

***NORTHERN INTERCEPTOR, PHASE 1,
HOBSONVILLE TO ROSEDALE, AUCKLAND:
ARCHAEOLOGICAL ASSESSMENT***

Report prepared for Watercare

By

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EXECUTIVE SUMMARY

Summary

This report has been prepared for Watercare to provide an assessment of effects on archaeological and historic heritage values of the proposed Northern Interceptor Phase 1 alignment. This report does not include an assessment of effects on Maori cultural values.

The assessment included a review of relevant historic heritage databases (the New Zealand Archaeological Association ArchSite database, the Auckland Council Cultural Heritage Inventory, District Plans and Proposed Auckland Unitary Plan schedules and the Heritage New Zealand Heritage List. Previous archaeological reports relevant to the project area were consulted, as were early survey plans held at Land Information New Zealand (LINZ) and historic aerial photographs. Visual inspections of the proposed alignment were undertaken on 23 December 2013 and 24-28 November 2014.

Multiple archaeological and historic heritage sites have previously been recorded within c.100m of the proposed alignment; however, the proposed works will have no effects on these sites. No archaeological or historic heritage sites were identified within the alignment of the proposed Northern Interceptor Phase 1 works as a result of the survey and assessment, but it is possible that unidentified subsurface remains may be present in coastal areas at Wainoni Park, North Shore Memorial Park and Rahui Reserve.

Recommendations

- The detailed development plans should take account of the locations of the recorded archaeological sites, and ensure that they are avoided.
- The recorded midden site R10/1187 in the vicinity of proposed earthworks in Wainoni Park should be temporarily marked out or fenced off prior to the start of earthworks to protect it from accidental damage from heavy machinery.
- If any of the recorded sites cannot be avoided, an Authority must be applied for under Section 44(a) of the HNZPTA and granted by Heritage NZ prior to the start of any works that will affect them. (*Note that this is a legal requirement*).

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EXECUTIVE SUMMARY, CONTINUED

Recommendations,
continued

- Because it is possible that subsurface archaeological remains may be exposed during development, an Authority should be applied for under Section 44(a) of the HNZPTA as a precaution prior to the start of earthworks. This would establish appropriate procedures for the management of any archaeological remains discovered, reducing the potential for delays during the development process.
 - Earthworks at Rahui Reserve, Wainoni Park North and the southern end of works at the North Shore Memorial Park should be monitored by an archaeologist to establish whether any unrecorded subsurface archaeological remains are present.
 - In the event of koiwi tangata (human remains) being uncovered, work should cease immediately in the vicinity of the remains and tangata whenua, the Heritage NZ, NZ Police and Council should be contacted so that appropriate arrangements can be made.
 - Since archaeological survey cannot always detect sites of traditional significance to Maori, such as wahi tapu, the tangata whenua should be consulted regarding the possible existence of such sites along the length of the proposed alignment.
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ABBREVIATIONS

Abbreviation	Definition
AEE	Assessment of Effects on the Environment
ArchSite	New Zealand Archaeological Associations Site Record Database
CHI	Auckland Council's Cultural Heritage Inventory
CMA	Coastal Marine Area
Council	Auckland Council
HDD	Horizontal Directional Drill
HNZPTA	Heritage New Zealand Pouhere Taonga Act 2014
NI	Northern Interceptor
North Shore City Council District Plan	Auckland Council District Plan (North Shore City Section)
NZAA	New Zealand Archaeological Association
PAUP	Proposed Auckland Unitary Plan (Notified 30 September 2013)
RMA	Resource Management Act 1991
SH18	State Highway 18
Watercare	Watercare Services Limited
WWTP	Wastewater Treatment Plant
Waitakere City District Plan (Operative 2003)	Auckland Council District Plan (Waitakere Section)

INTRODUCTION

Project Background

Watercare Services Limited ('Watercare') is proposing to build new wastewater pipelines and associated infrastructure to convey wastewater from north-western parts of Auckland to the Rosedale Treatment Plant ('WWTP') in Albany (Figure 1). This project is known as the 'Northern Interceptor'. Construction of the Northern Interceptor is intended to be staged, with the timing of various stages depending on the rate of population growth.

Clough & Associates has been commissioned by Watercare to assess the potential archaeological and historic heritage effects related to the construction, operation and maintenance of the proposed Northern Interceptor Phase 1 (Figure 1).

The proposed work requires various resource consents under the Resource Management Act 1991 ('RMA'). This technical report provides specialist input for the *Northern Interceptor Phase 1 – Assessment of Effects on the Environment* report ('the AEE') prepared by MWH New Zealand Limited, which supports the resource consent application. This report also identifies any requirements under the Heritage New Zealand Pouhere Taonga Act 2014 ('HNZPTA'). Recommendations are made in accordance with statutory requirements.

This report provides the following:

- A brief overview of the proposed works;
- A description of the methodology employed in preparing the report;
- An overview of the historic background of the project area;
- An overview of the archaeological background of the project area;
- Results of field survey;
- An assessment of the actual or potential effects on the archaeological and historic heritage environment through the proposed construction, having reference to the statutory framework. This includes the identification of activities that could result in adverse effects and, in turn, identifying design refinements or construction methodologies that could avoid, remedy or mitigate such effects;
- Recommended mitigation and management measures.

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INTRODUCTION, CONTINUED

Proposed Works

The proposed Northern Interceptor Phase 1 will transfer existing flows from the Hobsonville Pump Station to the Rosedale WWTP. The proposed route is from the existing Hobsonville Pump Station, under the Upper Harbour Highway, along the northern side of the motorway causeway, and then under the Upper Waitemata Harbour, through Greenhithe and then the commercial area of Rosedale (Figure 1).

Key elements of the project include:

- Upgrading of the existing Hobsonville Pump Station;
- Installation of a pipe under SH18;
- Installation of pipelines in a widened section of the existing motorway causeway;
- Installation of dual pipelines across the Upper Waitemata Harbour to Greenhithe via marine trenching or horizontal directional drilling ('HDD');
- Installation of pipelines under Lucas Creek via HDD;
- Construction of a pipe bridge between Witton Place and North Shore Golf Course and across streams at Wainoni Park;
- Trenched construction for pipeline installation in roads, open space and other land; and
- Associated infrastructure including chambers, minor above ground structures, scour valves, connections to existing infrastructure and air treatment facilities.

With the exception noted below, the proposed works are described in detail in the main AEE. Key drawings showing the proposed works and construction methodology are copied in Appendix A of this report. The works described in the main AEE and shown on the appended drawings are assessed in this report.

Watercare is proposing some widening along the existing Upper Harbour Highway causeway near Hobsonville to provide for proposed water and wastewater infrastructure, including a section of the Northern Interceptor Phase 1 pipeline. That work forms part of Watercare's proposed Greenhithe Bridge Watermain Duplication and Causeway project. That project is part of a separate resource consent package and is described in a report entitled *Greenhithe Bridge Watermain Duplication and Causeway – Assessment of Effects on the Environment*, prepared by URS New Zealand.

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INTRODUCTION, CONTINUED

Methodology The New Zealand Archaeological Association's ('NZAA') site record database (ArchSite), Auckland Council's Cultural Heritage Inventory ('CHI'), Auckland Council District Plans – Operative North Shore Section 2002 and Operative Waitakere Section 2003 Plan and Proposed Auckland Unitary Plan ('PAUP') schedules and the Heritage New Zealand ('Heritage NZ') New Zealand Heritage List were searched to determine whether any archaeological sites had been recorded on or in the immediate vicinity of the proposed Phase 1 alignment. Literature and archaeological reports relevant to the area were consulted (see Bibliography). Early plans held at Land Information New Zealand (LINZ) and historic aerials were checked for information relating to past land use within the project area.

Visual inspections of the proposed alignment were conducted on 23 December 2013 and 24-28 November 2014. Fiona McKenzie, representing the Ngati Manuhiri Settlement Trust, was present during the survey of Wainoni Park and the North Shore Memorial Park areas of the alignment. The ground surface was examined for evidence of former occupation (in the form of shell midden, depressions, terracing or other unusual formations within the landscape, or indications of 19th century European settlement remains). Exposed and disturbed soils were examined where encountered for evidence of earlier modification, and an understanding of the local stratigraphy. Subsurface testing with a probe and spade was carried out where possible to determine whether buried archaeological deposits could be identified or establish the nature of possible archaeological features. Particular attention was paid to the spur crests and creek banks (topographical features where archaeological sites are often found to be located). Sites were photographed and GPS readings taken. Field sketches were made as required and site record forms written or updated.

The assessment of effects on archaeological values took into account the potential for effects on any archaeological remains of pre-1900 date and any significant post-1900 archaeological remains up to the mid-20th century.

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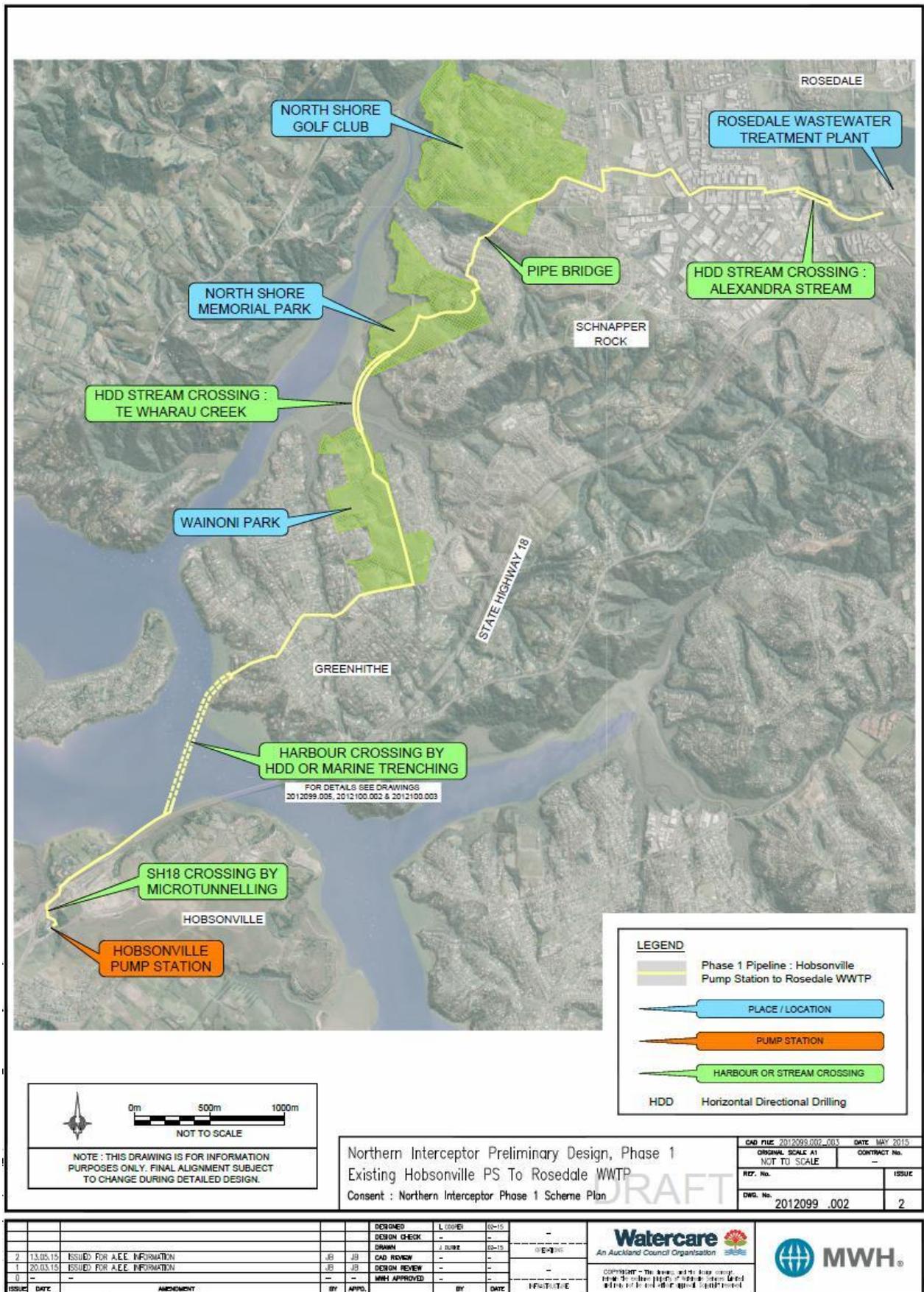


Figure 1. Northern Interceptor Phase 1 Scheme Plan. Source: Watercare and MWH 2015

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HISTORICAL BACKGROUND

Pre-European Settlement¹

The Hobsonville and Greenhithe areas, and other locations along the creeks and inlets of the inner reaches of the Waitemata Harbour, were occupied by Maori for generations before the arrival of Europeans, evidence of which survives in the form of recorded place names, oral traditions and archaeological sites (although many have been destroyed by 19th and 20th century development and natural processes).

Through time a number of iwi have had influence over the region. Of particular significance were Waiohua, Te Kawerau and Ngati Whatua and the many hapu related to these groups (Clough & Tanner 2004). However, other hapu from outside the region also maintained rights to fish in the waters of the Waitemata through the summer months, and sites in the area may relate to any of these groups.

The records that survive indicate that settlement focused on the upper reaches of the harbour around Hellyers and Lucas Creeks, particularly at the entrance to these creeks. Te Wharemoenanu was a small settlement on a small peninsula on the southern side of the entrance to Lucas Creek (Okahukura). On the northern side at the entrance to Hellyers was the settlement at Tauhinu pa (also known as NZAA site R11/285). There were numerous occupation sites along the entire foreshore as well as settlements bordering on Lucas Creek, stretching as far upstream as the township of Albany. These continued along branches of the estuary – for example, there was a settlement known as Te Karaka near the head of the Te Wharau Creek and another located on Awaiti, an arm of Te Wharau Creek. These settlements were occupied permanently, with fluctuations in use associated with seasonal gathering by groups coming from the larger Tamaki isthmus region.

The Okahukura (Lucas Creek), reaching out from the Waitemata, and the Okura river on the east coast, like many rivers and estuaries on the isthmus, were of considerable significance as communication routes. In combination with inland route ways such as the Oteha Valley and the continuous ridgeway of Lonely Track Road, these rivers would have provided easy access to coast and harbour. The importance of these waterways to Maori is attested by the presence of pa such as Dacre Point (R10/291) at the head of the Okura, and Tauhinu, which commanded the entrance to the upper harbour near Oruamo or Hellyers Creek, and the many shell midden and other sites recorded along the river and stream banks.

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¹ Adapted from Clough 1995; Shakles et al. 2011 and Judge 2014)

INTRODUCTION, CONTINUED

Early European Settlement²

The Greenhithe and Albany areas, of which the study area is a part, were first acquired from Maori for early European settlement through Crown purchases during the mid-1840s. From 1853 the land was further divided through Crown Grants under the provisions of the Waste Lands Act 1853 (King 1984).

The settlement at Greenhithe was initially very sparse due to its isolation and lack of access via roadways. The first known permanent settler was George Deane, who purchased 69 acres in 1858, and a few other settlers acquired land after this. In 1865 Mary Forgham purchased land from the Revd Thomas Hamer, and the land was named 'Fern Bank', which was the first European name given to the area (Dunmore 2001). A later landowner, Henry James Blyth, named the land Greenhithe after a small village on the banks of the river Thames in England. This became the official name of the area as accepted by the Post Office in 1884. However, the whole peninsula was still known by two names – Lucas Creek and Greenhithe are listed on the 1891 census (Dunmore 2001).

From its establishment in 1840, Auckland provided a growing demand for timber which was easily extracted from the bush adjacent to the harbour and transported down the estuaries within both the Greenhithe and Albany areas. The accessibility of the general area via the estuary is reflected in its European history and archaeology, with Lucas Creek becoming the centre of one of the very early timber industries in Auckland, as it was one of the early sources exploited for kauri. Both the Okahukura and Okura waterways were the scene of considerable industry, with barges plying their waters throughout the latter part of the 19th century (Rickard 1984).

It is generally remarked that the timber industry greatly increased the environmental degradation of the area (King 1984; Scriven 1981). The gum diggers also moved in directly after the first wave of government land purchases and established small camps across Greenhithe and Albany. Two main camps are recorded: (1) Cut Hill situated at the head of Hellyers Creek just inside the northeast border of Greenhithe; and (2) Schnappers Rock Camp. Gum extraction required deep diggings to get easy access to the gum, with burn-offs further contributing to the degradation of forests and soils.

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² Adapted from Clough 1995; Shakles et al. 2011 and Judge 2014.

INTRODUCTION, CONTINUED

Early European Settlement, *continued*

After the ephemeral industries of gum and timber extraction more permanent settlers moved into the area. The early farmers remained bound to the estuaries, dependent on them for transport and supplies, and encountered very poor quality leached soils, resulting in many abandoning their land in disgust. Some horticulture was established, but purely at the subsistence level until the late 19th century, when commercial fruit growing was established. Henry James Blyth was shipping apples, peaches, plums, pears and lemons to the Auckland market by 1887 (Dunmore 2001).

In 1866 a passenger ferry service was established by Jeremiah Casey, with jetties at Greenhithe and Albany, and it is possible that there were other stopping points along the estuary. By the late 1800s the volume of sea traffic around the Upper Harbour made the privately owned jetties that were previously utilised unsuitable and the Harbour Board was approached to see if a new public wharf could be built. The new wharf was constructed in 1900 at what is now the Rahui Road Reserve at the end of Traffic Road, Greenhithe. The wharf was 156m long x 1.8m wide with steps and a wooden shed (4 x 4m) located on the end for goods and passengers and a freight crane (Figure 2). Rail lines were later added to trolley goods to and from the boats to the foreshore. Produce and freight would be winched down to the steep bank at what is now Traffic Road to be carted across the wharf. In 1910, to cope with the increase in fruit loads, a cargo shed was built next to the waiting room on the wharf. In 1939, the goods and waiting shed was damaged by a gale and was replaced that same year by a new waiting shed (3 x 2.4m) (King 1984).

The population of Greenhithe stood at around 40 at the turn of the century. By 1906 development was taking place over much of Greenhithe due to years of scrub and bush clearance, along with the construction of new roads allowing subdivisions to be developed. This led to higher settlement numbers over the ensuing early 20th century, with the population reaching 134 by 1926 (Dunmore 2001).

By the 1950s, with the ongoing development of roading, patronage of the Greenhithe wharf had fallen off considerably and the structure began to fall into disrepair. In 1958 the Auckland Harbour Board resolved to demolish the wharf, finally undertaking the demolition in 1960 (King 1984).

The Hobsonville peninsula located in the upper reaches of the Waitemata Harbour, is bordered by the Waiarohia Inlet in the north and Limeburners Bay in the south. In 1853, the Waipareira block was purchased from Ngati Whatua by the Crown and the peninsula was divided into four large land blocks which were sold to settlers in the 1850s (Macready & Clough 2008; Dawson 2007).

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INTRODUCTION, CONTINUED

Early European Settlement, *continued*

The Hobsonville land block which includes the project area was sold to the Rev. D. Bruce in 1855 (block 12 of Waipareira, 375 acres). Bruce sold some of his land to the Waitemata City Council for road access to a wharf in 1883. There is no record of Bruce's use or occupation of his land, and in 1891 he subdivided it into a number of lots (Figure 11, below). About 100 acres on the northwestern side of the block, west of the wharf road, were acquired by the Westbourne Estate. The land appears to have remained undeveloped farmland throughout the 19th century and early 20th, with further subdivision by the Westbourne Estate not planned until 1913. (Macready & Clough 2008).

The early development of Hobsonville from the 1860s until the late 1920s was dominated by the pottery industry centered on Limeburners Bay and Scott Point on the southern side of the Hobsonville peninsula (Clough et al. 2008; Clough & Associates 2010). By the early 20th century, however, the Hobsonville area was also known for the commercial growing of grass seed and oats were successfully cultivated, although after World War I most of the farmland was converted to pasture for stock grazing (Dawson 2007: 15-17).



Figure 2. Photograph taken by Henry Winkelmann in 1912 looking south-east showing Greenhithe and Greenhithe wharf (centre right). Source: Auckland Libraries, Sir George Grey Special Collections 1-W992

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INTRODUCTION, CONTINUED

Early European Settlement, continued

In the late 1920s the heavy clay industry at Hobsonville came to an end, but fortunately for the local economy the Hobsonville peninsula was chosen by New Zealand's fledgling air force to become an airbase for both land and sea planes. Work began on the development of the airbase in 1927 and it was not until 2002 that the base finally closed, surplus to Defence requirements (Dawson 2007; Macready & Clough 2008). The former airbase land is now under development as a Special Housing Area.

The Greenhithe (Upper Harbour) Bridge connecting Hobsonville and Greenhithe was constructed in the 1970s. In 2006 a duplicate bridge was constructed abutting the original bridge on its northern side to allow for increased traffic demands (Fletcher Construction Company Ltd 2015).

Information from Early Plans/Aerials

An undated survey plan likely dating to the late 1800s (OLC 110) shows the Greenhithe area as being subdivided into large farm blocks (Figure 3). A further plan dating to 1882 shows the area north of Te Wharau Stream, also subdivided into large farm blocks on the shores of Lucas Creek (Figure 4). The plan shows that all the flat land had been cleared by this stage, and the only remaining bush cover is shown along the creek banks and within stream gullies.

A survey plan (DP 4875) undertaken in 1909 for Misters Widdison and Churchouse of the area now known as Wainoni Park shows the existence of what appear to be a farmhouse and outbuildings as well as a garden, orchard and fowl run (Figure 5). Comparison of this plan with the 1963 aerial shows that the farmhouse still remained on site at that time. The aerial also shows extensive evidence of ploughing over the site (Figure 6).

An aerial photograph dating to 1959 shows the extensive earthworks being undertaken at Rosedale for the establishment of the wastewater treatment plant. Much of the remainder of the area remains in large farm/orchard blocks, although residential areas are evident focused around the shores of the Upper Harbour and Lucas Creek (Figure 7).

A later aerial dating to 1963 shows the expanse of farm and orchard blocks (Figure 8). The aerial also shows the preliminary earthworks being undertaken for the establishment of the North Shore Golf Club (Figure 9). By 1996, the area has been heavily developed. Extensive areas of earthworks are shown within the present day industrial/commercial area to the east of Albany Highway and within Rosedale Park (Figure 10).

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INTRODUCTION, CONTINUED

Information from Early Plans/Aerials, continued

At the Hobsonville end of the project area, an 1891 plan (DP 961) shows the subdivision of the Rev. D Bruce's large land block into farmlet-sized lots (Figure 11). A 1913 plan for an intensive subdivision on the northwestern side of the peninsula (DP 8956) does not appear to have eventuated, and most of this land subsequently became part of the Hobsonville airbase. A 1959 aerial shows the airbase at that stage, prior to the construction of the Greenhithe Bridge in the 1970s (Figure 12).

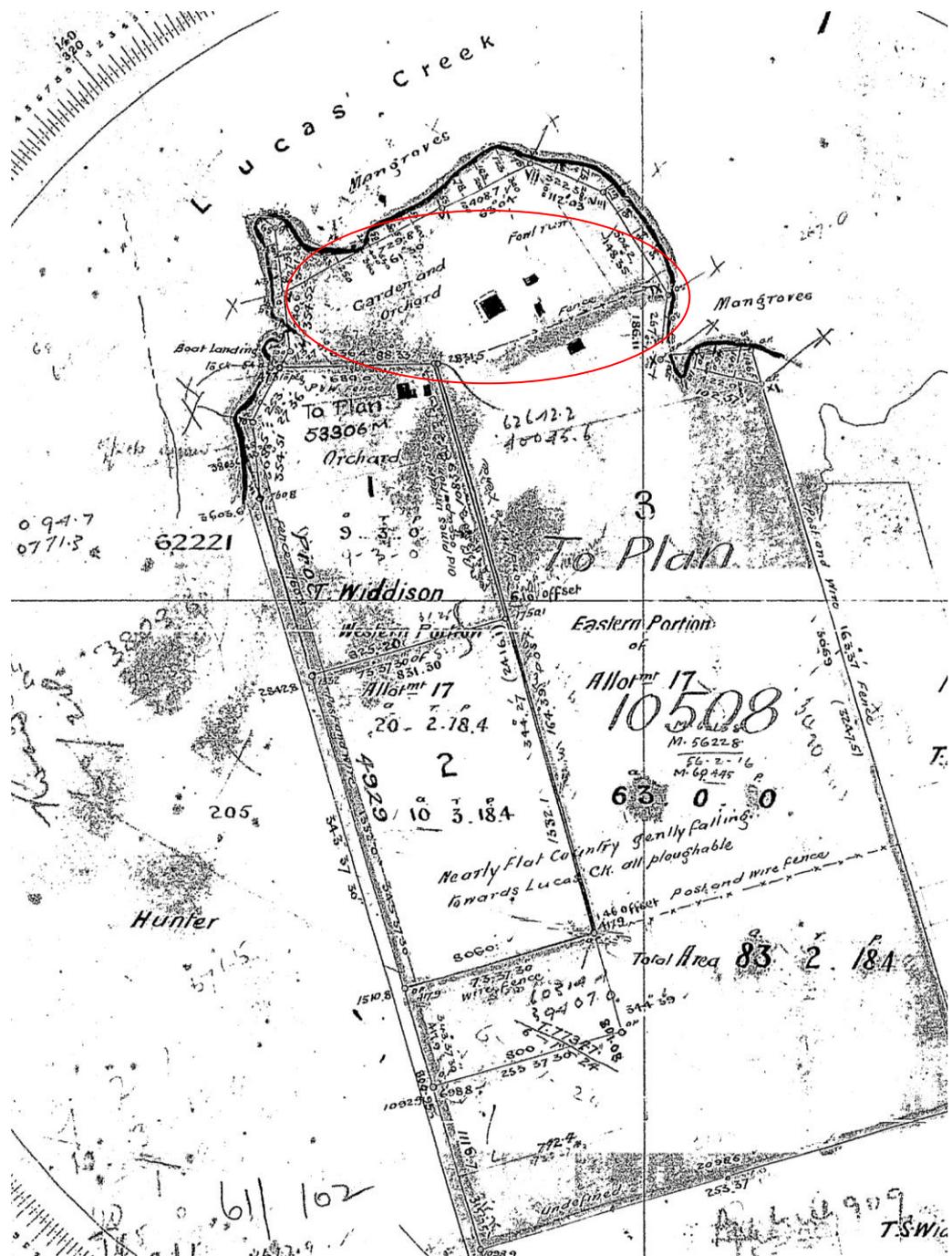


Figure 3. OLC 110 (n.d.) showing Greenhithe at southern part of project area. Source: Quickmaps 2014

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INTRODUCTION, CONTINUED

Figure 5. Detail of Plan DP 4875 (1909) showing buildings, gardens and fowl run at northern end of Wainoni Park (circled). Source: LINZ 2014



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INTRODUCTION, CONTINUED



Figure 6. 1963 aerial showing old farm house (marked with arrow) within what is now Wainoni Park; the area around all shows signs of extensive ploughing. Aerial source: Google Earth 2014

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INTRODUCTION, CONTINUED



Figure 7. Showing partial coverage of 1959 aerial photographs. Note the beginning of earthworks for the Rosedale Treatment Plant in the upper right-hand corner. Hobsonville airbase is shown on the lower left hand corner. Source: Auckland Council GIS 2014

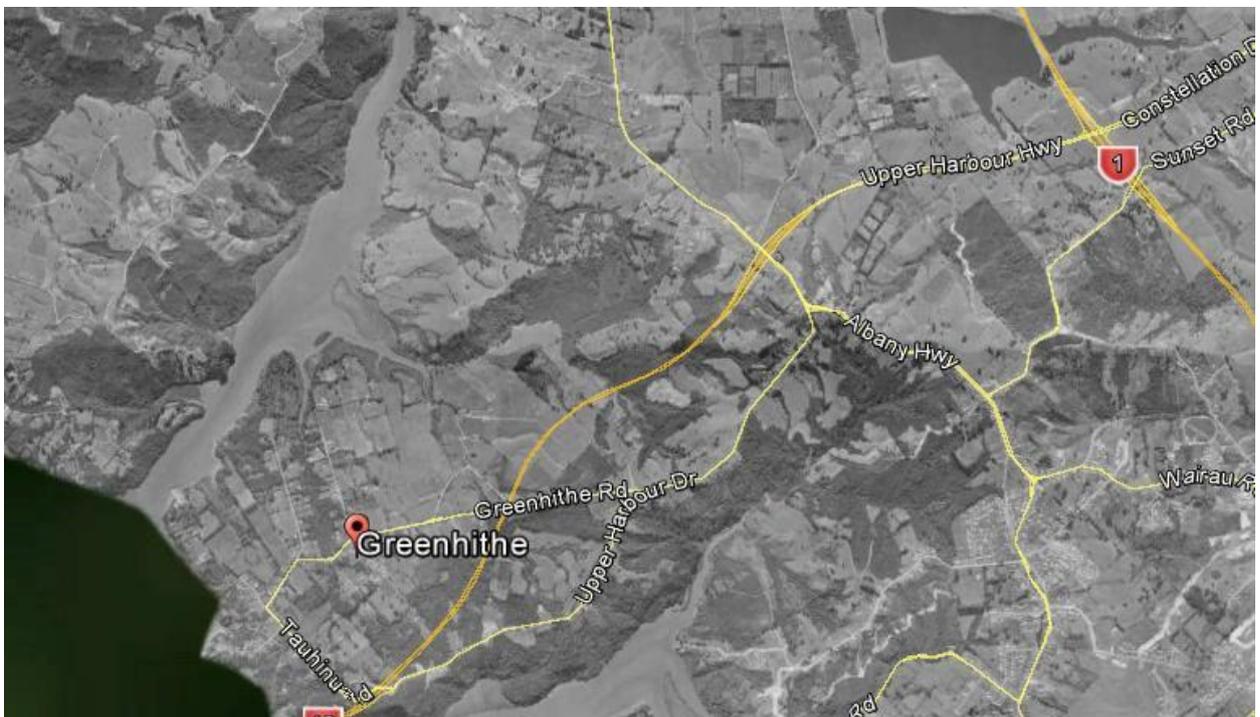


Figure 8. 1963 aerial showing Greenhithe, Albany and Rosedale areas. Note that much of the land remains in open farmland/orchard blocks. Source: Google Earth 2014

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INTRODUCTION, CONTINUED



Figure 9. 1963 aerial showing earthworks being undertaken for the formation of North Shore Golf Club. Aerial source: Google 2014



Figure 10. 1996 aerial of the project area within Albany and Rosedale, showing extensive earthworks being undertaken along the eastern side of Albany Highway (shown in black) and within Rosedale Park (towards the upper right-hand corner). Source: Auckland Council GIS 2014

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INTRODUCTION, CONTINUED

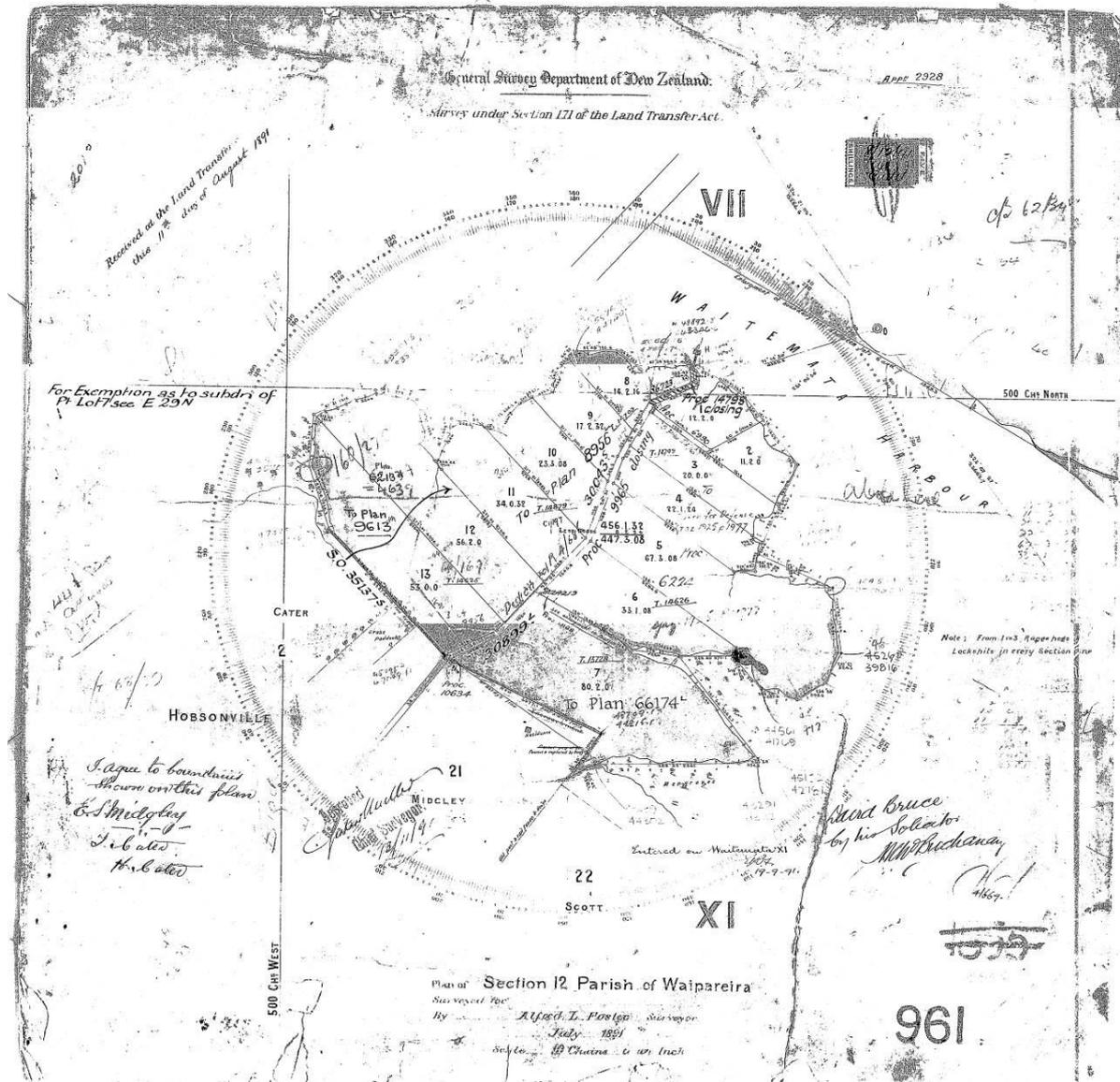


Figure 11. Subdivision of Rev. Bruce's Hobsonville peninsula land in 1891 (DP 961). Wharf indicated by arrow

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INTRODUCTION, CONTINUED



Figure 12. 1959 aerial showing Hobsonville airbase land. Source: Auckland Council GIS 2014

ARCHAEOLOGICAL BACKGROUND

Physical Environment

The proposed Northern Interceptor Phase 1 alignment is located within the generally heavily developed areas of Hobsonville, Greenhithe, Albany and Rosedale. The Hobsonville area has been substantially modified through the residential development of the peninsula, including the SH18. Greenhithe is characterised by intensive residential housing with large areas of open space, including Wainoni Park which is located on the southern bank of Te Wharau Creek. The park remains undeveloped and is currently utilised as a pony club. The Greenhithe area lies at a moderate elevation above sea level with areas of high elevation along the southern side of the headland (outside the proposed area of works).

The Albany area is characterised by intensive residential subdivision, an extensive industrial/commercial sector and large open spaces – including North Shore Memorial Park and the North Shore Golf Club which are located along the eastern shores of Lucas Creek.

The Rosedale area is surrounded by industrial and commercial developments. The area is centered on Rosedale Park. This is the location of the Rosedale Wastewater Treatment Plant.

Previous Archaeological Work

A number of archaeological assessments have previously been undertaken at various points along the proposed Phase 1 Northern Interceptor alignment. These comprise an extensive coastal survey of the Lucas Creek area undertaken by Auckland Regional Council (Brassey 2010) as well as broad scale structure plan assessments (Clough 1995; Clough & Prince 1999), assessments for infrastructure development (Foster 1998 and 2001) and various assessments for subdivision, residential and commercial development (Bioresarches 1995; Clough & Macready 2008, 2009, 2012, 2013; Macready & Clough 2008; Clough & Prince 1997; Clough & Prince 2001; Foster 1997; Judge 2013, 2013b and 2014; Mosen 1995; Shakles et al. 2011; Sides et al. 1997). The aerial and table shown below give further details as to the assessments known to have been undertaken at the time of writing this report (Figure 13; Table 1).

The assessments all indicate a dominance of sites related to pre-European Maori occupation of the area. These sites are located primarily along the coastal edges of navigable waterways, with very few sites recorded inland.

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ARCHAEOLOGICAL BACKGROUND, CONTINUED

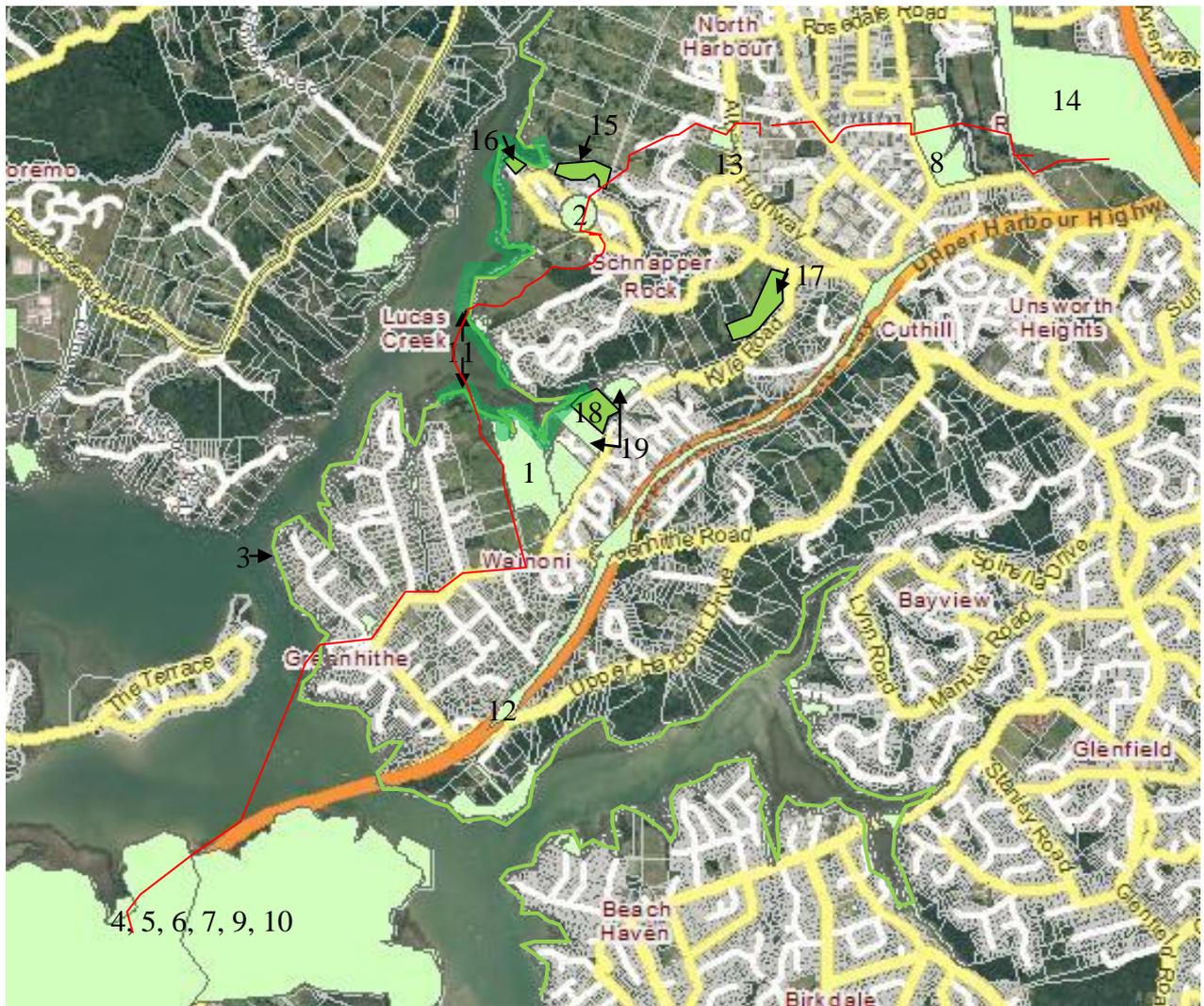


Figure 13. Aerial showing known coverage of archaeological surveys (shown in green) undertaken within the general vicinity of the proposed alignment (approximate alignment shown in red). Numbers correspond to the table below. Source: Auckland Council CHI and Auckland Council GIS 2014

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ARCHAEOLOGICAL BACKGROUND, CONTINUED

Table 1.
Archaeological
assessments
undertaken
within the
general vicinity
of the project
area. Source:
Auckland
Council CHI
2014

Map ID	Title	Author	Date
1	An Archaeological Survey of the Proposed CDL Land NZ Ltd Subdivision, Orwell Road, Greenhithe	Mosen	1995
2	Schnapper Rock Road Property: Terrestrial Ecological and Archaeological Characteristics	Bioresearches	2000
3	Auckland Regional Council Coastal Survey	Brassey	2010
4	Hobsonville Airbase Precinct One - Stage 1: Archaeological Assessment	Clough & Macready	2008
5	Hobsonville Landing: AEE (Archaeology)	Clough & Macready	2009
6	Sunderland/Hudson Precinct, Hobsonville Point: AEE (Archaeology)	Clough & Macready	2012
7	Catalina Precinct, Hobsonville: Archaeological Assessment	Clough & Macready	2013
8	181 Bush Road, Albany: Archaeological Survey for Resource Consent Application	Clough & Prince	1997
9	Waiarohia Structure Plan Area: Archaeological Assessment	Clough & Prince	1999
10	Hobsonville Access and Docking Facility: Preliminary Archaeological Assessment	Clough & Prince	2001
11	Archaeological Investigation of Future Development Areas, North Shore City: Survey and Assessment of Albany and Greenhithe Structure Plan Areas.	Clough	1995
12	Upper Harbour Corridor, Greenhithe Deviation: Archaeological Assessment	Foster	2001
13	Proposed School Sites, Albany: Archaeological Assessment	Foster	1997
14	Power NZ - Proposed Albany to Wairau Road Overhead Transmission Line: Archaeological Assessment	Foster	1998
15	Proposed Subdivision - Laurel Oak Drive, Schnapper Rock, Albany, Auckland	Judge	2013
16	284 Schnapper Rock Road, Albany: Archaeological Assessment	Judge	2013
17	55 Schnapper Rock Road and 52 Kyle Road, Schnapper Rock, Albany: Archaeological Assessment	Judge	2014
18	162 Kyle Road, Greenhithe: Archaeological Assessment	Shakles, Phear & Clough	2011
19	Te Wharau Creek Subdivision, Ryder and Kitto Blocks, Greenhithe	Sides, Mosen, Don & Gardner	1997

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ARCHAEOLOGICAL BACKGROUND, CONTINUED

Recorded Historic Heritage Sites

There are currently seven archaeological and seven historic heritage sites recorded within c.100m of the proposed Northern Interceptor Phase 1 alignment (Figure 14 – Figure 19; Table 2).

The recorded archaeological sites comprise coastal shell midden deposits related to pre-European Maori settlement of the area. The midden site recorded as R10/818 (Figure 16) may possibly be the settlement referred to in Maori traditional history as being located at Awaiti on an arm of the Te Wharau Creek, originally recorded by Clough in 1995 as a settlement area extending over a large part of the small promontory. Visible archaeological remains comprised extensive deposits of shell midden and a dark modified soil (Clough 1995:15).

The site recorded as R10/816 in the NZAA records (Figure 17) is described completely differently within the Auckland Council CHI records, and it is unknown whether this site should be accurately recorded within Wainoni Park or within the North Shore Memorial Park property.

The seven recorded historic heritage sites comprise existing residential, religious and civic buildings (CHI 3507, 12928, 12936, 19647 and 19648), the remnants of Greenhithe wharf located at the end of Traffic Road (CHI 191 – see Figure 15) and a railway sleeper located within the CMA close to the end of Traffic Road (CHI 17744 – Figure 15).

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Table 2. Archaeological and historic heritage sites recorded within c.100m of the proposed Northern Interceptor Phase 1 alignment. Source: Auckland Council CHI and ArchSite 2014

CHI No.	NZAA Site No.	Site Type	Name	Location	District/Regional Plan Name	NZTM Easting	NZTM Northing
191		Wharf Site (Greenhithe Wharf)	Greenhithe wharf	Traffic Road, Greenhithe		1748699	5928484
3507		Building - Dwelling	'Love Cottage' Evans House	Monterey Park, Hobsonville	PAUP: within Historic Heritage Overlay for Duke House ref. 130	1747781	5927300
5955	R11/495	Shell midden		Hobsonville		1747952	5927283
11170	R10/817	Midden		North Shore Memorial Cemetery	PAUP Site of Value to Mana Whenua ID1978	1749632	5930597
11171	R10/818	Midden/ Settlement	Te Karaka?			1749797	5930060
12928		Building - Educational	Old Greenhithe School Building Greenhithe School Building (former)	Greenhithe Road, Greenhithe	N S District Plan, Operative 2002 (Cat A, Map 17:5). PAUP Historic Heritage Building (Appen 9:842)	1749173	5928771
12936		Building - Dwelling	Collins House (former)	20-24 Greenhithe Road, Greenhithe	NS District Plan, Operative 2002 (Cat B, Map 17:18). PAUP Historic Heritage Building (Appen 9:852)	1749135	5928860
	R10/816	Midden		Possibly Waioni Reserve – records differ			
17730	R10/1181	Midden		North Shore Memorial Cemetery	PAUP Site of Value to Mana Whenua ID3211	1749656	5930568
17731	R10/1182	Midden		North Shore Memorial Cemetery	PAUP Site of Value to Mana Whenua ID3212	1749606	5930579
17736	R10/1187	Midden		Te Wharau Reserve, Te Wharau Creek	PAUP Site of Value to Mana Whenua ID3217	1749618	5930049
17744		Railway Sleeper		Traffic Road, Greenhithe		1748647	5928392
19647		Building - Church	St Michael and All Angels Anglican Church	12 Greenhithe Road, Greenhithe		1749078	5928748
19648		Building - Tauhinu Sea Scouts Den	Tauhinu Sea Scouts Den	R17 Rahui Road, Greenhithe	NS District Plan, Operative 2002 (Cat B, Map 17:504)	1748710	5928481

Continued on next page

ARCHAEOLOGICAL BACKGROUND, CONTINUED



Figure 14. Northern Interceptor Phase 1 alignment (overlaid in red) at Hobsonville, showing distribution of recorded archaeological and historic heritage sites within the general vicinity. Note: site locations are only accurate to within c.100m. Aerial source: Auckland Council GIS 2014

Continued on next page

ARCHAEOLOGICAL BACKGROUND, CONTINUED



Figure 15. Northern Interceptor Phase 1 alignment (overlaid in red) at Greenhithe, showing distribution of recorded archaeological and historic heritage sites within the general vicinity. Note: site locations are only accurate to within c.100m. Aerial source: Auckland Council GIS 2014

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ARCHAEOLOGICAL BACKGROUND, CONTINUED



Figure 16. Northern Interceptor Phase 1 alignment (overlaid in red) at Wainoni Park, showing distribution of recorded archaeological and historic heritage sites within the general vicinity. Note: site locations are only accurate to within c.100m. Aerial source: Auckland Council GIS 2014

Continued on next page

ARCHAEOLOGICAL BACKGROUND, CONTINUED



Figure 17. Northern Interceptor Phase 1 alignment (overlaid in red) at North Shore Memorial Park and North Shore Golf Club, showing distribution of recorded archaeological and historic heritage sites within the general vicinity. Note: site locations are only accurate to within c.100m. Aerial source: Auckland Council GIS 2014

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ARCHAEOLOGICAL BACKGROUND, CONTINUED

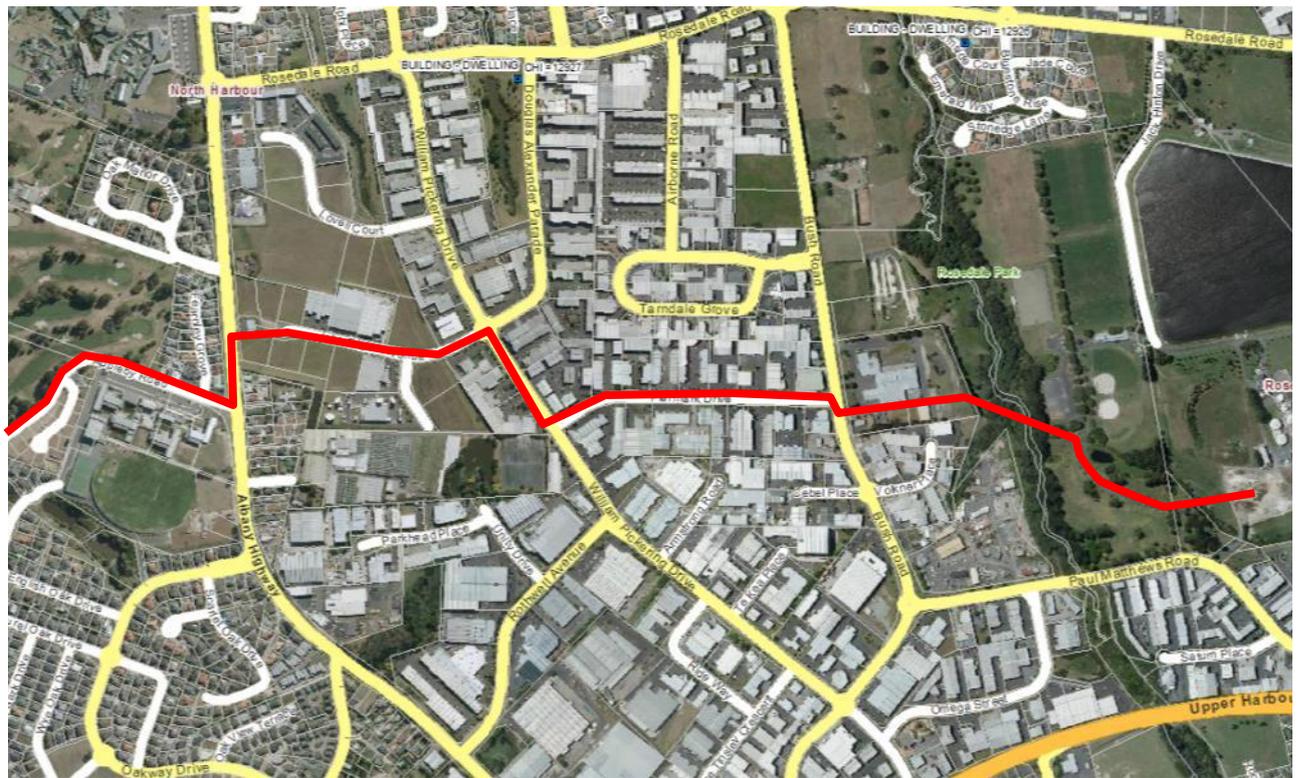
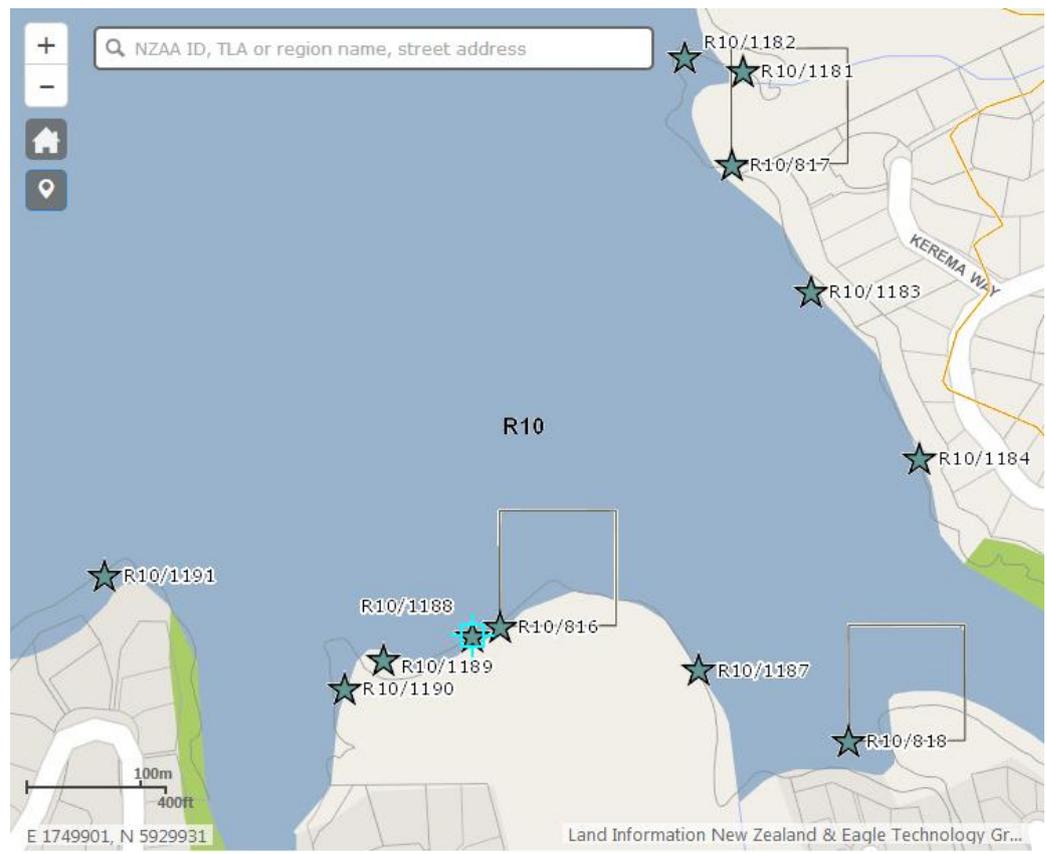


Figure 18. Northern Interceptor Phase 1 alignment (overlaid in red) at Albany and Rosedale, showing no recorded archaeological and historic heritage sites within the general vicinity. Note: site locations are only accurate to within c.100m. Aerial source: Auckland Council GIS 2014

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ARCHAEOLOGICAL BACKGROUND, CONTINUED

Figure 19.
ArchSite map showing distribution of recorded archaeological sites along the banks of Te Wharau Creek. Note: site locations are only accurate to within c.100m. Source: NZAA ArchSite 2014



FIELD SURVEY

Hobsonville Pump Station, SH18 Crossing to Upper Waitemata Harbour Crossing

The Hobsonville end of the proposed Northern Interceptor Phase 1 alignment follows from the connection within the existing Hobsonville pump station (Figure 20), crossing SH18 via micro tunneling, then travels down the northern side of the Upper Harbour Highway (via open cut trenching) and continues along the northern side of the Upper Waitemata Harbour crossing (Greenhithe Bridge). The area was found to have been extensively and significantly modified through the development of SH18 and construction and later modification of the Upper Waitemata Harbour crossing (Figure 21). Exposed soils were noted across the survey area and showed exposed yellow clay with no or very minimal topsoil evident (Figure 22).

Previously recorded shell midden site R11/495 was not located. The area within which it was originally recorded has been completely modified through the construction of the bridge/motorway and pedestrian/cycleway as well as the motorway fence and rock wall revetment (Figure 23). The site has probably been destroyed since original recording. Historic house site CHI 3507 is located c.90m north of the proposed alignment within the PAUP historic heritage overlay for Duke House (PAUP Appendix 9: ID 130) and will not be affected (Figure 24).

No archaeological or historic heritage remains were identified within the Hobsonville section of the Phase 1 alignment.

**Figure 20.
Hobsonville
Pump Station**



Continued on next page

FIELD SURVEY, CONTINUED

Figure 21.
Looking over the
western
approach to the
Upper
Waitemata
Harbour crossing
(Hobsonville
side)



Figure 22.
Modified
landscape and
exposed soils
evident along the
northern side of
the SH18
(Hobsonville
side)



Continued on next page

FIELD SURVEY, CONTINUED

Figure 23.
Recorded
location of
midden site
R11/495



Figure 24. PAUP
Historic Heritage
overlay showing
extent of place
for Duke House
(Appendix 9:130)
including 'Love
Cottage' (purple
hatching) in
relation to the
proposed
alignment (red).
Aerial source:
PAUP GIS 2014



Continued on next page

FIELD SURVEY, CONTINUED

Rahui Reserve and Traffic Road, Greenhithe

From Hobsonville to Greenhithe, the proposed pipe alignment crosses the harbour in a north-easterly direction, meeting with the foreshore at the end of Rahui Road, Greenhithe. The Upper Waitemata Harbour crossing section of the crossing is not included within the scope of this project. The pipeline is proposed to be directionally drilled beneath the foreshore at Rahui Reserve, then open cut through the reserve. This will involve the removal of the toilet block within the Reserve and subsequent construction of a new toilet block. The works will also involve the leveling of ground on the northern side of Rahui Road to accommodate machinery and the excavation of two entry pits within the Reserve (Figure 25).

The alignment then continues up the paper road section of Traffic Road, along the formed section of Traffic Road to connect with Tauhinu Road and Greenhithe Road. An HDD pit and line valves will be excavated within the foreshore reserve at the end of Rahui Road (see Appendix A; Figure 25).

Two sites are currently recorded within the Auckland Council CHI as being located within the coastal reserve (Figure 25). The sites comprise the Sea Scouts building (CHI 19648) and a remnant wharf site (CHI 191).

The sea scout hall is still in use, located to the north of the proposed area of works (Figure 26). The remnant piles of the wharf are located beneath the cantilevered section of the sea scout building, within the CMA. Neither of the sites will be affected as a result of the proposed works.

Minor subsurface testing within the reserve identified a 24cm deep mixed grey/brown soil overlying a yellow clay subsoil (Figure 27, Figure 28). Testing along the unformed section of Traffic Road identified a modified mixed clay soil to a depth of c.18cm (Figure 29, Figure 30).

No archaeological or historic heritage remains were identified within the area of proposed works at Rahui Reserve and Traffic Road.

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FIELD SURVEY, CONTINUED

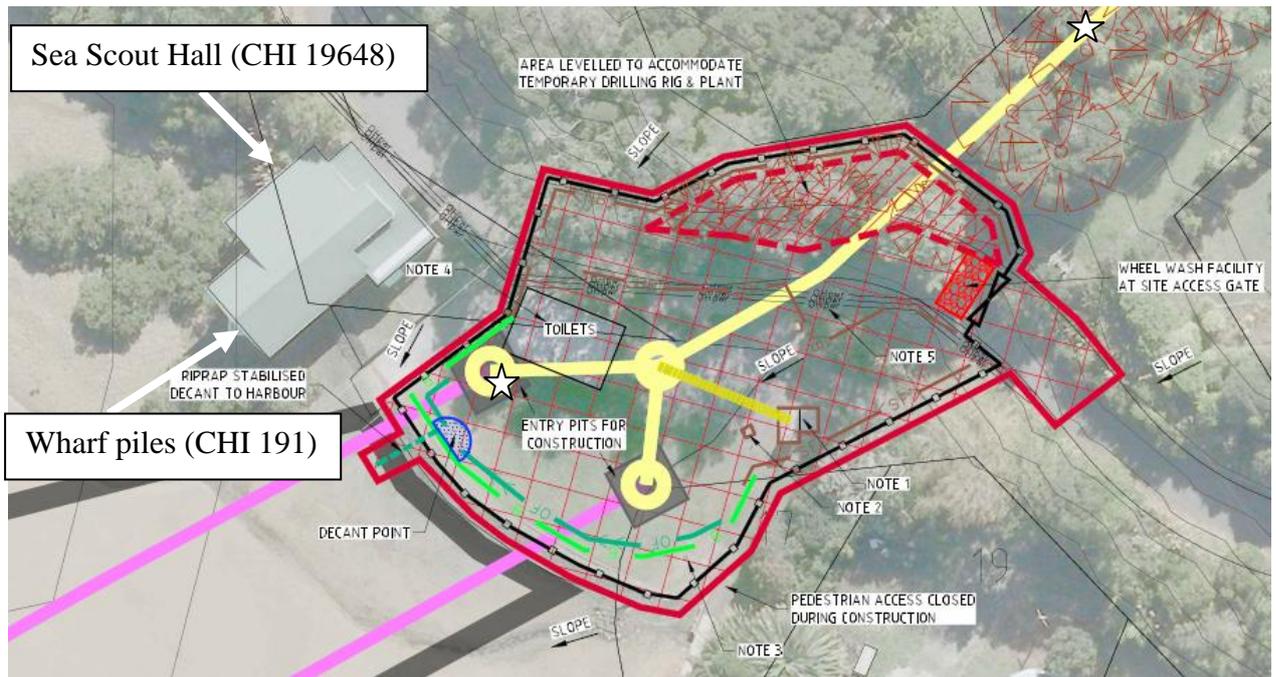


Figure 25. Aerial shows proposed alignment and excavation areas, in relation to the recorded Sea Scout Hall (CHI 19648) and remnant wharf piles (CHI 191). Test pit locations are marked with stars. Aerial source: Watercare and MWH 2015

Figure 26.
Looking north
towards Sea
Scout Hall and
remnant wharf



Continued on next page

FIELD SURVEY, CONTINUED

Figure 27.
Looking north-
west over
proposed area of
works (in
foreground),
showing toilet
block to be
removed on far
right and sea
scout hall in
background
centre



**Figure 28. Result
of test pit in
Rahui Reserve**



Continued on next page

FIELD SURVEY, CONTINUED

Figure 29.
Looking down
the unformed
section of Traffic
Road towards the
foreshore



Figure 30. Result
of test pit within
the unformed
section of Traffic
Road



Continued on next page

FIELD SURVEY, CONTINUED

Greenhithe Road to South Wainoni Park

The proposed alignment then continues from the end of Traffic Road and Tauhinu Road along Greenhithe Road to South Wainoni Park. The works along this section are proposed to be open cut along the existing sealed road.

There are currently three historic heritage sites recorded within the Auckland Council CHI along Greenhithe Road (Figure 31). The sites comprise the ‘Old Greenhithe School’ building located within Collins Park, between 13 and 15 Greenhithe Road (Figure 32); Collins House located at 20 Greenhithe Road (Figure 33) and St Michael and All Angels Anglican Church located at 12 Greenhithe Road (Figure 34). Both the old school building and Collins House are scheduled as Category B Significant Historic Heritage Places within the PAUP (Appendix 9: 842 and 852). The site extents are illustrated in Figure 31.

These historic heritage sites will not be affected as a result of the proposed works, nor were any other archaeological or historic heritage sites identified within the proposed Greenhithe Road works area as a result of the current assessment.

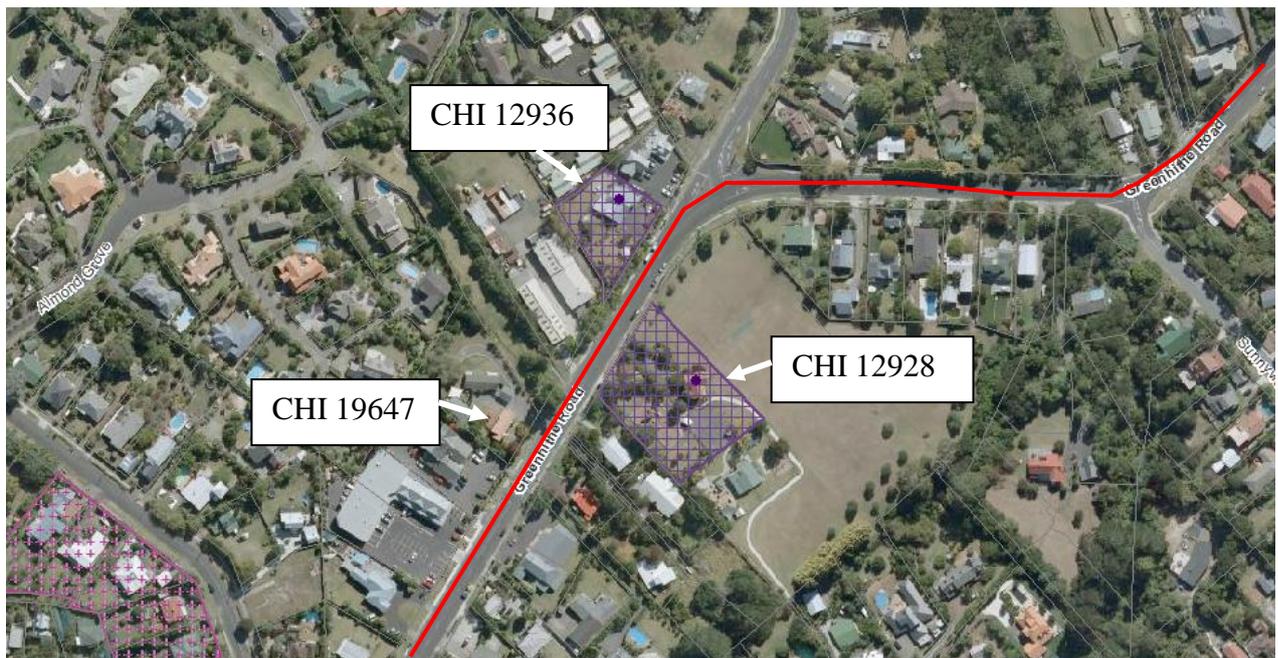


Figure 31. Aerial showing proposed alignment (marked in red), in relation to sites recorded within the Auckland Council CHI (note: CHI sites 12936 and 12938 also include scheduled site extents (purple hatching). Aerial source: Auckland Council GIS 2014

Continued on next page

FIELD SURVEY, CONTINUED

Figure 32.
Former
Greenhithe
School (CHI
12938) as seen
from Greenhithe
Road



Figure 33. Clark
House (CHI
12936) as visible
from Greenhithe
Road



Continued on next page

FIELD SURVEY, CONTINUED

Figure 34. St Michael and All Angels Church (CHI 19647) as seen from Greenhithe Road



Wainoni Park

The proposed alignment runs north from Greenhithe Road through the eastern side of Wainoni Park (Figure 35). The park is currently utilised as a Pony Club and, as such, access was limited in some paddocks. The alignment is proposed to be open cut through the park with an HDD pit and line valves to be installed at the northern edge of the park and an access road will be formed from Churchill Road (Figure 35 and Figure 37). The alignment will then be directionally drilled beneath Te Wharau Creek to surface again inside the North Shore Golf Club property.

Identified archaeological sites within Wainoni Park are focused around the northern edge that is bounded by Te Wharau Creek. The sites comprise shell midden deposits related to pre-European Maori settlement of the Creek, located around the coastal edge. Sites located within close proximity are R10/1187 and R10/1188 (Figure 35). Site R10/1187 is recognised as being a Site and Place of Value to Mana Whenua within the PAUP (Appendix 4: 3217; Figure 36)

R10/1187 comprises patches of shell midden evident eroding and slumping from the foreshore bank onto the mudflats over a distance of c.30m. Sections of the midden remain relatively intact, but they do not appear to extend into the bank for more than 0.5m. The midden comprises predominantly cockle, with charcoal and bunt stone also identified (Figure 38, Figure 39).

R10/1188 comprises a very small patch of shell midden (less than 1m²) which is visible beneath a mature Norfolk Pine tree. Only cockle was identified. Visual survey and probing did not identify any further remains (Figure 40).

Continued on next page

FIELD SURVEY, CONTINUED

Wainoni Park, *continued*

Also noted around the foreshore area were four discrete patches of mixed historic and modern rubbish. Bottles, including black beers, string rim wines, whirly salad oils, case gin and schnapps bottles were present in abundance, as were fragments of ceramic tableware, some with the blue underglaze print of 'Asiatic Pheasant' identified (Figure 41, Figure 42). All of these items date to the latter half of the 19th century and through to the early 20th century. Modern items were also mixed through the debris including coca cola bottles, machine made screw top jars and plastic bottles. Although many of these items could possibly relate to the occupation of the site during the 19th century by the Churchouse family, it is not clear when they were deposited. Communications with Rachel Ford of Auckland Council determined that at the time of the last survey of the area (Robinson & Ford 2008 in: Brassey 2010), no historic rubbish was identified. This, together with the mixture of modern rubbish suggests that the material has been dumped here more recently and is therefore not historically 'in situ'.

At the request of Watercare, no subsurface testing was undertaken within the park. No other sites were identified within the remainder of the park.

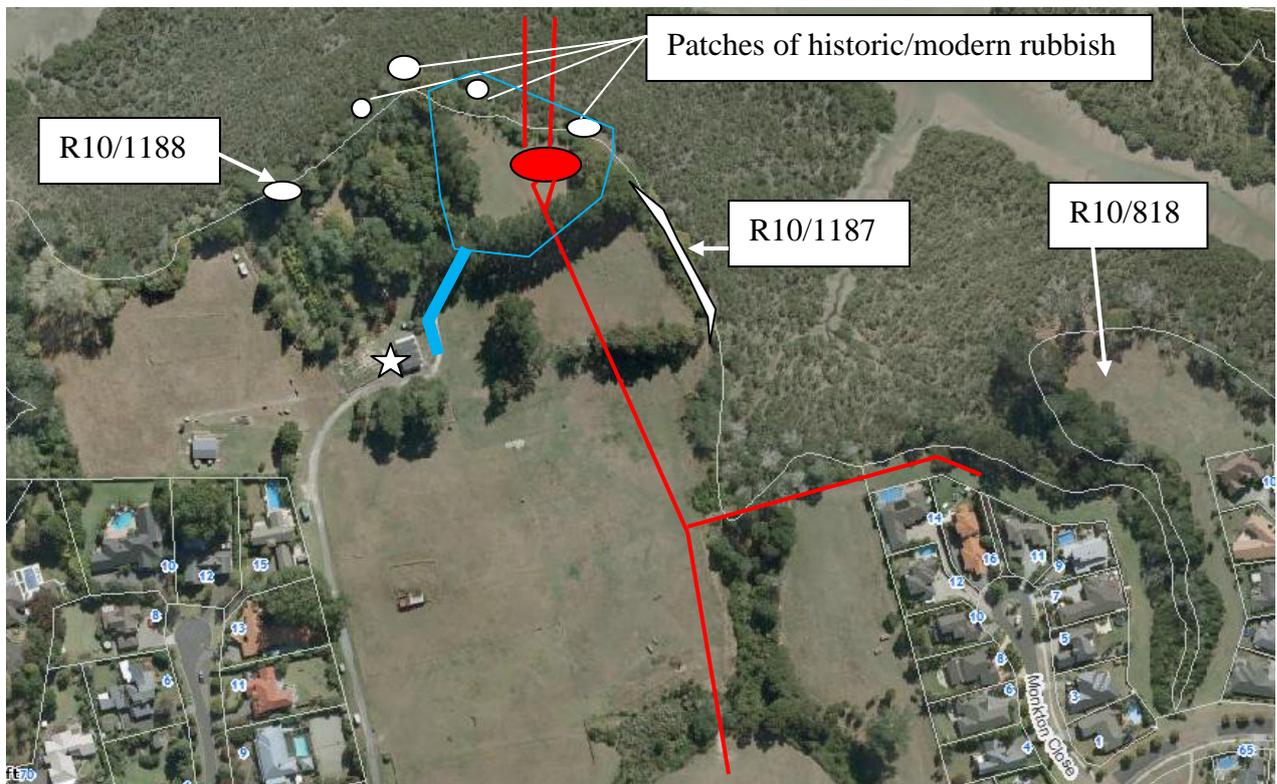


Figure 35. Aerial shows proposed alignment and excavation areas (marked in red), proposed site works area and access road (marked in blue), in relation to the recorded archaeological sites and areas of historic and modern mixed rubbish. Location of original farmhouse marked with star. Aerial source: Auckland Council GIS 2014

Continued on next page



Figure 36. PAUP Sites of Value to Mana Whenua overlay at northern end of Wainoni Park. Source: Auckland Council PAUP GIS 2014

**Figure 37.
Looking north-
north-west over
proposed
location of
earthworks
within Wainoni
Park North**



Continued on next page

FIELD SURVEY, CONTINUED

Figure 38.
Looking west
towards site
R10/1187



Figure 39. Close-
up of section of
R10/1187



Continued on next page

FIELD SURVEY, CONTINUED

Figure 40.
Looking over site
R10/1188
(bottom right
corner)



Figure 41.
Historic and
modern rubbish
strewn over
coastal mudflats
around northern
end of Wainoni
Park



Continued on next page

Figure 42.
Historic and modern rubbish strewn over coastal mudflats around northern end of Wainoni Park



North Shore Memorial Park

The proposed alignment is directionally drilled beneath Te Wharau Creek and surfaces just north of the vegetated area within North Shore Memorial Park. An HDD pit and line valves will be installed at this point. The remainder of the alignment is proposed to be open cut along the alignment of a future access road and then along the alignment of the existing sealed cemetery road.

There are currently three recorded archaeological sites located within the general vicinity of proposed works at North Shore Memorial Park. The sites all comprise coastal shell midden deposits (R10/817, R10/1181 and R10/1182). All of the sites are located within the heavily vegetated area along the southern boundary of the cemetery property (Figure 43). The sites are all recognised as being Sites and Places of Value to Mana Whenua within the PAUP (Figure 44).

R10/817 comprises a small but dense deposit of shell midden located on the south-facing foreshore bank. Only cockle was identified. The site is actively eroding onto the foreshore and does not appear to continue further inland (Figure 45).

Continued on next page

FIELD SURVEY, CONTINUED

North Shore Memorial Park, *continued*

Site R10/1181 comprises a patch of shell midden actively eroding down the moderate to steeply sloping north facing foreshore bank, opposite R10/817 (Figure 46). Shell is evident spread over an area of c.3m with no intact lens identified. Again, only cockle was identified with occasional pieces of charcoal.

Site R10/1182 is spread in patches along much of the extent of the small bay (c.50m; Figure 47 and Figure 48). The midden deposits comprise primarily cockle with some oyster also identified. One of the deposits is particularly ashy.

All of the recorded sites are located away from the proposed alignment and will not be affected.

Subsurface testing undertaken along the proposed alignment within the currently undeveloped section of the cemetery did not identify any further archaeological or historic heritage remains. Test pits showed a c.15cm thick layer of pale grey brown mixed soil overlying the sterile clay subsoil (Figure 44, Figure 49).

No archaeological or historic heritage remains were identified within the area of proposed works at North Shore Memorial Park.

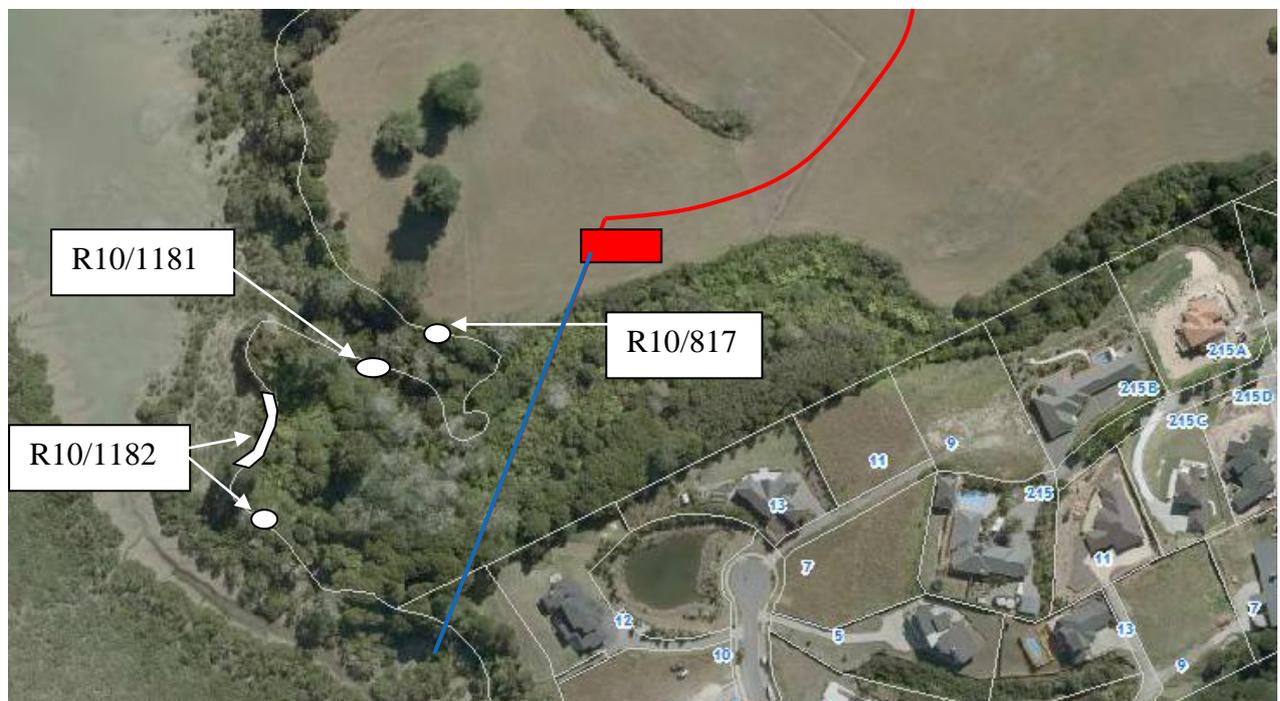


Figure 43. Aerial shows proposed alignment and excavation areas (open trenching marked in red, directional drilling marked in blue), in relation to the recorded archaeological sites. Aerial source: Auckland Council GIS 2014

Continued on next page

FIELD SURVEY, CONTINUED

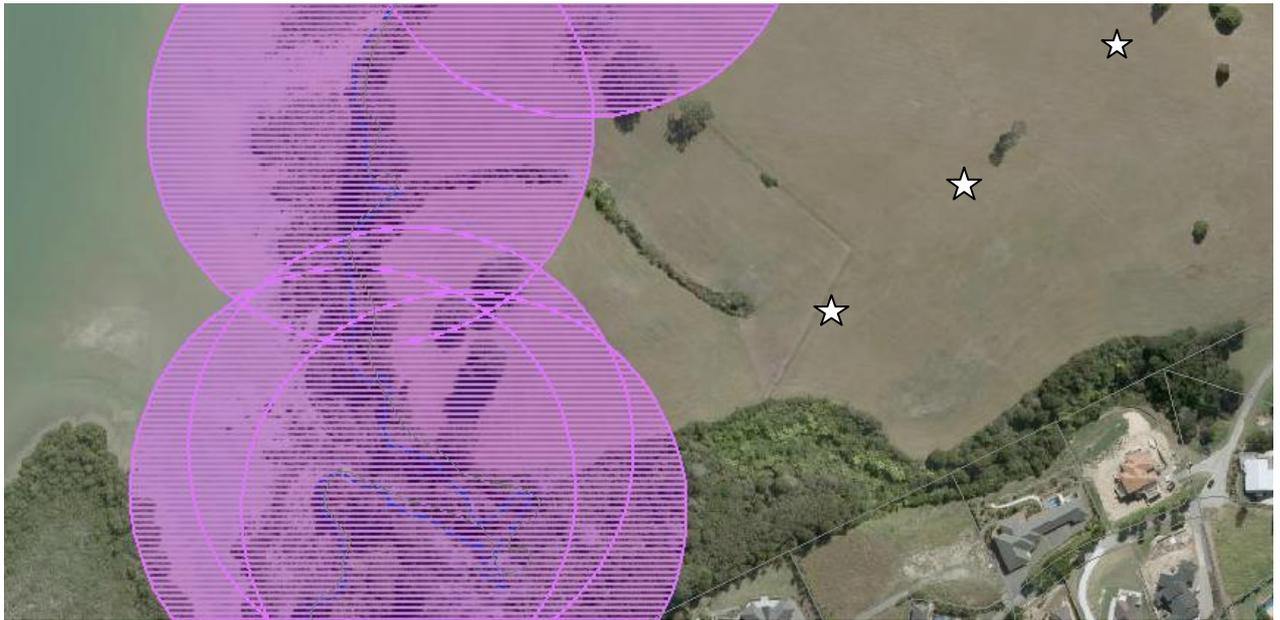


Figure 44. PAUP Sites of Value to Mana Whenua overlay at south-western corner of the North Shore Memorial Park in relation to test pits undertaken (marked with stars). Source: Auckland Council PAUP GIS 2014

Figure 45. Site R10/817



Continued on next page

FIELD SURVEY, CONTINUED

Figure 46. Site R10/1181



Figure 47. Part of site R10/1182



Continued on next page

FIELD SURVEY, CONTINUED

Figure 48. Part of site R10/1182



Figure 49. Typical test pit undertaken within North Shore Memorial Park property



Continued on next page

FIELD SURVEY, CONTINUED

North Shore Memorial Park to Piermark Drive

Upon exiting from the North Shore Memorial Park, the proposed alignment follows down existing sealed road alignments, crossing the inland section of a remaining bush block into the North Shore Golf Club. The alignment is proposed to be open cut through the Golf Club property, along sealed Appleby Road (Figure 50), along John Glenn Avenue and across Albany Highway. The alignment then continues between industrial buildings to Piermark Drive (Figure 51) – a heavily developed commercial/industrial through road.

Inspection of the alignment through the Golf Club did not identify any archaeological or historic heritage remains. The area has been extensively modified for the development of the Golf Club and exposed soils generally comprised clay subsoils with a thin topsoil layer (Figure 52).

No archaeological or historic heritage remains were identified within the proposed area of works North Shore Memorial Park to Piermark Drive.

Figure 50.
Looking south-west down
Appleby Road



Continued on next page

FIELD SURVEY, CONTINUED

Figure 51.
Looking east
along Piermark
Drive



Figure 52.
Exposed clay
soils within
North Shore Golf
Club property



Continued on next page

FIELD SURVEY, CONTINUED

Rosedale Park to Rosedale WWTP

The proposed alignment runs from the western edge of Rosedale Park (behind industrial and commercial buildings along Bush Road), through an area currently in pasture and utilised by the local pony club (Figure 53). The alignment then continues in an easterly direction, crossing Alexandra stream that runs through the Park (Figure 54) and following the existing formed road alignment to the Rosedale WWTP (Figure 55). These works are proposed to be open cut with the alignment directionally drilled beneath Alexandra stream.

Much of the area had been previously modified through formation of the WWTP and the park, as was evidenced through exposed clay soils and results of testing that showed only a very thin topsoil layer – especially east of the stream alignment (Figure 56). Visual survey and subsurface testing did not identify any archaeological or historic heritage remains within the proposed alignment through Rosedale Park.

Figure 53.
Looking south over western edge of Rosedale Park



Continued on next page

FIELD SURVEY, CONTINUED

Figure 54.
Location of
proposed stream
crossing within
Rosedale Park
(to be
directionally
drilled)



Figure 55.
Looking south-
east over
proposed
alignment within
Rosedale Park



Continued on next page

FIELD SURVEY, CONTINUED

Figure 56
Exposed clay
soils within
Rosedale Park



DISCUSSION AND CONCLUSIONS

Summary of Results

The review of historic heritage databases identified seven archaeological and seven historic heritage sites recorded within c.100m of the proposed Northern Interceptor Phase 1 alignment from Hobsonville pump station to the Rosedale WWTP. The archaeological sites all comprise shell midden deposits related to pre-European Maori settlement of the Lucas Creek area and are located around the northern end of Wainoni Park and the southern coastal edge of North Shore Memorial Park. The historic heritage sites comprise mainly existing buildings located at Rahui Reserve and Greenhithe Road, as well as the remains of Greenhithe Wharf. None of the recorded sites will be affected by the proposed alignment, and no new sites were identified during the field survey.

Maori Cultural Values

This is an assessment of effects on archaeological values and does not include an assessment of effects on Maori cultural values. Such assessments should only be made by the tangata whenua. Maori cultural concerns may encompass a wider range of values than those associated with archaeological sites.

The historical association of the general area with the tangata whenua is evident from the recorded sites, traditional histories and known Maori place names.

Consultation has been undertaken with various iwi groups with interests in the project, including: Te Kawerau Iwi Authority and Ngati Manuhiri Settlement Trust. Sections of the current assessment(Wainoni Park and North Shore Memorial Park) were undertaken with Ngati Manuhiri representative Fiona McKenzie. Communications concerning the assessment have also been ongoing between Watercare and other affected iwi groups.

Survey Limitations

It should be noted that archaeological survey techniques (based on visual inspection and minor sub-surface testing) cannot necessarily identify all sub-surface archaeological features, or detect wahi tapu and other sites of traditional significance to Maori, especially where these have no physical remains.

Continued on next page

DISCUSSION AND CONCLUSIONS, CONTINUED

Archaeological Value and Significance

The general Hobsonville and Greenhithe areas are considered to have considerable archaeological significance based on the sites remaining that relate to both pre-European Maori and early European settlement of the areas. The Albany and Rosedale areas have less archaeological significance as relatively few sites have previously been recorded within these areas.

The proposed alignment passes within close proximity to sites related to all periods of occupation of the area; however no sites have been identified within the immediate area of works. While historic rubbish remains were identified within the proposed area of works at the northern end of Wainoni, these do not appear to be historically in situ and are therefore not considered to be an archaeological site.

The proposed area of works therefore has no known archaeological value or significance.

Effects of Proposal

The current proposal will have no known effects on archaeological or historic heritage values as no sites have been identified within the areas of works for the proposed Northern Interceptor Phase 1 alignment. The proposed works do however involve open trenching within the vicinity of recorded heritage buildings at Rahui Reserve and Greenhithe Road. A vibration report prepared by Tonkin & Taylor (2014) has assessed that works within these areas will be of low vibration risk with 'no risk to structures' (Tonkin & Taylor 2014:17-18).

However, in any area where archaeological sites have been recorded in the general vicinity it is possible that unrecorded subsurface remains may be exposed during development. It is considered possible that unrecorded subsurface archaeological sites may be exposed during development, particularly within coastal areas, i.e. Rahui Reserve, Wainoni Park and North Shore Memorial Park. If so, any previously unidentified remains are likely to be similar to those previously identified within the general area, namely coastal shell midden deposits or historic period remains.

If any archaeological remains should be exposed once construction was underway it would not be possible to avoid them due to the engineering requirements of the project.

Archaeological features and remains can take the form of burnt and fire cracked stones, charcoal, rubbish heaps including shell, bone and/or 19th century glass and crockery, ditches, banks, pits, old building foundations, artefacts of Maori and early European origin or human burials.

Continued on next page

DISCUSSION AND CONCLUSIONS, CONTINUED

Resource Management Act 1991 Requirements

Section 6 of the RMA recognises as matters of national importance: *‘the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga’* (S6(e)); and *‘the protection of historic heritage from inappropriate subdivision, use, and development’* (S6(f)).

All persons exercising functions and powers under the RMA are required under Section 6 to recognise and provide for these matters of national importance when *‘managing the use, development and protection of natural and physical resources’*. Archaeological and other historic heritage sites are resources that should be sustainably managed by *‘Avoiding, remedying, or mitigating any adverse effects of activities on the environment’* (Section 5(2)(c)).

Historic heritage is defined (S2) as *‘those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures, deriving from any of the following qualities: (i) archaeological; (ii) architectural; (iii) cultural; (iv) historic; (v) scientific; (vi) technological’*. Historic heritage includes: *‘(i) historic sites, structures, places, and areas; (ii) archaeological sites; (iii) sites of significance to Maori, including wahi tapu; (iv) surroundings associated with the natural and physical resources’*.

Regional, district and local plans contain sections that help to identify, protect and manage archaeological and other heritage sites. The plans are prepared under the rules of the RMA. The Auckland Council District Plan – Operative North Shore Section 2002 and the Proposed Auckland Unitary Plan (notified 2013) are relevant to the proposed activity.

There are currently four archaeological sites (R10/817, R10/1181 and R10/1182, R10/1187) scheduled as Sites and Places of Value to Mana Whenua within the PAUP (Appendix 4: 1978, 3211, 3212, 3217). The recorded extents of these sites will not be affected by the proposed works. The works do however fall within the PAUP mana whenua overlay buffers for these sites at both Wainoni Park and North Shore Memorial Park.

In addition, the ‘Old Greenhithe School’ building (CHI 12928) and Collins House (CHI 12936) are scheduled within the Operative Plan (Map 17: 5, 18) and within the PAUP (Appendix 9: 842, 852) as Category B Historic Heritage Places. The Tauhinu Scout Den at Rahui Reserve is also scheduled as a Category B building within the Operative Plan (Map 17: 504). At Hobsonville Duke House, (CHI 3507) is scheduled in the PAUP (Appendix 9: 130).

None of these sites will be affected as a result of the current proposed works, but as the works are within 50m of the defined extents of place of the Old Greenhithe School, Collins House and Duke House, consent may be required under the PAUP rules.

Continued on next page

DISCUSSION AND CONCLUSIONS, CONTINUED

Resource Management Act 1991 Requirements, continued

This assessment has established that the proposed activity will not affect any known archaeological or built heritage remains, but has the potential to affect unidentified subsurface archaeological remains that may be exposed during development. If resource consent is granted, it is recommended that a requirement for monitoring of works within Wainoni Park North, Rahui Reserve and the southern section of works at North Shore Memorial Park is included as a condition and that an Accidental Discovery Protocol is adopted for the remainder of works required for the project. It is also recommended that an advice note regarding the provisions of the HNZPTA is included.

Heritage New Zealand Pouhere Taonga Act 2014 Requirements

In addition to any requirements under the RMA, the HNZPTA protects all archaeological sites whether recorded or not, and they may not be damaged or destroyed unless an Authority to modify an archaeological site has been issued by Heritage NZ (Section 42).

An archaeological site is defined by the HNZPTA Section 6 as follows:

‘archaeological site means, subject to section 42(3), –

(a) 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)’³

Authorities to modify archaeological sites can be applied for either in respect to archaeological sites within a specified area of land (Section 44(a)), or to modify a specific archaeological site where the effects will be no more than minor (Section 44(b)), or for the purpose of conducting a scientific investigation (Section 44(c)). Applications that relate to sites of Maori interest require consultation with (and in the case of scientific investigations the consent of) the appropriate iwi or hapu and are subject to the recommendations of the Maori Heritage Council of Heritage NZ.

Continued on next page

³ Under Section 42(3) an Authority is not required to permit work on a pre-1900 building unless the building is to be demolished. Under Section 43(1) a place post-dating 1900 (including the site of a wreck that occurred after 1900) that could provide ‘significant evidence relating to the historical and cultural heritage of New Zealand’ can be declared by Heritage NZ to be an archaeological site.

DISCUSSION AND CONCLUSIONS, CONTINUED

Heritage New Zealand Pouhere Taonga Act 2014 Requirements, continued

In addition, an application may be made to carry out an exploratory investigation of any site or locality under Section 56, to confirm the presence, extent and nature of a site or suspected site.

While no known archaeological sites will be affected by the proposed works, it is possible that unidentified subsurface archaeological remains may be exposed during development.

In order to avoid any delays should unidentified subsurface features be exposed by the proposed works, consideration could be given to applying for an authority under Section 44(a) of the HNZPTA to cover all works undertaken for this project, as a precaution. This should be obtained before any earthworks are carried out. The conditions of the authority are likely to include archaeological monitoring of preliminary earthworks in specified areas, and procedures for recording any archaeological evidence before it is modified or destroyed.

Conclusions

Seven archaeological and seven other historic heritage sites have previously been recorded within c.100m of the proposed Northern Interceptor Phase 1 alignment. The recorded extents of these sites will not be affected as a result of the proposed works. However, there is some potential for previously unrecorded archaeological remains to be uncovered during works, particularly within the coastal areas including: Rahui Reserve, Wainoni Park North and the southern edge of North Shore Memorial Park. Due to this potential it is recommended that an Authority under the HNZPTA is sought prior to the start of works, and that works within these areas are monitored by an archaeologist to establish whether subsurface remains are present.

RECOMMENDATIONS

**It is
Recommended:**

- That the detailed development plans take account of the locations of the recorded archaeological sites, and ensure that they are avoided.
 - That the recorded midden site R10/1187 in the vicinity of proposed earthworks in Wainoni Park is temporarily marked out or fenced off prior to the start of earthworks to protect it from accidental damage from heavy machinery.
 - That if any of the recorded sites cannot be avoided, an Authority must be applied for under Section 44(a) of the HNZPTA and granted by Heritage NZ prior to the start of any works that will affect them. (*Note that this is a legal requirement*).
 - That because it is possible that subsurface archaeological remains may be exposed during development, an Authority should be applied for under Section 44(a) of the HNZPTA as a precaution prior to the start of earthworks. This would establish appropriate procedures for the management of any archaeological remains discovered, reducing the potential for delays during the development process.
 - That earthworks at Rahui Reserve, Wainoni Park North and the southern end of works at the North Shore Memorial Park should be monitored by an archaeologist to establish whether any unrecorded subsurface remains are present.
 - That in the event of koiwi tangata (human remains) being uncovered, work should cease immediately in the vicinity of the remains and tangata whenua, the Heritage NZ, NZ Police and Council should be contacted so that appropriate arrangements can be made.
 - That since archaeological survey cannot always detect sites of traditional significance to Maori, such as wahi tapu, the tangata whenua should be consulted regarding the possible existence of such sites along the length of the proposed alignment.
-

BIBLIOGRAPHY

- Auckland Council Cultural Heritage Inventory, accessed at <http://maps.aucklandcouncil.govt.nz> and <https://chi.org.nz>.
- Bioresearches. 2000. Schnapper Rock Road Property: Terrestrial Ecological and Archaeological Characteristics. Bioresearches report.
- Brassey, R. 2010. Auckland Regional Council Coastal Survey. ARC Heritage report.
- Clough & Associates. October 2010. Limeburners Bay Industrial Heritage Site, Hobsonville, Auckland. A Conservation Plan. Draft plan prepared for Auckland Regional Council.
- Clough, R. 1995. Archaeological Investigation of Future Development Areas, North Shore City: Survey and Assessment of Albany and Greenhithe Structure Plan Areas. Clough & Associates report prepared for North Shore City Council.
- Clough, R. and S. Macready. 2008. Hobsonville Airbase Precinct One – Stage 1: Archaeological Assessment. Clough & Associates report for the Hobsonville Land Company.
- Clough, R. and S. Macready. 2009. Hobsonville Landing: AEE (Archaeology). Clough & Associates report for BECA and the Hobsonville Land Company.
- Clough, R. and S. Macready. 2012. Sunderland/Hudson Precinct, Hobsonville Point: AEE (Archaeology). Clough & Associates report for the Hobsonville Land Company.
- Clough, R. and S. Macready. 2013. Sunderland/Hudson Precinct, Hobsonville Point: AEE (Archaeology). Clough & Associates report for the Hobsonville Land Company.
- Clough, R., S. Macready and M. Plowman. January 2008. R.O. Clark's Pottery (1864-1931), Limeburners Bay, Hobsonville: Archaeological Investigation. Report on S18 investigation of site R11/1508 in fulfilment of NZHPT Authority No. 2007/355 prepared for Hobsonville Residential Developments Ltd. Clough & Associates Monograph Series No. 3.
- Clough, R. and D. Prince. 1997. 181 Bush Road, Albany: Archaeological Survey for Resource Consent Application. Clough & Associates report.
- Clough, R. and D. Prince. 1999. Waiarohia Structure Plan Area: Archaeological Assessment. Clough & Associates report prepared for Land Information New Zealand (LINZ).
- Clough, R. and D. Prince. 2001. Hobsonville Access and Docking Facility: Preliminary Archaeological Assessment. Clough & Associates report prepared for URS and Waitakere City Council.
- Clough, R. and V. Tanner. 2004. Northern Region Strategic Development: Heritage Assessment. Clough & Associates report prepared for Waitakere City Council.
- Dawson, B. 2007. *Hobsonville: Portrait of a Seaplane Station*. Auckland: Random House.
- Dunmore, J. 2001. *Greenhithe: Today and Yesterday*. Heritage Press Ltd, Auckland.
- Fletcher Construction Company Ltd. 2015. Upper Harbour Duplicate Bridge. Accessed at: <http://www.fletcherconstruction.co.nz/projects.php?id=57&action=search&projectname=Upper%20Harbour%20Duplicate%20Bridge>.
- Foster, R. 1997. Proposed School Sites, Albany: Archaeological Assessment. Russell Foster & Associates report.
- Foster, R. 1998. Power NZ – Proposed Albany to Wairau Road Overhead Transmission Line: Archaeological Assessment. Russell Foster & Associates report.
- Foster, R. 2001. Upper Harbour Corridor, Greenhithe Deviation: Archaeological Assessment. Russell Foster & Associates report.

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BIBLIOGRAPHY, CONTINUED

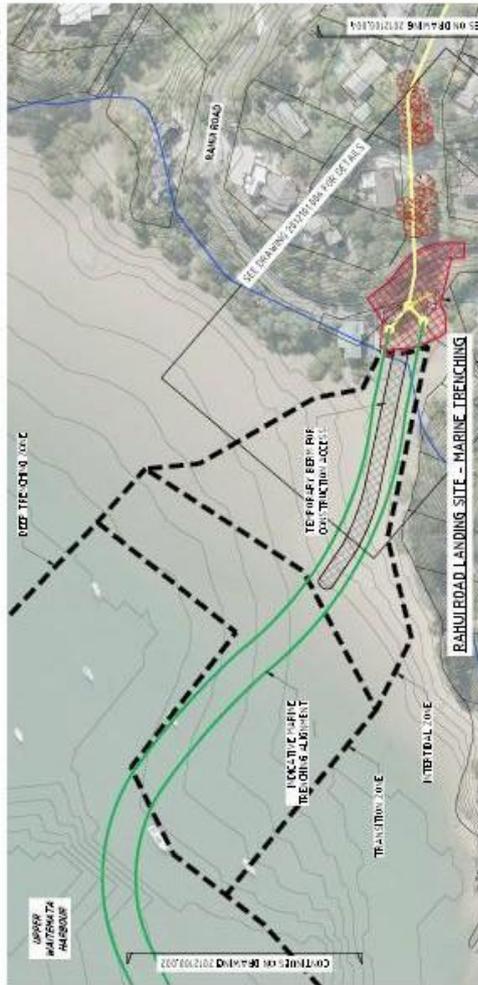
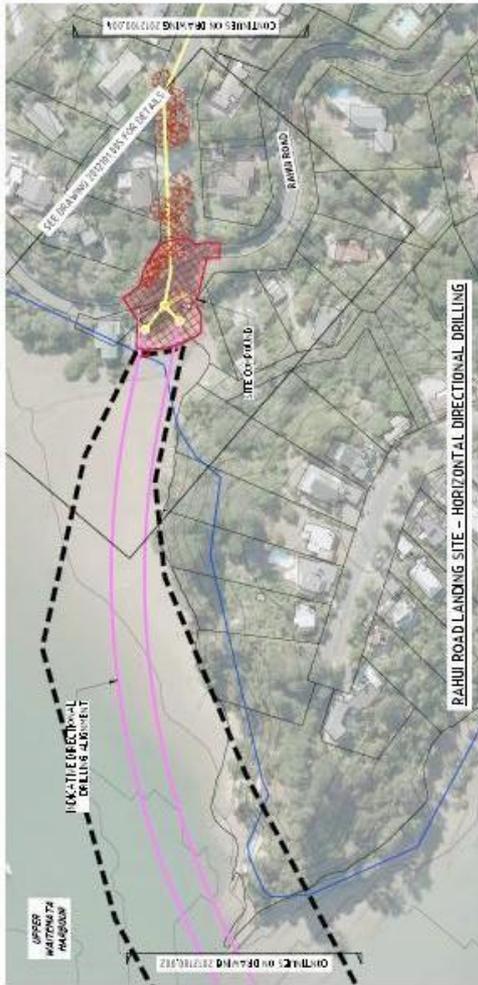
- Harrison, P., B. Lockstone and A. Anderson. 1997. *The Golden Age of New Zealand Flying Boats*. Random House.
- Judge, C. 2013. Proposed Subdivision – Laurel Oak Drive, Schnapper Rock, Albany, Auckland: Archaeological Assessment. Clough & Associates report prepared for 3rd Fairway Developments Ltd.
- Judge, C. 2013b. 284 Schnapper Rock Road, Albany: Archaeological Assessment. Clough & Associates report prepared for Airey Consultants Ltd.
- Judge, C. 2014. 55 Schnapper Rock Road and 52 Kyle Road, Schnapper Rock, Albany: Archaeological Assessment. Clough & Associates report prepared for HL Developments Ltd & Yushi Zhang.
- King, R. E. 1984. *Tauhinu: A History of Greenhithe*. Criterion Papers NZ Ltd.
- Macready, S. and R. Clough. December 2008. Hobsonville Airbase: Heritage Landscape Assessment. Clough & Associates draft report prepared for The Hobsonville Land Company.
- Mosen, J. 1995. An Archaeological Survey of the Proposed CDL Land NZ Ltd Subdivision, Orwell Road, Greenhithe. Bioresarches Report.
- Murdoch, G. n.d. (Historian). Personal communications.
- Neate, R. 2014. Northern Interceptor Phase 1 Construction Methodology. MWH report prepared for Watercare.
- New Zealand Archaeological Association ArchSite Database, accessed at <http://www.archsite.org.nz>.
- New Zealand Heritage List, accessed at <http://www.historic.org.nz>.
- Rickard, V. 1984. Okura Bush Scenic Reserve Archaeological Site Survey, Department of Lands and Survey, Auckland. *Archaeological and Historical Reports* No. 14.
- Scriven, J. 1981. Upper Waitemata harbour catchment study: history and prehistory of the upper Waitemata Harbour. Working Report No. 19. ARA.
- Shakles, R., S. Phear and R. Clough. 2011. 162 Kyle Road, Greenhithe: Archaeological Assessment. Clough & Associates report prepared for Green Meadows Development Ltd.
- Sides, E., J. Mosen, G. Don and R. Gardner. 1997. Te Wharau Creek Subdivision, Ryder and Kitto Blocks, Greenhithe. Bioresarches report.
- Smithies, L. 1983. A Short History of Hobsonville and the People who were the First Settlers (and other papers). Unpublished manuscript, Waitakere City Council Central Library, Vertical File, Hobsonville.
- Tonkin & Taylor. 2014. Northern Interceptor Construction Vibration Assessment. Tonkin & Taylor report for Watercare Services Ltd.
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APPENDIX A: WORKS PLANS

<p style="text-align: center;">GENERAL NOTES : ALIGNMENT PLANS DRAWINGS 2012100.001-009</p>	<p style="text-align: center;">GENERAL NOTES : SITE COMPOUND PLANS DRAWINGS 2012101.001-011</p>																																								
<p>NOTES :-</p> <ol style="list-style-type: none"> 1. HAZED STREAMS AND OTHER BODIES OF WATER INDICATED IN ITALICS, WHERE SHOWN, THE LOCATION OF BUILDINGS IS INDICATIVE AND NOT INFORMATION PURPOSES ONLY. 	<p>NOTES :-</p> <ol style="list-style-type: none"> 1. EROSION AND SEDIMENT CONTROLS TO BE IN ACCORDANCE WITH HIGHLAND COUNCIL TECHNICAL PUBLICATION 91 (T90). 2. SOIL TO BE PROTECTED TO BE AVOIDED WHERE POSSIBLE. HOWEVER, WHERE THIS IS NOT POSSIBLE, SOIL SHOULD BE COVERED WITH A MAT OF STRAW OR OTHER PRACTICALLY AVAILABLE MATERIALS. MATS SHALL BE LAYED DOWN AND MAINTAINED AS PRACTICALLY POSSIBLE BY ALL WORKERS. 3. GRASS SEEDS, BENTONITE COVERS AND/OR SALICONS. 4. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED SOON AS PRACTICALLY POSSIBLE AFTER THE START OF CONSTRUCTION AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. 5. STABILISED MATERIAL TO BE USED TO STABILISE EROSION AND SEDIMENT CONTROL MEASURES. THE LOCATION OF BUILDINGS, CONSTRUCTION & SITE INFRASTRUCTURE ACCESS ROADS, ETC. ARE INDICATIVE AND NOT INFORMATION PURPOSES ONLY. 6. WHERE STABILISED MATERIAL IS USED, IT SHALL BE APPLIED TO THE SURFACE OF THE MATERIAL TO BE STABILISED TO PREVENT WIND EROSION AND SEDIMENTATION. 7. WHERE STABILISED MATERIAL IS USED, IT SHALL BE APPLIED TO THE SURFACE OF THE MATERIAL TO BE STABILISED TO PREVENT WIND EROSION AND SEDIMENTATION. 8. WHERE STABILISED MATERIAL IS USED, IT SHALL BE APPLIED TO THE SURFACE OF THE MATERIAL TO BE STABILISED TO PREVENT WIND EROSION AND SEDIMENTATION. 9. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN SECURED SITE COMPOUND AND WORKING AREAS. 10. SECURED STREAMS AND OTHER BODIES OF WATER INDICATED IN ITALICS. 																																								
<p>LEGEND</p>	<p>LEGEND</p>																																								
<table border="1"> <thead> <tr> <th>DATE</th> <th>DATE</th> <th>BY</th> <th>APP'D</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>11/06/15</td> <td>NS/E: FOW/ AEE: IFS/ MONTON</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>20/03/15</td> <td>NS/E: FOW/ AEE: IFS/ MONTON</td> <td></td> <td></td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	DATE	DATE	BY	APP'D	DATE	2	11/06/15	NS/E: FOW/ AEE: IFS/ MONTON			1	20/03/15	NS/E: FOW/ AEE: IFS/ MONTON			0					<p style="text-align: center;">Watercare <small>Watercare is a joint venture between the following companies:</small> WATERCARE (NZ) LIMITED WATERCARE (AUCKLAND) LIMITED WATERCARE (DUNEDIN) LIMITED WATERCARE (HAMILTON) LIMITED WATERCARE (TARANAKI) LIMITED WATERCARE (WELLINGTON) LIMITED</p> <p style="text-align: center;">MWH</p> <p style="text-align: center;">Northern Interceptor Preliminary Design, Phase 1 Existing Hobsonville PS To Rosedale WWTP Consent : General Notes For Alignment Works And Site Compounds</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>DATE</th> <th>BY</th> <th>APP'D</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>11/06/15</td> <td>NS/E: FOW/ AEE: IFS/ MONTON</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>20/03/15</td> <td>NS/E: FOW/ AEE: IFS/ MONTON</td> <td></td> <td></td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	DATE	DATE	BY	APP'D	DATE	2	11/06/15	NS/E: FOW/ AEE: IFS/ MONTON			1	20/03/15	NS/E: FOW/ AEE: IFS/ MONTON			0				
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NOTE: SITE LAYOUT AND DESIGN IS INDICATIVE ONLY AND IS SUBJECT TO CHANGE DURING DETAILED DESIGN STAGE

FOR GENERAL NOTES AND LEGEND SEE DRAWING 2012099.004



SEE DRAWING 2012099.004 FOR MARINE CONCRETE DETAILS
SEE DRAWING 2012099.005 FOR MARINE TRENCH DETAILS

NO.	DATE	BY	APPROVED	REVISION
1	13/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION
2	20/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION
3	20/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION
4	20/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION
5	20/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION
6	20/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION
7	20/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION
8	20/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION
9	20/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION
10	20/05/15	W. LEE	W. LEE	ISSUE FOR A/E REVISION

Watercare **MWH**

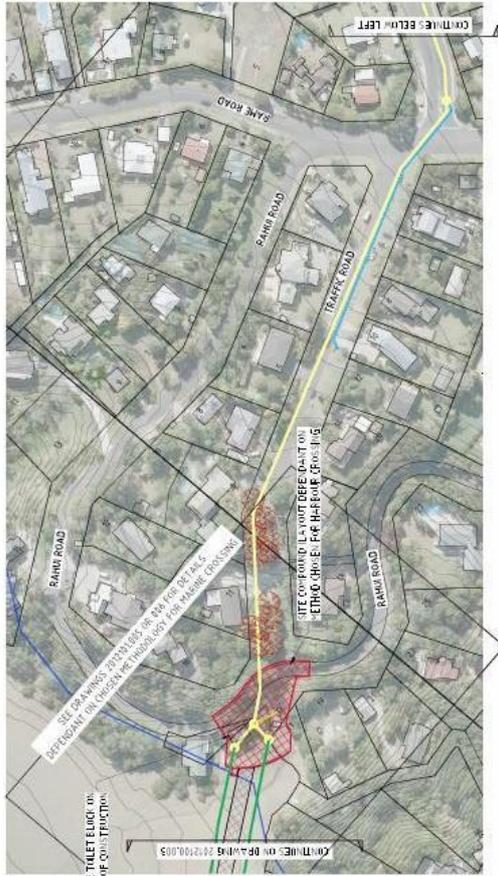
Watercare is a joint venture between MWH and the New Zealand Government. We are the national water and wastewater utility provider.

Northern Interceptor Preliminary Design, Phase 1
Existing Hobsonville PS To Records: WWTP
Consent: Harbour HDD/Trenching And Rillui R-000

ISSUE DATE	20121001
ISSUE NO.	003
CONTRACT NO.	2
DATE	JULY 2015
ORIGINAL SCALE AT AS SHOWN	1:500
CONTRACT NO.	1374
ISSUE	

FOR GENERAL NOTES AND LEGEND SEE DRAWING 2012099.004

NOTE : SITE LAYOUT AND DESIGN IS INDICATIVE ONLY AND IS SUBJECT TO CHANGE DURING DETAILED DESIGN STAGE



REFLECT TIE IN TO
COMPLETION OF CONSTRUCTION

FOR DETAILS OF PIPES AND JOINTS
REFER TO THE TECHNICAL DRAWINGS - SEE DRAWING 2012099.004
OPTION 2 - 1:1 SCALE THE SAME AS THE DRAWING 2012099.004

FOR DETAILS OF PIPES AND JOINTS
REFER TO THE TECHNICAL DRAWINGS - SEE DRAWING 2012099.004
OPTION 2 - 1:1 SCALE THE SAME AS THE DRAWING 2012099.004



1m 25m 50m
ORIGINAL SCALE: 1:1000

ISSUE	DATE	BY	APP'D.	BY	DATE	DESCRIPTION
0	13.05.15	ISSUED FOR LEE INFORMATION				
1	20.03.15	ISSUED FOR LEE INFORMATION				
2	13.05.15	ISSUED FOR LEE INFORMATION				

DESIGNED	J. BATES	20-15
DESIGN CHECK	J. BATES	20-15
DRAWN	J. BATES	20-15
CHECKED	J. BATES	20-15
DESIGN APPROVED		
MWWT APPROVED		

COO. FILE	2012099-2100-001	DATE	05/11/2015
ORIGINAL SCALE	AS SHOWN	CONTRACT NO.	1374
REF. No.		ISSUE	
DWG. No.	2012100_004		2

 Watercare <small>Watercare Limited is a wholly owned subsidiary of the New Zealand Government.</small>	 MWH	Northern Interceptor Preliminary Design, Phase 1 Existing Hobsonville PS To Rosedale WWT Consent : Rainui Road And Greenhills Road
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NOTE: SITE LAYOUT AND DESIGN IS INDICATIVE ONLY AND IS SUBJECT TO CHANGE DURING DETAILED DESIGN STAGE

FOR GENERAL NOTES, AND LEGEND, SEE DRAWING 2012099.004



10 25m 50m
GRAPHIC SCALE = 1:1125

NO.	DATE	BY	APP'D	REVISED	DESCRIPTION
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2	2012.10.05				ISSUE FOR PRELIMINARY DESIGN
3	2012.10.05				ISSUE FOR PRELIMINARY DESIGN
4	2012.10.05				ISSUE FOR PRELIMINARY DESIGN

DESIGNED	BY	DATE	PROJECT #
DRAWN	BY	DATE	PROJECT #
CHECKED	BY	DATE	PROJECT #
APPROVED	BY	DATE	PROJECT #

FILE NO.	2012099.004	DATE	JULY 2015
CONTRACT NO.	1374		
REF. NO.	AS SHOWN		
ISSUE			
DATE	20121005		
ISSUE			
DATE			

Northern Interceptor Preliminary Design, Phase 1
Existing Hobsonville PS To Rosedale WWTP
Consent : Greenlithe Road And Wainoni Park South



APPENDIX B: NZAA AND CHI SITE RECORD FORMS

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

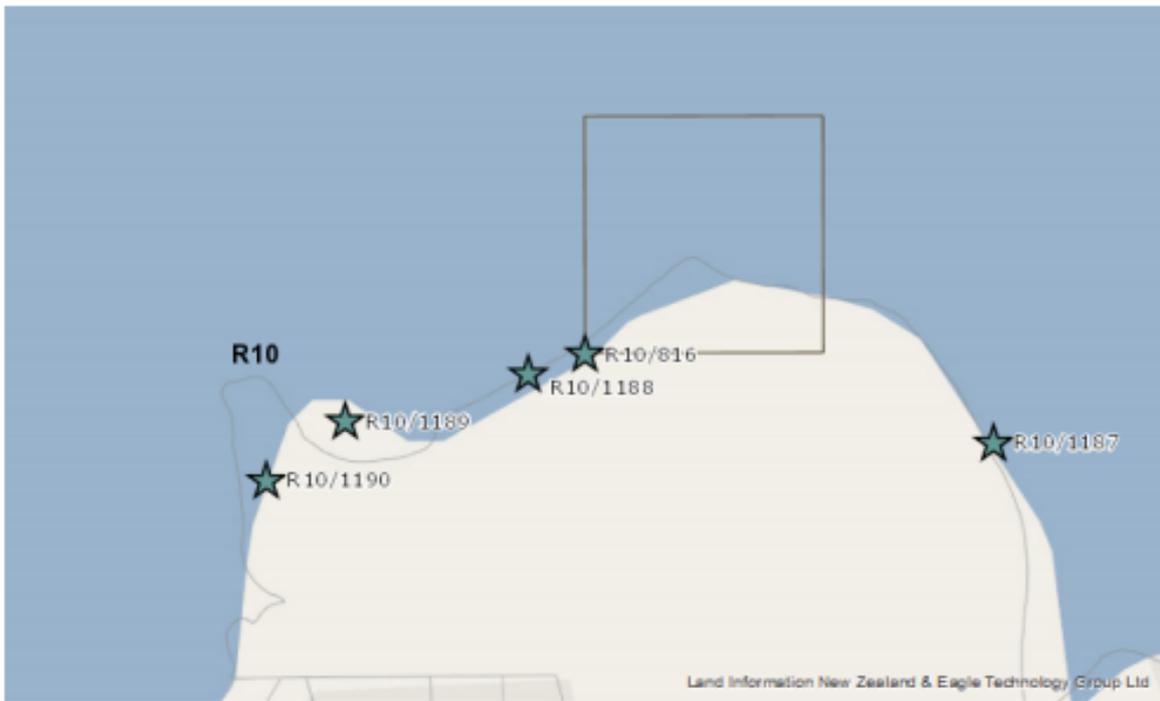
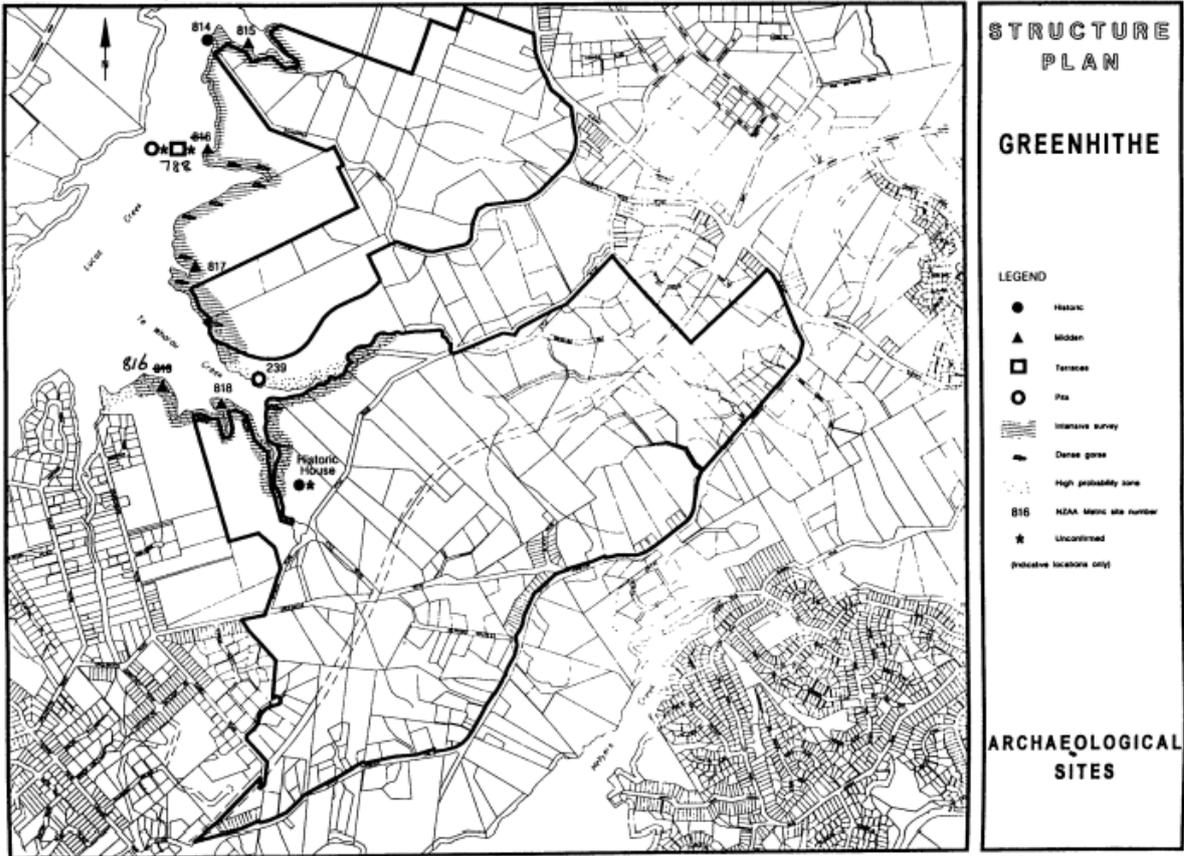
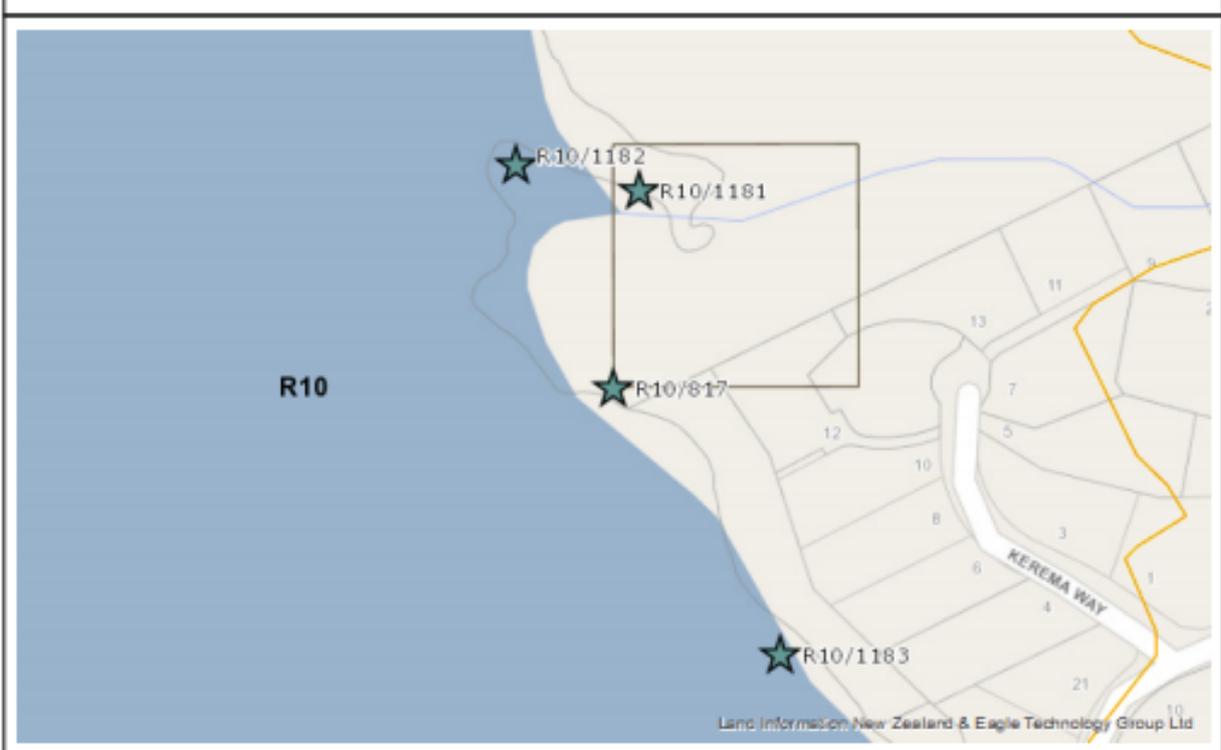
 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R10/816</p> <p>SITE TYPE: Midden/Oven</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1749446 Northing: 5930085 Source: CINZAS</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R10/816</p>	
 <p style="text-align: right; font-size: small;">Land Information New Zealand & Eagle Technology Group Ltd</p>	
<p>Finding aids to the location of the site</p>	
<p>Brief description MIDDEN</p>	
<p>Recorded features Midden</p>	
<p>Other sites associated with this site</p>	

Figure 4. Archaeological sites in the Greenhithe SPA



NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (METRIC)		NEAA METRIC SITE NUMBER R10/816
Metric map number NEMS 260 sheet		DATE VISITED 3/3/95
Metric map name Whangaparoa		SITE TYPE MIDDEN
Metric map edition 1st		SITE NAME: MAORI OTHER
Grid Reference	Easting	Northing
	26 5 9 9 75	64 9 1 8 00
1. Aids to relocation of site (attach sketch map): At northern end of Wainoni Park North, Greenhithe. In the NE corner of the paddock that has an old green shipping container (belonging to the pony club) and two mature oak trees on the NE boundary along the estuary.		
2. State of site and possible future damage: Eroding into estuary, exposed by root action.		
3. Description of site (Supply full details: history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here)		
A thin scatter of finely divided shell midden is exposed over 5-7 m along the northeastern bank of the estuary, running along the fenceline. Mainly estuarine species such as mud snails and cockle.		
4. Owner Greenhithe Pony Club Address		Tenant/manager Address
5. Nature of information (hearsay, brief or extended visit) Brief Visit		
Photographs (reference numbers and where held)		
Aerial photographs (reference numbers and clarity of site)		
6. Reported by R. Clough Address 209 Carter Rd, Oratia.		Filekeeper Brenda Sewell Date 3 7 1995
7. New Zealand Historic Places Trust (for office use)		
<input type="checkbox"/>	Type of site	<input type="checkbox"/>
<input type="checkbox"/>	Local environment	<input type="checkbox"/>
<input type="checkbox"/>	Land classification	<input type="checkbox"/>
		Present condition and future danger of destruction
		Local body

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R10/817</p> <p>SITE TYPE: Midden/Oven</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1749645 Northing: 5930486 Source: CINZAS</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R10/817</p>	
 <p>The map displays a coastal area with several sites marked by green stars. Site R10/817 is located on the coast. Sites R10/1182 and R10/1181 are located inland, enclosed in a rectangular box. Site R10/1183 is located further inland. A road labeled 'KEREMA WAY' is visible. The map is credited to Land Information New Zealand & Eagle Technology Group Ltd.</p>	
<p>Finding aids to the location of the site</p>	
<p>Brief description MIDDEN</p>	
<p>Recorded features Midden</p>	
<p>Other sites associated with this site</p>	

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (METRIC)		NZAA METRIC SITE NUMBER R10/817 DATE VISITED 28/2/95 SITE TYPE MIDDEN SITE NAME: MAORI OTHER											
Metric map number NZMS 260 sheet Metric map name Whangaparoa Metric map edition 1st													
Grid Reference	Easting	26 6 0 1 00	Northing										
			64 9 2 2 00										
1. Aids to relocation of site (attach sketch map) Within lot DP 21264. At the end of a broad flat ridge running southwest towards Lucas Creek a small promontory extends into the estuary. This promontory lies to the north Te Wharau Creek on the northern side of a small inlet. A mature macrocarpa is located at the base of the ridge 10-15m back from the estuary. A bearing from this to totara tree over midden is 196deg.													
2. State of site and possible future damage: Eroding into estuary below, roots of pine and totara disturbing the deposit. A large section of the midden has slumped to just above the estuarine mud.													
3. Description of site (Supply full details: history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here)													
Shell midden is located on top of bank, comprising mainly cockle (medium-small 80%) with some oyster. The deposit is dense and ashy in parts and contains small firecracked stones. Although there are few lumps of charcoal, the soil is black.													
4. Owner North Shore Cemetery and Crematorium Address Schnapper Rock Rd.		Tenant/manager Address											
5. Nature of information (hearsay, brief or extended visit) Brief Visit													
Photographs (reference numbers and where held)													
Aerial photographs (reference numbers and clarity of site)													
6. Reported by S. Ross / H. Buckley Address c/o Clough & Associates. 209 Carter Rd, Oratia.		Filekeeper Brenda Sewell Date 17 JUL 1996											
7. New Zealand Historic Places Trust (for office use)													
<table border="1"><tr><td>A</td><td>B</td></tr><tr><td></td><td></td></tr><tr><td>C</td><td>D</td></tr></table>	A	B			C	D	Type of site	<table border="1"><tr><td>D</td><td>C</td></tr><tr><td>M</td><td>L</td></tr></table>	D	C	M	L	Present condition and future danger of destruction
A	B												
C	D												
D	C												
M	L												
	Local environment		Local body										
<table border="1"><tr><td>A</td><td>B</td></tr><tr><td></td><td></td></tr></table>	A	B			Land classification								
A	B												

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R10/818</p>
	<p>SITE TYPE: Midden/Oven</p> <p>SITE NAME(s):</p>
<p>DATE RECORDED:</p>	

SITE COORDINATES (NZTM) Easting: 1749746 **Northing:** 5929986 **Source:** CINZAS

IMPERIAL SITE NUMBER: **METRIC SITE NUMBER:** R10/818



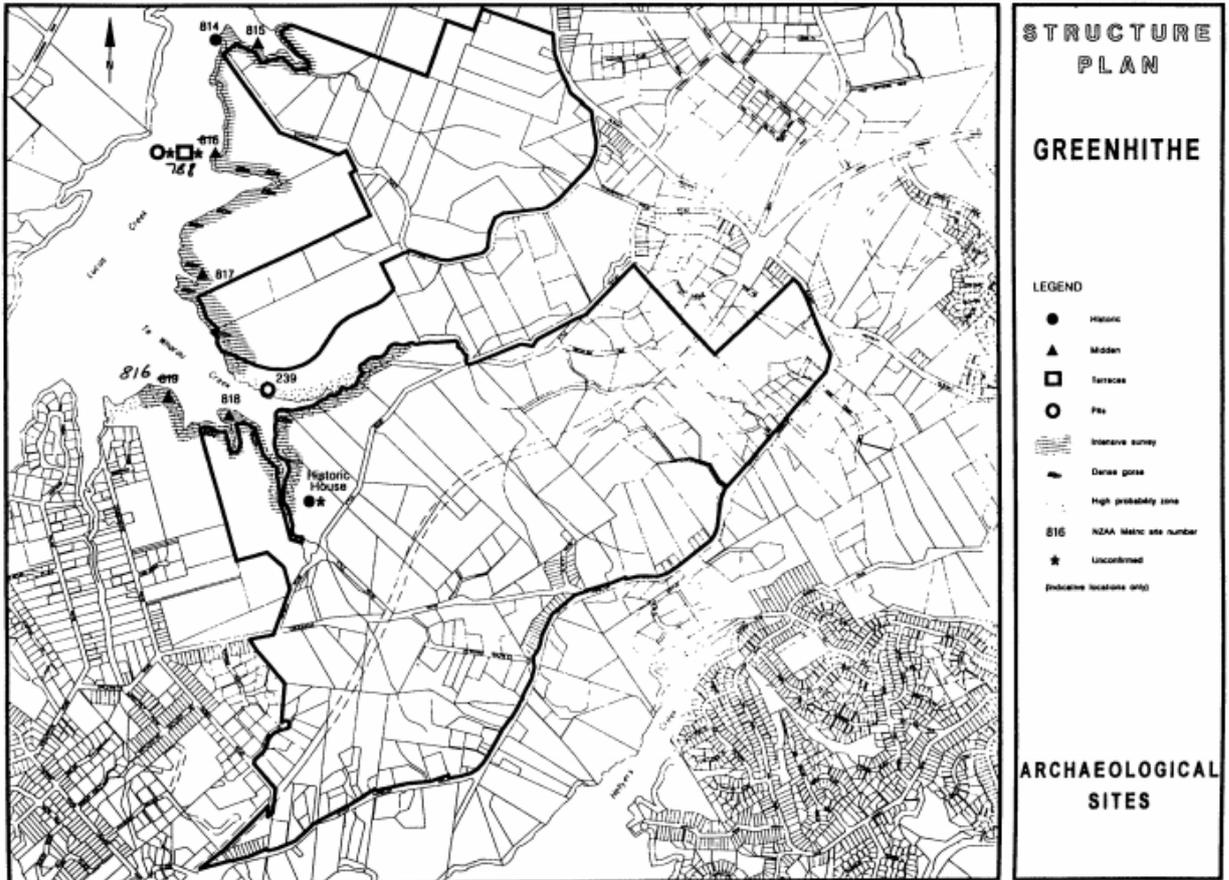
Finding aids to the location of the site

Brief description
MIDDEN

Recorded features
Midden

Other sites associated with this site

Figure 4. Archaeological sites in the Greenhithe SPA



NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (METRIC)		NZAA METRIC SITE NUMBER R10/818 DATE VISITED 3/3/95 SITE TYPE MIDDEN SITE NAME: MAORI OTHER													
Metric map number NZMS 260 sheet Metric map name Whangaparoa Metric map edition 1st															
Grid Reference Easting		26 6 0 2 75	Northing 64 9 1 7 50												
1. Aids to relocation of site (attach sketch map): NE boundary of DP 5085 on bank above estuary. In promontory on northern side of paddock with two high tension pylons.															
2. State of site and possible future damage: Exposed to stock damage, but for most part covered by c. 10cm of topsoil. Future damage will occur is land more intensively used															
3. Description of site (Supply full details: history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here) A thin scatter of finely divided shell midden is exposed in a number of areas of the promontory. Further testing indicated that the midden is dense, around 10cm thick below the topsoil, itself 10cm. The midden extends over most of the promontory measuring approximately 15-20m radius.															
4. Owner CDL Land NZ Ltd Address		Tenant/manager Address													
5. Nature of information (hearsay, brief or extended visit) Brief Visit Photographs (reference numbers and where held) Aerial photographs (reference numbers and clarity of site)															
6. Reported by S.Ross / H. Buckley Address c/o Clough & Associates. 209 Carter Rd, Oratia.		Filekeeper Brenda Sewell Date 17 JUL 95.													
7. New Zealand Historic Places Trust (for office use)															
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Type of site		Present condition and future danger of destruction													
Local environment		Local body													
Land classification															

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R10/1181</p> <p>SITE TYPE: Midden/Oven</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1749655 Northing: 5930567 Source: Handheld GPS</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R10/1181</p>	
	
<p>Finding aids to the location of the site North Shore Memorial Cemetery.</p>	
<p>Brief description Midden.</p>	
<p>Recorded features</p>	
<p>Other sites associated with this site</p>	

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R10/1182</p> <p>SITE TYPE: Midden/Oven</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1749605 Northing: 5930578 Source: Handheld GPS</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R10/1182</p>	
 <p>Land Information New Zealand & Eagle Technology Group Ltd</p>	
<p>Finding aids to the location of the site North Shore Memorial Cemetery.</p>	
<p>Brief description Midden.</p>	
<p>Recorded features</p>	
<p>Other sites associated with this site</p>	

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R10/1187</p> <p>SITE TYPE: Midden/Oven</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1749617 Northing: 5930048 Source: Handheld GPS</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R10/1187</p>	
	
<p>Finding aids to the location of the site Te Wharau Reserve.</p>	
<p>Brief description Midden.</p>	
<p>Recorded features</p>	
<p>Other sites associated with this site</p>	

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R10/1188</p> <p>SITE TYPE: Midden/Oven</p> <p>SITE NAME(s):</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1749422 Northing: 5930077 Source: Handheld GPS</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R10/1188</p>	
	
<p>Finding aids to the location of the site Te Wharau Reserve.</p>	
<p>Brief description Midden.</p>	
<p>Recorded features</p>	
<p>Other sites associated with this site</p>	

CHI Places Number	191	NZAA Site Number	
NZMS 260 map number	R10	Date of visit	09 Dec 2008
NZMS 260 map name	Auckland	Type of site or area	WHARF SITE
NZMS 260 map edition	2006	Name	Greenhithe wharf
Grid references Easting:	2659150	Northing	6490200
1. Aids to relocation of site (attach a sketch map):			
Traffic Road Greenhithe Upper Waitemata Harbour			
2. State of site and possible future damage:			
No trace visible at high tide. 09 Dec 2008: Three posts remain. Two are resting against the blue-stone rock wall on appears to have been built around and is embedded in the wall.			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
Wharf. Served by ferry. A 513 ft (156.4m) wharf with a 482 ft (147m) walkway, 6ft (1.8m) wide, pierhead 31 ft (9.4m) x 22 ft (6.7m), plus steps, a wooden shed 13x13 ft (4x4m) for goods and passengers, and a freight crane. Later railway lines were added in order to trolley goods to and fro from the boats. Produce and freight would be winched down the steep bank, at the end of what is now called Traffic Road. In 1910 to cope with increase of fruit a cargo shed was built next to the waiting room on the wharf. In 1939 the sheds were damaged by a gale and the waiting shed (10x8ft, 3x2.4m) only was replaced.			
Additional Notes:			
Additional information by James Robinson and Rachel Ford (09 Dec 2008): Very little of the wharf remains apart from three posts and some iron fittings. The site is currently located under the Sea Scouts building.			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		book, Brief Visit	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	Michael Taylor James Robinson and Rachel Ford	Date recorded	3 May 1993 09 Dec 2008
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	HISTORIC ACZ CMA LBD WHARF		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of

CHI Places Number	844	NZAA Site Number	
NZMS 260 map number	R11	Date of visit	Not visited
NZMS 260 map name	Auckland	Type of site or area	AIRCRAFT
NZMS 260 map edition	Edition 1 1981	Name	
Grid references Easting:	2658500	Northing	6489200
1. Aids to relocation of site (attach a sketch map):			
Clark Point Hobsonville Upper Waitemata.			
2. State of site and possible future damage:			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
World war II American airplane crash site.			
Additional Notes:			
A Hudson bomber crashed into the harbour off Hobsonville and the tail could be seen sticking out from the mud just below the sewer beacon, visible from the Upper Harbour Crossing at Greenhithe. SE 1250 p.43. Is this the same one? Also a Dakota crashed somewhere (SE 176). Additional information by Malcolm Hahn (2006): Extract from 'God Willing and Weather Permitting': 65 years after a Lockheed Hudson bomber crashed into the mud flats, the remains of the war plane can still be seen beside the approaches of the Upper Harbour Bridge when the tide is out. On the night of the 25th January 1943, the crew of two were doing what is called circuits and bumps, which basically is practice landings under emergency situations, when the plane lost height and crashed into the water. It is thought that both of the crew drowned when they attempted to swim ashore towards Herald Island.			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		Not visited, reported only	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	Michael Taylor Malcolm Hahn	Date recorded	8 Jul 1993 2006
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	HISTORIC AVIATION AEROPLANE MILITARY AIRPLANE AIRCRAFT WORLD WAR II CMA ACZ Lockheed Hudson Bomber		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body

CHI Places Number	5955	NZAA Site Number	R11_495
NZMS 260 map number	R11	Date of visit	Jul 2001
NZMS 260 map name	Auckland	Type of site or area	MIDDEN (SHELL)
NZMS 260 map edition	Edition 1 1981	Name	
Grid references Easting:	2658400	Northing	6489000
1. Aids to relocation of site (attach a sketch map):			
Hobsonville Massey Waitemata			
2. State of site and possible future damage:			
NZAA Condition: Partly damaged, continuing minor damage Mostly destroyed by road cutting			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
On top of point, edge of Hobsonville air base, in top of cutting on south side of western approach to upper harbour bridge. 10m ASL & 300m NW of airbase main gate. 10 x 0.2m shell layer exposed that formerly extended over flat top of point. Contains Chione, Crassostrea, Amphibola and charcoal.			
Additional Notes:			
Additional information by Don Prince 2001. A systematic inspection of the cutting on the south side of the western approach to the Upper Harbour Bridge failed to detect any evidence of the site recorded in 1977 by Haywood and Diamond. There is some confusion in interpreting Haywood and Diamond's aids to relocation (R11/495), as their description of the site being "300m northwest of airbase main gate" contrasts with the recorded grid reference co-ordinates that place the site to the north east of the gate house. It is assumed that the grid reference co-ordinates are correct and the north west description is a typing error. However, as no evidence was detected at either location, the entire cut was inspected. The cut today has a dense, and in places, impenetrable vegetation cover (kykuyu grass, gorse, pampas grass, mixed regenerating native and pine) that may conceal evidence of the site.			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)			
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	Bruce W. Hayward and John (Jack) T. Diamond Don Prince	Date recorded	10 Sep 1977 Jul 2001
Filekeeper		Date (NZAA SRF Entry Date)	1977
Address			
7. Keywords	MIDDEN PREHISTORIC MAORI MODIFIED CMA LBD MODIFIED BY HUMAN ACTIVITY		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
AA	Type of site	BD	Present condition and future danger of destruction
IO	Local environment today		Security Code
AA	Land classification	MK	Local body

CHI Places Number	11170	NZAA Site Number	R10_817
NZMS 260 map number	R10	Date of visit	04 Dec 2008
NZMS 260 map name	Auckland	Type of site or area	MIDDEN
NZMS 260 map edition	2006	Name	
Grid references Easting:	2660087	Northing	6492311
1. Aids to relocation of site (attach a sketch map):			
North Shore Memorial Cemetery Albany Upper Waitemata			
2. State of site and possible future damage:			
NZAA Condition: Partly damaged, risk of severe damage March 2003. Some coastal erosion, damage from rabbits. Possible future damage from cemetery expansion. Dec 2008. Continual coastal erosion. No evidence of rabbit burrows.			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
Additional Notes:			
Additional information by Russell Foster (March 2003). Close to southern boundary of cemetery, on northern edge of small stream inlet. Shell midden exposed along top of bank under trees. Patchy midden extends north towards to two tall trees on centre of ridge (GR for 'rabbit hole') where thick midden exposed by rabbits. Surface shell scatter noted around southern and western sides of tree in left centre of photograph. It is probable that additional occupation evidence is present. Recommendations: Add to District Plan. Extent of site needs thorough investigation before any ground modification is undertaken in this part of reserve. This is particularly important as the assessment undertaken for the cemetery did not identify the full extent of this midden. Additional informaion by James Robinson and Rachel Ford (Dec 2008): Midden located along 4m of the coastal bank facing south 1.5-2m up the bank. Lens is highly eroded. Contains dark grey soil matrix with 99% of shell material being cockle. Also some charcoal and fire cracked rock present.			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		Brief visit	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)		ARC CHI	
6. Reported by	Russell Foster James Robinson and Rachel Ford	Date recorded	1995 Mar 2003 04 Dec 2008
Filekeeper		Date (NZAA SRF Entry Date)	1995
Address			
7. Keywords	MIDDEN SHELL LUCAS CREEK		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
AA	Type of site	BC	Present condition and future danger of destruction
--	Local environment today		Security Code
AE	Land classification	ML	Local body

CHI Places Number	11171	NZAA Site Number	R10_818
NZMS 260 map number	R10	Date of visit	08 Dec 2008
NZMS 260 map name	Auckland	Type of site or area	MIDDEN
NZMS 260 map edition	2006	Name	
Grid references Easting:	2660251	Northing	6491774
1. Aids to relocation of site (attach a sketch map):			
2. State of site and possible future damage:			
NZAA Condition: Intact, no information on danger			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
Additional Notes:			
Additional information by Russell Foster (March 2003). Site was said to be on peninsula. GPS Grid Ref above is that of peninsula nearest to reported location. Site not relocated. Testing at presumed location did not identify any midden as described in original SRF. Additional information by James Robinson and Rachel Ford (08 Dec 2008): Site not relocated during ARC 2008 coastal survey of the Upper Waitemata.			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		Brief visit	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	(need original SRF) Russell Foster James Robinson and Rachel Ford	Date recorded	1995 Mar 2003 08 Dec 2008
Filekeeper		Date (NZAA SRF Entry Date)	1995
Address			
7. Keywords	MIDDEN		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
AA	Type of site	AD	Present condition and future danger of destruction
--	Local environment today		Security Code
AE	Land classification	ML	Local body
ACC Heritage Number			

CHI Places Number	12928	NZAA Site Number	
NZMS 260 map number	R10	Date of visit	
NZMS 260 map name	None	Type of site or area	BUILDING - EDUCATIONAL
NZMS 260 map edition		Name	Old Greenhithe School Building Greenhithe School Building (former)
Grid references Easting:	2659645	Northing	6490455
1. Aids to relocation of site (attach a sketch map):			
Greenhithe Road Collins Park Greenhithe North Shore			
2. State of site and possible future damage:			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
Additional Notes:			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)			
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	Sally Burgess	Date recorded	
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	EDUCATIONAL BUILDING Proposed Auckland Unitary Plan PROPOSED PLAN SCHEDULE SCHOOL UP Category B UPID00842		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body
ACC Heritage Number			

CHI Places Number	12936	NZAA Site Number	
NZMS 260 map number	R10	Date of visit	
NZMS 260 map name	None	Type of site or area	BUILDING - DWELLING
NZMS 260 map edition		Name	Collins House (former)
Grid references Easting:	2659590	Northing	6490570
1. Aids to relocation of site (attach a sketch map):			
20-24 Greenhithe Road Greenhithe Greenhithe Road North Shore			
2. State of site and possible future damage:			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
House / restaurant			
Additional Notes:			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)			
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	Sally Burgess	Date recorded	
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	HOTEL HOUSE - HISTORIC Proposed Auckland Unitary Plan PROPOSED PLAN SCHEDULE RESTAURANT UP Category B UPID00852		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body
ACC Heritage Number			

CHI Places Number	17730	NZAA Site Number	R10_1181
NZMS 260 map number	R10	Date of visit	04 Dec 2008
NZMS 260 map name	Auckland	Type of site or area	MIDDEN
NZMS 260 map edition	2006	Name	
Grid references Easting:	2660111	Northing	6492282
1. Aids to relocation of site (attach a sketch map):			
North Shore Memorial Cemetery Schnapper Rock Road Albany Upper Waitemata			
2. State of site and possible future damage:			
Site is eroding into the creek and will continue to erode through natural processes			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
Site is located on southern side of small inlet opposite site 11170 (R10_817) in the vegetated area at the southern end of the North Shore Memorial Cemetery. The midden is exposed at MHWS. Three clumps or intermittent lenses of cockle shell midden, each about 2m long and 20-30cm thick with fragments of charcoal. All in a grey to black soil matrix. Site possibly debris from occupation on ridge above. Additional GPS co-ordinates: E 2660111, N 6492283. E 2660098, N 6492278.			
Additional Notes:			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		Brief Visit	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	James Robinson and Rachel Ford	Date recorded	04 Dec 2008
Filekeeper		Date (NZAA SRF Entry Date)	
Address	ARC Pitt St Auckland		
7. Keywords	MIDDEN COCKLE LUCAS CREEK UPPER WAITEMATA		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body
ACC Heritage Number			

CHI Places Number	17731	NZAA Site Number	R10_1182
NZMS 260 map number	R10	Date of visit	04 Dec 2008
NZMS 260 map name	Auckland	Type of site or area	MIDDEN
NZMS 260 map edition	2006	Name	
Grid references Easting:	2660061	Northing	6492293
1. Aids to relocation of site (attach a sketch map):			
North Shore Memorial Cemetery Schnapper Rock Road Albany Upper Waitemata			
2. State of site and possible future damage:			
Midden is eroding from coastal bank.			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
Site is located on small peninsula on the southern section of the North Shore Memorial Cemetery along Lucas Creek. The site may be part of CHI 11730 (R10_1181) as one large site. CHI 11731 consists of a number of intermittent middens around a small headland. The first two GPS coordinates (E 2660061, N 6492293 & E 2660060, N 6492266) have midden that consist primarily of cockle with some oyster and mudsnail. The third GPS point (E 2660053, N 6492240) on the other side of the small headland is similar but also contains pipi.			
Additional Notes:			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		Brief Visit	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)		CHI	
6. Reported by	James Robinson and Rachel Ford	Date recorded	04 Dec 2008
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	MIDDEN COCKLE PIPI OYSTER LUCAS CREEK UPPER WAITEMATA		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body
ACC Heritage Number			

CHI Places Number	17732	NZAA Site Number	R10_1183
NZMS 260 map number	R10	Date of visit	04 Dec 2008
NZMS 260 map name	Auckland	Type of site or area	MIDDEN
NZMS 260 map edition	2006	Name	
Grid references Easting:	2660168	Northing	6492091
1. Aids to relocation of site (attach a sketch map):			
Esplanade Reserve Te Wharau Creek Lucas Creek Upper Waitemata			
2. State of site and possible future damage:			
Midden is eroding from the coastal bank			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
The midden is located intermittently along the coastline of Lucas Creek. Five separate coordinates have been taken. A: E 2660168, N 6492091: Shell midden extending for 5m along eroding edge at low bank approximately 50cm above MHS. Often fragmentary and consists of cockle in a grey to black soil matrix. Lens is 10-20cm thick. Photo 1-2 B: E 2660173, N 6492086: Extension of A C: E 2660183, N 6492075: Extension of A/B D: E 2660188, N 6492072: Midden, Mostly Oyster with some cockle. All above an area of fire cracked rock. Photos 3-5 E: E 2660200, N 6492059: Midden, mostly cockle, some oyster. 40cm thick 3m long.			
Additional Notes:			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		Brief Visit	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	James Robinson and Rachel Ford	Date recorded	04 Dec 2008
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	MIDDEN COCKLE OYSTER FIRE CRACKED ROCK LUCAS CREEK UPPER WAITEMATA		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body

CHI Places Number	17736	NZAA Site Number	R10_1187
NZMS 260 map number	R10	Date of visit	08 Dec 2008
NZMS 260 map name	Auckland	Type of site or area	MIDDEN
NZMS 260 map edition	2006	Name	
Grid references Easting:	2660072	Northing	6491763
1. Aids to relocation of site (attach a sketch map):			
Te Wharau Reserve Te Wharau Creek Lucas Creek Greenhithe Upper Waitemata			
2. State of site and possible future damage:			
Site is eroding into the stream and will continue to do so through natural processes			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
20m continuous lens of 15cm compact midden containing mostly cockle and mudsnail all in a grey-blackish matrix. Eroded midden is also located scattered down the bank and into the intertidal zone. Additional co-ordinates A: E 2660072, N 6491763 B: E 2660063, N 6491781 The site may be part of the larger Pa site 10442 (R10_787) found in the general area.			
Additional Notes:			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		Brief Visit	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	James Robinson and Rachel Ford	Date recorded	08 Dec 2008
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	MIDDEN COCKLE MUDSNAIL TE WHARAU CREEK		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body
ACC Heritage Number			

CHI Places Number	17737	NZAA Site Number	R10_1188
NZMS 260 map number	R10	Date of visit	08 Dec 2008
NZMS 260 map name	Auckland	Type of site or area	MIDDEN
NZMS 260 map edition	2006	Name	
Grid references Easting:	2659877	Northing	6491792
1. Aids to relocation of site (attach a sketch map):			
Te Wharau Reserve Te Wharau Creek Greenhithe Upper Waitemata			
2. State of site and possible future damage:			
Midden is eroding into creek.			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
Site consists of the occasional shell/scatter of large cockles (3cm) and oyster eroding out of bank under Norfolk Pine tree. Is in the general area of Pa site CHI 10442 (R10_787) and may be related			
Additional Notes:			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		Brief Visit	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	James Robinson and Rachel Ford	Date recorded	08 Dec 2008
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	MIDDEN COCKLE OYSTER TE WHARAU CREEK		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body
ACC Heritage Number			

CHI Places Number	17744	NZAA Site Number	
NZMS 260 map number	R10	Date of visit	09 Dec 2008
NZMS 260 map name	Auckland	Type of site or area	RAILWAY SLEEPER
NZMS 260 map edition	2006	Name	
Grid references Easting:	2659098	Northing	6490108
1. Aids to relocation of site (attach a sketch map):			
Traffic Road Greenhithe Upper Waitemata			
2. State of site and possible future damage:			
Site is rusting on the coast.			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
Rusting railway sleeper sitting on the coastal platform. May be related to a slipway or early transportation in the area.			
Additional Notes:			
4. Owner		Tenant/Manager	
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)		Brief Visit	
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	James Robinson and Rachel Ford	Date recorded	09 Dec 2008
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	RAILWAY SLEEPER UPPER WAITEMATA		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body
ACC Heritage Number			

CHI Places Number	19647	NZAA Site Number	
NZMS 260 map number	None	Date of visit	Not visited
NZMS 260 map name	None	Type of site or area	Building - dwelling
NZMS 260 map edition		Name	St Michael and All Angels Anglican Church
Grid references Easting:		Northing	
1. Aids to relocation of site (attach a sketch map):			
12 Greenhithe Road Greenhithe			
2. State of site and possible future damage:			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			
<p>Reference Source: - King, R. E. Tauhinu – A History of Greenhithe. Auckland: R. E. King, 1984, p124- 126 & 151. - North Shore City Council property file no. 3133166 -NZHPT Listing: Not registered by NZHPT. -Significant Elements: Extent of Listing: Entire exterior of church building. History: Fundraising: The construction of St Michael and All Angels Church was a long process that began in the late 1920s. The fund collected was largely donations and bequests of parishioners, of which Mrs. MacCallum contributed a large sum of £500 in 1953, and Mr. Cyril and Mrs. Marjorie Jonkers (JP, QSM) put in their deceased son's savings in 1954. The Jonkers family was well known in Greenhithe. They ran an orchard in Rame Road and later established a fruit canning business that provided job opportunities for many local residents. Mr. Jonkers was the secretary of the Greenhithe community hall committee and was in charge of a commando unit made up of men from Paremoremo, Greenhithe, Glenfield and Albany during WWII. In 1983 Mrs. Jonkers was awarded the Queen's Service Medal. MacCallum and Jonkers' offering was a large step towards the establishment of an Anglican church. In the following year in 1955, the site now known as 12 Greenhithe Road was purchased by church authorities from Mr. Blakeway for the construction of the church. On 25th of March 1956, the foundation stone of St Michael and All Angels Church was laid by Bishop Simpson who was the Bishop of Auckland at that time. The construction of the church was made possible after various proposals were turned down and finally Mr. Jonkers proposed that the church was to have an iron roof and to remain unpainted, with a £700 contribution from the vestry for furnishings. Mr. and Mrs. Jonkers also supplied timber from their property for the construction of the church, and labour assistance was provided not only by Anglican Church worshippers but also many non-Anglicans. The timber-constructed St Michael and All Angels Church sits on a brick foundation. It is unclear whether the church was indeed completed with an iron roof and unpainted. However the earliest photographic evidence of the church found to date shows a tiled gable roof. It also shows that the street-facing window at the eastern end of the church was originally a simple six-light window, which is now a stained window featuring a white cross; and that the picket fence surrounding the church ground had since been removed. In 1996, a Lockwood show home was moved to the church ground to serve as a vicarage to accommodate the first full time priest of the area, Reverend Mark Taylor. In the same year, a telecommunication mast was erected within the church ground, although some surrounding neighbours objected to this. It was decided subsequently that the telecommunication tower was to be finished in natural shades and camouflaged by foliage to lessen its visual impact. Currently St Michael and All Angels Church caters mainly Anglican worshippers but offers a Methodist service once a month. It is used occasionally as a voting booth during elections. Physical Characteristics: Style: The church does not reflect any particular architectural style. Construction/Craft Technology: The church is of timber framed construction on masonry foundation walls. Its construction/craft technology is of no significance. Age: St Michael and All Angels Church was constructed in 1956. Architect/Builder: The design and construction of the church is a combined effort of church worshippers and local community members. Design: Further information on the church is required for an assessment of its design significance to be made. Rarity and Representativeness: St Michael and All Angels Church is the first and remains the only church</p>			

building of any denomination in the Greenhithe area. Its representativeness is of considerable significance.

Authenticity:
Site: The church is in its original position.
Curtilage: The curtilage of the church is modestly landscaped and complements the humble character of the building. The removal of the picket fence along the street front site boundary has an effect of no more than minor in the authenticity of the curtilage.
Alterations: Apart from the installation of the front elevation stained window, it is unclear whether the building has undergone any other alterations.
Structural Integrity: It is unclear whether any work has been carried out

that affected the structural integrity of the building.

Associations:
Person: The church is associated with Cyril and Marjorie Jonkers. Cyril Jonkers was a well-recognised local figure and Marjorie Jonkers was a Queen's Service Medal recipient. These associations are of moderate significance.
Event: The church is not associated with any event of importance.
Social/Cultural Patterns or History: St Michael and All Angels Church is the first religious building constructed in the area that demonstrates the increasing number of worshippers living in the area to warrant the necessity of a local church. Its association to this local social pattern is of moderate significance.

Environmental Contribution:
Group Value: The church does not belong to any recognised group of buildings.
Townscape Value: The church is of moderate significance in contributing to the development of Greenhithe Village hub in the post-World War II period.
Landmark Value: The church is of minor landmark value within the vicinity of Greenhithe.
Setting: The setting is an evenly balanced combination of foliage and open space that is complementary to the church as well as the Greenhithe area.

Statement of Significance
Architecture:
St Michael and All Angels Church is the first and remains the only religious building in Greenhithe. It is of considerable significance in representing a rare building typology in the area.
History:
The church is of moderate historical significance in illustrating the increased residential habitation resulting in the increase of worshippers in Greenhithe that in turn heightened the desire of a dedicated church building. It is also of significance due to its association with a well known family in the local community of which one of the members is a Queen's Service Medal recipient.

Context:
The church is a landmark in the vicinity of Greenhithe. It is of moderate contextual significance as it contributes to the post-World War II development of the Greenhithe Village hub. Its setting is compatible with the surrounding area.

Additional Notes:

4. Owner			
Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)			
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	Auckland Council District Plan (North Shore Section) Proposed Plan Change 38	Date recorded	09/07/2012
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	CHURCH Plan Change 38		
8. New Zealand Register of Archaeological Sites (for office use)			

CHI Places Number	19648	NZAA Site Number	
NZMS 260 map number	None	Date of visit	Not visited
NZMS 260 map name	None	Type of site or area	Building - commercial
NZMS 260 map edition		Name	Tauhinu Sea Scouts Den
Grid references Easting:		Northing	
1. Aids to relocation of site (attach a sketch map):			
R17 Rahui Road Greenhithe			
2. State of site and possible future damage:			
3. Description of site (supply full details, history, local environment, references, sketches, etc. If extra sheets are attached include a summary here)			

Reference Source: North Shore City Council property file no. 3621061 Dunmore, John. Greenhithe Today & Yesterday. Auckland: Heritage Press Limited, 2001, p.23. Glen Sycamore, 2010. Tauhinu Sea Scout Group Proposed Headquarters Extension. [pdf] Auckland: Tauhinu Sea Scout Group Committee. Available at: <http://www.greenhithe.org.nz/portal/discuss/greenhithecommunity/789398334/436762357/greenhithe-sea-scout-proposed-extension.pdf> [Accessed 24 Aug 2010]. Bond, S., 2010. Charting a Course for Life, Auckland, [online] Available at: <http://www.theauckland.co.nz/local/news/charting-a-course-for-life/3913862/> [Accessed 24 Aug 2010].

NZHPT Listing: Not registered by NZHPT.

Significant Elements:
 Extent of Listing: Entire exterior of building (includes that portion of the building located above Mean High Water Spring)
 History: The Tauhinu Sea Scouts building dates to 1955. It is currently utilized by one of the six sea scout groups on the North Shore. In 1969 the Department of Lands & Survey agreed to the Tauhinu Sea Scouts' request to erect a building for their headquarters at the current site, a local authority designated recreation reserve. The building is a combination of timber and concrete construction. It is often referred to as the 'Ship' by the Tauhinu Sea Scouts. To the south of the building is a concrete dinghy ramp believed to be erected in 1987. In 2010, Tauhinu Sea Scouts proposed a boat shed extension to the building. The proposal was made in response to the lease termination of the group's storage facility at the old Hobsonville air base. Initially the proposal featured an additional storey above the existing building which was not further pursued. The group later proposed an alternative option of extending directly to the south such that the extension occupies the space between the existing building and dinghy ramp.

Physical Characteristics:
 Style: The sea scouts' headquarters is not of a notable architectural style.
 Construction/Craft Technology: The building does not feature any notable construction/craft technology.
 Age: The building was constructed c.1969 and the dinghy ramp in 1987.
 Architect/Builder: The architect and builder remain unidentified. The District Plan schedule does not have jurisdiction to consider that portion of the building which is physically located within the coastal marine area (CMA)- only that area above mean high water spring.
 Design: The building is of no particular design significance.
 Rarity and Representativeness: Tauhinu Sea Scouts is the only sea scout group in the Albany ward, and one of the six sea scout groups in the North Shore City. It represents a branch of scouts that focuses on water-based activities due to its geographic location and water surrounds. The Tauhinu Sea Scouts' headquarter is of considerable significance as an example of a purpose built sea scout facility in the area, and particularly represents the area's development themes of sport and community organizations and facilities.

Authenticity:
 Site: The sea scouts' headquarters remains on its original site.
 Curtilage: The dinghy ramp is of minor significance in enhancing the interpretation of the history and use of the building.

Alterations: It is unclear from the information available whether alterations have been carried out at the sea scouts' headquarters.
 Structural Integrity: It is unclear from the information available whether any alterations have been carried out that have affected the structural integrity of the sea scouts' building.

Associations:
 Person: The building and dinghy ramp were purpose-built for the Tauhinu Sea Scouts and the structures remain closely associated with the group. The group has been recognised by the Royal New Zealand Navy Chief of Naval Staff for its positive contribution to Sea Scout Group management. Tauhinu Sea Scouts' direct association with the building is of moderate significance.
 Event: The sea scouts' headquarters is not associated with any important event.
 Social/Cultural Patterns or History: Travelling by water is an important means of transport to and from the North Shore. The development of the Tauhinu Sea Scouts and its association with sailing and water safety training is of moderate significance in demonstrating this social pattern.

Environmental Contribution:
 Group Value: The sea scouts' headquarters does not belong to any recognised group of built structures in its immediate environment. However in the wider context, it is associated with the other five sea scouts bases on the North Shore and this group value is of minor significance.
 Townscape Value: The sea scouts' headquarters is of minor significance as an example of modest built developments along the coastal edge, which forms part of the Greenhithe historic townscape.
 Landmark Value: The sea scouts' headquarters is of minor landmark value.
 Setting: The setting of the sea scouts' headquarters by the water is compatible with the function of the facility.

Statement of Significance
 Architecture: The Tauhinu Sea Scouts headquarters building is of considerable architectural significance as the only sea scouts headquarter in the North Shore City that has a physical relationship to the sea, being partly built in the water.
 History: The building is of moderate historical significance, having a direct association with the Tauhinu Sea Scouts, whose efforts in providing training on sailing and water activities has been recognised by the Royal New Zealand Navy Chief of Naval Staff.
 Context: The sea scouts' headquarters is of minor contextual significance.

Additional Notes:

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Owner Address		Tenant/Manager Address	
5. Nature of information (heresay, brief or extended visit, etc.)			
Aerial photographs (reference numbers, and clarity of site)			
Photographs (reference numbers, and where they are held)			
6. Reported by	Auckland Council District Plan (North Shore Section) Proposed Plan Change 38	Date recorded	09/07/2012
Filekeeper		Date (NZAA SRF Entry Date)	
Address			
7. Keywords	Plan Change 38 Scouts		
8. New Zealand Register of Archaeological Sites (for office use)			
NZHPT Site Field Code			
Latitude S		Latitude E	
	Type of site		Present condition and future danger of destruction
	Local environment today		Security Code
	Land classification		Local body
ACC Heritage Number			