

# **Archaeological assessment of effects**

**Ambury Properties Limited**  
**Ohinewai**

**Matthew Gainsford & Warren Gumbley**

**June 2019**

# Contents

<b>1</b>	<b>Summary.....</b>	<b>1</b>
<b>2</b>	<b>Statutory requirements.....</b>	<b>3</b>
2.1	The Heritage New Zealand Pouhere Taonga Act (HNZPTA) 2014.....	3
2.2	The Resource Management Act (RMA) 1991.....	4
<b>3</b>	<b>Physical environment and setting .....</b>	<b>5</b>
<b>4</b>	<b>Recorded archaeological sites .....</b>	<b>7</b>
<b>5</b>	<b>Methodology .....</b>	<b>8</b>
5.1	Historical survey plans and aerial photography .....	9
5.2	Walkover survey .....	9
<b>6</b>	<b>Results.....</b>	<b>9</b>
6.1	Survey plans and aerial photography .....	9
6.1.1	HNC SO 404 I_1-2.....	9
6.1.2	HNC SO 400 I_1 .....	10
6.1.3	ML 13102 South Auckland .....	11
6.1.4	SN192 (1940) and SN164 (1977).....	11
6.2	Results from walkover survey.....	13
<b>7</b>	<b>Constraints and limitations .....</b>	<b>15</b>
<b>8</b>	<b>Archaeological or other values.....</b>	<b>15</b>
8.1	Archaeological .....	15
<b>9</b>	<b>Conclusions and recommendations .....</b>	<b>15</b>
<b>10</b>	<b>References.....</b>	<b>16</b>

## 1 Summary

Ambury Properties, the property-owning associate of New Zealand Comfort Group Limited (NZCG) through Bluxom, Burnett and Olliver (BBO) have commissioned Warren Gumbley Limited to prepare the following archaeological assessment. NZCG want to consolidate their operations at Lumsden and Tahuna Roads, Ohinewai (Allot 405 Whangamarino PSH, Lot 3 DP 474347, Lot 2 DPS 29288 and Lot 1 DPS 292288) (Figures 1-3).

An initial development plan of the site includes a large factory for NZCG, supporting industrial, factory outlet retail, convenience retail, service centre and residential development and related open space.

This assessment provides the results from an archaeological walkover survey and a review of relevant historical documents of the proposed area of development including aerial photographs, historic maps, and the New Zealand Archaeological Associations (NZAA) national database, Archsite.

There are in the surrounding area recorded archaeological sites. However, within the proposed development area there are no recorded sites. Results from the walkover survey did not identify anything of archaeological interest.

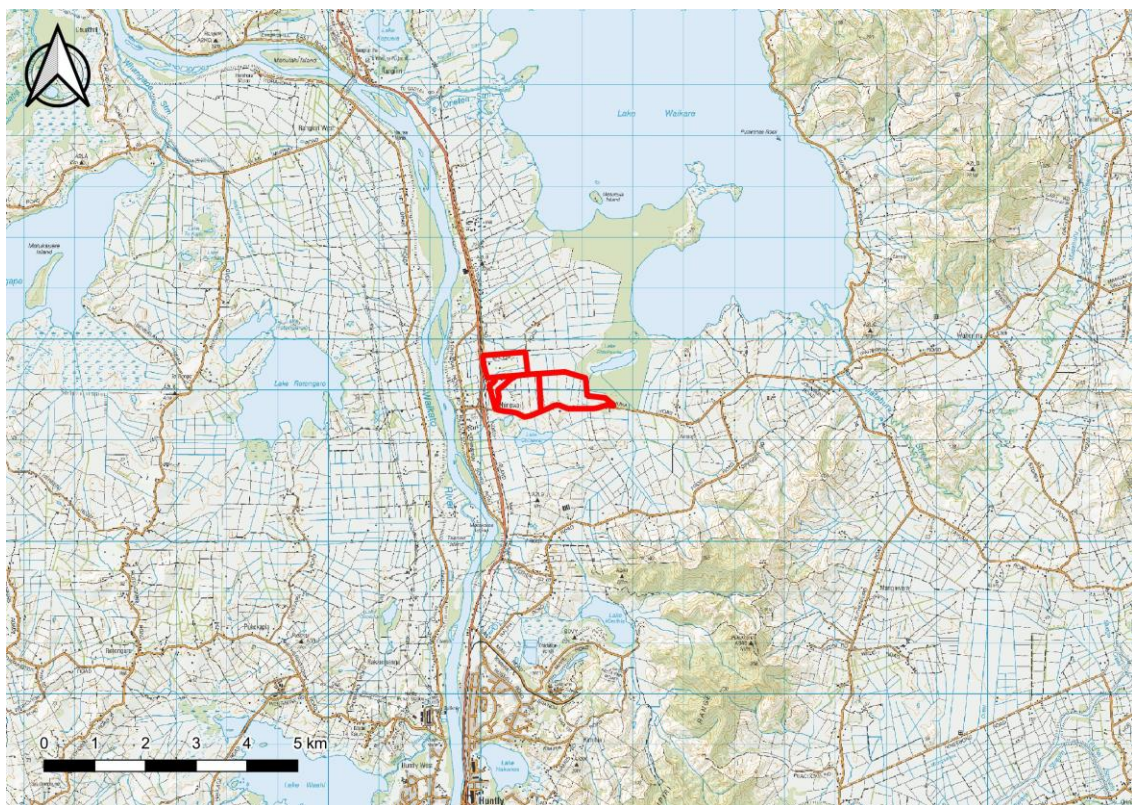


Figure 1. Location of the proposed development area (Source: LINZ).



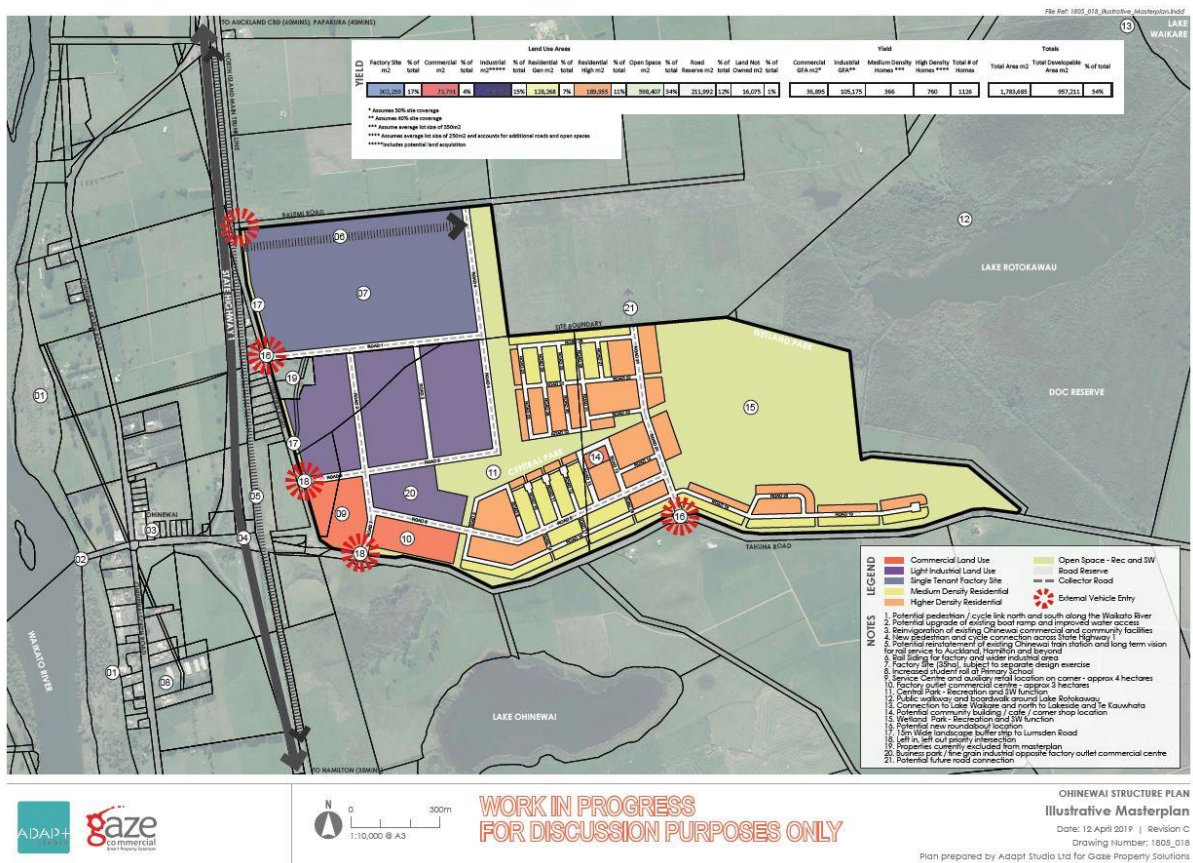


Figure 2. Latest version of the proposed masterplan (Source: Gaze Property Solutions).

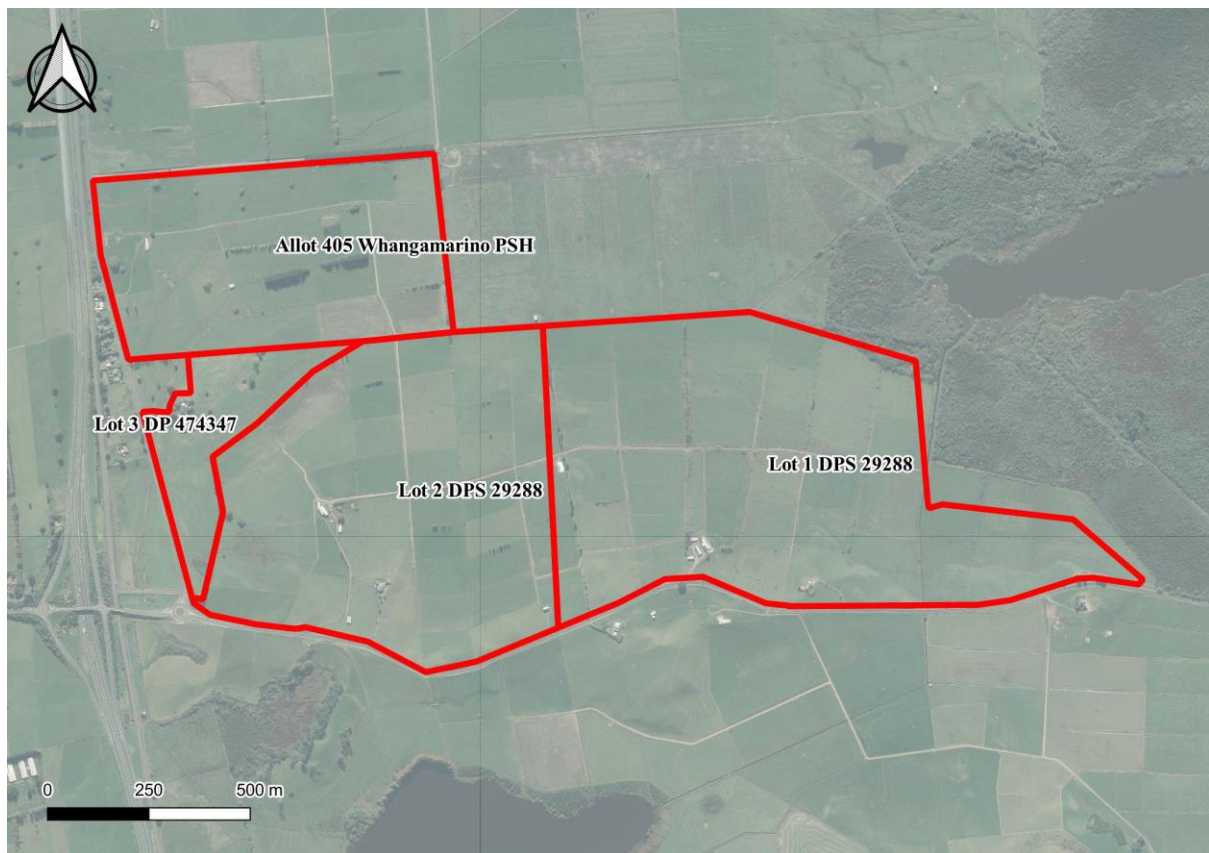


Figure 3. Land parcel titles affected by proposed development (Source: LINZ).

## 2 Statutory requirements

The management of archaeological historical and cultural sites and landscapes are controlled by the Resource Management Act (RMA) and its associated District Plans and Regional Policy Statements. Archaeological sites are also explicitly protected through the archaeological provisions of the Heritage New Zealand/Pouhere Taonga Act (NZHPT). This Act prevents archaeological sites from being destroyed or modified without an authority from Heritage NZ.

### 2.1 The Heritage New Zealand Pouhere Taonga Act (HNZPTA) 2014

The purpose of the HNZPTA is to promote the identification, protection, preservation, and conservation of the historical and cultural heritage of New Zealand (HNZPTA section 3). Emphasis is placed on avoiding effects on heritage.

The HNZPTA provides blanket protection to all archaeological sites meeting the definition in the Act, whether they are recorded or not. Protection and management of sites is managed by the archaeological authority process, administered by HNZPT. It is illegal to destroy, or modify archaeological sites without an authority to do so from HNZPT.

The HNZPTA 2014 (s6) defines an archaeological site 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 that 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) of the Act<sup>1</sup>.

Any person who intends carrying out work that may modify or destroy an archaeological site, or to investigate an archaeological site using invasive archaeological techniques, must first obtain an authority from HNZPT. The process applies to sites on land of all tenure including private, public and designated land. The HNZPTA contains penalties for unauthorised site damage.

The archaeological authority process applies to all archaeological sites that fit the HNZPTA definition regardless of whether the site is recorded in the NZAA Site Recording Scheme or registered with HNZPT; or if the site only becomes known about as a result of ground disturbance; and/or the activity is permitted under a district or regional plan, or a resource or building consent has been granted, or the ground is subject to a designation.

The HNZPTA replaced the *Historic Places Act 1993* (HPA) in May 2014.

HNZPT also maintain the New Zealand Heritage List/Rārangī Kōrero (The List). The List can include archaeological sites. The purpose of The List is to inform members of the public about such places, and to assist with their protection under the RMA.

---

<sup>1</sup> Such declarations usually pertain to important post-1900 remains with archaeological values.

It is possible that archaeological sites, as defined in the HNZPTA, may be discovered by this project. Any archaeological sites identified during the ground works at this site will be protected under the HNZPTA.

## **2.2 The Resource Management Act (RMA) 1991**

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 sustaining the potential of natural and physical resources for 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 Maori, including wahi 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 Maori.

Where resource consent is required for any activity the assessment of effects is required to address cultural and historic heritage matters (RMA 4th Schedule).

### 3 Physical environment and setting

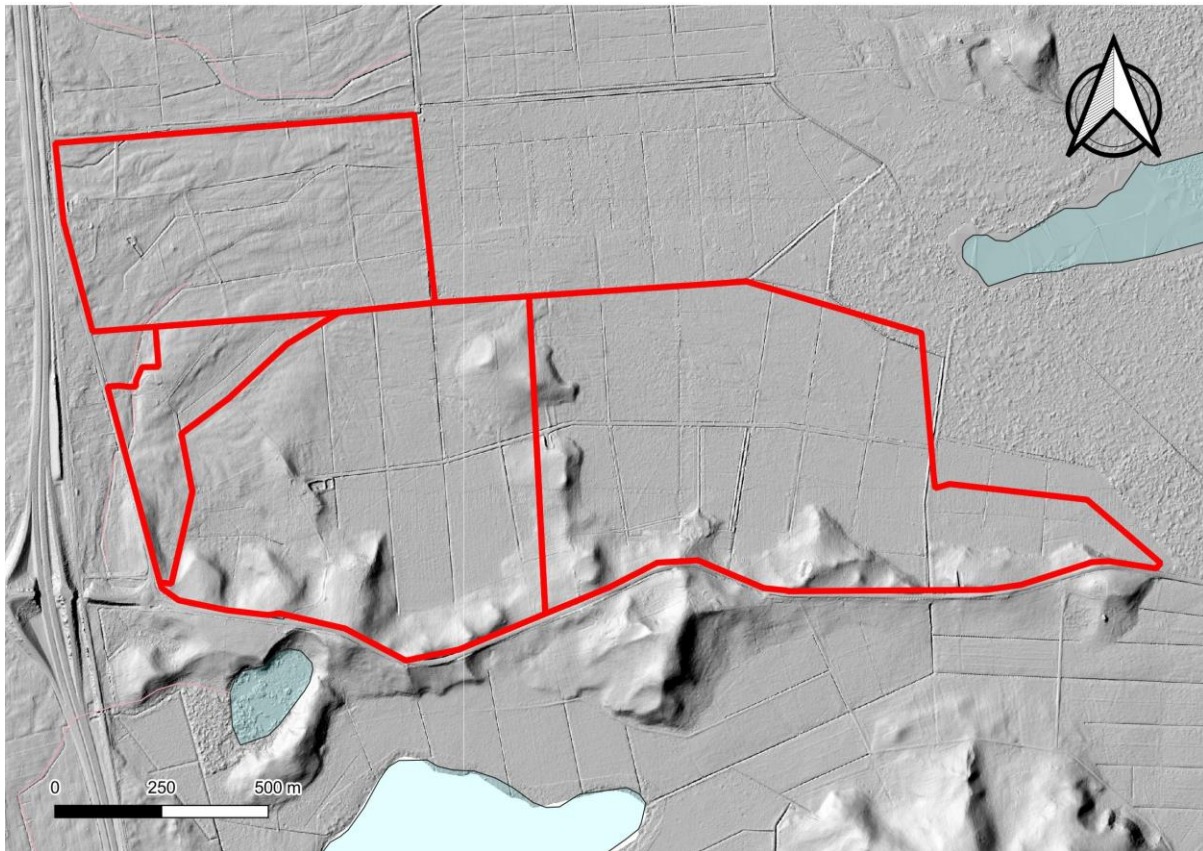
The proposed development area lies on circa 175 hectares. It is bounded by Tahuna Road in the south, Lumsden Road in the west and Balemi Road in the north. To the east is Lake Rotokawau and Lake Waikare and to the south Lake Ohinewai. Most of the proposed development is low lying former swamp comprised of peaty topsoil. A series of ridges originating in the west and south extend into the property (Figures 4–5).



Figure 4. New Zealand soil classification for the proposed development area. Approximate location is denoted by blue ellipse (Source: Landcare Research).

In general, the landform of the Waikato local to the development area can be characterised as low hill-country with flat wet areas (Figure 4). Soils identified in the area by Landcare Research are poor to very poorly draining soils that arise on hills and surrounding lower elevations (Figure 4). Based on the Landcare Research soil maps expected soils types are classified as orthic granular (NO) on the higher elevations (material developed from weathering of ancient volcanic material) and humic organic (OH) on the lower elevations/flats (formed by the remains of decomposed plants and forest litter, can be referred to as peat). Several lakes and the Waikato River are located close to the proposed development area.





*Figure 5. Hillshade model derived from LIDAR data of the proposed development area (Source: WRC).*

In Figure 5 it is possible to distinguish the ridges from the flatter former swamp areas. In the northwest the landscape is slightly undulating. Lakes Ohinewai and Rotokawau are visible in the image.



## 4 Recorded archaeological sites

A search of the NZAA online database ArchSite was undertaken to identify any archaeological sites either on the proposed development area or in the vicinity. Table 1 below shows archaeological sites within 2–3 kilometres of the proposed development area (Figure 6 & Table 1).

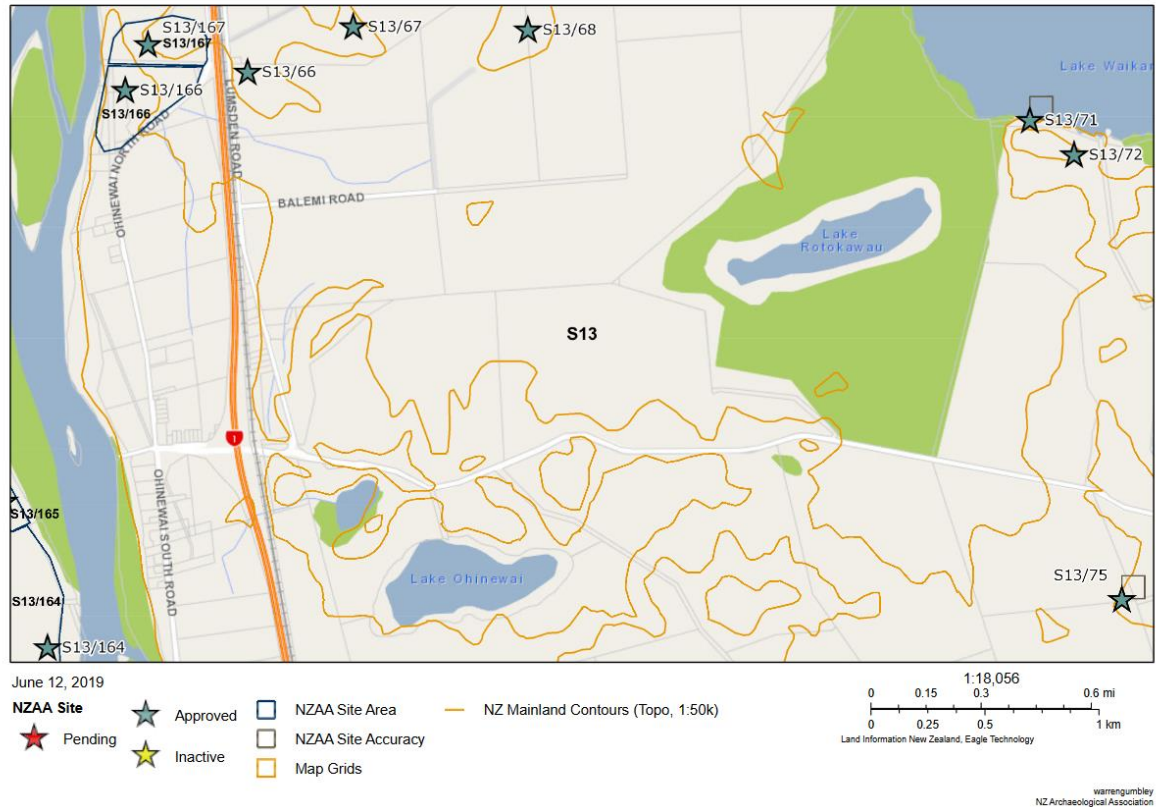


Figure 6. Recorded archaeological sites in the vicinity of the proposed development area (Source: NZAA ArchSite).

Table 1. Archaeological sites near the proposed development area (Source: Archsite).

NZAA ID	Description	NZTM E	NZTM N
S13/66	Midden	1791067	5850279
S13/67	Midden	1791531	5850478
S13/68	Pits/Terrace	1792297	5850465
S13/71	Midden	1794498	5850069
S13/72	Pits/Terrace	1794692	5849918
S13/75	Midden	1794902	5847969
S13/166	Borrow pits	1790630	5850400
S13/167	Borrow pits	1790530	5850200

## 4.1 Previous archaeological surveys

### 4.1.1 Foster, R. 1983

An archaeological survey for proposed opencast and underground coalmines was surveyed archaeologically. Thirteen archaeological sites were identified during the survey including midden, pit/terrace, a find spot and a historic site (Foster 1983). None of the sites identified in Fosters report reside in the proposed area of development outlined in this report.

## 4.2 Possible pā site

It was stated to Warren Gumbley during a meeting with local Iwi that there is a pā site located on the south side of Tahuna Road bordering Lake Ohinewai (Warren Gumbley pers. comm. 29 May 2019). The location is a promontory on a north south alignment (Figures 7-8). This site is currently unrecorded in the national archaeological site database (Archsite).

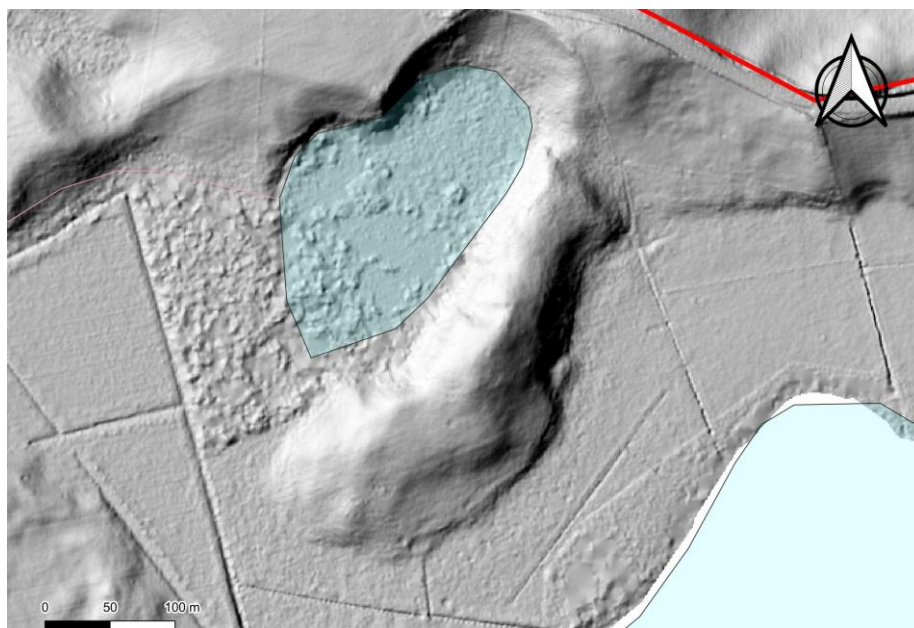


Figure 7. Possible pā site located on ridge between Lake Ohinewai and another small body of water (Source: WRC).



Figure 8. Aerial photograph from 1940 series (SN155\_A\_7) that shows the location for the pā (Source Retrolens)

## **5 Methodology**

### **5.1 Historical survey plans and aerial photography**

A search of relevant survey plans was conducted to determine if there is any reference to any Māori occupation within the proposed expansion area. Aerial photographs from the 1940s series to more modern series were also examined to determine if land use has changed over time.

### **5.2 Walkover survey**

A walkover survey was conducted by Matthew Gainsford and Dennis Green of W. Gumbley Ltd 28–29 May 2019 of the proposed development area. Survey concentrated on areas determined most likely to have associated archaeological features/sites. It concentrated therefore on ridges and higher elevations within the proposed footprint. Although the higher elevations were a focal point, all of the land for the proposed development area was surveyed.

Walkover survey included: a visual inspection of the area, soil testing of paddocks and ridges with a 50 millimeter hand-held auger and examination of drain cuttings. The general area was photographed.

## **6 Results**

### **6.1 Survey plans and aerial photography**

An examination of historic survey plans in Quickmaps did not identify any notations of Māori occupation within the proposed expansion footprint. The 1940s aerial photography series and following showed land use as being primarily swamp and pastoral grazing. There is one annotation to a possible early farm in the ML 13102 plan called Armitage Farm.

#### **6.1.1 HNC SO 404 I\_1-2**

SO 404 I\_1-2 (probably dated to 1866) does not show any occupation within the proposed development area. There are however notes describing the landscape. Most of the area is noted as having high ti tree (manuka) and flax as well as multiple areas of swamp. An annotation east of the development area is labelled as ‘Large swamp ending in lake’, most probably Lake Rotokawau. This swamp represents the low lying areas of the proposed development area that continue eastward to Lake Waikare. The road is labelled ‘Road to Armitage farm’ which lies to the north (Figure 9).



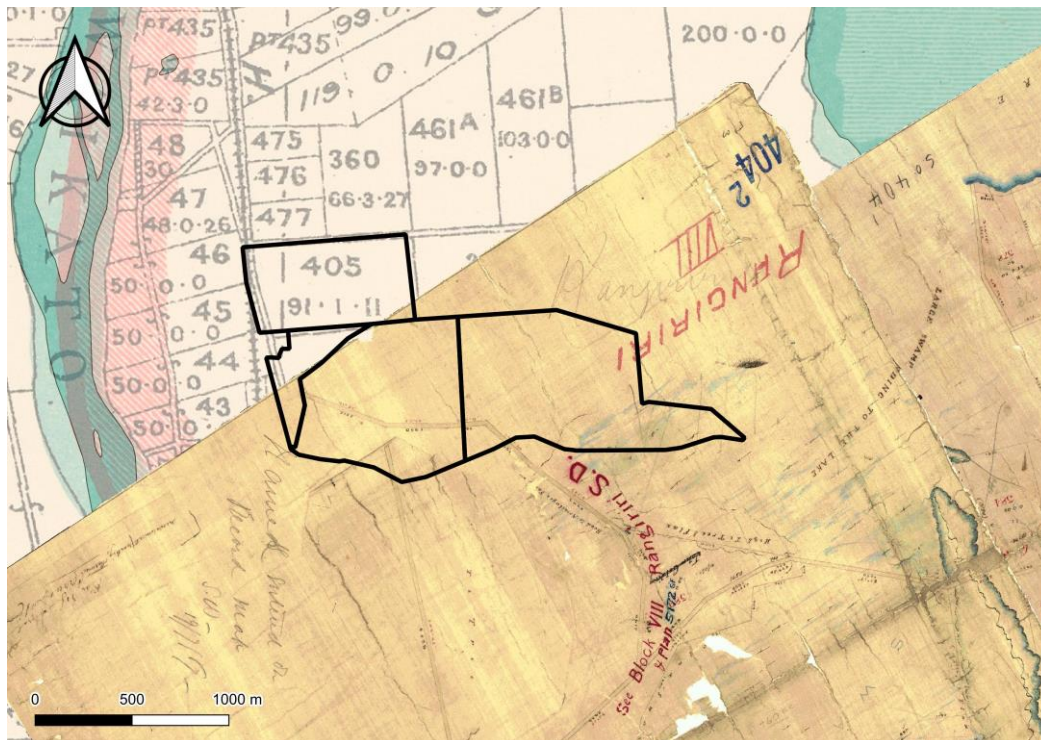


Figure 9. Plan showing lots near Lake Waikare. Parish of Taupiri (1866?) (HNC SO 404 I\_1-2) (Source: Quickmaps).

### 6.1.2 HNC SO 400 I\_1

There is no occupation or annotations on the survey plan within the proposed development area; surrounding land has however been divided up into parcels. It appears that most of the landscape is still in native bush, mostly ti tree and flax. Within the proposed development it is still swamp that dominates. To the south and west of Ohinewai Lake two recreation reserves are labelled (Figure 10).

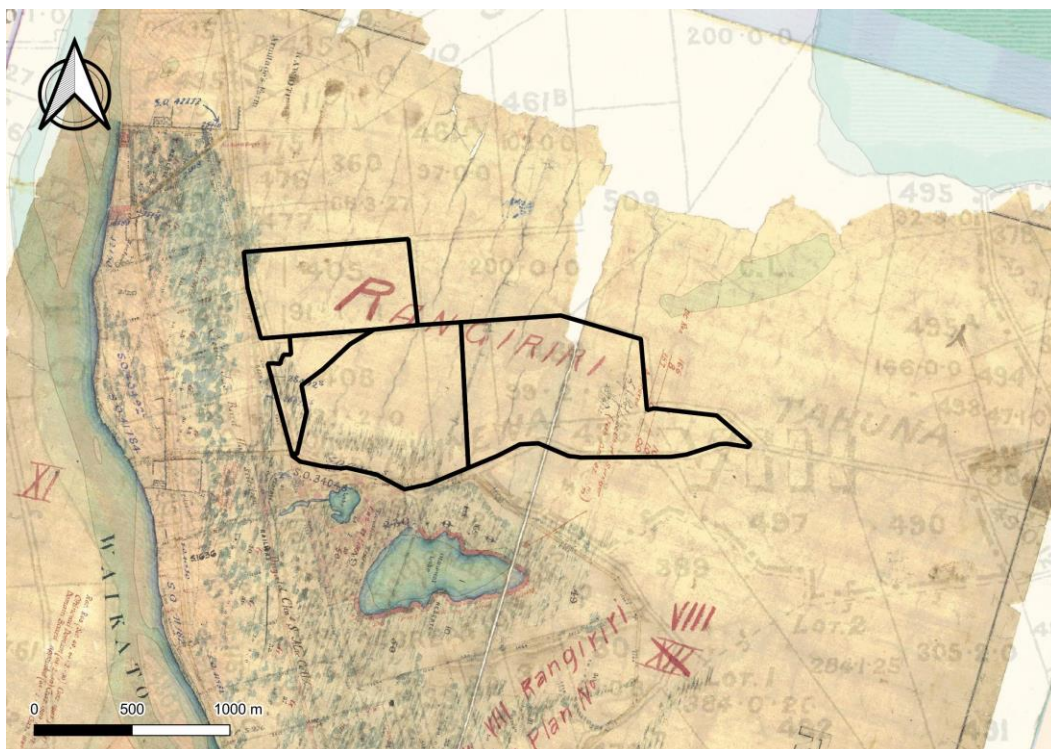


Figure 10. Plan (1866) showing detail surrounding the proposed development area. HNC SO 400 I\_1 (Source: Quickmaps).



### 6.1.3 ML 13102 South Auckland (undated)

Based upon ML 13102 it can be determined that the area was still swamp. To the north of the proposed development area the location of Ambury Farm is identified (Figure 11).

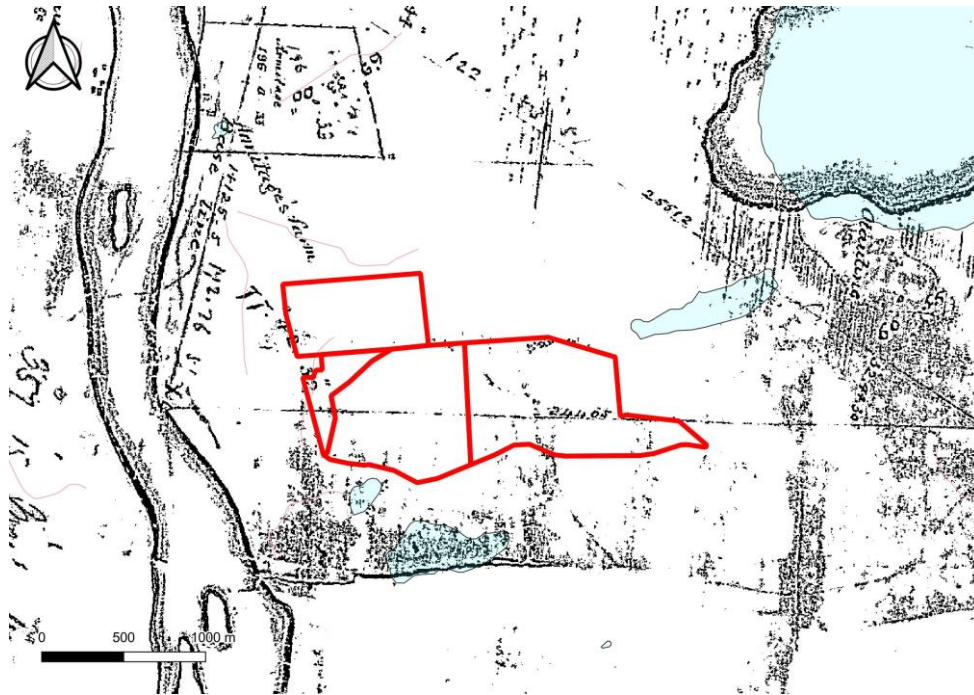


Figure 11. Survey plan from the Māori Land Court showing the surrounding area (ML 13102 South Auckland undated) (Source: Quickmaps).

### 6.1.4 SN192 (1940) and SN164 (1977)

Historic aerials were analysed to determine if land use and associated structures could be visualised (Figures 12–13).



Figure 12. Aerial photograph from the 1940 series (SN192\_291\_38). The landscape has been partially drained and is being used for pastoral grazing (Source: Retrolens).



*Figure 13. Aerial photograph from the 1977 series (SN164\_L\_6). Land usage has not changed since the 1940s being, that is, as pastoral grazing. More of the land has been drained since the 1940s (Source: Retrolens).*

## **6.2 Results from walkover survey**

Soils within the lower peat flats were a dark humus soil (black) overlying a sandy pumice B-Horizon (light grey to light brown). Within the peat flats on raised areas the B-Horizon was comprised of pumice soil, this is likely to be remnants of the Taupo Pumice Alluvium (TPA) (Figures 14-15).



*Figure 14. Photo that shows the low-lying (flat) landscape and the ridges to the south.*



*Figure 15. Auger sample of the soils from the swamp area.*

Soils of the surrounding ridges/hills were formed on ancient weathered volcanic deposits. These were Hamilton clay loam/Kainui clay loam and are deemed to be moderate to poorly draining (Figures 16–17). These soils are generally unsuitable for Māori horticultural practice.





*Figure 16. Photo that shows ridges looking down on the flatter swamp areas.*



*Figure 17. Looking from a ridge across to Ohinewai Lake south of the proposed development area..*

According to the landowner Graham Bowers, he has not seen any shell or other poteantial archaeological deposits on his property. He also stipulated that the low lying areas still occasionally flood to a depth of circa 75–100 centimetres (Graham Bowers pers. comm. 29 May 2019).

Within the proposed development area nothing of archaeological interest was identified during the walkover survey.



## ***7 Constraints and limitations***

This report is an assessment of the impacts of Ambury Properties proposed development on archaeological values. There are no statements on the cultural significance of the project area nor are the views of tangata whenua represented in this report.

Identifying features within the landscape is based on surface topography. This can be difficult and the level of confidence of recording sites can vary without associated archaeological information and/or features, for example, shell midden.

Statements made to the location and nature of recorded archaeological sites and their archaeological values are derived from published material including the New Zealand Archaeological Association (NZAA) ArchSite Database.

## ***8 Archaeological or other values***

### **8.1 Archaeological**

There are no known archaeological sites with corresponding values within the proposed development area. Within the wider landscape however there are registered finds of midden, pits/terraces and horticultural landscapes.

## ***9 Conclusions and recommendations***

No archaeological deposits were identified within the development area during the walkover survey.

It is possible that there are subsurface archaeological features and deposits within the proposed development area that leave no surface visible trace. However, we believe the potential for unidentified archaeological deposits is very low to nil.

## **10 References**

Foster, F. 1983. *Archaeological site survey: Ohinewai coal-field*. Unpublished report 1983/9. Historic Places Trust. Auckland.

### **Databases**

Waikato Regional Council. WRAPS 2012 and LIDAR 2007.

Quickmaps.

### **Websites**

ArchSite. 2019. New Zealand archaeological associations site recording database. < <http://www.archsite.org.nz/>>.

Landcare research. June 2019 <[https://soils-maps.landcareresearch.co.nz/?layername=fsl\\_nzsc&idcolumn=&idvalue=&mapfile=fsl&srs=EPSG:2193&Mode=QUERY&BBOX=1791256,5847392,1794256,5850392&X=1792756&Y=5848892](https://soils-maps.landcareresearch.co.nz/?layername=fsl_nzsc&idcolumn=&idvalue=&mapfile=fsl&srs=EPSG:2193&Mode=QUERY&BBOX=1791256,5847392,1794256,5850392&X=1792756&Y=5848892)>.

Land Information. June 2019. LINZ Data service. < <https://data.linz.govt.nz/>>.

Retrolens. June 2019. < <http://retrolens.nz/>>.