Former Tokanui Psychiatric Hospital, demolition and remediation project: archaeological assessment

report to
Toitū Te Whenua Land Information New Zealand
and
Underground Overground Archaeology

Leela-Moses and Danielle Trilford



Former Tokanui Psychiatric Hospital, demolition and remediation project: archaeological assessment

report to
Toitū Te Whenua Land Information New Zealand
and
Underground Overground Archaeology

Prepared by:

Leela Moses

Reviewed by:

Matthew Campbell

Date:

22 July 2024

Reference:

22-1372

© CFG Heritage Ltd 2024



Former Tokanui Psychiatric Hospital, demolition and remediation project: archaeological assessment

1 Introduction

Toitū Te Whenua Land Information New Zealand (LINZ) plan to undertake asset removal and contaminated soil remediation work at the site of the former Tokanui Psychiatric Hospital at 149 Te Matawhai Rd, Tokanui (Section 1 SO 44852; Section 1 SO 59771), which is currently designated as a Deferred Selection Property in the Maniapoto Deed of Settlement. The Deed of Settlement requires the Crown demolish the hospital buildings that have fallen into disrepair since the 1998 closure of the hospital and to undertake soil remediation. No archaeological sites are currently recorded within the boundaries of the hospital grounds. However, it is located near the southern banks of the Puniu River, which was central to the pre-European Māori settlement of the area, adjacent to major battles during the Waikato War, and would become the boundary of Te Rohe Pōtae, all of which suggests previously unrecorded archaeological material may be present. An archaeological assessment of effects is required to support possible applications for an archaeological authority to Heritage New Zealand Pouhere Taonga (HNZPT). Hayden Cawte of Underground Overground Archaeology commissioned this report on behalf of LINZ from CFG Heritage Ltd.

1.1 Statutory requirements

All archaeological sites, whether recorded or not, are protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 and may not be destroyed, damaged or modified without an authority issued by Heritage New Zealand Pouhere Taonga (HNZPT).

An archaeological site is defined in the Heritage New Zealand Pouhere Taonga Act as:

- (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).

The Resource Management Act 1991 (RMA) requires City, District and Regional Councils to manage the use, development, and protection of natural and physical resources in a way that provides for the wellbeing of today's communities while safeguarding the options of future generations. The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (Section 6f).

Historic heritage is defined as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities.

Historic heritage includes:

- historic sites, structures, places, and areas
- archaeological sites;
- sites of significance to Māori, including wāhi tapu;
- surroundings associated with the natural and physical resources (RMA Section 2).

These categories are not mutually exclusive and some archaeological sites may include above ground structures or may also be places that are of significance to Māori.

Where resource consent is required for any activity the assessment of effects is required to address cultural and historic heritage matters.

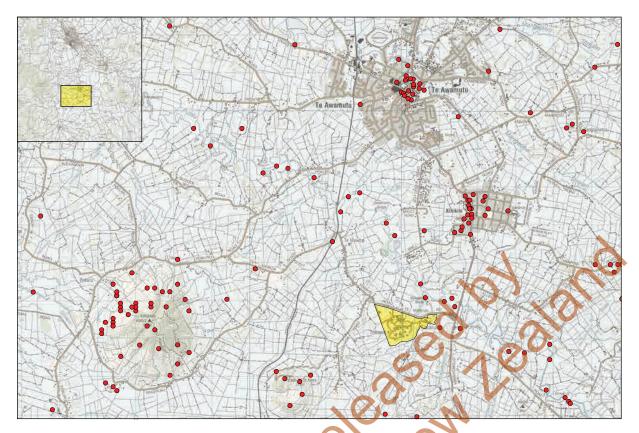


Figure 1. Location of the former Tokanui Hospital and archaeological sites recorded in the vicinity.

2 Methodology

The following digital resources were also consulted:

- Archaeological site records were accessed from the New Zealand Archaeological Association (NZAA) Site Recording Scheme (SRS) through ArchSite (http://archsite.org.nz).
- The Heritage New Zealand Pouhere Taonga (HNZPT) digital library was searched for relevant reports on previous archaeological investigations (https://dl.heritage.org.nz/greenstone3/library/collection/pdf-reports/).
- Modern aerial images and land parcel information were accessed from Land Information New Zealand (LINZ) data service (https://data.linz.govt.nz/data).
- Historic aerial imagery was accessed from Retrolens (https://retrolens.nz/)
- Historic maps and plans held by LINZ were accessed using QuickMap.
- Digital NZ was searched for records of old maps and plans.
- The National Library/Alexander Turnbull Library was searched for historic photographs of the site (https://natlib.govt.nz/)
- Soil types were determined using the New Zealand Land Resource Inventory (NZLRI) soils portal (https://lris.scinfo.org.nz/layer/48066-nzlri-soil/).
- SmartMaps was used to access Manaaki Whenua Landcare Research soil data (https://smap.landcareresearch.co.nz/maps-and-tools/app/).
- Manaaki Whenua was also searched for historic and pre-human environmental information (https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Wetlands/wetlands_historic)
- Several texts were accessed at the Auckland City Library.

A site visit was undertaken by Danielle Trilford and Leela Moses on 7 September 2022, using hand augering to analyse subsoil conditions. A two-day cultural induction at Mangatoatoa Marae was attended by Danielle Trilford and Leela Moses on 8–9 February 2023. The results of this hui and other investigation into potential washi tapu sites within the hospital grounds have been presented

in a Waahi Tapu Investigation and Cultural Induction Summary (2023), but korero from this hui have formed part of this assessment and are discussed in the mana whenua section below.

3 Background

Much of the background for this report was drawn directly from Garbutt (2022) and Campbell (2014).

The former Tokanui Hospital complex is located on what is mostly flat rural farmland on the floodplain of the Pūniu River, to the south of Te Awamutu and Kihikihi. The majority of the site rests on volcanic soils with moderate drainage, with some patches of yellow-brown loams (Soil Bureau Bulletin 1954: 128-168; https://smap.landcareresearch.co.nz/maps-and-tools/app/). Prior to human arrival the area directly around the Pūniu River was forested with kahikatea-pukatea-tawa forest with much of the surrounding area in wetland (https://lris.scinfo.org.nz/layer/48289-potential-veg-etation-of-new-zealand/data/; https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Wetlands/wetlands historic).

According to historical accounts, the vegetation of the flat land immediately surrounding the Pūniu River in the vicinity of the project area appears to have consisted of native shrubs, flax and pockets of swampland in the 19th century, which was drained after the land confiscations of the New Zealand Wars (*Waikato Times*, 15 January 1878: 3). The hospital site is at the junction of three waterways, noted in historic plans ML 945 drawn in 1865, and ML 6748 drawn in 1889, as Mokoroa, Tarutahi Swamp, Tarutahi Creek, and Wharekōrino Swamp (

Figure 2; Figure 3) (Te Muraahi & Maniapoto 2021).

Following the establishment of the Tokanui Mental Hospital in 1912, hospital structures as well as domestic dwellings and gardens were successively constructed on the properties encompassed by this assessment. Much of the surrounding land today consists of smaller scale farming blocks and pockets of smaller rural houses and settlements.

3.1 Pre-European Māori

The greater Waikato and Waipā district was occupied as early as the 14th century by peoples of *Tainui* waka, who gradually displaced the first inhabitants of the land residing along the banks of the Pūniu River, either through war or assimilation (Taitoko 1998). According to reports the original inhabitants were either Ngāti Kahupungapunga (Waipā District Council 2014) or Te Waiohua (Maniapoto-Anderson 2012). All tangata whenua of the Waipā district today can trace their ancestry to Tāwhao, a direct descendant of Hoturoa, the captain of the *Tainui* (Waipā District Council 2014).

Pre-1900 settlements around Tokanui were concentrated along waterways, including the Pūniu River which runs north of the site. The Waipā district, particularly around the Pūniu and Waipā Rivers, was densely populated and utilised by Māori, with settlements, urupā and mahinga kai distributed throughout the region as observed at the time of European settlement (Waipā District Council 2014). In addition to the Pūniu River and surrounding land representing a focus for the gathering of resources such as flax, eels and other freshwater species by local Māori, several temporary and more permanent settlements were established in the Waipā district (Te Onewa Consultants 2017). These included larger pā along the Pūniu River, such as Rewatu, Kaiure, Piraunui and Te Horanga, and on hill-tops further away from the river. The large hill running along the western extent of the hospital site was known as Mokoroa, and has been referenced as the site of an extensive settlement or pā (pers. comms. Toataua, N. 2023). The large areas of former swampland were utilised and traversed by Māori, with kōrero of the surrounding plants and shrubs being utilised in rongoa (Te Muraahi & Maniapoto 2021). Te Awamutu, the name of which refers to the end of canoe navigation on the Manga-o-hoi stream, the point from which Māori who wanted to travel further inland had to proceed on foot, was an early settlement in the area, as was nearby Kihikihi (Barber 1984: 20; Simmons 2006).

3.2 19th Century Māori

Early accounts and traditional histories indicate that the late 18th to early 19th centuries were a period of major change for Māori in the Waipā, characterised by inter-tribal conflict and major population movements. The Pūniu River has often functioned as a border, including between Ngāti Toa and Ngāti Raukawa during periods of conflict (Phillips 1995: 137). Phillips (1989: 90) recounts the tale of a battle between Ngāti Whakatere and Ngāti Maniapoto at a pā 'within revolver shot' of the current Tokanui village, in about 1800.

The rise of musket warfare between 1810 to 1865 led to an increase in inter- and intra-tribal warfare among the various iwi and hapū of the region during the so-called Musket Wars. The Kingitanga movement was formed in response to pressure for land sales, with the first Māori King, Pōtatau Te Wherowhero, elected in 1857 (Bass 1993: 32–33). The movement was seen as an attack on British sovereignty, impeding the Crown's acquisition of land. King Pōtatau died in 1860 and was succeeded by his son Matutaera Tāwhiao. Following increased tensions between Māori and Europeans in Auckland and Waikato districts, Governor Grey issued an 1863 ultimatum to Waikato Tribes around Auckland: drop their arms and swear allegiance to the Queen or retreat beyond Mangatāwhiri and lose their lands. Before the ultimatum reached Māori, Crown troops crossed the Mangatāwhiri into the Waikato, beginning the Waikato War.

Following the war, an aukati (border) was established along the Pūniu River, with garrisoned redoubts on the northern side and Kingitanga settlements on the south (Marr 1996: 7). The aukati effectively closed the King Country to Europeans.

Plans of the Pokuru Block in the second half of the 19th century show significant change around that time. ML 946 (drawn in 1865) has very little detail apart from the waterways and a few sites along their banks. This includes 'Te Awakeri Eel Pah' at the confluence of the Tarutahiu Swamp, Wharekino Creek and Tarutahi Creek (Figure 2). Although the plan could not be aligned precisely with modern maps, these three waterways currently merge around the eastern edge of the Tokanui Hospital site.

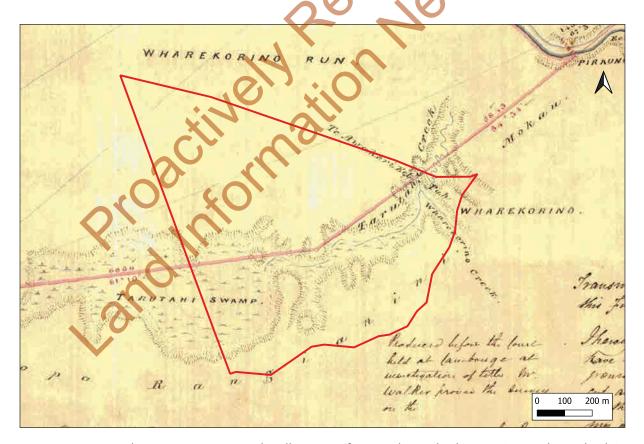


Figure 2. ML 946 drawn in 1865 prior to the allocation of Hospital parcels, showing 'Te Awakeri eel Pah.'

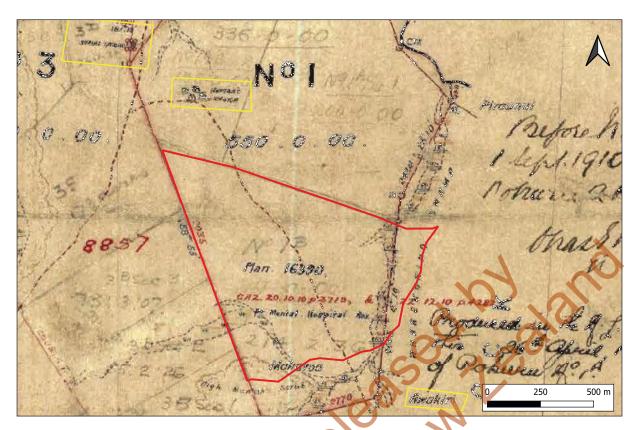


Figure 3. Detail of plan of the Pokuru Block (ML 6784, drawn in 1897), showing 'Mental Hospital reserve', Mokoroa, Awakiri, as well as a burial ground and kāinga to the northeast of the hospital site.

Previously recorded sites Piraunui (S15/248) and Turimaru pā (S15/242) (currently named Kaiure in the SRS) are also present along the banks of the Pūniu (Figure 2). A slightly later plan, ML 6748 (drawn in 1897), shows the same waterways, but labels the area 'Mokoroa', with 'Awakiri' appearing to the east of the waterways, outside the defined scope of the plan (Figure 3). That plan also shows a transport route, presumably either a walking or horse track through the project area, as well as a burial ground and kāinga to the northeast of the hospital site.

In 1880 the railhead of the North Island Main Trunk line had reached Te Awamutu and a link through the King Country was seen as essential to opening the country for European settlement and development. Within the Kingitanga there was also internal pressure for titles of land to be legally recognised so that land could be leased or otherwise used for economic gain (Marr 1996: 11). Following negotiations, it was agreed that the Rohe Pōtae would be opened in exchange for Crown assistance in the maintenance of lwi and hapū authority, and the continuation on the ban of liquor sales in the area (Marr 1999: 156; Murray and Cocker 1930). The first sod on the south side of the Pūniu River was turned on 15 April 1885. By 1887 the line had reached Otorohanga and a few months later Te Kuiti, but it was not until 1908 that the main trunk line was complete.

3.3 European Settlement

Missionaries arrived as early as 1834 in the Waipā and Waikato districts and began to establish parishes and later churches, focussing largely on the land surrounding the western coastline (Marr 1996). One of the first inland mission stations was Mangapouri (S15/134, outside the Study Area), established by the Church Missionary Society (CMS) near the junction of the Pūniu and Waipā rivers in 1834, although this proved to be a short-lived affair and was abandoned in 1836. The CMS soon after restored their base in the region with the Rev B. Y. Ashwell, who persuaded some of the local Māori at Otawhao (Te Awamutu) to help him establish a mission station there in 1839 (S15/325).



Figure 4. The turning of the sod for the northern trunk railway, along the Pūniu River. Rewi Maniapoto centre with grey beard and top hat. APG-1180-1/2-F, Alexander Turnbull Library 1885.

While there is evidence for European ownership of land south of the Pūniu River in the 1860s, with T. Russell having purchased large tracts of land encompassing the Pokuru Block from Māori landowners in 1868, it is unlikely that this land was intensively settled or farmed given the conflicts between European settlers and Māori from the 1860s onwards. More intensive and extensive European occupation of the land south of the Pūniu River only commenced following the delineation of native land after the Native Land Court hearings in the late 1880s.

3.4 Tokanui Psychiatric Hospital

Negotiations commenced between the Crown and local hapū in the early 20th century for the purchase of large blocks of land immediately to the south of the Pūniu River for the purposes of establishing a prison and associated reformatory farm (Waikeria) and a mental hospital at Tokanui (Taitoko, 1998) under the provisions of the Public Works Act 1908. Previously defined blocks were further subdivided, with the 5146 acres procured by the Crown from the former Pokuru 1 (Taitoko 1998). The main hospital was established on the Pokuru 1B block, covering an area of 215 acres, with an additional 15 acres to the east of the hospital complex being used for the construction of 52 residential dwellings, a water and sewage supply system, a cemetery and other ancillary buildings (Taitoko 1998). Much of the land clearance was undertaken by prisoners from Waikeria, who also constructed some of the prison buildings (Cameron and Clough 2016: 6). In 1923 concerns were raised by Raureti Te Huia regarding two urupā on the site which the Government had failed to protect as promised. One of these is identified by Wayne Taitoko as the nearby Pukekawakawa burial reserve.

The exact location of the second is unknown, though it is believed to be within the hospital grounds (Te Muraahi & Maniapoto 2021: 48). Further research in subsequent stages of the project may help identify the location of the urupā.

Site selection was driven by a general shift from urban to rural locations for asylums, to ensure patient privacy, mollify public fears, and ensure space for future development. The space also enabled the hospital to be somewhat self-sufficient, with onsite gardens and orchards worked by patients for both therapeutic and economic gain (Campion et al.: 29-31). Te Mawhai Road, as well as other roads associated with the hospital complex, were also constructed during the first decades of the hospital's establishment in 1912 (*Waikato Times*, 10 January 1917: 4).

In 1993, Health Waikato announced the closure of the hospital. Since this time, the hospital complex has been abandoned and has largely fallen into disrepair, with the residential dwellings on the properties to the east being occupied by private individuals. Shortly after the announcement of the hospital closure, the original Māori owners of the land lodged a claim with the Waitangi Tribunal for the return of their ancestral land (Taitoko 1998).

4 Archaeological Background

There are no recorded archaeological sites in the project area, and there are no records of archaeological work undertaken in or near the project area. There are, however, several pa recorded along the Pūniu River in either direction of the site, including oral traditions of a pā or settlement along Mokoroa hill, through the western edge of the project area. 19th century plans ML 946 (drawn in 1865) shows 'Te Awakeri Eel Pah' at the confluence of the Tarutahiu Swamp, Wharekino Creek and Tarutahi Creek, on the eastern boundary of the Hospital, possibly near the morgue building (building 25) (Figure 2). There are interview records taken in 1923 noting an urupā within the hospital grounds, the location of which is unknown. In addition to the urupā, several areas of cultural sensitivity were noted by mana whenua representatives, including land around the former men's dormitories (also known as Buildings 13 and 48), and around a "ditch" on the western edge of the site (pers comms. Maniapoto 2023).

Commercial mitigation archaeological monitoring and investigations have taken place in the wider region, particularly in association with wastewater pipelines, Waikeria Prison and powerline installation (Campbell and Harris 2012; Druskovich 2007; Lawrence 2019; O'Hagan and Keith 2019; Simmons 2006; Ussher 2020).

Archaeological monitoring of trenching in Kihikihi has been undertaken four times based on the HNZPT Digital Library records (Druskovich 2007; Hoffmann 2010; Cruickshank and Craig 2020). These projects uncovered historic waste consistent with both military and residential settlements. These included large amounts of alcohol bottles from the hospitality industry, blacksmithing waste and religious items. Other works have focussed on identifying structures and material related to Crown military actions (Simmons 2006).

Work for the Waipā power network has involved the survey and mapping of archaeological sites across the Waipā district. This identified issues with accuracy in recorded locations of archaeological sites, and the lack of systematic survey in the region. Pā from documentary sources, for example Haereatea Pā were noted, though this pā was not seen during survey. There was, however, another pā along an oxbow of the Pūniu River, confirming the pattern of pā along the rivers bank (Campbell 2014).

A 1980 field survey of the Lower Pūniu River by Leahy and Walsh extended from just to the south of Tokanui Hospital. Walkovers along the river noted that the area has been extensively ploughed, and many of the ridges bulldozed. Several sites that had been recorded by Steve Edson from aerial photography were confirmed and a further 115 sites added to the record, consisting of mostly pā in prominent positions and within sight of each other and pit/terrace sites. This survey indicated that despite extensive land modification the Pūniu Riverbanks and surrounds contained intact archaeological sites (Edson 1980).

The area around Tokanui Hospital has not been well surveyed, with archaeological field work tending to be focused on developed settlements or constrained by development plans. Six archaeological sites are recorded within 2 km of the hospital grounds, all of which are pre-European Māori

pā. Many of these were identified in 1980 by Steve Edson of the Waikato Museum from aerial photographs, which explains the dominance of large, exposed earthworks sites such as pā and pit/terrace sites, which are more clearly visible in the photographs. Many of these sites have not been field checked by archaeologists. Although in the Waikato, Pūniu River is not associated with the Waikato Garden Soil complex or borrow pits, and there are no pre-European Māori horticultural sites recorded in the area. However, the presence of 10 storage pit sites within 5 km of Tokanui Hospital indicates that horticulture was likely occurring.

Geotechnical testing carried out at the Tokanui Hospital site did not identify any archaeological deposits. Some 20th century period material such as plate fragments were exposed. In some areas of the project the soils were already damaged from what were presumably previous hospital activities and, considering some works were to expose suspected services, existing trenches for services were exposed. It is probable the absence of archaeological deposits was partly due to the minor nature of works (Trilford 2023).

There are also several 19th century period sites in the wider area, including a redoubt and stockade associated with the Waikato constabulary force (S15/235 and S15/2360), two taverns (S15/394 and S15/398) and some domestic and rubbish sites in nearby Kihikihi.

4.1 LiDAR

2014 Waikato Council LiDAR was converted to a hillshade model to examine the terrain for any earthwork features. The two former swamps, now streams, surrounding the site are clear, with no evidence of archaeological earthworks in the project location. A ditch visible in the western portion of the site may be the area referred to by mana whenua representatives as an area of cultural sensitivity, that will be addressed in documents by them. The LiDAR resolution was insufficient to identify any smaller features but high points identified during field survey, and the confluence of waterways along the eastern boundary of the site are marked in yellow.

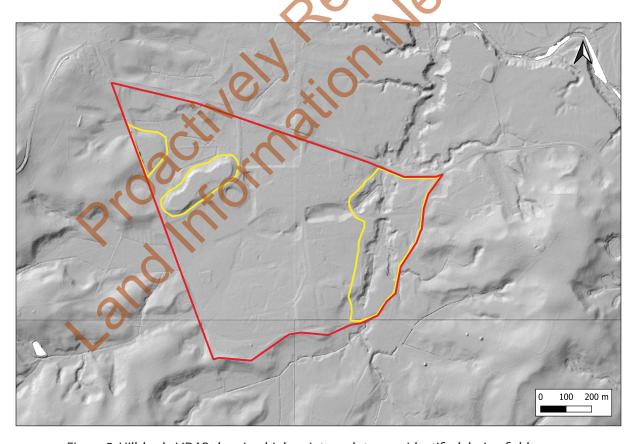


Figure 5. Hillshade LiDAR showing high points and streams identified during field survey.

5 Mana whenua hui

A two-day cultural induction at Mangatoatoa Marae was attended by Danielle Trilford and Leela Moses on 8 – 9 February 2023. During this hui discussions were held regarding the location of areas which may be culturally sensitive. Further details regarding areas of cultural sensitivity are discussed in the Waahi Tapu Investigation and Cultural Induction Summary (2023).

6 Field Survey

The area of proposed works was inspected visually with survey conducted both on foot and by vehicle. A series of soil auger tests were taken on high points to examine soil conditions, extent of modification and stratigraphy. Foot survey focused on high points and waterways, with general survey of paddocks. No structures were accessed during this survey. No cultural material was identified however some areas were identified which warrant further attention. There is no surface evidence of the walking track observed in the 1889 drawings.

6.1 Survey zone 1

Survey zone 1 consists of the northwest part of the site, and is mainly a grassed paddock currently stocked with cattle, with scrub and bush around the outer edges and structures in the centre. A low hill extends from outside the property into the northwest corner of zone 1, which is currently covered in building 55. Augering of the lowland paddock in zone 1 exposed no archaeological material, and subsoils were indicative of former wetlands (Figure 7). This is supported by Manaaki Whenua historic wetland data also. Augers ran to a maximum depth of 700 mm into the subsoils.

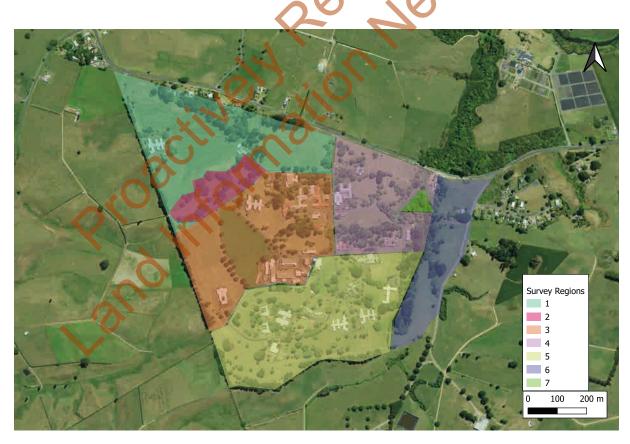


Figure 6. Survey zones.



Figure 7. Typical auger results in low-lying area, Zone 1.

6.2 Survey zone 2 (Mokoroa Hill)

This zone is a linear ridgeline running through the northwest part of the site. It is the highest point on the property. The hill has gently sloping sides and on top a flat ridge, the ridge is one of the highest points in the wider area and commands wide views of the Pūniu River. A road runs along the spine of the hill, and there are scatters of exotic trees (Figure 8). Multiple disconnected yellow fire hydrants are evidence of former structures indicating that in some area areas the ground has been worked. Auguring at the north point of the ridge showed 400 mm of dark brown, organic rich topsoil overlying a yellow-brown natural loam. Small red brick fragments were identified in the topsoil layer (Figure 9). No archaeological features were identified but this is the "Mokoroa" area on pre-1900 maps and this easily-defended and elevated ridgeline commands a clear view of the Pūniu River and wider landscape.

6.3 Survey zone 3

Survey region 3 is the centre west part of the site, consisting of paddocks to the western edge, and hospital buildings towards the east. The central parts are heavily modified with buildings and associated amenities. The surrounding paddocks are lowland and appear to be drained wetlands, matching the data provided by Manaaki Whenua. The area appears to have been highly modified.

6.4 Survey zone 4

The north central part of the site consists largely of landscaped parklands, with several hospital buildings, divided by rows of exotic trees. Some of this area has evidence of modification during soil augering and test pitting. Visual inspection along the Tarutahi Stream edges and flanks could not be undertaken due to dense vegetation. Te Awakeri (alternatively Te Awakiri) Pā annotated on pre-1900

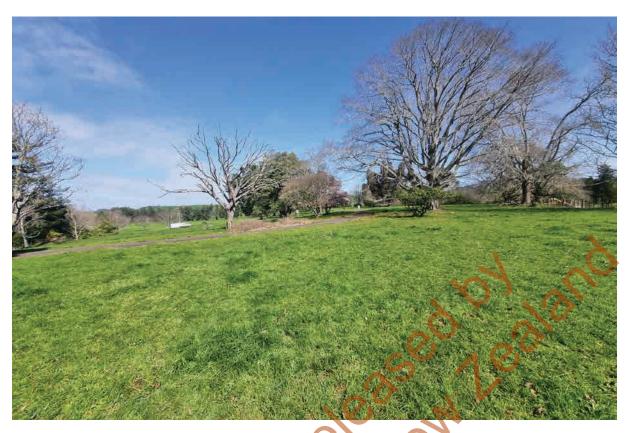


Figure 8. Ridge of hill with tree-lined road.



Figure 9. Auger results from Mokoroa / Survey Zone 2.



Figure 10. South facing view along streams edge with structures in the background.

plans could fall in this area but the topography and subsoils indicate what was likely to be mostly wetland.

6.5 Survey zone 5

Survey zone 5 consists of the south part of the site. This is largely grazing paddocks, with several hospital roads and structures, including what was the male nurse's dormitory, a riding for the disabled park and the isolation / infectious disease ward (Mark Collins pers. comm. 2022). There was no visible surface evidence of archaeological material in zone 5 and similar to many other areas, there are many pockets of land in the area that appear to have been modified.

6.6 Survey zone 6

Survey zone 6 was accessed via Farm Road. This is a grassy space along the outside of the Tarutahi Stream and was littered with rubbish and scrub. It appeared to be mostly modified, with older paths and roadways cutting across it. No archaeological deposits were seen on the ground surface or during test pitting.

6.7 Survey zone 7

Survey zone 7 consists of the north facing point at the confluence of two streams, including the Tarutahi Stream (Figure 6). The Tokanui Hospital Morgue stands at the entrance to the hill which is a small square building with a road circling it. The hill has flat, stepped sides on the slopes which are covered in exotic trees with native regrowth (Figure 11). It is unclear if these stepped terraces are modern or not – they are not distinctly archaeological. The east side has a more natural, gentle slope



Figure 11. Stepped slope of hill below morque, Survey Zone 7.

down to a wide terrace, with large trees covering much of its surface, before sloping down again to the stream below. No archaeological deposits were identified, and while there were no definitive archaeological features, the north facing confluence and "Te Awakeri Eel Pah" on pre-1900 plans does flag a reasonable cause to suspect archaeological deposits present at this point. Pre-European Māori archaeological sites can often be found on north-facing elevated land overlooking the confluence of two waterbodies like Survey Zone 7.

7 Assessment

The following assessment of values and significance relate only to archaeological values. Other interested parties, in particular mana whenua, may hold different values regarding the proposed works.

The former Tokanui Psychiatric Hospital grounds are part of a wider, under-recorded archaeological landscape. Although there are no recorded archaeological sites on the hospital grounds, based on discussions with mana whenua, topography, elevation, the presence and positions of waterways, soil attributes and similar variables there is reasonable cause to suspect that there may have been undefended settlements / kāinga and urupā within parts of the hospital grounds. These would have been most likely on hills across the site, which would previously have been elevated dry areas of firm ground overlooking the wetlands. These areas of likelihood match old maps and plans which note pre-European Māori landuse and walking track routes.

Previously unrecorded archaeological sites may be, particularly along the high points in survey zones 1, 2 and 7. Awakeri (Or Awakiri) Pā may have been located on or near the hill where the former morgue (building 25) stands, which is a northfacing highpoint at the confluence of two streams – the location loosely matches old plans and is a common topography for pre-European Māori occupation - but it is unclear from the plans precisely where it was. Historic sources and oral traditions indicate that the land of the former Tokanui Hospital was used by pre-1900 Māori, however modification

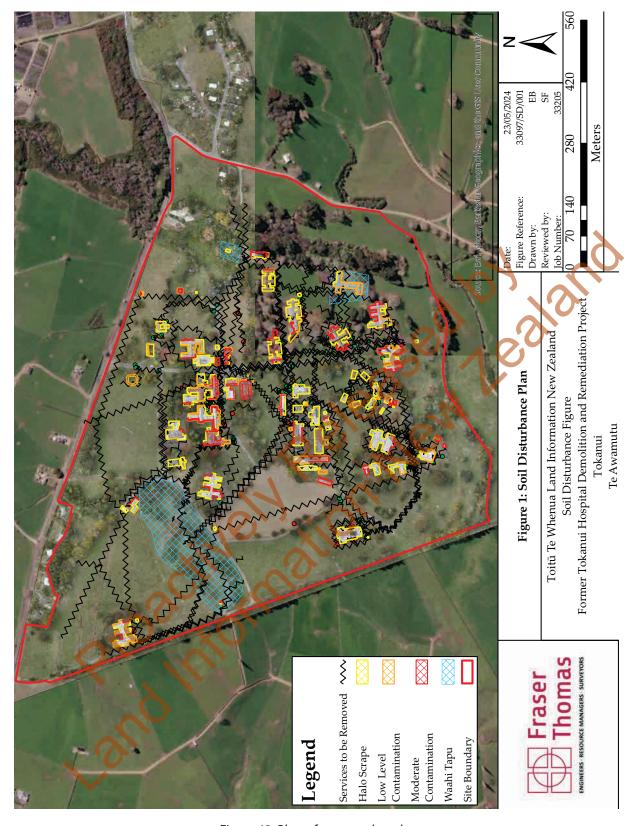


Figure 12. Plan of proposed works.

14 Tokanui Hospital asset removal

associated with the draining of swamp lands and construction of the hospital would have damaged much of the physical evidence. Importantly, the ground disturbance is evidenced to be patchily present – meaning there is reasonable cause to suspect potential previously unrecorded archaeological deposits may be exposed in certain proposed works areas.

7.1 Assessment of effects

Much of the proposed works fall in areas where land was once permanent wetland, and the likelihood to exposing archaeological deposits is fairly low – albeit still present. Should material be present, these will likely be findspots of pre-European Māori material culture / taonga and worked wood such as kō or similar.

The proposed works in areas where risk for deposits is higher, include removal of structures, as well as underground services including wastewater, water, communication and steam ducts, as well as roading, and an embankment. There will also be management works to an old landfill to the east of the Wharekorino Stream. Several of the services overlap with each other, as well as intersecting with areas of archaeological risk (Figure 13).

Locations where each individual infrastructure asset intersect with areas of archaeological risk are also shown separately below.

7.1.1 Structures

Structures to be removed will be demolished, their foundations removed, followed by further digging in and around the structure footprint to remove contaminated soils. The depth of this remedial scrape varies depending on the level of contamination detected during earlier testing, but will range from 0.1–0.7 m below the foundation depth, across an area extending up to 6 m outside the

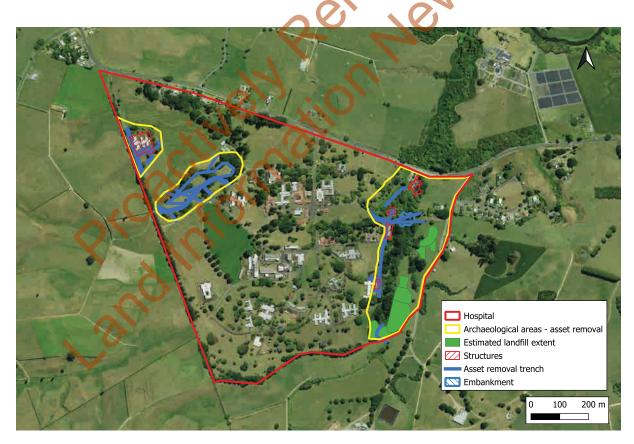


Figure 13. Proposed asset removal inside areas of archaeological concern.

building foundations. Buildings S8, B55, B25, B24 and B26 are all inside areas of archaeological risk, and earthworks have the potential to negatively impact potential previously unrecorded archaeological sites by removing them using a hydraulic excavator (Figure 14).

7.1.2 Wastewater

Wastewater assets include manholes and pipes. Manholes to be removed will be cut down and removed to 1m deep below existing ground level. Wastewater pipes to be removed will be cut down to a maximum of 800 mm depth, with any residual pipes left in the ground to be capped or plugged. This includes approximately 70 m of wastewater pipes and three manholes in front of building 55 (on the hill in Survey zone 1), which have the potential to negatively impact previously unrecorded archaeological sites (Figure 15).

7.1.3 Water

Water assets include valve boxes and pipes. All water valve boxes are to be excavated and removed. All waterpipes are to be removed to a maximum 800 mm depth. This includes approximately 50 m of pipes on Mokoroa Hill (Survey zone 2), 75 m of pipes in front of building 55 (on the hill in Survey zone 1), and 210 m along the Wharekōrino and Tarutahi waterways, and 83 m along the hill which have the potential to negatively impact potential previously unrecorded archaeological sites (Figure 16).

7.1.4 Communications

Communications assets include comms pits, ducts and cables. All are to be removed. This includes approximately 260 m of ducts and cables on Mokoroa Hill (Survey zone 2), 180 m around the



Figure 14. Structures to be removed inside archaeological risk areas.

Tokanui Hospital asset removal



Figure 15. Section of wastewater pipes and manholes to be removed inside area of archaeological risk.



Figure 16. Sections of water pipes and valve boxes to be removed inside areas of archaeological risk.

Wharekino and Tarutahi waterways, and 80 m along the hill in Survey zone 1, which have the potential to negatively impact previously unrecorded archaeological sites (Figure 17).

7.1.5 Power

Power assets include above and below ground lines, with poles, boxes and pits. All power assets are to be removed. This includes approximately 80 m of below ground power lines on Mokoroa Hill (Survey zone 2), 360 m along the Wharekino and Tarutahi waterways and 320 m on the hill in Survey zone 1, which have the potential to negatively impact potential previously unrecorded archaeological sites (Figure 18).

7.1.6 Concrete steam ducts

All existing above and underground concrete steam ducts to be removed, including all internal pipework. This includes approximately 160 m of concrete steam ducts on Mokoroa Hill (Survey one 2), and 80 m along the hill in Survey zone 1, which have the potential to negatively impact potential previously unrecorded archaeological sites (Figure 19).

7.1.7 Roading

Selected portions of road and parking areas are to be removed. This includes approximately 200 m of roading on Mokoroa Hill (Survey zone 2), and approximately 50 m of roading on the former morgue (Survey zone 7), which have the potential to negatively impact potential previously unrecorded archaeological sites (Figure 20).

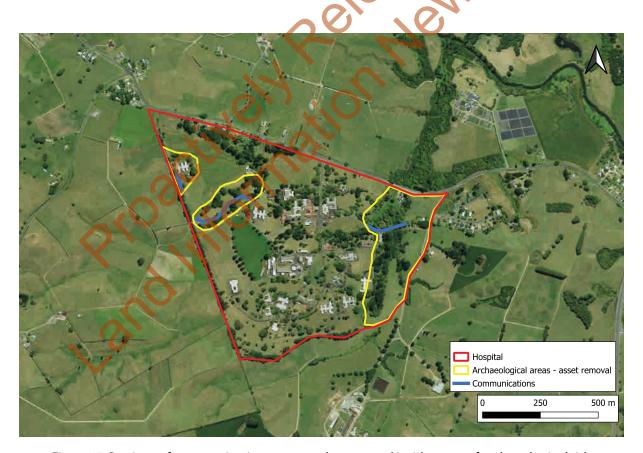


Figure 17. Sections of communications assets to be removed inside areas of archaeological risk.



Figure 18. Sections of power assets to be removed inside areas of archaeological risk.



Figure 19. Sections of steam ducts to be removed inside areas of archaeological risk.



Figure 20. Sections of roading to be removed inside areas of archaeological risk.

7.1.8 Embankment

A modern man-made earth embankment on the eastern edge of the hospital site will be removed. Ground disturbance associated to the removal of the embankment where the natural ground surface will be excavated could negatively impact potential previously unrecorded archaeological sites. The removal of the imported earth does not risk exposing archaeological deposits.

7.1.9 Landfill

Upgrades to the landfill on the eastern edge of the Wahrekīno include the relocation of landfill and fill material currently located to the west of the Wharekōrino Stream to within the previously defined landfill area, removal of medical waste, transfer of contaminated soil from the hospital remediation works, partial removal and realignment of a culvert and reinstatement of the adjoining stream, and improved capping of the entire landfill.

Low and moderate level contaminated soil from the hospital demolition works will also be placed within an excavated area within the landfill area, and capped, topsoiled and grassed, with the excavated cleanfill material being used as backfill for the demolition works.

Natural soils may be encountered along the edges of the of the landfill, along the edges of the stream reinstatement and culvert construction, in the backfill excavation area, and along the banks of the Wharekorino stream (Figure 22), which could negatively impact potential previously unrecorded archaeological sites.

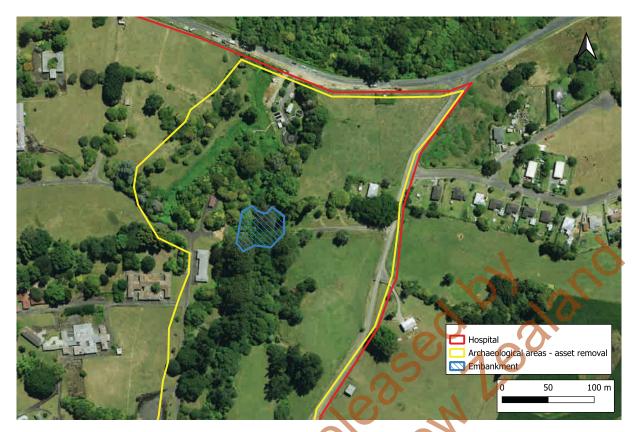


Figure 21. Location of the embankment to be removed.

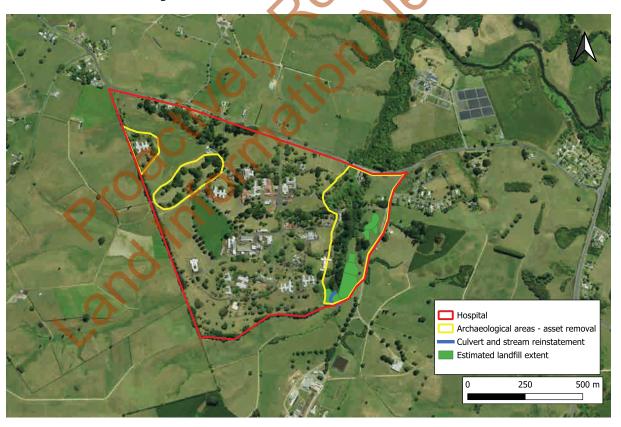


Figure 22. Estimated location of the landfill.



Figure 23. Miscellaneous small assets.

7.1.10 Miscellaneous

A number of small assets will be removed adjacent to Te Mawhai Road, and the Wharekōrino Stream (survey zone 4), including some concrete edging, fencing, an outfall pipe, a grit chamber, footbridge and ancillary cabling. Ground disturbance related to these works is expected to be minor, with works largely confined to above ground or previously disturbed areas. Some minor disturbance of natural grounds may occur, which has the potential to negatively impact potential previously unrecorded archaeological sites (Figure 23).

7.2 Mitigation of effects

Proposed ground disturbance in the areas outlined in Figure 23 should be monitored by a suitably qualitied archaeologist. This will involve monitoring areas where there is a higher risk profile for sites being impacted; such as road removal, embankment removal and structure removal. Periodic spot checks are a suitable level of mitigation for the remainder of the works and full time monitoring is not necessary in those areas. Should any material be exposed relating to pre-European Māori land use these should be investigated and sampled following standard archaeological best practice, and there should be a focus on radiocarbon dating to contribute to better understanding of the chronology of Māori settlement in the area. It is expected mana whenua will provide recommendations on the cultural management of the works.

8 Recommendations

These recommendations are only made based on the archaeological values that have been outlined above. Any other values associated with special interest groups, including tangata whenua, can only be determined by them. It is recommended that:



Figure 24. Areas recommended for archaeological monitoring.

- an authority to modify or destroy previously unrecorded sites be applied for from Heritage New Zealand Pouhere Taonga (HNZPT) under Section 45 of the Heritage New Zealand Pouhere Taonga Act 2014 for works in areas indicated in Figure 23;
 - note that this is a legal requirement;
 - an Archaeological Management Plan be prepared to accompany the authority application, which sets out appropriate methods for managing any effects on the sites during construction;
 - no authority should be applied for without consultation with the appropriate tangata whenua authorities; evidence of consultation, and views expressed, will be required by HNZPT, and will be taken into account when making a decision about the granting of the authority
 - note that the application process may take up to three months from the date of lodgement, and following issue there is a period of 15 working days during which earthworks cannot commence to allow for appeals to the Environment Court;
- appropriate tikanga (protocols) should be followed during works mana whenua may make recommendations outlining these;
- in the event of kōiwi (human remains) being uncovered during any future construction, work should cease immediately and mana whenua should be contacted so that suitable arrangements can be made;
- since archaeological survey cannot always detect sites of traditional significance to Māori, or wāhi tapu, mana whenua should be consulted regarding the possible existence of such sites, and the recommendations in this report.
- all works in zones 1 and 3–6 should be undertaken under an Accidental Discovery Protocol; a draft protocol is attached to this report;

References

- Alexander, D.J. 2009. 'Public Works and other Takings in Te Rohe Potae District', research report commissioned by the Crown Forestry Rental Trust, 853pp Wai 898 A63, Te Rohe Potae inquiry
- Anderson, A., J. Binney and A. Harris 2014. *Tangata Whenua: An Illustrated History*. Bridget Williams Books, Wellington.
- Barber, L. H. 1984. Frontier Town: A History of Te Awamutu 1884–1984. Ray Richards Publisher and Te Awamutu Borough Council, Auckland and Te Awamutu.
- Barber, L. H. 1978. *The View from Pirongia: The History of Waipa County*. Richards Publishing in association with Waipa County Council, Auckland and Te Awamutu.
- Bass, M. 1993. *The Northwest King Country: A History of the Land and its People*. Waikato Conservancy, Department of Conservation, Hamilton.
- Boast, R. 2008. Buying the Land, Selling the Land: Governments and Maori Land in the North Island 1865–1921. Victoria University Press, Wellington.
- Campbell, M. 2014. The Te Awamutu Reinforcement Project: archaeological assessment. Unpublished CFG Heritage Ltd report to Align and Waipa Networks Ltd.
- Campbell, M. and J. Harris 2012. The Te Awamutu Reinforcement Project: archaeological appraisal. Unpublished
 CFG Heritage Ltd report to Waipa Networks Ltd and The Environmental Challenge.
- Campion, M., C. Coleborne and K. Prebble 2012. Mental health at Tokanui in the early years. *Changing Times, Changing Places: From Tokanui Hospital to mental health services in the Waikato, 1910-2012.* Half Court Press, Hamilton.
- Cunningham, M. *The Environmental Management of the Waipā and its Tributaries*. Case-study commissioned by the Waitangi Tribunal for Te Rohe Potae district inquiry (Wai 898). Ministry of Justice, Wellington.
- Druskovich, B. 2007. Archaeological Monitoring from the Kihikihi Wastewater Project; Kihikihi Township. Report for Waipā District Council, Consultant Archaeologist, Auckland.
- Edson, S. 1980. Interim note on site recording in the Waikato by means of aerial photography. New Zealand Archaeological Association Newsletter 23: 241-243.
- Garbutt, E. 2022. *Tokanui History*, unpublished report. Underground Overground Archaeology, Christchurch.
- Harris. G.E. and J. Henderson 1925. Geological map of the Puniu survey district. Department of Lands and Survey, Wellington.
- Lawrence, M. 2019. Archaeological Assessment of Effects: Waikeria Prison Wastewater Upgrade Project. Unpublished report prepared for the Department of Corrections & Waipa District Council.
- Leahy, A. and W. Walsh 1980. Lower Puniu River Survey, Te Awamutu. Archaeological site survey report.
- Maniapoto-Anderson, R. 2012. Tokanui Te Whenua: a tangata whenua perspective, in *Changing Times, Changing Places: from Tokanui Hospital to mental health services in the Waikato, 1910-2012.* Half Court Press Itd, Hamilton.
- Marr, C. 1996. Rangahaua Whanui District 8: The Alienation of Maori Land in the Rohe Potae (Aotea Block), 1840–1920. Waitangi Tribunal, Rangahaua Whanui Series.
- Marr, C. 1999. Rangahaua Whanui District 8: The Alienation of Maori Land in the Rohe Potae (Aotea Block) Part 2: 1900–1960. Waitangi Tribunal, Rangahaua Whanui Series.
- Murray, J. M. and J. Cocker 1930. Temperance and Prohibition in New Zealand. The Epworth Press, London.
- Phillips, F. L. 1989. Nga Tohu a Tainui: Landmarks of Tainui. Volume 1. Tohu Publishers, Otorohanga.
- Phillips, F. L. Nga Tohu a Tainui: Landmarks of Tainui, historic places of the Tainui people. Volume 2. Tohu Publishers, Otorohanga.
- O'Hagan, A. and S. Keith 2019. Waikeria Wastewater Project: Final report. Sian Keith Archaeology Ltd. Hamilton Otorohanga Land Court Minute book 16: 81
- Simmons, A. 2006. Archaeological report on the construction of the Kihikihi water reservoir. Simmons and Associates report, Hamilton.
- Smith, S.P. 2002. Maori wars of the nineteenth century: the struggle of the northern against the southern Maori tribes prior to the colonisation of New Zealand in 1840. Cadsonbury Publications, Christchurch.
- Taitoko, W. 1998. 'A History of the Tokanui Blocks', research report commissioned by the Waitangi Tribunal, 73pp Wai 440 A1, Tokanui Land Claim inquiry
- TAR Block Ltd. 2023. Waahi Tapu Investigation and Cultural Induction Summary.
- Te Muraahi, K. & Maniapoto, M. 2021. Pokuru 1B: Former Tokanui Hospital campus. Cultural impact assessment for Toitū te Whenua.
- Te Onewa Consultants 2017. Cultural Impact Assessment of the Proposed Waikeria Prison expansion, prepared for the Department of Corrections.

Trilford, D. 2023. Tokanui Hospital preliminary soil testing: final report (HNZPTA authority 2024/018). Final report to Toitū te Whenua Land Information New Zealand and Heritage New Zealand Pouhere Taonga. Ussher, E. 2020. Te Awamutu substation: archaeological field assessment. Unpublished CFG Heritage Ltd report to Transpower New Zealand Ltd.

Waikato Argus, 1912. The Waikato Argus, [Published daily] A Guaranteed Circulation of over 8500 Weekly. 32(4897). Waikato argus, Hamilton.

Waikato Times. 1887. A Trip Through the Native Country. Waikato Times, 28(2265): 3. Hamilton.

Waikato Times. 1917. Waipa County Council, monthly meeting. Waikato Times, 88(13584). Hamilton

Waipā District Council. 2014. Our Partnerships with Iwi, sourced from https://www.waipadc.govt.nz/our-council/our-partners/councilpartnershipwithiwi

Proactively Released Lealan and Information Revenue an

Accidental Discovery Protocol

In the event of the accidental or unexpected discovery of archaeological features, including human remains:

- 1. All work within the vicinity of the discovery should cease immediately.
- 2. A buffer of at least 5 m should be set up around the discovery and this should be marked on the ground, preferably with pegs and tape, or similar.
- 3. All machinery and plant should be removed from the buffer zone where this is possible.
- 4. The site archaeologist, or other qualified archaeologist, should be informed.
 - i. Heritage New Zealand Pouhere Taonga (HNZPT) should be informed.
 - ii. If the discovery is of Māori origin, the relevant tāngata whenua authorities should also be informed. Appropriate protocols (tikanga) should be observed.
 - iii. If the discovery is of human remains, the New Zealand Police should also be informed.
- 5. The archaeologist should take relevant steps to secure the area of the discovery.
- alscov (the clien atties or HNZPT. 6. The archaeologist will assess the discovery and advise HNZPT and the client on the relevant
- 7. Works in the area of the discovery shall not recommence until authorised in writing by the