

**BEFORE THE WAIPĀ DISTRICT COUNCIL**

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of Proposed Plan Change 20 – Airport Northern  
Precinct Extension to the Operative Waipā  
District Plan

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**STATEMENT OF EVIDENCE OF MATTHEW PERCY GAINSFORD**

**(ARCHAEOLOGICAL)**

**28 FEBRUARY 2023**

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**Counsel acting:**  
JR Welsh  
ChanceryGreen  
223 Ponsonby Road  
Ponsonby, Auckland 1011



## **INTRODUCTION**

### **Qualifications and experience**

1. My name is Matthew Gainsford.
2. I hold a Bachelor of Arts in Archaeology and Ancient History from the University of Auckland (2000) and a Masters of Maritime Archaeology from Flinders University, Adelaide (2005). I have been working as an archaeologist since 2003. I am currently a senior archaeologist with W. Gumbley Ltd in Hamilton. I have held this role since 2017 and have significant experience in the archaeology of the Waikato with a broad knowledge in compiling archaeological assessments as identified in this evidence, for example: the Southern Links Roothing Project - South Hamilton; Whatukooruru Drive Roothing Project – South Hamilton, Peacocke Structure Plan – South Hamilton, Rangitahi Subdivision – Raglan, Kawhia Water Main Replacement Project and archaeological assessments for numerous subdivisions in Ngaruawahia, Taupiri, Hamilton and Cambridge and the greater Waikato.
3. I am familiar with the application site and the surrounding locality. I have read the relevant parts of: the application; submissions; further submissions and the Section 42A Report.

### **Involvement in Proposed Plan Change 20**

4. I have been engaged by Titanium Park Limited (“TPL”) and Rukuhia Properties Limited (“RPL”) to prepare evidence for Proposed Plan Change 20 (“PC20”). I was the author of the two Archaeological Assessments of Effects which were submitted with the PC20 request.<sup>1</sup>
5. I have visited both the TPL and RPL sites and the locality on three separate occasions during 2021 - once during a site visit and twice to undertake archaeological testing.

### **Code of Conduct**

6. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note (2023) and I agree to comply with it. In that regard, I confirm that this evidence is written within my expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

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<sup>1</sup> Archaeological assessment of effects - Proposed development: Titanium Park - Appendix 11 to the PC20 Request; and Archaeological assessment of effects - Proposed development: Family Holdings Ltd – Appendix 12 to the PC20 Request.

## **SCOPE OF EVIDENCE**

7. In my evidence, I provide a summary of the two assessments I undertook for the TPL and RPL sites. In the below evidence I outline the methodology employed for both the assessments and the results from my research and field testing. Based on the results of the assessment I can confirm that no archaeology was identified within either site. I have recommended that an accidental discovery protocol (“ADP”) be employed during the project if any unrecorded archaeology may be encountered. Although I have reviewed submissions and the s42A officers’ report, there are no matters that require my comment.

## **EXECUTIVE SUMMARY**

8. In 2021, I conducted archaeological assessments for two sites: the TPL site and the adjacent RPL site. My assessments included a desktop review of relevant historical documentation and a field survey with testing at both sites. The TPL land is used for maize and ryegrass silage, while the RPL land has previously been for maize production and crop testing. Based on available historic plans, and aerial photographs both sites were originally in native bush and swamp. Since draining and clearing there is only evidence of successively more intensive land use. No archaeology has been recorded within or adjacent to either site. Both sites were visited and archaeologically tested (using either machine excavation or auger sampling). No archaeology was identified at either of the sites. Therefore, there was no requirement for further archaeological investigation. An archaeological authority (HNZPTA 2014) is not required for either site at the time of development although ADPs should be proffered at the consenting stage.

## **SUMMARY OF REPORTS**

9. The management of historical and cultural sites and landscapes are controlled by the Resource Management Act 1991 (“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 2014 (“NZHPT”). This Act prevents archaeological sites from being destroyed or modified without an authority from Heritage NZ.
10. The purpose of the HNZPT is to promote the identification, protection, preservation, and conservation of the historical and cultural heritage of New Zealand (HNZPT section 3). Emphasis is placed on avoiding effects on heritage.

11. The HNZPT 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 the HNZPT. It is illegal to destroy or modify archaeological sites without an authority to do so under the HNZPT.
12. A desktop study of the historic records including historic images and historic survey plans was undertaken to determine historic and current land use and ownership. Plans and aerials can also help to identify changes in vegetation and topography within an area. Historic survey plans often have annotations to prior ownership, past land uses or vegetation. All the above sources allow further insight into the archaeological landscape and how it has changed over time.
13. Historic survey plans (Quickmap) show that the two sites were, after confiscation by the Crown in 1864, provided as allotments for men of the 4<sup>th</sup> Waikato Regiment. Subsequently these were purchased by later owners and larger homesteads were formed within the area. There are very few historic survey plans relevant to the proposed development area. Two plans: an historic SO map from 1885 (SO1385 South Auckland) and a modern depiction of historic research were identified (Raynes 1981). These plans confirm successive ownership and amalgamation into larger land holdings. Both sites were eventually encapsulated into the Gribble, Haslington and Bell homesteads depicted in Raynes (1981) book 'South of West Hamilton'.
14. Historic survey plans also show that the area was originally covered largely by either 'Ti Tree' (manuka) scrub or swamp (which has since been drained). Historic aerial images (Retrolens) show that the general area was used mainly for pastoral grazing prior to its use for crop and silage production or crop testing. The smaller hill has a structure adorning it, likely the current house.
15. The New Zealand Archaeological Association's ("NZAA") site recording database (Archsite), the Heritage List and Waipa District Plan were used to identify whether any archaeological or historical sites have been recorded within either of the two sites. Archsite was accessed to determine the nearest recorded sites to the TPL and RPL sites. There were no recorded archaeological sites within either the TPL or RPL sites. Neither the Heritage List nor the Waipa District Plan identified any heritage sites within either of the TPL or RPL sites. The closest archaeological sites (which are identified as borrow pits – Māori horticulture) are outside of the TPL and RPL sites situated closer to the Waikato River.

16. I visually inspected both sites during fieldwork. Visual inspection allows ground truthing of areas identified through desktop studies and visualises the landscape. Variation in land elevation and site location play a significant role whether archaeology is present or not. This is further bolstered by soil type variability (as discussed below). Also, archaeological sites often leave traces of their whereabouts through modification of the landscape, for example, terracing, storage pits, or defensive structures. Based on the topography there was no evidence for any modification at either site that would suggest an archaeological site.
17. Soil type, consistency and permeability is another method used in the assessment process to determine the possibility for archaeological sites, deposits or features are located within a subject area. Archaeological sites can be identified by this method since certain soil types are more suited to Māori horticulture and occupation, and others are less suited or not suitable. The process to determine soil type is usually by way of auger/test pit sampling or test trenching to allow the soil profile to be sampled at multiple locations across an area. This was completed as part of the fieldwork stages at both sites. Sites were visually inspected, and ground tested archaeologically to identify any potential for unrecorded archaeology. The surrounding landscape (including both areas) is flat lowlands (of varying elevations) punctuated with two hills, a larger and smaller.
18. Within the TPL land two hills were tested with archaeological test trenches by excavator since they were deemed, based on their elevation and viewshaft, as potential areas for archaeology. Test trenching allows a greater area to be examined and provide a wider visualisation of the soil profile and to identify the presence or absence of archaeology. Test trenches showed both natural hillsoils and modified areas from earthworking. Modern earthworks have included flattening of the hilltop and to the construction of an effluent pond and its associated services.
19. The RPL was tested using a 25 mm soil auger. Testing identified that soils varied across the sites from more freely draining loam to poorly draining silt.
20. Within the TPL site soils on the hills are not conducive to Māori horticulture being composed of hill soils that are poorly draining and no evidence for occupation was encountered. Within RPL site soils varied from freer draining in the south to poorly draining soils in the north. The northern area of the RPL site has been identified in historic survey plans as a former, now drained, swamp. This is corroborated by the landform and the soil profiles. Soil profiles visible in auger profiles were wet and deep being identified as poorly draining silt loam.

21. Another feature of soil profile testing is to determine whether charcoal concentrations or Māori-made soil horizons are present. Charcoal indicates both initial forest clearance and occupation, and made soil horizons are indicative of Māori horticulture (and likely associated occupation) and are obvious deposits not present in the natural environment. Māori horticulture is a common archaeological site type that occurs throughout the Waikato and includes features such as, for example, borrow pits, made soils and possible occupation areas. These sites are however, usually constrained to river margins and areas of suitable soil type. Made soils were created by Māori through the excavation of deeper layers of sand and gravel located under the loams and clays of the Waikato. This was then added to the topsoil to create a growing medium or in the creation of growing mounds for kumara and other tubers. Made soils are conspicuous and are easily identifiable through archaeological testing. None of the examined soil profiles indicated the presence of made soils or other archaeology. As a result, there is no evidence for any unrecorded archaeology within either site. The only modification identified was modern in nature, that is, non-archaeological.

#### **ACCIDENTAL FINDS**

22. The evidence presented here is based on archaeological best practice for the compilation of archaeological assessments. Documents used, and field methodology employed are standard. There is always the possibility for accidental finds within the landscape but the risk for this has been assessed as very low. If accidental finds were to occur, then established protocols and procedures set out by Heritage New Zealand would be used to mitigate any effects to archaeology. An archaeological authority would then be required for works affecting archaeology.

#### **RESPONSE TO SUBMISSIONS RAISED**

23. No submissions are related to archaeology.

#### **RESPONSE TO THE SECTION 42A REPORT**

24. There are no matters in the section 42A Report that require comment.

#### **CONCLUSION**

25. Based on the assessment of the TPL and RPL sites it is determined that there is no evidence for archaeology within either. The locations are remote from the Waikato River or other water courses and the closest archaeological sites are Māori horticultural sites;

these sites tend to be clustered close to the waterway. The land surrounding the two hills (TPL and RPL) is low lying and has historically been covered in 'ti tree' (manuka) scrub and former swamp; it is now used for maize and ryegrass silage (TPL), maize production and crop testing (RPL). Significant modification of the landscape has also occurred through the construction of structures, crop production/ploughing and creation of ancillary structures such the flattening and construction of an effluent pond on the larger hill. The sites assessed by W. Gumbley Ltd have been identified archaeologically as very low risk areas. This assessment is based on local knowledge, historic information, landform, soil profiles and archaeological field testing.

26. Due to the nature of the landscape, it is highly unlikely that archaeology exists within the remaining low lying surrounding landscape. No archaeology is recorded within either site and there was no archaeology identified during the assessment process. The likelihood for accidental finds is also assessed as very low. It is not necessary that an archaeological authority be applied for before the commencement of works but an ADP (with the appropriate protocols and procedures) should be in place for the event of accidental finds.

**Matthew Gainsford**

W. Gumbley Ltd

28 February 2023