

KAHAWAI POINT SPECIAL HOUSING AREA GLENBROOK: ARCHAEOLOGICAL ASSESSMENT

Report prepared for Kahawai Point Development

By

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Draft1

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EXECUTIVE SUMMARY

Summary

A development at McLarin Rd, Glenbrook Beach is for approximately 800 new homes over 10 years. The affordable homes within the development will be priced at between \$460,000 and \$465,000. The development will provide a mix of housing types, matched to current shortages, including smaller 2 bedroom duplexes and larger 3 to 5 bedroom homes. The first homes may be ready for habitation by 2016/2017. The development is north facing and includes a significant pohutakawa lined coastal margin. The land has significant mature wetland habitat and is well connected to the all-tide boat ramp at Glenbrook Beach. A substantial coastal walkway will be part of the development. It is zoned rural under the Proposed Auckland Unitary Plan. Developer Kahawai Point Ltd has been working closely with mana whenua and has incorporated iwi housing concepts into the master plan for the development. The project requires a plan variation and qualifying development consent for the initial development of the land. This will include earthworks, drainage, roads and the walkway. It is anticipated the first stage will deliver a 200-lot subdivision.

A number of archaeological sites are recorded on the coastal fringe of the development and would be negligibly affected by the earthworks for the subdivision. However, the proposed walkway and pine tree removal would affect some of these sites. The archaeological sites are all shell midden or ovens associated with Maori occupation of the area. They range from small to large and vary in condition from very poor to fair due to natural erosion and ploughing.

The walkway and pine removal effects are less than minor in most situations near the archaeological sites and specific design will minimise the effects with the ability to do some limited archaeological excavation.

The results of the excavations will provide information for the range of interpretative signage and improved vegetation management will provide a positive outcome for the heritage on the property in line with statutory requirements.

An Authority from Heritage NZ will be required for the project works.

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INTRODUCTION

Project

Background

A development at McLarin Rd, Glenbrook Beach is for approximately 800 new homes over 10 years. This includes the properties:

- Lot 2 DP 351480 (8130m²)
- Lot 1 DP 351480 (363183m²).

The development will provide a mix of housing types, including smaller 2 bedroom duplexes and larger 3 to 5 bedroom homes. The development is north facing and includes a significant pohutakawa lined coastal margin. A substantial coastal walkway will be part of the development. It is zoned rural under the Proposed Auckland Unitary Plan.¹

Mana whenua are both landowners and are heavily involved in the development. Iwi housing concepts have been incorporated into the master plan for the development. The development will require a plan change variation as well as consent for the required works. This includes tree removal, earthworks, drainage, roads and the walkway. It is anticipated the first stage will deliver a 200-lot subdivision (Stage 1 described below).

The project is one of the Special Housing Area (SHA) developments being carried out under the *Auckland Housing Accord* developed between Auckland Council and the Government relating to Auckland's housing shortage. The proposal has been designed in accordance with the provisions with the Proposed Auckland Unitary Plan (PAUP).

This report has been commissioned by the developers to determine the effects of the proposal on archaeological and other historic heritage values. This report has been prepared as part of the required assessment of effects accompanying a resource consent application under the Resource Management Act 1991 (RMA), to address the specific requirements for the SHA and to identify any requirements under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA). Recommendations are made in accordance with statutory requirements.

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¹ <http://www.aucklandcouncil.govt.nz/EN/ratesbuildingproperty/housingsupply/Pages/specialhousingareas.aspx>

Methodology The New Zealand Archaeological Association's (NZAA) site record database (ArchSite), Auckland Council's Cultural Heritage Inventory (CHI), District Plan schedules and the Heritage New Zealand (Heritage NZ) New Zealand Heritage List were searched for information on recorded archaeological or other heritage sites on or in the immediate vicinity of the proposed development.

Literature and archaeological reports relevant to the area were reviewed. Early plans held at Land Information New Zealand (LINZ) and aerial photographs were reviewed for information relating to past use of the development area.

A field survey was undertaken on 13th August 2015. 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 and limited subsurface testing with probe and spade was undertaken for evidence of earlier modification, and an understanding of the local stratigraphy. Photographs were taken to record the sites and features of interest on the property.

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INTRODUCTION, CONTINUED

Special Housing Area - McLarin Road, Glenbrook

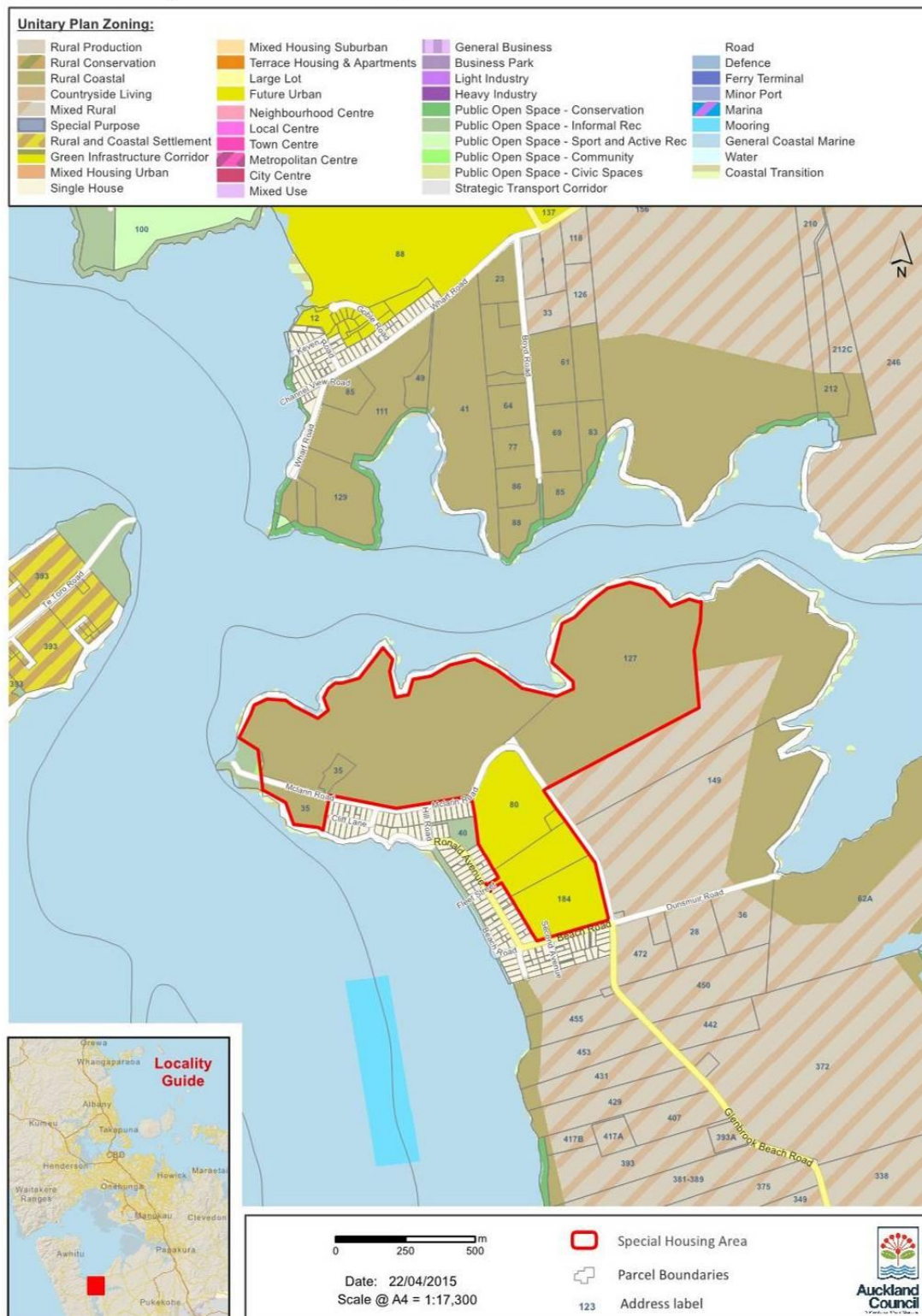


Figure 1. Map showing SHA

<http://www.aucklandcouncil.govt.nz/EN/ratesbuildingproperty/housingsupply/Documents/specialhousingareamap201507mclarinroadglenbrook.pdf>

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INTRODUCTION, CONTINUED



KAHAWAI POINT SCHEME DIAGRAM

Figure 2. Proposed concept plan (courtesy Rangatu)

PHYSICAL SETTING

Physical Environment

The properties are primarily in agricultural land. Most paddocks are currently heavily ploughed down to the subsoil. There is some landscaping around the current house.

Wetlands have been relatively recently planted up the main creek inlets with the coastal margin a combination of scrub with some fringe pine trees and occasional pohutakawa. The Taihiki River runs along the northern boundary and the Waiuku River along the western boundary with mudflats along the fringe.

Landcare (Figure 3) suggests that the historic vegetation around Kahawai Point was bush, dominated by beeches with pockets of scrub.

The geology (Figure 4) is described as alternating sandstone and mudstone with variable volcanic content and interbedded volcanoclastic grits.

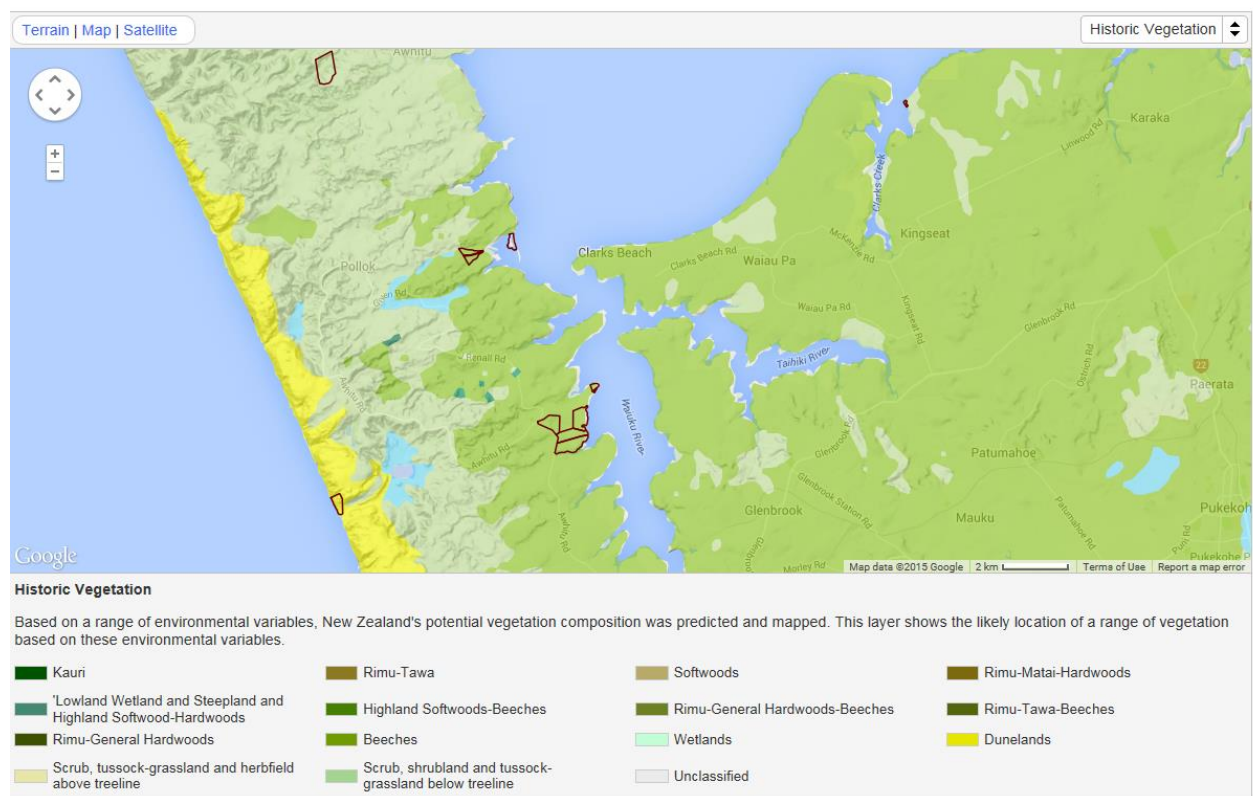


Figure 3. Historic Vegetation model (Landcare Website)

<http://whenuaviz.landcareresearch.co.nz/place/100250>

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Figure 4. Geology of the development area showing property covered with alternating sandstone and mudstone (NZ GNS WMS Service QMAP layer)

HISTORICAL BACKGROUND

Historical Plans and Aerial Photos

The Maori history of the area has been subject to extensive research as part of the Manukau Claim in front of the Waitangi Tribunal (e.g., 1989). Ngati Te Ata has prepared a Cultural Impact Assessment summarising the history of the area and their association with the properties. This CIA accompanies the application and can be referred to as required.

This section reviews historical plans and aerial imagery to see if there is any specific information regarding archaeological sites on the property.

Early plans show the location of major settlements around the project area. The earliest plans obtained show settlements opposite Kahawai Point at 'Te Toro' (e.g., Figure 5). No obvious sites are indicated on the subject area but Figure 5 does show the main subdivision of northern part of the Kahawai Block. Muir (1983:4) describes the sale of the Kahawai Block in 1853. Muir (1981 quoted by Tanner Site Record Form R12/106) describes a fishing village around Kawahai Pt. Waitete Pa is located to the north of the Taihiki River and is administered as a historic reserve by the Department of Conservation.

Subdivision plots from the 20th century show that by 1925 the area was under grass with a paper road designed to run around the river margin (Figure 6) – a somewhat impractical solution to access the area. Figure 6 shows what is now McLarin Rd and the Kahawai Pt Reserve.

Aerial photographs from the 1950s clearly illustrate the property (Figure 7 - Figure 9) changing very little for most the second half the 20th century. Pasture covers the majority of the block with pine trees planted across the riverine margins.

The current house is also visible in the 1950s but there are no specific indications of any archaeological remains on the subject properties.

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HISTORICAL BACKGROUND, CONTINUED

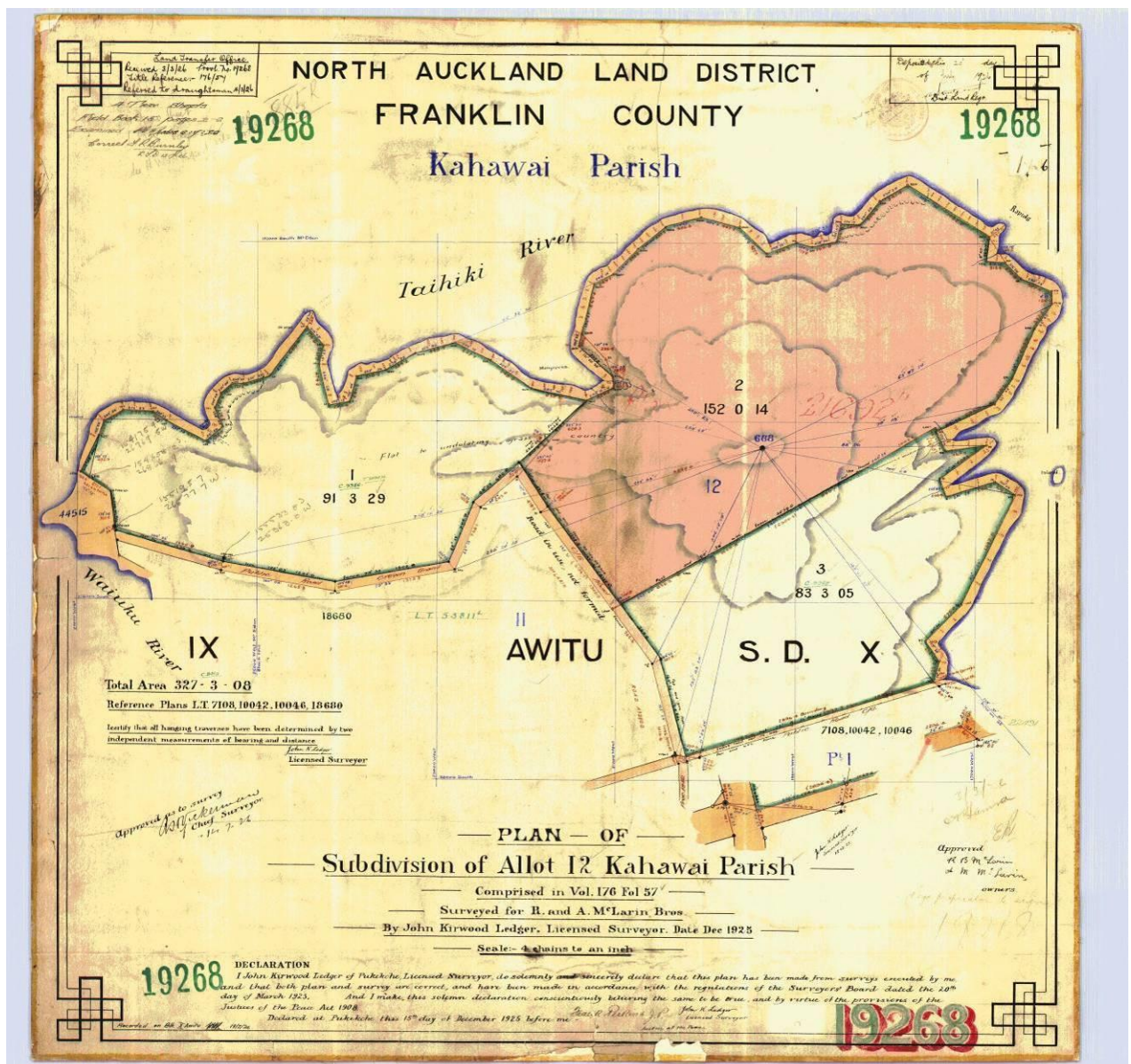


Figure 6. DP 19268 dated 1925

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Figure 7. Kahawai Pt in 1952 (Ref: WA-31822-F. Alexander Turnbull Library, Wellington, New Zealand. <http://natlib.govt.nz/records/23504742>)

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HISTORICAL BACKGROUND, CONTINUED

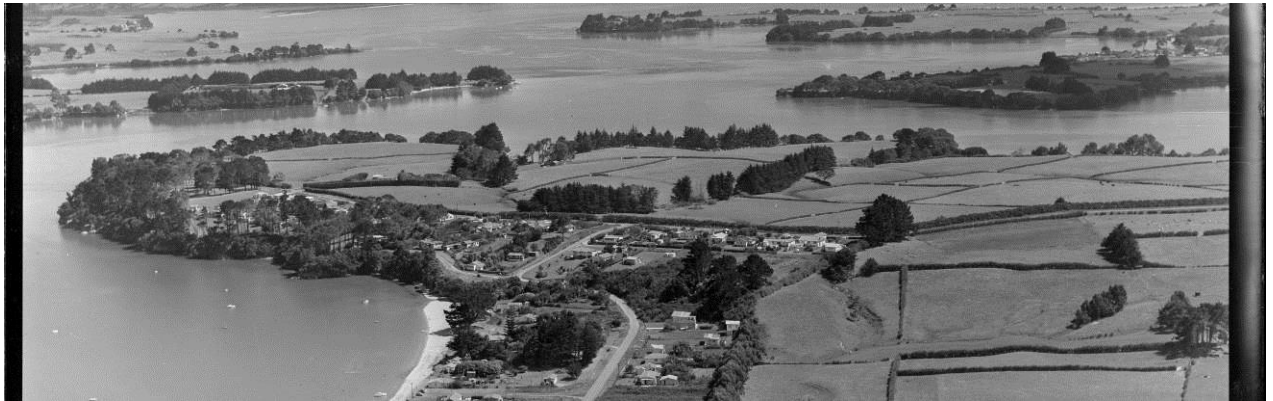


Figure 8. View looking north across Kahawai Pt from Glenbrook Beach in 1962 (Ref: WA-56941-G. Alexander Turnbull Library, Wellington, New Zealand. <http://natlib.govt.nz/records/23031167>)



Figure 9. View looking north across Kahawai Pt from Glenbrook Beach in 1986 (Ref: WA-78850-F. Alexander Turnbull Library, Wellington, New Zealand. <http://natlib.govt.nz/records/23114716>)

ARCHAEOLOGICAL BACKGROUND

Recorded Archaeological Sites

Previous archaeological research in the area has focussed on the nearby Glenbrook Steel Mill, south of the current project area. This included Lilburn and MacGrath (1980) survey for a pipeline from the Mill to the east and reviewed nearby archaeological sites and findspots in the area. Subsequent more intensive survey of the Mill property itself was undertaken by Best and Coates (1985). That survey found around 25 sites including up to five pa sites, a number of smaller settlement sites and the common midden sites. All clearly pointing to the long-term use of the area by Maori. Other surveys in the area were conducted during the 1980s but focused primarily on the Mill property and some of the larger pa sites that were known.

More recently, Foster (Russell Foster and Associates 1998) surveyed the proposed Glenbrook Sewerage scheme that was designed to cross through the Taihiki River from Glenbrook to Waiau including the current project area. Foster identified two sites on the property, R12/670 and R12/671 as well as a larger site R12/106 that had been previously identified. All were midden sites.

In 2006, the Auckland Regional Council undertook a coastal survey around the current project area and reconfirmed the location of the three previously known sites as well as a number of similar midden sites in variable condition along the coastal fringe (see Appendix NZAA Site Record Forms). The sites were located with a GPS and form the basis of the Mana Whenua Sites of Value layer used in the Proposed Auckland Unitary Plan shown in (Table 1, Figure 10).

Major excavations have been undertaken on sites in the region. Waitete Pa (R12/302) built in 1834-35 to the north was excavated in 1978 (Bulmer 1983) revealing the 19th century defensive structure and boat ramp. More recent monitoring and excavations have been undertaken on sites on the Awhitu Peninsula but not described further here.

Overall, the results of the archaeological work show that there has been a long history of settlement by Maori of the Kahawai Block and nearby surrounds. Sites in the area range from the common shell midden sites expected along the river edge with access to the Manukau Harbour by canoe. Small to large settlement sites including evidence of living areas and storage pits show that gardens were planted nearby and pa sites occupy strategic locations along the rivers.

No clear indication of significant 20th century heritage is associated with the properties within the project area although it would have been cleared and put into farming during the late 19th century.

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ARCHAEOLOGICAL BACKGROUND, CONTINUED

Table 1. List of previous archaeological sites identified on or near the project area

NZAA ID	NZTM Easting	NZTM Northing	Description
R12/106	1751461	5886334	MIDDEN/SETTLEMENT
R12/670	1751771	5886544	MIDDEN
R12/671	1751591	5886404	MIDDEN
R12/873	1751251	5886283	MIDDEN
R12/874	1751551	5886354	MIDDEN
R12/877	1751831	5886494	MIDDEN
R12/878	1751931	5886445	MIDDEN/HANGI
R12/879	1752091	5886515	MIDDEN
R12/880	1752141	5886485	MIDDEN
R12/881	1752371	5886515	MIDDEN
R12/882	1752910	5886706	MIDDEN



Figure 10. Location of archaeological sites and PAUP Mana Whenua Sites of Value (purple circles)

FIELD SURVEY RESULTS

Field Survey

Field survey was undertaken on the 13 August 2015 with the assistance of Bernard Chote, Rangatu, and representatives of Ngati Te Ata and Kahawai Point Development Ltd.

The conditions were good, with good ground visibility across the majority of the properties.

The area of the house at 35 McLarin Road has been landscaped significantly and no archaeological features identified around there.

It was clear that the paddocks have been heavily ploughed in recent years resulting in major ground disturbance across the majority of the land. This has meant that all the topsoil and most subsoil has been disturbed and clumps of the natural basal ground is visible in the ploughed fields (Figure 11). Near the river margins and where midden sites have been previously identified, crushed shell is present in the disturbed soil (Figure 12).

Planting along the river edge and in the wetlands has been undertaken in recent years and the vegetation around the river banks makes identification of the sites difficult in places (Figure 13). As noted earlier, old pine trees are planted in this margin (Figure 14) and present a challenger for the long term management of the area.

R12/873

R12/873 was originally recorded in 2004 as a midden in poor condition. R12/873 is located along the western margins of the development area above the River (Figure 15) and occurs in a few patches up to 60m apart (SRF in Appendix). Today, shell is clearly visible along the edge of the ploughed paddock and probing suggested more deposits with in the relatively unmodified bank nearby (Figure 16). Some of the material near the bank may be sufficiently intact. Pine trees are present here and have fallen across the landscape as they have aged, damaging the ground surface.

There are sufficient remains here to make this site suitable for small scale excavation, as natural erosion has continued along the bank, and ploughing and the walkway would all likely lead to the full destruction of this site. It is a good area for interpretative signage for the walkway, with the views across the river and heritage remnants.

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FIELD SURVEY RESULTS, *CONTINUED*

R12/106

R12/106 was originally recorded as a cockle midden in 1975 with additional material eroding out in a couple of patches along the edge of the bank above the water. Shell was visible eroding from the bank during the 2004 survey with cockle, scallop, rock oyster and pipi all noted (see SRF).

Today the fields behind show patches of crushed shell (Figure 17) but some intact deposits are likely along the grassed areas. GPS location from the SRF is mostly accurate with the shell distributed over around 25m along the bank but patchy. Earth has been pushed up against the top of bank to form a silt bund (Figure 18).

Shell is also visible along the banks of a silage pond.

R12/874 and R12/671

R12/874 was identified on the southern side of the Taihiki River on a slumped foreshore bank. Shell was visible then across around 7m over the bank with another patch recorded around 50m north. Pine and pohutakawa covered the area.

It was difficult to find the shell although the slumped bank was easily found but grass cover obscures the surface (Figure 19). Cockle to the northeast along the bank.

R12/671 was recorded by Foster in 1998 and relocated in 2004. It is recorded as large patches of midden along natural terrace on the bank above the river (Figure 20).

The sites are still visible although R12/874 and R12/671 form a zone of larger and smaller patches of midden along the bank in this area. Tidal erosion has impacted the site in this area significantly with a large area visible below in one area (Figure 21) and includes shell and hangi stones on the beach.

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FIELD SURVEY RESULTS, *CONTINUED*

R12/670 and R12/877

R12/670 was recorded on the small headland sticking out into the Taihiki River (Figure 22). Foster (1998) describes the site as covering the area around the point with shell visibly eroding down the bank. Foster also noted that the area to the west of the point had been cut down to the beach (Figure 23) and a wharf had probably been built there around 1894 and derelict by 1925. The 2004 update to the site record notes the shell eroding out of the bank.

Today the southern site has been heavily ploughed and shell is spread across a wide area (Figure 24). However, a patch on the point itself is overgrown but otherwise appears in good condition. This is an ideal spot for the Pohutakawa Park location with interpretative signage relating to the cultural heritage.

R12/877 is recorded as more midden south of the point where R12/670 was centred although probably is part of the same site (as the original R12/670 Site Record Form (Figure 22) notes the presence of midden from the area of R12/870 continuously down north to the point). Today ploughing has destroyed everything behind the sites with landscaping of the bank for sediment control. Some possible features remain but would be in poor condition (Figure 25).

A hypothetical 3D reconstruction of the area is shown in Figure 26

R12/878, R12/879 and R12/880

R12/878 was recorded as set of hangi stones eroding from the bank at the northeastern end of the project area above the River. Despite searching, this could not be located and may have eroded away. However, the vegetation is dense along the bank and it could have been obscured. R12/879 and R12/880 represent a similar situation to R12/670 and R12/877 with patches of shell midden and hangi stones eroding in slumping banks. The shell was not easily found as earth bunds have been created for farming (Figure 27) and obscure much of the area along with the vegetation along the bank. It is likely that these sites are in poor condition (particularly R12/880) but it is difficult to fully determine their extent at present.

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Figure 11. Deep ploughing of the paddocks



Figure 12. Crushed shell in ploughed soils

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FIELD SURVEY RESULTS, CONTINUED



Figure 13. Dense vegetation coverage around river edge

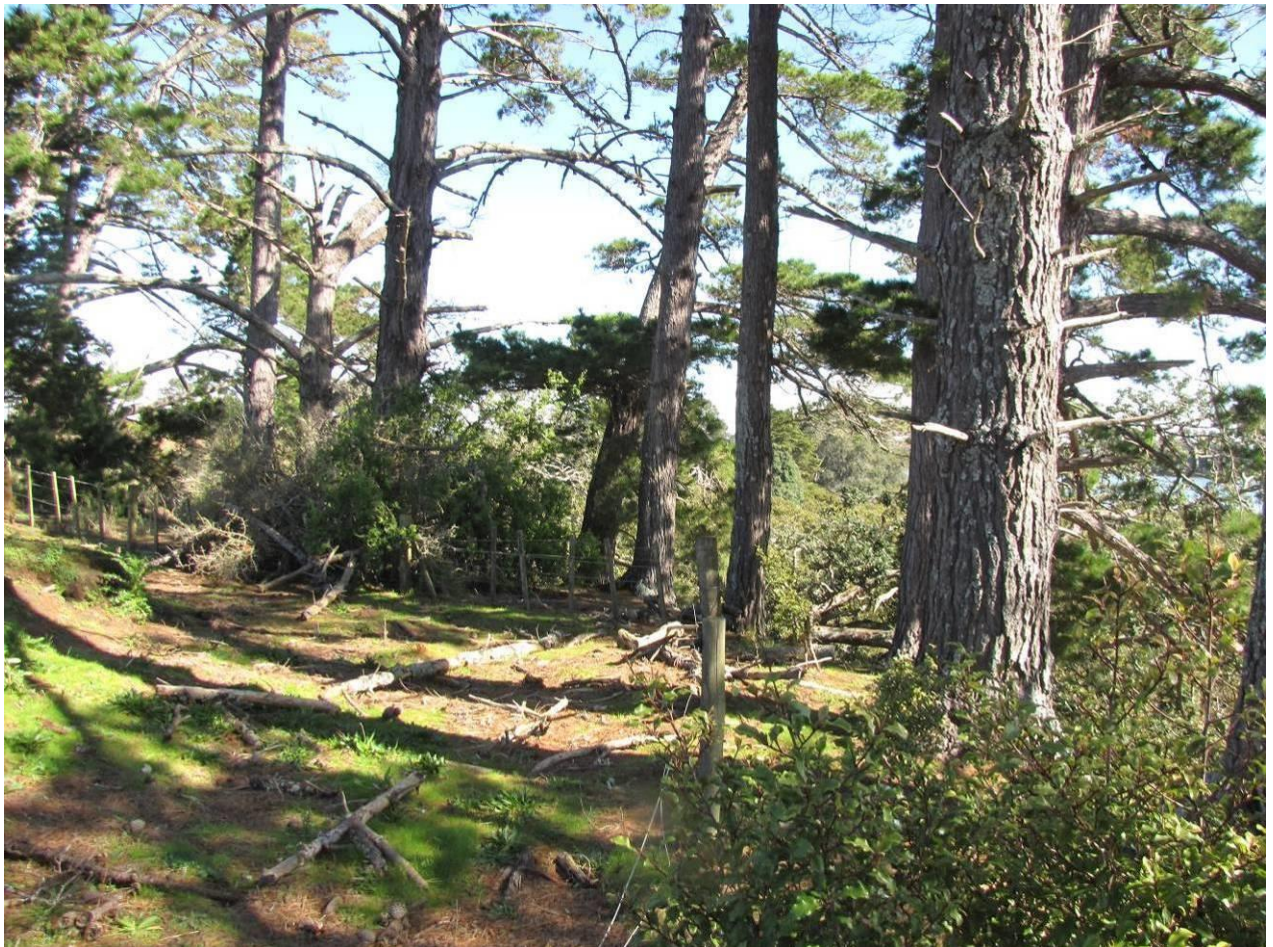


Figure 14. Pines planted along river bank zone

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FIELD SURVEY RESULTS, *CONTINUED*



Figure 15. Looking west along to area of R12/873 around the trees



Figure 16. View of mostly crushed shell related to R12/873 in ploughed area with more intact material in the grass

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FIELD SURVEY RESULTS, *CONTINUED*



Figure 17. Area of crushed shell looking over location of R12/106



Figure 18. Looking west around area of R12/106 at earth bund

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FIELD SURVEY RESULTS, CONTINUED



Figure 19. Area of R12/874



Figure 20. Area of R12/671

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FIELD SURVEY RESULTS, *CONTINUED*



Figure 21. Slumped midden in area of R12/874-R12/671

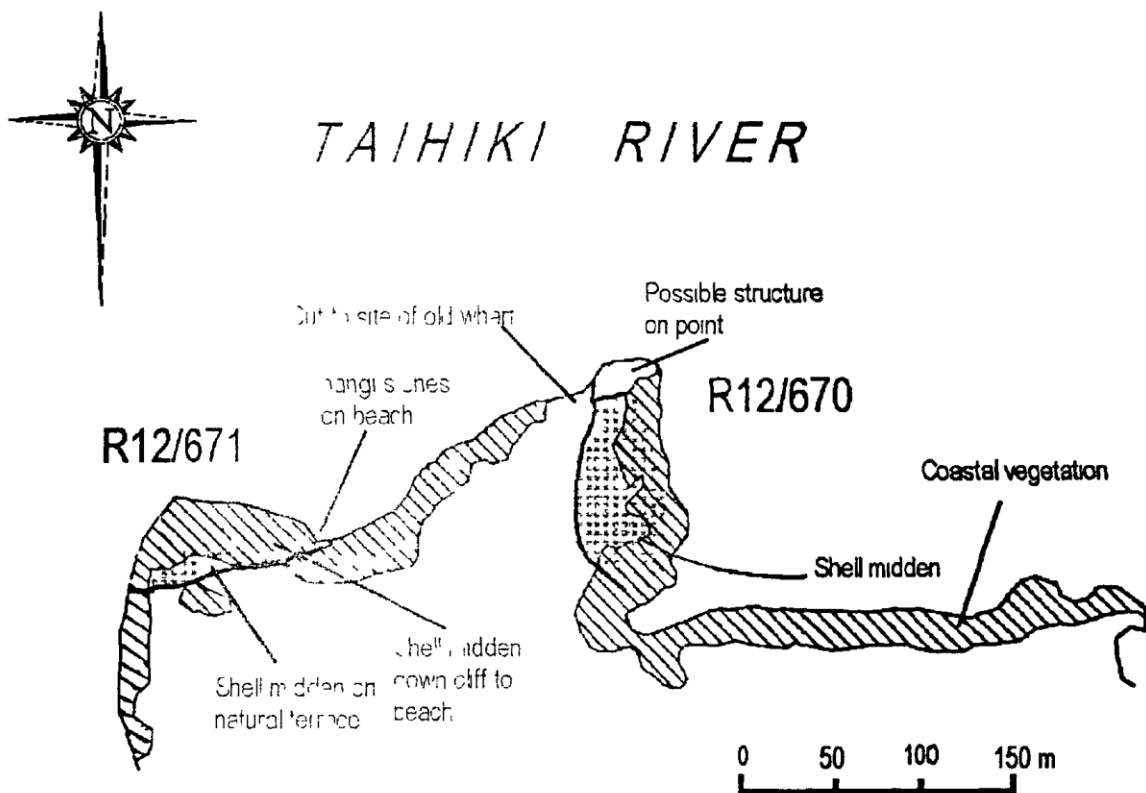


Figure 22. Plan showing the location of sites R12/670 and R12/671 (Foster 1998 SRF)

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FIELD SURVEY RESULTS, *CONTINUED*



Figure 23. R12/670 looking down across cut for old wharf



Figure 24. Looking east across ploughed field with shell debris clearly visible. Area of intact parts of R12/670 and R12/877 shown

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FIELD SURVEY RESULTS, *CONTINUED*



Figure 25. Shell in R12/670 suggesting grassed area may contain intact elements



Figure 26. Hypothetical 3D reconstruction of sites R12/670 (foreground) and R12/877 (below tree)
(Simon Bickler and Thomas Macdiarmid)

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FIELD SURVEY RESULTS, CONTINUED



Figure 27. Modern earth bunds across area behind sites R12/879-880

DISCUSSION AND CONCLUSIONS

Summary

A number of midden sites are located on the border of the current project area. For the most part the housing development will have no to minor effects on those sites as they are located primarily along the river bank. Archaeological features within the main development itself will have been heavily damaged by farming activities.

Old pine trees and vegetation cover the river bank and obscure a number of likely areas where other features would be found. Removal of the pines would be beneficial to the archaeological features here as the trees are likely to fall down the banks if left, damaging any archaeological features nearby and adding to the erosion of the bank.

A proposed walkway along the river bank will run across and over a number of archaeological sites. Appropriate avoidance and mitigation will be required for that walkway and is discussed below.

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.

A Cultural Impact Assessment (CIA) is being prepared by Ngati Te Ata to accompany applications.

The significance of the area to mana whenua is evident from previous CIAs relating to the area, recorded traditional histories, and the many Maori place names associated with the area.

Survey Limitations

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

As noted, vegetation has obscured some areas and deep ploughing the fields may have destroyed features leaving only remnants bases of features in some areas (if extant).

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DISCUSSION AND CONCLUSIONS, *CONTINUED*

Archaeological Value and Significance

The Proposed Auckland Unitary Plan and Auckland Regional Policy Statement (RPS) identify a number of criteria for evaluating the significance of historic heritage places. In addition Heritage NZ has provided guidelines setting out criteria that are specific to archaeological sites (condition, rarity, contextual value, information potential, amenity value and cultural associations) (Heritage NZ 2006: 8-9). Both sets of criteria have been used to evaluate the value and significance of the archaeological sites on (see Table 2 and Table 3).

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 through the use of 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.

Overall, sites are considered to have limited archaeological values although R12/670 probably has a better range of features and would have moderate archaeological value based on the criteria discussed.

The Heritage Landscape

The heritage landscape is defined by the midden sites representing shifting settlement around Kahawai Point over the last few hundred years.

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DISCUSSION AND CONCLUSIONS, CONTINUED

Table 2. Evaluation of the cultural heritage significance of sites within the project area, using criteria derived from the PAUP (Chapter B: 4.1)

Criterion	Comment	Significance evaluation
a) Historical: The place reflects important or representative aspects of national, regional or local history, or is associated with an important event, person, group of people or idea or early period of settlement within New Zealand, the region or locality	The middens are broadly representative of Maori settlement in the region, but are of limited extent on the property. The remains of the middens have no known associations with specific events, persons or ideas.	Moderate, local
b) Social: The place has a strong or special association with, or is held in high esteem by, a particular community or cultural group for its symbolic, spiritual, commemorative, traditional or other cultural value	There is no general public awareness of any remains relating to Maori settlement in the development area	Little, local
c) Mana Whenua: The place has a strong or special association with, or is held in high esteem by, Mana Whenua for its symbolic, spiritual, commemorative, traditional or other cultural value	To be determined by mana whenua	
d) Knowledge: The place has potential to provide knowledge through scientific or scholarly study or to contribute to an understanding of the cultural or natural history of New Zealand, the region, or locality	The middens and burial caves have some potential to contribute to knowledge of Maori settlement in the area	Some, local
e) Technology: The place demonstrates technical accomplishment, innovation or achievement in its structure, construction, components or use of materials	The middens do not demonstrate any technical accomplishment	Little, local
f) Physical attributes: The place is a notable or representative example of a type, design or style, method of construction, craftsmanship or use of materials or the work of a notable architect, designer, engineer or builder;	Most of the midden are not notable or good representative examples of their type given their high level of damage. R12/670 may have some good characteristics with intact features on the point	Little, local
g) Aesthetic: The place is notable or distinctive for its aesthetic, visual, or landmark qualities	The midden features are not visually distinctive	Little, local
h) Context: The place contributes to or is associated with a wider historical or cultural context, streetscape, townscape, landscape or setting	The middens are part of the general Maori archaeological and heritage landscape.	Low, local

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DISCUSSION AND CONCLUSIONS, *CONTINUED*

Table 3. The archaeological values of sites within the project area based on Heritage NZ (2006: 9-10) criteria

Value	R12/887	R12/670	Other sites
Condition	Fair condition	Fair to good in parts	Fair to very poor
Rarity	Midden is the most common site type in the region, but mostly concentrated nearer the coast	Midden is the most common site type in the region, but mostly concentrated nearer the coast	Midden is the most common site type in the region, but mostly concentrated nearer the coast
Contextual value	The site has some contextual value as part of a significant wider archaeological/heritage landscape	This site is in a good location and may have subsurface features preserved in the unploughed areas. Some moderate contextual values	Part of general settlement along the rivers here.
Information potential	The site has low potential to contribute to knowledge of Maori settlement in the area. There may be some associated subsurface settlement features such as postholes and hangi	The site has moderate potential to contribute to knowledge of Maori settlement in the area compared to other nearby sites, and there may be some associated subsurface settlement features such as postholes and hangi.	The sites generally have low potential to contribute to knowledge of Maori settlement in the area compared to other nearby sites as they have been heavily modified or eroded. There may be some associated subsurface settlement features such as postholes and hangi
Amenity value	The midden has some amenity value, being on the area of the walkway and sufficient information to provide interpretative data of interest	The site has good potential to contribute to knowledge of Maori settlement in the area compared to other nearby sites. It is located within the proposed park and the potential to provide interpretation and amenities relating to the cultural heritage here is good.	Limited given the fragile nature of the river margin. However as part of the coastal walkway some features could be identified or information regarding features excavated and the information obtained would enhance the proposed walkway.
Cultural associations	The sites have Maori cultural associations, the significance of which is for mana whenua to determine		
Other	N/A	N/A	N/A

DISCUSSION AND CONCLUSIONS, *CONTINUED*

Assessment of effects

The assessment of effects is separated into various aspects related to the proposed development to assist in the process of meeting the statutory obligations and providing suitable mitigation. These aspects are:

1. Overall development;
2. Pine tree removal;
3. Walkway development;
4. Stage 1 earthworks.

The concept plan is shown in Figure 2 with earthworks required for areas where housing is to be developed. The coastal walkway plan is shown in Figure 28 and the specific requirements for the Stage 1 development shown in Figure 29.

Specific details of the earthworks are not yet available but as noted the archaeological sites are largely along the river margin and bulk earthworks in the majority of the development area are unlikely to have any major effects regardless of specific designs. This includes any requirements for most of the proposed infrastructure.

Effects of development

Overall, the effects of the housing development on archaeological sites and heritage values are considered minor. The bulk of the proposed housing development will occur away from the location of known archaeological sites.

The proposed mitigation for the project for archaeological effects are:

- Site R12/670 is within the proposed Pohutakawa Park. Landscape and planting in the park should avoid the non-ploughed areas of the park and vegetation management (i.e. grass) be used to keep this area intact. Other enhancements including interpretative signage, carving/pou or other artwork related to the Maori heritage of the site would increase the heritage value of the site.
- Some monitoring of preliminary earthworks in the vicinity of known sites to determine if any subsurface features remain. These should be investigated by a qualified archaeologist under an Authority from Heritage NZ as appropriate.

Heritage NZ Authorities may be undertaken in separate areas depending on the proposed programme of works (see below).

There are no known effects on 20th century heritage.

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DISCUSSION AND CONCLUSIONS, *CONTINUED*

Effects of Pine Tree Removal

The removal of pine trees across the river margin might result in some damage to archaeological sites but any effects would be considered positive as the pine trees are old and likely to cause major damage if not felled.

Proposed Mitigation:

Monitoring of pine tree removal to avoid felling on any archaeological features is desirable. Heavy machinery should be kept away from any extant features.

River Walkway Effects

The river/coastal walkway (Figure 28) has the most potential to affect the archaeological sites. The walkway will involve excavation to achieve a flat surface and may be 200mm-300mm deep in parts. Archaeological features here would therefore be damaged or destroyed and there is the potential for other similar features (i.e. midden, firescoops etc) related to those sites to be uncovered. However, the walkway is a very positive amenity for the local population and there is significant scope to link the heritage values of the river margin within the design of the walkway.

Proposed mitigation:

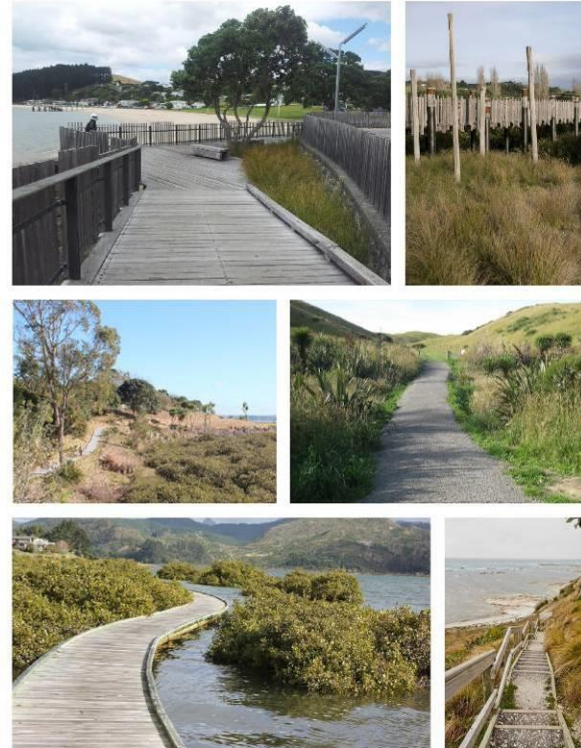
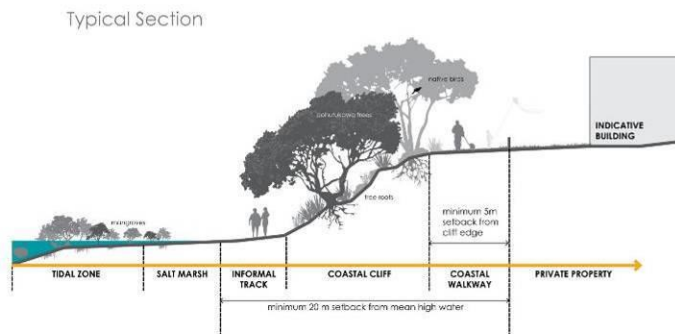
- In practice, specific design requirements can mitigate most of the negative impact of proposed works;
 - Survey of the walkway when available will allow some latitude to avoid extant features;
 - Parts of the walkway design to incorporate elements relating to the shell midden;
 - Interpretive signage and artwork reflecting the heritage values of the area.
 - Archaeological investigation of any disturbed features. The results will be incorporated in the public works.
-

Stage 1 earthworks

As noted, the earthworks for the Stage 1 earthworks (Figure 29) are unlikely to have any significant archaeological effects. There is a limited potential for some intact features near the river margin. Monitoring of preliminary works under a Heritage NZ Authority is recommended with small excavations of archaeological features encountered.

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DISCUSSION AND CONCLUSIONS, CONTINUED



COASTAL PATHWAY



Figure 28. Proposed coastal pathway

Continued on next page

TAIHIKI RIVER

POINT

McLarin Road

POSSIBLE SUBDIVISION RELATING TO
1 & 2 DP351480, 1 DP21692, & 1 DP18680
(McLarin Road, Glenbrook)
Scheme Plan

CKL
Planning | Surveying | Engineering

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Issue	Description	Checked	Date
1	Designed	MSA	13.08.15
2	Drawn	MSA	13.08.15
3	Checked	MH	13.08.15

Job No: T3002
Revision: C4
Page No: 1 of 1

Scale: 1:2500
(A3 Original)

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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.

This assessment has established that there are a number of historic heritage sites protected in the District Plan and PAUP that are in close proximity to or extend into the project area.

There are 11 Sites and Places of Value to Mana Whenua which are Archaeology of Maori Origin as noted earlier (Table 1). Under the PAUP this will trigger the need for a Cultural Impact Assessment to accompany the resource consent² and there are specific requirements in relation to archaeological investigation.³

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² “Earthworks on or within 50m of a site or place of value to Mana Whenua” is a Restricted Discretionary Activity (PAUP 2013: Chapter J/ 5.2/1). “A cultural impact assessment will be required for all applications requiring a resource consent under...the Sites and Places of Value to Mana Whenua overlay” (PAUP 2013: Chapter G/ 2.7.4).

³ Permitted activities development control 2.2 “Archaeological investigations that do not involve ground disturbance must: a. use non-intrusive geophysical surveying techniques; b. be undertaken under the supervision of a mandated Mana Whenua representative” (PAUP 2013: Chapter J/ 5.2/2.2).

DISCUSSION AND CONCLUSIONS, *CONTINUED*

Resource Management Act 1991 Requirements, continued

The proposed Park will have R12/670 at its heart and provide long term management of this site. The proposed development may also affect unidentified subsurface archaeological remains that may be exposed during development particularly close to the river margin.

A range of measures are proposed/recommended to manage and mitigate the effects of development on heritage values.

It is considered that the proposed development will result in minor adverse effects on archaeological sites and the heritage landscape.

Special Housing Areas

As set out on the Auckland Council website:⁴

“Special Housing Areas (SHAs) are being identified across the city where fast-track development of affordable housing can take place. The SHAs are being located in selected urban and rural areas earmarked for urban development. The areas of land chosen will be within the Rural Urban Boundary. The Rural Urban Boundary defines the extent of urban development in Auckland over the next 30 years.

All developments are being carried out under the Auckland Housing Accord. The council developed the accord with the government, to plug Auckland’s housing shortage. Proposals will be designed in accordance with the provisions with the Proposed Auckland Unitary Plan (PAUP) and in collaboration with the Housing Project Office.”

To qualify as an SHA, areas will need to meet a specific set of criteria and will be assessed by the HPO for suitability (ibid.). The criteria include whether the proposal is:

- Consistent with Auckland Plan principles and intent for quality development; and
- Compatible with Unitary Plan provisions (e.g. heritage and special character; Treaty Settlement Land).

The Kahawai Pt SHA is designed to deliver the Government’s vision for new homes in Auckland to meet the growing demand for housing, while also conserving historic heritage as set out in the Auckland Plan (2012: Strategic Direction 4) and Proposed Auckland Unitary Plan (notified 2013).

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⁴ <http://www.aucklandcouncil.govt.nz/EN/ratesbuildingproperty/housingsupply/Pages/specialhousingareas.aspx>, Auckland Council, accessed 08/02/2015.

DISCUSSION AND CONCLUSIONS, *CONTINUED*

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).”

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.

The proposed development will affect remains of pre-1900 date and an Authority must therefore be obtained from Heritage NZ before any work can be carried out that may affect them.

The remains consist of a number of midden sites (Table 1) along the river margin. There is also potential for additional unrecorded subsurface archaeological remains to be exposed during earthworks.

The conditions of any authority issued by Heritage NZ are likely to include archaeological monitoring of works and the investigation and recording of any archaeological remains affected.

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CONCLUSION AND RECOMMENDATIONS

Conclusions

The Kahawai Point SHA will provide a significant boost to available housing in this part of Glenbrook. Ten archaeological sites have been identified on or close to the development properties and are all located along the coastal/riverine margin. The sites all consist of midden or oven stones related to Maori settlement of the area in pre-colonial times. They are in variable condition but mostly poor due to natural erosion, intrusive vegetation such as large pine trees and intensive ploughing of the fields behind the sites. Most sites will continue to deteriorate here.

The development includes:

- 1) Removal of old pine trees and scrub along the coastal margin
- 2) Major earthworks for all the properties over a 10-15 year period, both for housing and necessary infrastructure;
- 3) A recreational walkway tying together the coastal margin and reinstated wetland areas around the development.

The first stage of housing is due to start in early 2016.

The majority of the development will have no impact on archaeological features as these are almost completely located within the coastal margin (and outside the property boundaries). These paddocks have been deeply ploughed and very few features associated with the archaeology on the river bank are likely to have survived.

Removal of the old pine trees includes areas of archaeological sites, but the removal of these trees is desirable as they are prone to collapse now and the roots do significant damage to the archaeological features when they fall. As long as heavy machinery is kept off the archaeological features themselves, removal of the pine trees is a positive heritage outcome.

The walkway is also likely to impact the archaeological sites in the margins. However, specific design in those areas will allow for avoidance of major intact features, or engineering to lower impacts of the sites. Mitigation including limited excavation of intact features likely to be damage, interpretative signage and vegetation management are positive outcomes for the heritage values of the project.

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CONCLUSION AND RECOMMENDATIONS, CONTINUED

Recommendations

- That the detailed development plans take account of the locations of the recorded archaeological sites, and ensure that they are avoided and any recorded sites along the coastal margin in the vicinity of proposed earthworks are temporarily marked out or fenced off prior to the start of earthworks to protect them from accidental damage from heavy machinery.
 - That if any of the recorded sites cannot be avoided [Table 1], 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)*. The proposed works are likely to impact these sites to varying degrees although the design of the walkway and tree removal has been proposed to minimise effects and provide positive heritage outcomes.
 - That because it is likely that additional unrecorded sites may be exposed during earthworks, the Authority application should include any additional sites that may be discovered when works are under way.
 - Mitigation for the walkway including site interpretation and investigation of features affected by the proposal is undertaken.
 - That earthworks in the vicinity of the recorded sites related to the housing project 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.
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BIBLIOGRAPHY

- Auckland Council. 2013. Proposed Auckland Unitary Plan.
- Best, S. and J. Coates. 1985. Archaeological Sites on The Land Of New Zealand Steel Ltd., Glenbrook. Unpublished report for Historic Places Trust.
- Bulmer, S. 1983. Waitete Pa. An Early Nineteenth Century Fishing Fortification. In Bulmer, S., G. Law and D. Sutton, A Lot of Spadework to be Done. *NZ Archaeological Association Monograph* 14.
- Heritage NZ. 2006. Writing Archaeological Assessments. Archaeological Guidelines Series No. 2. New Zealand Historic Places Trust Pouhere Taonga (now Heritage NZ).
- Lilburn, K. and E. MacGrath. 1980. Glenbrook Lateral Pipeline Archaeological Survey. Unpublished report.
- Muir, B. 1983. *Waiuku and District - The Romantic Years*. W. J. Deed Printing Ltd, Waiuku.
- Russell Foster and Associates. 1998. Glenbrook Sewerage Scheme - Glenbrook Beach to Waiau Beach: archaeological assessment. Unpublished report.
- Waitangi Tribunal. 1989. Report of the Waitangi Tribunal on the Manukau claim (Wai 8). 2nd ed. Wellington, N.Z.: The Tribunal, 1989. 1 v. (Waitangi Tribunal reports, 0113-4124) July 1985.
-

Databases:

- Auckland Council Cultural Heritage Inventory, accessed at <http://maps.aucklandcouncil.govt.nz> and <https://chi.org.nz>.
- New Zealand Archaeological Association ArchSite Database, accessed at <http://www.archsite.org.nz>.
- New Zealand Historic Places Trust Register, accessed at <http://www.historic.org.nz>.

Auckland Council Plans (accessed at www.aucklandcouncil.govt.nz):

- Auckland Plan, 2012.
- Draft Auckland Council Unitary Plan, 2013.
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APPENDIX: NZAA SITE RECORD FORMS