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**Transmission Gully:  
Archaeological assessment of proposed  
roadway**

Report to the NZ Transport Agency  
Report 20

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Mary O’Keeffe  
Heritage Solutions

Victoria Grouden  
Capital Heritage



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# Executive Summary

1. The NZ Transport Agency (NZTA) proposes to construct a new road - Transmission Gully. The road will commence near Linden in the south and run to MacKays Crossing in the north.
2. Mary O’Keeffe of Heritage Solutions and Victoria Grouden of Capital Heritage were contracted to assess the effects of the proposed work upon the archaeological resource as required under the Resource Management Act 1991 and Historic Places Act 1993.
3. The methodology for the assessment required the consultants to outline the history of the area, note data on known and recorded archaeological sites, assess the likelihood of further unrecorded archaeological sites, assess the impact of the proposed construction work on the archaeological resource, and make appropriate recommendations for mitigation based on these findings.
4. Data on recorded sites was obtained from Archsite (the New Zealand Archaeological Association on-line database), Quickmap, Porirua City Council District Plan, Kapiti Coast District Plan, and key historical texts and sources.
4. There are no recorded archaeological sites within the proposed road’s alignment. There are recorded archaeological sites within the wider vicinity of the proposed alignment. They are of both Maori and European origin.
5. There is some likelihood of further unrecorded archaeological sites and features within the proposed alignment and area of work.
6. Because of the likelihood of further unrecorded archaeological sites being present within the alignment, a precautionary approach is considered prudent. It is therefore recommended that as part of the planning process and prior to any earthworks, the NZTA applies for an authority to modify, damage or destroy an archaeological site under Section 12 of the Historic Places Act 1993.

# 1. Introduction

The NZ Transport Agency (NZTA) proposes to build a new road – Transmission Gully.

In August 2009 Mary O’Keeffe and Victoria Grouden (the consultants) were engaged by Beca Carter Hollings & Ferner Ltd (Beca). Beca has been engaged by the NZTA to undertake the preparation of an Assessment of Effects on the Environment, Notices of Requirement and a suite of resource consent applications for the Transmission Gully project for the NZTA. The consultants were engaged to undertake an archaeological assessment of the proposal to meet the statutory requirements of the Resource Management Act 1991 (RMA) and the Historic Places Act 1993 (HPA).

The location of the proposed route is shown in Figure 1. This image indicates both the legally designated route and the currently preferred route.



**Figure 1: Oblique view of proposed Transmission Gully route**

[www.nzta.govt.nz/projects/transmission-gully/img-oblique-view.html](http://www.nzta.govt.nz/projects/transmission-gully/img-oblique-view.html)

## 1.1 Context and Data

The identification, protection and management of archaeological sites in New Zealand are addressed by two separate pieces of legislation.

Archaeological sites are defined in the HPA as:

“...any place in New Zealand that

(a) Either -

(i) was associated with human activity that occurred before 1900; or

(ii) is the site of the wreck of any vessel where that wreck occurred before 1900; and

(b) is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand.<sup>1</sup>”

All archaeological sites in New Zealand that conform to the definition in the HPA cited above have legal protection under Part 1 of the HPA, whether or not they are recorded or their existence is known.

In addition, the RMA identifies the protection of historic heritage from inappropriate subdivision, use and development as a matter of national importance (section 6f).

Historic heritage is defined as those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities.

Historic heritage includes:

- ◆ Historic sites, structures, places and areas
- ◆ Archaeological sites
- ◆ Sites of significance to Maori, including wahi tapu
- ◆ Surroundings associated with the natural and physical resources

Archaeological sites by implication are physical and tangible; they can be observed and measured. Archaeological sites or features may be subsurface, and their potential presence may be suspected, and later observed during investigation.

While the HPA gives a legal interpretation of what constitutes an archaeological site, the RMA does not define archaeology specifically; rather it is included in the general category of historic heritage.

Thus the statutory context for archaeology differs between the two acts. Whereas the HPA primarily<sup>2</sup> limits it to places of human activity that predate 1900AD, the RMA’s remit is broader. It refers to places and resources, not generally considered to be archaeological under the terms of the HPA, that contribute to an understanding and appreciation of New Zealand’s history and cultures,.

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<sup>1</sup> Historic Places Act 1993, Section 2, Interpretation.

<sup>2</sup> There is provision in the HPA for the gazettal of historic sites postdating 1900 if it is considered that they have high archaeological significance and/or potential.

Archaeological sites may be of Maori origin and therefore of particular significance to Maori. There may also be other sites of significance to Maori for their spiritual and traditional values that may have no physical or tangible remains, and therefore cannot be assessed in terms of archaeological values. This report primarily documents the archaeological resource in the study area. It is in no way intended to be a definitive assessment of the Maori cultural values of the route and surrounding area or of the impacts that the proposed work may have on those values. Further information about Maori cultural values has been obtained from the appropriate iwi/hapu authorities, and is contained in a separate report.

Archaeology can never say definitively “what happened” on a site or a landscape; instead, data and information is gathered, and a hypothesis is proposed to explain the possible relationships between data, known information and interpretations.

Archaeologists in New Zealand follow both a code of ethics adopted by the NZ Archaeological Association in May 1993, and the ICOMOS (International Council on Monuments and Sites) New Zealand Charter adopted in March 1993 and revised in 2010. The code of ethics requires archaeologists to be mindful of the cultural origins of the archaeological resource, to acknowledge the importance of indigenous cultural heritage, and to acknowledge the relationship between heritage places and the indigenous people. Methodology for archaeological assessments is set out in the Historic Places Trusts’ “Guidelines for Writing Archaeological Assessments”<sup>3</sup>.

Data for this study was sourced from Archsite, the NZ Archaeological Association’s on-line database of recorded archaeological sites, and the detailed site record forms for recorded archaeological sites in the vicinity of the proposed alignment were studied. Data was also obtained from the Historic Places Trust’s on-line register of historic places, historic areas, wahi tapu and wahi tapu areas; Porirua City Council’s District Plan and Kapiti Coast District Council’s District Plan. In addition historic survey plans held by Land Information New Zealand were checked, as were key historical texts for the area and historic aerial photo runs.

Archaeological sites in New Zealand are recorded by the NZAA and records entered into the site recording scheme. The NZAA file is an information database that has been built up over a long period of time by many different contributors and is not necessarily definitive. Individual site locations vary in accuracy and individual records are not ranked or identified in relation to national or regional significance. Grid references given for an archaeological site are simply an indication of the site’s location, and do not delimit the site’s extent. In addition, some sites included in the NZAA list may no longer exist, as they may have been destroyed since they were recorded.

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<sup>3</sup> HPT, 2006

## 1.2 Scope and limitations of this report

This report presents an archaeological assessment of the proposed area of work and does not constitute an assessment of Maori cultural values. This document contains data sourced from the New Zealand Archaeological Association archaeological site database, Archsite. The New Zealand Archaeological Association Incorporated gives no warranty in relation to the data (including accuracy, reliability, completeness or suitability) and accepts no liability (including, without limitation, liability in negligence) for any loss, damage or costs relating to any use of the data.

In addition, specific statutory recommendations are focussed mainly on those sites and features which fulfil the definition of an archaeological site as stated by the Historic Places Act 1993. There are additional historic built structures in the vicinity of the proposed road that post-date 1900AD and are covered by the RMA, but not the HPA. This report is intended to fulfil the requirements of both Acts, but recommendations are made mainly in terms of the HPA, as this is New Zealand's primary legislation for the management and protection of archaeology.

Finally, this report is only an assessment of potential impacts of the proposed route. There will be additional activities, such as laydown areas, machinery parking areas and fill dump sites, which may have the potential to impact on archaeological sites and features. As the locations and scale of these additional activities are not known at the time of writing, their potential impacts cannot be assessed.

This report sits within the context of wider heritage values for the Transmission Gully Project, and, as such, is one of three reports on the heritage values of the project.

The three reports are:

- An assessment of cultural values, completed by Te Runanga o Toa Rangatira
- An assessment of built heritage values, completed by Ian Bowman
- An assessment of archaeological values, completed by Victoria Grouden, Capital Heritage and Mary O'Keeffe, Heritage Solutions.

The conclusions of each of the three reports should be read in the light of the conclusions of the other two.

## 1.3 Scope of project

The Transmission Gully Project ("***the Project***") consists of three components:

- The Transmission Gully Main Alignment ("***the Main Alignment***") involves the construction and operation of a State highway formed to expressway standard from Linden to MacKays Crossing. The NZ Transport Agency (NZTA) is responsible for the funding and delivery of the Main Alignment.
- The Kenepuru Link Road involves the construction and operation of a State highway (limited access road) from the Kenepuru Interchange to Kenepuru Drive. The NZTA is responsible for the funding and delivery of the Kenepuru Link Road



- The Porirua Link Roads involves the construction and operation of two local roads connecting the Main Alignment to the existing eastern Porirua road network. The Porirua City Council (PCC) is responsible for the funding and delivery of the Porirua Link Roads.

### **1.3.1 The Transmission Gully Main Alignment**

The Main Alignment will provide an inland State highway between Wellington (Linden) and the Kapiti Coast (MacKays Crossing). Once completed, the Main Alignment will become part of State Highway 1 (SH1). The existing section of SH1 between Linden and MacKays Crossing will likely become a local road.

The Main Alignment is part of the Wellington Northern Corridor (Wellington to Levin) road of national significance (RoNS). The Wellington Northern Corridor is one of the seven RoNS that were announced as part of the Government Policy Statement on Land Transport Funding (GPS) in May 2009. The focus of the RoNS is on improved route security, freight movement and tourism routes.

The Main Alignment will be approximately 27 kilometres in length and will involve land under the administrative jurisdiction of four separate territorial authorities: Wellington City Council, Porirua City Council, Upper Hutt City Council, and Kapiti Coast District Council. The Main Alignment will be a motorway under section 71 of the Government Roding Powers Act 1989 (GRPA).

The key design features of the Main Alignment are:

- Four lanes (two lanes in each direction with continuous median barrier separation);
- Rigid access control;
- Grade separated interchanges;
- Minimum horizontal and vertical design speeds of 100 km/h and 110km/hr respectively; and
- Crawler lanes in some steep gradient sections to account for the significant speed differences between heavy and light vehicles.

The NZTA's objectives for the Main Alignment and the Kenepuru Link Road are:

- To provide an alternative strategic link for Wellington that improves regional network security;
- To assist in remedying the safety concerns of and projected capacity problems on the existing State Highway 1 by providing a safe and reliable route between Linden and MacKays Crossing in an environmentally sustainable manner;
- To assist in enabling wider national economic development by providing a cost-optimised route that better provides for the through movement of freight and people; and

- To assist integration of the land transport system by enabling the existing State Highway 1 to be developed into a safe, multi-functional alternative to the proposed strategic link.

### **1.3.2 Background to the Transmission Gully Project**

The concept of an inland, alternative route to bypass the existing SH1 coastal route and communities north of Wellington was first raised in the early 1940s and has been under consideration by various parties ever since.

The key events in the development of the Transmission Gully Project are:

- In the early 1940s, there was first talk of an alternative inland route for SH1 north of Wellington.
- In 1981, the National Roads Board embarked on an assessment of the Western Corridor (undertaken by the Ministry of Works and Development and the Ministry of Transport) looking at options for an inland route (now known as Transmission Gully) in comparison to an upgrade of the coastal route.
- In 1986, the findings of the National Roads Board's Western Corridor Report were released with the report rejecting an inland route and supporting major improvements along the existing coastal route.
- In 1987, the Greater Wellington Area Land Use and Transportation Strategic Review (GATS) was jointly funded by the National Roads Board, Wellington Regional Council and the Urban Transport Council. The Western Corridor section was separated out for early consideration. The GATS considered a large number of options including routes through Porirua East/Whitby, Takapu Valley, Belmont deviation through Belmont Regional Park to SH2, as well as upgrades to the coastal route.
- In 1989, an environmental impact report (EIR) was produced to compare the impacts of options proposed in GATS including public transport and roading upgrades. The EIR considered both coastal and inland options. The EIR concluded that in addition to public transport upgrades, roading improvements were required to address the growing congestion on SH1. The EIR found the inland route was more environmentally and socially acceptable. The favoured route was an inland alignment from MacKays Crossing to Takapu, continuing through the Takapu Valley with an interchange on SH1 at Tawa.
- In 1990, the Parliamentary Commissioner for the Environment (PCE) conducted an audit of the EIR. The PCE agreed in principle with the findings of the EIR with some reservations and recommendations. The audit found that Takapu Valley was not necessarily the best alignment at the southern end and that further investigation of the links to the Hutt Valley and Porirua was required. The PCE's principal recommendations were to finalise and designate the inland route and to consult with the public to reduce uncertainty for both the coastal and inland route communities.
- In 1991, the Wellington Regional Council conducted further investigations into possible alignments at the southern end. A number of alignments were examined and the conclusion was for a connection to SH1 at Linden as well as connection to western Porirua via a Kenepuru link. Justification for this was

clear benefits to the management of Porirua traffic and relief to SH58 around Pauatahanui Inlet. This would also reduce environmental and social impacts associated with the Takapu Valley option.

- In 1996, a preliminary design was produced for the Linden to MacKays Crossing alignment and the notices of requirement were lodged.
- In 1997, the hearing takes place for the notices of requirement for the Linden to MacKays Crossing alignment.
- In 2003, all the appeals on the notices were finally resolved and the designations for the Linden to MacKays Crossing alignment were included in the relevant district plans.
- In 2004, an existing local road designation was altered to provide local road access to the Linden to MacKays Crossing alignment from eastern Porirua.
- In 2004, the Western Corridor Transportation Study (jointly commissioned by Greater Wellington Regional Council and Transit New Zealand) commenced to provide the basis for an integrated transportation strategy to manage travel demands in the Western Corridor. The resulting Western Corridor Plan (WCP) included consideration of major public transport and roading options and travel demand management (TDM) initiatives. Consultation on the WCP indicated that affected communities did not support the coastal route and expressed a strong preference for Transmission Gully.
- In 2006, the WCP was endorsed by the Transit NZ Board and adopted by the Greater Wellington Regional Council and included Transmission Gully in the Regional Land Transport Strategy (2007 to 2016) for construction within 10 years as part of a balanced multi-modal approach to addressing transport needs within the Western Corridor.
- In 2008, a draft scheme assessment report (SAR) was undertaken which involved the assessment of numerous options for a Transmission Gully alignment both within and outside the confines of the existing designation. Together with a detailed consultation process, preferred alignment for Transmission Gully was produced.
- In 2009, detailed environmental and engineering investigation work commenced for Transmission Gully.
- In May 2009 the GPS is released which included the RoNS programme. The Wellington Northern Corridor is one of the RoNS.
- In December 2009, NZTA's Board announces that Transmission Gully is the preferred route to improve access through the southern end of the Western Corridor. The NZTA press release stated; "our task was to choose the route which would deliver the best result for the region and New Zealand [as part of the Roads of National Significance], while also bearing in mind the potential impact on the environment and surrounding communities. In the end it was clear that Transmission Gully was the better choice. It is less expensive, it will provide a safer four-lane route, it's better for local communities and better for the environment, and it will reduce travel times between Kapiti and Wellington".

- In 2010, detailed environmental and engineering investigation work is progressed and the preferred alignment is optimised to accommodate road design, ecological, water quality and other considerations. In March, the NZTA signals its intention to lodge the statutory RMA documentation with the EPA using the new “national consenting process”.

### 1.3.3 Project Description

The Main Alignment is a proposed 27km expressway from Linden in Wellington City to MacKays Crossing on the Kapiti Coast.

The Main Alignment consists of nine sections:

Section number	Section name	Station value (m)	Length (km)
1	MacKays Crossing	00000 – 03500	3.5
2	Wainui Saddle	03500 – 06500	3.0
3	Horokiri Stream	06500 – 09500	3.0
4	Battle Hill	09500 – 12500	3.0
5	Golf Course	12500 – 15500	3.0
6	State Highway 58	15500 – 18500	3.0
7	James Cook	18500 – 21500	3.0
8	Cannons Creek	21500 – 24900	3.4
9	Linden	24900 – 27700	2.8

#### *Section 1: MacKays Crossing*

This section is approximately 3.5km long, and extends from the tie-in at the existing MacKays Crossing Interchange on SH1 to the lower part of the Te Puka Stream valley. The Main Alignment will connect to the existing SH1 at approximately 00700m. The first 700m will follow the existing SH1 alignment which is a grade separated interchange providing access across the North Island Main Trunk rail line (NIMT). Any alteration to the MacKays Crossing Interchange will be minor.

This section of the Main Alignment will provide for three lanes in the northbound carriageway from 00700m and from 02100m in the southbound carriageway. Southbound traffic will be able to exit the Main Alignment at approximately 01250m. This exit will pass under the Main Alignment at approximately 01800m and will connect to the existing SH1 heading south towards Paekakariki. Traffic heading northbound from Paekakariki will be able to join the Main Alignment from a connection at approximately 01200m.

A subway at 01990m (BSN 2) will provide vehicular access across the state highway to three properties. This subway will also provide access across the Main Alignment for pedestrians, cyclists and stock. For the rest of this section heading south, the carriageway will be three lanes in both directions and rises up the Te Puka Stream valley. At approximately 02900m there will be an arrestor bed adjacent to the northbound carriageway for any out of control vehicles heading downhill. The section finishes at 03500m.

### *Section 2: Wainui Saddle*

Section 2 starts at approximately 03500m and will continue climbing for about 2km to the top of the Wainui Saddle at approximately 262m above sea level (at about 05500m). This will be the highest point of the Main Alignment. Just south of the Wainui Saddle peak at about 05600m there will be a brake check area for both northbound and southbound carriageways. Slightly further south, at approximately 06000m, three lanes in each direction will be reduced to two lanes in each direction. Section 2 finishes at 06500m.

### *Section 3: Horokiri Stream*

This section is approximately 3km long and extends from the southern end of the Wainui Saddle to the northern end of Battle Hill Farm Forest Park. For the entire length of this section, the Main Alignment will run generally parallel to the Horokiri Stream. From 06500m to approximately 08550m the Main Alignment will be to the west of the Horokiri Stream, while from 08550m to 09500m it will be to the east of the stream. As the Main Alignment runs parallel to the stream it will cross a number of its minor tributaries which generally run perpendicular to the Horokiri Stream and the Main Alignment.

Over this section, the Main Alignment will cross the Horokiri Stream once with a bridge at 08540m (BSN 4). The section finishes towards the northern boundary of the Battle Hill Farm Forest Park (BHFFP) at approximately 09500m.

### *Section 4: Battle Hill*

This section is approximately 3km long and extends from the northern boundary of the BHFFP to the Pauatahanui Golf Course. Shortly after the Main Alignment enters the BHFFP from the north it crosses over the Horokiri Stream with a bridge at approximately 09720m (BSN 5). Over the remainder of this section heading south the Main Alignment will follow the Horokiri Valley floor which widens from north to south through the BHFFP.

Access across the Main Alignment for park users will be provided by a subway located at approximately 10500m (BSN 6). This will provide a connection between the eastern and western part of the park for pedestrians, cyclists and stock. The Main Alignment will continue south from the BHFFP boundary towards the Pauatahanui Golf Course. At about 11750m it will cross an unnamed stream with a bridge (BSN 7). Access across the Main Alignment will be available underneath this bridge. The section finishes at 12500m where there will be a subway providing pedestrian and stock access across the Main Alignment (BSN 9).

### *Section 5: Golf Course*

This section is approximately 3km long, and extends from north to south through rural land adjacent to the Pauatahanui Golf Course and Flighty's Road. The Main Alignment will cross a number of small tributaries along this section but there will be no major stream crossings requiring bridges.

### *Section 6: State Highway 58*

This section is approximately 3km long and starts at 15500m. The SH58 / Pauatahanui Interchange will be located at approximately 17500m. At this interchange the Main Alignment will be elevated above a roundabout which will provide access to and from the Main Alignment for traffic travelling in both directions on existing SH58. Immediately south of this interchange, at approximately 17660m, there will be a bridge (BSN 14) across the Pauatahanui Stream.

At approximately 18250m the Main Alignment will widen to provide three lanes in each direction. This section finishes at approximately 18500m.

### *Section 7: James Cook*

This section starts just south of the State Highway 58 / Pauatahanui Interchange, at approximately 18500m. Three lanes will be provided for both the northbound and southbound carriageways. The James Cook Interchange will be located at approximately 19500m. This will be a dumbbell interchange with the Main Alignment being elevated above the local road connections. These roads will provide access to the Main Alignment in both directions to and from the Porirua Link Roads. In the vicinity of this interchange, the number of lanes in each direction will be reduced from three to two. This will occur at approximately 18900m in the northbound carriageway and at 19500m in the southbound carriageway. From the James Cook Interchange, the Main Alignment will continue southwards for a further 2km. This section finishes at approximately 21500m.

### *Section 8: Cannons Creek*

This section begins at 21500m and is approximately 3.4 km long. Throughout this section the Main Alignment will run along the eastern side of Duck Creek valley, and across an undulating, weathered greywacke plateau between Duck and Cannons Creeks.

### *Section 9: Linden*

This southernmost section is approximately 2.8km long. From the start of the section at approximately 24900m, a third lane will be provided in the northbound carriageway heading uphill.

The Kenepuru Interchange will be located at approximately 26700m. This interchange will involve the Main Alignment being elevated above a roundabout which will connect to the Kenepuru Link Road.

South of the Kenepuru Interchange, the Main Alignment will continue downhill to where it will tie into the existing SH1 along the Tawa straight. For traffic joining the Main Alignment in a northbound direction, the carriageway will be elevated and will pass over the existing southbound SH1 carriageway. Traffic continuing to Porirua will be able to do so by taking the left lane exit from the existing SH1.

### **1.3.4 The Kenepuru Link Road**

The Kenepuru Link Road will provide a connection from the Main Alignment to western Porirua. This link road will provide a connection from the Kenepuru Interchange to the existing Kenepuru Drive and will be approximately 600m long. There will be a roundabout at the intersection with Kenepuru Drive. The Kenepuru Link Road will be a State highway (limited access road) designed to the following standards:

- Two lanes (one in each direction);
- Design speeds of 50 km/h;
- Maximum gradient of 1:8; and
- Limited access only.

The Kenepuru Link Road will contain a curved 240m long bridge over the existing SH1 and the NIMT (BSN 26).

### **1.3.5 The Porirua Link Roads**

The Porirua Link Roads will connect the Main Alignment to the eastern Porirua suburbs of Whitby and Waitangirua. The Porirua Link Roads will be local roads designed to the following standards:

- Two lanes (one in each direction);
- Design speeds of 50 km/h;
- Maximum gradient of 1:10; and
- Some side access will be permitted.

The Waitangirua Link Road will be approximately 2.5km long and will run from the James Cook Interchange to the existing intersection of Niagara Street and Warspite Avenue. This will be a signalised intersection. The Waitangirua Link Road will cross five waterways. The most significant of these will be a crossing of Duck Creek requiring a culvert (BSN 16). The Waitangirua Link Road will link into the western side of the James Cook Interchange.

The Whitby Link Road will be approximately 900m long and will run from the existing roundabout at the intersection of James Cook Drive and Navigation Drive to the Waitangirua Link Road. The new intersection of the proposed Waitangirua and Whitby link roads will be a signalised T-intersection.

### **1.3.6 Development of the current design**

The scheme assessment report (SAR) was undertaken between 2006 and 2008. The key objective for this phase was to identify the most advantageous route alignment which could then be further refined and used for assessment and consenting.

The SAR is referred to as Phase I and the investigations and assessments (the current phase) are referred to as Phase II. Phase III refers to the consenting of the Project.

Work undertaken on the route since 2006 provided the first real opportunity to conduct on-site, in-depth investigations into the impact of the proposed alignment from an engineering and environmental perspective.

The key aspects that were considered during the SAR phase were:

- Geotechnical constraints;
- Physical environmental impacts;
- Social impacts;
- Cost;
- Timeliness;
- Network flexibility; and
- Route performance and safety.

The associated findings from these investigations indicated that the proposed route provides several significant benefits over the existing designated alignment and the coastal route.

The key benefits include:

#### *Improving route security*

While both the existing coastal route and the Transmission Gully route traverse fault lines, Transmission Gully's proposed design offers greatly improved route security for the existing State Highway 1 and the Region's road network over the existing coastal route.

Where the route is vulnerable to damage from major seismic events, engineered earth embankments have been used rather than bridge structures, which will provide greater resilience and allow easier and quicker reinstatement in order to restore road access to the region.

#### *Improving highway safety and function*

The alignment will be constructed for open road speed limits (100km/h) and a median barrier will be provided along the entire route. Crawler lanes and an arrester bed as well as 'run-off areas' for out of control vehicles) on the steepest sections, along with grade separated interchanges to remove conflicts associated with vehicle turning movements provide additional safety improvements over the coastal route.

#### *Managing environmental impacts*

Generally, the proposed route provides greater opportunities to manage environmental impacts as compared to the previously designated alignment or the coastal route. The mitigation measures required by conditions on the existing designation (such as the



planting of approximately 150,000 native trees and shrubs) will still be able to be utilised in the proposed alignment.

*Improving connections to local roads*

An eastern Porirua interchange known as the James Cook Interchange will connect to both James Cook Drive in Whitby and Warspite Avenue in Waitangirua, providing improved connections with the wider Porirua area.

The Kenepuru Link Road will also provide access to the Main Alignment from western Porirua.

## 2. Archaeological resource

This section of the report will set out:

- a general statement as to the history and events in the vicinity of the proposed route that may have resulted in the creation of archaeological sites and features;
- the archaeological surveys undertaken in the area, so as to describe and locate recorded sites, and also, importantly, to determine whether a lack of known sites is an actual absence of sites, or an absence of recording;
- Discussion of specific recorded sites within the alignment of the proposed route

### 2.1 Recorded history of the area

The proposed route stretches from MacKays Crossing in the north, to Linden in the south (see Figure 1). In general this area was occupied by Maori prior to European settlement, and also by European settlers and farmers. Specific areas in the vicinity of the route are foci for historic settlement, events and resource use, which have resulted in the formation of archaeological sites and features. This section includes information about places and events outside the immediate vicinity of the proposed route, as these have strongly influenced the location and nature of sites within the vicinity of the proposed route.

The archaeology of the study area can be divided into three broad themes: Maori occupation and subsistence; military history; and European farming. Aspects of these three themes are contiguous in time and place.

Each theme is further examined by geographic area, relating to the proposed route.

The geographic areas are:

- Paekakariki and Coastal
- Paekakariki Hill Road
- Pauatahanui
- South of Pauatahanui

#### ***2.1.1 Maori Settlement and Subsistence***

According to Carkeek<sup>4</sup> the first occupants of the Wellington area (as far north as Pukerua Bay) were Ngai Tara, descended from Tara and later joined by Ngati Ira. It is thought that Tautoki, Tara's brother was given the land north of the Paekakariki/Paraparaumu area, and that Rangitane were his descendants. In more recent times, the area north of Pukerua Bay became known as Muaupoko land, remaining that until Te Rauparaha's arrival in the region during the 1820s. Ngati Rangi (Muaupoko) also had affiliations with the Paraparaumu and Paekakariki areas and Carkeek recounts conflicts between Ngati Rangi and Ngati Ira at Pukerua Bay<sup>5</sup>.

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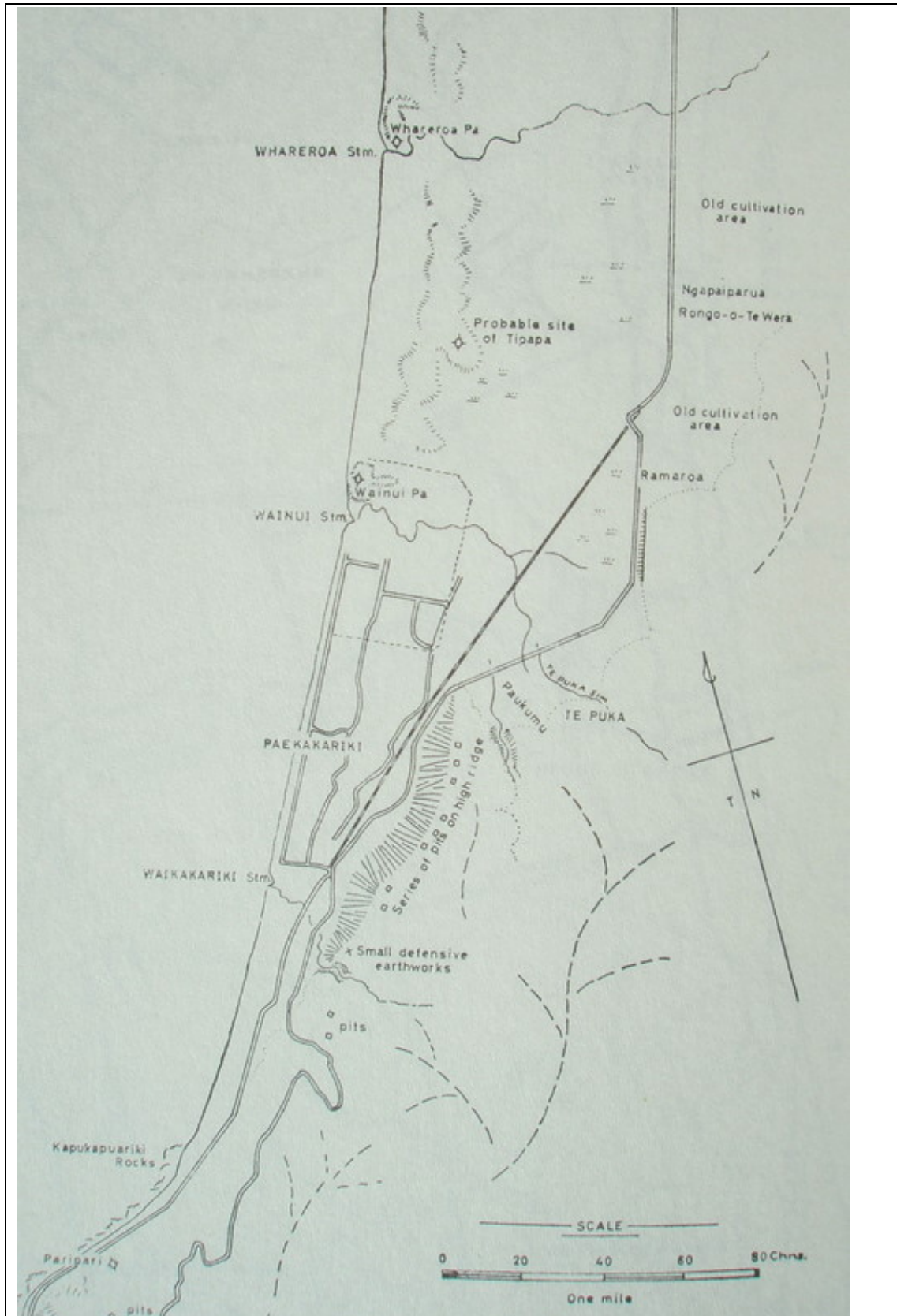
<sup>4</sup> 1966:1-2

<sup>5</sup> 1966:6-7

The vast majority of evidence for Maori occupation is along or near the coastal edge, reflecting the importance of the coast for both resources and transport. Maori fished in the sea, and gathered shellfish from the beaches. The coast has always been important for Maori, as a route for travelling, as a source of kaimoana, and as a cultural and spiritual reference point. They also utilised the coastal swamps for eels, birds and flax, and planted crops in the friable coastal soils. This subsistence pattern is especially prevalent along the Kapiti Coast, but can also be seen further south around the Porirua Harbour and Pauatahanui inlet. The hills immediately adjacent to the coastal flats were used for crop storage and for the strategic advantage their height allowed.

### **Maori Settlement and Subsistence: Paekakariki and Coastal Area**

Carkeek (1966) recorded locations and histories of Maori sites on the Kapiti Coast. Map 8 from his book shows the sites in the vicinity of Paekakariki (Figure 2).



**Figure 2: Map 8 from Carkeek, 1966**

Carkeek, 1966: 176

Sites are shown on the ridge above Paekakariki, including a long line of storage pits and defensive earthworks. North of the town, on the flat land on the eastern side of State Highway 1 are several cultivation grounds, plus two named places: Rongo O Te Wera, and Ngapaiparua. Carkeek records Rongo-O- Te Wera as “At one time the site of old cultivation grounds used by the Ngati Haumia people of Wainui pa”.<sup>6</sup> Carkeek also records the name of these cultivations ground as Ngapaiparua.<sup>7</sup>

These cultivation areas are shown on historic survey plans (Figure 3 and Figure 4). Survey plans SO 10593 and 10594 show cultivation grounds in the slightly higher, more stable land above the swamps. SO 10594 shows a track to the cultivation grounds.

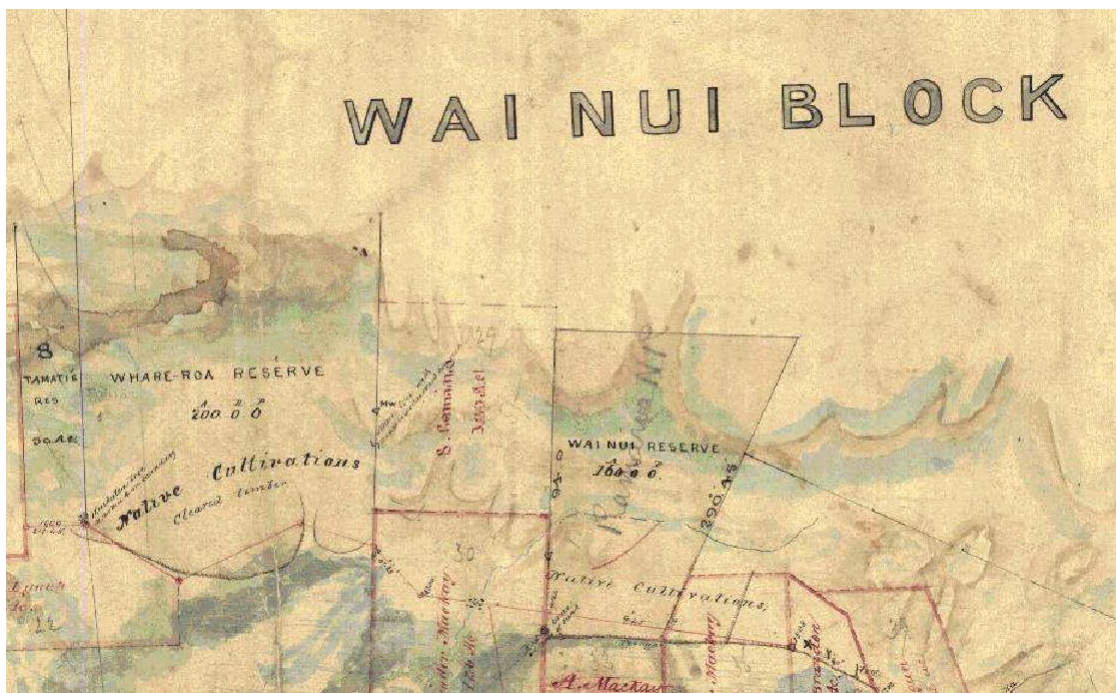


Figure 3: Detail from SO 10593, 1859

Quickmap

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<sup>6</sup> Carkeek, 1966: 141

<sup>7</sup> Carkeek, 1966: 176



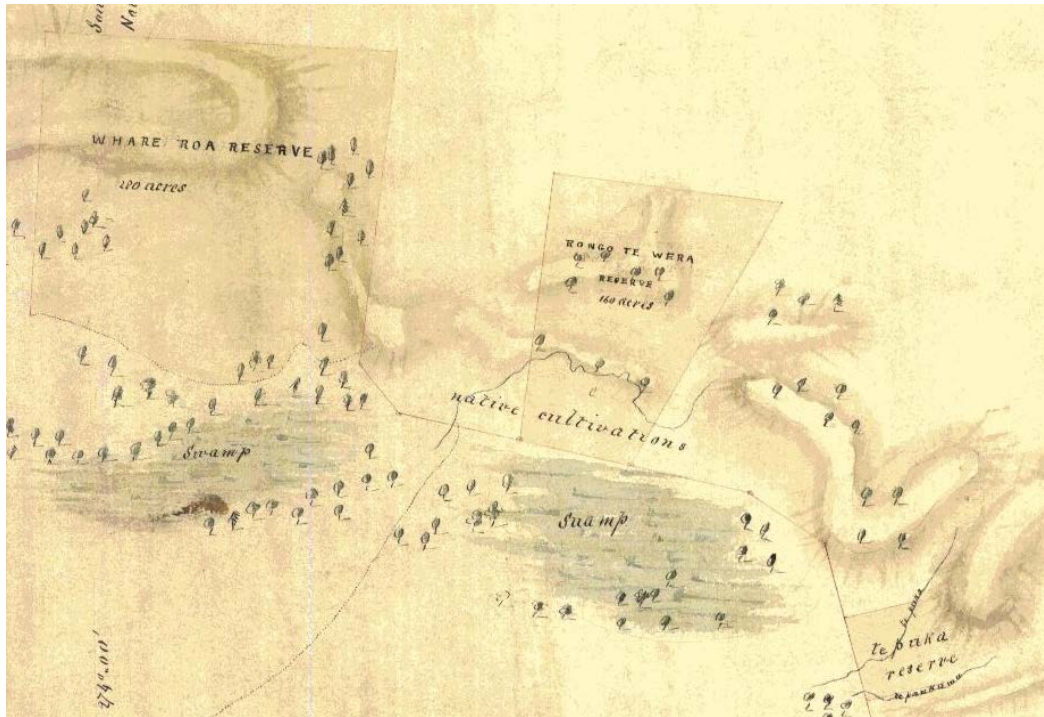


Figure 4: Detail from SO 10594, n.d.

Quickmap

The area around the Wainui cultivations grounds was occupied by 1886, as a plan (Figure 5) built for the construction of the main trunk rail line (built by 1886) is annotated with the word “Pah” (meaning village as opposed to defended settlement), and showing the locations of buildings.

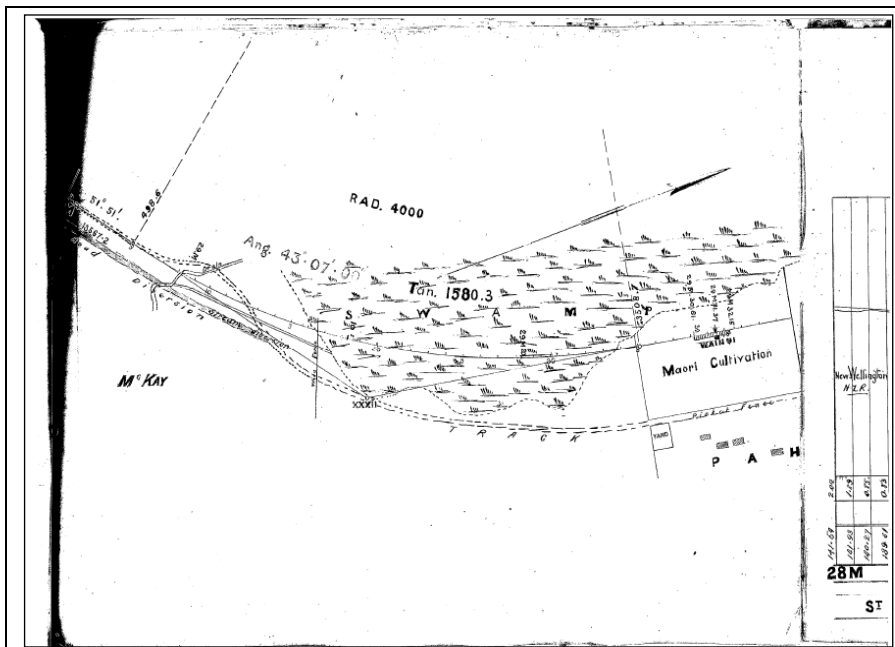


Figure 5: Railways plan, n.d.

Reference unknown supplied by Bruce McFadgen

## **Maori Settlement and Subsistence: Paekakariki Hill Road**

Whilst no sites of Maori origin have been recorded or observed in the area of the Paekakariki Hill Road, it is reasonable to suggest that the valley beside the Horokiri stream was a natural pathway for Maori, moving from Pauatahanui to the coast. It is likely, therefore, that there was transient movement up and down the river valley, and though the surrounding hills.

## **Maori Settlement and Subsistence: Pauatahanui Area**

The Pauatahanui inlet and the coast from Mana to Plimmerton are rich in archaeological sites and evidence of Maori settlement. The edge of the Pauatahanui inlet in the vicinity of Duck Creek (Wai-o-hata) was heavily occupied because of the wealth of bird and fish life there. Evidence of Maori settlement from archaeological excavations includes middens, fire pits and post holes.<sup>8</sup> Tradition states that Ngai Tara and Ngati Ira occupied the area around Pauatahanui, and were displaced by the well armed Ngati Toa in the early 1820s<sup>9</sup>.

The New Zealand Company purchased land around Pauatahanui in 1839. Ngati Toa did not recognise the company's claim, and conflict between Ngati Toa and their leader Te Rangihaeata<sup>10</sup> followed. Te Rangihaeata built a fighting pa named Mataitaua at Pauatahanui<sup>11</sup>. This pa was on the site of what is now the location of St Albans Church.

With unrest over land issues increasing, the government forces moved against Te Rangihaeata in 1846, and when Te Rangihaeata found himself outnumbered he moved up the Horokiri Valley, where he made his stand at a place now known as Battle Hill.

## **Maori Settlement and Subsistence: South of Pauatahanui**

As shown in the previous sections, the focus of Maori settlement in the Kapiti and Porirua areas was on the coast. So far very little information about the Maori occupation and use of the area between Pauatahanui and Lindon has been identified. Adkin<sup>12</sup> shows part of the area in his map of the greater Wellington Peninsula, but while he identifies a number of settlements around the inner Wellington Harbour and on the West Coast, there are very few shown inland. He does, however, note an old cultivation ground in the vicinity of Takapu Road, east of the railway station, somewhat to the south of the Transmission Gully road alignment (Figure 6). According to Adkin, the Takapu cultivation was in the valley of the Porirua Stream (originally the Kenepuru Stream) near the present Takapu Road. The land was claimed by the Te Ati Awa chief, Te Patu-kawenga at the time that Te Ati Awa drove out Ngati Ira from the area<sup>13</sup>.

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<sup>8</sup> Brice, 1998: 18

<sup>9</sup> Sheehan, 1988: 2

<sup>10</sup> Te Rangihaeata was Te Rauparaha's nephew

<sup>11</sup> Sheehan, 1988: 4

<sup>12</sup> 1959:125

<sup>13</sup> Adkin, 1959:80

Best's observation in his studies of the Wellington Harbour was that apart from one small Ngati Awa settlement at Opuawe (on the Karori Stream); all the other Maori settlements were on or near the coast. Inland forests would have been visited to obtain food but using temporary camps rather than establishing permanent settlements<sup>14</sup>.

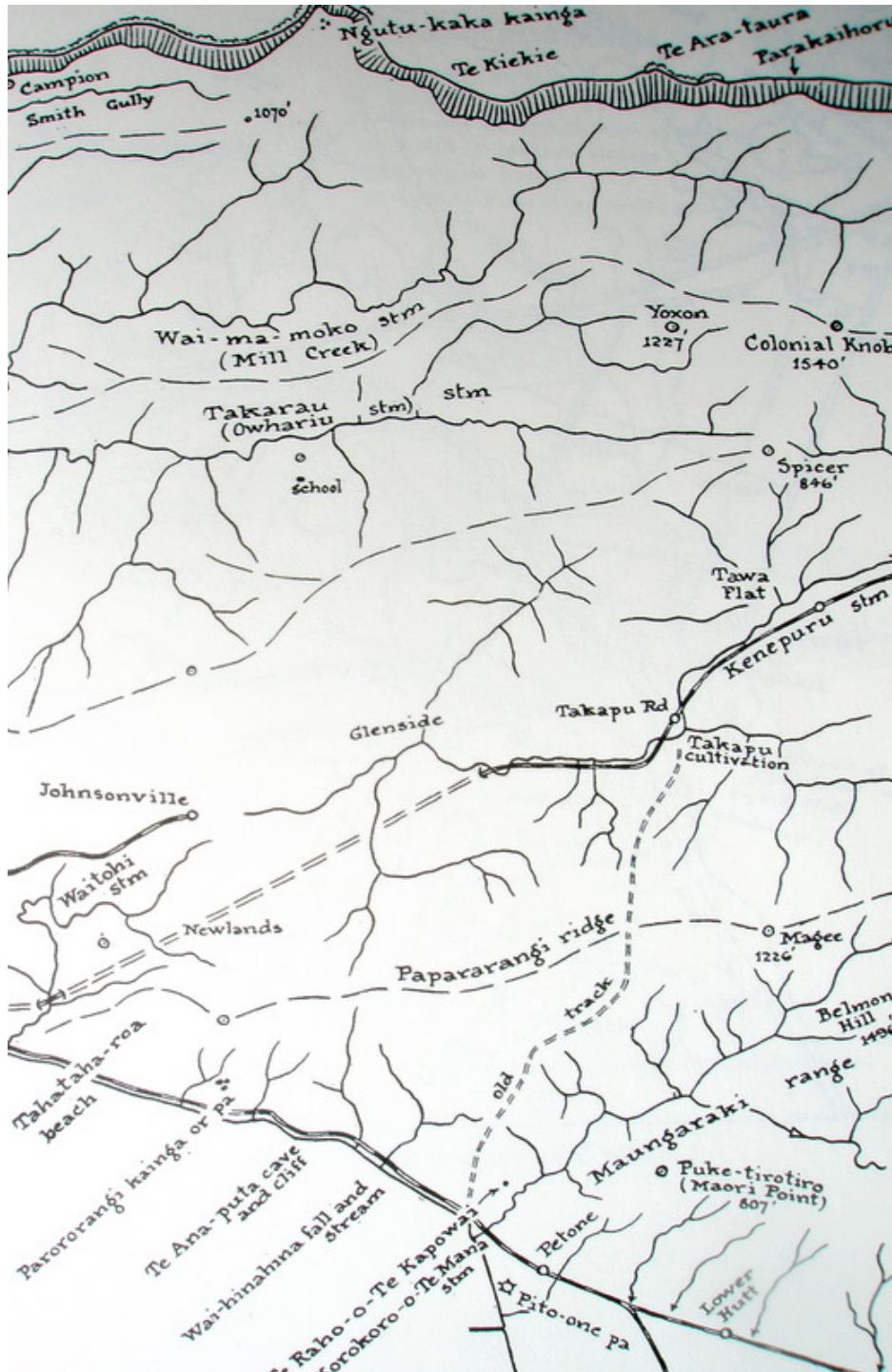


Figure 6: Detail of Adkin 1959 Map VI

Adkin 1959:125

<sup>14</sup>

Best, 1919:10



### ***2.1.2 European Settlement and Subsistence***

There is variable evidence for the beginnings of European settlement and farming in the study area. Historic survey plans offer some information and there is also limited documentation of historic structures and early settlers who took up larger tracts of land for farming and other purposes.

#### **European Settlement and Subsistence: Paekakariki Area**

Plans of land north of Paekakariki show surveyed parcels, with owners' names indicated. Whilst surveyed parcels of land do not necessarily denote farming activity, it is reasonable to speculate that purchasers might have wanted to start working their land and making money off it as soon as possible. Figure 7 shows subdivided sections of the Whareroa and Wainui Blocks as in 1859.

There were a number of farmers who took up land in the area and The Cyclopaedia of New Zealand carries an entry for the son of such a one: Paul Lynch, a Sheepfarmer at "Emerald Glen." The entry notes that Lynch had been a settler in the district for 30 years (the entry dates to 1897) owning 1500 acres.<sup>15</sup> A website for the Emerald Glen Lodge notes "The first homestead was built on the bush clad property of "Emerald Glen" in the 1850's by Paul Lynch's father Captain Lynch. Trees were felled and pit-sawn on site to provide the timber for the home. The bricks for the chimney were also fired on site."<sup>16</sup>

At MacKays Crossing, Arthur MacKay and his brother farmed on the plateau above the railway crossing that bears their name. This area was known as Te Ramaroa and was first leased to the MacKays by Maori in 1876.<sup>17</sup>

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<sup>15</sup> Cyclopaedia of New Zealand, 1897: 1083

<sup>16</sup> [www.emeraldglenlodge.co.nz/lynch.html](http://www.emeraldglenlodge.co.nz/lynch.html)

<sup>17</sup> Macmorran, 1977:98

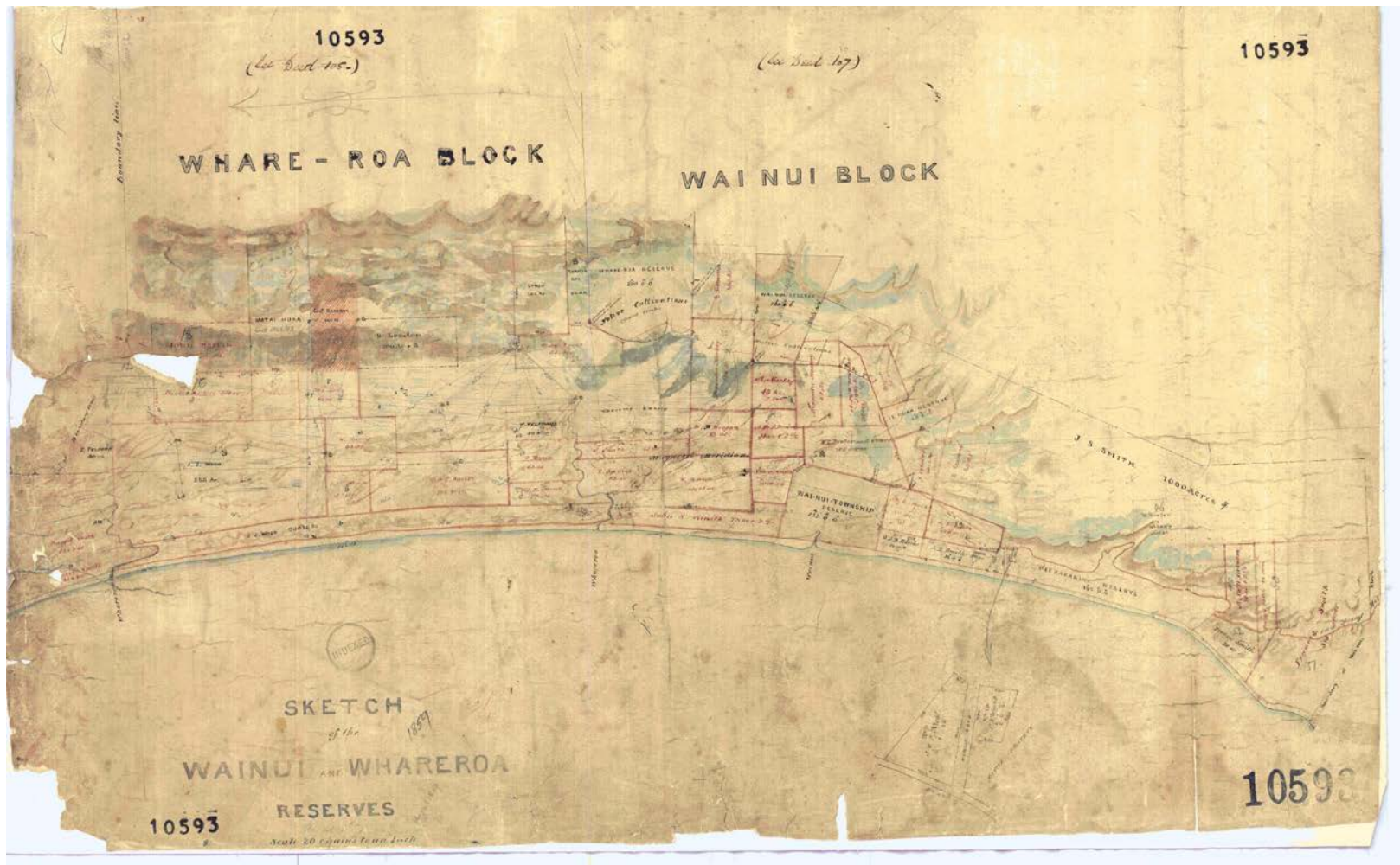


Figure 7: SO 10593, land north of Paekakariki, 1859

Quickmap

A key event in the development of the Plimmerton area in European times was the construction of the Wellington-Manawatu railway line. The line was opened in 1886, and access to the seaside resorts at Plimmerton, Paremata, Titahi Bay, and Pukerua Bay increased for Wellingtonians. The line was laid through what was the former site of Taupo kainga.

With the arrival of the Europeans, Taupo was renamed Plimmerton, after John Plimmer, known as the “Father of Wellington”<sup>18</sup>. John Plimmer was instrumental in the construction of the Wellington-Manawatu Railway line. This ran from Wellington along what is now the Johnsonville branch line, and north along the coast beside Paekakariki.<sup>19</sup> An historic railways plan (Figure 5 above) shows a railway station planned at Wainui, just north of Paekakariki. This was never built.

### **European Settlement and Subsistence: Paekakariki Hill Road Area**

The Transmission Gully route runs generally parallel to the Paekakariki Hill Road between Paekakariki and Pauatahanui. The Paekakariki Hill road was originally constructed as a military road in 1849<sup>20</sup> (shown on survey plan SO 10502, dating from the early 1850s-see Figure 9). Land either side was also surveyed for farming purposes. Until the coastal road was built in 1939, the Paekakariki Hill road, together with the railway (which opened 1886) was the main route north past Pukerua Bay.<sup>21</sup>

A map from 1849<sup>22</sup> shows that a number of farmers already worked the area with two runs each attributed to Yule and Compton, one run to Statton and one to Turnbull. Turnbull's run included the Battle Hill site and associated graves (Figure 8). In 1860 the bush covered land at the Battle Hill site at Horokiri was sold to the 62 year old Henry Abbott who set about clearing it and stocking it with cattle. On his death in 1882 the farm passed to his sons Roderick and Nicholas, and it remained with his family until 1975. Wellington Regional Council purchased the park in 1987, and now administers it as the Battle Hill Farm Forest Park. Henry Abbott, together with his son Henry and daughters Maria and Delia are buried at Battle Hill in a small graveyard, together with two of the three militiamen killed in the battle of 1846<sup>23</sup>.

Other farmers in the Paekakariki Hills area included Francis Wilson Smith, who came to New Zealand with his parents in the late 1840s. After serving in the militia, he was granted land at Horokiwi. Later his two younger brothers took up land at Paekakariki, and as Francis steadily increased his holdings, he and his brothers eventually farmed an extensive area from MacKays Crossing south over the Paekakariki hills to Horokiwi, and along the ridges to Pukerua Bay<sup>24</sup>. Some of the Smith holdings are noted in Figure 9.

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<sup>18</sup> Ibid

<sup>19</sup> O’Keeffe, 2008

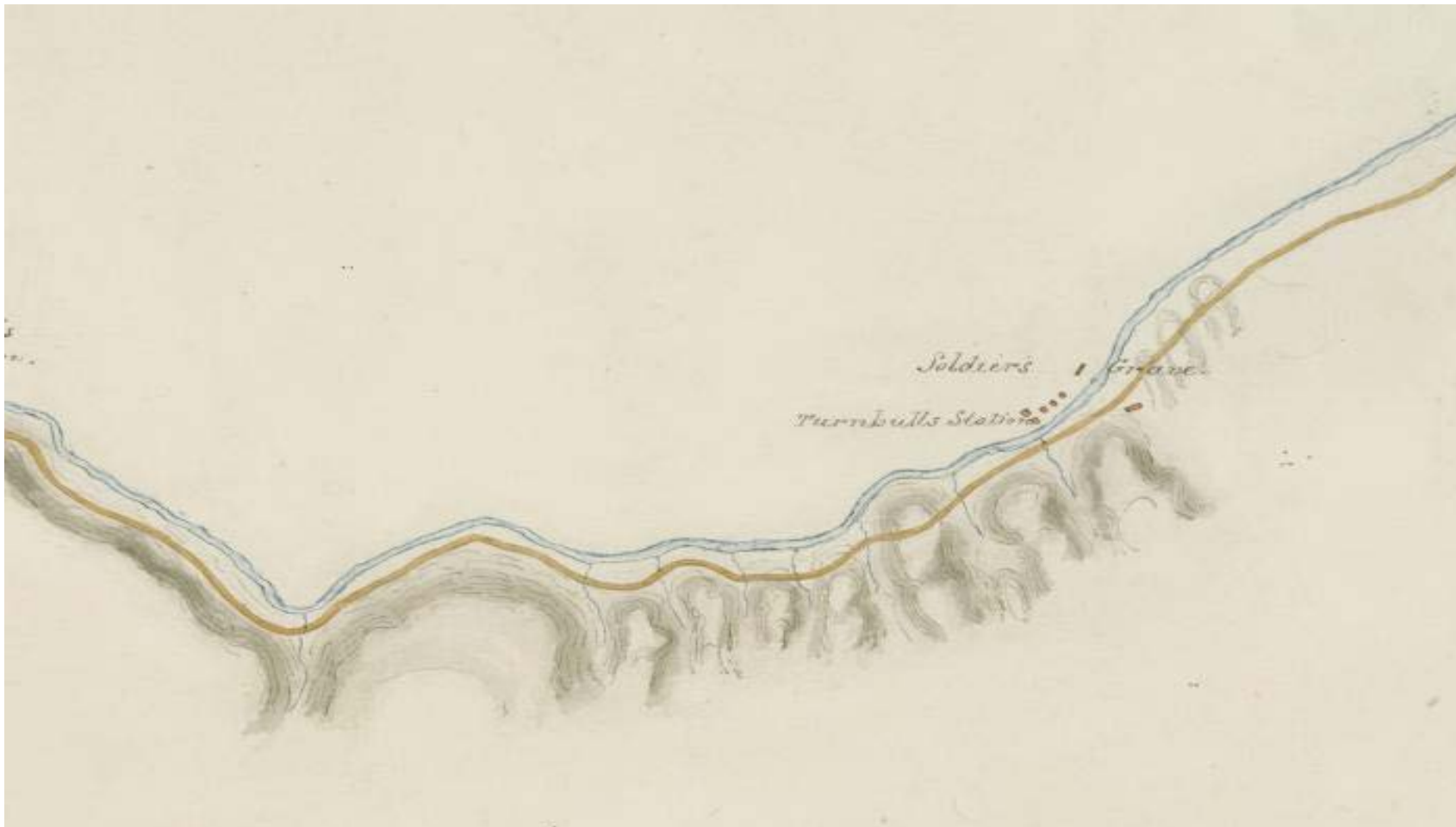
<sup>20</sup> Macmorran, 1977: 95

<sup>21</sup> Macmorran, 1977: 95

<sup>22</sup> H.A. Russell 1849

<sup>23</sup> [www.gw.govt.nz/History-2/](http://www.gw.govt.nz/History-2/)

<sup>24</sup> Macmorran, 1977:96



**Figure 8: Detail of North Road by A.H. Russel, 1849**

Alexander Turnbull Library MapCol-832.47gmbd



## European Settlement and Subsistence: Pauatahanui Area

The New Zealand Company purchased land around the Pauatahanui inlet in 1839. The intention was to build a village at Motu-karaka, surrounded by 100 acre country sections.

The first hotel was built in Pauatahanui in 1847, and several others followed. By 1855 Pauatahanui had three inns, stores, a post office, stables, sawmills, houses, and a church.<sup>25</sup> An interdenominational chapel was built by 1857, and a school was built by 1860<sup>26</sup>. This investment of time and money into local infrastructure indicated a growing population.

On 6 December 1856 Thomas Hollis Stace donated one acre to the Pauatahanui community to be used as the site for a Protestant chapel (which was also to be used as a school) and a burial ground. The chapel was located on the site of Matai-taua pa for use for all denominations of Protestant Christians resident in Pauatahanui and the neighbourhood up to a 25 mile radius. It was built in 1857 by William Blackie, who operated the Horokiwi Hotel in Pauatahanui. The chapel was also used as school rooms during the week until the Horokiwi and Pauatahanui Schools opened in 1860.<sup>27</sup>

By 1890 the chapel was too small and was in poor condition. After the construction of St. Alban's in 1895, the chapel continued to deteriorate. In 1908 the building was purchased and demolished by Matthew Moynihan, publican of the Pauatahanui Hotel, who used the timber to build a shed at the rear of his hotel.<sup>28</sup>

St Joseph's Catholic Church opened in April 1878. It was designed by Thomas Turnbull, a significant Wellington-based architect. St Joseph's is noted for the use of 'poor man's stained glass', a form of printed, coloured transparent paper, imitating the forms and colours of glass. Adjacent to the church is a graveyard where a number of early settlers to the Pauatahanui area are buried.

St Joseph's is significant as it is the oldest Catholic Church building still in use in Wellington and the first Catholic Church in the Porirua basin<sup>29</sup>.

St Alban's was the third church to be built in Pauatahanui, and was consecrated in 1898. It is located on the site of the pa Matai Taua, built in the 1840s by the Ngati Toa leader, Te Rangihaeata, nephew of Te Rauparaha. St Alban's church has served the Pauatahanui community for over 100 years. It has strong links to the early farming community of Pauatahanui, which raised the money for its construction. St Alban's has architectural significance as a well-resolved timber, Gothic church designed by Clere, Fitzgerald and Richmond, one of the most prominent architectural

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<sup>25</sup> Ibid: 14

<sup>26</sup> Sheehan, 1988: 9

<sup>27</sup> <http://www.pcc.govt.nz/About-Porirua/Porirua-s-heritage/Porirua-s-suburbs/Pauatahanui--Judgeford-and-Whitby/Historic-site--Matai-taua-pa--original-chapel-and-St-Alban-s#A%20new%20church,%20St.%20Alban%27s>

<sup>28</sup> ibid

<sup>29</sup> HPT register

practices in Wellington. Frederick de Jersey Clere (1856-1952) was a noted architect in Wellington and, from 1883, was Diocesan Architect of the Anglican Church<sup>30</sup>.



**Figure 10: View of St Alban's, Pauatahanui, c.1924**

Alexander Turnbull Library: APG-1302-1/2-G

Several early European buildings remain extant at Pauatahanui. The Taylor-Stace Cottage has great historical significance, as it is the oldest existing residence in the Pauatahanui district and possibly in the whole Wellington district. William and Anne Taylor arrived in New Zealand in 1840 and moved to Pauatahanui in 1847 where they constructed what is now the back portion of the cottage. In 1848 they moved to Tawa Flat and the house was eventually sold to Alfred Stace.

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<sup>30</sup> HPT register





**Figure 11: Taylor Stace Cottage**

Porirua Library Collection

As discussed elsewhere in this report, the site of St Alban's church has been a focus for occupation. Te Rangihaeata built his fighting pa, Matai-taua, on the site in the 1840s. A European military post was established on the same site in August 1846, shortly after Te Rangihaeata had abandoned the pa.

Historic survey plans reveal an aspect of the history of Pauatahanui not evident today. A small town was planned on the edge of the inlet: it was set out in 1841 and was to be named "Porirua". Survey plan SO 10413, shows the outline of the settlement, and the land parcels that had been purchased. Based on present-day Motukaraka Point, the town was to have a church and a Market House.

Survey plan SO 10505, (1852, Figure 13), shows parcels of land east of the Pauatahanui inlet, which have been surveyed off and sold. Whilst this does not indicate that farming had necessarily started in the area, it indicates the land had been sold, and thus is reasonable to assume that early farming followed soon after this.

SO 10956 (n.d., Figure 14) and SO 10655 (n.d.) also show surveyed land parcels and owners' names.



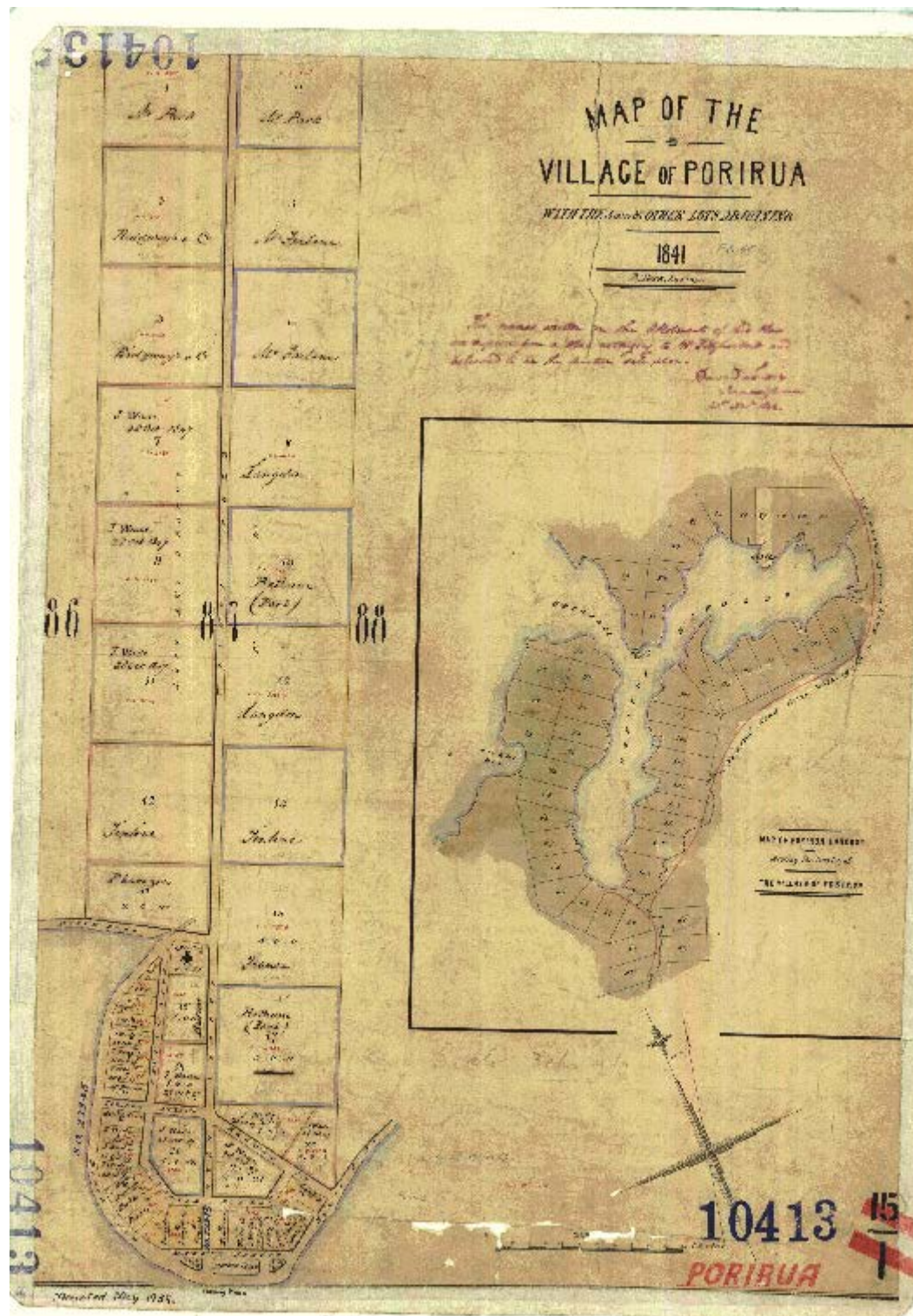


Figure 12: Detail of SO 10413, 1841

Quickmap

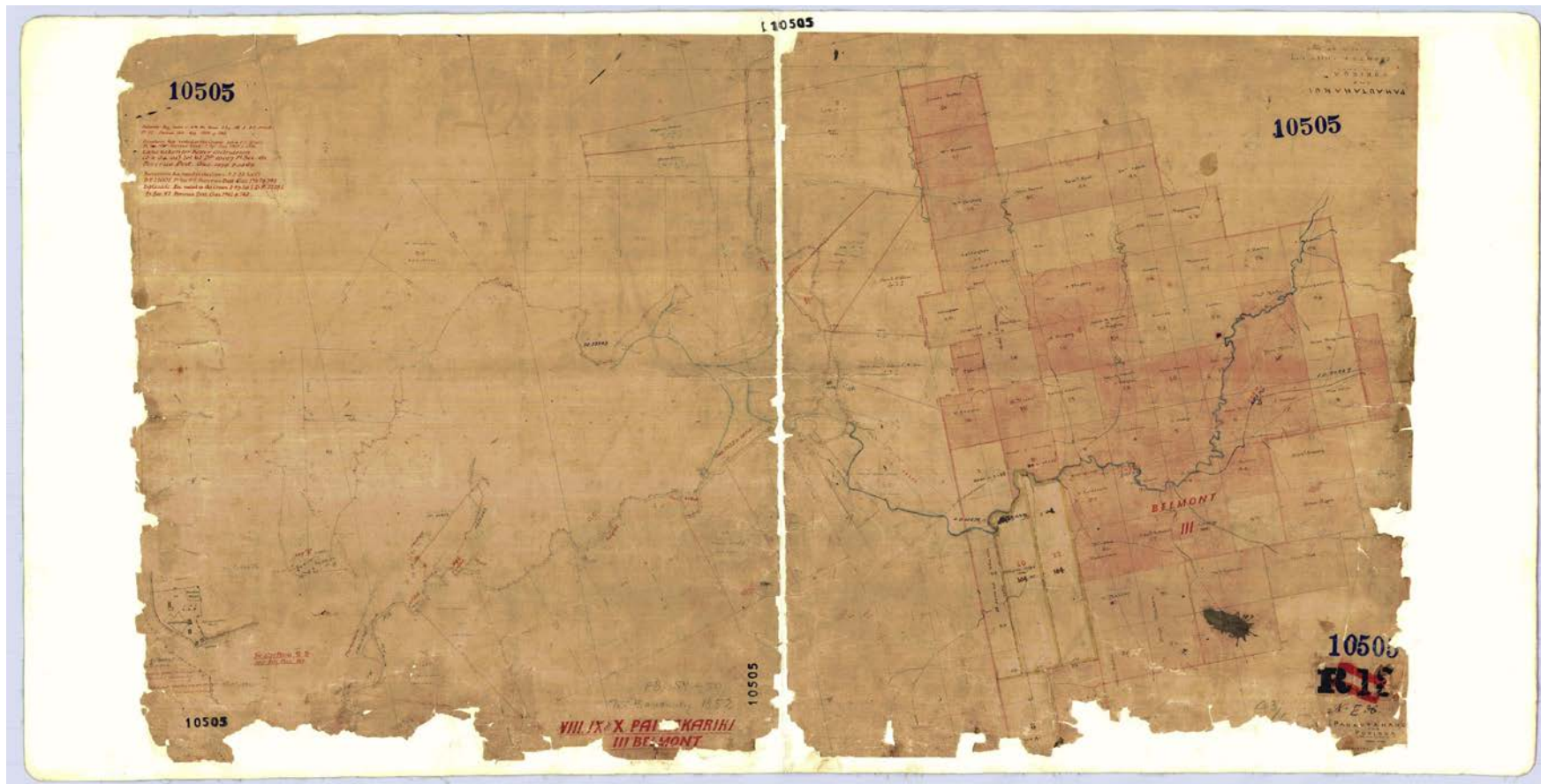


Figure 13: SO 10505, land around the Pauatahanui inlet, 1852

Quickmap



Other plans also show the location of a town planned at the southeast corner of the inlet. Detail from plan SO 12638 (1887, Figure 14) show the reserve for the town hall. St Peters Church and cemetery is also shown. The town hall site, plus a recreation ground, is seen on plan SO 17682 (1921).

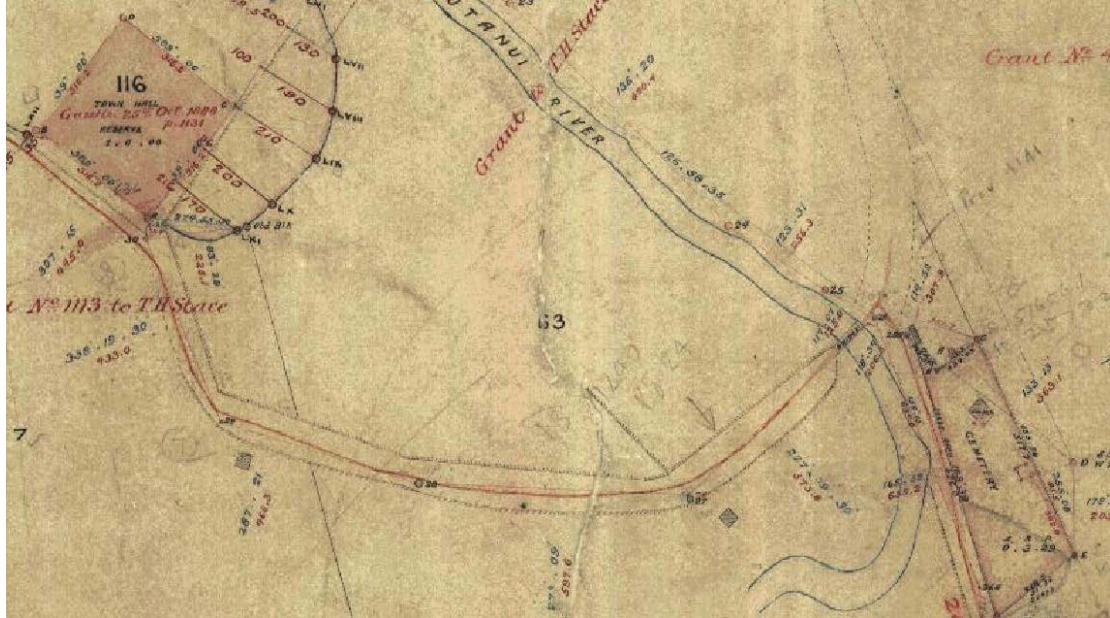


Figure 14: Detail from SO 12638, 1887

Quickmap



Figure 15: Pauatahanui around 1879 (Thomas Hollis Stace Cottage in background)

Porirua Library Collection

The Cyclopaedia of New Zealand mentions Europeans farming in the Pauatahanui area.

Charles Carter, Farmer, Pahautanui (sic). Born in Merton, Surrey, in 1846, Mr. Carter arrived in New Zealand in 1850. He devoted his attention to sawmilling, with sheepfarming as an adjunct, until a few years ago, when he relinquished the sawmilling, and gave his whole mind to sheepfarming. Mr. Carter is a very old resident of the district, having resided at Pahautanui (sic) for some thirty-seven years<sup>31</sup>.

Survey plans dating from the 1850s show surveyed parcels of land, with owners' names on them. An example is SO 10505, dating to 1852 (Figure 13), and showing land round the Pauatahanui inlet.

### **European Settlement and Subsistence: South of Pauatahanui**

As with Paekakariki, the Paekakariki Hill Road and the Pauatahanui area, the land situated to the south-west was subdivided as part of the New Zealand Company land purchases of the 1840s. Again, there are a number of significant historic survey plans that indicate some of the ownership history, and there are several families who have been long associated with the area. For instance, virtually all the land that forms modern Whitby was purchased from the descendants of Francis Bradey, an early settler. He first purchased 110 acres from the New Zealand Company in 1839 (near the Whitby Golf Course), soon adding several more 100 acres. At that time he was living on his town acre in Bowen Street, Wellington. He took possession of the estate in 1847, again purchasing more land.<sup>32</sup> The locations of Bradey's "section" and other early settlements can be seen in relation to the Pauatahanui settlement in Figure 17. This map indicates that although the settlers may have had holdings that extended to the south, their actual places of residence were close to the water.

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<sup>31</sup> Cyclopaedia Company Limited, 1897:1078  
<sup>32</sup> Macmorran, 1977:19-24.



**Figure 16: Detail of North Road by A. H. Russel, 1849**

Alexander Turnbull Library MapCol-832.47gmbd

Bradey's farm can be seen in Figure 17 which shows substantial buildings overlooking the Pauatahanui Inlet. Another painting made by Bradey in 1863 shows that there was a timber mill there at that time. This was operated by Messrs. Hurley and Carter. The timber for the mill came from the Duck Creek land and was used in the construction of Old St Paul's Church in Wellington. The Bradey family farmed the land known as the Duck Creek run until the 1960s.<sup>33</sup> Frederick Bradey, one of Francis' sons, is described thus in *The Cyclopaedia of New Zealand* of 1897:

This well-known and much respected settler, who was born in 1833 at Kent Road, Greenwich, England, came to the colony with his parents per ship "Adelaide" in 1840. His father, Mr. Francis Bradey, who died in 1872, was a settler in Wellington for many years. Brought up to a country life the subject of this notice settled in Pahautanui (sic) in 1855, taking up over 2000 acres of

<sup>33</sup> Porirua City Council [www.pcc.govt.nz/About-Porirua/Porirua-s-heritage/Porirua-s-suburbs/Pauatahanui--Judgeford-and-Whitby/Historic-site--Francis-Bradey-s-grave](http://www.pcc.govt.nz/About-Porirua/Porirua-s-heritage/Porirua-s-suburbs/Pauatahanui--Judgeford-and-Whitby/Historic-site--Francis-Bradey-s-grave)

land, then wholly, covered with bush. This fine property is now fully cleared and in cultivation and carries over 5000 sheep besides cattle and horses. <sup>34</sup>



**Figure 17: Duck Creek Farm by Francis Bradey, 1887**  
Porirua Library Collection

Others farmed the area, including Patrick Mungavin, who was born on the ship carrying his parents to New Zealand from Ireland in 1853. Mungavin inherited 365 acres east of the Porirua railway line. This property covered much of what is now Porirua East, extending north to Cannons Creek. <sup>35</sup>

Cannons Creek was mainly farmed by four families: the Sievers, Mexteds, Mahers and Windleys. The land was gradually taken for housing from the 1930s onwards <sup>36</sup>.

An important economic activity that took place to the east of the proposed alignment is logging. The area was logged in the 19<sup>th</sup> century, although no research has been undertaken into the timber industry in Wellington, and there is a marked lack of information on specific sites (Paul Mahoney, pers.comm. 2007). As a result, there was little documentary evidence for milling and logging sites within the designation. One site that has been documented was situated in the vicinity of Francis Bradey's Duck Creek run, south of the Pauatahanui Inlet. However the precise location of the site is not known (Paul Mahoney, pers.comm., 2007), and no evidence of the site was found

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<sup>34</sup> Cyclopaedia Company Limited, 1897:1078

<sup>35</sup> Porirua City Council [www.pcc.govt.nz/About-Porirua/Porirua-s-heritage/Porirua-s-suburbs/East-Porirua/Historic-site--Mungavin-Homestead-and-Gardens](http://www.pcc.govt.nz/About-Porirua/Porirua-s-heritage/Porirua-s-suburbs/East-Porirua/Historic-site--Mungavin-Homestead-and-Gardens)

<sup>36</sup> Porirua City Council [www.pcc.govt.nz/About-Porirua/Porirua-s-heritage/Porirua-s-suburbs/East-Porirua/History-of-Cannons-Creek](http://www.pcc.govt.nz/About-Porirua/Porirua-s-heritage/Porirua-s-suburbs/East-Porirua/History-of-Cannons-Creek)

during the field survey. From what is known about the 19<sup>th</sup> century timber industry, logging in the area is likely to have focussed on the gully bottoms, where trees would have been hauled down the slopes, and taken out either by bush tramways or bullock drays.



**Figure 18: Messrs. Hurley and Carter's saw-mill on Mr. Francis Bradey's run, "Duck Creek," Pauatahanui.**

From a painting by Mr. John Bradey, Levin (in 1926), of the original oil painting by Mr. Frank Bradey in 1863. Early Wellington, 1928

### ***2.1.3 Military Activities***

Military presence has been an aspect of the study area since the 1840s, when Te Rangihaeata built his fighting pa, Matai-taua, at Pauatahanui.

Between the Battle of Waiorua in 1824 and 1839 Ngati Toa secured certain land rights on the Porirua District and Kapiti Coast. As a consequence, when the NZ Company agents came to negotiate the acquisition of land in the area they dealt with Ngati Toa chiefs such as Te Rauparaha and Te Rangihaeata. Neither Te Rauparaha nor Te Rangihaeata viewed the 1839 Deed as a land sale transaction and the 1842-1843 Spain Commission found the NZ Company land sale claims to be invalid<sup>37</sup>.

Two significant sites on the coast at Plimmerton - Taupo Pa and Taupo kainga - have a direct bearing on the occupation of military sites at Pauatahanui. Both sites have a rich and significant history, and both were sketched by contemporary artists. Taupo kainga was probably founded between 1838 and 1841. Until 1846 it was the main kainga of Te Rauparaha, and thus was the centre of Ngati Toa influence<sup>38</sup>. The village was certainly occupied before the Wairau Affair of 1843, where a number of Ngati Toa and Europeans (armed constabulary) were killed in an armed encounter. After that incident large numbers of Ngati Toa returned to the wider Porirua area from the South Island for fear of reprisal attacks from settlers. Following the Wairau affair parts of the kainga were fortified<sup>39</sup>.

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<sup>37</sup> Bowman, 2005: 9

<sup>38</sup> Stodart, 2002: 26

<sup>39</sup> *ibid*





**Figure 19: Taupo pa, Lithograph by George Angas, 1844**

Alexander Turnbull Library: PUBL-0014-48

Te Rauparaha was living at Taupo kainga in 1846, when Governor George Grey arrested him on suspicion of a planned assault on Wellington. He was held without charge on the naval vessel HMS *Calliope*, for 10 months, and eventually returned to his people at Otaki in 1848. Te Rauparaha lived at Otaki until his death in 1849.<sup>40</sup>

The Wairau affair had a major influence on Ngati Toa. Te Rauparaha's nephew Te Rangihaeata and several hundred of his followers moved from Mana Island in 1843, and relocated to Taupo, where he built a fortified pa on the ridge north of the kainga<sup>41</sup>. The pa was occupied until about 1846. A wahi tapu was created above the pa and this remains today as an urupa and native reserve<sup>42</sup>.

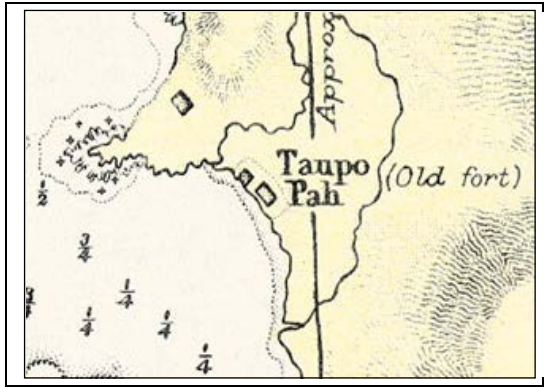
The government survey ship HMS *Acheron* sailed up the Kapiti coast in 1850. It recorded the kainga (although referring to it as Taupo Pah (sic)); it did not record the pa as presumably it had been abandoned by this time.

<sup>40</sup> [www.ngatittoa.iwi.nz/te\\_rauparaha.htm](http://www.ngatittoa.iwi.nz/te_rauparaha.htm)

<sup>41</sup> Ibid

<sup>42</sup> ibid





**Figure 20: Detail from Acheron survey**

Pataka Museum, Porirua

### **Construction of the Paremata Barracks**

In the Porirua area Te Rangihaeata reacted to the increased tension by disrupting road building and ejecting trespassing settlers. Governor Grey's response to growing Maori unrest was to have a strong military presence in the area, to protect European settlers, to cut off the escape route of Maori from the Hutt Valley, and to defend the back way into Wellington itself. Grey realised that Porirua was an important strategic point, and he stationed imperial troops in the area, and had the stone Paremata Barracks at Ngati Toa domain built by 1847.<sup>43</sup>

Poor quality building materials and the 1848 earthquake rendered the building unfit for occupation; the building was then used for a powder magazine. Three years after the last troops had left the area the 1855 Earthquake effectively rendered the barracks as unsuitable even for storage. The towers collapsed and the second floor was destroyed.<sup>44</sup>

A 1921 map of the Wellington Region (refer to Figure 21) shows the location of forts, stockades and the barracks as part of the region's defences. The "strategic triangle" of Fort Richmond in the Hutt, Te Aro Fort/Te Aro Barracks in Wellington, and Paremata Barracks in Porirua, with their linking stockades from Ngauranga, makes Grey's desire for a permanent military post at Porirua logical.<sup>45</sup>

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<sup>43</sup> Bowman, 2005: 9

<sup>44</sup> Bowman, 2005: 13

<sup>45</sup> Bowman, 2005: 11

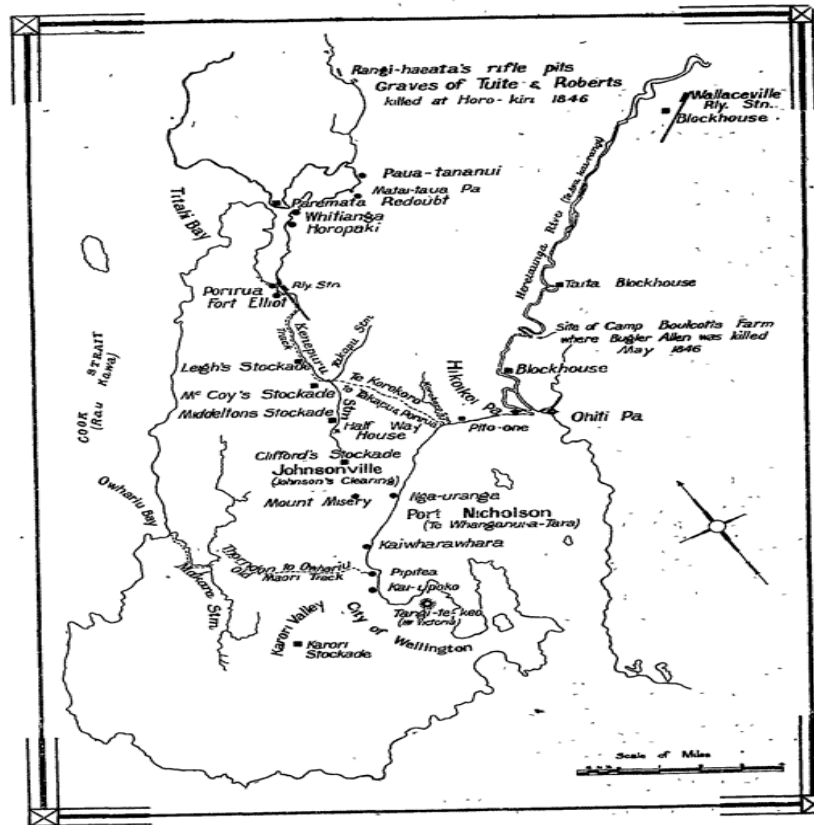


FIG. 1.—Map showing blockhouses and stockades of the Wellington district.

Figure 21: Map showing military blockhouses and stockades, Wellington district

Best 1921:15

### Battle Hill Skirmish

The growing tension in the 1840s between Maori and European land purchasers and settlers reached a peak in August 1846

Maori had been evicted from their lands in the Hutt Valley and Ngati Toa continued to resist growing pressure to sell their land. When the Imperial troops advanced from Paremata fortress to join the combined Militia and Maori contingent in the advance up the Horokiri Valley, Lieutenant De Winton occupied Matai-taua pa as a military post.

### Best records

This post was established at the Matai-taua *pa* at Pua-tahanui after its evacuation by the hostile Maori on the approach of the force of Militia and Maori auxiliaries from the Hutt in August, 1846. This force occupied the *pa* on the 1st August, Governor Grey arriving there in the afternoon of the same day, accompanied by Captain Stanley, of the "Calliope."

The post was situated on the spur on which the church stands at Pua-tahanui, just above the creek, and above the bridge. A rude sketch of the Maori *pa* appeared in a Wellington paper of that time, but the reproduction of the stockade is decidedly eccentric. A sketch in the writer's possession is much more reliable. The name Matai-taua is one of the few local names of which we know the origin.

This *pa* was built by the Rangihaeata when he retired from Motukaraka some months before. When the Imperial troops advanced from Paremata fortress to join the Militia and Maori contingent in the advance up the Horokiri Valley Lieutenant De Winton occupied the *pa* as a military post. On the 10th August he was reinforced by a detachment of police under Sub-Inspector Strode. In October, 1846, we find that the post was garrisoned by three officers and one hundred men of the 65th Regiment. These officers were Captain R. Newenham, Lieutenant T. F. Turner, and Assistant Surgeon T. E. White.

Best, 1921: 22-23

On the 10th August troops were reinforced by a detachment of police under Sub-Inspector Strode. In October, 1846, the post was garrisoned by three officers and one hundred men of the 65th Regiment. These officers were Captain R. Newenham, Lieutenant T. F. Turner, and Assistant Surgeon T. E. White<sup>46</sup>.

In 1848 Captain Russell and a detachment of the 58th occupied the post. They were engaged in roadmaking. The post was finally abandoned in 1850. Apparently the 58th advanced to this post in 1847, for a traveller passing down the coast in that year describes it as follows:—

“The strong *pa* of Pawhatanui (sic) (?) belonging to Rangihaeata, Rauparaha's fighting-man, had been seized the year before by our forces, and was now occupied by a detachment of the 58th. I stopped at the blacksmith's outside the *pa* to have the horse shod, before taking him on the hard metalled road into Wellington. During the process an officer happened to pass. We entered into conversation, and the result was that Captain R., the officer in command of the detachment (for he it was), invited me to pass the night at the *pa*. Mounting the hill on which it stood, we entered the gate.

“The strong palisade, about 15 ft. high, which surrounded the original *pa*, remained undisturbed, but nearly the entire space within was now occupied by neat wooden huts, painted blue and shingled. Captain R., with his wife, a lieutenant and the assistant surgeon, with their wives, and an ensign, formed the society of the *pa*, and a very lively and agreeable society it was. The ladies were all young and pretty, and on the best terms with each other; Mrs. R., with her frank gaiety, being the life and soul of the little party. As for the officers, they did not, with the exception of Captain R., get through their time so easily—in fact they were mortally bored. What, indeed, had they to do? The doctor, in that provokingly salubrious climate, had no patients to cure, and the subalterns, since the Maori war was over, had none but routine duties to perform, which on detachment service are usually light enough. There was no hunting, and nothing to shoot but parrots, pigeons, and tuis. However, they did what they could; they fished and boated, pulled down almost daily to Paremata Point, where there was a detachment of the 65th, to compare notes with the major and the ensign, the latter of whom ingeniously contrived to kill a good many

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<sup>46</sup>

Best 1921:22

hours in the education of a talking tui, and laid schemes for obtaining leave to go to Wellington, which was another London or Paris to an unfortunate subaltern buried in the bush at Pawhatanui (sic).”

Best, 1921: 22-23

A plan of the pa shows its complexity (see Figure 22).

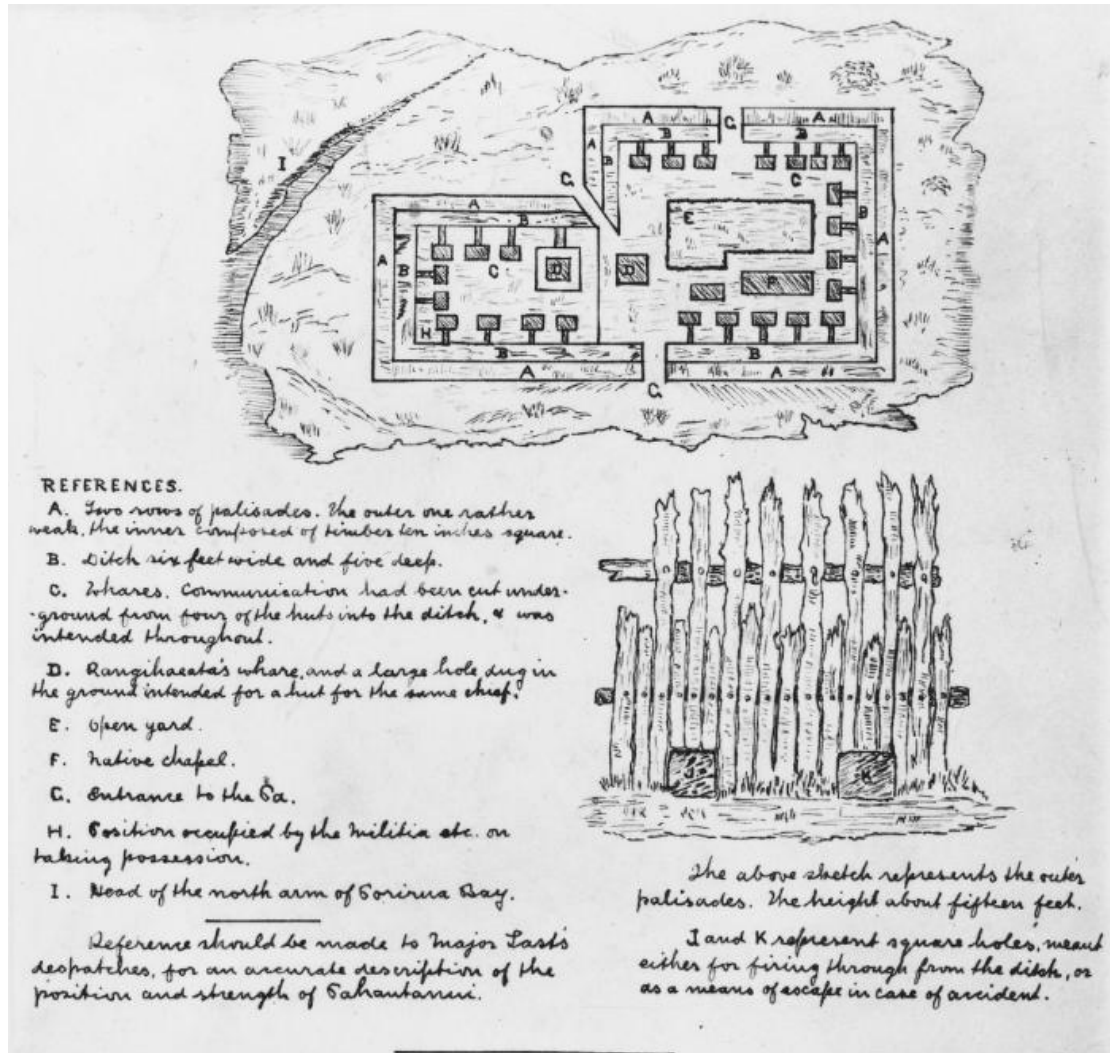


Figure 22: Ground plan of Rangihaeata's pa at Pauatahanui, 1846

Alexander Turnbull Library NON-ATL-0070

As well as fortifying Porirua with troops and the fort, Governor Grey planned to kidnap Te Rauparaha from his Pa in Plimmerton, and then launch a second-phase attack on Te Rangihaeata and his Ngati Toa and Ngati Rangatahi allies<sup>47</sup>.

In early August 1846 a group of around 500 British troops, police, militia and Te Atiawa allies joined forces to converge on Te Rangihaeata's pa at Pauatahanui. Finding it deserted, they pursued him through dense forest up the Horokiri Valley to what is now Battle Hill Farm Forest Park<sup>48</sup>.

<sup>47</sup> www.gw.govt.nz/History-2/

<sup>48</sup> ibid

Te Rangihaeata had built a temporary pa on an almost unassailable razorback ridge near the summit of Battle Hill. (The archaeological detail of the Battle hill site is discussed in section 2.3.2 of this report). On the morning of 6<sup>th</sup> August, the Government force attacked and tried to storm the pa. Return fire from Te Rangihaeata's men halted the attack, killing 3 Government soldiers.<sup>49</sup>

Irregular fire was maintained for several hours, and when it became dark the troops retreated. The following day, small mortars and ammunition were carried up from the Paremata fort and Te Rangihaeata's forces were shelled for most of the day of 8<sup>th</sup> August. Most of the troops retreated to Pauatahanui on 10<sup>th</sup> August.<sup>50</sup>

On 13 August, Te Rangihaeata quietly abandoned his position and travelled north, taking his force with him. Te Rangihaeata never returned to the Wellington area, and lived out the remaining 10 years of his life at Poroutawhao, north of Levin.

Demoralised and devoid of the leadership and protection of their two principal chiefs, Ngati Toa finally conceded to Crown demands for the sale of their land. In return for a few thousand pounds and the promise of Te Rauparaha's release, the Crown extracted from Ngati Toa around 608,000 acres in the Wairau and 25,000 acres in Porirua, including what is now the Battle Hill Farm Forest Park<sup>51</sup>.

Relations between the Government and Maori continued to be unsettled, and a military garrison was built in 1847. Fort Strode was built at Motu-karaka, on the northern side of the inlet. Supplies for the garrison were brought in by boat and landed at Ration Point, just south-east of Motu-karaka. The military helped build a narrow road around the southern shores of the inlet, through Pauatahanui town and up the Horokiri valley to Paekakariki<sup>52</sup>.

### **World War II Military Presence**

A military presence was established again around the Pauatahanui inlet in 1939, when a military camp was built at Motu-karaka. About 5,000 men from the 10<sup>th</sup> Marines were stationed at the camp, which was called the Plimmerton Military camp<sup>53</sup>.

There was also a military presence at Paekakariki during WWII. The sandy beach and rural surrounds of Queen Elizabeth Park close to Wellington were an ideal training ground for American troops preparing to fight in the Pacific during World War II. The 1<sup>st</sup> and 2<sup>nd</sup> divisions of the United States Marine Corps were camped in or near the park between June 1942 and October 1943. Three camps were built: Camp Russell was located in the park beside the present day entrance at MacKays Crossing, Camp Mackay was located on the other side of State Highway 1 from Camp Russell, on land now occupied by Whareroa farm, and Camp Paekakariki was located at the southern end of the park, partially in what is now park land and partially in what is

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<sup>49</sup> Ibid

<sup>50</sup> Cowan, 1922: 128

<sup>51</sup> [www.gw.govt.nz/History-2/](http://www.gw.govt.nz/History-2/)

<sup>52</sup> Sheehan, 1988: 7

<sup>53</sup> Sheehan, 1988: 13

now Paekakariki township. The combined capacity of the camps was about 15,000 men.

The substantial camps were made of prefabricated buildings, and had streets, sewerage water supply and electricity. The camp that was situated on the MacKays Crossing plateau is shown in Figure 23. The proposed designation does not traverse either camp site (the Te Puka valley can be seen in the middle right of the photo).



**Figure 23: Detail of aerial photo of US servicemen's camps at MacKays Crossing, Nov 1943**

Alexander Turnbull Library PAColl-0783-2-0288

The three camps are outside the proposed alignment of the route. There is no surface physical evidence of each camp within the extent of the camp (there may be subsurface evidence). One feature associated with the camp which still survives is a brick fuel tank, constructed in the hills to the east of the camps. It can be seen in the

centre bottom part of Figure 24. This feature is not archaeological in the sense of the definition within the Historic Places Act 1993, as it postdates 1900AD, but Archsite allows post 1900 sites and structures to be added if archaeological techniques can assist in revealing their significance.



**Figure 24: Brick fuel tank, 1956**

Aerial photo Survey 1005 taken 29th Nov 1956, no. E-8

## 2.2 Archaeological Surveys

A number of archaeological surveys have been undertaken in the vicinity of the proposed route. These surveys are listed, and shown in map form. This data is important, as it determines where archaeologists have been, and thus whether gaps in the archaeological site data are a true absence of sites, or simply an absence of site surveying.

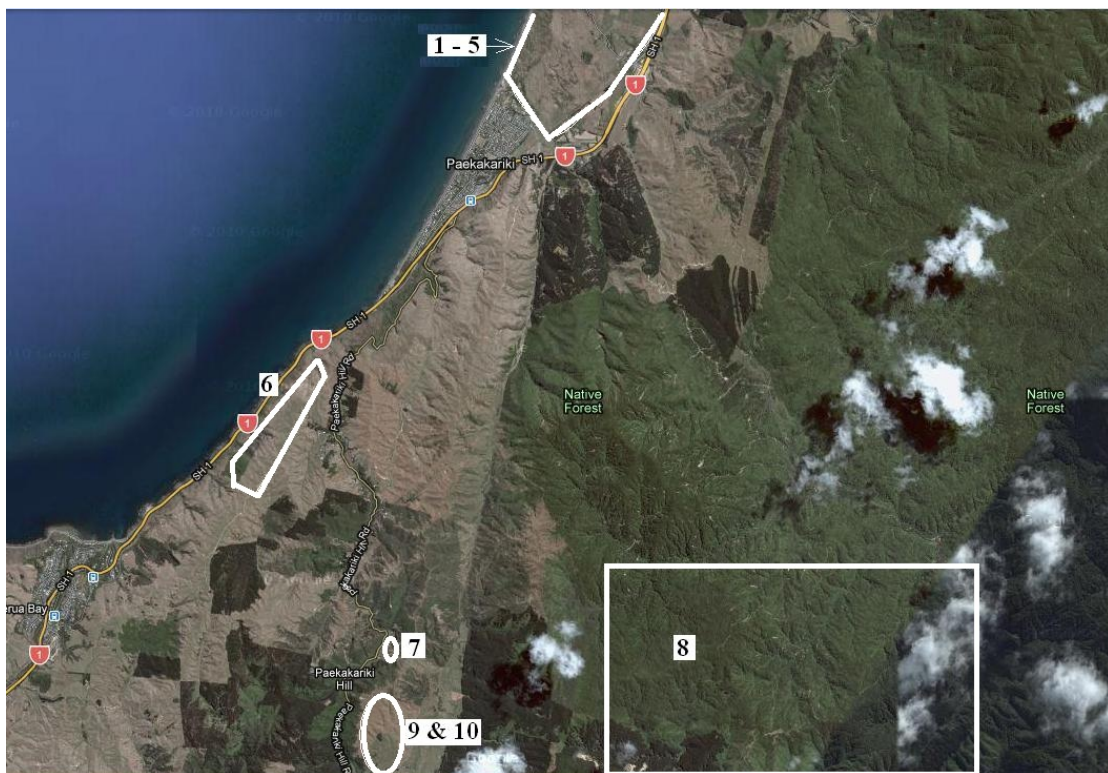
This section does not include more general historic sources: it is limited to specific archaeological surveys, where trained field observers were looking for archaeological features, and the work has resulted in a formal written report. Neither does it include opportunistic archaeological recording, by passing observers.

Locations of the surveys can be seen in Figure 25 and Figure 26. Numbers on the figures relate to survey numbers in the associated table.

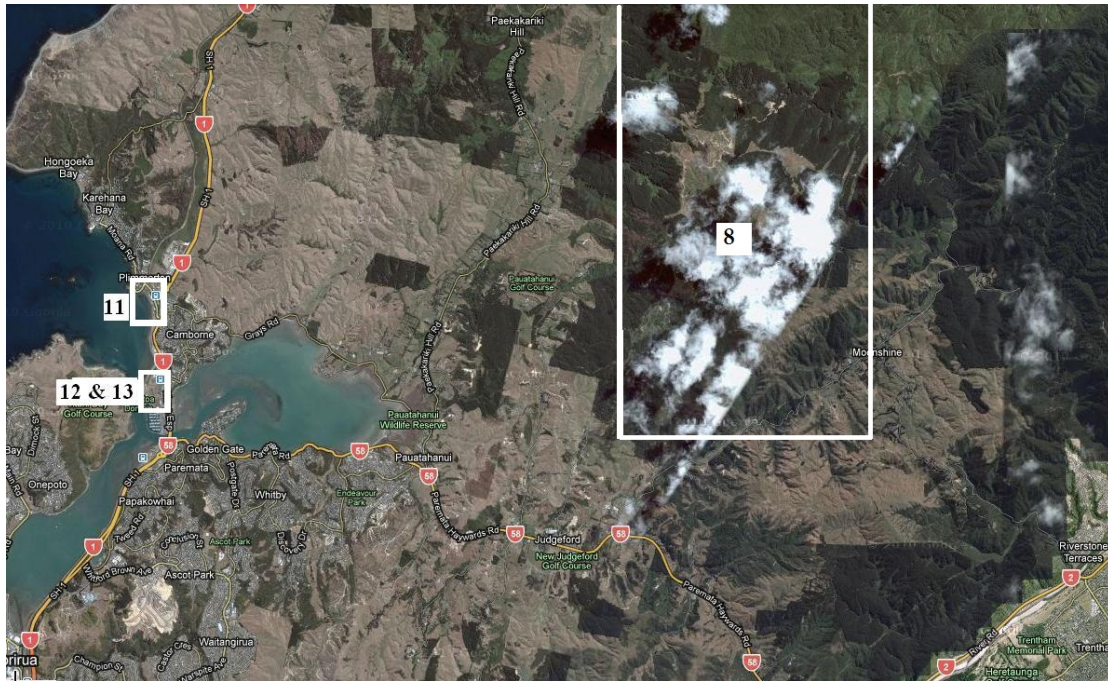
Number on Figure 25 and Figure 26	Author	Title	Date	Content/coverage
1	McFadgen, B	Archaeology at MacKays Crossing	2005	Archaeological monitoring of road construction, including physical layer associated with WW2 camps, and floor of historic (post 1900AD) stable
2	Forbes, S	Queen Elizabeth Park, Paekakariki : Archaeological Report	1998	Sites within park area
3	Forbes, S	Wainui, Queen Elizabeth Park, Paekakariki : Archaeological Monitoring for new toilet construction, Wellington Regional Council	2001	Monitoring specific area near Wainui pa within park
4	O'Keeffe, M	Draft text for Greater Wellington's Queen Elizabeth Regional Park Management Plan	2004	Physical sites within Queen Elizabeth farm park
5	Opus International Consultants	Archaeological Assessment Report: MacKays Crossing, Paekakariki, Transmission Gully 233PN	2007	Desktop assessment of known and potential sites within Queen Elizabeth farm park
6	O'Keeffe, M	Tunapo, 1227 Paekakariki Hill Rd, Paekakariki: Archaeological assessment of proposed subdivision. Unpublished report to Connell Wagner Consultants Ltd.	2004	Field survey of farmland at north end of Paekakariki Hill Rd
7	O'Keeffe, M	Blackies Woolshed	2008	Recording farm building
8	O'Keeffe, M	Puketiro windfarm: Archaeological assessment of proposed project	2009	Known and potential sites within Puketiro forest
9	O'Keeffe, M	Draft text for Greater Wellington's Battle Hill Regional Park Management Plan	2004	Physical sites within Battle Hill farm park
10	Opus International Consultants	Archaeological Assessment Report:	2007	Desktop assessment of known and potential sites within Battle



		Battle Hill, Paekakariki Hill Road, Transmission Gully 233PN		Hill farm park
11	O'Keeffe, M	Mainline Steam, Plimmerton: Archaeological assessment of proposed construction of new carriage building	2007	Known and potential sites in Plimmerton area, including Taupo pa and Taupo kainga
12	Bowman I, W Johnson & M O'Keeffe	Paremata Barracks Conservation plan	2005	Barracks building, including history & archaeology of site
13	O'Keeffe, M	Ibid Ngati Toa Domain, Porirua: Archaeological assessment of proposed foreshore enhancement	2007	Known and potential sites within Ngati Toa domain



**Figure 25: Archaeological surveys in vicinity of Paekakariki**



**Figure 26: Archaeological surveys in vicinity of Pauatahanui**

Figure 25 and Figure 26 show that the majority of surveys have been undertaken on or near the coast. However the survey for the proposed Puketiro windfarm (shown as 8 on Figure 25 and Figure 26) is significant, as it covers a large expanse of inland territory. The consultants for this project inspected most of the dominant ridges, and observed the steepness and inhospitable nature of the terrain. The internal territory in the wider area of the Transmission Gully route is similar in nature to the landscape at Puketiro.

Enough archaeological survey and recording has been undertaken in the wide Wellington/Kapiti Coast region to gain an understanding of the relationship between topography and settlement. Archaeological site distribution patterns show the vast majority of per European Maori sites in Wellington and the Kapiti Coast (and indeed through most of New Zealand) are on the coast or within 1km of it<sup>54</sup>. This reflects both the high reliance on the sea for subsistence, and the coast for access. Non sea-based subsistence activities, such as gardening or gathering forest resources, also occur in the zone within about 1km of the sea, based on site distribution patterns, and topography permitting these activities.

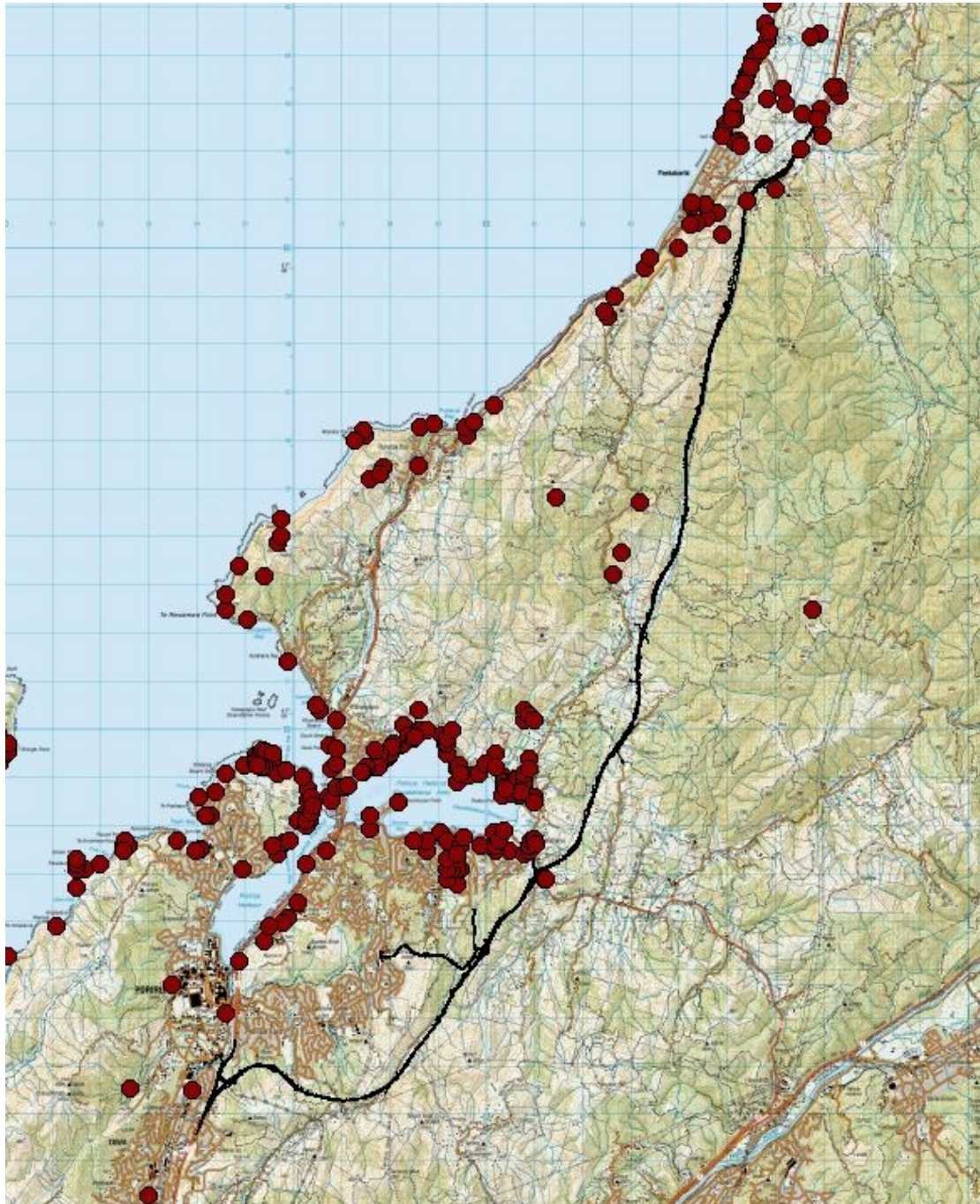
Thus it can be concluded that in general terms absence of recorded sites does reflect a true absence of sites on the ground, as opposed to absence of site recording activities.

<sup>54</sup> McFadgen, 2007: 123



## 2.3 Known archaeological sites

There are archaeological sites recorded within the immediate and wider vicinity of the planned route. Figure 27 shows the distribution of sites as at July 2011.



**Figure 27: Recorded archaeological sites in wider vicinity of planned Transmission Gully route**

Detailed data for this section was gained from Archsite, the on-line database of the NZ Archaeological Association, and from the site record forms containing detailed information for each site. The precise location and extent for each site was obtained

from the site record forms, to confirm there was no possibility of sites extending into the alignment.

It is noted that the NZ Archaeological Association site recording scheme is a database, as opposed to a statutory tool, and thus it can, and does, include records for sites that post date 1900AD, such as a brick fuel tank located within the alignment east of Queen Elizabeth Park (see section 2.3.1 below).

The sites in the wider vicinity of the proposed route are clustered in three main geographic areas: around the Pauatahanui inlet, along the Paekakariki Hill Road, and at Paekakariki. Within each of these areas, the sites present can be arranged by the three themes identified: Maori settlement, European subsistence and farming, and military.

The sites at each geographic area will be discussed in detail. The location of sites in relation to the proposed alignment was considered; whether sites were within the alignment or in close enough vicinity so as to be adversely affected by construction activities. “Vicinity” for this section was considered to be 200m proximity or less, as 200m would allow for demarcation of sites for avoidance.

### ***2.3.1 Paekakariki***

The area at the north end of the alignment follows the ridges and drops to the coastal dune flats of the Kapiti Coast. The Kapiti Coast has many pre-European Maori sites, as it was an area of rich resources: the sea provided much kaimoana, the swamps between the dunes provided flax, birds and eels, the more stable inland dunes were gardened and lived on and the hills behind the dunes provided strategic height and gardening soils. McFadgen<sup>55</sup> states the dunes “... are the single most important factor influencing land form; the age and distribution of vegetation, wetland and soils; and where the Maori lived in pre-European times. Understanding them is a prerequisite to understanding both the natural and cultural history of the region.”

Queen Elizabeth Park was also the site of the US marines camps during World War 2.

Figure 28 shows the recorded archaeological sites in the vicinity of MacKays Crossing and Paekakariki.

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<sup>55</sup> McFadgen, 1997:6





Figure 28: Recorded archaeological sites in the vicinity of Paekakariki

Site number	type/name	location	grid reference (NZTM)	description	HPT register number	TLA listing
<b>Maori occupation and subsistence</b>						
R26/180	Maori storage pits/midden	crest of ridge above Paekakariki	E 1764804 N 5460739	26 pits, spread over 600m	category 2 # 6138	B19
R26/181	pits	crest of ridge above Paekakariki	E 1764580 N 5460632	Rectangular pits	category 2 # 6139	-
R26/182	pits	crest of ridge above Paekakariki	E 1764367 N 5460520	four pits	category 2 # 6140	-
R26/270	pa	on spur of ridge above Paekakariki Hill Rd	E 1764241 N 5460466	transverse ditch along end of leading spur	-	-
R26/183	terraces	on ridge beside farm track, near Kapuni gas line	E 1764890 N 5460276	ten or more terraces	-	-

R26/146	Maori storage pits	on spur above & south of SH1	E 1765998 N 5461216	two shallow pits	-	-
R26/412	midden	Whareroa farm Park	E 1766991 N 5462319	lens of midden	-	-
R26/348	Urupa	Whareroa farm Park	E 1767331 N 5463145	private whanau urupa	-	B39
<b>Military</b>						
R26/415	fuel storage tank	beside farm track on Perkins farm	E 1765407 N 5460983	WW2 circular brick fuel storage tank	-	B87
R26/327	WW2 camp – Camp Russell	Coastal side of SH1, Queen Elizabeth Park	E 1766571 N 5462765	Site of Camp Russell	-	-
R26/329	WW2 camp – Camp McKay	On ridge above SH1 beside Queen Elizabeth Park	E 1766531 N 5462045	Site of Camp McKay	-	-
R26/343	Historic stable floor & building	Immediately beside SH1 in Queen Elizabeth Park	E 1766936 N 5462885	floor excavated and removed	-	B35

With the exception of site R26/415, no sites are within the alignment, or sufficiently close so as to be adversely impacted on.

### ***2.3.2 Paekakariki Hill Road***

As noted in section 2.1 of this report, military sites in the area date to the 1840s, during a period of unrest between European settlers and would-be land purchasers, and Maori. In the Wellington area, a key event in this unrest was the battle fought at Battle Hill.

There are two groups of archaeological sites in Greater Wellington’s Battle Hill Farm Park: the location of the military camp below the battle site (R26/326) beside the graves of the Abbott family and two of the soldiers killed during the battle (R26/325); and the site of the battle on the hill behind (R26/246).

The graves are located on the flat valley at the base of the ridge where the battle took place, beside the Horokiwi Stream. The graves are within two separate concrete structures; one large concrete enclosure contains two marble headstones, one for Henry Abbott d.1882, Delia d. 1877 and Maria d.1867, and a second is for Henry Abbott Jnr, d. 1883. A second low concrete mound carries a headstone to William Roberts and Thomas Tuite, who were soldiers.

The site of the battle is partway up the steep dominant ridge immediately north of the valley where the graves are located.

As noted Cowan (1969: 130-133) described the battle and its location. He states that the battle took place on a “...steep and narrow ridge...about three-quarters of a mile north of [Abbott’s] homestead...”.

Cowan describes several features on the landscape associated with the battle. He notes the leading spur up the ridge leads to the main ridge; this is the ridge the troops followed and the track today winds up and beside it.

The first feature is “A little distance up the ridge there is a trench or long rifle-pit, now more than half filled in and softly grassed; it does not run across the spur but almost parallel to it.”

The second feature is “Several hundred feet higher up...” where “...the knife-back...leads to the knoll in which the Maoris lay behind their...breastworks of earth and logs..... In a slight dip in the ridge a line of depression in the turf running partly across the narrow saddle is...the trench cut by the Government forces...”. This is about 300 feet below the fortified summit of the ridge. “A few yards onward the ridge rises into a small knoll; ...there is a rather steep ascent to the crest of Battle Hill...”.

Cowan describes a group of features on the summit of the hill, where “the face of the Maori breastwork was immediately on the south end of the crest...the trench and the shelter-pit dug immediately in rear of the parepare are [visible]. The ruined trench...is...about three feet deep, and its ditch-like terminal on the verge of the precipitous slope on the southeast side is well marked. The trench extends across the ridge a distance of 26 paces; it is roughly zigzag in outline and about its centre there is an advanced rifle-pit. Four paces in rear of the line of trench, at the north end, there is a grassy rua, a pit 9 feet long and 3 feet deep, occupying half the width of the ridge-crown. It was originally roofed over with earth and timber as a bomb-proof shelter”.

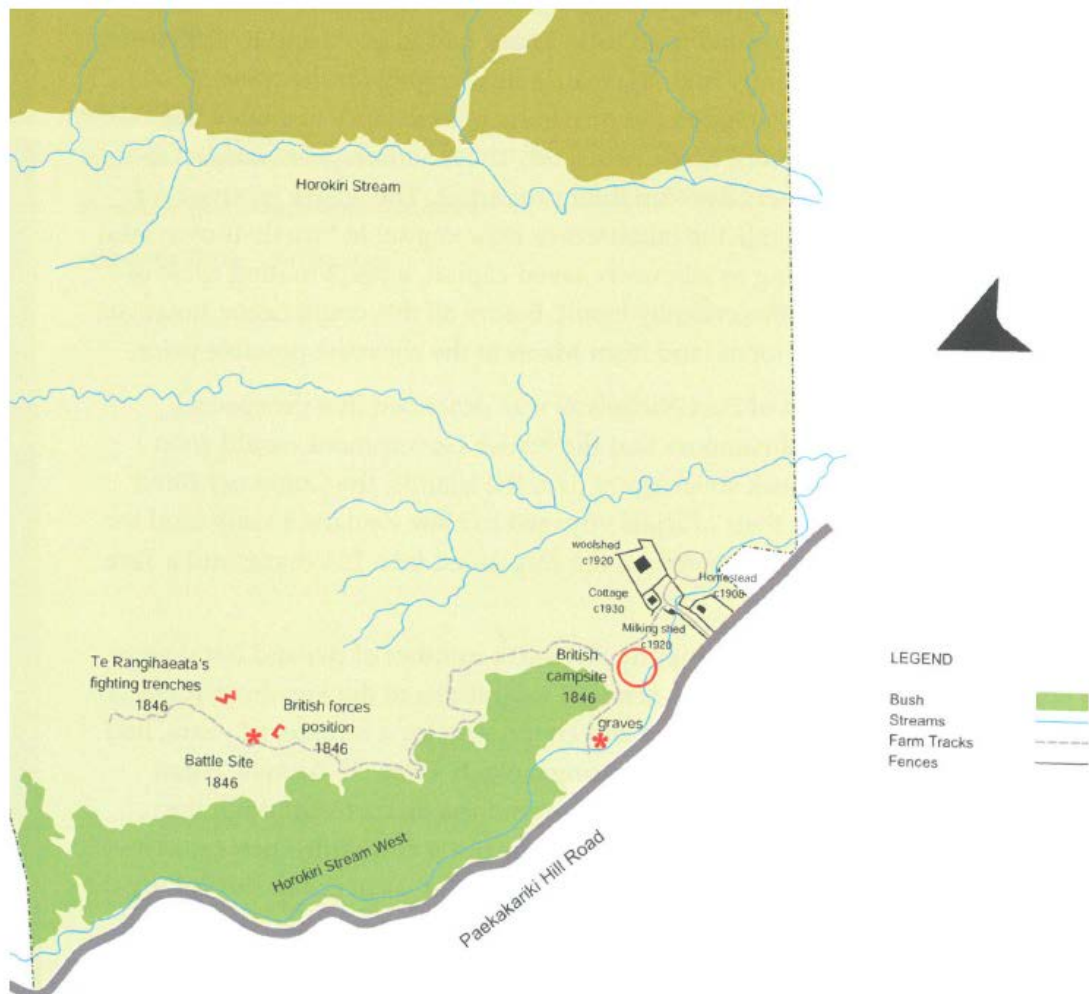
Despite Cowan’s description of the landscape and the features, interpreting the landscape and tying the landscape to Cowan’s description is difficult. However it should be remembered that the events described by Cowan took place nearly 160 years ago, and Cowan himself visited the site and described it over 80 years ago.

A trench can be seen today across the lower ridge, which could either be Cowan’s first feature, the “trench or long rifle pit” or it could be his second feature being the Government forces’ trench. This is located at grid reference E2672810, N6015298

The most obvious feature to be seen today is a zigzag trench cut along the line of the ridge, at grid reference E2672863, N6015383. This is on a high crest of the ridge, but is definitely not at the summit of the ridge, as is the zigzag trench described by Cowan above. The zigzag trench visible today has been cut through at its north end by the farm track; any sign of an “advanced rifle pit” about its centre that may have been present is obliterated. There is also no sign of the rua described by Cowan, and moreover there is little room for a rua of the dimensions noted by Cowan at this point of the ridge where the zigzag trench is.

There are no man-made features to be seen at the summit of the ridge, except for a large stone marking the battle.

Figure 29 shows the physical features at the Battle Hill sites:



**Figure 29: Historic features at Battle Hill site**

Battle Hill Farm Forest Park: Resource Statement. 2006.

All the recorded sites are located on a ridge parallel to and west of the route alignment, and thus are not within the alignment, or sufficiently close so as to be adversely impacted on (The ridge containing the sites is approximately 1km from the alignment). Conditions in the resource consent will cover procedures for physical demarcation to protect adverse impacts on these sites.

An additional site along Paekakariki Hill Rd, Blackie's Woolshed (R26/418), is a farming woolshed dating to the 1890s. There is also a gold mining site (R26/245), dating to the 1860s. In the Puketiro Forest to the east of the proposed alignment, is an historic quarry (R26/406). This was a source of crushed rock, presumably for early roading.

Figure 30 shows the recorded archaeological sites in the area of the Paekakariki Hill Road.



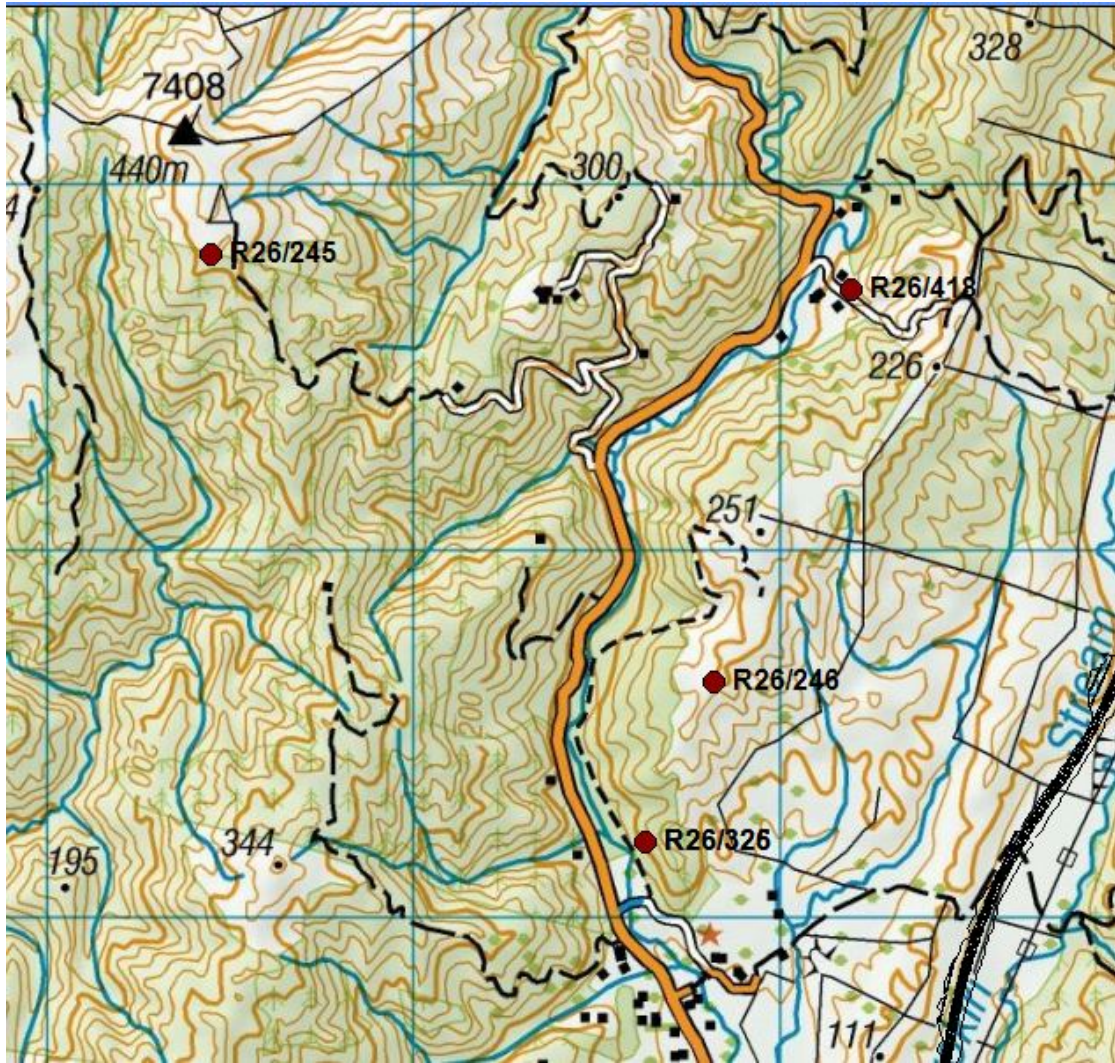


Figure 30: Recorded archaeological sites in vicinity of Paekakariki Hill Rd

Site number	type/name	location	grid reference (NZTM)	description	HPT register number	TLA listing
<b>Military</b>						
R26/325	European graves	Battle Hill site, Pauatahanui Hill Rd	E 1762632 N 5453208	Concrete enclosure containing graves of soldiers and settlers	-	JB 09
R26/326	Battle hill campsite	Battle Hill site, Pauatahanui Hill Rd	E 1762632 N 5453208	Campsite of government troops, before Battle Hill engagement	-	JB 09
R26/246	battle hill trenches	Battle Hill site, Pauatahanui Hill Rd	E 1762820 N 5453645	Battle hill battlefield and trenches	-	JB 09
<b>European settlement</b>						
R26/418	Blackie's woolshed	Paekakariki Hill Rd	E 1763196 N 5454712	Historic woolshed building	category 2 # 2883	JB 42

R26/245	Gold mining site	Paekakariki Hill Rd	E 1761449 N 5454808	series of drives and shafts	-	JC 02
R26/406	historic quarry	Cooks Rd, Puketiro Forest	E 1766910 N 5452245	Exposed quarry face	-	-

No sites within this section of the proposed route are within the alignment, or sufficiently close so as to be adversely impacted on.

### ***2.3.3 Pauatahanui Inlet***

Not surprisingly, the area around the inlet contains many sites. It was an area rich in resources for early Maori, and also provided easy access to the sea, and thus up and down the coast. The same ease of access applied to early European settlers.

There are numerous midden sites located around the edge of the inlet, reflecting the richness of the sea-based resources available to the Maori occupants.

Figure 31 shows the recorded archaeological sites on the east side of the inlet, nearest the road alignment.



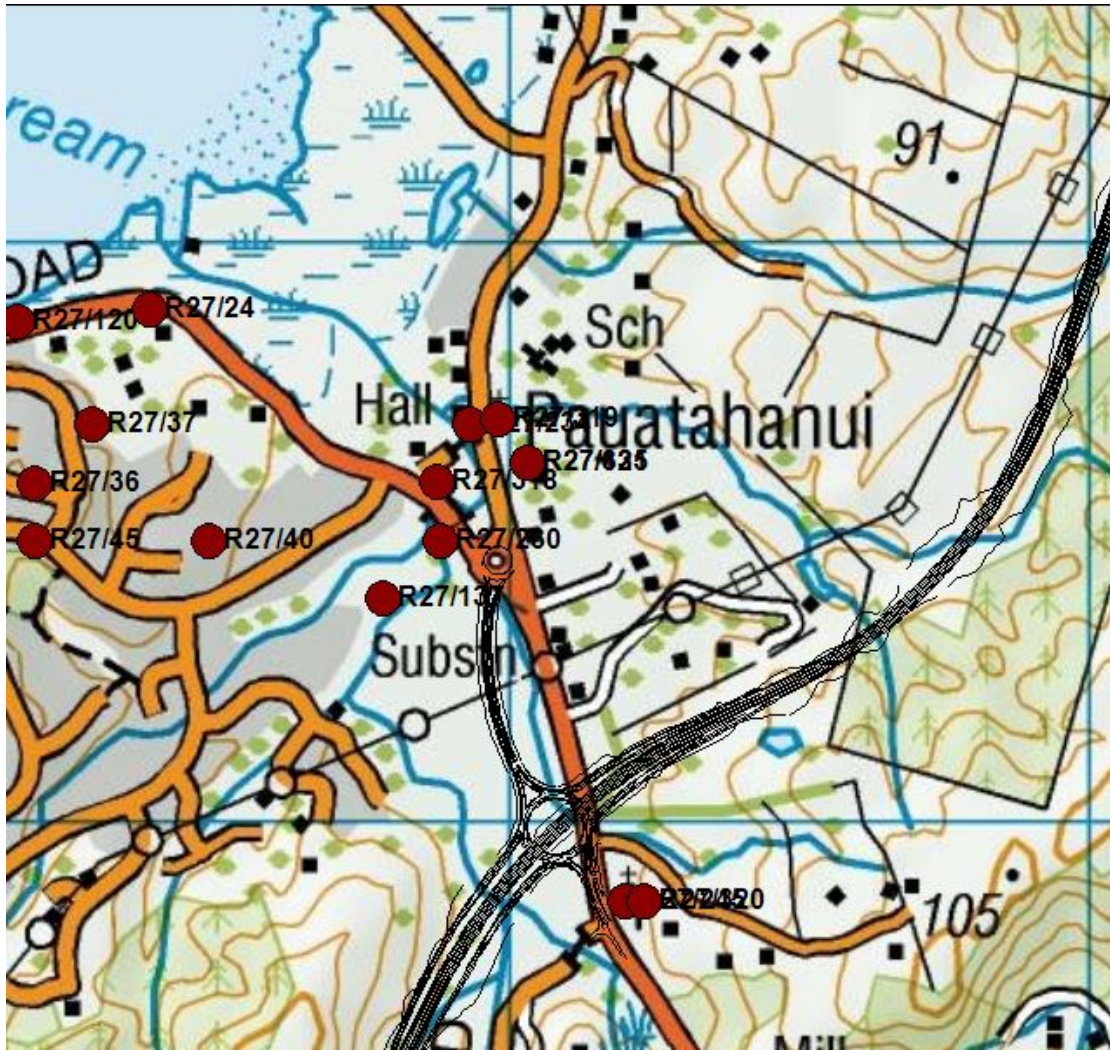


Figure 31: Recorded archaeological sites on east side of Pauatahanui inlet

Site number	type/name	location	grid reference (NZTM)	description	HPT register number	TLA listing
<b>Maori occupation and subsistence</b>						
R27/234	middens	In bank of new bridge, by SH58 roundabout	E 1760930 N 5447686	Three small middens	-	-
R27/245	midden	In shallow cutting beside door to St Josephs church	E 1761198 N 5446865	midden in section	-	-
R27/137	midden	In exposed bank beside Pauatahanui stream	E 1760780 N 5447368	midden in section	-	-
R27/230	pits	south of Paremata Rd, near SH58 roundabout	E 1760880 N 5447468	Three pits	-	-
<b>Military</b>						
R27/135	Matai Taua pa	just north of SH58	E 1761031 N 5447620	Pa site, ditch remnants and midden	-	JB 22

		roundabout, grounds of St Albans				
<b>European settlement</b>						
R27/320	St Josephs church	beside SH58, opposite Bradey Rd	E 1761230 N 5446865	Church building	category 1 # 205	JA 02
R27/319	Thomas Hollis Stace cottage	Beside Paekakariki Hill Rd, just north of SH58 roundabout	E 1760978 N 5447697	two storied cottage	category 2 # 4106	JB 23
R27/318	Taylor Stace Cottage	Beside unused section of Paremata Rd	E 1760874 N 5447588	single story colonial cottage	category 1 # 4108	JA 01
R27/321	St Albans church & graveyard	Just north of SH58 roundabout	E 1761031 N 5447620	Wooden church, and surrounding graveyard	category 2 # 1320	JB 22

No sites within this section of the proposed route are within the alignment, or sufficiently close so as to be adversely impacted on.

St Josephs Church (R27/320) and the midden immediately beside it (R27/245) are about 200m from the alignment; however the church and midden are elevated on a rise above the alignment. Conditions in the resource consent will cover procedures for physical demarcation to protect adverse impacts on these sites.

### ***2.3.4 South of Pauatahanui***

As indicated in the previous sections of this report, there are no recorded archaeological sites in the southern section of the planned Transmission Gully Route. This section of the road passes through largely undeveloped land to the south of Porirua harbour, west to SH1 near Linden. Various link roads and interchanges are also planned for this area at Waitangirua, Warspite and Kenepuru. As Figure 32 indicates, there are no previously recorded archaeological sites in this section, apart from the Maori cultivation noted by Adkin near Takapu Road<sup>56</sup>, discussed in section 2.1.1 of this report. It is possible there was sawmilling in this area, but there is no historical or archaeological evidence of it.

<sup>56</sup> Adkin, 1959:125



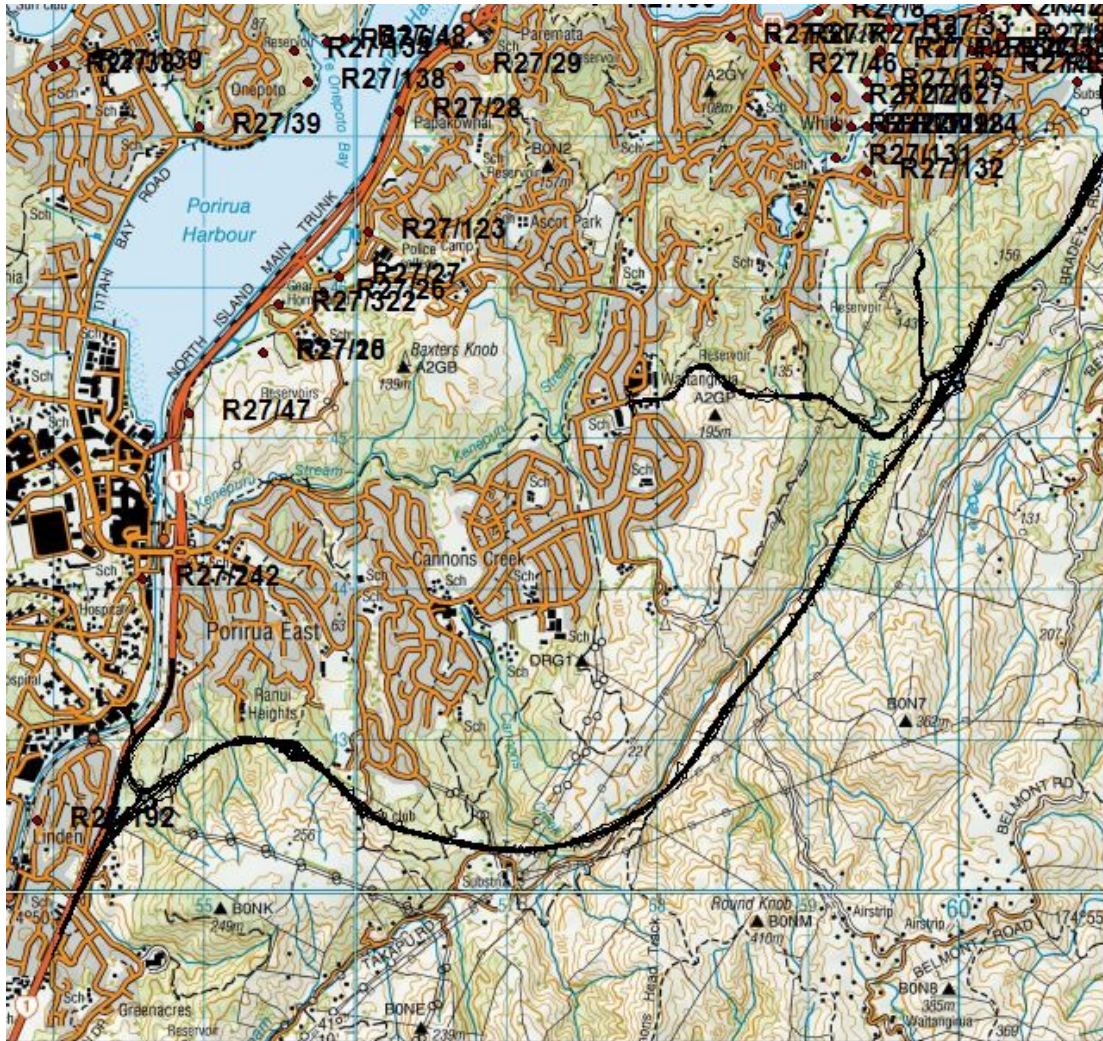


Figure 32: Recorded archaeological sites south of Pauatahanui Inlet

No sites within this section of the proposed route are within the alignment, or sufficiently close so as to be adversely impacted on.

**2.4 Road section assessments**

The detailed descriptions of the road sections are set out in section 1.3 of this report.

Section 1: MacKays Crossing

This section is approximately 3.5km long, and extends from the tie-in at the existing MacKays Crossing interchange on SH1 to the foot of the Te Puka Stream valley.

*Archaeological sites present:*

None recorded within alignment. Military camp on ridge above and to east; sites within Queen Elizabeth Park to north. Brick fuel storage tank within alignment – this is not archaeological, in the sense of the definition contained within the Historic Places Act 1993. It is, however, covered by the broader heritage provisions of the Resource Management Act 1991.

## Section 2: Wainui Saddle

This section is approximately 2.9km long, and extends from the foot of the Te Puka Stream valley to the south side of the Wainui Saddle.

*Archaeological sites present:*

None recorded

## Section 3: Horokiri Stream

This section is approximately 2.5km long and extends from the south side of Wainui Saddle to the northern end of Battle Hill Farm Forest Park.

*Archaeological sites present:*

None recorded

## Section 4: Battle Hill.

This section is approximately 3.9km long, and extends through Battle Hill Farm Forest Park, and neighbouring rural land.

*Archaeological sites present:*

None recorded in alignment. Battle Hill site on adjacent ridge, and other sites in valley west of Battle Hill ridge.

## Section 5: Golf Course.

This section is approximately 3.1km long, and extends from north to south through rural land adjacent to the Pauatahanui Golf Course and Flighty's Road.

*Archaeological sites present:*

None recorded

## Section 6: State Highway 58.

This section is approximately 3.0km long. It extends through rolling rural and rural residential land north of SH58, crosses SH58 and a low-lying estuarine plain associated with the Pauatahanui Inlet, then climbs the moderately-steep, weathered greywacke terrain to the south.

*Archaeological sites present:*

None recorded in alignment. St James Church and recorded Maori midden in close vicinity.

## Section 7: James Cook.

This section is approximately 1.8km long. The route flanks a significant tributary of Pauatahanui Stream adjacent to Bradey Road, rising to a saddle with the Duck Creek valley.

*Archaeological sites present:*

None recorded

## Section 8: Warspite.

This section is approximately 4.6km long. The route runs along the eastern side of Duck Creek valley, and across an undulating, weathered greywacke plateau between Duck and Cannons Creeks.

*Archaeological sites present:*

None recorded

Section 9: Linden.

This section is approximately 3.4km long. The route continues from the Cannons Creek area along the moderately steep northeast- and then northwest-facing flanks of a broad ridge top, crosses a number of steep gullies, and ends in the gentle slopes of the Porirua Stream Valley at Linden.

*Archaeological sites present:*

None recorded

## 2.5 Site visits

The consultants made a site visit on 9 February 2010, accompanied by the Transmission Gully project team. The entirety of the route was driven or viewed insofar as was possible.

Specific areas were viewed in greater detail than others. Based on the preference for coastal locations seen in the wider distribution pattern, greater attention was paid to the northern end of the proposed route near Queen Elizabeth Park, and the section of the alignment near the Pauatahanui inlet, as it was determined that sites were more likely to be present in these locations. Therefore the central inland parts of the proposed alignment were viewed during a drive-by visit, but were not surveyed in detail.

The consultants specifically viewed several locations; the ridge of MacKays Camp above State Highway 1, the brick fuel storage tank (R26/415) and some historic farming buildings at Perkins' Farm, and the ridge adjacent to the Battle Hill site. The consultants recorded the fuel tank during this visit, with the purpose of adding it to Archsite.

In addition, the consultants made an independent visit on 16 February 2010, to the Pauatahanui area to specifically view the locations of known sites and buildings, in relation to the location of the planned alignment, to verify site location in relation to the alignment. Additional details about the Taylor Stace Cottage, the Thomas Hollis Stace cottage and St Josephs Church were also recorded, with the intention of adding these sites to Archsite.



## 3. Assessment

### 3.1 Potential archaeology of development area

There are no known archaeological sites or features within the proposed road alignment.

As this report details, the area in the vicinity of the planned Transmission Gully route was an area of early settlement and subsistence from early times. Both Maori and Europeans have settled and lived along the coast or beside the Pauatahanui inlet, with the ease of movement and access to resources that these locations provide. Equally the planned Transmission Gully route follows areas of natural valleys and low ridge passes. European roads often follow the route of early Maori tracks, for two reasons: human instinct seeks out the easiest, least exhausting route, and once a route is established it is easier to use an existing route than to find a new one. Whilst no known Maori track follows the proposed route of the Transmission Gully road, it is possible that this was a route for Maori accessing forest resources, as it follows a relatively easy route, and links two areas of settlement.

Therefore, there is the potential for further, unknown and unrecorded archaeological sites along the alignment of the proposed road. These may be of either Maori or European origin.

This potential is considered reasonably low for two reasons:

- The areas of most intense settlement at either end of the route (Paekakariki and Pauatahanui) have been intensively surveyed by archaeologists (see Figure 25 and Figure 26);
- The pattern of site distribution shown in Figure 27 shows that the vast majority of recorded archaeological sites are on or near the coast. As discussed in section 2.2 of this report, the majority of systematic archaeological surveys have also been done near the coast, with the exception of one inland survey for a windfarm.
- The wider pattern of site distribution in the Wellington area also has the vast majority of sites on or near the coast. This is mainly due to both topographic constraints, and subsistence preferences for coastal locations;
- Based on the apparent coastal preference, the actual route up the valley and over the ridge may have been an early foot track for Maori, but use is likely to have been transient, making it less likely that archaeological remains would be present there.

However, given the intensity of settlement on different parts of the route (Paekakariki, Paekakariki Hill Road, Pauatahanui in particular), and also the large extent and scope of the proposed work, the possibility of further, unknown archaeological sites being identified and affected cannot be ruled out. For this reason a precautionary approach is advised.

## 4. Conclusions and recommendations

The planned Transmission Gully road runs from Linden in the south to MacKays Crossing in the north.

It passes close to several areas with rich and diverse human history: the Pauatahanui Inlet, the Paekakariki Hill Rd and Paekakariki and its environs. These areas all contain a number of recorded archaeological sites that fall into three themes: Maori settlement and subsistence, military history, and European settlement and subsistence.

Numerous archaeological surveys have been undertaken, both specifically along the road alignment, and within its general and immediate vicinity, however, there are no known archaeological sites within the proposed road alignment itself. One historic feature which is located within the alignment, a brick fuel storage tank, is not an archaeological site in terms of part 1 of the HPA, and consequently no statutory recommendations can be made in relation to it.

The probability of further, unknown archaeological sites being located within the alignment is considered low. This supposition is based on several strands of evidence:

- Previous archaeological surveying and documentary research suggests a strong preference for coastal locations for pre European Maori and early European settlers, based on the richness of coastal resources for subsistence, and ease of access along the coast;
- The vast majority of recorded archaeological sites within the wider Wellington/Kapiti Coast region are located on or very near the coast. The majority of the route is well inland;
- Where the route is near the coast or harbour edge additional archaeological site visits have been made to check for the possibility of additional unrecorded sites being present;

However the presence of further unrecorded sites cannot be categorically ruled out. In addition, there are known archaeological sites in moderately close proximity to the proposed route. The nature of these sites, especially those of pre European Maori origin, means there is the possibility of further subsurface features, and thus unknown and unrecorded archaeological sites being in the vicinity.

Because of these two factors: proximity of recorded archaeological sites and the potential subsurface nature of the sites, the consultants recommend that NZTA takes a precautionary approach, and applies for an authority under Section 12 of the HPA to modify, damage or destroy archaeological sites. Section 12 of the Act is a general authority, and the act states:

“12. Application for general authority to destroy, damage, or modify archaeological site

(1) Any person wanting to destroy, damage, or modify the whole or any part of—

- (a) All archaeological sites within a specified area of land; or
- (b) Any class of archaeological site within a specified area of land,—

may, instead of making an application under section 11 of this Act, make an application under this section for the grant of a general authority under section 14 of this Act.

(2) Subsection (1) of this section applies notwithstanding that some or all of the sites or possible sites within the specified area of land have not been recorded or otherwise previously identified.

(3) Sections 11(2), 11(3), and 14 of this Act shall apply with the necessary modifications to an application for a general authority made under subsection (1) of this section.”

Section 12 of the Act is appropriate given the circumstances of the potential archaeology of the Transmission Gully alignment, because no known sites have been recorded or observed, but the consultants acknowledge the possibility of unknown sites being present and adversely impacted upon.

It is advised that the NZTA applies to the Historic Places Trust for an authority under Section 12 of the Historic Places Act 1993 to modify, damage or destroy archaeological sites within the alignment of the proposed Transmission Gully road.

The following conditions for the authority are recommended:

1. That an archaeologist be on call for all surface clearing, trenching, construction or other invasive subsurface groundwork required for all aspects of road construction.
2. If potential archaeological material is encountered work must cease immediately in the vicinity of the find, and the archaeologist and iwi (if appropriate) be contacted. Work should not recommence until the archaeologist indicates it is appropriate to do so. The archaeologist should be given the opportunity to examine any archaeological deposits disturbed by the development work, and to make recommendations for further detailed examination of these deposits where appropriate.
3. A full archaeological briefing should be given to all site crew, including all subcontractors as to the possible nature of potential archaeological material, and procedures if material is encountered.
4. An archaeological management plan should be written to detail process and contacts, in the event of potential archaeological material being encountered
5. Artefacts and material uncovered and recorded during site clearing work should be lodged with an appropriate repository. Any associated costs for processing, cataloguing and conservation of artefacts and materials will be the responsibility of the authority holder.

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