

Former Hampden and Awamoa Landfills

An Archaeological Appraisal

Report Prepared for the Waitaki District Council Author: India Gillespie Reviewed by: Dr Dawn Cropper



Former Hampden and Awamoa Landfills

An Archaeological Appraisal

Prepared by

New Zealand Heritage Properties Ltd, Salisbury House, 106 Bond Street, Dunedin T +64 3 477 3933 www.heritageproperties.co.nz

Project Details

| Site Address | Former Hampden Landfill: (Carlisle Street Road Reserve; Sections 9-12, Block XVII, Town of Hampden; and Section 18, Block LXIV, Town of Hampden). Two Former Awamoa Landfills: (Beach Road Road Reserve; and Section 70, Block IV, Oamaru SD). | |
|---------------------|---|--|
| Client | Waitaki District Council | |
| Client Contact | Steve Clarke | |
| Client Address | Waitaki District Council | |
| | Private Bag 50058 | |
| | Oamaru | |
| | Otago 9444 | |
| Report Authors | India Gillespie | |
| Reviewed By | Dr Dawn Cropper | |
| Report Submitted To | Waitaki District Council; and GHC Consulting Limited | |
| Document Control ID | J011407_AP_REV B | |

Document Control

| Revision No. | Date Submitted | Description | Prepared By | Reviewed By |
|--------------|----------------|--|-------------|-------------|
| Α | 20/02/2023 | Issued to client. | IG | DC |
| В | 20/02/2023 | Revised to include comments from client; issued. | IG | DC |

Ownership and Disclaimer

This report has been prepared for the sole use of the client in relation to a specific work program described in Section 1 of this report. This report and the information contained herein are subject to copyright. Ownership of the primary materials created in the course of the research remains the property of the named researchers and New Zealand Heritage Properties Ltd. This report remains the property of the client and New Zealand Heritage Properties Ltd. The professional advice and opinions contained in this report are those of the consultants, New Zealand Heritage Properties Ltd, and do not represent the opinions and policies of any third party. The professional advice and opinions contained in this report do not constitute legal advice and are only current for the proposed work as described in Section 1.

Cover Photo: Bicknell, F. (1900). Woman and children on a beach road [photograph]. System ID 160500: Waitaki Archive. Retrieved from https://collection.culturewaitaki.org.nz/objects/160500/woman-and-children-on-a-beach-road

1 Introduction

The Waitaki District Council (WDC) are proposing to undertake remedial works at three former landfill sites located in Hampden and Awamoa. New Zealand Heritage Properties Ltd (NZHP) has been commissioned by Steve Clarke on behalf of the WDC to undertake an archaeological appraisal of the former Hampden landfill (Carlisle Street Road Reserve; Sections 9-12, Block XVII, Town of Hampden; and Section 18, Block LXIV, Town of Hampden) and two former landfills at Awamoa (Beach Road Road Reserve; Lot 2 DP 21053; and Section 70, Block IV, Oamaru SD). The purpose of this report is to determine if there are any archaeological requirements for the proposed remedial earthworks, as per the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA 2014). This appraisal comprises desktop research only, and consultation has not been undertaken with manawhenua.

The HNZPTA 2014 defines an archaeological site as any place in New Zealand, including any building or structure (or part of a building or structure), that (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and (b) includes a site for which a declaration is made under section 43(1).

1.1 Project Area

The project areas are defined as the former Hampden landfill (Carlisle Street Road Reserve; Sections 9-12, Block XVII, Town of Hampden; and Section 18, Block LXIV, Town of Hampden) and two former landfills at Awamoa (Beach Road Road Reserve; and Section 70, Block IV, Oamaru SD), encompassing eight land parcels, and a summary of the project area is provided in Table 1-1 and shown in Figure 2-1 and Figure 3-1. Within the project area there are no previously recorded archaeological sites, and no significant and valued historical and cultural heritage places are included on the New Zealand Heritage List/Rārangi Kōrero ('the List'). Both project areas intersect with items scheduled in the Waitaki District Plan as Significant Coastal Landscapes or as a Designation Area or Site. The project area is not within a Statutory Acknowledgement Area. This appraisal has identified that Section 70, Block IV, Oamaru SD is subject to Section 59 Land Act 1948; Reserves and Domains Act 1953; and to Part 9 of the Ngāi Tahu Claims Settlement Act 1998.

Table 1-1. Summary of project area.

| Site Address | Former Hampden and Awamoa Landfills | | |
|---|---|--|--|
| Landowner/Occupier | Waitaki District Council | | |
| Legal Description | Former Hampden Landfill: (Carlisle Street Road Reserve; Sections 9-12, Block XVII, Town of Hampden; and Section 18, Block LXIV, Town of Hampden). | | |
| | Two Former Awamoa Landfills: (Beach Road Road Reserve; and Section 70, Block IV, Oamaru SD). | | |
| Territorial Authority | Waitaki District Council | | |
| New Zealand Heritage List/Rārangi Kōrero | - | | |
| Covenant or Heritage Order | Section 70, Block IV, Oamaru SD: Subject to Section 59 Land Act 1948; Subject to Reserves and Domains Act 1953; Subject to Part 9 of the Ngāi Tahu claims settlement act 1998 (which provides for certain disposals relating to the land to which this certificate of title relates to be offered for purchase or lease to Te Rūnanga o Ngāi Tahu in certain circumstances) | | |
| Scheduled on District Plan | Hampden: scheduled on the Waitaki District Plan as a Significant Coastal Landscape and a Designation Area or Site. Awamoa: scheduled on the Waitaki District Plan as a Significant Coastal Landscape. | | |
| Reserve Status | Road Reserve Recreation Reserve | | |
| Statutory Acknowledgement Area | | | |
| Customary Marine Title | - | | |

2 Former Hampden Landfill

The following sections give an overview of Māori and Pākehā settlement in the general Hampden area to provide context to understand the site-specific history of the project area (Figure 2-1). Through this research it is possible to begin to identify what type of physical, cultural, and social processes have shaped the form and distribution of archaeological material. Additionally, historical background can be used to inform the interpretation of archaeological contexts and material whenever they are encountered.

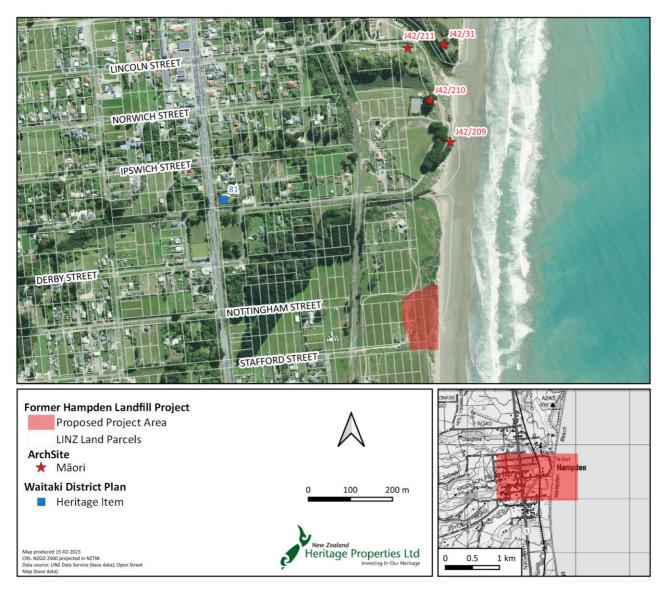


Figure 2-1. Map showing the location of the proposed project area in relation to nearby archaeological and heritage sites.

2.1 Māori Occupation

A rich local record of Māori traditions and place names recount some of the earliest Polynesian settlers to Te Waipounamu (South Island) and the areas near Matakaea (Shag Point). Three principal streams of descent are recognized in the traditions of Kāi Tahu manawhenua (Waitaha, Kāti Mamoe and Kāi Tahu).

The lower Waitaki area of North Otago saw a concentration of early settlements, particularly around the coast (Figure 2-2). Archaeological evidence indicates that there has been Māori occupation of the Waitaki area from at least 1000 years ago, with more extensive settlement during the time that moa existed, as shown in the widespread archaeological remains of moa bones in cultural contexts (Symon, 2007). The archaeological record indicates that early groups accessed various resources from the lakes, rivers and valleys in the interior, establishing smaller

"transient" nohoaka (camps) and kāika (villages) that served as semi-permanent sedentary bases. Recorded archaeological sites have uncovered evidence of Māori lifeways such as cooking features and food resources (including kaimoana); stone resources for the production of tools and ornaments; re-purposed animal bone used in the production of tools and ornaments; timber and plant resources used in the construction of buildings, waka and smaller objects and in the production of textiles (e.g., harakeke and kareao).

Beattie's annotated maps of Otago depict a range of pre-1840 Māori placenames in the vicinity of Hampden (Beattie, n.d). The source of information for Beattie's annotations stem from a combination of the recollections of Māori informants, fragments of Māori tradition, and notes on historical observations, archaeological discoveries, and analyses of placenames. While the sources for this information differ, the frequency of placenames attest to the length of Māori occupation in this area. The name "Waiwherowhero" is shown in closest proximity to the project area (Figure 2-2), while the Hampden area itself was often referred to as Te Kurī.

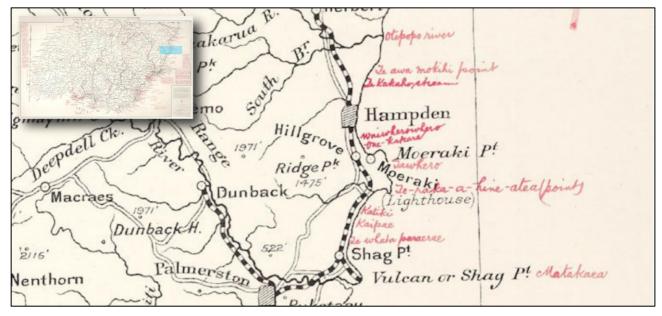


Figure 2-2. Detail of James Herries Beattie's map showing Māori placenames in Otago and Southland before 1840 (Beattie, n.d.).

Te Kurī is located north of Moeraki on the coastline, near the present-day township of Hampden. Kurinui Creek intersects with Te Kurī running from the hinterland to the coast where the township would later emerge. Pākehā later named two branches of the creek that intersected with Hampden township Little Kuri and Big Kuri Creeks. According to Herries Beattie, Te Kurī/Hampden Beach was also called Kakaho Beach. Ara tawhito are traditional travel routes, and an ara tawhito connecting the northern extent of Te Waipounamu with Murihiku, extends along the coastline to the west of the project area. This ara tawhito is stated as basically following the same alignment as the current railway line from Ōamaru to Orepuki (Te Rūnanga o Ngāi Tahu, 2019).

In 1861 Block I of the Otepopo Survey District was laid out. Within the Kuri Bush reserve, ten acres was set aside as a 'Maori Bush Reserve' (Figure 2-3). It was originally on the north-west border of the township of Hampden. In 1878 the Hampden Road Board noted that manawhenua had applied to the Waste Lands Board for the unsurveyed portion of Block I, Otepopo Survey District. The Road Board wrote an objection to the Commissioner of the Waste Lands Board on the basis 'it would be an injustice to the settlers' (Oamaru Mail, 1878). Te Kurī is also recognised as a kāika mahika kai (Te Runanga o Ngāi Tahu, 2021).

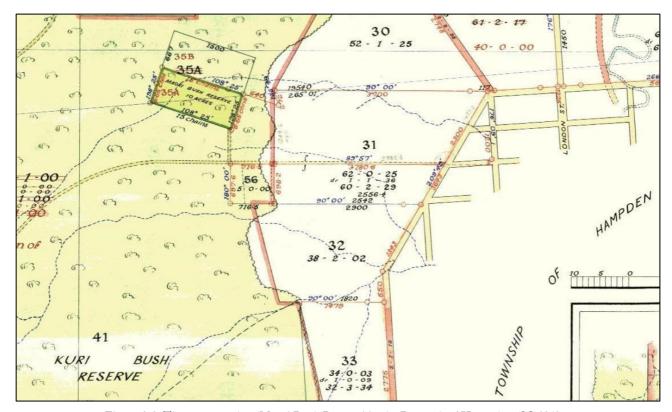


Figure 2-3. The area noted as 'Maori Bush Reserve' in the Borough of Hampden (SO 1351).

At Hampden Beach, just north of the project area, small excavations were undertaken by Michael Trotter in 1965-7. The excavations uncovered what is believed to be a moa-hunter site that is estimated to extent over one hectare in area, with moa, bird, and fish bones as well as silcrete blades and basalt flakes uncovered (New Zealand Archaeological Association, 2020). Four previously recorded archaeological sites, J42/31 and J42/209-11, are situated between approximately 300-500m north of the project area (see Figure 2-1), and in 2020, these sites were again investigated by Trotter (2020). Trotter notes that although these sites have been previously damaged, there is reasonable cause to suspect that occupational deposits remain *in situ* westwards in the dune system. This theory is reinforced by the presence of artefacts, notably lithics (Figure 2-4), slowly eroding onto the surface in this area.



Figure 2-4. Lithics recovered from Site J42/210 in 2020 (Trotter, 2020).

NZHP consulted numerous sources of historic evidence and combined with recent archaeological investigations, has found that there is reasonable cause to suspect that a Māori archaeological site may be present within the project area. Many of the prominent nohoaka (temporary settlement or camp sites), mahika kai areas, and ara tawhito associated with past lifeways activities in the wider Hampden area are situated along the foreshore. Four significant archaeological sites associated with early Māori lifeways activities are located within 500m of the project area, and recent investigations suggest archaeological material remains *in situ* in this area.

2.2 Post-Contact Occupation

Due to its desirable location close to the port at Moeraki, farming communities established themselves in and around Hampden in the 1850s (Muirhead, 1990). There are two streams that run through the township of Hampden, the Big and Little Kuri Streams. The first area of Pākehā settlement near Hampden was near Baghdad Bush and the lower reaches of Little Kuri Stream. In 1852 an accommodation house was constructed by Mr G B Wright on land nearby, with the house constructed from timbers felled from Baghdad Bush (Muirhead, 1990). In the early days, this was the only accommodation house between Dunedin and the Rangitata River.

Named after the Hampden Run, the survey of the new township was completed by December 1860. The earliest formal survey plan of the project area dates to 1860 when the Township of Hampden was surveyed in preparation for the issuing of Crown Grants (see Figure 2-5). The Crown Grant Map details that the project area originally intersected with five historic land parcels (Sections 9-12, Block XVII, Town of Hampden; and Section 18, Block LXIV, Town of Hampden) and three road reserves (Carlisle, Stafford, and Nottingham Streets). This map indicates that the project area is owned by the Borough of Hampden at this time, with sections set aside for a Municipal Reserve. The area was originally 'thickly covered with native bush, but the timber proved to be so valuable for building and fencing' that very little of the bush remained by the turn of the century (Cyclopedia Company Limited, 1905). Eighty lots in the fledgling township were put up for sale in 1861 (Otago Witness, 1859, 1860).



Figure 2-5. Georeferenced Crown Grant Map overlain on aerial imagery with the proposed project area highlighted red (Reid, 1860).

The township of Hampden was proclaimed a municipality in September 1879; one of the smallest boroughs in New Zealand (Muirhead, 1990). By 1893, Hampden had a police station, railway station, library, dairy factory, post

and telegraph station. and five boarding houses (Muirhead, 1990). By 1905, Hampden was described as a 'pleasantly situated borough on the main line of railway... Hampden, as a progressive borough, has done much to beautify the district, and bathing sheds have been erected on the beach for the free use of residents and visitors' (Cyclopedia Company Limited, 1905). Established gardens and fences can also be seen around the town in two 1907 photographs (see Figure 2-6 and Figure 2-7). However, these photographs do not show any such structures or modifications in the vicinity of the proposed project area. The Hampden landfill commenced accepting waste around 1970, and closed on 16 December 1996, having buried around 33,000m³ of Municipal Solid Waste (Waitaki District Council, 2021). An aerial photograph from 1987 (Figure 2-8) clearly shows the landfill and surrounding disturbance to the dune system.

NZHP consulted a range of historic sources and found that there is no reasonable cause to suspect that a post-contact archaeological site is within the project area. There is no prior evidence of any activity at the proposed project area until dumping commenced at the landfill in the 1970s.



Figure 2-6. Early twentieth century photograph with the project area indicated (Muir & Moodie, 1907b).



Figure 2-7. Early twentieth century photograph with the project area indicated (Muir & Moodie, 1907a).



Figure 2-8. Late-twentieth century aerial photograph with the project area indicated (LINZ, 1987).

3 Former Awamoa Landfills

The following sections give an overview of Māori and Pākehā settlement in the general Ōamaru area to provide context to understand the site-specific history of the proposed Awamoa project areas (Figure 3-1). Through this research it is possible to begin to identify what type of physical, cultural, and social processes have shaped the form and distribution of archaeological material. Additionally, historical background can be used to inform the interpretation of archaeological contexts and material whenever they are encountered.

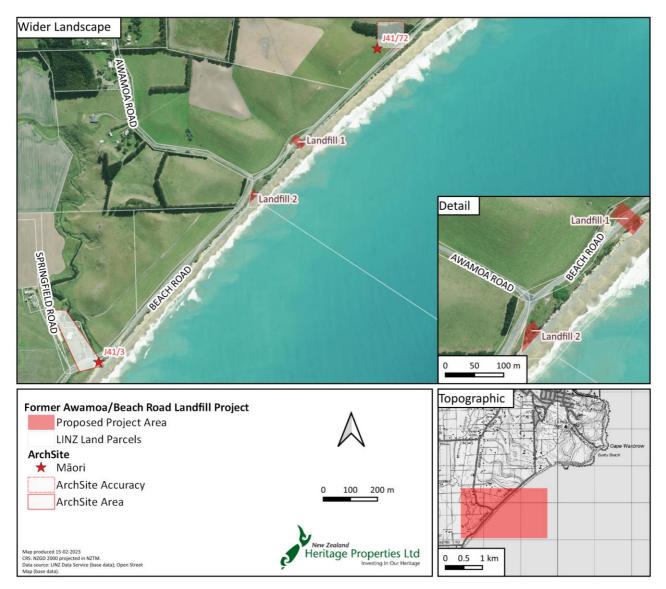


Figure 3-1. Map showing the location of the proposed project area in relation to nearby archaeological and heritage sites.

3.1 Māori Occupation

The wider Ōamaru area was part of the extensive network of nohoaka and mahika kai areas located along Te Taio-Ārai-te-uru (the Otago coastline). During the 1879 Smith-Nairn Royal Commission of Inquiry into the Kāi Tahu land claims, Rāwiri Te Māmaru and other Kāi Tahu kaumātua recorded Ōamaru as a kāika nohoaka, pā tūturu, and a kāika mahika kai where tuna (eels), īnaka (whitebait) and kōareare (edible root or rhizome of raupō/bulrush) were gathered (Te Rūnanga o Ngāi Tahu, 2019). Nohoaka, literally meaning a place to sit, traditionally refers to seasonally occupied sites which were an important part of Māori lifeways. The moa (*Dinornithiformes*) populations in the Waitaki District were high during the early phases of manawhenua settlement, and there is evidence for moa hunting to have been a major lifeways activity in the area (McDonald, 1962). This is shown by the high number of moa bones within cultural contexts that have been encountered within archaeological sites in the Waitaki District

(Anderson, 1989). Pākehā have historically referred to these nohoaka and early archaeological sites as 'moa-hunter' sites, although lifeways relied on many other forms of resources alongside moa.

Within the Waitaki District, the earliest archaeological sites were mostly located along the coast, many situated adjacent to streams and larger watercourses, and up the Waitaki River. Not only did the streams provide water and freshwater food resources, larger waterways also served in transporting moa carcasses hunted further inland downstream to kāika (Anderson, 1989).

There are thirteen Māori occupation sites recorded along the coast between Kākaunui and Ōamaru (NZAA Site Recording Scheme, February 2023). Of these, many are early Māori sites and consist of middens and ovens. One of the largest such sites is at Awamoa (site J41/3), which is located approximately 800m south-west of the proposed project area. Even though this site has been subjected to continual fossicking following its discovery by government agent, Walter Mantell, in the nineteenth century, enough evidence could be gleaned from more thorough and documented excavations undertaken from the 1960s onwards. The site is likely to have covered an area of roughly 1.5 hectares. Moa bone was retrieved from both middens and large ovens; the latter often cut through earlier occupation layers, suggesting a long (but possibly intermittent) occupation of the site (Trotter, 1979, 2022).

Along the coastline to the north of the proposed project area (see Figure 3-2), there are clusters of archaeological sites, classified as midden/oven site types, largely relating to early and contact period lifeways activities. Although these sites have been recorded, they have not been systematically investigated. Archaeological investigations have focused instead on the early settlement of North Otago which was centred around settlements established at the mouth of the Waitaki River, the Awamoko River, and in Moeraki (Shaw, 1995). Occupation between these areas of more permanent settlement appears to have been sporadic with seasonal hunting and gathering activities likely forming part of the lifeways systems of Māori along Te Tai-o-Ārai-te-uru (Shaw, 1995).

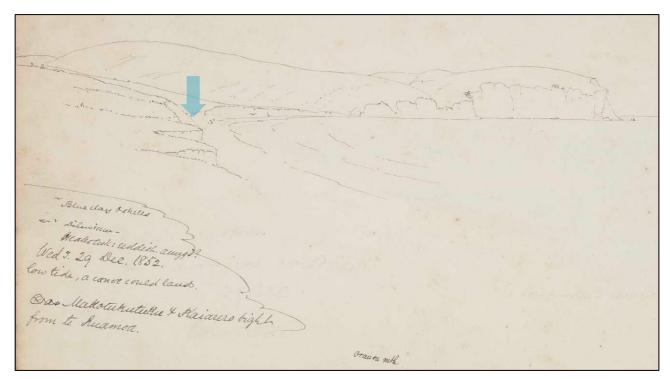


Figure 3-2. Sketch of the landscape north of Awamoa, looking towards Maktuktuku (Cape Wanbrow) with the approximate location of the project area indicated (Mantell, 1852).

NZHP consulted numerous sources of historic evidence and combined with recent archaeological investigations, has found that there is reasonable cause to suspect that a Māori archaeological site may be present within the project area. Many of the prominent nohoaka (temporary settlement or camp sites), mahika kai areas, and ara

tawhito associated with past lifeways activities in the wider Ōamaru and Awamoa areas are situated along the foreshore. A significant archaeological site associated with early Māori lifeways is located within 800m of the project area, and recent investigations suggest archaeological material remains *in situ* in this area.

3.2 Post-Contact Occupation

During the early years of the Pākehā settlement of the Ōamaru area there was a focus on accommodating and supplying the coastal travellers coming by both land and sea. It was the geographical setting of Ōamaru that made it an attractive place to establish a supply post, with South Hill sheltering the town from the worst of the cold southern winds, and the small peninsula (Makotukutuku/Cape Wanbrow) creating a partially sheltered landing place for ships. Crown Grants of land began to be formalised during the late 1850s and 1860s, and during this time, Ōamaru and the wider agricultural landscape developed rapidly. The township flourished on the boom brought about by the grain and wool supply flowing through the town and out to the rest of New Zealand via the burgeoning port.

A survey of the Ōamaru District was completed in 1866 (see Figure 3-3) and details the project area on the seward side of the Beach Road road reserve, near the head of a small gully. Tenders for the proper formation and gravelling of Beach Road, from Ōamaru to Kākaunui, were advertised in 1879 (North Otago Times, 1879). Photographs from around the turn of the twentieth century show Beach Road and the adjacent coastal beach reserve as rugged and windswept (Figure 3-4).

The proposed project area, situated to the east of the intersection of Awamoa and Beach Roads, was utilised by the public, with no involvement from the WDC, as *ad hoc* dump sites from the 1940s (see Figure 3-5) until ~1975 (Baddiley, 2020). Aerial photographs from the mid-twentieth do not show any structures or significant anthropogenic modifications, aside from pasture establishment and road construction, to the wider coastal landscape (Figure 3-6).

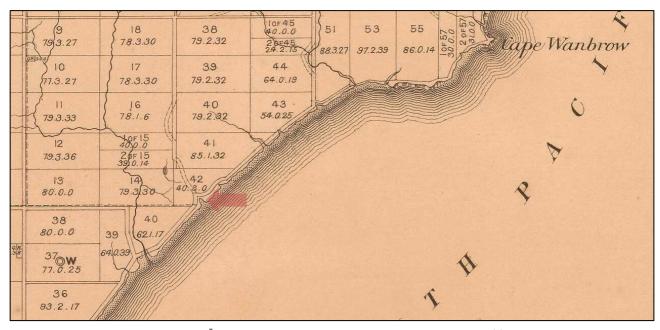


Figure 3-3. Detail of the Ōamaru Survey District, with the project area indicated (Thomson, 1866).



Figure 3-4. Photograph looking south along Beach Road towards the proposed project area, which is approximately indicated (Bicknell, 1900).

INFESTED BY RATS Report on Beach Road Dump

The health inspector, Mr G. Kerr, has reported to the Oamaru Borough Council Beach road. that the refuse dump at is infested bу Awamoa, Waitaki County Council have this dump burned out, and the rats have been exterminated to have the area covered with a layer of sand. As the dump is used mostly by borough residents and business firms, it is considered that the Borough Council should contribute to the cost of this work. These precautions. Mr Kerr pointed out, might require to be taken annually.

Figure 3-5. Detail from a newspaper article describing the rats plaguing the Beach Road dump (Otago Daily Times, 1948).

Recent investigations, comprising boreholes and other environmental tests, have been undertaken at the Awamoa project area (Baddiley, 2020). Some of the resulting borehole logs, while noting modern inclusions within the matrix, also note deposits of shell, charcoal, and ash. These may be related to either various pre-1900 lifeways activities in the area, or the twentieth century dumping activities undertaken at the site; there was no archaeological involvement in the environmental site investigation.

NZHP consulted a range of historic sources and found that there is no reasonable cause to suspect that a post-contact archaeological site is within the project area. There is no prior evidence of any activity at the proposed project area until dumping commenced at the landfills in the 1940s.



Figure 3-6. Mid-twentieth century aerial photograph with the project areas indicated (LINZ, 1955).

4 Conclusions and Recommendations

This appraisal has demonstrated that there is reasonable cause to suspect that archaeological sites, as defined by the HNZPTA 2014, may be within the project areas and could be modified or destroyed by the proposed remediation works. Many of prominent nohoaka, mahika kai areas, and ara tawhito associated with past lifeways activities in the wider Hampden and Awamoa areas are situated along the foreshore. There are significant archaeological sites associated with early Māori lifeways activities located within 1km of the project areas, and recent investigations suggest archaeological material remains *in situ* in the surrounding landscape. However, the twentieth century landfill extents are clearly demarcated by slumping, erosion, and stratigraphic changes. Based on the description of proposed works provided, NZHP recommends the following approach.

- 1. As a first step, a pedestrian survey should be carried out to determine if there are any visible archaeological remains eroding from the surface within the three areas of proposed works.
 - a. If there are visible archaeological remains that may be affected by the proposed remediation that cannot be avoided by the works, an authority will be required. The steps involved in this process are outlined in Point 4 below.
 - b. If there is no visible archaeology at the site, NZHP recommends site avoidance with the assistance of an archaeologist.
- 2. As a first principal, every practical effort should be made to avoid damage to any archaeological site, whether known or discovered during the proposed project works.

3. Site avoidance monitoring.

- a. An archaeologist be on site for the start of works to advocate for site avoidance and to brief the contractors on the possibility of encountering archaeology, how to identify archaeology, and their responsibilities in regard to notification of any archaeological discoveries.
- b. NZHP would also recommend that tangata whenua be consulted and given the opportunity to be actively involved in the project.
- c. Works must operate under an Accidental Discovery Protocol (see Appendix A), which should be supplied to all contractors involved in earthworks.
- d. The works must avoid archaeology if it is encountered, negating the need for an archaeological authority.
- e. Should archaeological materials be suspected or observed during the project works, all work within a 5m radius (or 25m if human remains are present or suspected) of the find must stop and be cordoned off to ensure it is safe. Work can continue outside the area.
 - i. If the archaeology cannot be avoided, an authority will be required to modify or destroy the site if the archaeology cannot be avoided and left *in situ*. The steps involved in this process are outlined in Point 4 below.

4. Steps for seeking an authority:

- a. An authority is required where archaeology will be modified or destroyed.
- b. An assessment be prepared that considers the archaeological values of the site and the effects of the work on those values.
- c. Consultation with tangata whenua be undertaken.
- d. An application to HNZPT is made for an archaeological authority.
- e. The archaeological site(s) should be recorded on the New Zealand Archaeological Association
- 5. The recommendations provided here relate only to the scope of works described in Section 1. Should the proposed works change, further appraisal is recommended.

5 References

- Anderson, A. (1989). Prodigious Birds: Moas and moa-hunting in prehistoric New Zealand. Cambridge: Cambridge University Press.
- Baddiley, M. (2020). Beach Road Closed Landfills: Detailed Site Investigation. Alexandra: Unpublished Report Prepared for the Waitaki District Council by WSP.
- Beattie, J. H. (n.d.). Map showing Maori placenames in Southland and Otago before 1840] [map with ms annotations]. Ref: Map showing Maori placenames in Southland and Otago before 1840] [map with ms annotations], National Librarry.
- Bicknell, F. (1900). Woman and children on a beach road [photograph]. System ID 160500: Waitaki Archive. Retrieved from https://collection.culturewaitaki.org.nz/objects/160500/woman-and-children-on-a-beach-road
- Cyclopedia Company Limited. (1905). Hampden, in The Cyclopedia of New Zealand [Otago & Southland Provincial Districts]. The Cyclopedia Company, Limited, 1905, Christchurch.
- LINZ. (1861). Crown Grant Index Record Map, Otepopo Surevy District. Ref: R10302813, Archives NZ.
- LINZ. (1955). SN503 [aerial photograph]. Survey Number: SN503: Retrolens. Retrieved from https://files.interpret.co.nz/Retrolens/Imagery/SN503/Crown_503_1344_32/High.jpg
- LINZ. (1987). SN8743 [aerial photograph]. Survey Number: SN8743: Retrolens. Retrieved from https://files.interpret.co.nz/Retrolens/Imagery/SN8743/Crown_8743_F_8/High.jpg
- Mantell, W. B. D. (1852). Makotukutuku and Kaiarero bight from Te Ruamoa. Wedy. 29 Dec. 1852 [sketch]. Tiaki Reference Number: E-332-065: National Library of New Zealand. Retrieved from https://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE25695488
- McDonald, K. C. (1962). White Stone Country the story of North Otago. Dunedin: The Otago Daily Times & Witness Newspapers Co., Ltd.
- Muir & Moodie. (1907a). Hampden [photograph]. Registration Number C.013541: Museum of New Zealand Te Papa Tongarewa. Retrieved from https://collections.tepapa.govt.nz/object/19007
- Muir & Moodie. (1907b). Hampden and Beach [photograph]. Registration Number C.013547: Museum of New Zealand Te Papa Tongarewa. Retrieved from https://collections.tepapa.govt.nz/object/19157
- Muirhead, S. (1990). Historic North Otago: Comprising a selection from those articles first published on the feature page of the Oamaru Mail in the 1980s. Oamaru: Oamaru Mail Company Limited.
- New Zealand Archaeological Association. (2020). Ovens and midden (J42/31).
- North Otago Times. (1879). Page 3 Advertisements Column 2. Volume XXVIII, Issue 2236: 28 June 1879, Page 3. Retrieved from https://paperspast.natlib.govt.nz/newspapers/NOT18790628.2.17.2
- Oamaru Mail. (1878). The Evening Mail. Volume III, Issue 653, 6 June 1878.
- Otago Daily Times. (1948). Infested by Rats. Issue 26782: 27 May 1948, Page 3. Retrieved from https://paperspast.natlib.govt.nz/newspapers/ODT19480527.2.15.10
- Otago Witness. (1859, October). Page 3 Advertisements Column 3. Issue 411, p. 3.
- Otago Witness. (1860). Page 9 Advertisements Column 5. Issue 473, 22 December 1860, Page 9.
- Reid, J. (1860). Town of Hampden [Crown Grant Index Record Map]. Item Code: R10302870: Archives New Zealand.

 Retrieved from
- https://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE33572362 Shaw, P. (1995). *Whitestone Oamaru: A Victorian Architectural Heritage*. Nelson: Craig Potton Publishing.
- Te Runanga o Ngāi Tahu. (2021). "Te Kuri", Kā Huru Manu.
- Te Rūnanga o Ngāi Tahu. (2019). Kā Huru Manu. Retrieved from https://www.kahurumanu.co.nz/atlas
- Thomson, J. T. (1866). Oamaru Survey District [map]. Alma MMSID: 9913878333502836: Otago Survey Lithographic Press. Retrieved from https://ndhadeliver.natlib.govt.nz/delivery/DeliveryManagerServlet?dps_pid=IE3734525
- Trotter, M. M. (1979). Investigations at Awamoa archaeological site, S136/4 [manuscript].
- Trotter, M. M. (2020). Hampden Beach Revisited: A new look at archaeological sites on Hampden Beach, North Otago. Kaiapoi: Unpublished Report Prepared by Michael Trotter, Archaeological Consultant.
- Trotter, M. M. (2022). Site Record Form for J41/3. New Zealand Archaeological Association. Retrieved from https://archsite.eaglegis.co.nz/NZAA/Site/?id=J41/3
- Waitaki District Council. (2021). Hampden Closed Landfill: Post Closure Care and Management Plan. Oamaru: Unpublished Report Prepared by Waitaki District Council and Waugh Infrastructure Management Ltd.

Accidental Discovery Protocol

