

33-43 MCKINNEY ROAD, WARKWORTH: ARCHAEOLOGICAL ASSESSMENT



Prepared for Aztek Projects Ltd

March 2021

By

Aaron Apfel (BA Hons)

Glen Farley (MA Hons)

Clough
& ASSOCIATES LTD

321 Forest Hill Rd,
Waiatarua, Auckland 0612
Telephone: (09) 8141946
Mobile 0274 850 059
www.clough.co.nz

Contents

Introduction	1
Project Background	1
Methodology	1
Historical Background	4
Maori Settlement	4
Mahurangi	4
European Settlement	5
World War II U.S. Military Camps.....	6
Archaeological Background.....	9
Historical Survey.....	13
Information from Early Maps and Plans	13
Information from Early Aerials.....	15
Physical Environment	17
Topography, Vegetation and Land use	17
Geology and Geomorphology	17
Field Assessment.....	22
Field Survey Results	22
Discussion and Conclusions.....	32
Summary of Results	32
Maori Cultural Values.....	32
Survey Limitations	32
Archaeological Value and Significance	33
Effects of the Proposal	33
Resource Management Act 1991 Requirements	33
Heritage New Zealand Pouhere Taonga Act 2014 Requirements	34
Conclusions	35
Recommendations	36
Bibliography.....	37
Appendix A: Site Record Forms	38
Appendix B: Cultural heritage Inventory Form	40

INTRODUCTION

Project Background

Aztek Projects Ltd seek a rezoning of approximately 6.5ha of land at McKinney Road, Warkworth, from Future Urban Zone to Mixed Housing Suburban Zone in accordance with the Warkworth Structure Plan. The proposed Plan Change Area comprises the properties at 9 and 33-43 McKinney Road and is bounded to the south by McKinney Road, to the west by residential properties along Wech Drive, to the north by residential properties along Fairwater Road, to the east by John Andrew Drive and to the northeast by properties currently under development along Titapu Road, off John Andrew Drive (Figure 1). The legal descriptions of the properties within the proposed Plan Change Area are: Lot 30 DP 40634, Lots 1 & 2 DP 481942, Lot 2 DP 80049, Lot 1 DP 550765 and Lot 1 DP 187649 (see Figure 2).

An archaeological survey and assessment were requested by Terra Nova Planning on behalf of Aztek Projects Ltd to establish whether there are any archaeological constraints on future development of the properties. This report forms part of the required assessment of effects for a Plan Change application under the Resource Management Act 1991 (RMA) and identifies any requirements under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA). Recommendations are made in accordance with statutory requirements.

Methodology

The New Zealand Archaeological Association's (NZAA) site record database (ArchSite), Auckland Council's Cultural Heritage Inventory (CHI), Auckland Unitary Plan Operative in part (AUP OP) schedules and Heritage New Zealand Pouhere Taonga (Heritage NZ) New Zealand Heritage List were searched for information on sites recorded in the vicinity. There are a significant number of pre-historic sites along the Mahurangi River further to the east. However, these databases showed there to be few heritage sites within the vicinity of 33-43 McKinney Road with only a few recorded historical/heritage sites in the general area.

A visual inspection of accessible properties within the proposed Plan Change Area was conducted on 25 February 2021. The surveyed properties were Lot 2 DP 481942 and 37 McKinney Road (Lot 2 DP 80049), as shown in Figure 2. The ground surface was examined for evidence of former occupation or land use both pre-historic and historic (in the form of shell midden, depressions, terracing or other unusual formations within the landscape; or indications of 19th century European settlement or industrial remains). Exposed and disturbed soils were examined where encountered for evidence of earlier modification. Subsurface testing with a probe was conducted on a regular basis in conjunction with test pitting, in order to understand the local stratigraphy. Test pits were placed in areas thought to hold the highest potential for archaeological remains, with particular attention given to the stream running southeast-northwest through Lot 2 DP 481942. Photographs were taken to record the landscape and any features of interest, in conjunction with field notes.

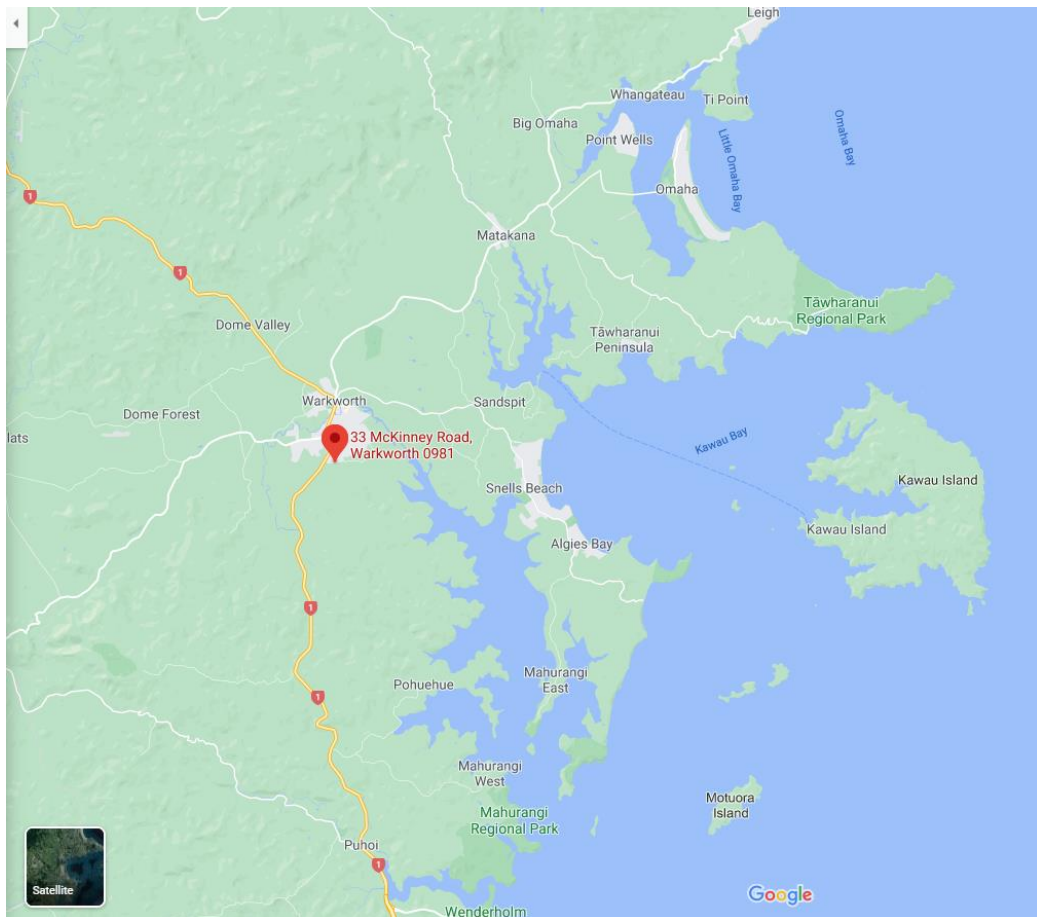


Figure 1. General location map and aerial of McKinley Road showing total proposed Plan Change Area in red and field survey test pit locations marked by yellow circles. Source: Google Maps and Auckland Council Geomaps (2021)

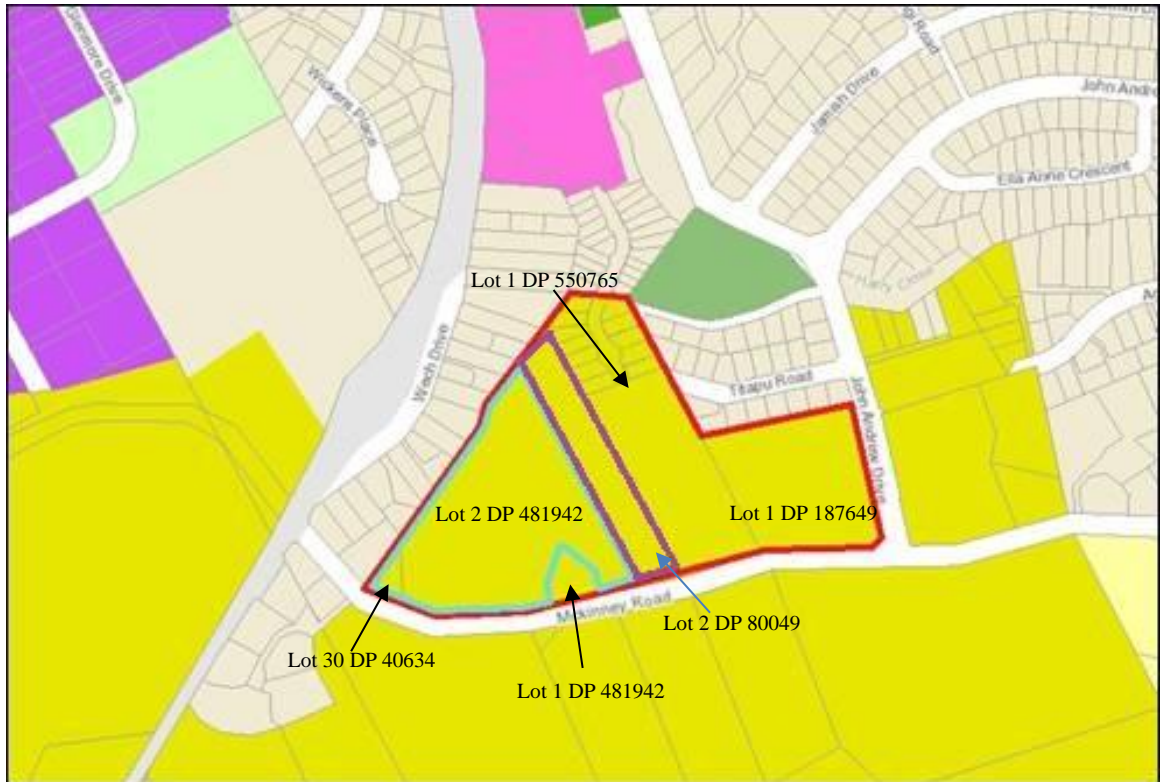


Figure 2. Proposed Plan Change Area outlined in in red, with surveyed properties at 37 McKinney Road outlined in purple and Lot 2 DP 481942 outlined in blue

HISTORICAL BACKGROUND

Maori Settlement¹

Prior to European arrival, the region between Mahurangi and Te Arai Point was occupied by the Ngai Tahu people who traced their descent from Tahuhunui, commander of the Moekakara or Te Whakatuwhenua canoe that landed near Goat Island (Murdoch 1992). Around the 1620s a group of Ngati Awa migrated north from Kawhia to Tamaki. Led by Maki and his brother Mataahu, they conquered Tamaki and settled at Mt Smart. They then headed north; a battle was fought between Ngai Tahu and Maki's people and Ngai Tahu were defeated. Around this time, the descendants of Maki and Mataahu became known as Kawerau and came to occupy the land from Takapuna to Te Arai and the Gulf islands as far north as Hauturu (Little Barrier Island) (Murdoch 1992).

Maki divided the land between his sons and followers. Maeaeriki was given land at Mangatawhiri and Tawharanui and his people became known as Ngati Raupo. Meanwhile, Manuhiri's relatives known as Ngati Manuhiri, settled the area between Whangateau and Pakiri (Murdoch 1992).

From early on, Kawerau came under attack from the Marutuahu confederation (Ngati Maru, Ngati Whanaunga, Ngati Tamatera and Ngati Paoa) from the Hauraki Gulf (Simmonds, D. in Keys n.d.). Rights to fish for school sharks were fought over between Kawerau and the Marutuahu tribes and battles continued until the 1790s, when a short-lived peace agreement was made (Murdoch 1992).

During the 1790s, Kawerau were part of a Marutuahu war party that travelled to the Bay of Islands, where they engaged and defeated Ngapuhi at Waiwhariki near Puketona. In the 1820s, Kawerau found themselves under threat from the musket-armed Ngapuhi. Ngapuhi were defeated at a battle at Mahurangi in 1820 where the Ngapuhi leader Koriwhai was killed. In 1822, Ngapuhi sought to avenge the death of Korwhai. They attacked Kawerau at Te Kohuroa (Matheson's Bay) and after an initial setback emerged victorious (Murdoch 1992).

In 1825, a large and important battle was fought at Auckland between Ngapuhi and a Ngati Whatua force which included the Kawerau people of the east coast. The battle was fought at Mangawhai and then at Te Ika a Ranganui near Kaiwaka, where Ngapuhi emerged victorious despite heavy losses. The Kawerau people living between Pakiri and Whangaparaoa lost many warriors and decided to leave their homes due to the fear of more attacks. Ngati Manuhiri sought refuge north of Whangarei with their Ngati Wai relatives, Ngati Rongo went to the Bay of Islands to stay with Nga Manu relatives and Ngati Raupo headed for Whangarei, where they were taken in by their Te Parawhau relatives (Pritchard 1983).

Mahurangi

The name Mahurangi originally applied to a small island off Waiwera and to the wider bay. The harbour was named Kiaho and the Mahurangi River was Waihe. Mahurangi was an elderly woman in Hawaiki, the ancestral homeland of the Maori. Her special powers enabled the construction of the Tainui canoe to proceed, and this place was named

¹ Adapted from Farley and Clough 2008.

Mahurangi during the exploration of the Hauraki Gulf by the Tainui canoe. The name was later applied to the whole area and the river (ARC 2005).

The area was valued for its shark fishing grounds, control of which was the cause of some of the intertribal conflict mentioned above. Shark meat was dried and kept as a winter food supply, while shark liver oil was mixed with pigments to produce paint. The inland forests provided bird and plant resources and were easily accessed via the Puhoi and Mahurangi rivers. Canoe travel along the coast and rivers and overland routes to the Kaipara Harbour provided good communication with other areas (ARC 2005).

The hot springs at Waiwera (originally Waiwerawera, meaning ‘hot water’) were well known to the Maori inhabitants of the region for generations before the arrival of Europeans. Robert Graham, who sheltered in the bay at Waiwera on his way to the Bay of Islands in 1842, described seeing a considerable number of Maori on the beach at Waiwera digging holes in the sand and lying in them, and was told by his guide that this was an area of natural hot springs (Billman 1965:11; Locker 2001:82).

The Mahurangi area was abandoned after the 1825 battle at Te Ika a Ranganui, but the Kawerau-Ngati Rongo people led by Te Hemara Tauhia began to return to the area from 1836.

European Settlement

The first recorded purchase of land by a European in the area was a transaction around 1838 between William Webster, an American, and the Hauraki iwi for 4,046 hectares between Point Rodney and Tawharanui for a price of £490. This was done without the knowledge of Ngati Raupo, its former occupants (Murdoch 1991:7). Subsequently, in 1841 the Crown negotiated the ‘Omaha and Mahurangi Purchase’, of an extensive tract of land that included the entire coastline between Pakiri and Takapuna. However, as the purchase was carried out between the Crown and tribes of the Hauraki without consulting Ngati Raupo, Ngati Rango and Ngati Manuhiri, occupiers of the coastline immediately to the north, the transaction was not completed for a further 13 years (Murdoch 1991:7). Te Hemara Tauhia and his people continued to occupy their lands in the meantime.

Robert Graham (1820-1885), one of Auckland earliest settlers and a noted entrepreneur as well as a politician, saw the potential of the Waiwera area as a health resort and tourist attraction, having visited it in 1842. He returned to Waiwera two years later and bought some land on the foreshore from Te Hemara Tauhia, building the first bathhouse and house at Waiwera in 1844-1845 (the land subsequently had to be repurchased from the Crown). Visitors came by boat to enjoy the benefits of the hot springs from the late 1840s onwards (Billman 1965:12, 13, 116; Locker 2001:78, 93; ARC 2005; DNB I: 156).

After the Omaha and Mahurangi Purchase was finalised in 1853, European settlement of the Mahurangi area proceeded fairly rapidly. The earliest European settlement in the Mahurangi (and in the Auckland region) dates back to 1832, when a spar station was established by Gordon Browne for Captain Ranulph Dacre on the Pukaouka Peninsula on the western side of the Mahurangi River. Browne had obtained cutting rights from Hauraki Maori and employed many Maori labourers. The venture ended in 1834 when Captain Sadler arrived on HMS *Bufallo*, having obtained permission from the Ngapuhi chief Titore to take spars for the navy, and took over the supply of trees and the work force. Logging continued around the harbour, and in 1844 the first sawmill was established at Warkworth by John Brown. After the foreshore area had been cleared, logging extended inland, continuing until the late 1930s, by which time all the kauri had been logged (ARC 2005).

World War II U.S. Military Camps

Over 40 United States military camps were located throughout the wider Warkworth area during World War II (1939-1945) and collectively saw 5000 servicemen in the area during this period (Auckland Council Heritage Unit 2019:34). American forces stationed at these camps comprised elements of the 3rd Marine Corps Division, the 25th Infantry Division, and the 43rd Infantry Division (Figure 3). The plan indicates a possible camp at McKinney Road. Figure 4 is a more detailed map showing the location of US military camps in the Warkworth district. The first division to establish camps in the area was the 43rd, which arrived in October 1942. The division remained for only a few weeks but later returned in March 1944. Elements of the 3rd Marine Corps Division, including the 21st Regiment, 12th Artillery Regiments and 3rd Tank Battalion, were stationed in Warkworth for several months from March 1943. Last to arrive in the area was the 25th Infantry Division, which occupied camps from December 1943 to February 1944 (Bioletti 1989: 27-29).

Most US military camps in the area consisted of several native timber ‘two-and four-men huts.’ These were mostly constructed with louvre windows. Khaki pyramidal tents were also erected in some camps, and were fitted with wooden floors and pot-belly stoves (Bioletti 1989:111 and 113). Wells were dug by troops at certain farm camps to provide fresh water sources, some of which are still in use today. A photograph of a typical camp is provided in Figure 5.

Following the departure of the US Forces from the Warkworth area, some camp buildings were utilised by the New Zealand Army and by 4 August 1944, the *Evening Post* reported that a group of the Warkworth army camps had been handed over by the New Zealand Army to the War Assets Realisation Board. The Article noted:

‘The camps are built to the usual New Zealand Army pattern, and consist of largely prefabricated huts and various auxiliary buildings, including stores, kitchens, mess-rooms and drying rooms... The camps which have now been vacated by the New Zealand Army provided accommodation for many thousands of soldiers. The Warkworth group alone had room for about 5000’.

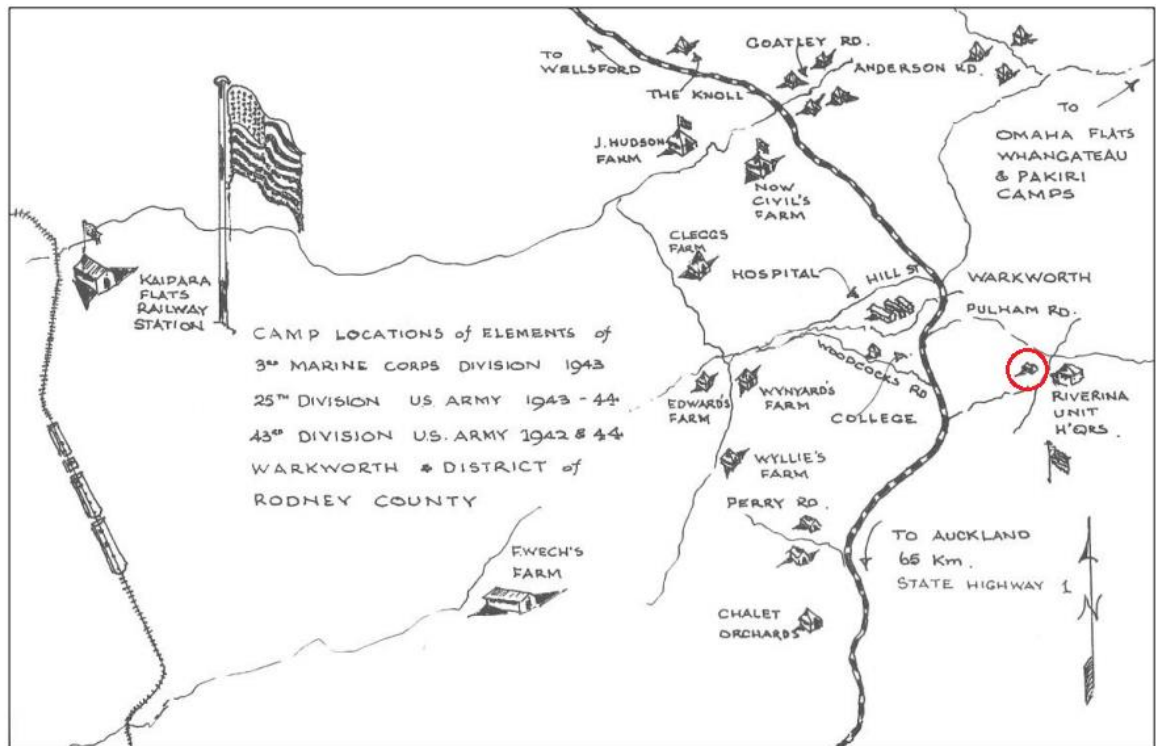


Figure 3. Sketch plan showing the location of World War II US military camps in the Warkworth area, with the possible McKinney Road camp marked by red circle. Source: Bioletti 1989: xii



Figure 4. Plan, unnamed and undated, showing the locations of the US military camps in the Warkworth District. Source: Warkworth and District Museum and Archives



Figure 5. Photograph, dated 1940s, by Tudor Collins, showing a typical US military camp with two- and four-men huts. SH1 heading north to Wellsford is visible in the photo. Source: Bioletti 1989:27

ARCHAEOLOGICAL BACKGROUND

The NZAA site record database (ArchSite) was searched for information on known sites in the vicinity of properties 33-43 McKinney Road (Figure 6). There are a significant number of sites related to Maori settlement along the Mahurangi River to the east/northeast of McKinney Road. Additionally, there are a significant number of historical sites along and near to the Mahurangi River to the east, north and west, with the majority centred around the Warkworth township. There is only one recorded archaeological site within 500m of the properties, this being the Morgan house site (Lot 2 DP 486313 Thompson Rd and 66 McKinney Road) approximately 400m southeast of property at 43 McKinney Road (NZAA Site Number R09/2242).

The Morgan house site was visited and researched by R. Brassey in 2018. The property was first taken up by a Crown Grant by J. R. Morgan in 1855 and passed through several hands through the 19th century. In 1911 it was purchased by J. Wech, whose family continue to own the property. In addition to domestic activities related to the house situated on the property, the land may have historically been used as a farm and/or to hold merchant stock.

Auckland Council's Cultural Heritage Inventory (CHI) was also searched for information of known historic heritage sites within the vicinity (Figure 7). This database records the Morgan house as CHI No. 17610, and shows two additional recorded sites within 500m. One of these is one of the Riverina World War II US military camps (CHI No. 17009) approximately 400m to the east of property 43 McKinney Road at Lot 1 DP 330465 McKinney Road. As noted above, this camp was one of more than 40 camps in the locality which saw 5000 servicemen in the area during World War II (Auckland Council Heritage Unit 2019:34). The A1 and A2 Riverina Camp was located at the corner of Pulham Road, Wilson Road and Hepburn Creek Road, with research on the site compiled by Heritage NZ (2018). The other site is the Warkworth Presbyterian Cemetery (CHI No. 14840) built in 1859 and still in use to this day, located approximately 460m to the east of property 43 McKinney Road at Lot 1 DP 58053 McKinney Road (across the road from the US military camp). The CHI also shows a number of historical buildings further to the east, including the Wilson House/Riverina (CHI No. 2400), which acted as the US Army headquarters for the US military camps in the area (Auckland Council Heritage Unit 2019:11); and a historical botanical site further to the southeast.

Auckland Unitary Plan Operative in part (AUP OP) schedules and the New Zealand Heritage List were also searched for information regarding heritage sites within the vicinity. The Wilson House/Riverina is scheduled on the AUP OP (ID 00575) (Figure 7) and listed by Heritage NZ (ID 498) but there are no other scheduled or listed historic places near 33-43 McKinney Road.

In February 2006, an archaeological assessment was undertaken for McKinney Residential Ltd regarding a large 250 residential lot subdivision at McKinney Road, Warkworth (Plowman and Clough 2006). The property included allotment 1 DP 204082 and allotments 2-8 DP 187649 and is 30.72 ha in extent. This subdivision is located just to the northeast of 33-43 McKinney Road (Figure 7, Figure 8) where Stage 2 works are still underway. As with the current assessment, the 2006 assessment noted that archaeological evidence across the broader area is located at some distance to the north and northeast of the survey area, primarily around the Warkworth township and the Mahurangi River. The archaeological survey found no archaeological evidence and determined the property to have no known archaeological significance.

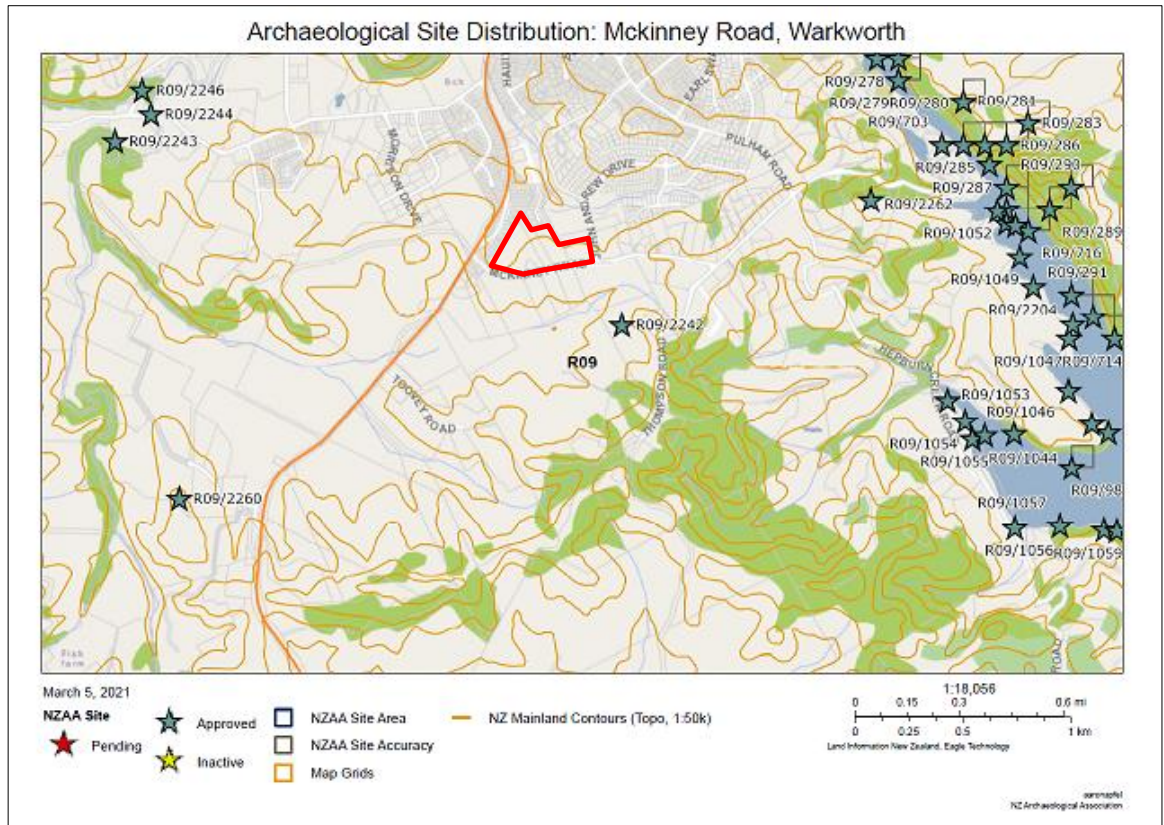


Figure 6. Archaeological site distribution around McKinney Road, Warkworth. Source: NZAA ArchSite

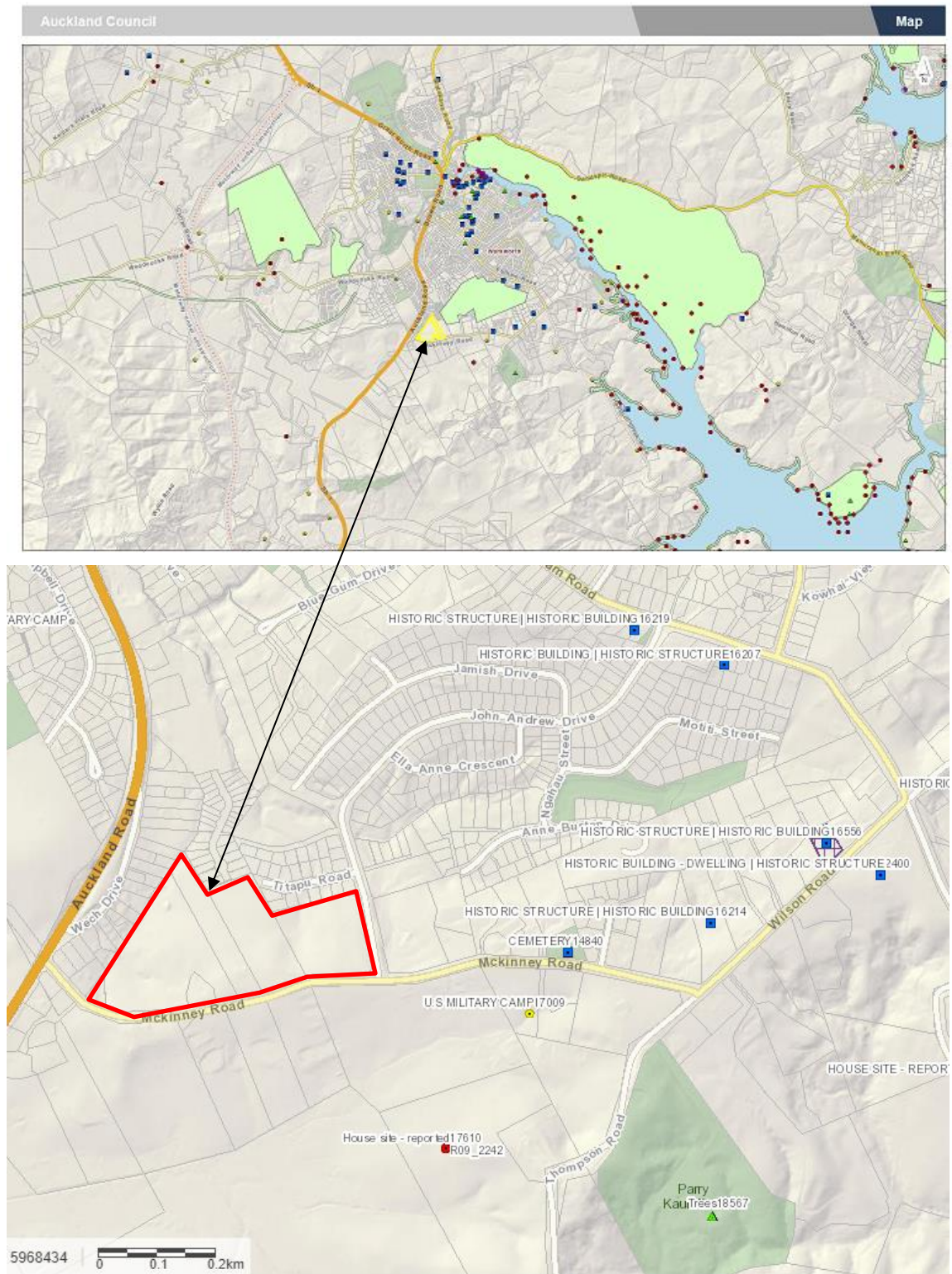


Figure 7. Cultural Heritage Inventory showing sites across Warkworth. Source: Auckland Council's Geomaps (2021). Red dots = archaeological sites, blue squares = historic buildings/structures, yellow symbols = reported sites, green triangle = botanical site purple hatching = historic heritage places scheduled on the AUP OP



Figure 8. McKinney Residential Ltd 250 lot subdivision at McKinney Road including allotment 1 DP 204082 and allotments 2-8 DP 187649. Source: Plowman and Clough 2006: 2

HISTORICAL SURVEY

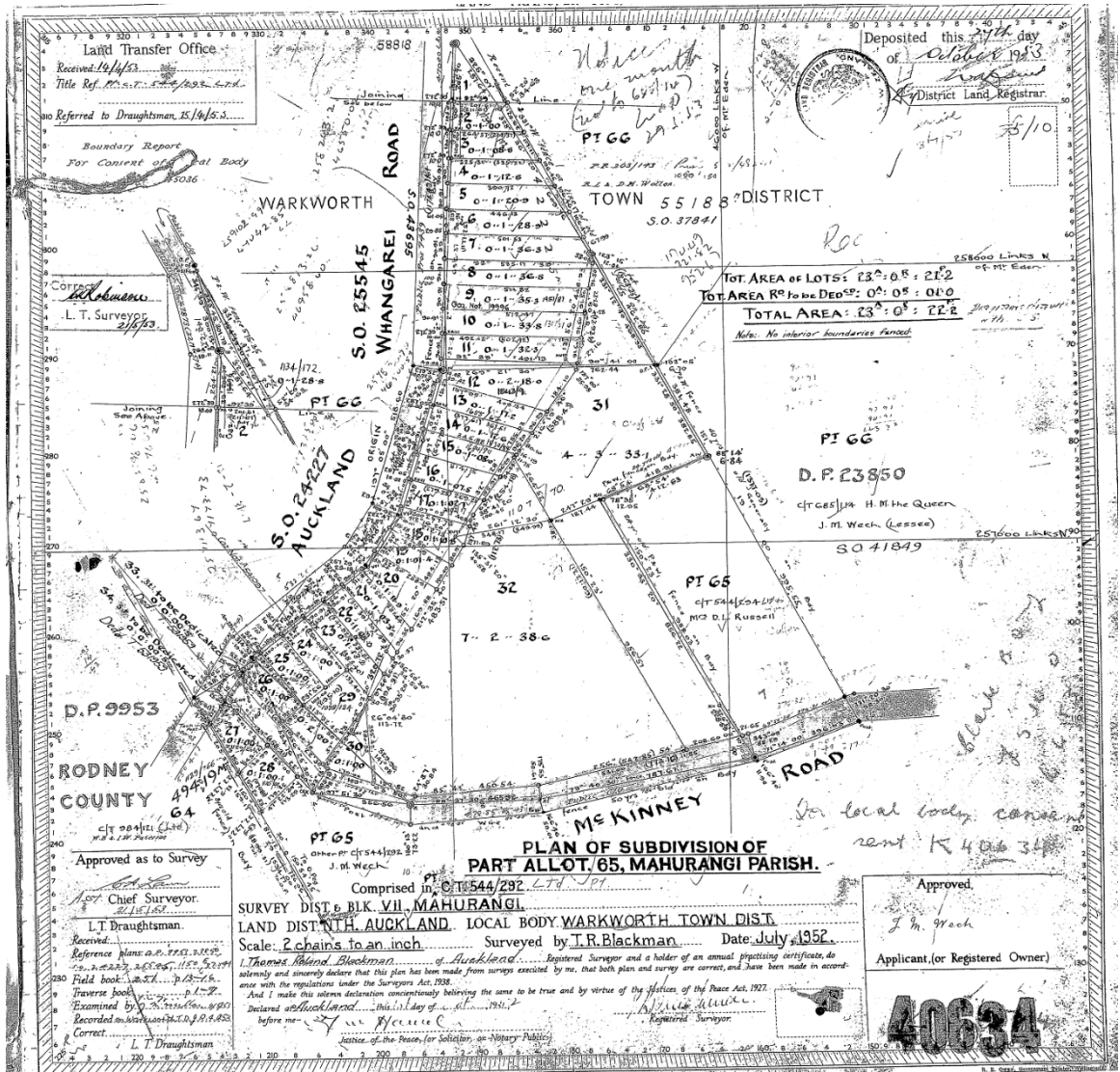
Information from Early Maps and Plans

There is little significant information to be learned from previous maps and plans of the properties. The earliest known plan of the properties is from 1931 (Figure 9) and shows Allot 66 Parish of Mahurangi, part of the Stage 2 McKinney Residential Ltd 250 lot subdivision previously discussed (Plowman and Clough 2006). This plan also shows the adjacent lot, Allot 65, and identifies the previous land owners of what are currently 37 and 43 McKinney Road (J.M. Wech and D.L. Russell). A 1953 plan of the subdivision of Part Allot 65 Mahurangi Parish shows the properties within the proposed Plan Change Area in their entirety, listing previous land owners and old boundaries/fence lines (Figure 10). The plan notes that some of the post and wire fences are possibly as much as 40 years old, indicating that activity may have been taking place on these properties in the early 20th century. Finally, a 1976 plan shows the subdivision of what is now 37 McKinney Road (Figure 11).



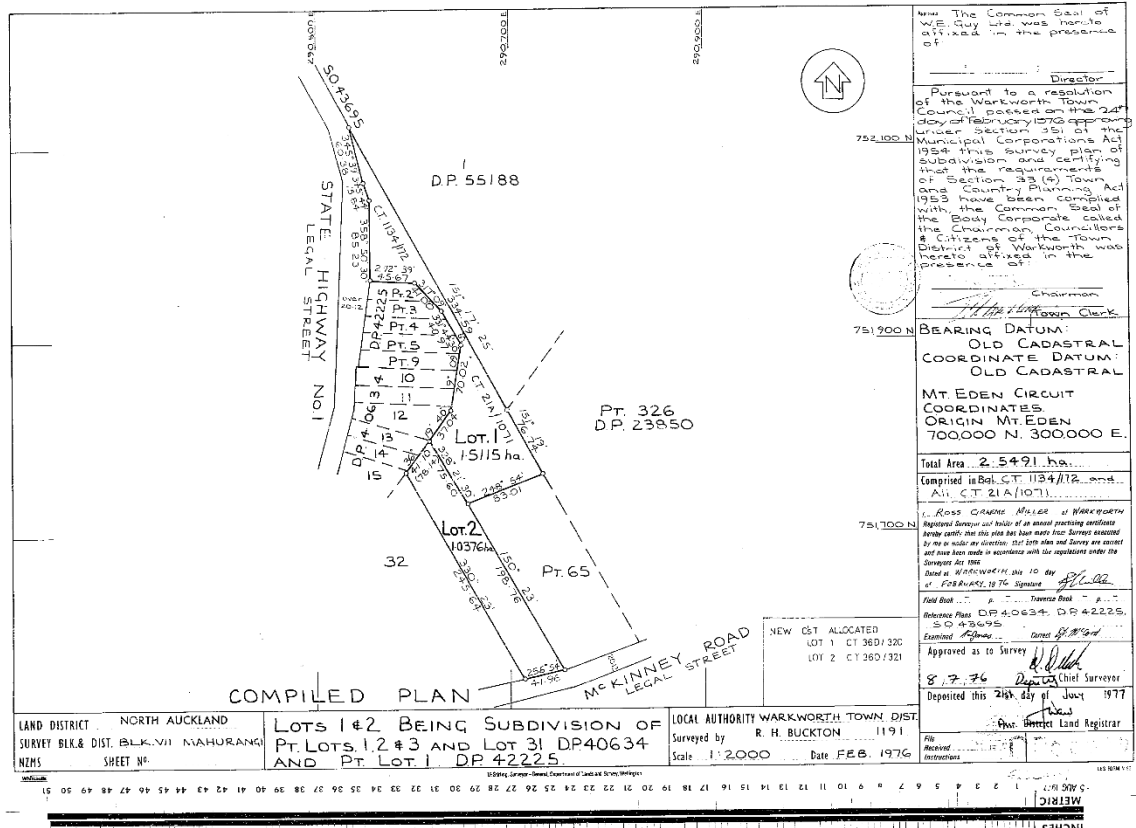
Land Information New Zealand, Custom Software Limited, Date Scanned 2002, Last modified February 2002, Plan is probably current as at 27/06/2019

Figure 9. 1931 plan showing Part Allot 66, Parish of Mahurangi. Source: Quickmap



Land Information New Zealand, Custom Software Limited, Date Scanned 2002, Last modified July 2018, Plan is not current as at 27/06/2019

Figure 10. 1953 plan showing subdivision of Part Allot 65, Mahurangi Parish. Source: Quickmap



Land Information New Zealand, Custom Software Limited, Date Scanned 2002, Last modified February 2002, Plan is probably current as at 27/06/2019

Figure 11. 1976 plan showing Lots 1 & 2 being the subdivision of Part Lots 1, 2 and 3 and Lot 31 DP 40634 and Part Lot 1 DP 42225. Source: Quickmap

Information from Early Aerials

The earliest available aerial is from 1963 (Figure 12.) and shows there to be little development within the area surveyed, with the land apparently used for stock grazing. The only structure within the survey area is what appears to be a barn or shed on the southwest corner, now 9 McKinney Road. To the east of the area surveyed the aerial shows 43 McKinney Road to contain a house and outbuildings near the road and what appear to be ploughed fields, while Lot 1 DP 187649 is in pasture. Modern aerials (Figure 1) show that there has been little subsequent development within the Plan Change Area apart from the houses at 9, 33 and 37 McKinney Road.



©Sourced from <http://retrolens.nz> and licensed by LINZ CC-BY 3.0

Figure 12. 1963 Aerial showing surveyed property on McKinney Road in red. Source: Retrolens, 27/04/1963 SN1404 Run E Photo #4.

PHYSICAL ENVIRONMENT

Topography, Vegetation and Land use

Properties 9 (Figure 13), 33 (Figure 14 and Figure 15) and 37 McKinney Road (Figure 16) (excluding the rear northern portion) are currently being used as domestic properties and are occupied. The rest of the land surveyed, being the rear of property at 37 McKinney Road and Lot 2 DP 481942 McKinney Road, is kept in pasture, and is currently being used for sheep grazing. The balance of the land within the Plan Change Area, including 43 McKinney Road, was not part of the survey, but is also in pasture, with a residence and garden area close to the road frontage. Looking at the 1963 aerial (Figure 12), the land is assumed to have been used predominantly as pasture throughout much of the 20th century until now. The original landscape appears to have suffered minimal modification. Other than the residences across these properties, there are no other structures or apparent modifications to the landscape apart from fencing.

Within the survey area, the topography predominantly consists of hills that have relatively gentle slopes leading to the flat valley and stream that runs along the northern border. Part of this stream can be seen running southeast-northwest through the central western portion of Lot 2 DP 481942 (Figure 17 and Figure 18) and was dry, with no flowing water at the time of the survey. This portion of the property has steeper slopes, particularly on the southern side, leading towards the stream and the valley to the north.

The land is bordered by trees and various shrubs along the north/northwest border. The only other trees seen on the property are those that surround the currently occupied domestic buildings/properties. A row of shrubs can be seen running adjacent to the majority of the border of 37 and Lot 2 DP 481942 McKinney Road. Some shrubs and tall grasses can also be seen running along the stream on Lot 2 DP 481942. Some dead trees/stumps can be seen near the northern boundary of Lot 2 DP 481942 (Figure 19 and Figure 20). The rest of the land consists of short grass/pasture, which enables clear visibility of areas where archaeological sites might be expected.

Geology and Geomorphology

The wider Warkworth area is layered with sand and mudstones from the early Miocene, known as the Warkworth subgroup (Edbrooke 2001). The area around the Mahurangi River is also noted as being a high-quality limestone source, which likely attracted some of the notable early industries to the area.

In general, test pits excavated during the archaeological survey (described in the following section) from the southern portions of the land along the upper parts of the hills showed a medium-brown topsoil followed by a natural brown/orange clay base. Test pits from the northern portions closer to the valley and at the base of the hills showed a slightly different stratigraphic profile. These showed a medium-brown topsoil followed by a darker brown soil and a natural light grey silty clay at the base.



Figure 13. Property 9 McKinney Road. Facing west



Figure 14. Property 33 McKinney Road. Facing north



Figure 15. Rear of property 33 McKinney Road, standing on Lot 2 DP 481942. Facing southeast



Figure 16. Property 37 McKinney Road. Facing north



Figure 17. Stream running through Lot 2 DP 481942. Facing northwest border



Figure 18. Stream running through Lot 2 DP 481942 showing erosion. Facing northeast



Figure 19. Tree stumps located at north/northwest corner of property Lot 2 DP 481942. Facing north



Figure 20. Dead tree and old fencing material located along northwest border of property Lot 2 481942. Facing north

FIELD ASSESSMENT

Field Survey Results

The field survey was undertaken on 25 February 2021. The survey began with the rear (unoccupied) portion of property 37 McKinney Road followed by Lot 2 DP 481942. The survey consisted of visual inspection to identify any surface archaeological features and subsurface testing with a probe and a series of spade test pits, in order to understand the local stratigraphy and flat topographical features. Test pits were approximately 20cm by 20cm and were generally placed in areas thought to have the most potential for archaeological remains. The location of these test pits is shown in Figure 21.



Figure 21. Test pit (TP) locations

The southern boundary of the survey area separating the residential and pasture portions of property at 37 McKinney Road is marked by a fence and a number of large trees (Figure 22). This portion of the property is located at the top of a gently sloping hill (Figure 23). The area was probed and a test pit was placed here (TP1) to examine the stratigraphy (NZTM coordinates 1748894, 5968983 \pm 3m) (Figure 24 and Figure 25). The stratigraphic profile was as follows:

Layer 1: 13-14cm of a medium-brown, moderately loose topsoil. Significant root disturbance.

Layer 2: 4cm of a light brown soil with high clay content, moderately compact. Minor root disturbance.

Layer 3: 6cm+ (base of pit) of a light brown/orange clay, compact with minor root disturbance.

The northern portion of the property at 37 McKinney Road is situated on the border of the valley that runs along the northern boundary of the properties (Figure 26). This portion is situated on a relatively flat area of land. Two recently disturbed oval-shaped features were discovered here (Figure 27), and were assumed to be sheep burials due to their shape and size and the presence of sheep on the property. These features were approximately 1m long and 45-50cm wide. A test pit (TP2) was placed several metres away from these features (NZTM coordinates 1748816, 5969134 \pm 3m), in order to understand how the stratigraphy varies between the hill and the valley below (Figure 28 and Figure 29). The stratigraphic profile was as follows:

Layer 1: 15cm of medium-brown topsoil, moderately loose with moderate root disturbance.

Layer 2: 14-15cm of dark brown soil, moderately loose with minor root disturbance.

Layer 3: 1cm+ (base of bit) of a light grey, moderately compact silty clay.

It was noted that the ground here was softer than the ground further up the hill; it appeared to have a higher water content as the soil was far less dry.

Another test pit (TP3) was placed at the centre of Lot 2 DP 481942, behind 33 McKinney Road (NZTM coordinates 1748830, 5968977 \pm 3m), in a relatively flat area approximately halfway down the hill (Figure 30 and Figure 31). This was to determine whether the stratigraphy here differed from the rest of the land and to see if this particular area had any archaeological potential. The stratigraphy here was similar to that of the first test pit at the top of the hill on the property at 37 McKinney Road. The stratigraphy here was as follows:

Layer 1: 19cm of medium-brown, moderately loose topsoil. Minor root disturbance.

Layer 2: 1cm+ (base of pit) light brown/orange clay, compact with no root disturbance.

Probing revealed that the ground surrounding the stream located on Lot 2 DP 481942 was relatively compact and dry. A test pit (TP4) was placed adjacent to the stream (NZTM coordinates 1748728, 5968975 \pm 3m) and the north-western boundary of the property (Figure 32, Figure 33 and Figure 34). Unfortunately, due to compaction the natural clay layer could not be reached. The stratigraphy here was similar to that of the second test pit done at the northern portion of property 37 McKinney Road, adjacent to the valley. The stratigraphy here was as follows:

Layer 1: 17cm of medium-brown topsoil, moderately compact with minor root disturbance.

Layer 2: 12cm+ (base of pit) dark brown soil, compact with no root disturbance.

A final test pit (TP5) was placed at the top of the hill above the stream (NZTM coordinates 1748790, 5968896 \pm 3m), near the southern boundary of Lot 2 DP 481942 and near property 33 McKinney Road (Figure 35 and Figure 36). This was in order to see how the stratigraphy differs from the stratigraphy seen below by the stream, and to see if this area had any archaeological potential. The stratigraphy here was virtually identical to the third test pit done behind the property 33 at McKinney Road at the approximate centre of Lot 2 DP 481942.

Visual inspection, probing and the test pits across the property did not identify any archaeological features or deposits.



Figure 22. Southern end of pasture portion of 37 McKinney Road, facing domestic property. Note large trees and fence forming boundary. Facing south



Figure 23. Standing at southern end of pasture portion of 37 McKinney Road, facing northern boundary. Facing north/northwest



Figure 24. Location of first test pit (TP1) marked by probe along southern end of the pasture portion of 37 McKinney Road. Facing south



Figure 25. Stratigraphic profile of TP1 placed along southern end of pasture portion of 37 McKinney Road



Figure 26. Northern end of 37 McKinney Road, facing north/northwest boundary



Figure 27. Oval-shaped features (possible sheep burials) at the northern end of 37 McKinney Road



Figure 28. Location of TP2 marked by probe at the northern end of 37 McKinney Road



Figure 29. Stratigraphic profile of TP2 placed at the northern end of 37 McKinney Road



Figure 30. Location of TP3 marked by probe placed at the centre of Lot 2 DP 481942 (rear of 33 McKinney Road). Facing southeast



Figure 31. Stratigraphic profile of TP3 placed at the centre of Lot 2 DP 481942 (rear of 33 McKinney Road)



Figure 32. Location of TP4 marked by probe placed adjacent to the stream on Lot 2 DP 481942 near the north-western boundary. Facing west



Figure 33. Location of TP4 marked by probe placed adjacent to the stream on Lot 2 DP 481942 near the north western boundary. Facing east



Figure 34. Stratigraphic profile of TP4 placed adjacent to stream on Lot 2 DP 481942 near the north western boundary



Figure 35. Location of TP5 marked by probe placed at the top of the hill above the stream, near the southern boundary of Lot 2 DP 481942 and near property 33 McKinney Road. Facing northwest



Figure 36. Stratigraphic profile of TP5 placed at the top of the hill above the stream, near the southern boundary of Lot 2 DP 481942 and near property 33 McKinney Road

DISCUSSION AND CONCLUSIONS

Summary of Results

The historical and archaeological research did not identify any previously recorded archaeological or other historic heritage sites within the proposed Plan Change Area at McKinney Road, Warkworth, and few located in close proximity to it. The closest recorded sites, within c.500m, are the Morgan house site (R09/2242, CHI No. 17610), the Riverina World War II US military camp (CHI Places No. 17009), and the Warkworth Presbyterian Cemetery (CHI Places No. 14840). The nearby Riverina World War II US military camp and headquarters (CHI Place No. 2400), one of over 40 in the Warkworth area, represents significant US military activity in the area during that period. However, the camp site was situated approximately 1km to the east of the proposed Plan Change Area, and no evidence of use as a military camps was observed during the field survey. These three sites will not be affected by future development within the Plan Change Area.

No visible archaeological material or features were identified during the field survey. Most of the recorded archaeological sites in the wider area are concentrated a significant distance away, to the north and northeast of the survey area, primarily around the Warkworth township and the Mahurangi River. Therefore, the likelihood of modifying or destroying unidentified archaeological remains during any future development on the surveyed properties is considered to be low.

Maori Cultural Values

This is an assessment of archaeological values and does not include an assessment of 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.

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.

Parts of the proposed Plan Change Area were not accessible for field survey because they are currently occupied, these being the properties at 9, 33, the southern portion of 37 McKinney Road. It is intended that the property 43 McKinney Road and Lot 1 DP 187649 will be surveyed at a later date. However, based on aerial photographs the landscape and archaeological potential in the areas that have not been surveyed are very similar to the rest of the proposed Plan Change Area.

Archaeological Value and Significance

Although there are several recorded sites of historic heritage significance within the general vicinity of the proposed Plan Change Area, there are none on the property or within the immediate vicinity, and the archaeological survey did not identify any archaeological or other historic heritage sites. The proposed Plan Change Area therefore has no known archaeological value or significance and the potential for unidentified subsurface archaeological remains is considered to be low.

The archaeological value of sites relates mainly to their information potential, that is, the extent to which they can provide evidence relating to local, regional and national history using archaeological investigation techniques, and the research questions to which the site could contribute. The surviving extent, complexity and condition of sites are the main factors in their ability to provide information through archaeological investigation. For example, generally pa are more complex sites and have higher information potential than small midden (unless of early date). Archaeological value also includes contextual (heritage landscape) value. Archaeological sites may also have other historic heritage values including historical, architectural, technological, cultural, aesthetic, scientific, social, spiritual, traditional and amenity values.

Effects of the Proposal

Based on the current survey, historical research and previous archaeological work in the area, the proposed rezoning and any future development within the proposed Plan Change Area will not affect any known archaeological or other historic heritage sites.

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. However, based on the distribution of recorded sites in the wider area and the results of the field survey, it is considered unlikely that any unidentified subsurface archaeological remains will be present within the proposed Plan Change Area.

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.

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’*. There is a duty to avoid, remedy, or mitigate any adverse effects on the environment arising from an activity (S17), including historic heritage.

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 provisions of the RMA. The Auckland Unitary Plan Operative in Part 2016 (AUP OP) is relevant to the proposed activity.

There are no scheduled historic heritage sites located within the proposed Plan Change Area. This assessment has established that future development within the Plan Change Area will have no effects on any known archaeological or other historic heritage sites, and has little potential to affect unidentified subsurface remains. However, should archaeological sites be exposed during future development, this is provided for under the Accidental Discovery Rule (E12.6.1) set out in the AUP OP, which requires that works cease within 20m of the discovery and the Council, Heritage NZ, Mana Whenua and (in the case of human remains) NZ Police are informed.

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),² –

(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. 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.

² Under Section 42(3) an Authority is not required to permit work on a pre-1900 building unless the building is to be demolished.

³ 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.

As there are no identified archaeological sites within the proposed Plan Change Area and little potential for unidentified subsurface remains, an archaeological authority will not be required for future development. However, should any sites be exposed during future development, the provisions of the HNZPTA must be complied with.

Conclusions

No archaeological or other historic heritage sites have been previously recorded within the proposed Plan Change Area, and none were identified during the archaeological survey of the western half of the Plan Change Area. The potential for unidentified subsurface archaeological remains within the area surveyed is considered to be low, and the same is likely to apply to the eastern half of the proposed Plan Change Area.

Future development as a result of the proposed Plan Change is therefore unlikely to have any adverse effects on archaeological/historic heritage sites. However, if unidentified archaeological remains were to be exposed by future development, this is provided for in the AUP OP under the Accidental Discovery Rule and by archaeological provisions of the HNZPTA.

RECOMMENDATIONS

- There should be no constraints on the proposed rezoning of properties within the proposed Plan Change Area, since no archaeological sites or other historic heritage sites are known to be present and it is considered unlikely that any will be exposed during future development.
- If archaeological remains are exposed during future development, or if human remains should be discovered, the Accidental Discovery Rule (E12.6.1) set out in the AUP OP must be complied with. Under the Accidental Discovery Rule works must cease within 20m of the discovery and the Council, Heritage NZ, Mana Whenua and (in the case of human remains) NZ Police must be informed.
- If modification of an archaeological site does become necessary, an Authority must be applied for under Section 44(a) of the HNZPTA and granted prior to any further work being carried out that will affect the site. (Note that this is a legal requirement).
- Since archaeological surveys 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 within the proposed Plan Change Area.

BIBLIOGRAPHY

- Auckland Council Heritage Unit. 2019. Historic Heritage Evaluation: Riverina, 46 Wilson Road Warkworth.
- Billman, M. 1965. *A Century in Hot Water. A Tale of Waiwera*. Rodney & Waitemata Times, Warkworth.
- Bioletti, H. 1989. *The Yanks are Coming: The American Invasion of New Zealand 1942-1944*. Auckland: Century Hutchinson.
- DNB. 1990. *The Dictionary of New Zealand Biography*. Volume I. 1760-1869. Allen & Unwin and Department of Internal Affairs, Wellington.
- Edbrooke, S.W. (compiler) 2001. Geology of the Auckland area. Scale 1:250,000. Lower Hutt: Institute of Geological & Nuclear Sciences Limited.
- Farley, G. Clough, R. 2008. Algies Bay Subdivision, Mahurangi, Rodney District: Archaeological Investigation of Site R09/152. Clough & Associates report prepared for Albro Holdings Ltd.
- Heritage New Zealand, 2018. A1 and A2 Riverina Camp.
- Keys, H.J. 1954. *Mahurangi – The Story of Warkworth, New Zealand*. Friends of the Mahurangi Inc.
- Locker, R. H. 2001. *Jade River. A History of the Mahurangi*. Friends of the Mahurangi, Warkworth.
- Murdoch, G. J. 1991. A History of the Human Occupation of Tawharanui Regional Park. Auckland Regional Council Planning Department.
- Murdoch, G. J. 1992. Tawharanui Regional Park: Management Plan. Auckland Regional Council, Regional Parks Services.
- Plowman, M. Clough, R. 2006. McKinney Road Subdivision, Warkworth: Archaeological Assessment. Prepared for McKinney Residential Ltd.
- Pritchard, K. 1983. 'Prehistoric Maori Settlement Patterns in East Rodney'. Unpublished Thesis, University of Auckland, 1983, p.28 and Auckland Regional Council Parks Services, p.40.

Websites:

- Auckland Council Cultural Heritage Inventory, accessed at <http://maps.aucklandcouncil.govt.nz> and <https://chi.org.nz>
- Auckland Council Geomaps, accessed at <http://www.aucklandcouncil.govt.nz/geospatial/geomaps>
- New Zealand Archaeological Association ArchSite Database, accessed at <http://www.archsite.org.nz>
- New Zealand Heritage List, accessed at <http://www.historic.org.nz>
- Retrolens, accessed at <http://retrolens.nz/>

Archives:

- ARC 2005. Auckland Regional Council, *Historic Mahurangi*, booklet/poster.

Auckland Council CHI:

- CHI Record No. 2400
- CHI Record No. 14840
- CHI Record No. 17009

New Zealand Archaeological Association, ArchSite:


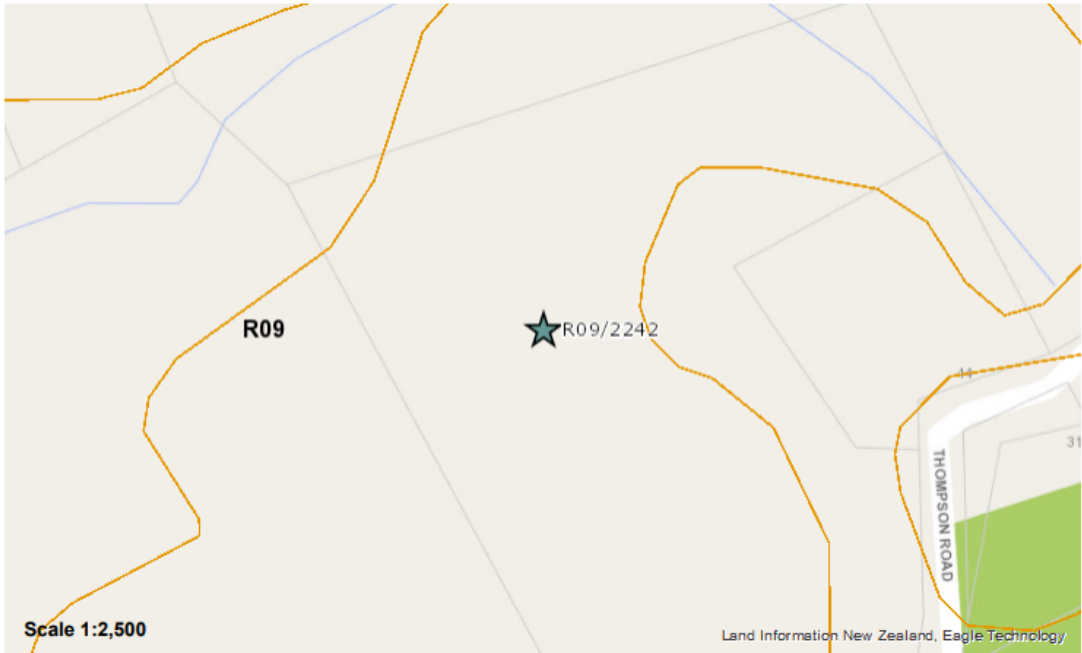
- Site No. R09/2242

Newspapers:

- Evening Post*, Volume CXXXVIII, Issue 30, 4 August 1944, p.5.

APPENDIX A: SITE RECORD FORMS

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

 <p>Site Record Form</p>	<p>NZAA SITE NUMBER: R09/2242</p> <p>SITE TYPE: Historic - domestic</p> <p>SITE NAME(s): Morgan house site</p> <p>DATE RECORDED:</p>
<p>SITE COORDINATES (NZTM) Easting: 1749276 Northing: 5968647 Source: On Screen</p>	
<p>IMPERIAL SITE NUMBER: METRIC SITE NUMBER: R09/2242</p>	
	
<p>Finding aids to the location of the site Lot 2 DP 486313 Thompson Rd & 66 McKinney Road Warkworth</p>	
<p>Brief description Site of 1850s house</p>	
<p>Recorded features</p>	
<p>Other sites associated with this site</p>	

Printed by: aaronapfel

09/03/2021

1 of 3

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD HISTORY	NZAA SITE NUMBER: R09/2242
<p>Site description</p> <p>Updated 01/06/2018 (Field visit), submitted by robertbrassey , visited 11/01/2018 by Brassey, Robert Grid reference (E1749276 / N5968647)</p> <p>Site of Morgan house and associated building/s. The first owner of the land taken up by a Crown Grant was J R Morgan who owned the land from 1855 until 1861. A cadastral map SO 1110A, shows that Morgan had a house, other buildings and fenced enclosures on the property by 1855. The property was then purchased by Combes and Daldy who were prominent in the early lime industry in Warkworth and were well known in Auckland as wholesalers and merchants. Following Combes' death in 1870, Daldy sold the land in 1873. William Crush Daldy, was a sea captain who arrived in Auckland in 1841. He was also elected to the House of Representatives, serving under the Fox Ministry. The firm Combes and Daldy appear as one of the first lime merchants in Warkworth in 1850 having already taken up Crown Grant land in the area. Daldy did have a farm in the area and it is possible this land was part of that farm. However, he was also an investor and this land may have been used for that purpose. In 1873 a Mr Edwards bought the land and in 1885 he sold the property to Mr Woodcock. The Woodcocks are well known early settlers and Alfred Woodcock served on the first district board. However, he did not own the property for very long selling it in 1887 to John Southgate, another early Warkworth settler and identity. John Southgate was another early producer of lime in Warkworth, having settled there in 1848. Southgate owned the property until 1906 and it is possible he bought the property as an investor. The next owner was a Mr Mercer who sold the property in 1911 to John Wech. The Wech family continue to own the property. They are also well known early settlers in the district.</p> <p>Site not accessed, viewed from public domain</p> <p>Condition of the site</p> <p>Updated 01/06/2018 (Field visit), submitted by robertbrassey , visited 11/01/2018 by Brassey, Robert</p> <p>In pasture, potentially in very good condition</p> <p>Statement of condition</p> <p>Updated: 24/07/2020 - Below surface - Surface evidence has been obliterated, however, there is likely to be subsurface material present. Note that this is different from a destroyed site.</p> <p>Current land use:</p> <p>Updated: 24/07/2020 - Grazing</p> <p>Threats:</p> <p>Updated: 24/07/2020 - Farming practices, Subdivision, Property development</p>	

APPENDIX B: CULTURAL HERITAGE INVENTORY FORM

Search results			
CHI Places Number	14840	NZAA Metric Site Number	
ACC Heritage Number		WCC Computer Number	
NZMS 260 map number	R09	Date of Visit	24/11/04
NZMS 260 map name	Auckland	Type of site or area	CEMETERY
NZTM map sheet	AZ31	Name of site or area	Warkworth Presbyterian Cemetery
Nature of Information:		brief visit	
Date of construction:		1859	
Builder:			
Reported by:		Dinah Holman Charlotte Judge and Angela Scott	
Local authority:		Rodney District Council	
District plan name:			
NZAA record status:		Brief Photographs Location map Cemetery records	
NZHPT Register number:			
NZHPT Act section:			
EIF application year:			
Architect:			
Engineer:			
Date reported:		May 1999 24 Nov 2004	
Date (NZAA SRF Entry Date)			
Listing status in district/regional plan:			
ArcView category:		Historic Structure	
NZHPT Register name:			
NZHPT Registration type:		None	
Click on this link to view this cultural heritage site in the Auckland Council GIS Viewer			
Hide record			

Search results			
CHI Places Number	17009	NZAA Metric Site Number	
ACC Heritage Number		WCC Computer Number	
NZMS 260 map number	None	Date of Visit	
NZMS 260 map name	None	Type of site or area	U.S MILITARY CAMP
NZTM map sheet	None	Name of site or area	Riverina Camps A1:A2:A3
Nature of Information:		EIF application year:	
Date of construction:		Architect:	
Builder:		Engineer:	
Reported by:		Leah Stevens	
Local authority:		Rodney District Council	
District plan name:			
NZAA record status:		Brief Aerial photograph Site location map	
NZHPT Register number:			
NZHPT Act section:			
EIF application year:		20 Apr 2007	
Architect:			
Engineer:			
Date (NZAA SRF Entry Date)			
Listing status in district/regional plan:		Reported Historic Site	
ArcView category:		Reported Historic Site	
NZHPT Register name:			
NZHPT Registration type:		None	
Click on this link to view this cultural heritage site in the Auckland Council GIS Viewer			
Hide record			

Search results			
CHI Places Number	2400	NZAA Metric Site Number	
ACC Heritage Number		WCC Computer Number	
NZMS 260 map number	R09	Date of Visit	Jan 1999
NZMS 260 map name	None	Type of site or area	HISTORIC BUILDING - DWELLING HISTORIC STRUCTURE
NZTM map sheet	AZ31	Name of site or area	Riverina Wilson House
Nature of Information:		EIF application year:	
Date of construction:	c. 1901	Architect:	Wladislaw de Montalk
Builder:	Mr Clayden and Angus Grant, carpenters	Engineer:	
Reported by:	New Zealand Historic Places Trust (Register) Dinah Holman Graeme Murdoch Marguerite Hill	Date reported:	Jan 1999 2009 30/01/2019
Local authority:	Rodney District Council	Date (NZAA SRF Entry Date)	
District plan name:		Listing status in district/ regional plan:	
NZAA record status:	Detailed Location map Photo NZHPT Buildings Record Form SRF	ArcView category:	Historic Structure
NZHPT Register number:	498	NZHPT Register name:	Riverina
NZHPT Act section:		NZHPT Registration type:	Historic Places Category II
<p>Click on this link to view this cultural heritage site in the Auckland Council GIS Viewer</p> <p>Hide record</p>			