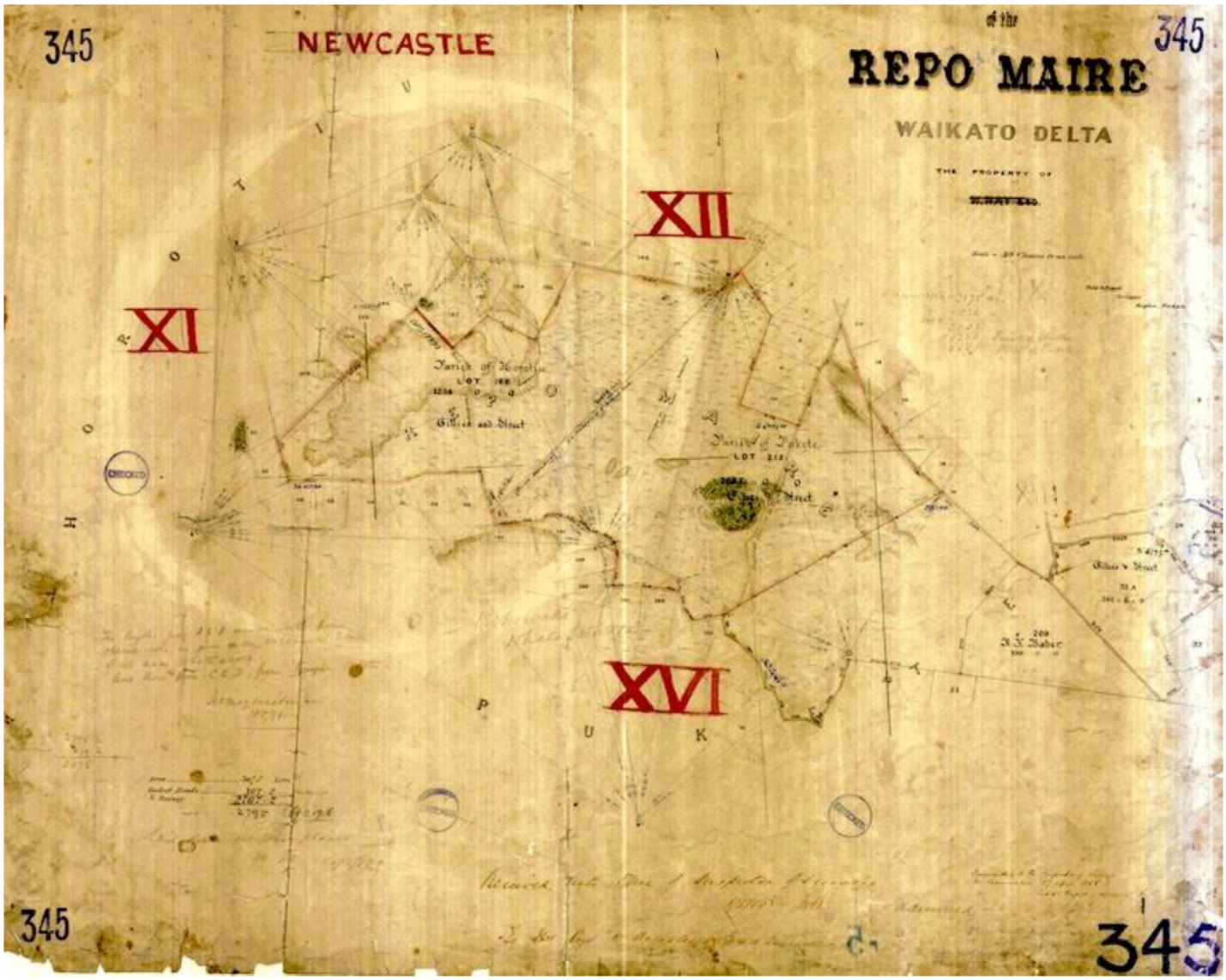
W GUMBLEY LTD.
ARCHAEOLOGISTS

Warren Gumbley
Principal/Director

PO Box 7108, Hamilton East, Hamilton 3247
cell s 9(2)(a) landline s 9(2)(a)
email s 9(2)(a)

Archaeological Assessment:

Stillhaven, Te Kowhai, Waikato



By Dr Warren Gumbley

July 2026

Introduction

Stillhaven Limited proposes **Stillhaven**, a thoughtfully planned mixed-use community on approximately 104ha of land located east of Te Kowhai in the Waikato District.

The project is intended to be progressed under the Fast-track Approvals Act and will require land use and subdivision consents from the Waikato District Council, together with regional resource consents from the Waikato Regional Council. The development is proposed to integrate with the Council's reticulated infrastructure networks, supporting the efficient delivery of services and long-term growth for the area.

Stillhaven will provide a significant contribution to meeting the Waikato District's housing needs by delivering approximately **700 new homes** across a range of housing typologies, alongside a retirement village comprising approximately **200 independent living units** and associated support facilities. This diversity of housing will provide opportunities for people at different life stages to remain within the local community.

The development will also include approximately (up to) **1,500 m² of commercial floor space** across two neighbourhood centres, providing convenient access to shops, services and employment opportunities for residents while reducing the need to travel for everyday needs.

A key feature of the proposal is the creation of an integrated network of public open spaces, walking and cycling connections, enhanced waterways, stormwater management areas and ecological restoration. At the heart of the development will be a centrally located public reserve incorporating community-focused social infrastructure, creating a welcoming destination for recreation, community events and everyday social interaction for both new and existing residents of the wider Te Kowhai area.

The master-planned community has been designed to promote walkability, connectivity, and healthy lifestyles through an interconnected transport network, safe active-transport routes, attractive public spaces, and extensive landscaping. Environmental enhancements, including waterway restoration and ecological planting, will improve local biodiversity and contribute to the long-term health and resilience of the natural environment.

Development will occur in stages/sequence to ensure that housing, community facilities and infrastructure are delivered in a coordinated manner that aligns with servicing capacity and market demand. This staged approach will support the orderly growth of Te Kowhai while creating a vibrant, sustainable and inclusive community that delivers lasting benefits for both future residents and the existing local community.

The five affected allotments are:

- Lot 3 DP 349516,
- Lot 1 DPS 82042,
- Lot 3 DP 361630,
- Lot 3 DP 466665

- Lot 2 DP 466110

This report assesses the actual and potential archaeological values that are affected by the Stillhaven project.

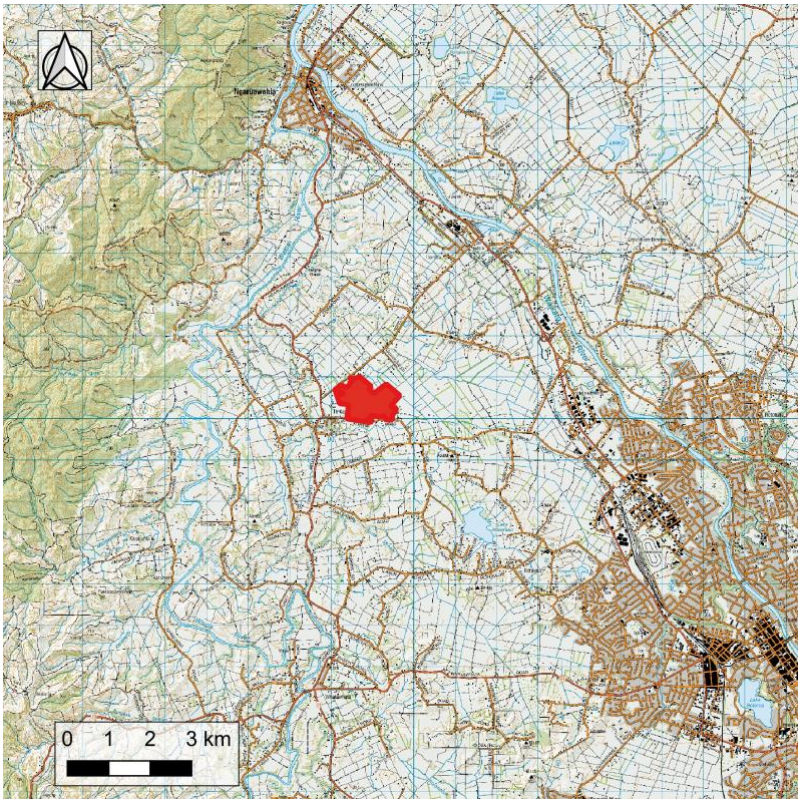


Figure 1. Map showing the location of the proposed Stillhaven development.

Statutory Requirements

Heritage New Zealand Pouhere Taonga Act (HNZPTA) 2014

The Heritage New Zealand Pouhere Taonga Act (HNZPTA) provides protection for all archaeological sites that meet the Act's definition, whether or not they are recorded. 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 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[1].

Any person who intends to carry out work that may modify or destroy an archaeological site must first obtain an authority from HNZPT. The process applies to sites on land of all tenures, including private, public and designated land.

Resource Management Act 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 Māori, 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 be places of significance to Māori.

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

Waikato District Plan

There are no provisions in the current Waikato District Plan regarding archaeological sites. The cultural heritage management provisions are encapsulated in the Sites and Areas of Significance to Māori (SASM) provisions. The project area is not located within a SASM.

[1] Such declarations usually pertain to important post-1900 remains with archaeological values.

Background

Landform

The project area lies approximately 3 km from the Waipā River to the north and west, and 4.5 km from the Waikato River to the east. It encompasses a largely flat landscape interrupted by two low ridges, with its drainage flowing to the west and north into the Waipā River. One of the ridges effectively divides the drainage into a northern sub-catchment and a southern one, with both catchments coalescing into a single catchment that flows north into the Waipā River.

Soil survey information from the 1930s shows that most of the project area is divided between Te Rapa Series and Kaipaki Series soils, with two ridges of Horotiu Series soils and isolated areas of Horotiu Series soils in the north-eastern part of the project area. Te Rapa Series soils are situated at a slightly higher elevation than Kaipaki Series soils.

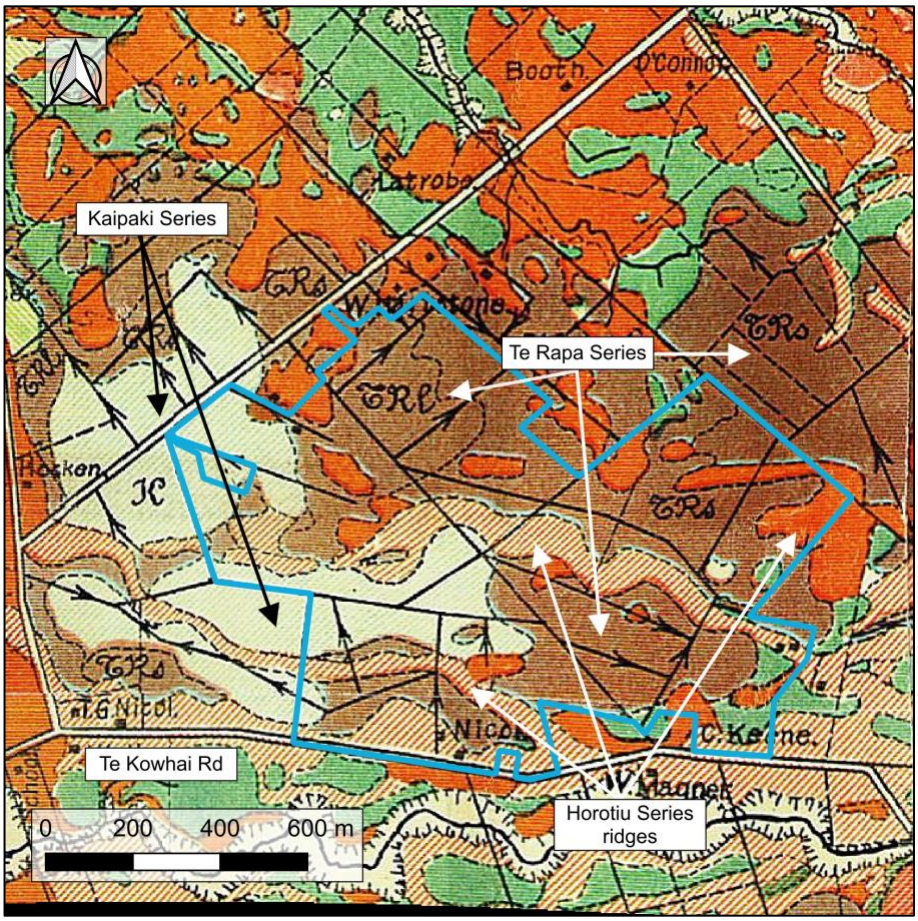


Figure 2. Part of the *Soil Map of Parts of Newcastle & Komakorau S.D.s, Waipa County* (1935) showing the Stillhaven project area boundary marked in blue.

Te Rapa Series soils have a dark grey or dark brown peaty loam topsoil typically 15 to 20 cm thick, although in many places the peat has decayed substantially (Reece Hill, pers. com.). The subsoil varies, with the soil map showing the sandy subsoil variant predominating within the project area.
Kaipaki Series soil is a peat soil that typically overlies fine-textured alluvium (silt or clay). Kaipaki soils are often found around the margins of swamps (e.g. Rukuhia Swamp) or in

deeper depressions on the Hinuera surface. Typically, the peat is 1-1.5 m deep, though it becomes thinner and shallower towards the edges, reflecting the profile of the underlying sediments. Like Te Rapa soils, the topsoil has steadily humified following extensive drainage (Bruce 1979, Grange et al. 1939).

As noted above, the Horotiu soils are conspicuous in the landscape, forming elevated ridges 1-1.5 m higher than the Te Rapa and Kaipaki soils. The 1935 soil map shows that the two ridges are composed of Horotiu coarse sandy loam, with other areas of Horotiu sandy loam. Unlike the other two soil classes, Horotiu soils are well-drained, with a brown topsoil overlying a yellowish-brown tephragenic B horizon, which in turn overlies sandy, gravelly alluvium of the Hinuera Formation. In the coarse sandy loam, the B horizon is sandier and thinner than in the sandy loam (Bruce 1979, Grange et al. 1939).

Historical Survey Plans and aerial photographs

Three early survey plans refer to Te Kowhai, SO 53, SO 54, and SO 345. Of these, SO 53 and SO 345 include the Stillhaven Project area. Both plans show the project area at the western end of the Repo Maire, a large, now fully drained wetland. Both plans also show most of the area covered by vegetation, but neither includes helpful annotations identifying the plant species. The motif describing the vegetation around the project area differs from another motif that clearly shows groups of standing trees and is also used on the plan. SO 54 shows several areas of vegetation to the south and west of the project area, annotated as “flax, ti-tree, and scrub”, “ti-tree”, and “flax and ti-tree”, which likely summarises the vegetation in the project area.

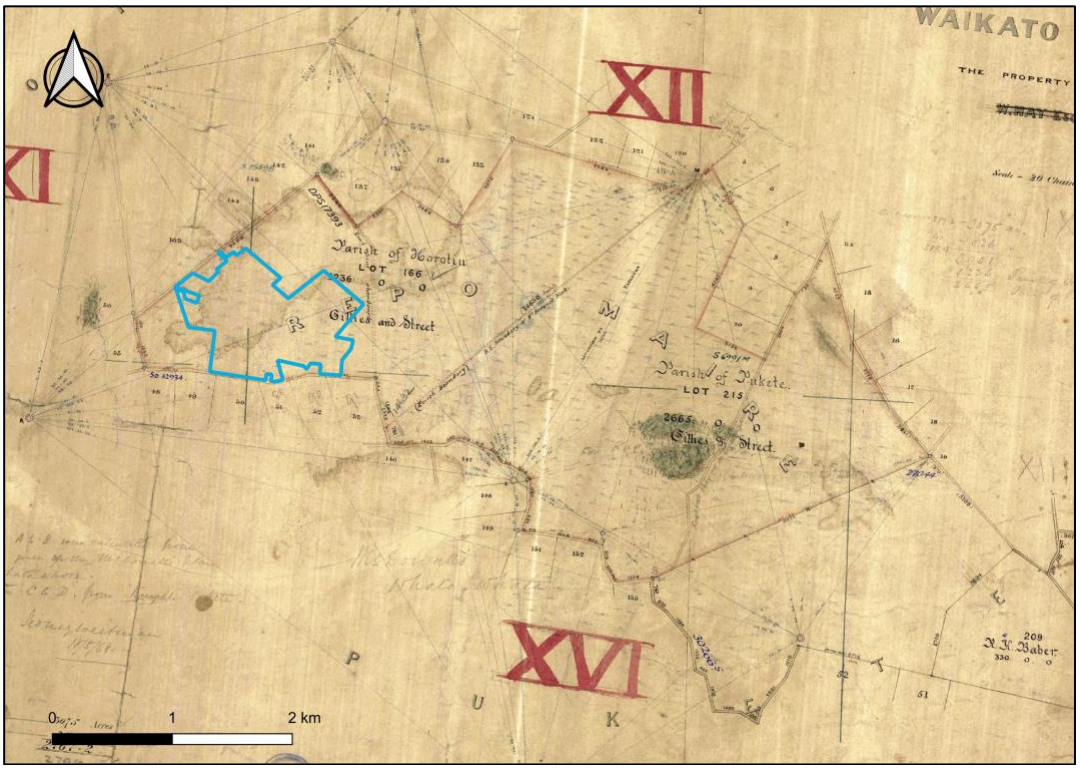


Figure 3. Part of the survey plan SO 345 (*Plan of the Repo Maire, Waikato Delta*), showing the project area overlaid in blue.

In the 1941 aerial photograph[2], the project area is featureless apart from some hedges and shelter belts. The landscape is much the same in the 1963 photograph[3]; however, in this image, the ridges of Horotiu coarse sandy loam appear as sinuous, pale bands running east to west.

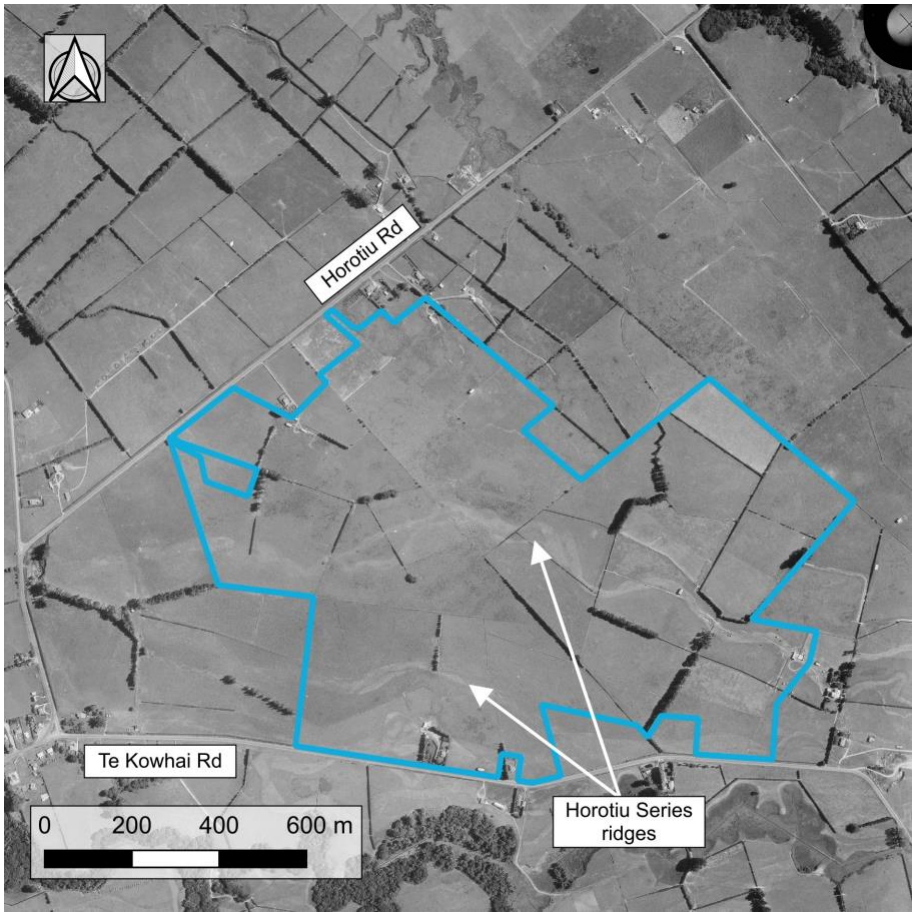


Figure 4. Part of SN1397/3279/13 (1963), showing the Stillhaven project area, with the pale elevated Horotiu ridges highlighted.

Distribution of archaeological sites in the inland Waikato

Archaeological site recording has been ongoing since the late 1950s, with data entered into the national database, the NZ Archaeological Association Site Recording Scheme. Approximately 1000 archaeological sites are recorded within the Middle Waikato Basin. Approximately 15% of these sites date to the post-European settlement period, and the remainder are associated with Māori occupation of the Basin. Approximately 21% of the sites in the Middle Waikato Basin are pā; most sites (~55%) are associated with Māori horticulture, and another 4-5% are occupation sites that might be generally termed kāinga.

[2] SN174/302/21.

[3] SN1397/3279/13.

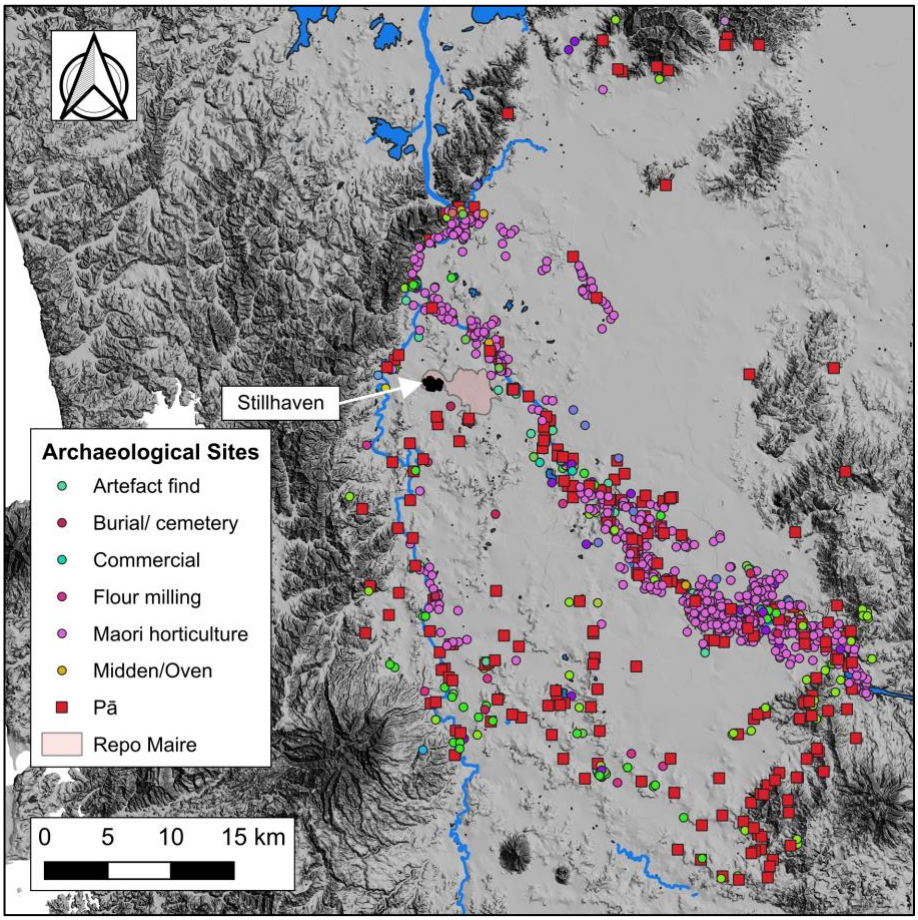


Figure 5. Map showing the distribution of recorded archaeological sites in the Middle Waikato Basin. The Repo Maire is shown as a pink polygon.

The archaeological sites are strongly clustered around the Waikato and Waipā rivers and, to a lesser extent, their tributaries and lakes. A study of the preservation of Māori horticultural sites within Waipā District for NZ Historic Places Trust found that 80% of such sites were within 1 km of the Waikato River (Gumbley & Hutchinson 2014). This finding may reasonably generalise beyond the study area. To some extent, pā follow this pattern, clustering along waterways, though some pā are on ridges overlooking the basin. Few sites are recorded that are remote from the two rivers and their tributaries. Between the Waipā and the Waikato River, there is a scatter of recorded sites. These are overwhelmingly pā, most of them focused on lakes or on navigable streams. In this zone, pā do not cluster on hilltops or ridges. The landforms in this area range from wetlands and semi-wetlands to hilly ridge systems. Scattered among this are small lakes that often have pā on their shores. The ridges will have provided useful communication routes through this landscape, but the soils associated with them are largely unsuitable for cultivation.

A resource-focused assessment of site distribution identifies places with the highest concentration or clustering of resources (e.g. cultivatable soil, eel (tuna) fishing, bird snaring, etc.). An early attempt at this by Cassels (1972a, 1972b), using locational analysis, identified lakes and cultivable soil near rivers as major desirable ecological zones because they maximise access to a variety of resources and ease transport along waterways. While, in many ways, Cassels' work was based on a range of assumptions in the absence of robust

archaeological data, with few archaeological sites recorded at that date, his conclusions have largely held if we ignore his proposed timelines.

Significant inland migration from the coast, particularly from Kawhia and Aotea Harbours, began around 1500 AD, with the construction of pā commencing a little later in the 16th century. The early pā were few, with an apparent hiatus of about a century before their proliferation began in the mid- to late 17th century (McBride 2025; McIvor 2024). After that, pā numbers grew rapidly until the early 19th century, when missionary activity contributed to a series of cultural changes that significantly reduced inter-hapū conflict. Evidence from the investigation of horticultural sites along the Waikato River shows that the Waikato Horticultural Complex began in the early 16th century and rapidly spread along the river, though it was initially widely dispersed (Gumbley 2021).

No archaeological sites are recorded within the Stillhaven project area. The nearest recorded archaeological site is S14/11, 1.5 km to the south, which records the discovery of a burial in a sand quarry. S14/8 is 2.2 km to the south and is a pā located on the north branch of the Ohote Stream. This pā is part of the small cluster of five pā around Lake Rotokauri. Otherwise, the archaeological sites cluster along the Waipā River, and are mostly pā. There is a particular cluster 2.5 km north-west of the project area, where the Waipā bends east. This is a group of pā and Māori-made soils associated with horticulture.

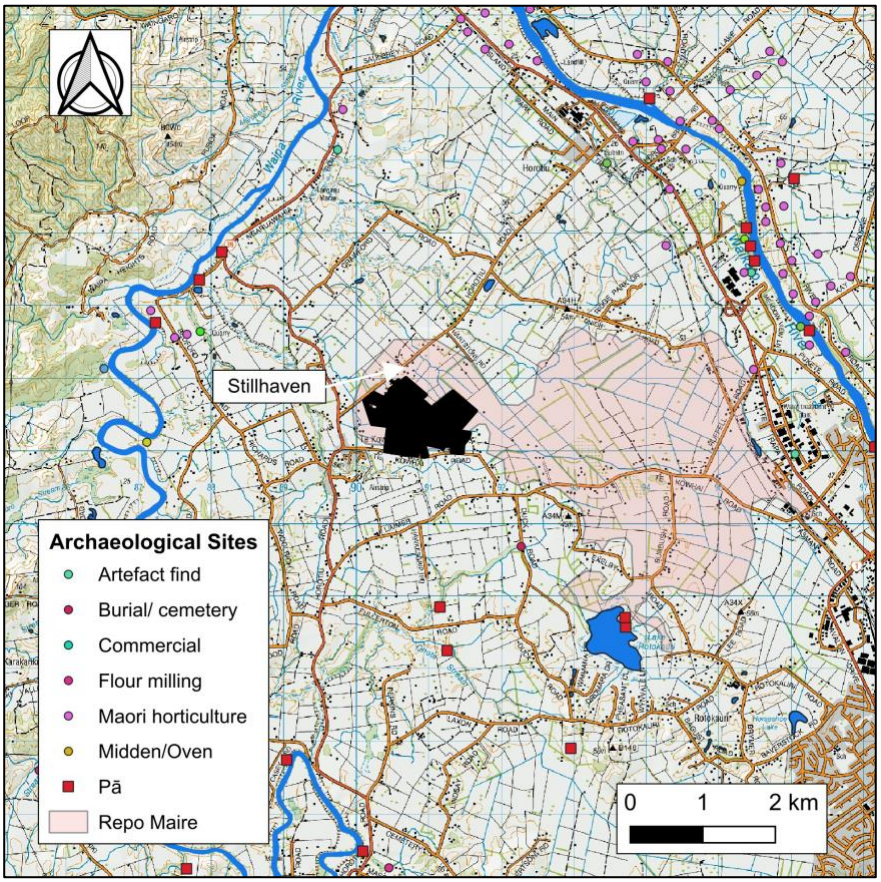


Figure 6. Map showing the distribution of recorded archaeological sites in the vicinity of the Stillhaven project (shown in black).

Site Inspection

A site inspection was carried out on 24 June 2026 in the company of Jo Kukutai (Ngāti Māhanga). Drawing on information from the Soil Bureau survey data, the inspection focused on areas with outcrops of the Horotiu Soil Series because these soils are sufficiently elevated to remain dry among the swampland.

Nine soil auger samples were examined. Several of these were located in paddocks that have been cultivated for maize. The topsoil (A-hz) was brown or greyish-brown and 15-20 cm deep on uncultivated soils and 18-50 cm in the cultivated soils. The B horizon varied from a yellowish-brown sandy silt to a coarse sandy silt. The interface between the B and C horizons was generally around 100 cm below the surface. Reddening of the B horizon was observed at most auger sites. This represented the deposition of mineral (iron) which normally occurs deeper, in my experience, in the upper part of the C horizon. The iron deposits were found at a depth of 40-50 cm below the surface, suggesting that the water table here was relatively shallow compared to other Horotiu soils remote from wetlands.

No obvious archaeological evidence was found. However, it needs to be borne in mind that only a part of the Horotiu soils within the project area were examined.

Assessment of effects on archaeology

No archaeological evidence has been identified within the project area. This report relies largely on desktop analysis but also incorporates a site inspection.

Evidence from the NZ Archaeological Association, which draws on over 60 years of archaeological site recording in the inland Waikato and was evaluated above, shows a very strong pattern: most sites are concentrated along the Waikato River and its tributaries. In its lower reaches, the Waipā River served as a subordinate focus for settlement. The primary difference between the two rivers in this area is the lower proportion of soils suitable for cultivation along the margins of the Waipā compared with the Waikato River. The economy of these landscapes appears to be strongly focused on crop cultivation, with associated pā and kāinga. Away from the rivers and their tributaries, a secondary focus is the lakes of the Middle Waikato Basin. In these environments, pā are found on the margins of lakes, usually on artificial mounds of varying heights, sometimes with other pā or occupation sites on streams linking the lakes to either the Waikato or Waipā Rivers. While some archaeological investigations have been conducted at these sites, most of this work was carried out 50 or more years ago (Bellwood 1971 & 1978; Shawcross 1968; Peters 1971). Consequently, the archaeology of these sites is understood only in limited ways, based on these old, albeit well-conducted, archaeological investigations. As a result, there is some appreciation of the structure of lake pā, but the economy of the communities living there is poorly understood. Based on the information to hand and assumptions informed by the known ecology, there is archaeological evidence of year-round occupation, with remains of both forest birds and waterfowl identified, along with a range of plant products from forests and lake edges (Bellwood 1978). We may also assume, based on the environment, that eels (tuna) would have formed a significant part of the economy. While we know nothing archaeologically about the pā on the streams linking the lakes to the rivers, it is likely that they focused on harvesting the annual eel migration and so may have been used seasonally.

The local landscape of the project area is drained swampland. We know from the early survey plans that the project area is located at the western end of the Repo Maire, a large wetland of approximately 1250 ha. The Repo Maire drained into three streams that flowed northward before coalescing and entering the Waipā River. The wetland would have been a significant resource for eels (tuna) and would have provided a plentiful harvest during the annual breeding migration, with eels likely to have been caught in pātuna in the lower reaches of the streams.

Conclusions

No archaeological sites are recorded in the national database within the proposed project area, with the nearest recorded site 1.5 km to the south. While the distribution of recorded archaeological sites can sometimes reflect the distribution of archaeologists, the long history of archaeological site recording in the Waikato, especially in the Middle Waikato Basin, means that the records, while almost certainly incomplete, have proven to be a robust reflection of the distribution of archaeological sites in the region and in the Middle Waikato Basin in particular. The data, therefore, strongly indicates that the project area falls outside the areas where archaeological sites would normally be expected. The natural history of the local landscape, where the project area comprised part of the Repo Maire wetland, further supports the absence of archaeological sites within the project area.

Because archaeology reflects human cultural activity, it is impossible to be categorical about the absence of archaeological remains. However, based on the available data, it is reasonable to conclude that there is very little potential for archaeological sites within the proposed Stillhaven project area. If archaeology is present, it is likely to take the form of a burial or other very localised deposits reflecting short-term activities. However, I considered finding these somewhat unlikely, and any risk can be accommodated using a standard accidental discovery protocol, which will be included in the substantive application.

References

Bellwood, P. 1971. Archaeological research at Lake Mangakaware, Waikato: A summary of results. *New Zealand Archaeological Association Newsletter* 14(3): 113–125.

Bellwood, P. 1978. Archaeological research at Lake Mangakaware, Waikato, 1968-1970. *Otago University Studies in Prehistoric Anthropology vol. 12; NZ Archaeological Association Monograph 9*, Dunedin.

Bruce, J. G. 1979. Soils of Hamilton City, North Island, New Zealand. New Zealand Soil Survey Report 31. New Zealand Soil Bureau, Department of Scientific and Industrial Research, Wellington, New Zealand.

Cassells, R. 1972a. Human ecology in the prehistoric Waikato. *Journal of the Polynesian Society*, 81: 196–247.

Cassells, R. 1972b. Locational analysis of prehistoric settlement in New Zealand. *Mankind*, 8: 212–222.

Grange, L.I., Taylor, N.H., Sutherland, C.F., Dixon, J.K.; Hodgson, L., Seelye, F.T., Kidson, E., Cranwell, L.M., Smallfield, P.W. 1939. Soils and agriculture of part of Waipa County. *New Zealand Department of Scientific and Industrial Research Bulletin* 76.

Gumbley, W. 2021. The Waikato horticultural complex: An archaeological reconstruction of a Polynesian horticultural system. Unpublished PhD thesis, The Australian National University.

McBride, R. 2025. The chronology of Waikato pā: A spatio-temporal investigation of pā in the Middle Waikato Basin. Unpublished PhD thesis, University of Waikato.

McIvor, I. 2024. An interface of mātauranga Māori and archaeology to generate whakapapa of pā tawhito. Unpublished PhD thesis, University of Waikato.

Peters, K. 1971. Excavations at the Lake Mangakaware Site 1, N65/28. *New Zealand Archaeological Association Newsletter* 14(3): 126–140.

Shawcross, W. 1968. The Ngaroto Site. *New Zealand Archaeological Association Newsletter* 11(1): 2–29.