



## RESOURCE CONSENT

**Land use Consent, Water Permit,  
Discharge Permit**

In accordance with the provisions of the Resource Management Act 1991(RMA), and subject to the attached conditions, the Hawke's Bay Regional Council (the Council) grants a resource consent for a controlled activity to:

**KiwiRail Holdings Limited**  
PO Box 593  
Wellington 6140

<b>Authorisation No:</b>	<b>Activity Description</b>	<b>Activity Type:</b>
AUTH-132530-01	To discharge contaminants to water during recovery works at Bridge 217 on the Palmerston North-Gisborne Rail Line over the Tutaekuri River.	Discharge Permit
AUTH-132735-01	To clear vegetation in an area within 5 metres of the Tutaekuri River during recovery works at Bridge 217 on the Palmerston North-Gisborne Rail Line.	Land Use Consent
AUTH-132736-01	To temporarily divert the Tutaekuri River during recovery works at Bridge 217 on the Palmerston North-Gisborne Rail Line.	Water Permit

### LOCATION

**Address of site:** Rail Bridge 217, Tutaekuri River, Waitangi, Napier

**Legal description (site of structure):** Part Section 52 Block I Clive SD, Section 57 Block I Clive SD, Part Lot 2 DP 6287, Section 53 Block I Clive SD

**Map reference (NZTM):** At or about 1937008 E - 5613636 N

**CONSENT DURATION**

This consent is granted for a period expiring on 21 October 2027.

A handwritten signature in blue ink, appearing to read 'Paul Barrett', is positioned above the printed name.

**Paul Barrett**

**Manager Consents**

POLICY AND REGULATION GROUP

Under authority delegated by Hawke's Bay Regional Council

21 October 2025

**CONDITIONS**

## 1A. Design Standards

- a) All works and structures relating to this resource consent shall be designed, constructed, and maintained to conform to the best engineering practices and at all times maintained to a safe and serviceable standard.
- b) The consent holder shall undertake all operations in accordance with the documents provided in support of the application.
- c) The consent holder shall only discharge cleanfill material as per the definition of the Ministry for the Environment 'National Planning Standards' (dated November 2019) to the site and is defined as:

*[Cleanfill] material means virgin excavated natural materials including clay, gravel, sand, soil and rock that are free of:*

- i) combustible, putrescible, degradable or leachable components;*
  - ii) hazardous substances and materials;*
  - iii) products and materials derived from hazardous waste treatment, stabilisation or disposal practices;*
  - iv) medical and veterinary wastes, asbestos, and radioactive substances;*
  - v) contaminated soil and other contaminated materials; and*
  - vi) liquid wastes.*
- d) For any material brought onto site from an offsite location, excluding mulch, concrete and metal aggregate (crushed stone), a desk-based assessment shall be prepared, and/or verified by a Suitably Qualified and Experienced Contaminated Soils Professional (SQEP) to confirm the material will meet the requirements of Condition 3 and provided to the Hawke's Bay Regional Council (Manager Compliance) at least five (5) working days prior to the material being brought onto site. Where necessary, the SQEP may choose to undertake sampling to ensure the material meets the definition of cleanfill required by condition 1A(c).

## 1B. Cultural Conditions

- a) Prior to construction, KiwiRail shall provide mana whenua groups with the Stage 2 construction methodology and the Construction Environmental Management Plan that outlines the mitigation strategies that will be employed to minimise the works detrimental Environmental effects on the awa and freshwater habitat.
- b) Commissions a Cultural Impact Assessment for Stage 3 berm works to ensure the:
  - i) The protection and enhancement of the mauri of the Tūtaekurī Awa and associated wetlands
  - ii) Enhancement of rongoā and native species proliferation
  - iii) Enhancement of mahinga kai species proliferation

iv) Realisation of kaitiakitanga for Ngāti Pārau hapū

1C. Discovery Protocol

- a) The Construction Environmental Management Plan shall include the Transport Rebuild East Coast Discovery Protocol and Poster below (see Appendix 1). All contractors must be familiar with the protocol before works commence onsite, and any new staff starting onsite must be made aware and become familiar with the protocol.

1. *Condition 1 omitted.*

2. *Condition 2 omitted.*

3. In this schedule, –

**affected rail route** – has the meaning given in clause 4 of the OIC-KR

**construction work** – means the authorised activities outlined in the resource consent application, excluding minor works and operational activities

**Council** – means, the Hawke’s Bay Regional Council.

**project** – means the resource consent application.

4. Kaitiaki Adviser

- a) At least 20 working days before starting construction works, the consent holder must invite each of the relevant iwi or hapū or iwi and hapū (for the particular works) to appoint 1 kaitiaki adviser (collectively, the Kaitiaki Adviser) to undertake the roles and responsibilities as set out in these conditions.
- b) The Kaitiaki Adviser may be supported by a team of cultural monitors, mandated by the relevant iwi or hapū or iwi and hapū, who can provide on-site guidance to the consent holder to enable the effective management of cultural indicators.
- c) The consent holder must invite the Kaitiaki Adviser to provide cultural indicators covering traditional associations, such as mahinga kai, cultural stream health, wāhi tapu, wāhi tupuna, standing orders, protocols, and cultural heritage.
- d) The consent holder must, in the preparation of any plans required under these conditions, –
- (i) take into account any cultural indicators provided; and
  - (ii) as soon as practicable, provide an explanation to the kaitiaki adviser of how the indicators have been taken into account.

5. Affected Area

- a) At least 20 working days before starting works, the agency shall notify and provide the following information to the Hawke’s Bay Regional Council, Napier City Council, Hastings District Council, Heritage New Zealand Pouhere Taonga, the Department of Conservation, iwi, hapū or both:
- (i) The construction programme schedule.
  - (ii) Contact details of the Project Manager and Site Manager.

- (iii) Date and time for the pre-construction start meeting.
- b) The agency shall undertake a pre-construction start meeting with iwi and hapū and stakeholders identified in condition 5(a), 10 working days prior to works commencing, which shall at a minimum cover the following:
  - (i) Scheduling and staging of the works;
  - (ii) Responsibilities of all relevant parties, including confirmation that the persons implementing the relevant management plans on site are suitably trained and/or experienced;
  - (iii) Contact details for all relevant parties;
  - (iv) Expectations regarding communication between all relevant parties;
  - (v) Procedures for implementing any amendments; and
  - (vi) Site visit procedures
- c) The agency shall:
  - (i) Keep record of any comments provided by iwi and hapu and stakeholders with respect to the management and monitoring of the construction works.

## 6. Construction Environmental Management Plan

- a) The consent holder must –
  - (i) prepare a Construction Environmental Management Plan (CEMP) for the construction works; and
  - (ii) not less than 5 working days before commencing the construction works, submit the CEMP to iwi and hapū and stakeholders identified in condition 5(a) for their information.
- b) The level of detail and the measures proposed in the CEMP must correspond with the nature and scale of the relevant construction works.
- c) The CEMP must include the following:
  - (i) the roles and responsibilities of construction management staff, including the erosion and sediment control manager required by condition 8(d)(ix):
  - (ii) a description of the training and education programme that will be implemented to ensure compliance with the conditions:
  - (iii) procedures for hazard management, including fire hazard, identification, and control:
  - (iv) procedures for managing dust from earthworks and related activities so that dust nuisance does not spread beyond the boundary of the project area:
  - (v) procedures for managing dewatering (including avoiding to the extent practicable or minimising effects on adjacent buildings), groundwater or surface water takes, and diversions and discharges to land or water (including the coastal marine area):

- (vi) the details of at least 2 emergency contacts and responders, who must be contactable 24 hours a day 7 days a week during construction and have authority to authorise immediate response actions:
  - (vii) the contact details of any construction staff living on site during the project construction:
  - (viii) methods for responding to queries and complaints:
  - (ix) methods for amending and updating the CEMP as required:
  - (x) details of the process to be used to identify, record, and investigate incidents:
  - (xi) details (including timing) of reporting to consent authorities of the outcomes of, and compliance with, the CEMP:
  - (xii) details of how the ecological principles will guide environmental outcomes:
  - (xiii) the erosion and sediment control plan set out in condition 8.
- d) At least 5 working days before finalising the CEMP or any amendment under condition 6(f) to the CEMP, the Agency must invite comments from iwi and hapū and stakeholders identified in condition 5(a) and must have regard to any such comments when finalising the CEMP, or the amendment, as the case requires.
  - e) At least 5 working days before finalising the CEMP or any amendment under condition 6(f) to the CEMP, the consent holder must invite comments from iwi and hapū and stakeholders identified in condition 5(a) and must have regard to any such comments when finalising the CEMP, or the amendment, as the case requires.
  - f) The consent holder must finalise and implement the CEMP for the duration of construction work.
  - g) A CEMP may be amended by the Agency, if necessary, to reflect any changes in design, construction methods, maintenance and operations methods, or procedures for managing effects.
  - h) An amended CEMP must be supplied by the consent holder to the Council and iwi and hapū and stakeholders identified in condition 5(a) for information within 10 working days of the amendments being completed.

## 7. Earthworks Principles

- a) The consent holder must undertake all construction works in a manner that—
  - (i) minimises the volume, area, and duration of the proposed earthworks required for the project through methodologies, including the design of batter slopes, appropriate to expected soil types and geology:
  - (ii) maximises the effectiveness of erosion and sediment control measures associated with earthworks by minimising potential for sediment generation and sediment yield:
  - (iii) minimises, and takes all reasonable steps to avoid, adverse effects on freshwater and marine water environments within or beyond the project boundary, with particular regard to reducing opportunities for the project to generate sediment:

- (iv) minimises adverse effects on outstanding natural features, outstanding natural landscapes, and areas of outstanding natural character (as specified in a regional plan or policy statement for the relevant area):
  - (v) minimises adverse effects on culturally significant land.
- b) The consent holder must, as far as practicable, ensure that earthworks are carried out in accordance with the ecological principles.

## 8. Erosion and Sediment Control Plan

- a) The consent holder must prepare an Erosion and Sediment Control Plan or plans (ESCP) for the construction works to identify how the earthworks principles will be applied.
- b) The level of detail and the measures proposed in the ESCP must correspond to the nature and scale of the relevant construction works.
- c) The ESCP must include a project-specific risk-based approach that allows for the ESCP to determine the level of information and design that must be provided for specific projects or activities or both.
- d) The ESCP must specify the following:

### *General*

- (i) how the construction works will be carried out in accordance with the ecological principles:
- (ii) appropriate structural (including chemical treatment where necessary) and non-structural erosion and sediment control measures to be installed before and during all construction works for representative parts of the project, including earthworks, coastal works, and works within watercourses:
- (iii) key environmental risks, particularly in relation to topography, soil type and form, and the receiving environment, including proximity to any sensitive receivers:
- (iv) the approach and procedures for ensuring advance warning of a rainfall event:
- (v) procedures for decommissioning the erosion and sediment control measures:
- (vi) procedures for determining the staging and sequencing of earthworks:
- (vii) which construction works are intended to be carried out under this resource consent, and which activities are carried out under section 330 of the RMA:
- (viii) methods for amending and updating the ESCP as required:

### *Erosion and sediment control manager*

- (ix) an appropriately qualified and experienced erosion and sediment control manager, who must be responsible for—
  - (1) ensuring compliance with the CEMP and ESCP; and
  - (2) subject to paragraph (x), liaising with any erosion and sediment control manager or managers appointed in respect of any other recovery works; and

(3) liaising with the Council in respect of the implementation of the ESCP, including in respect of any incident falling within their duties under paragraph (x):

(x) that the erosion and sediment control manager appointed in respect of the project may also fulfil the same function in respect of any other recovery works:

*Responsibilities*

(xi) the names of—

(1) appropriately qualified and experienced staff to manage the erosion and sediment control devices, associated maintenance procedures, and monitoring requirements; and

(2) staff directly responsible for supervising installation, maintenance, and decommissioning of erosion and sediment control devices and the associated works:

*Incident management*

(xii) the process for identifying, recording, investigating, and notifying the Council of incidents that result in the release or accidental discharge of contaminants or material into any watercourse due to structural failure of any erosion and sediment control measures:

*Monitoring*

(xiii) a procedure for ongoing visual appraisals, and where necessary quantitative monitoring, of all erosion and sediment control measures, including details of analysis of trends in erosion and sediment control effectiveness and performance and consequential erosion and sediment control amendments.

9. What happens if sediment control measures fail

- a) If any erosion and sediment control measure fails, the consent holder must engage a suitably qualified and experienced ecologist to undertake an ecological survey of any affected areas as soon as is reasonably practicable after the failure.
- b) If a survey identifies significant adverse effects, the consent holder, in consultation with the Council, must, as soon as practicable, develop and implement appropriate remedial measures (which may include offsets) commensurate to the scale of the effects.
- c) Not less than 5 working days before starting construction works, the consent holder must submit a hard copy of the ESCP to the Council for information. The ESCP must meet the design criteria of the relevant regional ESC Guideline.
- d) The consent holder must implement the ESCP submitted in accordance with condition 9(c) for the duration of the construction works.

*Erosion and sediment control criteria*

- e) The ESCP must include details (including timing) of reporting to consent authorities of the outcomes of, and compliance with, the ESCP.

*Erosion and sediment control devices*

- f) The consent holder must design, construct, and maintain all erosion and sediment control measures to comply with the guideline referred to in condition 9(c).

10. Dust management

- a) The consent holder must prevent, as far as practicable, dust that arises from construction activities from spreading beyond the boundary of the project area.

11. *Condition 11 omitted.*

12. Requirements for works and structures in the beds of watercourses

- a) All construction works in the bed of a river must be carried out in accordance with—
  - (i) the ESCP prepared in accordance with condition 8; and
  - (ii) the ecological principles; and
  - (iii) the earthworks principles; and
  - (iv) any cultural indicators prepared by the kaitiaki adviser under condition 4(c).
- b) *Condition 12 b) omitted.*
- c) *Condition 12 c) omitted.*
- d) *Condition 12 d) omitted.*
- e) *Condition 12 e) omitted.*

13. Construction requirements

- a) This condition applies if condition 12 applies.
- b) *Condition 13 b) omitted.*
- c) *Condition 13 c) omitted.*
- d) *Condition 13 d) omitted.*
- e) *Condition 13 e) omitted.*
- f) The consent holder must ensure that –
  - (i) no machinery leaking fuel, lubricants, hydraulic fluids, or solvents is operated within a watercourse or near a watercourse where runoff may enter water; and
  - (ii) *Condition 13 e) (ii) omitted.*
  - (iii) *Condition 13 e) (iii) omitted.*
  - (iv) other fuels and lubricants, but excluding sediment, are not released into water in a watercourse; and
  - (v) the Ministry for Primary Industries' requirements and clean dry protocols relating to didymo and freshwater pests are followed in relation to all equipment; and

- (vi) the use of wet concrete is avoided in flowing water.
- g) The consent holder must ensure that construction material, demolition material, and any subsequent materials from repair and maintenance activities that are authorised by the consent and that are no longer required as part of the construction works are—
  - (i) removed on completion of the construction works; and
  - (ii) disposed of in an appropriate manner and in a place where they will not affect floodwaters and watercourses.
- h) The consent holder must comply with all notices and guidelines issued by Biosecurity New Zealand that relate to preventing the spread of freshwater pests.

14. *Condition 14 omitted.*

15. *Condition 15 omitted.*

16. *Condition 16 omitted.*

17. Construction noise

- a) Construction noise must comply, as far as practicable, with the long-term duration limits provided in Table 2 and Table 3 of NZS 6803:1999.
- b) The consent holder must take all practicable measures to reduce levels of noise from plant and equipment operating onsite during construction.

**Advice Note:**

*Audible Bird Scaring Device, meaning any device that generates audible sound waves used for the scaring of birds and other animals, and includes any percussive, electronic or explosive device, airhorn, alarm amplified signal, gas gun, screech, siren or warble, are excluded from and do not need to comply with the noise limits in condition 17.*

18. Ecology

- a) The consent holder must appoint a suitably qualified and experienced ecologist (a Project Ecologist) for the duration of the construction works to inform the design, management, and monitoring of all construction works.

Ecological principles

- b) The following ecological principles must be used to guide the project design and construction (temporary and permanent works):
  - (i) to avoid as far as practicable, and minimise,—
    - (1) permanent habitat loss (including in coastal, terrestrial, and freshwater habitats):
    - (2) loss of naturally uncommon and highly depleted ecosystem types, significant indigenous vegetation, significant habitats of indigenous fauna, and habitats for at-risk or threatened species and taonga species:
    - (3) habitat fragmentation or habitat barriers (including in coastal, terrestrial, and freshwater habitats):

- (4) impacts on habitat connectivity (including coastal, terrestrial, and freshwater habitats):
- (5) impacts on at-risk or threatened species and taonga species:
- (6) adverse effects on water quality (including on kaimoana and mauri) from sediment:
- (7) to the extent practicable, alteration of natural hydrology patterns:
- (8) the potential for the spread or establishment, or both, of pest plants or animals (including in coastal, terrestrial, and freshwater habitats):
- (9) impacts on habitats that play an important role in the life cycle and ecology of native species:

(ii) as far as practicable, to create safe habitats, especially for at-risk or threatened species and taonga species.

c) *Condition 18 (c) omitted.*

d) The ecological scoping survey and subsequent ecological effects assessment must be carried out in general accordance with Appendix 1 of the National Policy Statement for Indigenous Biodiversity.

e) The Agency must provide a copy of the final ecological scoping survey and subsequent ecological effects assessment to the iwi and hapū and stakeholders identified in condition 5(a) after completion.

f) In this clause, highly depleted means less than 20% of indigenous cover remains in the land environment.

19. Minimising ecological loss

a) *Condition 19(a) omitted.*

a1) Prior to, during, and post works, the project ecologist shall ensure the relevant bird, fish, and lizard management plans are implemented and adhered to, as necessary to minimise ecological loss.

b) *Condition 19(b) omitted.*

c) *Condition 19(c) omitted.*

d) *Condition 19(d) omitted.*

e) The consent holder must keep a record of any habitat identified in the ecological scoping survey carried out under the Ecological Report Summary (Appendix B to the application) that is lost as a result of the project.

20. *Condition 20 omitted.*

21. *Condition 21 omitted.*

22A. Cycle path access

- a) Not less than 10 working days prior to commencement of any works that require a closure of the cycle pathway at the northern end of the site, the consent holder shall give notice to the Council (Cycle Network Coordinator) of the intention to close the cycle pathway and include a duration the closure is to be in place for. A suitable detour shall be available at any other time public access is restricted.
- b) The public access via the cycleway path located at the northern end of the site shall be unobstructed and usable for the public from 24/10/2025 to 27/10/2025.

## 22. Review of conditions

- a) For the purposes of section 128(1)(a) of the RMA, the Council may, at any permitted times, review the conditions in this schedule in order to—
  - (i) deal with any adverse effect on the environment that may arise from the exercise of the consent and that it is appropriate to deal with at a later stage; and
  - (ii) review the adequacy of any monitoring.
- b) In this clause, permitted times means—
  - (1) within 6 months after the first anniversary of the date the construction work is commenced:
  - (2) within 6 months after the second anniversary of the date the construction work is commenced:
  - (3) within 6 months after the fifth anniversary of the date the construction work is commenced.

## ADVICE NOTES

- i. That where, for any cause (accidental or otherwise), contaminants associated with the consent holder's operations escape to water other than in conformity with the consent, the consent holder shall:
  - a) Immediately take all practicable steps to contain and then remove the contamination from the environment, and;
  - b) Immediately notify the Council of the escape, and;
  - c) Report to the Council, in writing and within 7 days, describing the manner and cause of the escape and steps taken to control it and prevent its reoccurrence.
- ii. Sediment control measures shall take into account the principles and practices set out in the Hawke's Bay Regional Council Waterway Guidelines: Erosion and Sediment Control (April 2009) and any subsequent publications released in replacement of this document. If during the works it becomes evident that for an unforeseen reason the consent holder cannot operate in accordance with the methodology outlined in the Construction Methodology and Sediment Control Plan, the consent holder must advise the Council (Manager Compliance) of an alternative method that is to be used prior to continuing the works.
- iii. All information required by the conditions of this consent can be provided to the council by email to [ComplianceReturns@hbrc.govt.nz](mailto:ComplianceReturns@hbrc.govt.nz)
- iv. The Resource Management (National Environmental Standards for Freshwater) Regulations 2020(NES-F) came into force of 3 September 2020. The NES-F includes Regulations that relate to the protection of

existing inland and coastal wetlands, to protect streams from infilling and to ensure that fish passage is maintained or improved. The consent holder should ensure they are familiar with these Regulations and any additional requirements that they may prescribe.

- v. For the purposes of this consent:

**Agency** – means KiwiRail Holdings Limited.

## **REASONS FOR DECISION**

The reasons for the decision are set out in the associated s42A report for application no. APP-131281.

## **MONITORING NOTE**

### **Routine monitoring**

Routine monitoring inspections will be undertaken by Council officers on at least one occasion prior to, during construction and/or after the completion of works. The costs of **any** routine monitoring will be charged to the consent holder in accordance with the Council's Annual Plan of the time.

### **Non-Routine monitoring**

"Non routine" monitoring will be undertaken if there is cause to consider (e.g. following a complaint from the public, or routine monitoring) that the consent holder is in breach of the conditions of this consent. The cost of non-routine monitoring will be charged to the consent holder in the event that non-compliance with conditions is determined, or if the consent holder is deemed not to be fulfilling the obligations specified in section 17(1) of the RMA shown below.

Section 17(1) of the RMA states:

*Every person has a duty to avoid, remedy, or mitigate any adverse effect on the environment arising from an activity carried on by or on behalf of the person, whether or not the activity is carried on in accordance with*

- a) any of sections 10, 10A, 10B, and 20A; or*
- b) a national environmental standard, a rule, a resource consent, or a designation.*

## **DEBT RECOVERY**

It is agreed by the consent holder that it is a term of the granting of this resource consent that all costs incurred by the Council for, and incidental to, the collection of any debt relating to this resource consent, whether as an individual or as a member of a group, and charged under section 36 of the RMA, shall be borne by the consent holder as a debt due to the Council, and for that purpose the Council reserves the right to produce this document in support of any claim for recovery.

**CONSENT HISTORY**

<b>Authorisation No.</b>	<b>Date</b>	<b>Event</b>	<b>Relevant Rule</b>	<b>Relevant Plan</b>
AUTH-132530-01	21/10/2025	Consent initially granted	9	Regional Coastal Environment Plan  Severe Weather Emergency Recovery (KiwiRail Holdings Limited) Order 2023
AUTH-132735-01	21/10/2025	Consent initially granted	8	Regional Coastal Environment Plan  Severe Weather Emergency Recovery (KiwiRail Holdings Limited) Order 2023
AUTH-132736-01	21/10/2025	Consent initially granted	46	Regional Coastal Environment Plan  Severe Weather Emergency Recovery (KiwiRail Holdings Limited) Order 2023
AUTH-132530-01	21/10/2025	S133A (RMA) minor corrects - insertion of omitted conditions 12 b) – e) & 13 e), and formatting of 22 b).	-	RMA s133A
AUTH-132735-01	21/10/2025	S133A (RMA) minor corrects - insertion of omitted conditions 12 b) – e) & 13 e), and formatting of 22 b).	-	RMA s133A
AUTH-132736-01	21/10/2025	S133A (RMA) minor corrects - insertion of omitted conditions 12 b) – e) & 13 e), and formatting of 22 b).	-	RMA s133A

Appendix 1:

# Archaeology | Our shared culture and heritage



## What is archaeology?

An **archaeological site** is any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand, including pre-1900 buildings and other structures.

## What is heritage?

**Heritage items** are “those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures”.

## Why does it matter?

Archaeological sites are important because they provide a unique window to the past. They are an important aspect of our social, cultural, environmental and economic wellbeing. Archaeological sites provide information vital to understanding our national identity. Many archaeological sites also have significance cultural values for Māori.

Damage or loss of archaeological sites needs to be avoided if possible. We are legally obliged to investigate and record all archaeological sites that our work may affect, under the terms of an archaeological authority issued by Heritage New Zealand Pouhere Taonga Act 2014. Breaches of the Act can lead to fines of up to \$300,000.



## Māori Archaeology

The East Coast region has a long and rich history of Māori settlement. Many significant Māori archaeological sites are present within the project area, and by

studying these objects and features we can learn about what life was like in this area hundreds of years ago. You can help us to do this!

### What did you find?

#### Concentrated areas or layers of shell



Middens (rubbish heaps), characterized by large amounts of shell, bone, and charcoal.

#### Bones or stone tools



Carved bone fish hooks and spear points, flaked stone tools used for hunting and carving, and ground stone tools, used to grind, shape, and polish adze heads

#### Charcoal or charcoal-stained soil

##### What is a cultural layer?

Cultural layers are vital archaeological evidence of past human lives and activities. The pictures below show what cultural layers can look like. Indicated in red, these layers are made up of charcoal stained soil, intermixed or modified soils, shells, and occasionally fragments of bone.

In the East Coast region such evidence is most often an indication of Māori gardening activity.

By studying and recording these layers, we can learn a lot about where people lived, what they ate and what their lives may have been like.



Thin band of charcoal stained sand (difficult to spot), a Māori oven (basically a centuries old hāngī!), and soil colour changes which may indicate you are digging into a cultural layer.

## European Archaeology

Settlers from Europe began to arrive in the East Coast region in the 1830s and left behind evidence of their lives. It is possible that project works could expose

objects and structures that people made and used almost 200 years ago. This could also include features relating to the early transport network.

### What did you find?

#### Bottles or pottery (even broken ones!)



A clay pipe in the shape of a skull, a cache of 19th century black beer bottles, a fragment of ceramic bowl, and a ceramic ginger beer bottle.

#### Leather or cloth (shoes & clothes)



A handmade leather shoe, an iron horseshoe, and a 19th century rubbish pit.

#### Structures (i.e brick, metal, timber)



A 19th century drain made out of bricks (brick-barrel) and a timber box drain, used to keep the streets clear of water in the 19th century.

#### Evidence of old buildings



Look out for construction materials like bricks, blocks or timber, which may indicate a structure used to stand on the site.

## Archaeological Site Discovery Protocol

In the event of any discovery of a possible archaeological site:

- 1 Cease all works immediately within a 20m radius.
- 2 Immediately advise your site supervisor of the find.
- 3 The site supervisor will immediately contact the Environmental Advisor, who will contact the archaeologist.
- 4 Works are not to recommence without archaeologist approval.

Project Archaeologist:

Environmental Advisor: