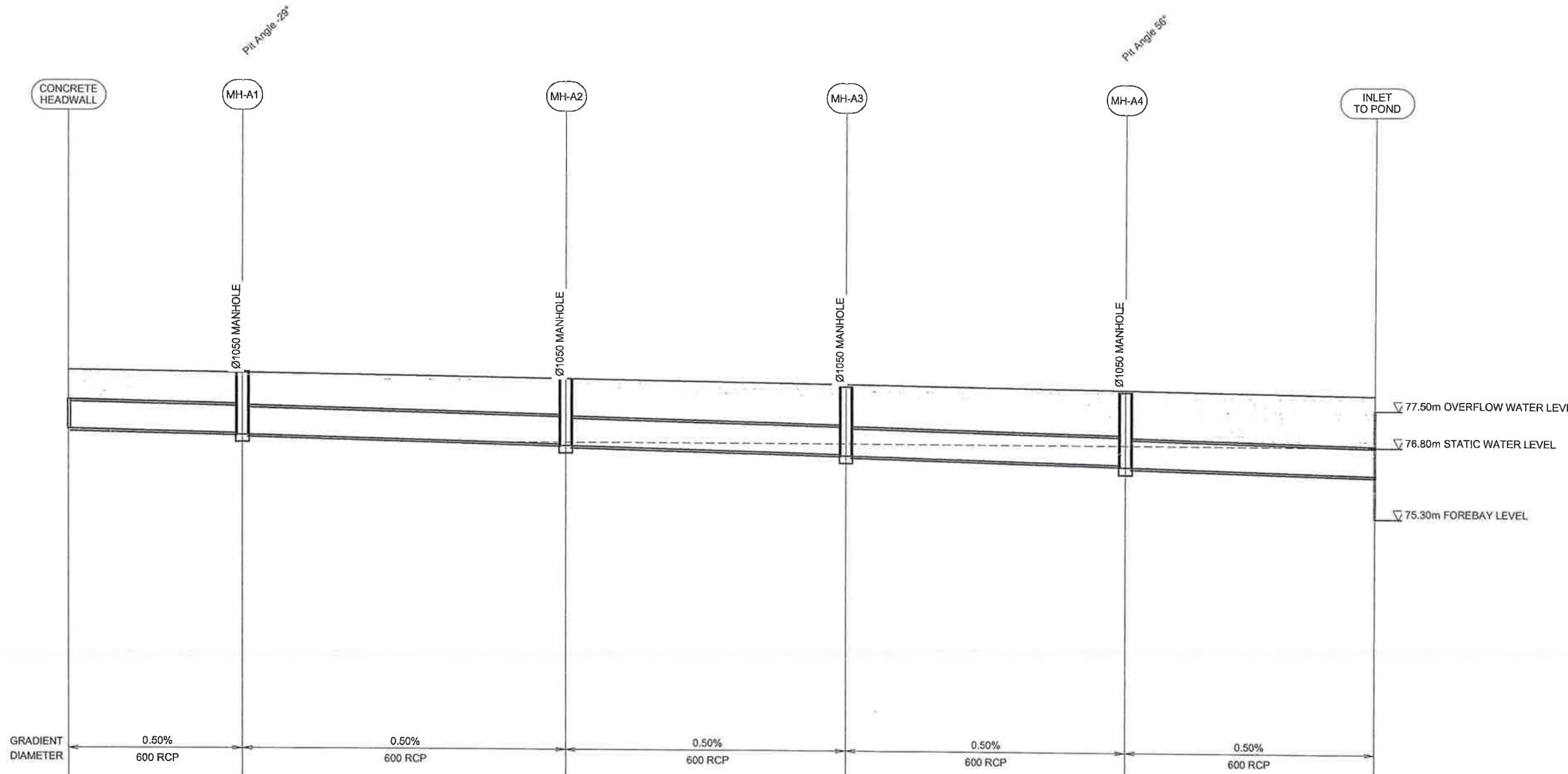
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Project	Proposed Plant Expansion	
Client	Waipapa Pine Ltd.	
Project No.	12 102	RC no.

DWG No.	PP5
Sheet No.	5 of 11



DATUM R.L.	69.00										
DEPTH TO INVERT	1.20	1.24	1.27	1.33	1.36	1.41	1.44	1.50	1.55	1.60	1.60
INVERT LEVEL	77.00	76.91	76.88	76.72	76.69	76.55	76.52	76.38	76.33	76.20	76.20
EXISTING/(FINISHED) SURFACE LEVEL	76.37 (78.20)	78.09 (78.15)	77.52 (78.05)	77.71 (77.96)	76.68 (77.88)	76.67 (77.80)	76.67 (77.80)	76.67 (77.80)	76.67 (77.80)	76.67 (77.80)	76.67 (77.80)
RUNNING CHAINAGE	0.00	17.34	17.34	32.61	49.95	28.20	78.15	28.20	106.35	25.30	131.65 (77.80)

Northland Regional Council
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Aze 19 MAY 2015
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 Consent # 31351

Issue	Date	Revision
-	18/09/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG **Stormwater Longitudinal Section**

Scale 1:50 @A3

Drawn AP Checked JP Approved

Date 18/09/2013

File Z:\12 JOBS\12 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN DWG

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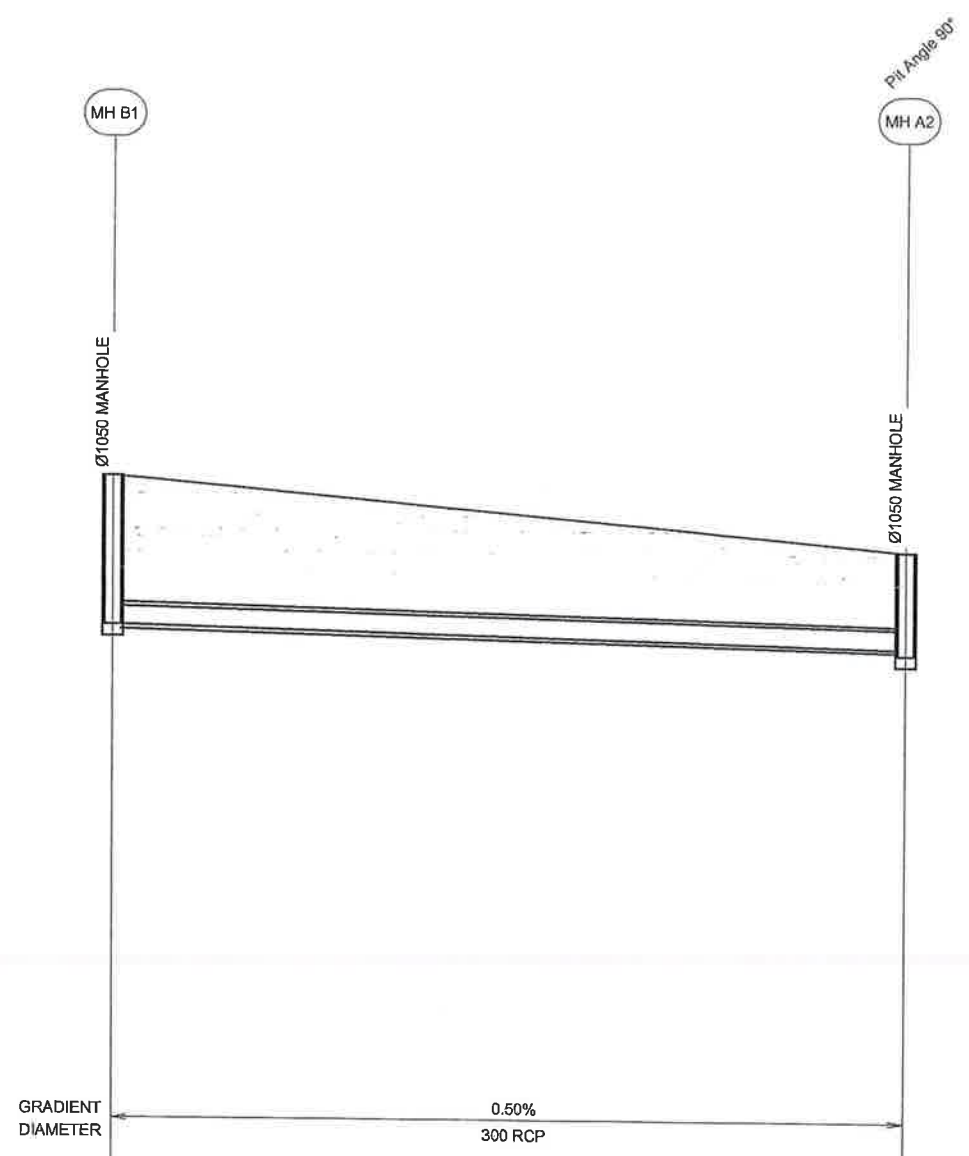
Project **Proposed Plant Expansion**

Client **Waipapa Pine Ltd.**

Project No. 12 102 RC no.

DWG No. **PLS1**

Sheet No. **6 of 11**



DATUM R.L.	69.00	
DEPTH TO INVERT	1.97	1.28
INVERT LEVEL	77.03	76.77
EXISTING/(FINISHED) SURFACE LEVEL	77.77 (79.00)	77.62 (78.05)
RUNNING CHAINAGE	0.00	52.04

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 Consent # 31351

Issue	Date	Revision
-	03/04/2014	DRAFT
A	03/10/2014	FOR CONSENT

DWG **Stormwater Longitudinal Section**

Scale 1:50 @A3 Date 18/09/2013

Drawn AP Checked JP Approved

File Z:\12 JOBS\12 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN DWG

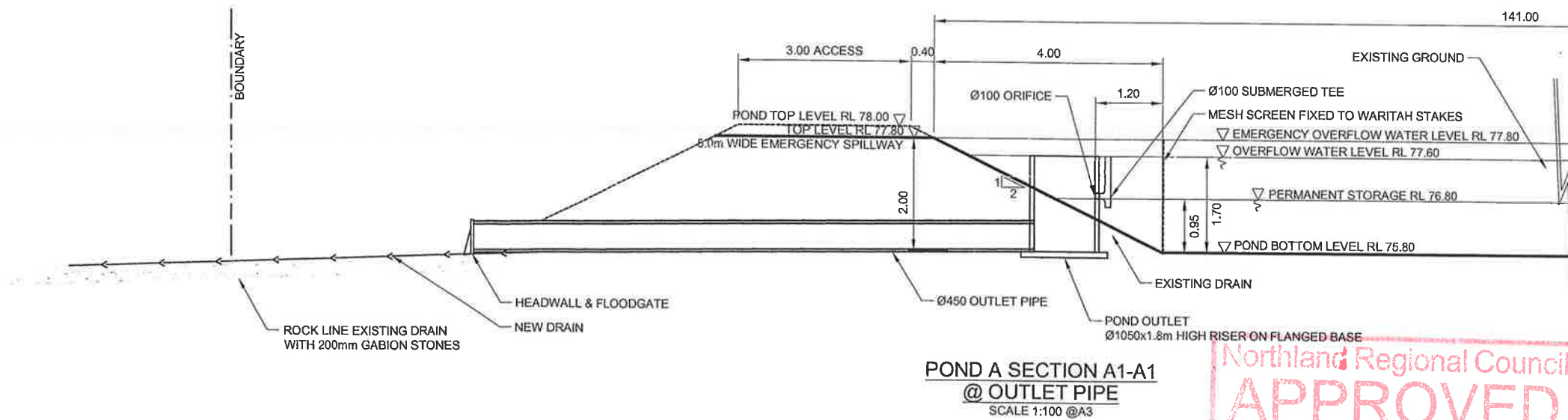
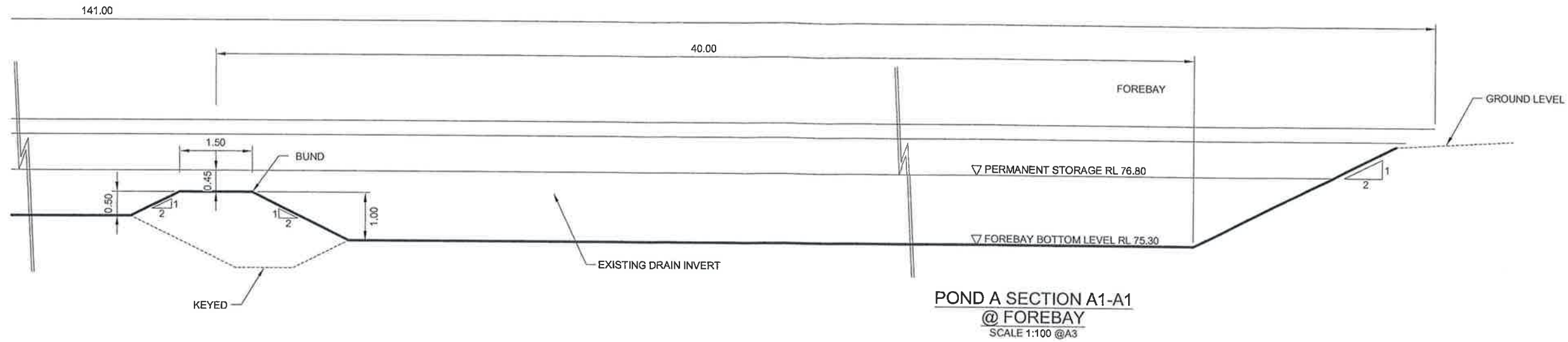
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Project	Proposed Plant Expansion	
Client	Waipapa Pine Ltd.	
Project No.	12 102	RC no.

DWG No.	PLS2
Sheet No.	7 of 11



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 Consent # 31351

Issue	Date	Revision
-	18/09/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG Proposed Pond A Section Details

Scale 1:50 @A3

0.5 0.25 0 0.5 1 1.5 m

Date 18/09/2013

Drawn AP Checked JP Approved

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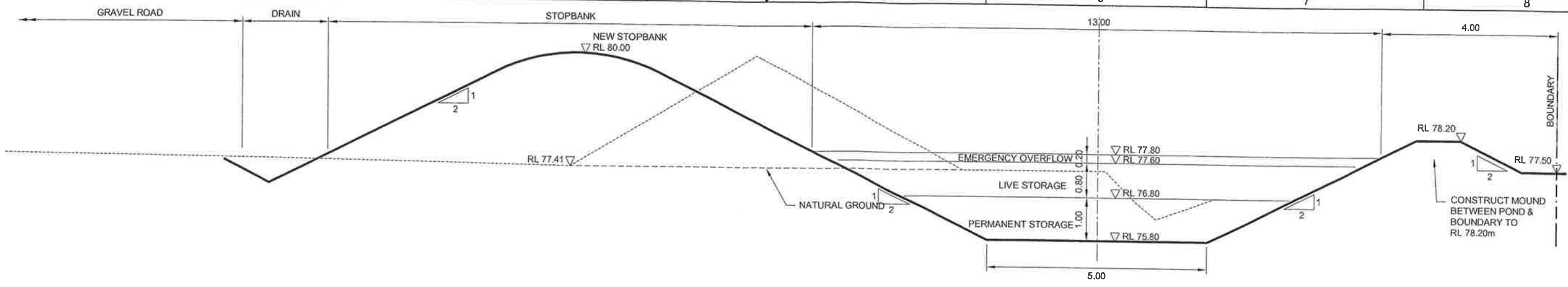
Project Proposed Plant Expansion

Client Waipapa Pine Ltd.

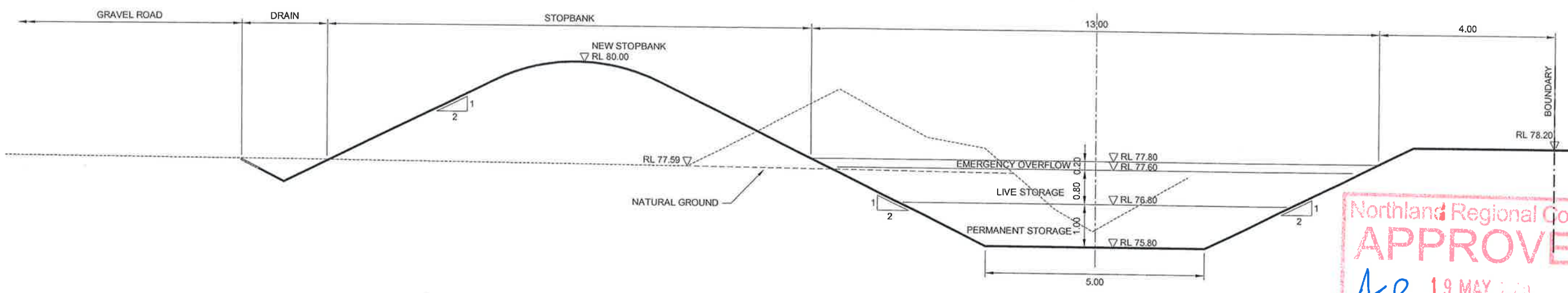
Project No. 12 102 RC no.

DWG No. PD1

Sheet No. 8 of 11

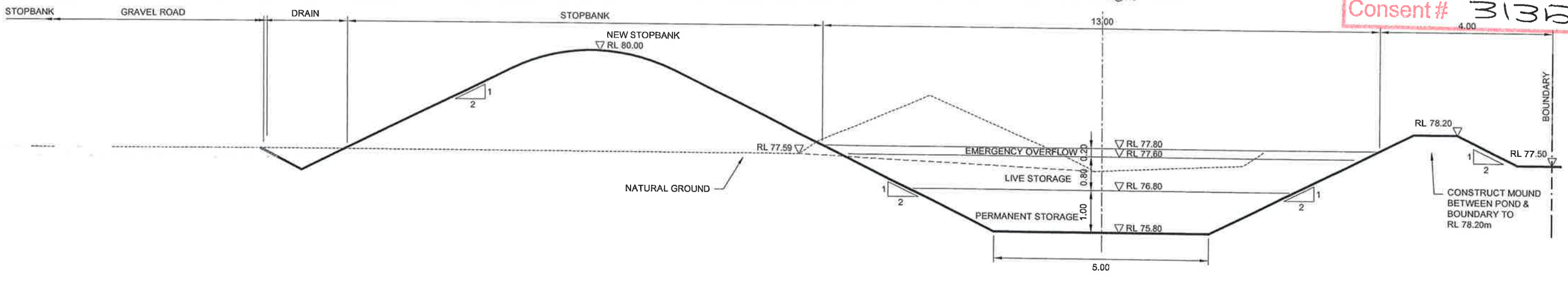


POND A SECTION A4-A4
TYPICAL CROSS SECTION
SCALE 1:100 @ A3



POND A SECTION A3-A3
TYPICAL CROSS SECTION
SCALE 1:100 @ A3

Northland Regional Council
APPROVED
ACR 19 MAY 2014
Plan / Document
Consent # 31351



POND A SECTION A2-A2
TYPICAL CROSS SECTION
SCALE 1:100 @ A3

Issue	Date	Revision
-	18/09/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG Proposed Pond A Section Details

Scale 1:50 @A3

Drawn AP Checked JP Approved

Date 18/09/2013

File Z:\12 JOBS\12 102 WAIPAPA PINE LTD\DRAWINGS\141003 SITE PLAN.DWG

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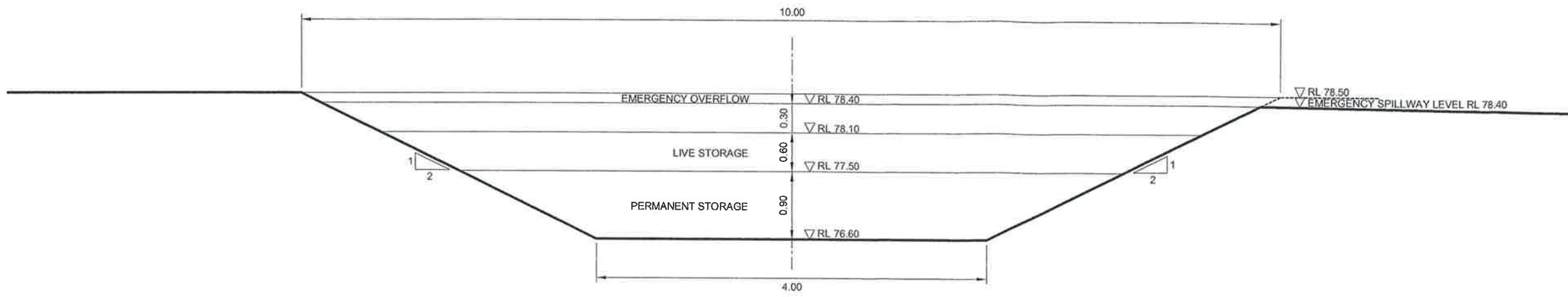
Project Proposed Plant Expansion

Client Waipapa Pine Ltd.

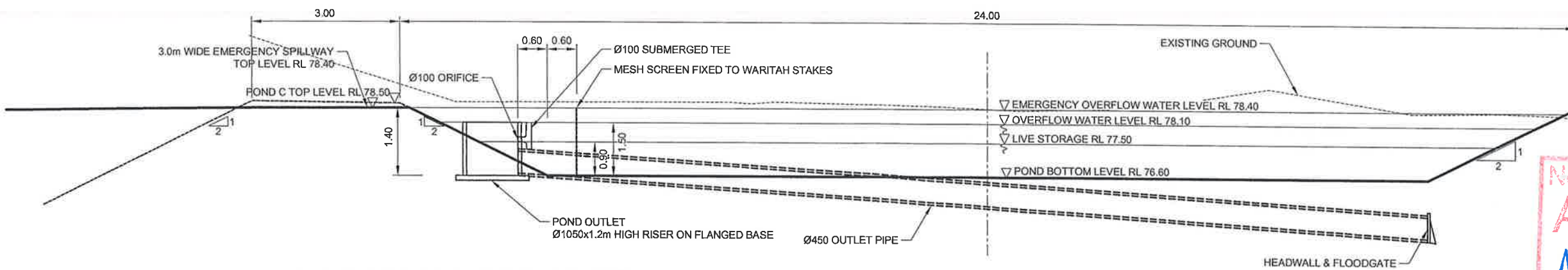
Project No. 12 102 RC no.

DWG No. **PD2**

Sheet No. **9 of 11**



POND C SECTION C1-C1
TYPICAL CROSS SECTION
SCALE 1:50 @ A3



SECTION @ OUTLET PIPE OR SPILLWAY
SCALE 1:100 @ A3

POND C SECTION C2-C2
SCALE 1:100 @ A3

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Acl 19 MAY 2015
Plan / Document
Consent # 31351

Issue	Date	Revision
-	18/09/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG Proposed Pond C Details

Scale 1:50 @A3

Drawn AP Checked JP Approved

Date 18/09/2013

File 2:112 JOB9112 102 WAIPAPA PINE LTD\DRAWINGS\141003 SITE PLAN.DWG

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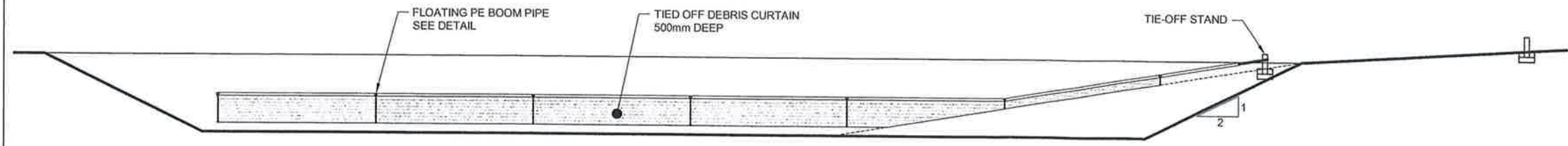
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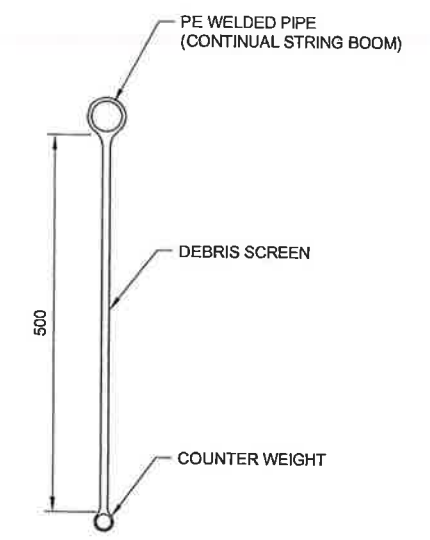
Project	Proposed Plant Expansion	
Client	Waipapa Pine Ltd.	
Project No.	12 102	RC no.

DWG No.	PD3
Sheet No.	10 of 11

Northland Regional Council
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ARL 19 MAY 2015
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 Consent # 31351



TYPICAL DEBRI CURTAIN STRUCTURE DETAIL
 SCALE 1:100 @A3



FLOATING PE BOOM PIPE DETAIL
 SCALE 1:10 @A3

Issue	Date	Revision
-	18/09/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG	Proposed Pond Details		
Scale	1:50 @A3	Date	18/09/2013
Drawn	AP	Checked	JP
File	Approved		

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Client	Waipapa Pine Ltd.	
Project No.	12 102	RC no.

DWG No.	PD4
Sheet No.	11 of 11



FAR NORTH DISTRICT COUNCIL

FAR NORTH OPERATIVE DISTRICT PLAN
DECISION ON RESOURCE CONSENT APPLICATION (LANDUSE)

Resource Consent Number: 2150320-RMALUC

Pursuant to section 104B of the Resource Management Act 1991 (the Act), the Far North District Council hereby grants resource consent to:

Waipapa Pine Ltd

The activities to which this decision relates include:

The use and expansion of an existing sawmill business as described within the application and including the following :

- Saw mill operations (processing timber) Monday to Friday from 7.00am to 10.00pm and 7.00am to 7.00pm Saturday and Sunday;
- Other activities which do not involve the processing of timber including maintenance and monitoring of plan and machinery, site security and the operation of the boiler and kiln on Monday to Friday from 10.00pm to 7.00am the following day and 7.00pm to 7.00am the following day on Saturday and Sunday;
- Installation and use of two banded timber treatment facilities using boron and an anti-sapstain product known as Antiblu;
- Transgression of those permitted activity rules detailed within the application including stormwater, traffic intensity, noise, scale of activity, parking and storage of hazardous materials;
- Construction of the stormwater management system incorporating bunds and detention ponds requiring earthworks with a volume of up to 10,000m³;
- The use, maintenance, operation and refuelling of the boiler and kiln; and,
- Dispensation from a requirement to provide an Esplanade Reserve.

Subject Site Details

Address: Current access is located at approximately 1945 State Highway 10, south of Waipapa

Legal Description: Lot 3 DP 343062 and Lot 2 DP 376253 held in Identifier 306630 and Part of Lot 1 DP 376253. Lot 5 DP 69740 provides the new access to the mill site and operations.

Certificate of Title reference: CT-306630, CT-306629

Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

1. The activity shall be carried out in accordance with the approved plans and reports as detailed below and which are attached to this consent with the Council's "Approved Stamp" affixed to them:
 - Proposed Site Layout Plan; Layout 101 Rev F dated 29/11/15;

- Proposed Site Layout Plan; Layout 101 Rev D – Elevation detail and Soil deposit area dated 30/04/14;
 - Stormwater Management Plan Issue A, dated 03/10/2014, Sheets 1-11 by Haigh Workman Consultants;
 - Environmental Noise Assessment by Design Acoustics Auckland Limited, dated 26th January 2016; and the,
 - Planning Report and Assessment of Environmental Effects dated February 2016 prepared by Bay of Islands Planning Limited.
2. The Consent Holder shall provide the additional car parking area in accordance with the approved Haigh Workman plan No PP1 entitled Proposed Plant Expansion – Waipapa Pine Limited, Project 12 102, dated 03/10/2014. The parking shall be completed in an all weather surface, suitably marked and drained accordingly. The required carparking shall be completed within 6 months of this decision.
 3. Crossing Point 78 [CP78] may continue to be used until such time as the New Zealand Transport Agency have approved and authorised Crossing Point 76 [CP 76] as having meet their requirements and the Right of Way access (over Lot 5 DP 69740) has been registered on the title[s] of the application site.
 4. Within six months of the application site being legally entitled to use CP76 in accordance with Condition 3, the Consent Holder shall erect a physical barrier that will prevent vehicles from using CP78. This barrier shall be erected along the eastern boundary of Lot 2 DP 343062 where the existing vehicle access is attained within Easement B shown on DP 343062.
 5. The consent holder shall complete construction and formal landscaping of the following components within 6 months of this decision:
 - the earth bunds;
 - the stormwater management system in accordance with the approved plans; and,
 - re-vegetation of the earth bunds in general accordance with the plans provided. Temporary mulching or other suitable ground cover shall be applied to achieve total ground cover from any areas left bare or unprotected for more than one month.
 6. For the purpose of ensuring effective slope stability, and to enable effective placement of topsoil, no fill batters shall be steeper than 1:3 (vertical:horizontal), and no cut batters shall be steeper than 1:2 (vertical:horizontal) unless retained by appropriately designed retaining structures. The Consent Holder shall monitor the as-built slopes and take all necessary actions to ensure their on-going stability.
 7. Provide confirmation from a Chartered Professional Engineer (within one month of its completion) that the extended car park area, stormwater system, and earth bunds as detailed within conditions 2 & 5 have been completed in accordance with the approved design specifications. For the purposes of stormwater the design and works is to be completed by a Chartered Professional Engineer qualified in stormwater design and that a PS1 Design Certificate be provided.
 8. All exterior lighting required for night time operations shall be directed away from the boundaries of adjoining sites, roads, and public places.
 9. The Consent Holder shall ensure that the activities undertaken do not result in noise levels exceeding the following noise limits unless otherwise specified as measured at

or within the boundary of any other zone or the or within the notional boundary of any dwelling existing at the date of commencement of this consent:

- (a) Monday to Friday from 7.00am to 10.00pm and 7.00am to 7.00pm Saturday and Sunday - 65dBA L₁₀ for saw mill operations involving the processing of timber except that the maximum noise level shall not exceed 70dBA on the boundary with Lot 5 DP 69740;
 - (b) Monday to Friday from 10.00pm to 7.00am the following day and 7.00pm to 7.00am the following day on Saturday and Sunday - 45dBA L₁₀ for any other activities (not involving saw mill operations) except that the maximum noise level shall not exceed 46dBA on the boundary with Lot 2 DP 69740;
 - (c) 70 dBA L_{max}.
10. The Consent Holder shall, subject to any Worksafe New Zealand requirements, replace on all mobile equipment/ vehicles (operating outside of a building) the reverse beepers with flashing strobe lights to warn of potential hazards.

Advice Notes

1. Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority issued pursuant to that Act. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately. The New Zealand Police should also be consulted if the discovery includes koiwi (human remains). A copy of Heritage New Zealand's Archaeological Discovery Protocol (ADP) is attached for your information. This should be made available to all person(s) working on site.
2. An application under section 348 of the Local Government Act should be applied for to secure access over Lot 5 DP 69740 in favour of the application site.
3. Whilst not part of the resource consent conditions the Consent Holder shall adopt all reasonable and practicable measures to ensure that risks associated with the storage, transportation and management of hazardous substances to be used at the timber mill are mitigated to the degree practicable and that the requirements of the Hazardous Substances and New Organisms Act 1996 ("HSNO") and HSNO regulations are complied with. This is to include the applicable monitoring and reporting regime required under the regulations.

REASONS FOR THE DECISION

1. Description of the Activity:

The application seeks consent for the proposed expansion of an existing sawmill operation located south of the Waipapa township. The current operation was consented under RC 2130204 and a number of conditions were imposed with respect to that consent. The details of the proposed expansion and related activities to which this consent relates are as follows:

The use and expansion of an existing sawmill business as described within the application and including the following:

- *Saw mill operations (processing timber) Monday to Friday from 7.00am to 10.00pm and 7.00am to 7.00pm Saturday and Sunday;*

- *Other activities which do not involve the processing of timber including maintenance and monitoring of plan and machinery, site security and the operation of the boiler and kiln on Monday to Friday from 10.00pm to 7.00am the following day and 7.00pm to 7.00am the following day on Saturday and Sunday;*
- *Installation and use of two bunded timber treatment facilities using boron and an anti-sapstain product known as Antiblu;*
- *Transgression of those permitted activity rules detailed within the application including stormwater, traffic intensity, noise, scale of activity, parking and storage of hazardous materials;*
- *Construction of the stormwater management system incorporating bunds and detention ponds requiring earthworks with a volume of up to 10,000m³;*
- *The use, maintenance, operation and refuelling of the boiler and kiln; and,*
- *Dispensation from a requirement to provide an Esplanade Reserve.*

The application details and defines what “sawmill operations” and “other operations” include. The specific components can be found within the applications’ planning report and assessment of effects, and also within the noise report. References to these documents should be made in reviewing what activities and operations fall within each definition.

2. District Plan Rules Affected:

In considering the above application proposal the following rules are considered to be breached or applicable to the application for the expansion of the saw mill activities on the site.

- | | |
|----------------|---|
| 8.6.5.1.3 | Stormwater management – permitted level of 15% exceeded |
| 8.6.5.1.5 | Traffic Intensity – permitted 60 TIF’s per day exceeded |
| 8.6.5.1.7 | Noise levels exceed the permitted standard at the boundary |
| 8.5.5.1.11 | Scale of Activity rule breached |
| 8.6.5.2.1 | Stormwater management – Controlled level of 20% exceeded |
| 8.6.5.3.1 | Traffic Intensity – restricted discretionary level of 61-200 TIF’s per day is exceeded |
| 8.6.5.3.5 | Noise – Restricted Discretionary |
| 12.3.6.1.1 | Excavation and/ or filling – 5000m ³ max per 12 months exceeded |
| 12.8.6.1.1 | Hazardous substances – exceeds the permitted ratio of less than or equal to 0.75 as defined within the plan for the rural production zone – discretionary |
| 15.1.6.1.1 | Parking provision not met – parking shortfall |
| 14.6.1(a)(iii) | Esplanade waiver sought under this section |

The application is overall considered to be a Discretionary activity.

4. Principal Issues in Contention and Main Findings on those Issues:

The principal issues in contention and main findings on the issues were as follows:

(a) Issues

- Rural Character, amenity, and Landscape
- Parking
- Stormwater management
- Earthworks

- Access
- Operational hours
- Noise
- Hazardous substances
- Esplanade waiver

(b) Main Findings

Rural Character, amenity, and Landscape

The site itself and the immediate area adjoining the site has the appearance of an industrial area located on the fringe of an broader industrial and rural servicing area. This change of land use (for the general area) from a rural emphasis has occurred with the establishment of industrial type activities and farm service uses within the immediate area. Some activities have occurred "as of right" having met the permitted standards for the Rural Production zone whilst other activities have provided sufficient evidence to conclude that effects from the operations will be not more than minor and that resource consent could be given. The current saw milling operation having sought and obtained resource consent for the current level of operations is one such example.

The zoning of the land is Rural Production and this zoning traverses the river where rural activities continue to occur with pastoral grazing prevalent and built form limited. Indispersed within this general area with an industrial emphasis are a number of residences on rural farms or smaller properties. The area is considered to be an evolving area currently zoned rural production but with an industrial emphasis.

It would be incorrect to assume that this site is typical of the rural environment but it is equally difficult to define a typical rural environment particularly given the extensive areas of the district it covers array of different patterns of development. It is however necessary that the activities characteristics within this industrial type area blend into the immediate area without compromising the rural environment adjacent to the site.

Council prepared Plan Change 15 in response to this change which seeks to control some of the industrial type uses which have evolved within the rural production zone and which have not got a distinctive need to be located there. For some industrial uses the plan change recognises a need to be within the rural environment. Processing of rural produce such as saw milling could be one example of this.

The site is surrounded by earth bunds and has perimeter vegetation on the western and southern boundaries. The eastern and northern boundaries are not screened and are open to the more industrial uses which occur on those sites.

Amenity values associated with rural character bring more subjective elements into consideration and not only deal with potential visual effects but also can be influenced by lighting, noise, dust, and traffic movements and other operational aspects. Noise, traffic and operational aspects are addressed in more detail later within this report.

It is considered that the visual effects of the plant and operation can be mitigated and that the river offers a natural barrier to these industrial type uses. Light glow from night time activities could affect rural amenity values however there are a number of additional contributors to this including the retail centres located further north of the site and general security lighting for nearby sites. Usual requirements such as directing lighting away from adjoining properties can be imposed and will assist in reducing potential effects from onsite lighting.

Dust can be managed on site through effective management of the respective onsite contributors. There was little evidence of fine material (which can increase dust)

within high usage areas although exposed earth bunds will need to be addressed with landscaping and mulch as required.

These effects are considered to be not more than minor and can be conditioned as required.

Parking

The original resource consent application (RC 2130204) proposed 36 car spaces in lieu of the required 70 spaces as required within the district plan. The dispensation for the 34 parking space shortfall was approved as part of that consent.

The applicant advises that the current number of parking required based on the formula detailed within the district plan is 201 spaces. It is noted that although up to 59 staff will be employed by the operations the maximum number of staff on site at any one time will be 28. It is contended within the application that the current supply of parking is sufficient and that no additional spaces are required in their opinion for the expanded operations.

In justifying the proposed supply it is noted that some staff car pool to work and that the provision of additional spaces could be achieved without any real difficulty within the site. Council considered whether this required a review clause under s128 and associated with the parking provision. In this regard I do not consider this necessary given the location of the parking spaces and the office.

With the subject site being located down a long right of way (this applies to both the current access and the future access points) it is not considered that parking would impact on the State Highway 10.

It is recognised that the high car parking figure is calculated using the size of the existing and proposed buildings rather than the staffing numbers or number of visitors to the site.

The parking area on the date of the site visit was well used and nearly full however any overflow would not affect other neighbouring lot owners. It is considered that the existing parking area, which can provide 36 parking spaces, can cater for the parking demand. It is recognised that the District Plan Appendix 3C has determined a figure that is not warranted for the type of activity being proposed by the applicant. It is not considered that this parking shortfall will adversely impact on any adjoining sites.

Councils Resource Consents Engineer has advised that based on the plans provided that there are 36 parking spaces available. The Engineer has also advised that not providing the required 201 car spaces will not adversely impact on adjoining properties. Standard parking conditions should be imposed within the decision.

It is considered that the proposed car park dispensation does not result in more than minor effects, due to the applicant providing 36 car parks, which will provide for the existing staffing numbers and any visitors to the site. Any overflow would result in effects that are contained within the site with little or no effects on adjoining lot owners. Changes to future parking demand will be able to be accommodated on site without adverse effects. It is considered that the effects of the parking shortfall are minor and that there is no requirement necessary for a s128 review clause relating to parking.

Stormwater management

Up to 80% of the site is to be covered by impermeable surfaces including buildings and the metalled yard. Although this percentage is significant and high in the context of the Rural Production Zone, the immediate area is more representative of an industrial area where up to 100% site coverage is possible. In this respect

immediately adjoining sites to the north enjoy the ability to have 100% site coverage. The stormwater measures proposed are considered to be satisfactory and Council's Resource Consents Engineer raises no concerns over the extent of the stormwater management controls proposed. The proposed stormwater ponds and earth bunds (and other minor components) will adequately deal with any onsite runoff. Northland Regional Council have issued consents for the stormwater works and confirm that such effects on the environment would be considered to be not more than minor. The stormwater effects resulting from the proposal can be adequately dealt by the proposed design and associated conditions of consent.

Earthworks

The proposal involved additional earthworks exceeding the permitted standards within the district plan. These works will expand the existing bunds created under the earlier resource consent application. The bunds assist in screening parts of the existing buildings from the adjacent farmland (complimenting the existing boundary vegetation) and provide the basis for its primary role as stormwater management and to a lesser extent noise mitigation.

The earth bunds themselves do not in my opinion result in any adverse visual effects, as the site does not have high amenity. The earth bunds as previously noted assist in helping to screen the activities taking place on the site.

Councils Resource Consents Engineer has advised that all the earthworks should be re-vegetated where this has not yet occurred and that while there are silt controls in place they need to be maintained or replaced to ensure that silt management on the site are operating efficiently. The Engineer has also recommended a condition that requires all hard stand areas to be metalled to minimise silt mobilisation and runoff.

It is considered that subject to those conditions being imposed that the any adverse effects associated with the earthworks that have taken place will be no more than minor.

Access

The site obtains its current access off State Highway 10 via a shared right of way. This portion of State Highway is a Limited Access Road, and the entranceway is within the broader Waipapa industrial/business area. As previously noted this access is not the intended future access and is required to be barricaded as detailed within conditions of RC 2130204. The new access is via the "Solid Holdings" site (Lot 5 DP 69740). The legal right to use this access is almost complete and formation to the application site has already been completed.

The applicant is not proposing to create an easement over the newly purchased lot (Lot 1 DP 376253), as their agent has advised that they now consider this land to be part of the site. The applicant has advised that if the applicants sells this land it will only adversely impact on them if they do not secure access arrangements. It has also been indicated that the long term plans are to subdivide this lot into two titles. It is considered that conditions of consent should refer to access being provided over this land and that if the land is to be sold a right of way will be required.

To facilitate the access over the Solid Holdings land this landowner has applied for and granted a right of way application (RC 2140028) and it has been agreed to upgrade the existing vehicle crossing that adjoins the State Highway.

The NZ Transport agency has not commented specifically on this new land use proposal but did comment on earlier proposals and advised that they are not opposed to this application based on the new access arrangements.

Their letter at the time stated the following:

- NZTA supports the Waipapa Pine/Solid Holdings joint access proposal using an upgraded CP76;
- NZTA will allow the ongoing use of CP78 by Waipapa Pine Ltd until 1 January 2014 (when CP 76 will be upgraded);
- NZTA is currently working with John McLaren of Haigh Workman to reach agreement on the upgrade design for CP76

In a previous letter of support they advised that their approval was given based on CP78 being closed upon the upgrade of CP76. However Council advised NZTA that this crossing was being used by other landowners and that Council was not aware of any alternative access being provided for those properties. NZTA has now advised that the issues around the status of CP78 and the construction standard of CP78 will be dealt with by NZTA as a separate matter.

The applicant has advised that a physical barrier will be created to prevent traffic from continuing to use the current access arrangement. Conditions of consent for RC 2130204 required the applicant to cease using CP78 by 1 January 2014 and that their access shall be available only via CP76. Clearly this requirement has not been achieved but progress has been made on achieving this requirement.

Councils Resource Consents Engineer previously recommended conditions of consent regarding the carriageway formation on the new land purchased by the applicant that will provide a linkage to the right off way located on Solid Holdings land. The RC Engineer has also confirmed conditions of consent regarding not using the new access until NZTA have confirmed the required upgrading has been undertaken.

The traffic movements which occur as a result of the proposed expanded operation using the formula within Appendix 3A equates to just over 500 traffic movements. This number is far greater than actual numbers but the composition and timing of traffic movements will be slightly different to existing activities on site and also to those which surround the site.

The applicant proposes to operate the saw mill 7 days per week as detailed within the application. The saw mill operations will occur during daytime hours and defined as 0700 to 2200 Monday to Friday and 0700 to 1900 for Saturday and Sunday. Other activities which do not involve the processing of timber including maintenance and monitoring of plan and machinery, site security and the operation of the boiler and kiln on Monday to Friday from 10.00pm to 7.00am the following day and 7.00pm to 7.00am the following day on Saturday and Sunday.

Considerations such as noise, headlight impacts, and frequency and number of traffic movements will need to be considered for evening and night time use of the site.

The future route taken by the trucks has been considered and will result in noise generated within an area with reasonably low background levels. Noise considerations are assessed in greater detail later within this report.

Due to the new access arrangements and refined operational elements, it is considered that adverse effects associated with traffic movements during day time hours (as defined within the plan) are not more than minor. The effects on neighbouring properties are considered to be less than minor.

Operational hours

The revised proposal (as described within the Planning Report and Assessment of Environmental Effects dated February 2016 prepared by Bay of Islands Planning Limited) modifies the current consented hours of operation to those described within Condition 6 of RC 2130204. Since the lodgement of the application and original consideration of a more intensive application at least one commercial/ industrial premise operates 24 hours per day and there are many which have no operation

hours or restrictions. The land located immediately to the north of the site has no restrictions on hours and nor does the Rural Production zone per se. Strictly speaking hours of operation are not subject to any rules and therefore generally not considered to be an issue.

There are however differences in levels of noise and associated amenity levels within the zone. The noise assessment addresses this in much greater detail. The following activities have been refined since originally lodged to reflect changes in noise levels and to reflect related expectations within the zone. The following operations achieve this requirement in my opinion.

- Saw mill operations (processing timber) Monday to Friday from 7.00am to 10.00pm and 7.00am to 7.00pm Saturday and Sunday;
- Other activities which do not involve the processing of timber including maintenance and monitoring of plan and machinery, site security and the operation of the boiler and kiln on Monday to Friday from 10.00pm to 7.00am the following day and 7.00pm to 7.00am the following day on Saturday and Sunday.

The activities detailed above are considered to result in effects that are not more than minor on the immediate environment.

Noise

The application activities and operations have (since originally lodged) been changed and refined in an attempt to match the noise rules within the Rural Production zone. The resultant changes mean that the saw mill operations (as defined earlier within the application) will occur during "day time hours" and other operations (as defined) will occur during night time hours.

Council originally engaged Marshall Day Acoustics to review the resource consent application and in particular consider the noise report prepared for the proposed sawmill expansion and with particular emphasis on the proposed additional hours of operation. This resulted in further consideration of matters and more robust assessment. Council's original concerns were reviewed and resulted in an amended application together with additional noise assessments including background readings and testing.

A noise assessment was undertaken and tests completed during normal operations and for a defined period of time as detailed within the report. The data was collected and assessments completed with the outcomes detailed within the Environmental Noise Assessment prepared by Design Acoustics Auckland Limited which is dated 26th January 2016. This report identified and confirmed breaches of the noise rules for the zone and resulted in the applicant obtaining written approvals from two affected persons. The two properties on which the noise rules were breached are incorporated into the proposed conditions of consent. The operational noise breaches related to two sites and relate to both daytime and night time noise standards.

The condition recommended reads:

The Consent Holder shall ensure that the activities undertaken do not result in noise levels exceeding the following noise limits unless otherwise specified as measured at or within the boundary of any other zone or the or within the notional boundary of any dwelling existing at the date of commencement of this consent:

- a) *Monday to Friday from 7.00am to 10.00pm and 7.00am to 7.00pm Saturday and Sunday - 65dBA L₁₀ for saw mill operations involving the processing of timber except that the maximum noise level shall not exceed 70dBA on Lot 5 DP 69740.*

- b) *Monday to Friday from 10.00pm to 7.00am the following day and 7.00pm to 7.00am the following day on Saturday and Sunday - 45dBA L_{10} for any other activities (not involving saw mill operations) except that the maximum noise level shall not exceed 46dBA on Lot 2 DP 69740;*
- c) *70 dBA L_{max} ;*

In addition to the operations and impacts on immediately adjoining properties a review was also undertaken on three residences located within the general area. Two residences had previously raised a number of concerns relating to current operations. The Noise Assessment prepared by Design Acoustics Auckland Limited went into great detail to confirm the likely readings at these properties using modelling and additionally provided background readings. The report re-confirmed that although activities from the sawmill operations would be audible to these residences the noise generated was recorded as below the permitted thresholds. This assessment was completed using industry standards for noise assessment and taking into account the allowable noise limits as prescribed within the district plan.

The applicant did acknowledge several of the concerns including the removal of beepers (as allowed by Worksafe New Zealand requirements) and provided clarification over the daytime and night time operations.

Notwithstanding the rules of the plan and the securing of written approvals of neighbours where noise rules are breached Council could consider the development in terms of s16 of the Act.

The noise report identified breaches on two boundaries from which written approval has been obtained. Beyond these two properties compliance with the noise rules was achievable. Effects from noise on these neighbouring properties was considered to be less than minor.

Hazardous substances

Although the proposed hazardous material on site is significantly over the permitted standards for the zone it is considered that the industry standards for control and management of hazardous substances and the system proposed within the application will minimise the effects of the proposal and provide sufficient risk management measures for such substances.

The system where the hazardous substances are involved is a closed system with little or no discharge to air – no discharge consents were required from NRC. Additionally, it is understood that the timber when exiting the process is dry to touch so there is no dripping or concentration of residue substances from the treatment process outside the enclosed building.

The bunds surrounding the site provide protection from the contamination of the Kerikeri River should the plant leak any hazardous substances although there is an additional bund within the building which can adequately deal with any spills. When the substances are replenished suitable controls are also proposed to ensure effects are minimised. Effects are considered to be able to be mitigated via standard industry practice. In this instance it is concluded that there is no need to impose conditions of consent for this consideration rather that advice notes include appropriate references to industry requirements and for compliance to occur under the HSNO regulations including any specific reporting regime as required.

Esplanade Waiver

An esplanade waiver has been requested by the applicant. Part of the application site already has an esplanade reserve adjoining the river and a further reserve or strip could be required for the remaining portion.

The Eastern Community Board has requested an Esplanade Reserve where it is appropriate and that this area be planted. It must be noted that this portion of the river is not identified as an Esplanade Priority Area. The existing and proposed activities on the site could be problematic for the use of any esplanade reserve particularly given that this area is not clearly demarcated and a working site. Visitors to the sawmill site must check in with the office at arrival. If a reserve existed members of the public could wander close to or immediately adjacent to the site which could raise significant safety issues. In addition to onsite activities the nearby smaller tributaries, drains, small dams and containment areas within the general area also mean navigation through this area (along the river) would be difficult.

A preliminary review of this is that a reserve of some form not be required because of the type of activity occurring on the site. There is potential for further development within the site in the future and when this occurs then this may be a more opportune time. Council may in the future have a clear idea of land use for this location and there could be further opportunities available in the future.

4. Relevant Statutory Provisions:

Policy Statements & Plan Provisions:

Regional Planning and Policy documents.

The applicant has already secured various regional consents related to earthworks, discharges and emissions. These consents concluded that associated effects for the onsite saw milling operation are not more than minor and could be further mitigated by relevant conditions of consent. In this respect the proposed saw mill expansion is also considered to be consistent with the relevant objectives and policies of these respective planning documents. There have been no significant policy changes since the original approval of the saw milling operation to which this application for an expansion would be contradictory. The application is therefore considered to be consistent with the regional planning documents.

The Operative Far North District Plan;

The following sections of the Operative Far North District Plan were considered in reviewing and assessing this application. The sections included rural environment, rural production zone, and district wide provisions including soils and minerals, hazardous substances, and transport. From these sections the following objectives and policies were of particular relevance to the application.

Objectives considered included 8.3.3, 8.3.6, 8.3.7, 8.3.10, 8.6.3.6, 8.6.3.8, 8.3.6.9, 12.3.3.3, 12.8.3.1, 12.8.3.2, 15.1.3.1, 15.1.3.3 and 15.1.3.4.

Policies considered included 8.4.2, 8.4.8, 8.6.4.1, 8.6.4.2, 8.6.4.7, 8.6.4.8, 8.6.4.9, 12.3.4.4, 12.8.4.1 to 12.8.4.6 inclusive, and 12.8.4.2.

The emphasis of the objectives and policies is to ensure that proposed activities such as the proposed expanded saw mill operation are provided for within the respective zones but only where effects are considered to be minor or less than minor and where additional mitigation measures can be imposed to ensure the use is acceptable and compatible within the surrounding environment. The assessment of effects concludes that effects are not more than minor from the saw mill operation and that additional mitigation via conditions will further reduce such effects. The site is a modified rural site which is surrounded by industrial type uses. Residential

development and typical rural uses and activities are sufficiently far enough away to not result in adverse effects. It is therefore concluded that the application is consistent with the majority of the relevant objectives and policies.

Part 2 Matters

The Council has taken into account the purpose & principles outlined in sections 5, 6, 7 & 8 of the Act. It is considered that granting this resource consent application achieves the purpose of the Act.

5. Notification and Affected Parties

The Council has determined (by way of an earlier report and resolution) that the adverse environmental effects associated with the proposed activity are no more than minor and that there are no affected persons or affected order holders.

6. Overall Evaluation

The effects of the proposed saw milling operation expansion have been carefully considered and concluded as being not more than minor. These minor effects have been further mitigated by the imposition of appropriate conditions of consent. The proposal is considered to be consistent with the relevant objectives and policies of the district plan and other statutory considerations such as relevant regional planning documents. The application is also considered to be consistent with Part 2 of the Act and considered and deemed to be an activity which is consistent with the sustainable management purpose of the RMA.

Approval

This resource consent has been prepared by Wayne Smith, Team Leader Resource Consents and is granted under delegated authority (pursuant to section 34A of the Resource Management Act 1991) from the Far North District Council by:



Pat Killalea, Principal Planner

8th April 2016.

Date

Right of Objection

If you are dissatisfied with the decision or any part of it, you have the right (pursuant to section 357A of the Resource Management Act 1991) to object to the decision. The objection must be in writing, stating reasons for the objection and must be received by Council within 15 working days of the receipt of this decision.

Lapsing Of Consent

Pursuant to section 125 of the Resource Management Act 1991, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses;

The consent is given effect to; or

An application is made to the Council to extend the period of consent, and the council decides to grant an extension after taking into account the statutory considerations, set out in section 125(1)(b) of the Resource Management Act 1991.

Proposed Plant Expansion

State Highway 10, Waipapa

For Waipapa Pine Ltd.



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Proposed Stormwater Management

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Proposed Pond A Plan Section Details	PD1-PD2
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HAIGH WORKMAN LTD
Civil & Structural Engineers

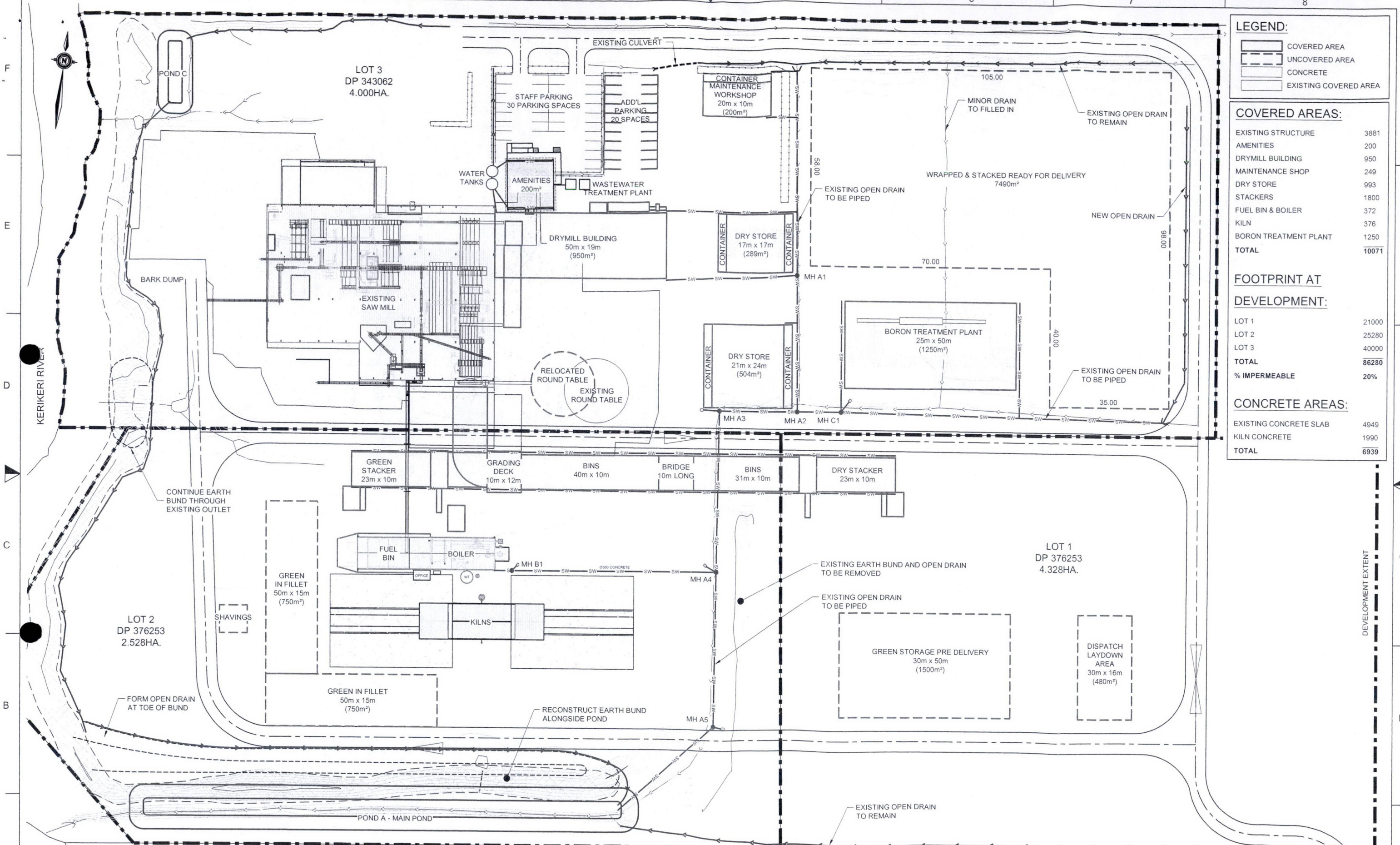
310 Kerikeri Road,
Kerikeri, BOI.

T: 09 407 8327
F: 09 407 8378
E: info@haighworks.co.nz

Project No. 12 102

For Consent

October 2014



LEGEND:

[Solid Line]	COVERED AREA
[Dashed Line]	UNCOVERED AREA
[Thick Solid Line]	CONCRETE
[Thin Solid Line]	EXISTING COVERED AREA

COVERED AREAS:

EXISTING STRUCTURE	3881
AMENITIES	200
DRYMILL BUILDING	950
MAINTENANCE SHOP	249
DRY STORE	993
STACKERS	1800
FUEL BIN & BOILER	372
KILN	376
BORON TREATMENT PLANT	1250
TOTAL	10071

FOOTPRINT AT DEVELOPMENT:

LOT 1	21000
LOT 2	25280
LOT 3	40000
TOTAL	86280
% IMPERMEABLE	20%

CONCRETE AREAS:

EXISTING CONCRETE SLAB	4949
KILN CONCRETE	1990
TOTAL	6939

Issue	Date	Revision
-	18/07/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG Overall Stormwater Plan

Scale 1:1000 @A3

Drawn AP Checked JP Approved

Date 18/07/2013

File Z:\12 JOBS\112 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN.DWG

HAIGH WORKMAN
Civil & Structural Engineers

310 Kerikeri Road, Kerikeri, BOI. T: 09 407 8327 F: 09 407 8378 E: info@haighworks.co.nz

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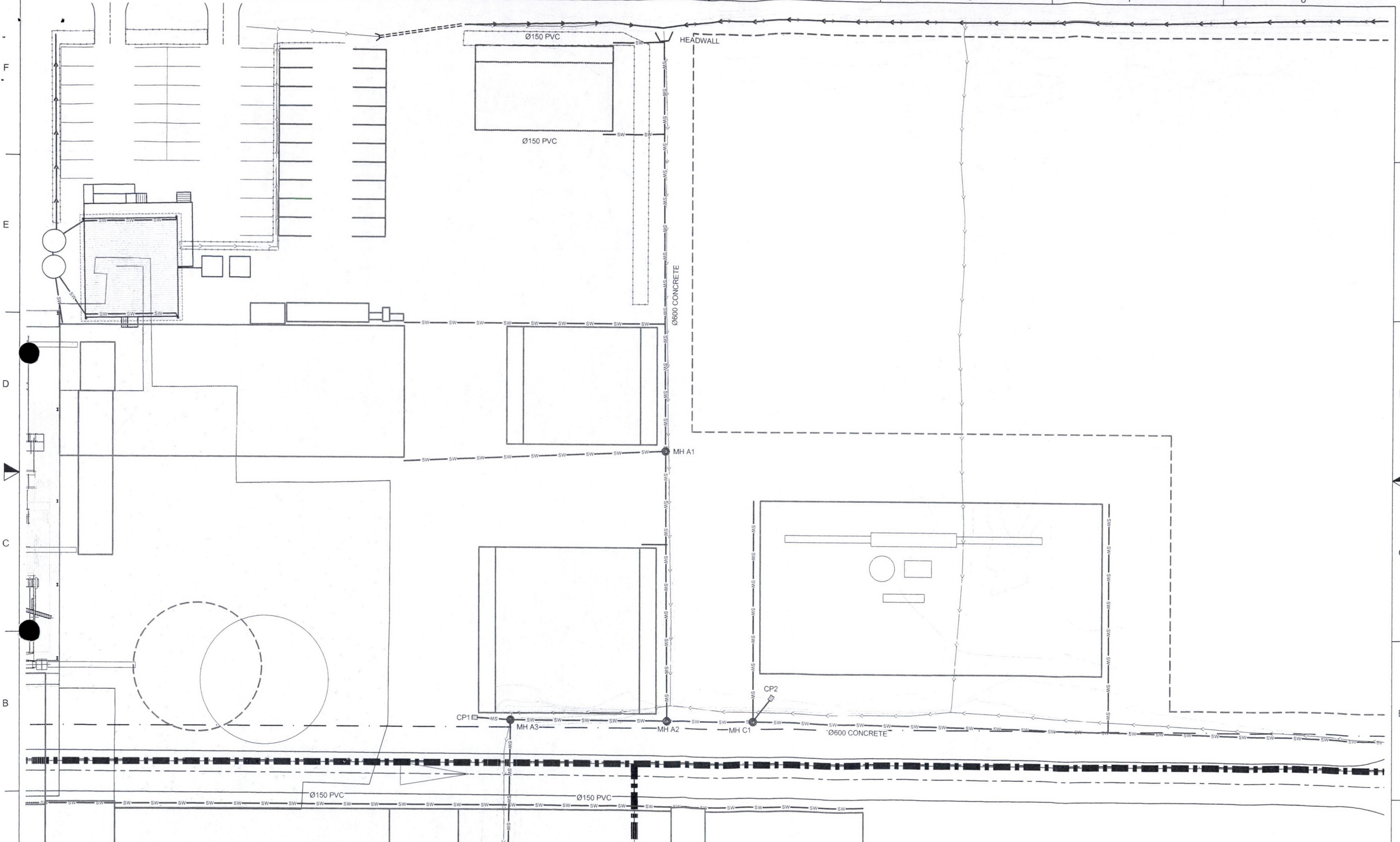
Project Proposed Plant Expansion

Client Waipapa Pine Ltd.

Project No. 12 102 RC no.

DWG No. **PP1**

Sheet No. **1 of 11**



Issue	Date	Revision
-	18/07/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG Stormwater Plan
Sheet 1 of 2

Scale 1:500 @A3

Drawn AP Checked JP Approved

Date 18/07/2013

File Z:\12 JOBS\112 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN.DWG

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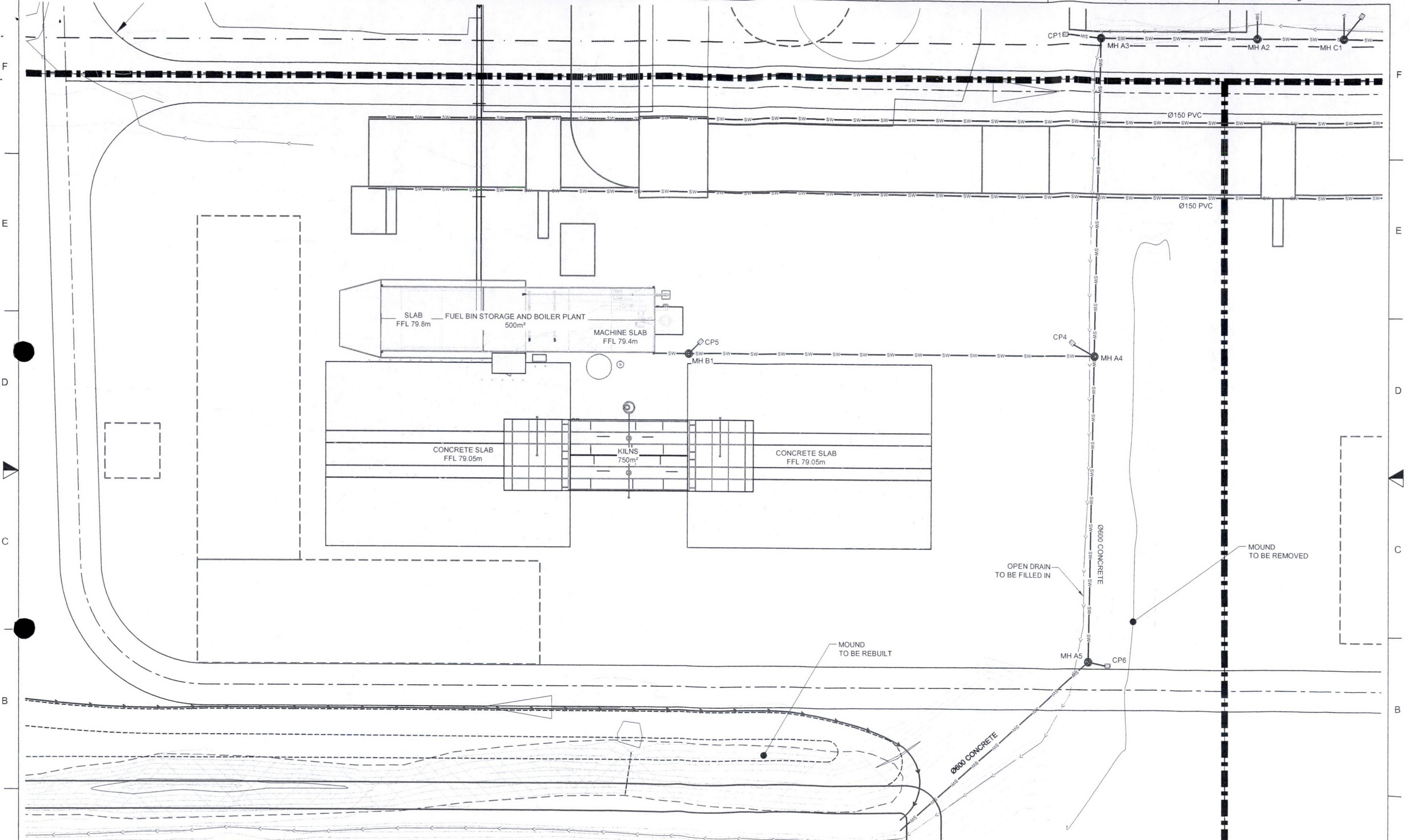
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Project	Proposed Plant Expansion	
Client	Waipapa Pine Ltd.	
Project No.	12 102	RC no.

DWG No.	PP2
Sheet No.	2 of 11



Issue	Date	Revision
-	18/07/2013	DRAFT
A	03/10/2014	FOR CONSENT

DWG Stormwater Plan
Sheet 2 of 2

Scale 1:500 @A3

Date 18/07/2013

Drawn AP Checked JP Approved

File Z:\12 JOBS\112 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN DWG

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Civil & Structural Engineers

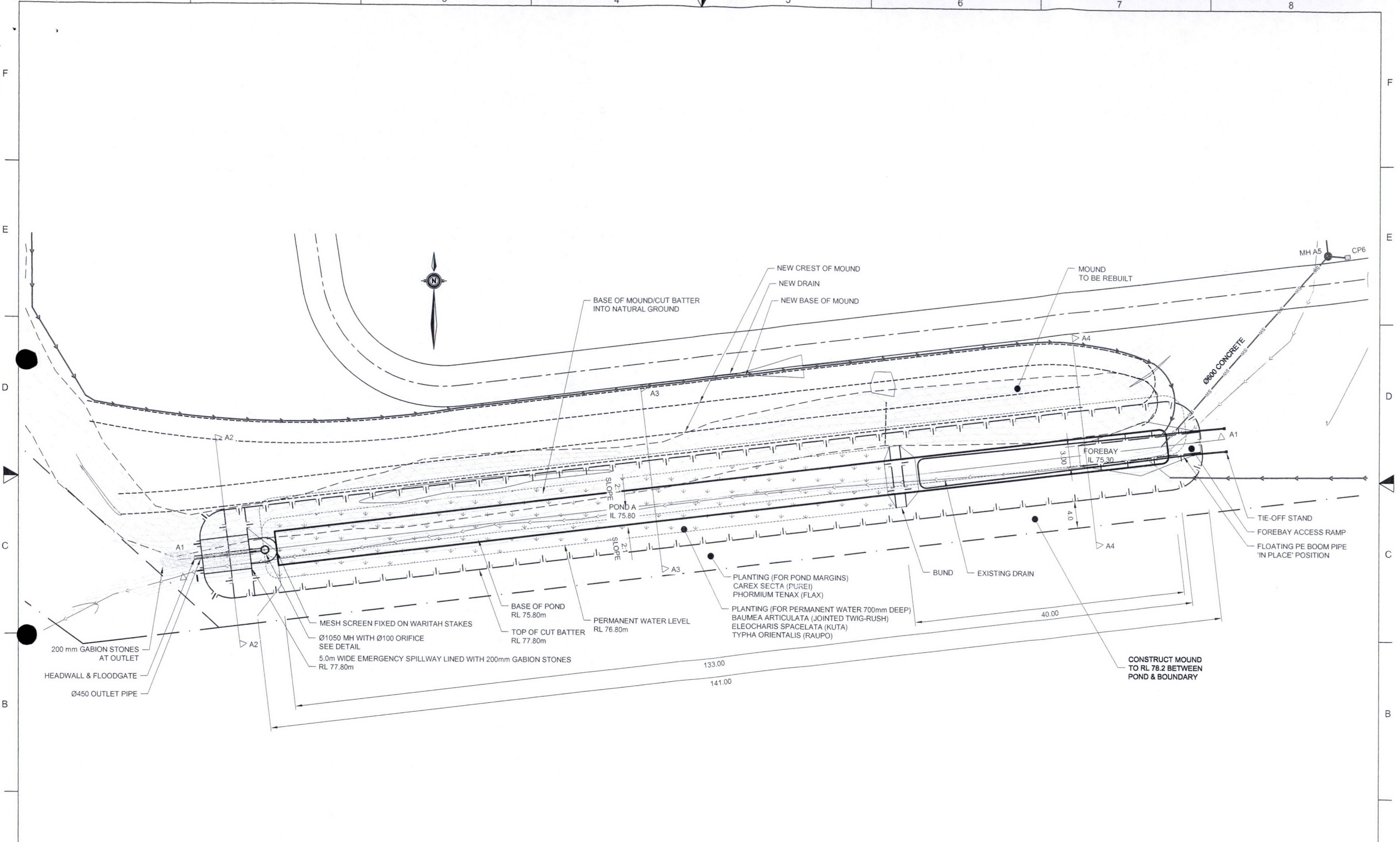
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Project No.	12 102	RC no.

DWG No.	PP3
Sheet No.	3 of 11



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-	18/09/2013	DRAFT
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DWG **Proposed Pond A Plan**

Scale 1:500 @A3

Date 18/09/2013

Drawn AP Checked JP Approved

File Z:\112 JOBS\112 102 WAIPAPA PINE LTD\DRAWINGS\1141003 SITE PLAN DWG

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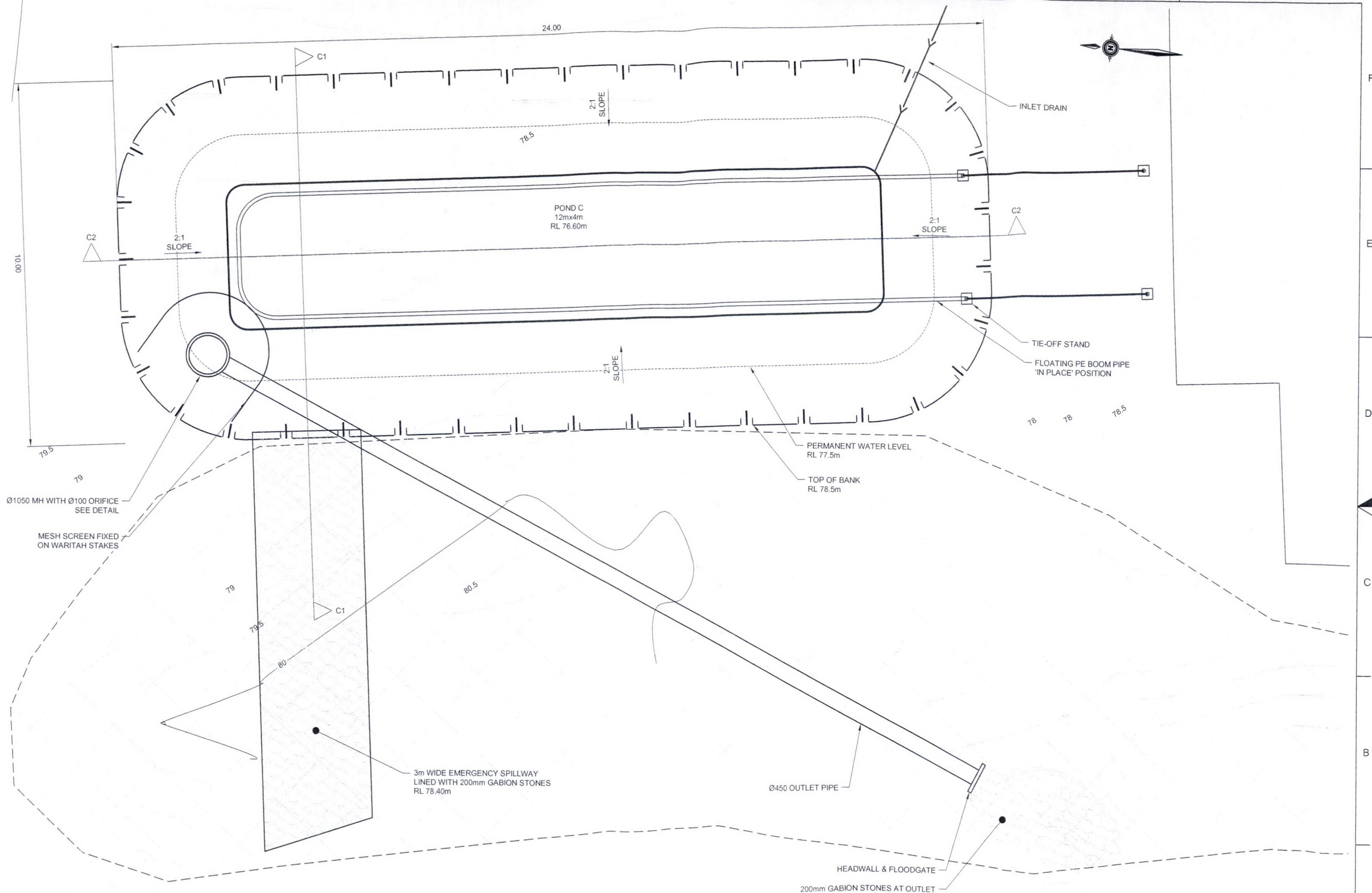
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Client **Waipapa Pine Ltd.**

Project No. 12 102 RC no.

DWG No. **PP4**

Sheet No. **4 of 11**



Issue	Date	Revision
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DWG **Proposed Pond C Plan**

Scale 1:100 @A3

Date 18/09/2013

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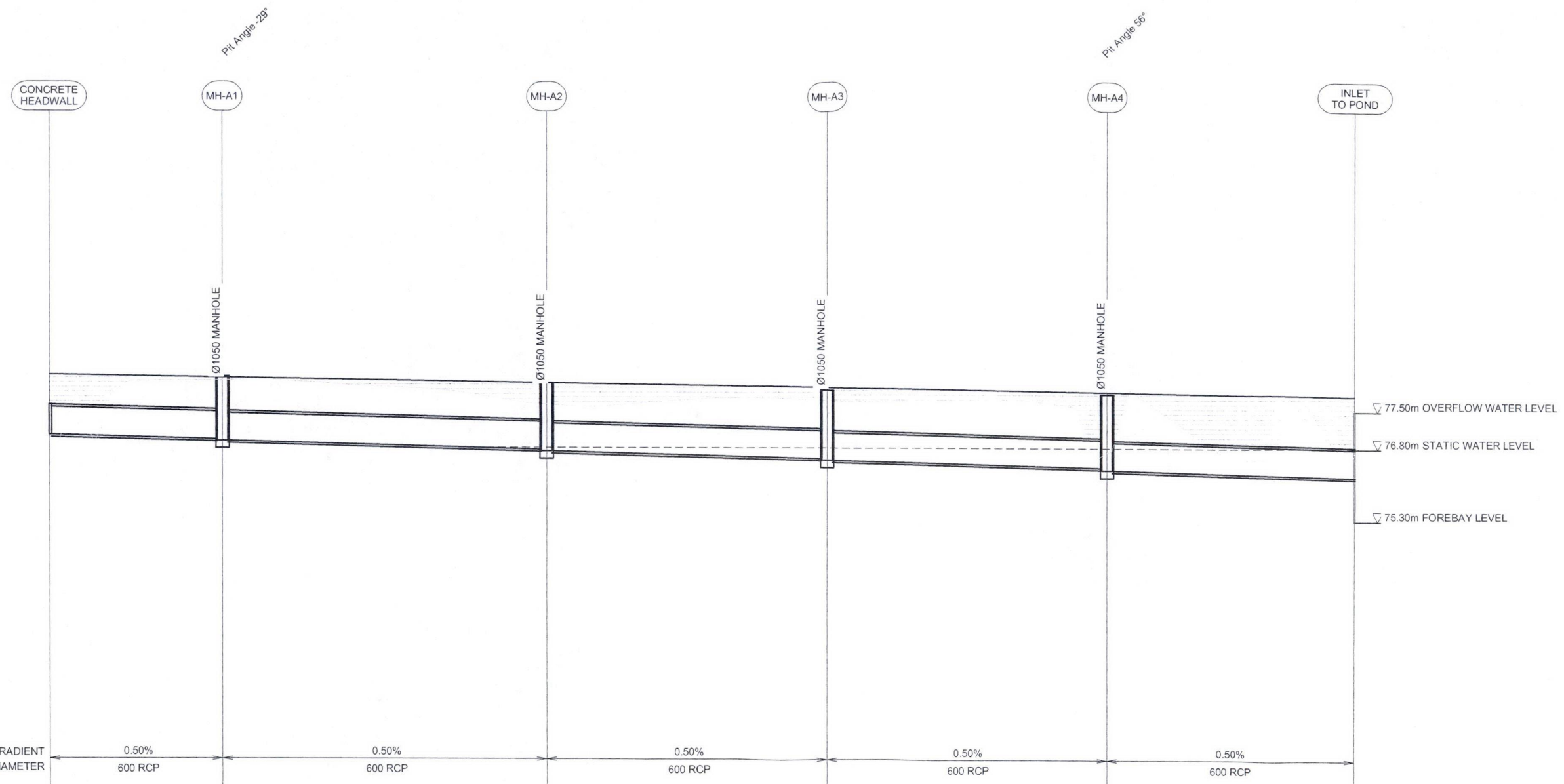
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Project No. 12 102

RC no.

DWG No. **PP5**

Sheet No. **5 of 11**



DEPTH TO INVERT	1.20	1.24	1.27	1.33	1.36	1.41	1.44	1.50	1.55	1.60	1.60
INVERT LEVEL	77.00	76.91	76.88	76.72	76.69	76.55	76.52	76.38	76.33	76.20	76.20
EXISTING/(FINISHED) SURFACE LEVEL	76.37 (76.20)	76.09 (76.15)	77.62 (78.05)	77.71 (77.96)	76.68 (77.88)	76.67 (77.80)	76.67 (77.80)	76.67 (77.80)	76.67 (77.80)	76.67 (77.80)	76.67 (77.80)
RUNNING CHAINAGE	0.00	17.34	17.34	32.61	49.95	28.20	78.15	28.20	106.35	25.30	131.65

Issue	Date	Revision
-	18/09/2013	DRAFT
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DWG Stormwater Longitudinal Section

Scale 1:50 @A3

Date 18/09/2013

Drawn AP Checked JP Approved

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Project No. 12 102 RC no.

DWG No. **PLS1**

Sheet No. **6 of 11**



GRADIENT 0.50%
DIAMETER 300 RCP

DATUM R.L.	69.00	
DEPTH TO INVERT	1.97	1.28 1.36
INVERT LEVEL	77.03	76.77 76.69
EXISTING/(FINISHED) SURFACE LEVEL	77.77 (79.00)	77.62 (78.05)
RUNNING CHAINAGE	0.00	52.04 52.04

Issue	Date	Revision
-	03/04/2014	DRAFT
A	03/10/2014	FOR CONSENT

DWG **Stormwater Longitudinal Section**

Scale 1:50 @A3

0.5 0.25 0 0.5 1 1.5 m

Date 18/09/2013

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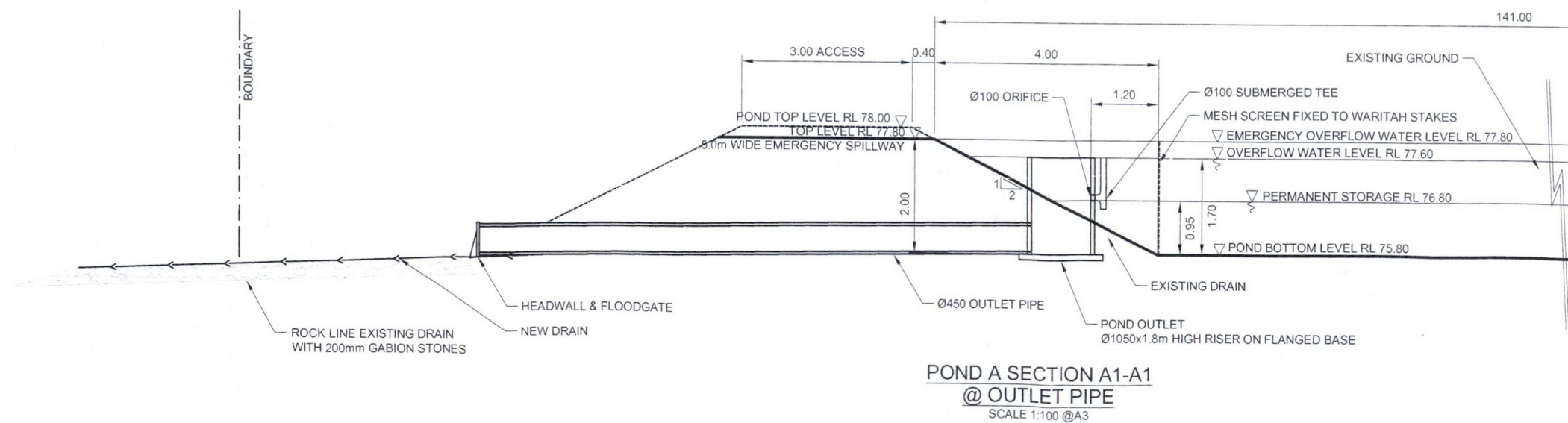
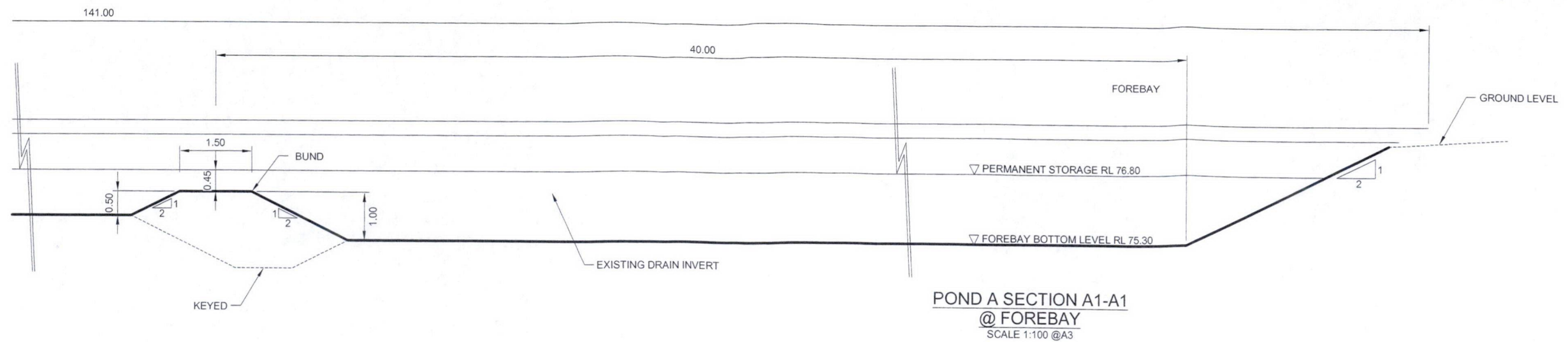
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DWG No.	PLS2
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Issue	Date	Revision
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DWG	Proposed Pond A Section Details		
Scale	1:50 @A3	Date	18/09/2013
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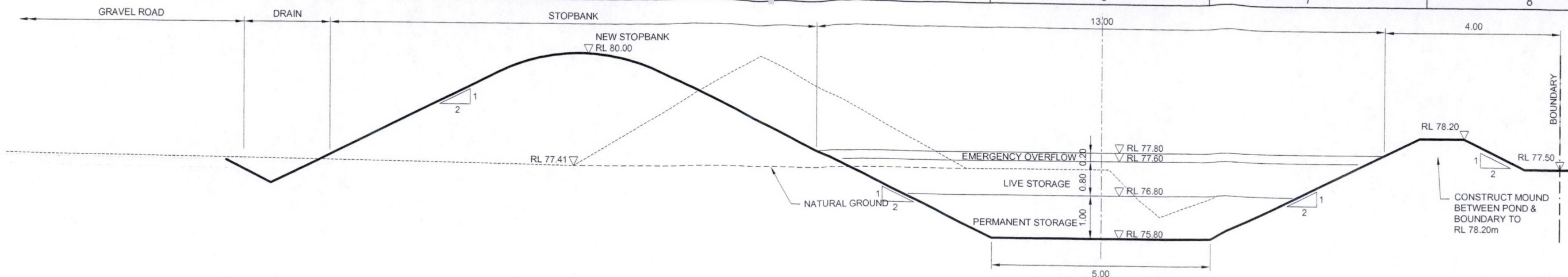
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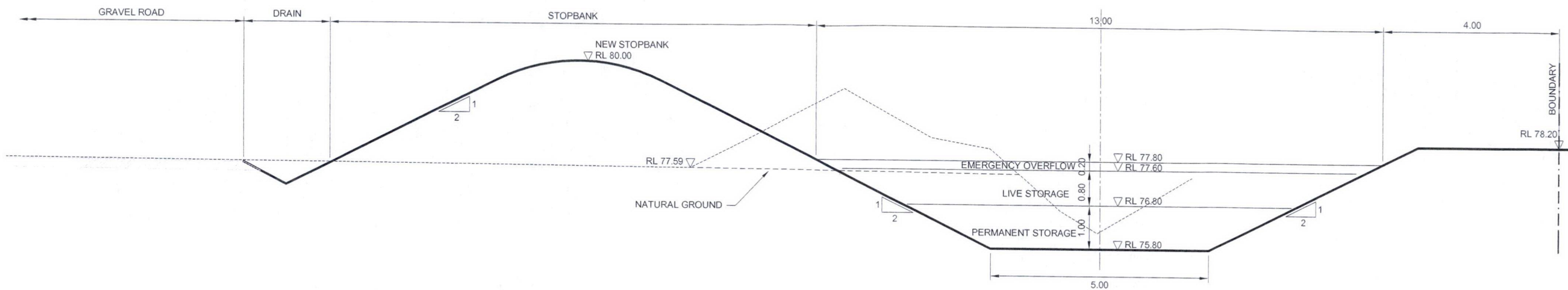
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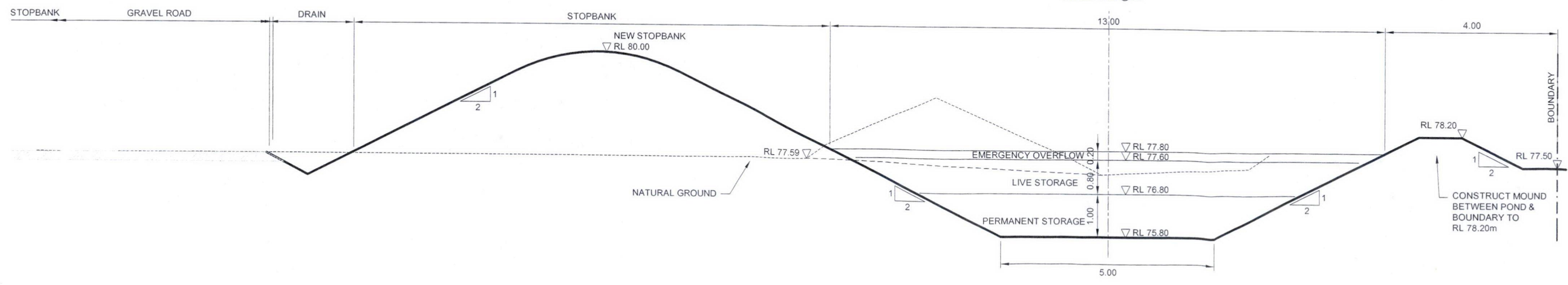
DWG No.	PD1
Sheet No.	8 of 11



**POND A SECTION A4-A4
TYPICAL CROSS SECTION**
SCALE 1:100 @ A3



**POND A SECTION A3-A3
TYPICAL CROSS SECTION**
SCALE 1:100 @ A3



**POND A SECTION A2-A2
TYPICAL CROSS SECTION**
SCALE 1:100 @ A3

Issue	Date	Revision
-	18/09/2013	DRAFT
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DWG **Proposed Pond A Section Details**

Scale 1:50 @A3

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Date 18/09/2013

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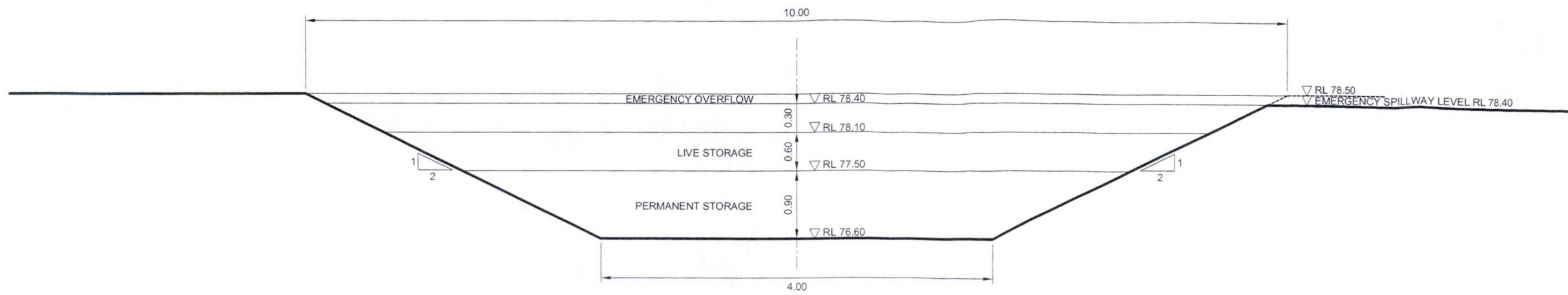
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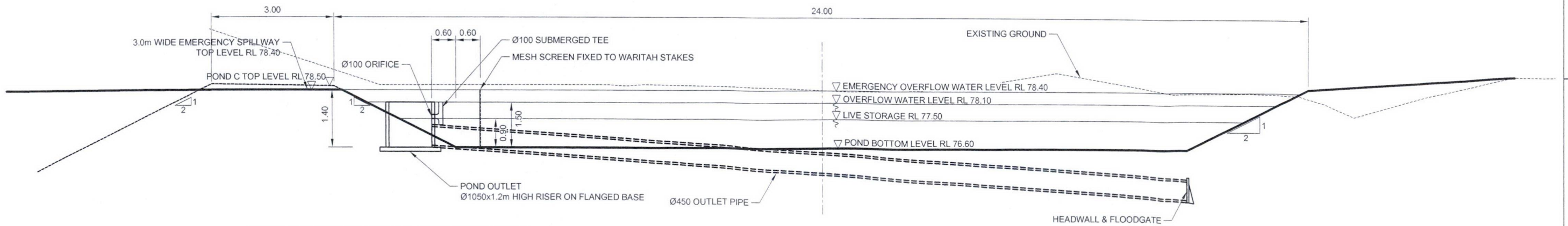
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POND C SECTION C1-C1
TYPICAL CROSS SECTION
SCALE 1:50 @ A3



SECTION @ OUTLET PIPE OR SPILLWAY
SCALE 1:100 @ A3

POND C SECTION C2-C2
SCALE 1:100 @ A3

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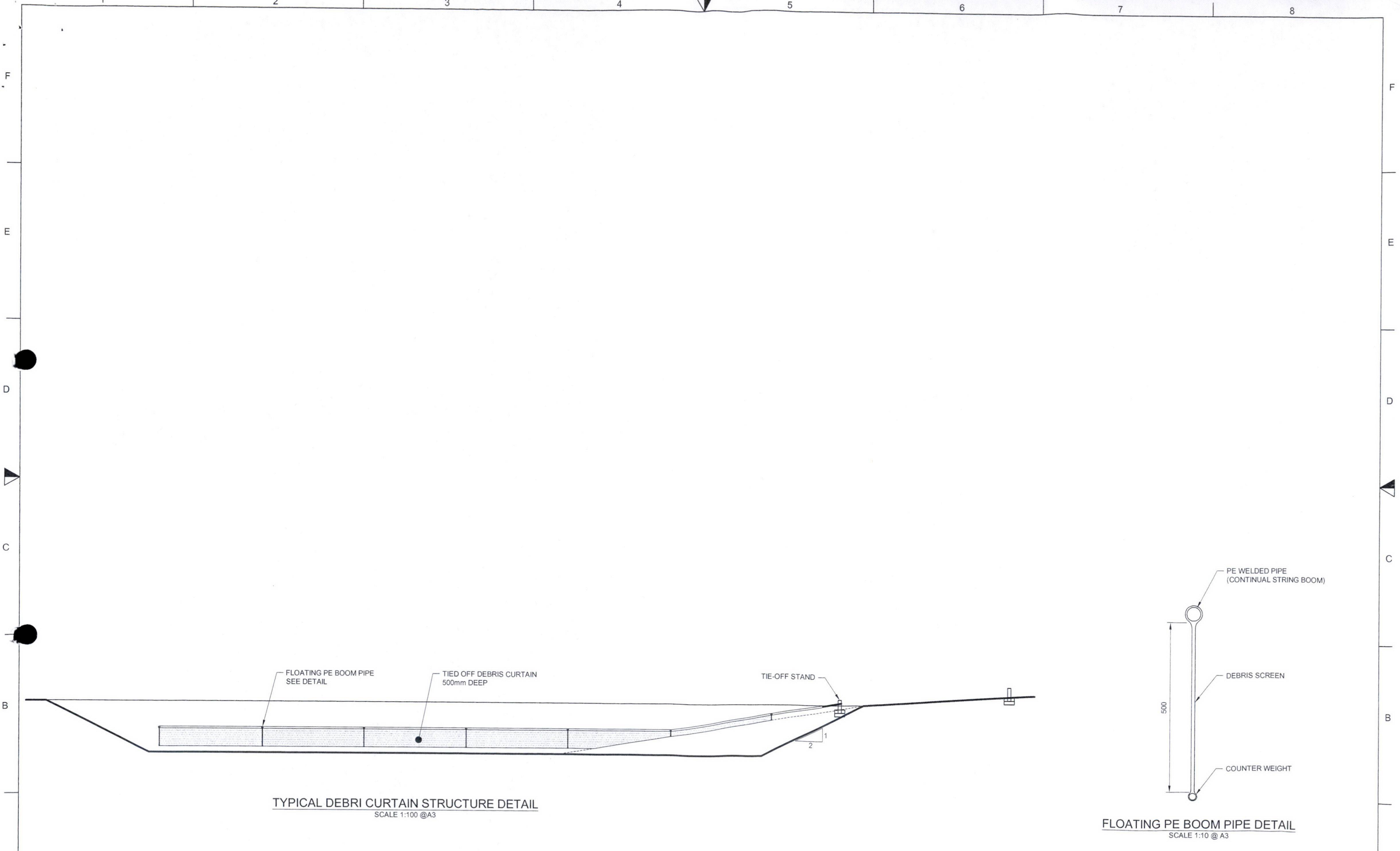
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TYPICAL DEBRI CURTAIN STRUCTURE DETAIL
SCALE 1:100 @A3

FLOATING PE BOOM PIPE DETAIL
SCALE 1:10 @A3

Issue	Date	Revision	DWG	Proposed Pond Details	HAIGH WORKMAN Civil & Structural Engineers	Project	Proposed Plant Expansion	DWG No.	PD4	
-	18/09/2013	DRAFT	Scale	1:50 @A3	310 Kerikeri Road, Kerikeri, BOI.	T: 09 407 8327 F: 09 407 8378 E: info@haighworks.co.nz	Client	Waipapa Pine Ltd.	Sheet No.	11 of 11
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Appendix E. Contamination Investigation



WILLIAMSON
WATER & LAND ADVISORY

Waipapa Sawmill

Bund Stockpile Sampling

WAIPAPA PINE LIMITED

WWLA0988 | Rev. 1

6 December 2023



Bund Stockpile Sampling

Project no: WWLA0988
 Revision: 1
 Date: 6 December 2023
 Client name: Waipapa Pine Limited
 Project manager: Shane Moore
 Author(s): Steve Tyson
 File name: G:\Shared drives\Projects\Fletcher Building Ltd\WWLA0998_Waipapa Sawmill Bund Removal\Deliverables\Reports\Appendix E - Contamination Report\WWLA0998_Waipapa Sawmill Bund Removal Contam Report_061213.docx

Williamson Water & Land Advisory

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Document history and status

Rev	Date	Description	By	Review	Approved
1	29 November 2023	Draft for client review	Steve Tyson	Shane Moore	Shane Moore
2	6 December 2023	For lodgement	Steve Tyson	Shane Moore	Shane Moore

Distribution of copies

Rev	Date issued	Issued to	Comments
1	29 November 2023	Fletcher Building Limited	Draft for client review
2	6 December 2023	Fletcher Building Limited Far North District Council Northland Regional Council	For lodgement

Investigation Summary

Williamson Water & Land Advisory (WWLA) has prepared this ground contamination assessment to support the removal of an earth bund located within the Waipapa Sawmill site at 1945b State Highway 10, Waipapa. The key findings of this report are:

<p>History and potential for contamination [Section 5]</p>	<p>The site history review confirmed that HAIL activities (those with potential to cause ground contamination as listed on the Ministry for the Environments Hazardous Activities and Industries List) have occurred on the wider site but these activities have not encroached on the bund.</p> <ul style="list-style-type: none"> • The area occupied by the bund was previously used for pastoral farming. The bund was formed during the early stages of development of the wider site as a sawmill (circa 2004). • While the wider site has been used for sawmilling, activities with the potential to cause ground contamination have not encroached on the bund. • The possible inclusion of topsoil derived from a former horticultural area is the only activity with potential to have resulted in contamination of the bund materials.
<p>Field Investigations and Analyses [Section 6]</p>	<p>Intrusive investigations identified that the concentration of metals, OCPs, TPH and PAH in the bund materials and associated stockpiles of wood ash fall within expected background ranges.</p> <ul style="list-style-type: none"> • All samples tested returned concentrations of the identified contaminants of concern well below the applicable human health criteria, even under the most sensitive future land use scenarios (rural residential). • All samples tested returned concentrations of the identified contaminants of concern well below the applicable environmental criteria.
<p>Conceptual site model (CSM) [Section 7]</p>	<p>A CSM was developed to show if there are potential risks associated with the proposed removal and reuse of the bund materials and wood ash. No complete exposure pathways (i.e. no confirmed risks) were identified.</p>
<p>Consenting implications [Section 8.1]</p>	<p>Consent for ground contamination matters is NOT required under either the NESCS or PRPN.</p> <ul style="list-style-type: none"> • As the identified contaminants of concern are not present above expected background concentrations the Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations (2011), herein referred to as the NESCS, does not apply to the proposal to remove the bund. • As soil sampling confirms that HAIL activities have not encroached on the bund the contaminated land rules of the Proposed Regional Plan for Northland (PRPN) do not apply to the proposal to remove the bund.
<p>Reuse and disposal [Section 8.2]</p>	<p>As the identified contaminants of concern are not present above expected background concentrations the bund materials and wood ash can be reused without constraint or if necessary, disposed of as cleanfill.</p>
<p>Earthworks implications [Section 8.2]</p>	<p>No specific ground contamination controls apply to disturbing or reusing the bund materials and wood ash. These materials can be removed and reused under standard earthworks controls.</p>

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- Appendix A. Figures
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Appendix D. Laboratory transcripts

1. Introduction

Williamson Water & Land Advisory (WWLA) was commissioned by Waipapa Pine Limited to undertake an assessment of ground contamination to support the removal of an earth bund located within the Waipapa Sawmill site at 1945b State Highway 10, Waipapa.

The location of the sawmill, and bund within it, are shown in **Figure 1** and **Figure 2** respectively, provided in **Appendix A**. For the purposes of this report “the site” refers to the earth bund and immediate surrounds, the “wider site” or “sawmill” refers to the entire sawmill property.

Further development of the wider site is planned and the bund is proposed to be removed to create useable space to support this development. The bund removal and yard extension works will comprise removal of the bund (to approximately 300 mm below the adjacent grade), minor recontouring, installation of new drainage (to replace an existing open drain along the western edge of the bund) and placing clean imported hardfill to create a new yard area. We understand that a landscape supplies company is interested in receiving the bund materials for reuse and on sale for topsoiling and landscaping purposes.

Far North District Council (FNDC) and Northland Regional Council (NRC) identify the wider site as a “Verified HAIL”¹, under category “A18. Wood treatment or preservation or bulk storage of treated timber”. As a result, removal of the bund may trigger the need for resource consent under the Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations (2011), herein referred to as the NESCS and/or NRC’s Proposed Regional Plan for Northland (PRPN). The objective of this investigation was to confirm the contamination status of the bund materials to confirm if the NESCS and/or contaminated land requirements of the PRPN apply to its proposed removal.

2. Scope of work

The following scope of work was undertaken to confirm the contamination status of the bund materials:

1. Existing ground contamination investigation information was reviewed;
2. Soil samples were collected from 10 locations across the bund; and
3. This report was prepared to outline the findings of the above tasks and associated implications for removal of the bund.

3. Legislative requirements

WWLA has undertaken investigations and prepared this report in general accordance with requirements of published industry best practice guidance, including:

- Ministry for the Environment (MfE). [Contaminated Land Management Guideline No. 1: Reporting on Contaminated Sites in New Zealand \(Revised 2021\)](#), (CLMG1); and
- MfE’s [Contaminated Land Management Guidelines No. 5: Site Investigation and Analysis of Soils \(Revised 2021\)](#), (CLMG5).

This report has been prepared, reviewed, and certified by a SQEP as described in the NESCS and NESCS Users’ Guide². CVs confirming the SQEP status of our contaminated land specialists are available on request.

¹ [Ministry for the Environment's Hazardous Activities and Industries List \(HAIL\)](#)

² MfE, April 2012. *NESCS Users’ Guide: National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health*.

4. Site description

The key features of the site and surrounds are summarised in **Table 1**. The features of the site setting are considered in the context of their potential to affect the distribution, mobility and form of contaminants (if present).

Table 1. Site setting

<p>Site condition</p>	<p><i>The use and condition of the site informs the potential for sources of ground contamination, such as activities listed on the Ministry for the Environment's Hazardous Activities and Industries List (HAIL).</i></p> <p>The site was visited by a SQEP from WWLA on 25 October 2023. Selected photographs are provided in Appendix B. The following observations about the conditions and current use of the site were made:</p> <ul style="list-style-type: none"> • The wider site is currently operating as a sawmill. Logs arrive at the site, are milled, and are kiln dried before being trucked to Whangārei to undergo timber treatment. We understand that no treatment, including application of antisapstain, currently occurs at the site. • Sawmilling activities in the immediate vicinity of the site (bund) comprise: <ul style="list-style-type: none"> - The bund is bounded by a compacted hardfill accessway / yard area on its western, northern and eastern sides. The accessway has a minimum width of 10 m. - Kilns are located more than 40 m to the west. A concrete apron extends from both kilns to approximately 10 m from the western toe of the bund (Photograph 1). - The enclosed Binsorter building is located some 10 m to the north with dry stores some 30 m beyond (Photograph 2 and Photograph 3). - The Pellet Plant is located some 20 m to the east. • The bund is located at the southern part of the sawmill site, where it runs perpendicular to, and abuts, the southern boundary, between Lots 1 and 2 of DP 376253. • The bund ranges from 2 to 4 metres in height and is approximately 60 metres long by 25 metres wide at the base (Photograph 3 to Photograph 6). It is steep sided and approximately 4 to 6 metres wide at the crest. • The bund is covered by non-native invasive vegetation including large, woody woolly nightshade, mature bamboo, with ground cover including dense kikuyu and tradescantia. • At the northern end of the bund (Photograph 5 and Photograph 6) wood ash from the drying kilns is temporarily stockpiled prior to removal by local landscape gardening suppliers. • An open stormwater drain (which flows to the south) is located along the western foot of the bund (Photograph 3). This drain discharges to a stormwater retention pond that runs parallel with the southern boundary of the site. The pond discharges to the Kerikeri River.
<p>Site surrounds</p>	<p><i>The use and condition of the site surrounds informs the potential for sources of ground contamination associated with nearby activities to impact on the subject site.</i></p> <p>The wider site is bordered from State Highway 10 to the east and Kerikeri River to the west. It is bordered principally by a mixture of industrial uses, including immediately to the:</p> <ul style="list-style-type: none"> • South by Northland Waste Kerikeri and Waipapa Landscape Supplies; and • North by precast Products and Mahalo Transport. <p>In the wider area uses include truck refuelling stops (Z and Allied Petroleum), kiwifruit packing, rural supplies (PCG Wrightson and Farm Source), various automotive and marine servicing businesses and an equipment hire business, amongst other commercial and industrial uses.</p> <p>The nearest residential dwellings are located more than 300 m to the east of the site (bund) and are themselves surrounded by commercial / industrial land uses.</p> <p>As described above the site (bund) is surrounded by the kilns, binsorter and pellet plant. Although these activities are all separated from the bund by a minimum 10 m wide hardfill accessway / yard.</p>
<p>Topography and drainage</p>	<p><i>The topography and drainage influences where contaminants may migrate to if present and surface water features are potential receiving environments for contaminants (if any) derived from the site.</i></p> <p>The topography of the wider site and surrounds is subdued with a gentle fall west towards the Kerikeri River. As noted above the bund has been formed to a height of some 2 to 4 m above the surrounding grade. Both NRC and FNDC map the 100-year Average Recurrence Interval (ARI) with climate change (CC) inundation extent as intersecting the western side of the bund. The bund prevents flood waters from propagating further eastward (inland).</p>

Geology	<p><i>Geological conditions are considered in the context of describing the conceptual site model should a potential for contamination be identified by this study. For example, more porous soils can enable contaminants to move more quickly and potentially further than clay-rich soils that retain/bind or prevent penetration of contaminants.</i></p> <p>The published geological map³ indicates that the site is underlain by Tauranga Group alluvium. The Tauranga Group comprises unconsolidated to poorly consolidated mud, sand, gravel and peat deposits of alluvial, colluvial and lacustrine origins. The Tauranga Group alluvium overlies volcanic deposits (basalt flows) of the Kerikeri Volcanic Group.</p>
Hydrogeology	<p><i>Hydrogeological conditions affect the potential risk of a contaminant entering and being transported in groundwater.</i></p> <p>Based on the site setting (floodplain) groundwater is expected to be present at shallow depth (1 to 2 m below ground) in the alluvial deposits beneath the site. A deeper aquifer is associated with the underlying basalt lava flows.</p>
Sensitive receptors	<p><i>Sensitive environmental receptors could include aquatic or terrestrial ecosystems. This is not an ecological assessment but is instead an initial review of the surrounding environment to assess where contaminants (if present) on the site could migrate to and whether the receiving ecosystem could be vulnerable to contaminants.</i></p> <p>The Kerikeri River and associated ecosystems are the nearest significant sensitive environmental receptors.</p> <p><i>Sensitive human receptors could for example be children at a school or kindergarten on or adjacent to a site. Workers on industrial land (including or adjacent to a site) would be considered less sensitive.</i></p> <p>Surrounding properties are commercial and industrial in nature so the users are not considered to be sensitive receptors.</p>

5. Site history

Pattle Delamore Partners Ltd (PDP) recently assessed ground contamination conditions as part of Fletchers due diligence process prior to its recent acquisition of the sawmill site⁴. The assessment included a review of the site history which identified the following key findings:

- The northeast corner of the site was being used for market gardening / horticultural purposes in the 1971 historical aerial photograph. This activity was not evident by 1981. Anecdotal evidence provided during site interviews suggests topsoil from this portion of the site may have been moved to form the southeast noise bund (the bund which is the subject of this report). Spoil within this bund may have also been sourced from Transit New Zealand from roadside slips.
- The northwest portion of the wider site has been operational the longest, with development occurring circa 2004. Antisapstain treatment was used in the older portions of the site, but this activity has not occurred at the site since 2011. The areas where antisapstain treatment most likely occurred are some 100 m from the bund.
- The pellet plant uses sunflower oil as a binding agent. There are no chemical additives.
- The boiler for the kilns is heated using woodchips from the mill. The wood ash byproduct is deposited at the northern end of the bund.
- Forklifts are refilled as required via mini tanker operated by a specialist contractor.
- Asbestos is known to be present in the weatherboard cladding and soffits of the main site office (some 100 m from the bund).
- Maintenance and engineering workshops were identified as being present on the northern side of the wider site (some 120 m from the bund).

Collectively the above information suggests that the possible inclusion of topsoil derived from a former horticultural area is the only activity with potential to have resulted in contamination of the bund materials. All other activities are sufficiently distal from the bund that they are highly unlikely to have resulted in soil

³ Edbrooke, S.W., and Brooke., F.J., (compiler) 2005, Geology of the Whangārei area. Institute of Geological and Nuclear Sciences 1:250,000 geological map 2, Institute of Geological and Nuclear Sciences.

⁴ PDP, 2022. Due Diligence Investigation for 1945b State Highway 10, Waipapa. Report prepared for Fletcher Building Limited by Pattle Delamore Partners Ltd, dated 5 December 2022. Reference: A03977100L001 WAIPAPA.docx

contamination. To further evaluate potential sources of contamination we have conducted a review of historic aerial photographs focussing specifically on activities undertaken in the vicinity of the subject site (bund). Selected historic aerial photographs (reproduced from PDP, 2022) are provided for reference in **Appendix C**.

In summary, review of the historic aerial photographs confirms that other than the storage of sawn timber in the yard to the west of the bund (now occupied by the kilns), no other activities have been conducted in its immediate vicinity since it was formed. Review of Google Earth images shows that storage of sawn timber near the bund only occurred between late 2012 and early 2016, after the time when antisapstain treatment had ceased at the site. It is therefore highly unlikely that soils in the bund could be impacted by antisapstain chemicals. In any event most of the common antisapstain chemicals have relatively short half-lives in the environment (<6 months) and would therefore be expected to have degraded over the >10-year period since they were used on the wider site.

6. Site investigations

6.1 Previous investigations

As described in **Section 5**, PDP recently assessed ground contamination conditions across the wider site. This included testing two samples collected from the northern end of the bund. While it is not specifically stated in PDP's report the locations of the samples correlate with the stockpiles of wood ash sourced from the kiln boiler. The samples returned concentrations of metals within expected background ranges and organochlorine pesticides (OCPs) were not reported above the laboratory limit of reporting. Only traces of heavy end total petroleum hydrocarbons (TPH) were reported, the chromatograms were not indicative of refined petroleum products and most likely represent byproducts produced during combustion of the wood chips (i.e. naturally occurring compounds).

6.2 Sampling rationale and methodology

The sampling rationale adopted for this investigation was to characterise soils within the bund, specifically assessing if impacts from have occurred from the identified contaminants of concern:

- OCPs and metals from former horticultural soils that may have been included in the bund; and
- TPH associated with potential inclusion of material from roadways (Transit New Zealand from roadside slips) and general effects from operation of mobile plant around the wider site (oil and grease).

Ten sample locations were selected across the crest and sides of the bund to provide spatial coverage. Soil samples were subsequently selected for analysis from varying depths to provide vertical coverage through the bund. In addition to the samples of bund materials, a sample of stockpiled wood ash was also collected to provide confirmation of the test results previously obtained by PDP (**Section 6.1**), this sample was tested for metals and polycyclic aromatic hydrocarbons (PAHs).

Soil sampling was conducted by WWLA personnel on 25 October 2023 as follows:

- Vegetation was hand cleared from each sample location and then the soil hand excavated by spade to approximately 0.5 m.
- A hand auger was then used to obtain samples to depths of up to 2.7m below ground level. The maximum depth of sampling depending on location on the bund.
- Sample location HA04 was collected from the northern face of the bund (see **Photograph 6** and **Photograph 7**). Samples were able to be obtained directly from the bund face, once surficial material was removed to expose a fresh surface.

The data quality objectives (DQOs) for this investigation were to:

- Undertake the investigation in general accordance with CLMG 5; and

- Collect and analyse soil samples and with sufficient accuracy and precision to provide evaluation against relevant human health and environmental acceptance criteria.

The following quality assurance and quality control measures were implemented to meet the investigation DQOs:

- Appropriately experienced staff were used to undertake the field investigation work.
- Soil sampling equipment was decontaminated (as required).
- Soil analyses were carried out by International Accreditation New Zealand (IANZ) accredited laboratories using industry standard methods.
- Appropriate chain of custody documentation was used.

6.3 Site observations

Soils encountered in the bund typically comprised a brown / grey silty topsoil with occasional traces of clay (see **Photograph 7** and **Photograph 8**). No visual or olfactory evidence of contamination was found. Groundwater was not encountered during sampling.

6.4 Results

The soil sample results are summarised in **Table 2** (overpage). The full laboratory reports are provided in **Appendix D**.

Soil sample results have been compared against the following assessment criteria:

Protection of Human Health	<ul style="list-style-type: none"> • NESCS SCS^{5,6} for commercial / industrial land use to reflect the current site use and as a proxy for assessing potential exposures to construction worker. • NESCS SCS criteria for rural residential land use (the most protective standard) based on the proposal for a landscape supplier to reuse the bund materials for topsoiling and landscaping purposes, which could include produce being grown in the soils.
Discharges to the Environment	For discharges to the environment the predicted background concentrations ⁷ and ecological soil guideline values (Eco-SGVs) ⁸ have been considered to assess potential effects.
Soil Disposal	Predicted background concentrations have been adopted to assess acceptance of soil to cleanfill sites (if required).

The findings are summarised below:

- All samples of returned concentrations of metals, OCPs, TPH and PAH that comply with the criteria for the protection of human health and environmental receptors.
- All samples of bund materials returned concentrations of metals within expected background ranges. Nickel slightly exceeded predicted background concentrations in three samples. However, the predicted nickel concentrations presented in **Table 2** are based on the Pakihi Mudstone being the parent rock. The site is located near an inferred lithological boundary with soil derived from both the Pakihi Mudstone and adjoining basalt parent rocks. The reported nickel concentrations fall within the predicted background range for the volcanic (basalt) derived soils.
- In a similar manner to the bund materials concentrations of metals in the wood ash slightly exceed the predicted background concentrations based on the Pakihi Mudstone being the parent rock, but apart from cadmium fall within the range predicted for a basalt parent rock. Cadmium slightly exceeds the local basalt

⁵ Soil Contaminant Standards (SCS) as set out in Ministry for the Environment, 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Wellington: Ministry for the Environment.

⁶ Where NESCS are not provided, guidelines have been adopted in accordance with Ministry for the Environment, 2011. Contaminated Land Management Guidelines No. 2, Hierarchy and Application in New Zealand of Environmental Guideline Values (Revised 2011). Wellington: Ministry for the Environment.

⁷ Predicted Background Concentrations of trace elements sourced from Landcare Research 2015 report through the LINZ data service, 95% UCL values adopted. <https://iris.scinfo.org.nz/layer/48470-pbc-predicted-background-soil-concentrations-new-zealand>.

⁸ Manaaki Whenua – Landcare Research, 2019. Updated Development of soil guideline values for the protection of ecological receptors (Eco-SGVs): Technical document. Contract Report: LC2605 (updated), dated June 2019.

range (1.0 versus 0.51 mg/kg) but falls within the broader range of New Zealand soil types⁹. Combined with lower concentrations of cadmium measured by PDP (0.20 and 0.22 mg/kg) we consider that the wood ash materials approximate background conditions.

- Trace concentrations of endrin aldehyde were reported in four of the 10 bund samples tested. However, the concentrations in three of the four samples are at or very close to the limit of laboratory reporting and are considered to fall within the margin of error (typically 30-50% on soil samples). These results are therefore discounted. The remaining result, being a single detection of 0.06 mg/kg, is not considered to be material in the context that the average concentration (0.016 mg/kg) across all samples still falls within the expected margin of error.
- Trace concentrations of two PAH compounds were reported in the sample of wood ash. In a similar manner to the OCPs, the detections are close to the limit of laboratory reporting and are likely to fall within the margin of error. In any event, PAHs are a natural byproduct of combustion of wood and as a result ambient concentrations of these compounds are present widely in the environment. The concentrations reported in the wood ash sample fall within the background ranges reported in New Zealand soils.

In summary, we consider that the soil testing results indicate that the concentration of metals, OCPs, TPH and PAH in the bund materials and wood ash fall within expected background ranges.

⁹ Manaaki Whenua Landcare Research, 2019. Updated Development of Soil Guideline Values for the Protection of Ecological Receptors (Eco-SGVs): Technical document. Contract Report: LC2605 (updated).

Table 2. Summary soil analytical results

Sample information	Sample Location	NESCS Commercial/Industrial/Outdoor worker ¹	NESCS rural residential (25% produce) ²	Ecological investigation level ³	Predicted background ⁴	HA01	HA02	HA03	HA04	HA05	HA06	HA07	HA08	HA09	HA10	Flyash North
	Depth (m)					1.0	0.6	1.0	1.0	0.5	2.7	1.8	0.6	1.2	0.5	Stockpile
	Material type					Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	Topsoil	Wood ash
Metals	Arsenic	70	17	18	10	1.9	1.9	1.9	3.2	6.2	3	2.8	3.2	0.8	2.7	5
	Cadmium	1,300	0.8	3	0.3	0.2	0.11	0.08	0.22	0.21	0.22	0.16	0.31	0.17	0.08	1
	Chromium	6,300	290	306	57	42	41	72	52	110	73	65	83	71	79	34
	Copper	NL (>10,000)	NL (>10,000)	271	48	13	10	15	12	17	21	16	16	37	18	99
	Lead	3,300	160	266	26	6.8	7.7	10	9.5	16	10	12	14	10	8.5	1.9
	Nickel	6,000 ⁵	400 ⁶	-	35	18	15	36	17	37	25	24	34	52	23	20
	Zinc	400,000 ⁵	7,400 ⁶	190	98	15	10	10	14	14	21	16	17	9.3	16	110
TPH	C ₇ -C ₉	500	500	110	-	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
	C ₁₀ -C ₁₄	1,700	510	70	-	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
	C ₁₅ -C ₃₅	NL (>10,000)	NL (>10,000)	1300	-	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
OCP	Total DDT	1,000	45	1.9	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-
	Dieldrin (or Σ aldrin+dieldrin)	160	1.1	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-
	Endrin aldehyde	-	-	-	-	< 0.01	0.01	0.02	0.06	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	-
	Other OCPs	-	-	-	-	< LoR	< LoR	< LoR	< LoR	< LoR	< LoR	< LoR	< LoR	< LoR	< LoR	-
PAHs	Acenaphthene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Acenaphthylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04
	Anthracene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Benz(a)anthracene	Refer BaP PEF	Refer BaP PEF	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Benzo(a)pyrene	Refer BaP PEF	Refer BaP PEF	2.8	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Benzo(a)pyrene PEF	35	6	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Benzo(b&j)fluoranthene	Refer BaP PEF	Refer BaP PEF	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Benzo(g,h,i)perylene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Benzo(k)fluoranthene	Refer BaP PEF	Refer BaP PEF	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Chrysene	Refer BaP PEF	Refer BaP PEF	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Dibenz(a,h)anthracene	Refer BaP PEF	Refer BaP PEF	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Fluoranthene	Refer BaP PEF	Refer BaP PEF	27	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Fluorene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Indeno(1,2,3-cd)pyrene	Refer BaP PEF	Refer BaP PEF	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03
	Naphthalene	210 ⁷	63	-	-	-	-	-	-	-	-	-	-	-	-	< 0.1
Phenanthrene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06	
Pyrene	NL (>10,000) ⁷	1,600	-	-	-	-	-	-	-	-	-	-	-	-	< 0.03	

Notes:

<LoR indicates concentration below the laboratory limit of reporting.

NL = not limiting.

Grey values are at background concentrations, black values are above background concentrations, bold values are above environmental criteria and shaded are above human health criteria.

1. MIE, 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health (unless otherwise stated). Soil Contamination Standard - Commercial/Industrial land use.

2. MIE, 2011. Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health (unless otherwise stated). Soil Contamination Standard - Residential, 25% consumption of homegrown produce.

3. Manaaki Whenua Landcare Research, 2019. Updated Development of Soil Guideline Values for the Protection of Ecological Receptors (Eco-SGVs): Technical document. Criteria for Agricultural land use. Added concentration limits using EC30 and site predicted background used. Typical soils, aged contaminants.

4. Manaaki Whenua Landcare Research. 2015 Predicted Background Concentrations of trace elements in Pakihi mudstone, sourced through the LINZ data service, 95% quantile. <https://iris.scinfo.org.nz/layer/48470-pbc-predicted-background-soil-concentrations-new-zealand>.

5. National Environment Protection Council [Australia] - National Environment Protection Measure (Assessment of Site Contamination). Health Investigation Levels - Commercial/Industrial land use (HIL D).

6. National Environment Protection Council [Australia] - National Environment Protection Measure (Assessment of Site Contamination). Health Investigation Levels - Residential with garden/ accessible soil (HIL A).

7. Guidelines for Assessing and Managing Petroleum hydrocarbon Contaminated Sites in New Zealand, Tier 1 Soil acceptance criteria, sandy silt, surface contamination, residential and commercial landuse criteria used as appropriate for human health, protection of groundwater quality for environmental discharge (surface contamination, groundwater at 4m).

7. Conceptual site model

A conceptual site model (CSM) indicates known and potential sources of contamination, routes of exposure (pathways), and the receptors that are affected by contaminants moving along those pathways. Receptors may be people or environmental. *The CSM's purpose is to set out risks to people and the environment (if any) associated with any proposed activity (short or long term) on the land.*

Works are expected to involve removal of the bund materials for reuse offsite (for topsoiling / landscaping), installation of new drainage and placing clean imported hardfill to create a new yard area. The CSM is summarised in **Table 3**. Colour coding in the table is used to indicate the:

- **Potentially Complete** pathways i.e. those where there may be a risk to people and/or the environment if appropriate controls and remedial actions in respect of ground contamination are not in place; and
- **Incomplete** exposure pathways where there is no risk to human or environmental receptors.

No complete pathways (i.e. no confirmed risks) were identified.

Table 3. CSM for the bund materials

Source	Receptor	Exposure pathway	Assessment
Metals and OCPs derived from the inclusion of	Site workers during soil disturbance	Dermal contact Inhalation of dust Ingestion of soil	Incomplete Pathway: Identified contaminants of concern are not present above expected background concentrations and are therefore well below applicable human health criteria.
	Future site users	Dermal contact Inhalation of dust Ingestion of soil	Incomplete Pathway: Identified contaminants of concern are not present above expected background concentrations and are therefore well below applicable human health criteria. In any case the soils will be removed from the site and area covered by imported hardfill, thereby removing this exposure pathway.
	Future users of recycled soils / bund materials	Dermal contact Inhalation of dust Ingestion of soil	Incomplete Pathway: Identified contaminants of concern are not present above expected background concentrations and are therefore well below applicable human health criteria, even under the most sensitive future land use scenarios (rural residential).
	Ecological receptors at the nearest surface water bodies	Leaching to groundwater or surface water runoff from the site	Incomplete Pathway: Identified contaminants of concern are not present above expected background concentrations and are therefore well below applicable environmental criteria.
	Ecological receptors at soil receiving site(s).	Leaching to groundwater or surface water runoff from the receiving site	

8. Development implications

8.1 Contamination consenting

8.1.1 NESCS

Part 9 of Regulation 5 of the NESCS states that *“these regulations do not apply to a piece of land... about which a detailed site investigation exists that demonstrates that any contaminants in or on the piece of land are at, or below, background concentrations”*. We consider that the investigations undertaken in relation to the bund constitute a detailed site investigation. As described in **Section 6.4**, we interpret that the identified contaminants of concern are present at or below expected background concentrations. On this basis the NESCS does not apply to the proposal to remove the bund.

8.1.2 Proposed Regional Plan for Northland

The PRPN defines potentially contaminated land as that on which a HAIL activity is or has been undertaken. As described in the preceding sections, while HAIL activities have occurred on the wider site these have not encroached upon the bund. This conclusion is supported by soil sampling which identifies that the identified contaminants of concern are not present above expected background concentrations. Therefore, the contaminated land rules of the PRPN do not apply to the proposal to remove the bund.

8.2 Reuse and disposal

As described in **Section 6.4**, we interpret that the identified contaminants of concern are not present above expected background concentrations, therefore the bund materials and wood ash can be reused without constraint or if necessary, disposed of as cleanfill.

8.3 Earthworks

As the identified contaminants of concern are not present above expected background concentrations, no specific ground contamination controls apply to disturbing or reusing the bund materials or wood ash. These materials can be removed and reused under standard earthworks controls.

9. Conclusions

Williamson Water & Land Advisory (WWLA) was commissioned by Waipapa Pine Limited to undertake an assessment of ground contamination to support the removal of an earth bund located within the Waipapa Sawmill site at 1945b State Highway 10, Waipapa.

Review of the site history identified that the bund was formed during the early stages of development of the wider site as a sawmill (circa 2004). While the wider site has been used for sawmilling since that time, associated activities with the potential to cause ground contamination, have not encroached on the bund. The possible inclusion of topsoil derived from a former horticultural area is the only activity with potential to have resulted in contamination of the bund materials.

Testing of the bund materials and associated stockpiles of wood ash indicate that the concentration of metals, OCPs, TPH and PAH in these materials fall within expected background ranges. As a result, consent for ground contamination matters is not required under either the NESCS or PRPN and the bund materials and wood ash can be removed and reused under standard earthworks controls.

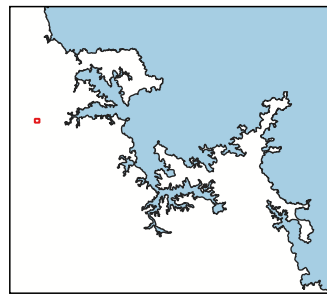
Appendix A. Figures



Map Title:
Site location Plan

Project:
Waipapa Sawmill Bund Removal

Client:
Waipapa Pine Limited



Legend

Property boundary
 Waipapa Pine property boundary
 Approximate extent of works

Data Provenance
 Aerial imagery and land parcels from Land Information New Zealand and survey image from Boundary Hunter Ltd.

Drawn by: Cherie
 2023

Layout Name
 Location Overview - Figure 1 Rev 2

Figure 1.

0 20 40 m



Map Title:
Soil Sampling Plan

Project:
Waipapa Sawmill Bund Removal

Client:
Waipapa Pine Limited



Legend

Property boundary
 Waipapa Pine property boundary

Approximate extent of works

Sample locations

Data Provenance
 Aerial imagery and land parcels from Land Information New Zealand

Drawn by: Cherie
 2023

Layout Name
 Soil Sampling Plan - Figure 2

Figure 2.



Appendix B. Selected site photographs



Photograph 1. View to west from top of bund, kilns in background.



Photograph 2. View to the north from top of bund, Binstacker building (left) and dry stores (right) in background.



Photograph 3. View north along the western side of the bund showing existing drainage. Binstacker building in background.



Photograph 4. View to the south along the eastern side of the bund.



Photograph 5. View to south of northern end of bund. Wood ash stockpiles in foreground.



Photograph 6. View of northern end of under (background) with wood ash stockpiles to left and right of image.



Photograph 7. Closeup of northern end of bund.




Photograph 8. Typical soil profile encountered within bund.

Appendix C. Selected historic aerial photographs

Year	Photograph (reproduced from PDP, 2022) and WWLA commentary (Site / bund and immediate surrounds shown by red outlines, wider site shown by black outline)
<p>1968 Image sourced from Retrolens</p>	 <p>Site and surrounds are being used for pastoral grazing purposes.</p>
<p>1977 Image sourced from Retrolens</p>	 <p>Horticultural use is evident to the north and south of the site but the site itself remains under pastoral use.</p>
<p>1979 Image sourced from Retrolens</p>	 <p>Horticultural use has largely ceased in the site surrounds with the land reverting to pastoral uses.</p>

Year	Photograph (reproduced from PDP, 2022) and WWLA commentary (Site / bund and immediate surrounds shown by red outlines, wider site shown by black outline)
<p>2007 Image sourced from Google Earth</p>	 <p>The northern portion of the wider site has been developed as a sawmilling facility (after 2003). The bund has been formed, most likely by stripping of topsoil from the area being cleared to the immediate west, however, inclusion of material from the former horticultural area (north) cannot be excluded. Industrial development has also commenced to the north of the wider site.</p>
<p>2013 Image sourced from Google Earth</p>	 <p>Timber is now being stored in the area to the west of the site. Industrial development continues to intensify in the wider area (north and east).</p>

Year	Photograph (reproduced from PDP, 2022) and WWLA commentary (Site / bund and immediate surrounds shown by red outlines, wider site shown by black outline)
2022 Image sourced from Google Earth	 <p data-bbox="373 882 1442 972">Development of the wider site has intensified with the Binsorter building constructed to the north and Pellet Plant developed to the east. Other than disturbance of the northern end of the bund, presumably to provide for construction and later extension of the Binsorter building, it remains unchanged from previous images.</p>

Appendix D. Laboratory transcripts

Williamson Water and Land Advisory Limited
 Unit 10 | 1 Putaki Drive
 Kumeu
 Auckland 0810



All tests reported herein have been performed in accordance with the laboratory's scope of accreditation

Attention: **Steve Tyson**

Report **1038668-S**
 Project name **WAIPAPA SAWMILL**
 Project ID **WWLA0998**
 Received Date **Oct 27, 2023**

Client Sample ID			HA01 1.0m	HA02 0.6m	HA03 1.0m	HA04 1.0m
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			K23- Oc0064630	K23- Oc0064631	K23- Oc0064632	K23- Oc0064633
Date Sampled			Oct 25, 2023	Oct 25, 2023	Oct 25, 2023	Oct 25, 2023
Test/Reference	LOR	Unit				
Total Petroleum Hydrocarbons (NZ MfE 1999)						
TPH-SG C7-C9	5	mg/kg	< 5	< 5	< 5	< 5
TPH-SG C10-C14	10	mg/kg	< 10	< 10	< 10	< 10
TPH-SG C15-C36	20	mg/kg	< 20	< 20	< 20	< 20
TPH-SG C7-C36 (Total)	35	mg/kg	< 35	< 35	< 35	< 35
Organochlorine Pesticides (NZ MfE)						
2,4'-DDD	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,4'-DDE	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,4'-DDT	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4,4'-DDD	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4,4'-DDE	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4,4'-DDT	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
DDT + DDE + DDD (Total)*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
a-HCH	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aldrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
b-HCH	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chlordanes - Total	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
cis-Chlordane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
d-HCH	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endosulfan I	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endosulfan II	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endosulfan sulphate	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endrin aldehyde	0.01	mg/kg	< 0.01	0.01	0.02	0.06
Endrin ketone	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
g-HCH (Lindane)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Heptachlor	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Heptachlor epoxide	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobenzene	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-Chlordane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibutylchloroendate (surr.)	1	%	INT	INT	INT	INT
Tetrachloro-m-xylene (surr.)	1	%	75	91	80	82

Client Sample ID			HA01 1.0m	HA02 0.6m	HA03 1.0m	HA04 1.0m
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			K23- Oc0064630	K23- Oc0064631	K23- Oc0064632	K23- Oc0064633
Date Sampled			Oct 25, 2023	Oct 25, 2023	Oct 25, 2023	Oct 25, 2023
Test/Reference	LOR	Unit				
Metals M7 (NZ MfE)						
Arsenic	0.1	mg/kg	1.9	1.9	1.9	3.2
Cadmium	0.01	mg/kg	0.20	0.11	0.08	0.22
Chromium	0.1	mg/kg	42	41	72	52
Copper	0.1	mg/kg	13	10	15	12
Lead	0.1	mg/kg	6.8	7.7	10	9.5
Nickel	0.1	mg/kg	18	15	36	17
Zinc	5	mg/kg	15	10	10	14
Sample Properties						
% Moisture	1	%	36	30	33	33

Client Sample ID			HA05 0.5m	HA06 2.7m	HA07 1.8m	HA08 0.6m
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			K23- Oc0064634	K23- Oc0064635	K23- Oc0064636	K23- Oc0064637
Date Sampled			Oct 25, 2023	Oct 25, 2023	Oct 25, 2023	Oct 25, 2023
Test/Reference	LOR	Unit				
Total Petroleum Hydrocarbons (NZ MfE 1999)						
TPH-SG C7-C9	5	mg/kg	< 5	< 5	< 5	< 5
TPH-SG C10-C14	10	mg/kg	< 10	< 10	< 10	< 10
TPH-SG C15-C36	20	mg/kg	< 20	< 20	< 20	< 20
TPH-SG C7-C36 (Total)	35	mg/kg	< 35	< 35	< 35	< 35
Organochlorine Pesticides (NZ MfE)						
2,4'-DDD	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,4'-DDE	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,4'-DDT	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4,4'-DDD	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4,4'-DDE	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
4,4'-DDT	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
DDT + DDE + DDD (Total)*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
a-HCH	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aldrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
b-HCH	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chlordanes - Total	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
cis-Chlordane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
d-HCH	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dieldrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endosulfan I	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endosulfan II	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endosulfan sulphate	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endrin	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endrin aldehyde	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Endrin ketone	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
g-HCH (Lindane)	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Heptachlor	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Heptachlor epoxide	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobenzene	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Methoxychlor	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			HA05 0.5m	HA06 2.7m	HA07 1.8m	HA08 0.6m
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			K23- Oc0064634	K23- Oc0064635	K23- Oc0064636	K23- Oc0064637
Date Sampled			Oct 25, 2023	Oct 25, 2023	Oct 25, 2023	Oct 25, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides (NZ MfE)						
trans-Chlordane	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibutylchlorendate (surr.)	1	%	INT	INT	INT	INT
Tetrachloro-m-xylene (surr.)	1	%	61	75	80	69
Metals M7 (NZ MfE)						
Arsenic	0.1	mg/kg	6.2	3.0	2.8	3.2
Cadmium	0.01	mg/kg	0.21	0.22	0.16	0.31
Chromium	0.1	mg/kg	110	73	65	83
Copper	0.1	mg/kg	17	21	16	16
Lead	0.1	mg/kg	16	10.0	12	14
Nickel	0.1	mg/kg	37	25	24	34
Zinc	5	mg/kg	14	21	16	17
Sample Properties						
% Moisture	1	%	32	37	34	34

Client Sample ID			HA09 1.2m	HA10 0.5m	FLYASH NORTH
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			K23- Oc0064638	K23- Oc0064639	K23- Oc0064640
Date Sampled			Oct 25, 2023	Oct 25, 2023	Oct 25, 2023
Test/Reference	LOR	Unit			
Total Petroleum Hydrocarbons (NZ MfE 1999)					
TPH-SG C7-C9	5	mg/kg	< 5	< 5	< 5
TPH-SG C10-C14	10	mg/kg	< 10	< 10	< 10
TPH-SG C15-C36	20	mg/kg	< 20	< 20	< 20
TPH-SG C7-C36 (Total)	35	mg/kg	< 35	< 35	< 35
Organochlorine Pesticides (NZ MfE)					
2,4'-DDD	0.01	mg/kg	< 0.01	< 0.01	-
2,4'-DDE	0.01	mg/kg	< 0.01	< 0.01	-
2,4'-DDT	0.01	mg/kg	< 0.01	< 0.01	-
4,4'-DDD	0.01	mg/kg	< 0.01	< 0.01	-
4,4'-DDE	0.01	mg/kg	< 0.01	< 0.01	-
4,4'-DDT	0.01	mg/kg	< 0.01	< 0.01	-
DDT + DDE + DDD (Total)*	0.01	mg/kg	< 0.01	< 0.01	-
a-HCH	0.01	mg/kg	< 0.01	< 0.01	-
Aldrin	0.01	mg/kg	< 0.01	< 0.01	-
b-HCH	0.01	mg/kg	< 0.01	< 0.01	-
Chlordanes - Total	0.01	mg/kg	< 0.01	< 0.01	-
cis-Chlordane	0.01	mg/kg	< 0.01	< 0.01	-
d-HCH	0.01	mg/kg	< 0.01	< 0.01	-
Dieldrin	0.01	mg/kg	< 0.01	< 0.01	-
Endosulfan I	0.01	mg/kg	< 0.01	< 0.01	-
Endosulfan II	0.01	mg/kg	< 0.01	< 0.01	-
Endosulfan sulphate	0.01	mg/kg	< 0.01	< 0.01	-
Endrin	0.01	mg/kg	< 0.01	< 0.01	-
Endrin aldehyde	0.01	mg/kg	< 0.01	0.01	-
Endrin ketone	0.01	mg/kg	< 0.01	< 0.01	-
g-HCH (Lindane)	0.01	mg/kg	< 0.01	< 0.01	-

Client Sample ID			HA09 1.2m	HA10 0.5m	FLYASH NORTH
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			K23- Oc0064638	K23- Oc0064639	K23- Oc0064640
Date Sampled			Oct 25, 2023	Oct 25, 2023	Oct 25, 2023
Test/Reference	LOR	Unit			
Organochlorine Pesticides (NZ MfE)					
Heptachlor	0.01	mg/kg	< 0.01	< 0.01	-
Heptachlor epoxide	0.01	mg/kg	< 0.01	< 0.01	-
Hexachlorobenzene	0.01	mg/kg	< 0.01	< 0.01	-
Methoxychlor	0.01	mg/kg	< 0.01	< 0.01	-
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	-
trans-Chlordane	0.01	mg/kg	< 0.01	< 0.01	-
Dibutylchlorodate (surr.)	1	%	INT	INT	-
Tetrachloro-m-xylene (surr.)	1	%	81	83	-
Metals M7 (NZ MfE)					
Arsenic	0.1	mg/kg	0.8	2.7	5.0
Cadmium	0.01	mg/kg	0.17	0.08	1.0
Chromium	0.1	mg/kg	71	79	34
Copper	0.1	mg/kg	37	18	99
Lead	0.1	mg/kg	10	8.5	1.9
Nickel	0.1	mg/kg	52	23	20
Zinc	5	mg/kg	9.3	16	110
Sample Properties					
% Moisture	1	%	41	30	30
Polycyclic Aromatic Hydrocarbons (NZ MfE)					
Acenaphthene	0.03	mg/kg	-	-	< 0.03
Acenaphthylene	0.03	mg/kg	-	-	0.04
Anthracene	0.03	mg/kg	-	-	< 0.03
Benzo(a)anthracene	0.03	mg/kg	-	-	< 0.03
Benzo(a)pyrene	0.03	mg/kg	-	-	< 0.03
Benzo(a)pyrene TEQ (lower bound)*	0.03	mg/kg	-	-	< 0.03
Benzo(a)pyrene TEQ (medium bound)*	0.03	mg/kg	-	-	0.04
Benzo(a)pyrene TEQ (upper bound)*	0.03	mg/kg	-	-	0.08
Benzo(b&j)fluoranthene ^{N07}	0.03	mg/kg	-	-	< 0.03
Benzo(g,h,i)perylene	0.03	mg/kg	-	-	< 0.03
Benzo(k)fluoranthene	0.03	mg/kg	-	-	< 0.03
Chrysene	0.03	mg/kg	-	-	< 0.03
Dibenz(a,h)anthracene	0.03	mg/kg	-	-	< 0.03
Fluoranthene	0.03	mg/kg	-	-	< 0.03
Fluorene	0.03	mg/kg	-	-	< 0.03
Indeno(1,2,3-cd)pyrene	0.03	mg/kg	-	-	< 0.03
Naphthalene	0.1	mg/kg	-	-	< 0.1
Phenanthrene	0.03	mg/kg	-	-	0.06
Pyrene	0.03	mg/kg	-	-	< 0.03
Total PAH*	0.1	mg/kg	-	-	0.1
p-Terphenyl-d14 (surr.)	1	%	-	-	INT
2-Fluorobiphenyl (surr.)	1	%	-	-	60

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Petroleum Hydrocarbons (NZ MfE 1999) - Method: LTM-ORG-2010 TRH and BTEX in Soil and Water by GC FID and PT GCMS	Auckland	Oct 27, 2023	14 Days
Polycyclic Aromatic Hydrocarbons (NZ MfE) - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water by GC MSMS	Auckland	Oct 27, 2023	14 Days
Organochlorine Pesticides (NZ MfE) - Method: LTM-ORG-2220 OCP & PCB in Soil and Water by GCMSMS	Auckland	Oct 27, 2023	14 Days
Metals M7 (NZ MfE) - Method: LTM-MET-3040 Metals in Waters Soils Sediments by ICP-MS	Auckland	Oct 27, 2023	6 Months
% Moisture - Method: LTM-GEN-7080 Moisture Content in Soil by Gravimetry	Auckland	Oct 27, 2023	14 Days

Auckland 35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 4551 IANZ# 1327	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: +64 3 343 5201 IANZ# 1290	Tauranga 1277 Cameron Road, Gate Pa, Tauranga 3112 Tel: +64 9 525 0568 IANZ# 1402
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Melbourne 6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong 19/8 Lewalan Street Grovedale VIC 3216 Tel: +61 3 8564 5000 NATA# 1261 Site# 25403	Sydney 179 Magowar Road Girraween NSW 2145 Tel: +61 2 9900 8400 NATA# 1261 Site# 18217	Canberra Unit 1,2 Dacre Street Mitchell ACT 2911 Tel: +61 2 6113 8091 NATA# 1261 Site# 25466	Brisbane 1/21 Smallwood Place Murarrie QLD 4172 Tel: +61 7 3902 4600 NATA# 1261 Site# 20794	Newcastle 1/2 Frost Drive Mayfield West NSW 2304 Tel: +61 2 4968 8448 NATA# 1261 Site# 25079 & 25289
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Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370
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 email: EnviroSales@eurofins.com

Company Name:	Williamson Water and Land Advisory Ltd	Order No.:		Received:	Oct 27, 2023 8:08 AM
Address:	Unit 10 1 Putaki Drive Kumeu Auckland 0810	Report #:	1038668	Due:	Nov 3, 2023
Project Name:	WAIPAPA SAWMILL	Phone:	021 65 4422	Priority:	5 Day
Project ID:	WWLA0998	Fax:		Contact Name:	Steve Tyson

Eurofins Analytical Services Manager : Katyana Gausel

Sample Detail						HOLD	Moisture Set	Total Petroleum Hydrocarbons (NZ MIE 1999)	Organochlorine Pesticides (NZ MIE)	Metals M7 (NZ MIE)	Eurofins Suite B&B-NZ: TPH, PAH (NZ MIE)
Auckland Laboratory - IANZ# 1327						X	X	X	X	X	X
Christchurch Laboratory - IANZ# 1290											
Tauranga Laboratory - IANZ# 1402											
External Laboratory											
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID						
1	HA01 1.0m	Oct 25, 2023		Soil	K23-Oc0064630		X	X	X	X	
2	HA02 0.5m	Oct 25, 2023		Soil	K23-Oc0064631		X	X	X	X	
3	HA03 1.0m	Oct 25, 2023		Soil	K23-Oc0064632		X	X	X	X	
4	HA04 1.0m	Oct 25, 2023		Soil	K23-Oc0064633		X	X	X	X	
5	HA05 0.5m	Oct 25, 2023		Soil	K23-Oc0064634		X	X	X	X	
6	HA06 2.7m	Oct 25, 2023		Soil	K23-Oc0064635		X	X	X	X	
7	HA07 1.8m	Oct 25, 2023		Soil	K23-Oc0064636		X	X	X	X	
8	HA08 0.6m	Oct 25, 2023		Soil	K23-Oc0064637		X	X	X	X	
9	HA09 1.2m	Oct 25, 2023		Soil	K23-Oc0064638		X	X	X	X	
10	HA10 0.5m	Oct 25, 2023		Soil	K23-Oc0064639		X	X	X	X	
11	FLYASH	Oct 25, 2023		Soil	K23-Oc0064640		X			X	X

Auckland	Christchurch	Tauranga
35 O'Rorke Road Penrose, Auckland 1061 Tel: +64 9 526 4551 IANZ# 1327	43 Detroit Drive Rolleston, Christchurch 7675 Tel: +64 3 343 5201 IANZ# 1290	1277 Cameron Road, Gate Pa, Tauranga 3112 Tel: +64 9 525 0568 IANZ# 1402

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1254	19/8 Lewalan Street Grovedale VIC 3216 Tel: +61 3 8564 5000 NATA# 1261 Site# 25403	179 Magowar Road Girraween NSW 2145 Tel: +61 2 9900 8400 NATA# 1261 Site# 18217	Unit 1,2 Dacre Street Mitchell ACT 2911 Tel: +61 2 6113 8091 NATA# 1261 Site# 25466	1/21 Smallwood Place Murarrie QLD 4172 Tel: +61 7 3902 4600 NATA# 1261 Site# 20794	1/2 Frost Drive Mayfield West NSW 2304 Tel: +61 2 4968 8448 NATA# 1261 Site# 25079 & 25289

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Company Name:	Williamson Water and Land Advisory Ltd	Order No.:		Received:	Oct 27, 2023 8:08 AM
Address:	Unit 10 1 Putaki Drive Kumeu Auckland 0810	Report #:	1038668	Due:	Nov 3, 2023
Project Name:	WAIPAPA SAWMILL	Phone:	021 65 4422	Priority:	5 Day
Project ID:	WWLA0998	Fax:		Contact Name:	Steve Tyson

Eurofins Analytical Services Manager : Katyana Gausel

Sample Detail						HOLD	Moisture Set	Total Petroleum Hydrocarbons (NZ MIE 1999)	Organochlorine Pesticides (NZ MIE)	Metals M7 (NZ MIE)	Eurofins Suite B4B-NZ: TPH, PAH (NZ MIE)
Auckland Laboratory - IANZ# 1327						X	X	X	X	X	X
Christchurch Laboratory - IANZ# 1290											
Tauranga Laboratory - IANZ# 1402											
	NORTH										
12	HA02 1.5m	Oct 25, 2023		Soil	K23-Oc0064641	X					
13	HA04 0.5m	Oct 25, 2023		Soil	K23-Oc0064642	X					
14	HA04 2.5m	Oct 25, 2023		Soil	K23-Oc0064643	X					
15	HA05 1.6m	Oct 25, 2023		Soil	K23-Oc0064644	X					
16	HA05 2.6m	Oct 25, 2023		Soil	K23-Oc0064645	X					
17	HA06 0.5m	Oct 25, 2023		Soil	K23-Oc0064646	X					
18	HA06 1.8m	Oct 25, 2023		Soil	K23-Oc0064647	X					
19	HA07 0.5m	Oct 25, 2023		Soil	K23-Oc0064648	X					
20	HA07 2.2m	Oct 25, 2023		Soil	K23-Oc0064649	X					
21	HA08 1.1m	Oct 25, 2023		Soil	K23-Oc0064650	X					
22	HA10 1.5m	Oct 25, 2023		Soil	K23-Oc0064651	X					
23	FLYASH SOUTH	Oct 25, 2023		Soil	K23-Oc0064652	X					

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Project Name:	WAIPAPA SAWMILL	Phone:	021 65 4422	Priority:	5 Day
Project ID:	WWLA0998	Fax:		Contact Name:	Steve Tyson

Eurofins Analytical Services Manager : Katyana Gausel

Sample Detail	HOLD	Moisture Set	Total Petroleum Hydrocarbons (NZ MIE 1999)	Organochlorine Pesticides (NZ MIE)	Metals M7 (NZ MIE)	Eurofins Suite B4B-NZ: TPH, PAH (NZ MIE)
Auckland Laboratory - IANZ# 1327	X	X	X	X	X	X
Christchurch Laboratory - IANZ# 1290						
Tauranga Laboratory - IANZ# 1402						
Test Counts	12	11	10	10	11	1

Internal Quality Control Review and Glossary
General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
- All soil/sediment/solid results are reported on a dry weight basis unless otherwise stated.
- All biota/food results are reported on a wet weight basis on the edible portion unless otherwise stated.
- For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
- Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified in this report with blue colour indicates data provided by customers that may have an impact on the results.
- This report replaces any interim results previously issued.

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling; therefore, compliance with these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is 7 days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

µg/L: micrograms per litre

ppm: parts per million

ppb: parts per billion

%: Percentage

org/100 mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100 mL: Most Probable Number of organisms per 100 millilitres

CFU: Colony forming unit

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples, these are performed on laboratory-certified clean sands and in the case of water samples, these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 5.4
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPa, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should be used as a guide only and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30%; however the following acceptance guidelines are equally

applicable: Results <10 times the LOR: No Limit

Results between 10-20 times the LOR: RPD must lie between 0-50%

Results >20 times the LOR: RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%

PFAS field samples that contain surrogate recoveries above the QC limit designated in QSM 5.4, where no positive PFAS results have been reported, have been reviewed, and no data was affected.

QC Data General Comments

- Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Petroleum Hydrocarbons (NZ MfE 1999)							
TPH-SG C7-C9	mg/kg	< 5			5	Pass	
TPH-SG C10-C14	mg/kg	< 10			10	Pass	
TPH-SG C15-C36	mg/kg	< 20			20	Pass	
TPH-SG C7-C36 (Total)	mg/kg	< 35			35	Pass	
Method Blank							
Organochlorine Pesticides (NZ MfE)							
2,4'-DDD	mg/kg	< 0.01			0.01	Pass	
2,4'-DDE	mg/kg	< 0.01			0.01	Pass	
2,4'-DDT	mg/kg	< 0.01			0.01	Pass	
4,4'-DDD	mg/kg	< 0.01			0.01	Pass	
4,4'-DDE	mg/kg	< 0.01			0.01	Pass	
4,4'-DDT	mg/kg	< 0.01			0.01	Pass	
a-HCH	mg/kg	< 0.01			0.01	Pass	
Aldrin	mg/kg	< 0.01			0.01	Pass	
b-HCH	mg/kg	< 0.01			0.01	Pass	
Chlordanes - Total	mg/kg	-			0.01	N/A	
cis-Chlordane	mg/kg	< 0.01			0.01	Pass	
d-HCH	mg/kg	< 0.01			0.01	Pass	
Dieldrin	mg/kg	< 0.01			0.01	Pass	
Endosulfan I	mg/kg	< 0.01			0.01	Pass	
Endosulfan II	mg/kg	< 0.01			0.01	Pass	
Endosulfan sulphate	mg/kg	< 0.01			0.01	Pass	
Endrin	mg/kg	< 0.01			0.01	Pass	
Endrin aldehyde	mg/kg	< 0.01			0.01	Pass	
Endrin ketone	mg/kg	< 0.01			0.01	Pass	
g-HCH (Lindane)	mg/kg	< 0.01			0.01	Pass	
Heptachlor	mg/kg	< 0.01			0.01	Pass	
Heptachlor epoxide	mg/kg	< 0.01			0.01	Pass	
Hexachlorobenzene	mg/kg	< 0.01			0.01	Pass	
Methoxychlor	mg/kg	< 0.01			0.01	Pass	
Toxaphene	mg/kg	< 0.5			0.5	Pass	
trans-Chlordane	mg/kg	< 0.01			0.01	Pass	
Method Blank							
Metals M7 (NZ MfE)							
Arsenic	mg/kg	< 0.1			0.1	Pass	
Cadmium	mg/kg	< 0.01			0.01	Pass	
Chromium	mg/kg	< 0.1			0.1	Pass	
Copper	mg/kg	< 0.1			0.1	Pass	
Lead	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 0.1			0.1	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons (NZ MfE)							
Acenaphthene	mg/kg	< 0.03			0.03	Pass	
Acenaphthylene	mg/kg	< 0.03			0.03	Pass	
Anthracene	mg/kg	< 0.03			0.03	Pass	
Benz(a)anthracene	mg/kg	< 0.03			0.03	Pass	
Benzo(a)pyrene	mg/kg	< 0.03			0.03	Pass	
Benzo(b&i)fluoranthene	mg/kg	< 0.03			0.03	Pass	
Benzo(g,h,i)perylene	mg/kg	< 0.03			0.03	Pass	

Test	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Benzo(k)fluoranthene	mg/kg	< 0.03		0.03	Pass	
Chrysene	mg/kg	< 0.03		0.03	Pass	
Dibenz(a,h)anthracene	mg/kg	< 0.03		0.03	Pass	
Fluoranthene	mg/kg	< 0.03		0.03	Pass	
Fluorene	mg/kg	< 0.03		0.03	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.03		0.03	Pass	
Naphthalene	mg/kg	< 0.1		0.1	Pass	
Phenanthrene	mg/kg	< 0.03		0.03	Pass	
Pyrene	mg/kg	< 0.03		0.03	Pass	
LCS - % Recovery						
Total Petroleum Hydrocarbons (NZ MfE 1999)						
TPH-SG C7-C36 (Total)	%	104		70-130	Pass	
LCS - % Recovery						
Organochlorine Pesticides (NZ MfE)						
2.4'-DDD	%	97		70-130	Pass	
2.4'-DDE	%	103		70-130	Pass	
2.4'-DDT	%	86		70-130	Pass	
4.4'-DDD	%	95		70-130	Pass	
4.4'-DDE	%	103		70-130	Pass	
4.4'-DDT	%	92		70-130	Pass	
a-HCH	%	101		70-130	Pass	
Aldrin	%	103		70-130	Pass	
b-HCH	%	89		70-130	Pass	
Chlordanes - Total	%	102		70-130	Pass	
cis-Chlordane	%	116		70-130	Pass	
d-HCH	%	101		70-130	Pass	
Dieldrin	%	95		70-130	Pass	
Endosulfan I	%	102		70-130	Pass	
Endosulfan II	%	98		70-130	Pass	
Endosulfan sulphate	%	103		70-130	Pass	
Endrin	%	88		70-130	Pass	
Endrin aldehyde	%	91		70-130	Pass	
Endrin ketone	%	96		70-130	Pass	
g-HCH (Lindane)	%	96		70-130	Pass	
Heptachlor	%	82		70-130	Pass	
Heptachlor epoxide	%	87		70-130	Pass	
Hexachlorobenzene	%	101		70-130	Pass	
Methoxychlor	%	88		70-130	Pass	
trans-Chlordane	%	88		70-130	Pass	
LCS - % Recovery						
Metals M7 (NZ MfE)						
Arsenic	%	104		80-120	Pass	
Cadmium	%	95		80-120	Pass	
Chromium	%	96		80-120	Pass	
Copper	%	103		80-120	Pass	
Lead	%	104		80-120	Pass	
Nickel	%	94		80-120	Pass	
Zinc	%	106		80-120	Pass	
LCS - % Recovery						
Polycyclic Aromatic Hydrocarbons (NZ MfE)						
Acenaphthene	%	110		70-130	Pass	
Acenaphthylene	%	120		70-130	Pass	
Anthracene	%	101		70-130	Pass	
Benz(a)anthracene	%	99		70-130	Pass	

Test			Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Benzo(a)pyrene			%	93		70-130	Pass	
Benzo(b&j)fluoranthene			%	106		70-130	Pass	
Benzo(g,h,i)perylene			%	80		70-130	Pass	
Benzo(k)fluoranthene			%	93		70-130	Pass	
Chrysene			%	104		70-130	Pass	
Dibenz(a,h)anthracene			%	88		70-130	Pass	
Fluoranthene			%	102		70-130	Pass	
Fluorene			%	101		70-130	Pass	
Indeno(1,2,3-cd)pyrene			%	89		70-130	Pass	
Naphthalene			%	109		70-130	Pass	
Phenanthrene			%	99		70-130	Pass	
Pyrene			%	106		70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Metals M7 (NZ MfE)				Result 1				
Arsenic	K23-Oc0061707	NCP	%	79		75-125	Pass	
Cadmium	K23-Oc0061707	NCP	%	80		75-125	Pass	
Chromium	K23-Oc0061707	NCP	%	80		75-125	Pass	
Copper	K23-Oc0061707	NCP	%	82		75-125	Pass	
Lead	K23-Oc0061707	NCP	%	88		75-125	Pass	
Nickel	K23-Oc0061707	NCP	%	79		75-125	Pass	
Zinc	K23-Oc0061707	NCP	%	90		75-125	Pass	
Spike - % Recovery								
Total Petroleum Hydrocarbons (NZ MfE 1999)				Result 1				
TPH-SG C7-C36 (Total)	K23-Oc0064631	CP	%	99		70-130	Pass	
Spike - % Recovery								
Organochlorine Pesticides (NZ MfE)				Result 1				
2,4'-DDD	K23-Oc0064631	CP	%	108		70-130	Pass	
2,4'-DDE	K23-Oc0064631	CP	%	116		70-130	Pass	
2,4'-DDT	K23-Oc0064631	CP	%	105		70-130	Pass	
4,4'-DDD	K23-Oc0064631	CP	%	111		70-130	Pass	
4,4'-DDE	K23-Oc0064631	CP	%	115		70-130	Pass	
4,4'-DDT	K23-Oc0064631	CP	%	107		70-130	Pass	
a-HCH	K23-Oc0064631	CP	%	107		70-130	Pass	
Aldrin	K23-Oc0064631	CP	%	111		70-130	Pass	
b-HCH	K23-Oc0064631	CP	%	79		70-130	Pass	
cis-Chlordane	K23-Oc0064631	CP	%	121		70-130	Pass	
d-HCH	K23-Oc0064631	CP	%	113		70-130	Pass	
Dieldrin	K23-Oc0064631	CP	%	106		70-130	Pass	
Endosulfan I	K23-Oc0064631	CP	%	119		70-130	Pass	
Endosulfan II	K23-Oc0064631	CP	%	114		70-130	Pass	
Endosulfan sulphate	K23-Oc0064631	CP	%	118		70-130	Pass	
Endrin	K23-Oc0064631	CP	%	107		70-130	Pass	
Endrin aldehyde	K23-Oc0064631	CP	%	109		70-130	Pass	
Endrin ketone	K23-Oc0064631	CP	%	111		70-130	Pass	
g-HCH (Lindane)	K23-Oc0064631	CP	%	98		70-130	Pass	
Heptachlor	K23-Oc0064631	CP	%	93		70-130	Pass	
Heptachlor epoxide	K23-Oc0064631	CP	%	98		70-130	Pass	
Hexachlorobenzene	K23-Oc0064631	CP	%	110		70-130	Pass	
Methoxychlor	K23-Oc0064631	CP	%	109		70-130	Pass	
trans-Chlordane	K23-Oc0064631	CP	%	102		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons (NZ MfE)				Result 1				
Acenaphthene	K23-Oc0064631	CP	%	117		70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Acenaphthylene	K23-Oc0064631	CP	%	130			70-130	Pass	
Anthracene	K23-Oc0064631	CP	%	100			70-130	Pass	
Benz(a)anthracene	K23-Oc0064631	CP	%	106			70-130	Pass	
Benzo(a)pyrene	K23-Oc0064631	CP	%	104			70-130	Pass	
Benzo(b&j)fluoranthene	K23-Oc0064631	CP	%	115			70-130	Pass	
Benzo(g,h,i)perylene	K23-Oc0064631	CP	%	91			70-130	Pass	
Benzo(k)fluoranthene	K23-Oc0064631	CP	%	99			70-130	Pass	
Chrysene	K23-Oc0064631	CP	%	113			70-130	Pass	
Dibenz(a,h)anthracene	K23-Oc0064631	CP	%	109			70-130	Pass	
Fluoranthene	K23-Oc0064631	CP	%	113			70-130	Pass	
Fluorene	K23-Oc0064631	CP	%	109			70-130	Pass	
Indeno(1,2,3-cd)pyrene	K23-Oc0064631	CP	%	106			70-130	Pass	
Naphthalene	K23-Oc0064631	CP	%	118			70-130	Pass	
Phenanthrene	K23-Oc0064631	CP	%	109			70-130	Pass	
Pyrene	K23-Oc0064631	CP	%	116			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons (NZ MfE)				Result 1					
Acenaphthene	K23-Oc0068961	NCP	%	118			70-130	Pass	
Acenaphthylene	K23-Oc0068961	NCP	%	103			70-130	Pass	
Anthracene	K23-Oc0068961	NCP	%	100			70-130	Pass	
Benz(a)anthracene	K23-Oc0068961	NCP	%	110			70-130	Pass	
Benzo(a)pyrene	K23-Oc0068961	NCP	%	104			70-130	Pass	
Benzo(b&j)fluoranthene	K23-Oc0068961	NCP	%	118			70-130	Pass	
Benzo(g,h,i)perylene	K23-Oc0068961	NCP	%	81			70-130	Pass	
Benzo(k)fluoranthene	K23-Oc0068961	NCP	%	102			70-130	Pass	
Chrysene	K23-Oc0068961	NCP	%	119			70-130	Pass	
Dibenz(a,h)anthracene	K23-Oc0068961	NCP	%	90			70-130	Pass	
Fluoranthene	K23-Oc0068961	NCP	%	113			70-130	Pass	
Fluorene	K23-Oc0068961	NCP	%	110			70-130	Pass	
Indeno(1,2,3-cd)pyrene	K23-Oc0068961	NCP	%	92			70-130	Pass	
Naphthalene	K23-Oc0068961	NCP	%	118			70-130	Pass	
Phenanthrene	K23-Oc0068961	NCP	%	112			70-130	Pass	
Pyrene	K23-Oc0068961	NCP	%	117			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Petroleum Hydrocarbons (NZ MfE 1999)				Result 1	Result 2	RPD			
TPH-SG C7-C9	K23-Oc0064630	CP	mg/kg	< 5	< 5	<1	30%	Pass	
TPH-SG C10-C14	K23-Oc0064630	CP	mg/kg	< 10	< 10	<1	30%	Pass	
TPH-SG C15-C36	K23-Oc0064630	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TPH-SG C7-C36 (Total)	K23-Oc0064630	CP	mg/kg	< 35	< 35	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides (NZ MfE)				Result 1	Result 2	RPD			
2,4'-DDD	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
2,4'-DDE	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
2,4'-DDT	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
4,4'-DDD	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
4,4'-DDE	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
4,4'-DDT	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
a-HCH	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Aldrin	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
b-HCH	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
Chlordanes - Total	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
cis-Chlordane	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	
d-HCH	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass	

Duplicate								
Organochlorine Pesticides (NZ MfE)				Result 1	Result 2	RPD		
Dieldrin	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Endosulfan I	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Endosulfan II	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Endosulfan sulphate	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Endrin	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Endrin aldehyde	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Endrin ketone	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
g-HCH (Lindane)	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Heptachlor	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Heptachlor epoxide	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Hexachlorobenzene	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Methoxychlor	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
trans-Chlordane	K23-Oc0064630	CP	mg/kg	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Metals M7 (NZ MfE)				Result 1	Result 2	RPD		
Arsenic	K23-Oc0061716	NCP	mg/kg	2.2	2.2	<1	30%	Pass
Cadmium	K23-Oc0061716	NCP	mg/kg	0.02	< 0.01	64	30%	Fail
Chromium	K23-Oc0061716	NCP	mg/kg	7.9	7.8	<1	30%	Pass
Copper	K23-Oc0061716	NCP	mg/kg	3.9	3.9	<1	30%	Pass
Lead	K23-Oc0061716	NCP	mg/kg	5.6	6.0	6.1	30%	Pass
Nickel	K23-Oc0061716	NCP	mg/kg	3.2	3.3	4.4	30%	Pass
Zinc	K23-Oc0061716	NCP	mg/kg	6.0	7.4	21	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons (NZ MfE)				Result 1	Result 2	RPD		
Acenaphthene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Acenaphthylene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Anthracene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benzo(a)anthracene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benzo(a)pyrene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benzo(b&j)fluoranthene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benzo(g,h,i)perylene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benzo(k)fluoranthene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Chrysene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Dibenz(a,h)anthracene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Fluoranthene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Fluorene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Naphthalene	K23-Oc0064630	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Phenanthrene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Pyrene	K23-Oc0064630	CP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	K23-Oc0064637	CP	%	34	35	<1	30%	Pass
Duplicate								
Total Petroleum Hydrocarbons (NZ MfE 1999)				Result 1	Result 2	RPD		
TPH-SG C7-C9	K23-Oc0064640	CP	mg/kg	< 5	< 5	<1	30%	Pass
TPH-SG C10-C14	K23-Oc0064640	CP	mg/kg	< 10	< 10	<1	30%	Pass
TPH-SG C15-C36	K23-Oc0064640	CP	mg/kg	< 20	< 20	<1	30%	Pass
TPH-SG C7-C36 (Total)	K23-Oc0064640	CP	mg/kg	< 35	< 35	<1	30%	Pass

Duplicate								
Metals M7 (NZ MfE)				Result 1	Result 2	RPD		
Arsenic	K23-Oc0064640	CP	mg/kg	5.0	5.4	7.3	30%	Pass
Cadmium	K23-Oc0064640	CP	mg/kg	1.0	0.83	22	30%	Pass
Chromium	K23-Oc0064640	CP	mg/kg	34	30	14	30%	Pass
Copper	K23-Oc0064640	CP	mg/kg	99	84	16	30%	Pass
Lead	K23-Oc0064640	CP	mg/kg	1.9	1.7	13	30%	Pass
Nickel	K23-Oc0064640	CP	mg/kg	20	17	15	30%	Pass
Zinc	K23-Oc0064640	CP	mg/kg	110	110	1.0	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons (NZ MfE)				Result 1	Result 2	RPD		
Acenaphthene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Acenaphthylene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Anthracene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benz(a)anthracene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benzo(a)pyrene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benzo(b&j)fluoranthene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benzo(g,h,i)perylene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Benzo(k)fluoranthene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Chrysene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Dibenz(a,h)anthracene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Fluoranthene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Fluorene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Naphthalene	K23-Oc0068960	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Phenanthrene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass
Pyrene	K23-Oc0068960	NCP	mg/kg	< 0.03	< 0.03	<1	30%	Pass

Comments
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Katyana Gausel	Analytical Services Manager
Xiaoxue (Snow) Tang	Senior Analyst-Metal
Roopesh Rangarajan	Senior Analyst-Organic



Xiaoxue (Snow) Tang
Senior Inorganics Chemist (Key Technical Personnel)

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates IANZ accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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Appendix F. Flood Hazard Area Assessment



Waipapa Pine Limited

Attention: Natasha Flavell
Natasha.flavell@fbu.com

23 November 2023

WWLA0988

1945b State Highway 10, Waipapa – Bund Removal: Assessment of Earthworks within a Flood Hazard Area

1. Introduction

Williamson Water & Land Advisory Ltd (WWLA) has prepared this letter to inform the resource consent application, in regard to earthworks within a floodplain associated with the removal of an earth bund located within the Waipapa Sawmill (**Figure 1**).

Removal of the bund is proposed to enable extension of the yard and to create additional useable space.

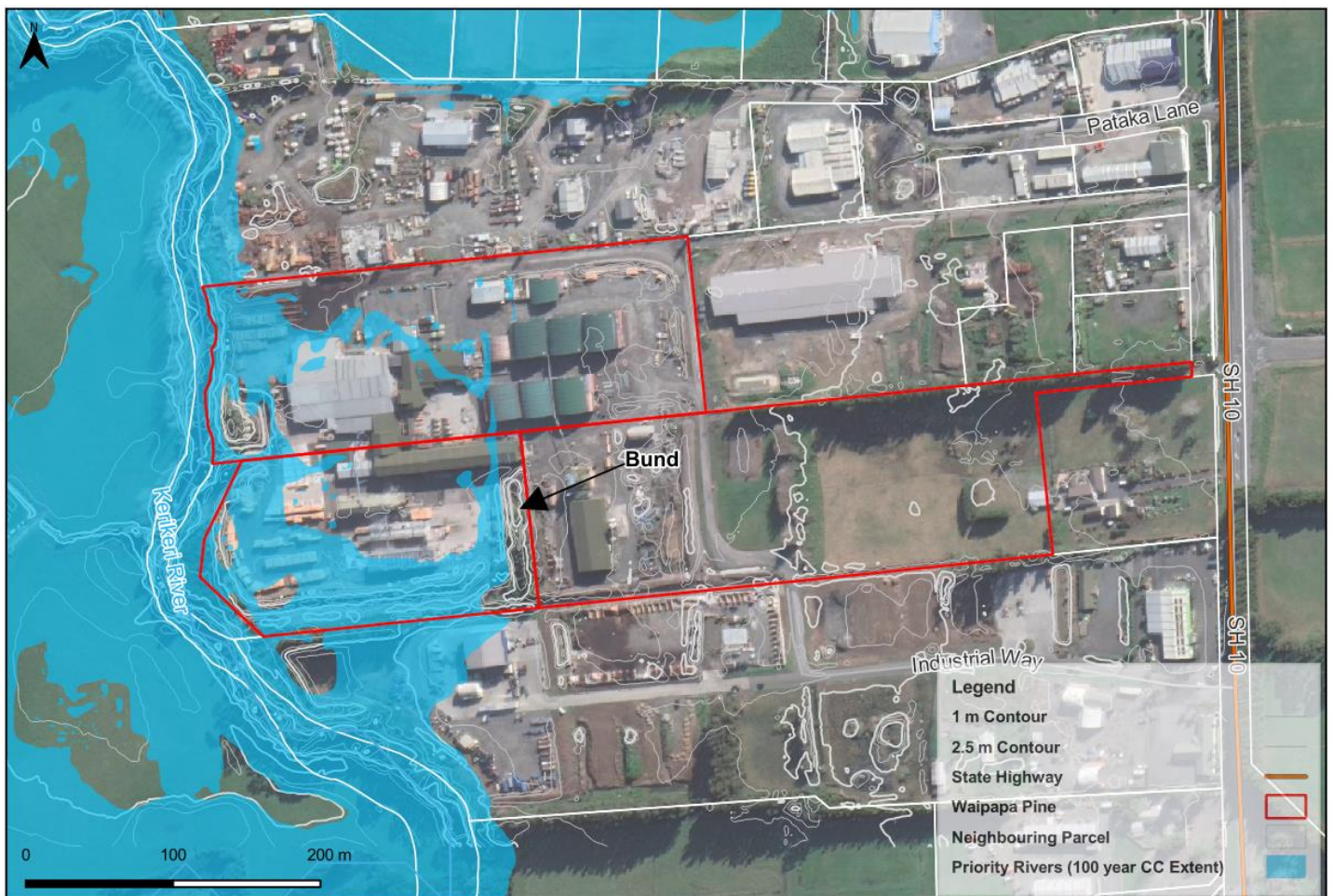


Figure 1. Location overview.

As the bund is located within a mapped flood hazard area, and removal of the bund will require greater than 100 m³ of earthworks to be moved or placed in a 12-month period, the requirement for a resource consent is triggered (Proposed Regional Plan for Northland – C.8.3.3) and must be obtained before it's removal.

2. Flood Hazard Area Assessment

2.1 Overview

Under the Proposed Regional Plan for Northland (PRPN), a flood hazard area is defined as land that has a once percent change in any year of being inundated due to high river flows.

Northland Regional Council (NRC) commissioned hydraulic flood modelling to determine flood hazard areas. The modelled flood hazard area for the Waipapa area is defined by the Priority Rivers 100-year Average Recurrence Interval (ARI) with climate change (CC) inundation extent. As seen in **Figure 1**, the modelled flood inundation from the Kerikeri River (located along the western boundary of the site) extends along the southern boundary of the site until it intersects the western side of the bund. The bund prevents flood waters from propagating further eastward (inland).

2.2 Effect of Removing the Bund

It is proposed to remove the bund and flatten the area to tie into existing ground levels on either side of the bund. If the bund was removed flood water would propagate further eastward than currently modelled for the 100-year ARI + CC flood event. As it is only the distal end of the inundation extent that currently intersects the bund, in our professional opinion inundation would not be expected to flow much further eastward or result in widespread flooding (i.e., only a minor change in inundation extent).

It is noted that:

- Once the bund is removed, the ground below will be slightly graded in a south-westerly direction to enable drainage of stormwater.
- While the inundation extent associated with a 100-year ARI + CC flood event may extend further eastward, it will not increase the natural hazard risk on other property – as the land parcel to the east of the bund is also part of the Waipapa Sawmill.

3. Closure

In our professional opinion, removal of the bund will only result in a minor change in inundation extent and will not result in an increase in flood hazard risk on any other property.

Yours sincerely,



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