Tiwai Peninsula

preliminary cultural significance report





January 2021

Introduction

This report provides a summary of collated reports, newspaper articles, and New Zealand Archaeological Association records relating to the cultural significance of Tiwai Peninsula.

Archaeological investigations of the peninsula show that Māori first inhabited Tiwai Point from around 1300, with peak occupation from 1400 to the mid 1600s. It is estimated that occupation ceased in the mid 1700s. Pre-colonisation, Māori occupation of Tiwai Point lasted approximately 450 years in total.

Tiwai Point was utilised by Māori as a prime location for the production of stone tools. Southland argillite was used to manufacture a variety of adzes, which were highly prized and widely dispersed as tools of choice for Māori of southern Aotearoa. Adzes made from Southland argillite were used for moa hunting, sealing, the hunting of smaller birds, and fishing.

Key archaeological work relating to the removal of artefacts was undertaken during 1968 and 1969. There was a sense of urgency to remove artefacts and to learn as much as possible about the site before construction of the Tiwai Aluminium Smelter began. The smelter opened in 1971.

Timeline of key events post public announcement of the planned smelter:

1961 – first public knowledge that Colmalco planned to build an aluminium smelter at Tiwai Point. At this time the Tiwai Peninsula was surveyed by archaeologists for sites of significant cultural interest. Unfortunately their lack of findings led them to conclude that the peninsula had been an 'occupation site' but that any artefacts had been washed away by the sea.

May 1968 – Staff from the Southland Museum discovered an early Māori 'workshop' at Tiwai Point

August 1968 – second major excavation of Tiwai – salvage operation

November 1968 – further salvage work

1969 – ongoing excavation work and ecological studies

Context and disclaimer

It was announced on 14 January 2021 that the Tiwai Smelter will close in 2024¹. The smelter is sited on one of Aotearoa's most important archaeological sites in terms of understanding early Māori culture. This report is a draft collation of documented evidence of the cultural and archaeological importance of Tiwai Point. It is intended to be a 'living' document that will be updated as more documentation and evidence becomes available to the authors.

Following on from this initial collation will be a more detailed study of the cultural and archaeological importance of Tiwai Point. This will be published as a separate report.

Document history

Version: 1	Status: Preliminary
Date: January 2021	Disclaimer: This report has been prepared in good faith within the limitations of the information available at this time.

¹ <u>https://www.rnz.co.nz/news/national/434490/tiwai-point-aluminium-smelter-to-keep-operating-until-end-of-2024</u>

Key Reports

1967-68 Southland Museum Annual Report

(one page - see Appendix A)

On the 3 May 1968 staff from the Southland Museum discovered an early Māori 'workshop' at Tiwai Point. Around 600 articles were collected, most of which were adze and adze making tools. It was ascertained that this site was a large adze-making 'workshop', producing tools in large quantities. Staff estimated that the site was abandoned approximately 200 years ago.

"... the bulk of the adze found are in the rough-shaping stage, indicating a well organised, highly skilled workshop on the site of the raw material – (a type of argillite)."

1969 – Tiwai Point Maori Site by A. J. Mackenzie (Director: Southland Museum) (one page – see Appendix B)

A.J. Mackenzie (Director of the Southland Museum) described Tiwai Point as one of the most important in the country in terms of understanding early Māori culture.

The site was deemed so important that it was a national effort to excavate the site before construction of the Smelter commenced. Mackenzie reports that approximately 3,000 articles were removed from the Point, to be housed in the Southland Museum. Artefacts included adze blanks, flakes and hammer stones.

"The Bluff Harbour area has been the site of Maori occupation for many hundreds of years, as further fieldwork by the Southland Museum has revealed a stone quarry and other sites previously unknown."

1969 – Archeaology at Tiwai Point: A preliminary report to the Southland Museum Trust Board (Inc) by G. S. Park (Otago Museum) (4 pages – see Appendix C)

G. S. Park describes the history of events regarding the archaeological excavation of Tiwai Point. He states that it first became public knowledge that Comalco wanted to build an aluminium smelter in 1961. At this time the Tiwai Peninsula was surveyed by archaeologists for sites of significant cultural interest. Unfortunately their lack of findings led them to conclude that the peninsula had been an 'occupation site' but that any artefacts had been washed away by the sea.

It was not until 1968 that it was realised that the Peninsula was indeed a site of significant stone working and possible habitation and that many artefacts still remained. The Otago Anthropological Society undertook subsequent excavations on behalf of the Southland Museum.

The excavation dates and sites are detailed in this report.

Park reports that in April 1969 the remains of an adult Māori woman were disturbed by a bulldozer. The body was removed to be studied at the Dunedin Medical School with the understanding that it be re-buried at Tiwai.

Published Journal articles and thesis

1969 – Tiwai Point expedition by E. Freeborn

Published in: New Zealand Archaeological Association. 1969. Volume 12. Page 141-143

Freeborn attended the excavation expedition that took place from 3-16th August 1968. He describes the expedition in terms of weather, dig conditions and itinerary. Only a very brief description of articles found is given, including moa toe bones, shells, and argillite flakes at one site.

See Appendix E for full report.

1969 – Tiwai Point – A Preliminary Report by G. S. Park

Published in: New Zealand Archaeological Association. 1969. Volume 12. Page 143-146

This paper seems to be a formalised version of the report given to the Southland Museum Trust Board (see above). In this version Park provides a map of Tiwai Point, showing the lagoon and Argillite 'hill', and approximate location of the smelter. Park also provides illustrations of stone workings. This report does not mention of the remains disturbed (as described in the report to the museum trust board).

See Appendix F for full report.

1969 – Ecological Method and Theory: Tiwai Peninsula by Gillian Hamel

Published in: New Zealand Archaeological Association. 1969. Volume 12. Page 147-163

This paper describes the Tiwai Peninsula in terms of its ecological characteristics that help with the understanding of how early Māori lived and interacted with their environment. Excavation of midden sites included:

- Shell: cockle, pipi, cats-eye (mollusc), paua and oyster
- Bone: Moa (vertebrate and foot bones), seal, dog, rat, sea birds (petrels and shags), bush birds (kereru and parakeet), and fish

Hamel notes that with regard to the seabirds, both petrels and shags were likely to have suitable nesting sites on the Bluff Peninsula. Petrels could also have colonies at Tiwai Point, and sooty shearwaters (titi) from Bluff Hill, where nesting sites were recorded by Beattie (1944).

The presence of bush birds was intriguing and no bush was present in the 1960s. Hamel states that "...all the food species so far recovered from the midden could have been gathered within a mile of the site (with the possible exception of the Spotted Shags)."

Hamel notes that during her visit to the Tiwai Peninsula in April 1969, she found evidence of the former presence of lowland podocarp forest. Small stands of Hall's totara (*Podocarpus hallii*) were recorded during Hamel's visit. It is possible that fire destroyed the forest on the peninsula:

"There are historical records of purposeful firing of the vegetation".

"The mosaic of manuka scrub, Coprosma scrub and Coprosma-tussock associations (both tall and short tussock) on the western tip of the peninsula suggests a long history of fire induced associations."

This explains the change from a forested environment to a scrub-dominated ecosystem.

Hamel states that rabbits were introduced to Bluff in 1864 and that Tiwai Peninsula was very heavily infested with them until 1955 when the local Rabbit Boards was formed.

See Appendix G for full report.

1978 – Radiocarbon dates from Tiwai Point, Southland by G.S. Park

Published in: New Zealand Archaeological Association. 1978. Volume 21. Page 143-165

"Preliminary analysis of material recovered from the site suggested a moa-hunting, fowling, sealing economy, based on exploitation of the local argillite rock resources."

Park describes a resurgence in interest in the excavated material from Tiwi in 1976. Results for six radiocarbon analyses are given. Results of botanical analysis are also given for five samples, which reinforce Hamel's view that the peninsula had been forested when occupied by early Maori.

See Appendix H for full report.

Appendix D contains a list of artefacts located at the Southland Museum and Art Gallery.

2009 – Jennings, C. G. The use of Southland Argillite in New Zealand Prehistory: Distribution, Chronology and Form. A thesis submitted for the degree of Master of Arts, University of Otago, Dunedin. July 2009.

This thesis explores the use of six major sources of Southland argillite in New Zealand prehistory. The research investigated the use of the stone in terms of both extraction and manufacture technologies, but also its geographic distribution and the time periods it was in use.

The following is taken from page 4:

In 1968 a salvage excavation was undertaken at Tiwai Point by Park, prior to the construction of the Comalco Aluminium Smelter (Park 1969). Two major areas designated B and X were dug at the site. **Area B** was around 115 square metres and was interpreted as a working area. This area was associated with a number of fire features and exhibited evidence for the deliberate heating of argillite rocks. **Area X** had an extent of approximately 150 square metres and revealed a series of discrete working floors with large flake concentrations. This was associated with a dense midden deposit. Unlike Riverton and Wakapatu, a wider range of stone materials were found. Among the few artefacts from Tiwai Point were a finished adze, chisels, a minnow lure shank, a bait hook and drilled centres of one-piece fishhooks. Ornaments were also found, including small pendants, a serpentine cloak pin and a worked dentalium shell (Park 1969). Hamel (1969) supplemented the preliminary report on the Tiwai Point excavation with an ecological study of vegetation and faunal resources local to the Tiwai Peninsula. The site was interpreted to have had one layer of occupation and radiocarbon dates were later produced for the site (Park 1978).

The Tiwai Point lithic material from Area X was later revisited in 1978 by Megan Huffadine, who examined the use of the flaked material at the site (Huffadine 1978). Huffadine used hand- specimen analysis to identify argillite from the site to sources from the Tiwai Peninsula, other areas around Bluff Harbour, and Mokomoko Inlet. She determined that different manufacturing activities were occurring at specific areas within the site. Huffadine also showed that refurbishment of broken adzes was undertaken at the site and noted the opportunistic use of cobbles and ventifacts for adze manufacture (Huffadine 1978: 59).

The fauna from Tiwai Point was used by Sutton and Marshall (Sutton and Marshall 1980) as part of an investigation of coastal hunting in the subantarctic zone. Live weights were calculated for the principle meat sources, showing predominance in seal, followed by moa, mutton-bird and other varieties of bird. Dog, fish and shellfish were also present in the midden. A range of different seasonal indicators for all seasons were present at Tiwai Point and the authors suggested year-round occupation. This conclusion challenged Higham's (Higham 1976: 230) earlier conclusion that Foveaux Strait sites were vacated during winter months.

From page 70:



Figure 5.7. Terrestrial radiocarbon dates associated with Southland argillite.

This figure shows that peak occupation of Tiwai Point occurred from about 1400 to the mid 1600s, with occupation ceasing in the mid 1700s. Occupation lasted about 450 years in total.

From page 68:

Studies of human colonisation and early anthropogenic environmental impact in New Zealand support an initial settlement around the thirteenth to mid-fourteenth centuries AD (Anderson 1991a; Lowe et al. 1998; McGlone and Wilmshurst 1999; Wilmshurst and Higham 2004). Nine sites provided terrestrial dates (Figure 5.7) almost exclusively from charcoal samples, which fall in or extremely close to a range within AD 1300-1450.

From page 92/92:

Higham and Coutts interpreted sites such Wakapatu and Tiwai Point as seasonal camps occupied in the warmer months for hunting, fishing and the production of stone tools (Higham 1968; Coutts and Higham 1971; Higham1976). However, Sutton and Marshall (1980) dismissed this at Tiwai Point and by extension the rest of Foveaux Strait. Whether seasonal or otherwise, the sites have been interpreted as restricted function camps (Anderson 1982a) which, along with the single purpose sites of the Riverton adze manufactory (Leach and Leach 1980) and Colyers Island (Bristow, Gillies and Gumbley 1985), were part of a wider exploitation territory.

From page 97/98 (conclusion of thesis)

Southland argillite was an important resource within the Murihiku region in the earliest phase of New Zealand prehistory. It was found throughout the Bluff Harbour area and near Riverton in the form of ventifacts, cobbles and outcrops. A wide variety of adzes could be manufactured from the stone, although some limitations were present depending on the stone variety and the form in which they occurred.

Hammer-dressing was an important part of the manufacture process using Southland argillite and hydrogrossular garnet was an important tool for this task. Although there is very little evidence for long-term sedentary settlement outside of the Otago coastline, some tentative interpretations can be made for the distribution of Southland argillite.

Southland argillite was dispersed throughout southern New Zealand, carried by mobile hunters and gatherers who exploited Central Otago, the Southland interior, eastern Fiordland, Foveaux Strait and its islands for a number of subsistence practices. The procurement of Southland argillite may have been an embedded activity in larger expeditions involving moa-hunting, sealing, other forms of fishing or hunting and the exploitation of other stone such as silcrete or porcellanite from the interior.

The Waitaki River mouth appears to be the northernmost location where Southland argillite adzes were densely concentrated, most likely cached by mobile parties using the site. Although less is known about Canterbury prehistory than Otago prehistory, Southland argillite is present in smaller numbers throughout this region, indicating relocation of people from the Otago region or some form of exchange between the people of both areas.

Very little is known about the prehistoric inhabitation of Stewart Island, though Southland argillite adzes may have been taken there on hunting expeditions or to be used at possible permanent settlements.

When transient villages fell out of use due to depleting food resources, subsistence strategies changed and Foveaux Strait, the Southland interior and Central Otago ceased to be major hunting destinations. With Foveaux Strait no longer being visited, the exploitation of Southland argillite also came to an end.

2020 - Jennings, C. and Weisler, M. I., 2020. Adapting Polynesian Adze Technology to New Raw Material at Tiwai Point, Murihiku, New Zealand. Lithic Technology.

DOI: 10.1080/01977261.2020.1782591

Abstract

The Tiwai Point site in Bluff Harbour, Murihiku (Southland) was occupied early in the first century of New Zealand settlement (~1300 AD). The site was the largest production center of Bluff argillite adzes that supplied settlements up to 500 km distant. This tough recrystalized mudstone was obtained from sources throughout Bluff Harbour and it presented new opportunities and challenges to pioneering Polynesian adze makers. Although suitable for producing Polynesian adze forms, it is tougher than tropical Polynesian basalts and required the development of novel manufacturing techniques. To understand these technological innovations, we produced 155 3D models of Bluff argillite adzes, preforms and blanks from the 1968 Tiwai Point excavation to model adze manufacture using various forms of the raw material. We found a heavy reliance on hammer-dressing as a practical means of working an unusually tough material with variable grain-size anda high potential risk of breakage.

The location of the major rock source is shown in Figure 1 below. Note that one of the main stone working sites is located in the Smelter landfill area.



Figure 1. Places mentioned in the text, the Greenhills Group geological formation and the major argillite source at Colyers Island.

Tiwai Point

The Tiwai Point site was located on the northern side of the Tiwai Peninsula, in a sheltered, flat area between Awarua Bay and a freshwater lagoon (Figure 1). The site was excavated as a recovery effort by G. S. Park prior to its total destruction during the construction of the Tiwai Point Aluminium Smelter, which opened in 1971. Nine weeks of excavation were undertaken during May, August, November and December 1968 (Park, 1969). Two major excavation areas were opened (Figure 2), in addition to an isolated eroding oven and its associated midden, which were excavated near the shore north of the site.

The first excavation area (Area B) was 115 m2, consisting of a discrete adze working area and several combustion features. Park (1969) inferred the deliberate heating of argillite in this area, from large angular pieces of argil- lite in a combustion feature with no ovenstones or evidence of food remains. Situated 80 m east of Area B, 150 m2 was excavated at Area X revealing several discrete working floors with large quantities of stone debit- age, a posthole and an oven. A spatial study of half the Area X stone artefacts were completed (Huffadine, 1978).

From an analysis of the faunal material from Area X Sutton and Marshall (1980) identified sea mammal, fish, and bird species which could have been obtained within 2km from the site. Huffadine (1978), using hand-specimen identification, identified 14 rock types from the Area X assemblage (n = 125,104 pieces), with green argillite obtained from the Bluff Harbour area the most abundant (n = 115,232 pieces). This assemblage represented intensive adze manufacture and included finished broken adzes and preforms (Huffadine grouped blanks and preforms together), waste flakes, as well as flakes exhibiting hammer-dressing1 (n = 237) and ground surfaces (n = 29). Local sources of coarse- grained Bluff argillite are present at Tiwai Point, although Huffadine considered the material unsuitable for adze manufacture. Huffadine noted that large argillite flakes (over 200 mm in length) were rare in the Tiwai Point assemblage and proposed that the earliest stages of adze manufacture likely occurred at the Colyers Island source, 6 km distant (Figure 1).

Although the Tiwai Point site is too small to be considered a permanent settlement, it shares similar characteristics (e.g. diverse midden, range of stone material, adze manufacture, combustion features, post hole) with other sites in the Foveaux Strait that represent short-term, possibly intermittent occupation that may have ranged from a few months to several years (Jacomb et al., 2010). Park (1969, 1978) identified only a single occupation layer at the site, and although most of the charcoal samples used for radiocarbon dating consisted of unidentified wood charcoal with unknown inbuilt age, the presence of non-industrial moa bone in the midden suggests occupation within the first few centuries after human colonization; that is, post AD 1300.

The excavated material from the site was first stored in the Otago Museum (Dunedin), then moved to the Southland Museum and Art Gallery (Invercargill). Even without complete provenance information the assemblage provides key insights into adze manufacture, especially when compared to other blanks and preforms made from Bluff argillite.

Adze production

This paper details the various techniques used for adze production. It details the different adze types and the blank types and manufacturing methods for each.

From the Conclusion:

Tiwai Point was the primary center for the completion and export of Bluff argillite adzes, occupied within the first century after the Polynesian colonization of New Zealand.

As the Foveaux Strait region was thought to be occupied only intermittently (Jacomb et al., 2010), the Tiwai Point site may represent the main centre of a short- term, sustained adze production

industry. Site occupants exploited Bluff argillite sources throughout the harbour area, focussing on extraction at nearby Colyers Island (Jennings et al., 2018).

Newspaper Articles

The following articles are summarised in chronological order (see Appendix I for full articles):

A: 'Adze Factory' At Tiwai Point (date: 4/5/68)

The possibility of an aluminium smelter being built at Tiwai Point has prompted Mr Mackenzie (curator of the Southland Museum) to examine the site. "*The point is now known to have been a Maori "adze factory" at which adzes found all over Southland were produced.*"

B: 'Rescue Attempt' Planned at Tiwai Adze Site

(date: 11/5/68)

"An urgent attempt is being made to mount an archaeological rescue operation on the Tiwai Point adze-making site – among the biggest discoveries of the type in the South Island."

It's established that the planned road to the smelter site would cross the 'adze factory' remains.

C: Rescue Bid at Tiwai Next Week (date 16/5/68)

"A small beach likely to vanish at the start of any aluminium smelter construction work on Tiwai Point will be the scene next week of an urgent archaeological "rescue operation". " "The more we see of the site, the more significant it becomes," Mr Mackenzie said yesterday."

The significance of Tiwai Point is becoming increasingly apparent.

D: Excavation to Start for Adzes (date 21/5/68)

It is hoped that the forthcoming excavation will shed light as to adze-making process. A recent visit to Bluff (20/5/68) confirmed that the rock argillite ran through Tikore Island, just off the point. This was rock-type was favoured for adze-making.

E: Smelter Work Could Ruin Adze Site (date: 23/5/68)

Post the excavation work of students from Otago University, concern is raised that "An important New Zealand archaeological site could be lost" if Comalco builds an aluminium smelter at Tiwai Point before next summer. This article describes initial findings, including: moa bones, post-holes indicating dwellings and ovens. More than 500 semi-finished adzes were also recovered.

F: Tiwai 'Rescue' Ends Today

(date: 25/5/68)

Students from Otago University have just finished a week long "rescue operation" from the site of the proposed aluminium smelter. "*It appears to have been a significant adze factory and could have been first used by the Maori 1000 years ago.*" [However, at this stage results from carbon dating wouldn't be known for several months.]

G: Remains Believed to be of Early Southland Personality (date: 25/5/68)

On 3 May 1968 a human jaw bone, part of a leg bone and two ribs were discovered. Two days later more bones were found. At this stage it was thought that the bones could have been "of a woman or a Maori". According to this article "It is still thought in many circles, and mang some locals (although it has never been proved conclusively), that there is a Maori chieftain buried on Tiwai. A bay on the ocean side of Tiwai is reputed to be "tapu"." However, an early map of the peninsula marked the point of Captain William Stirling's grave in the exact spot where the bones were found. It is assumed that these were the bones of Captain Stirling.

H: Bluff Excavations

(Otago Daily Times: 28/5/68)

Post the initial May finds at Tiwai Point, it is suggested that it could be a significant site. The project is relying on university students for their time.

I: Big Archaeological Find May Be Lost (date: 28/5/1968)

Concerns are raised that few people seem to be interested in the "Maori site at Tiwai Point".

"What may well turn out to be one of the biggest archaeological finds in New Zealand, the Maori site at Tiwai point, near Bluff, may be lost for all time because there appears to be little interest in doing anything about it."

University students spent the last week of their holidays excavating Tiwai Point, uncovering about 600 artifacts. However, at this point interest in the project seems to have waned. Comalco has offered extra time for excavation, however A. Mackenzie (director of the Southland Museum) was struggling to find people to do the work. *"In any other country a chance like this would mean a national effort."*

J: Help Needed to Save Artifacts

(date: 28/5/68)

The same text as the article above.

K: Tiwai Point Appeal Fund at \$161

(date: 28/6/1968)

The Southland Museum appeals for funds for the "rescue operation" of Tiwai Point in August 1968.

L: Comalco Gives \$250 for Tiwai 'Dig'

(date not given but must be after May 1968 and before August 1968)

Published post the May excavation. \$250 was given by Comalco for specialist archaeological work for Tiwai Point in August 1968.

M: Maori Site at Tiwai Point 600 Years Old

(date: not given, 1968)

A.J. Mackenzie gave a talk to the Bluff Lions Club, stating that the Tiwai Point Maori artifacts were between 600 and 700 years old.

N: Comalco Helps 'Rescue Dig'

(date: 10/7/68)

Comalco gives \$250 towards cost of "rescue dig". University of Otago anthropology students to undertake the "rescue dig" in August 1968. The dig was described by A.J. Mackenzie as " ... a matter of urgency ... The smelter would occupy much of the excavated area."

O: Damage by Vandals at Tiwai Archaeological Site

(date: 22/8/68)

The sub-headline text states that the findings of the August expedition: "... confirms that the ancient "adze factory" as being among New Zealand's most important links with its Maori heritage."

Vandals had uncovered and disturbed an important archaeological area. "*The result was likened yesterday to a book for which only the cover remained intact.*" It was noted that no greenstone had been found at the site as most artifacts were of local stone.

Tiwai 'Dig' Site Damaged

(date: 26/9/68)

Curio hunters are reported to have caused significant destruction to the excavation sites at Tiwai Point.

P: To resume Tiwai 'Dig' Soon

(date: 30/10/1968)

The third large expedition to Tiwai Point was to take place in the middle of November 1968. The expedition was led by the Otago Museum's assistant anthropologist Stuart Park. According to this article "Hundreds of items associated with early Maori working of Tiwai's argillite reef were recovered in May and August" (1968).

Q: Wellington Maoris Claim Smelter Site Tapu

(date: unknown but post archaeological excavations)

Paranihi Rissetto states his opposition to the building of the smelter on "an ancient and sacred Maori burial site". He also stated that "it would be a breach of section three of the Treaty of Waitangi, which safeguards the Maori peoples right to shellfish foods."

The article states that Mr Rissetto had sought legal advice with a view to suing the NZ Government and Comalco on behalf of his people.

However, the article goes on to state: "*Mr Robert Whaitiri, of Bluff, a prominent Southland Maori and a member of the Ngaitahu Tribal Trust Board, last night said that Southland Maoris were definitely not oppose to the siting of the smelter on the Tiwai Point site.*"

[No follow-up newspaper article has been found.]

New Zealand Archaeological Association site records for Tiwai Point

The following shows summary information for site records for burials/cemetery locations; rock sources; rock working areas; ovens and middens; as well as sites associated with post colonial activities. Full records are provided in Appendix J.

Burial sites





Rock sources and rock working sites





NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION NZAA SITE NUMBER: E47/38 0 SITE TYPE: Source site Site Record Form SITE NAME(s): ARCHSITE DATE RECORDED: SITE COORDINATES (NZTM) Easting: 1245091 Northing: 4829735 Source: Handheld GPS IMPERIAL SITE NUMBER: \$181/43 METRIC SITE NUMBER: E47/38 E47 E4774 Scale 1:2,500 Finding aids to the location of the site The outcrop is situated almost right under the landward end of the Tiwai smeller wharf. Brief description Source also. Rock from this outcrop has been analysed by the NZGS who describe it as a very fine grained tuff or a recrystallised argifise rock. I definical rock has been found in the nearby workshop sites (E47 2 & 3). Recorded features Artefact - stone flakes Other sites associated with this site E47/2 Printed by: rachaelegerton 18/11/2020 1 of 3



Printed by: rachaelegerton

Ovens and middens

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

E47

Finding aids to the location of the site Bearing: Bluff Hill - 252, Tiwai Chimney - 320. Low sand hills, 8m from high tide line.

Brief description Originally recorded as two areas: a) Group of concentrated stone b) Shell and bone scatters in area 7m east of a). Contents: small cyster (both valves), bird bone, fish vertebrae, bamacle.

Site Record Form

SITE COORDINATES (NZTM) Easting: 1247295 Northing: 4829470 IMPERIAL SITE NUMBER: \$18150 METRIC SITE NUMBER: \$4743

0

ARCHSITE



NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION	
Site Record Form	NZAA SITE NUMBER: E47/42 SITE TYPE: ModernOven SITE NAME(s): DATE RECORDED:
SITE COORDINATES (NZTM) Easting: 1247395 Nor	thing: 4829450 Source: On Screen
IMPERIAL SITE NUMBER: \$181/49 METRI	C SITE NUMBER: E47/42
E47 \$	647/42
-	
Finding aids to the location of the site Originally recorded as located 100m east of S181/50 (E47/43), b	ehind first row of low sandhills (10 metres from the beach).
Brief description Originally recorded as ovenstones scattered over 5m2 area as a	result of bulldozing.
Recorded features Overstones	
Other sites associated with this site	
Printed by: rachaelegerton	18/11/202

1 of 3

NZAA SITE NUMBER: E47/43

★E47/42

Source: On Screen

SITE TYPE: Midden/Oven

SITE NAME(s):

★E47/43

DATE RECORDED:

18/11/2020 1 of 3

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION



Printed by: rachaelegerton

Recorded features Midden, Oven (intact) Other sites associated with this site

Scale 1:2,500

18/11/2020 1 of 3

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION	
Site Record Form	NZAA SITE NUMBER: E47/46 SITE TYPE: MddenOven SITE NAME(s): DATE RECORDED:
SITE COORDINATES (NZTM) Easting: 1245650 Northin	ng: 4829886 Source: On Screen
IMPERIAL SITE NUMBER: \$181/53 METRIC S	SITE NUMBER: E47/46
E47 🗶 (47)	7 47/47 7/46
Scale 1:2,500	Land Information New Zealand, Eagle Technology
Finding aids to the location of the site "Bearings: Bluff Hill - 222, Tiwai Chimney. Eroding out of bank and h Reserve."	idden behind marram grass, in front of Museum
Brief description Originally recorded as an oven, containing burnt stone, charcoal and little secondary flaking. 8m south, oven stones and flakes eroding ou	I fine green argillite flakes, some burnt and some with a at of bank.
Recorded features Artefact - stone flakes, Oven (intact), Ovenstones	
Other sites associated with this site	
Printed by: rachaelegerton	18/11/2020



NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

Site Record Form	NZAA SITE NUMBER: E47/48 SITE TYPE: Midden/Oven SITE NAME(s): DATE RECORDED:	
SITE COORDINATES (NZTM) Easting: 1245690 North	ning: 4830373 Source: Handheld GPS	
IMPERIAL SITE NUMBER: \$181/55 METRIC SITE NUMBER: \$47/48		
★ (**77 E47		
Scale 1:2,500	Land Information New Zealand, Eagle Technology	
Finding aids to the location of the site Bearings: Bluff Hill = 219, Tiwai Chimney = 129. Midden is 6m nort picnic area	h of the oven. Approx. 100 m south along beach from	
Brief description Oven, recorded as 0.3m below soil surface, 1m long, containing pr crenata, alcithoe, paua. Shells both whole and fragmented.	edominantly cockle, up to 2cm long, also Amphibola	
Recorded features Midden, Oven (intact)		
Other sites associated with this site		
Printed by: rachaelegerton	18/11/2020	
	1 of 6	









 State 12:50
 Description

 Finding aids to the location of the sile
 Operating the operated at located at modul of effluent channel from similar, on east bare.

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ATE RECORDED:

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 STER COORDINATES (N2TM) Easing: 124653
 Northing: 45053
 Source: Handheld OPS

METRIC SITE NUMBER: S181A2
 METRIC SITE NUMBER: E4755

 E47

 E4

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Immigrant graves





IEW ZEALAND ARCHAEOLOGICAL ASSOCIATION	
Site Record Form	NZAA SITE NUMBER: E47/185 SITE TYPE: Burlai/ cemetery SITE NAME(s): DATE RECORDED:
SITE COORDINATES (NZTM) Easting: 1244793 Northin	ng: 4829084 Source: CINZAS
IMPERIAL SITE NUMBER: METRIC S	SITE NUMBER: E47/185
E47 5 cale 1:2000 Finding aids to the location of the site	10 Lace information here Zealand, Experil February
The grave is located at Tiwai Point, near the jetty, south of the long s Brief description The grave of William Baird, who died on the way to New Zealand in	
Recorded features Grave	
Other sites associated with this site	
rinted by: rachaelegerton	18/11/20 1 of

Shipwreck, whaling station and wharf





0 SITE TYPE: Transport/ communication Site Record Form ARCHSITE SITE NAME(s): DATE RECORDED Northing: 4829035 Source: Handheld GPS METRIC SITE NUMBER: E47/171 SITE COORDINATES (NZTM) Easting: 1244657 IMPERIAL SITE NUMBER:

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

E47 Scale 1:2,500	€47/101 E4
Finding aids to the location of the site	Land in printing inter Leans of Lange into a
	d 100 m NW of the wooden pyramid beacon looking across the harbour entrance
Brief description	
Wooden wharf.	
Recorded features	
Wharf/ jetty	
Other sites associated with this site	

NZAA SITE NUMBER: E47/171

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Navigation beacons





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