Precinct 4 Project: Archaeological Assessment of Effects

Feilding, Manawatu
Prepared for Manawatu District Council
Contact Details

Name: Emily Cunliffe
Opus International Consultants Ltd
Wellington Environmental Office
L10, Majestic Centre, 100 Willis St
PO Box 12 003, Thorndon, Wellington 6144
New Zealand

Telephone: +64 4 471 7000
Mobile: +64 21 466 895

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Prepared by: 

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Emily Cunliffe | Archaeologist

Reviewed by: 

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Sheelagh Conran | Principal Archaeologist
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1. Introduction

1.1. Purpose of this Report
Opus International Consultants Limited (Opus) were commissioned by Manawatu District Council to prepare an archaeological assessment report for the proposed District Plan change for Precinct 4, a proposed urban growth area for future residential development in Feilding (Figure 1).

The purpose of this report is to identify the probability of archaeological sites being within the proposed Precinct 4 development area, and assess the value of these sites and how the values may be affected. This report provides recommendations for managing / mitigating the effects this development may have on archaeological values. All recommendations in this report are made in accordance with statutory requirements.

Figure 1: Location of the proposed project area.

1.2. The Proposed Development Area
The proposed Precinct 4 area is situated to the north of the Feilding town centre, between Makino Road, Reid Line, and Port Street (Figure 2). The area will be the site of a new road layout and the development of residential and commercial buildings, as well as recreational areas. The Makino Stream runs through the western side of the area.

The area is mainly pasture. There are a small number of houses within the area which are mainly located along Roots Street and Port Street.
1.3. Constraints and Limitations

The NZAA ArchSite was the primary resource used for identifying recorded sites in the area. It is important to note that the archaeological site location data in ArchSite should be regarded as a guide only, and is generally based on reconnaissance rather than on accurate survey information. The coordinates of many of the sites in the database are of variable accuracy. In addition to this, the areal extents for many recorded sites are poorly defined.

This report does not include an assessment of Māori cultural values. Statements are made as to the location and nature of archaeological sites and their archaeological values. There are no statements on the cultural significance of the project area nor are the views of tāngata whenua represented in this report. An assessment of cultural significance will not necessarily correlate with an assessment of the archaeological significance of the area.

2. Statutory Framework

There are two main pieces of legislation in New Zealand that control work affecting archaeological sites. These are the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) and the Resource Management Act 1991 (RMA). In addition to these the Manawatu District Council District Plan has an objective to protect historic built heritage.

2.1. Heritage New Zealand Pouhere Taonga Act 2014

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 Heritage New Zealand. It is illegal to destroy, damage or modify archaeological sites without an authority to do so from Heritage New Zealand.

Any person who intends on carrying out work that may damage, modify or destroy an archaeological site, or to investigate an archaeological site using invasive archaeological techniques, must first obtain an authority from Heritage New Zealand. 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 New Zealand Archaeological Association (NZAA) Site Recording Scheme or registered with Heritage New Zealand; 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.
For the purposes of defining what an archaeological site is, the following definition from the HNZPTA is provided. An archaeological site is defined under section 43.1 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 (HNZPTA Section 6); and

(b) Includes a site for which a declaration is made under Section 43(1) of the Act.

Heritage New Zealand also maintains the New Zealand Heritage List/Rārangi 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.

2.2. The Resource Management Act 1991

Part II of the Resource Management Act 1991 (RMA) outlines the Purposes and Principles of the Act. In outlining the purpose of the Act, Section 5 states:

1. The purpose of this Act is to promote the sustainable management of natural and physical resources.

2. In this Act, “sustainable management” means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while –

   a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

   b) Safeguarding the life supporting capacity of air, water, soil, and ecosystems; and

   c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Section 6 of the RMA outlines that “in achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance.” In 2003 amendments to the RMA elevated historic heritage to a Matter of National Importance under Section 6 (f), which identifies the need for “the protection of historic heritage from inappropriate subdivision, use, and development.”

A definition of Historic Heritage has also been added with the amendments to the RMA. This defines Historic Heritage as:

a) Those natural and physical resources that contribute to an understanding and appreciation of New Zealand’s history and cultures deriving from any of the following qualities:

   i. Archaeological

   ii. Architectural

   iii. Cultural

   iv. Historic

   v. Scientific

   vi. Technological; and

   i. Includes –

      a. Historic sites, structures, places, and areas; and

      b. Archaeological sites; and

      c. Sites of significance to Maori, including waahi tapu; and

      d. Surroundings associated with the natural and physical resources.
As such, when considering applications under the Act, the consenting authority must have regard to historic heritage as a Matter of National Importance. To assist in this assessment criteria in guidelines produced by the Historic Places Trust (see Section 3.2 below) and in Regional Policy Statements can be used.

3. Methodology

This archaeological assessment of effects combines both desktop research and site visit information. The desktop research component utilised a range of sources including:

- Published and unpublished local histories;
- Archaeological investigation and survey reports, and archaeological assessments;
- The NZAA Digital Site Recording Scheme (ArchSite), and
- Historic maps and aerial photography.

The site survey was undertaken by the author on 6 November 2017. The methodology was to drive the streets within the Precinct 4 area and, from the street, inspect the buildings that were visible on the 1940s aerial image to identify any pre-1900 buildings, or sites where pre-1900 buildings may have been situated. A site walkover of the Makino Stream bed was also conducted from Port Street and Roots Street to identify the presence of pre-1900 bridge components.

4. Physical Environment

Feilding is situated within the Manawatu district just west of the junction between the Kiwitea Stream and the Oroua River. The Oroua River feeds into the Manawatu River south of Palmerston North. The landscape is an old seabed which is mainly flat with occasional domes where folds in the bedrock have risen to create high points in the landscape. The rivers flow around these domes, and have created natural levees from sediment deposition, and in times of high flow the water became trapped in the surrounding low lying basins forming wetlands (Knight 2014). There was an extensive swamp along the western side of the Oroua River, called Roto-nui-a-hau. Subsequently, the original vegetation comprised mixed podocarp forest interspersed with swamp vegetation such as flax and toe toe.

Following the arrival of European settlers the forests were rapidly felled for timber, and much of the flax was harvested from the swamps. The establishment of agriculture and farming in the area lead to the swamps being drained to form large swaths of arable land.

The proposed Precinct 4 area is situated north of Feilding town centre, and is a mostly flat, semi-rural area comprising mainly pasture with occasional residential houses. The Makino Stream runs roughly north to south through the western side of the project area.

5. Historic Background

5.1. Pre-European Occupation

Prior to European settlement the Manawatu area was relatively sparsely populated compared to other parts of the North Island. This is mainly due to the heavily forested and swampy nature of the environment. The earliest human settlement of the Manawatu region was focused around the coast. However, following the decline of food resources such as the moa, the people living around the river mouths began to travel inland and transition to a reliance on the cultivation of crops and freshwater food sources, such as eels and birds (Knight 2014). While settlements inland, including pa and kainga, were scarce, they were mainly focused along the edges of the rivers which provided ease of access to food resources and travel.

5.2. European Arrival

Feilding was established in 1874 by the London-based Emigrant and Colonist’s Aid Corporation, and was the first township on the Manchester Block. William Henry Adelbert Feilding, who was chief representative of the corporation, visited New Zealand in 1871, and purchased 100,000 acres of Manawatu land which was named the Manchester Block. The first settlers arrived in 1874, and much of the initial phase of settlement was occupied with the clearance of the surrounding bush and the improvement of communication between Foxton
(then the main port for the district). In 1876 the railway line from Foxton to Palmerston North was extended to Feilding, opening an outlet for the town. Following the arrival of the railway the town grew quickly. The early industries included timber and flax milling. There were a number of highly productive saw mills located close to Feilding.

Flax milling was an important industry in the Feilding area prior to 1900, and there were numerous flax mills operating along the waterways in the region. Although no direct references could be found that indicated there were flax mills operating on the Makino Stream within the project area, there are some references to this industry occurring south of Port Street. In the late 1880s a number of complaints appeared in the Fielding Star about the pollution of the Makino Stream from flax milling, which lead to a filter dam being installed on the Makino Stream. This was presumably constructed north of where the stream flow enters the town centre. One such newspaper letter stated that

"...the water being so polluted that it is turning quite bitter and of an inky blackness, this being caused by the stream being diverted to run through a flax mill and carry off their washings... If anyone doubts the truth of this just let him walk up the Makino as far as Port Street crossing, view and taste the water, and judge for themselves."  

A timber bridge was constructed over the Makino Stream on Port Street at least as early as 1889. The timber bridge was swept away in 1926 by a flood, and council deferred rebuilding the bridge until another bridge required replacement and the timber could be repurposed. In 1928 the council ruled that a new structure was not warranted. No reference to the bridge ever being replaced could be found, and it is likely that this never happened given that no bridge exists at the site currently.

The proposed project area is situated north of the main town of Feilding, and was originally subdivided into ‘Suburban Sections’ (see DP 20, Figure 3). An aerial image taken in 1949 shows that the majority of the land within the proposed project area was used for pasture during this time (Figure 4). There are a number of houses, but mainly the area is undeveloped land. The only area north of the township that was developed for residential housing prior to 1900 was along the east side of Makino Road.

The extant houses within the Precinct 4 area are virtually all post-1900 buildings. There is one known pre-1900 house situated within Precinct 4. Located at 69 Pharazyn Street, ‘Awatea’ was constructed for the Clapham family in 1893 (Figure 5).

5.2.1. Awatea

Awatea is a Queen Anne style timber homestead with outbuildings, including stables and a wind mill. The homestead was located on one of Feilding’s 10 acre blocks (Lot 73, DP 20, see Figure 3). The Clapham family shifted from Wellington to take advantage of the economic growth. By the time Awatea was constructed in 1893, the Manchester Block settlement was maturing and the economic advantages of this were particularly seen in the growth of its principle town, Feilding, in this period. Awatea is an important legacy of this prosperity. The fortunes of the Clapham family seem to have mirrored this development, because after purchasing the property in 1878 the Clapham family had prospered sufficiently by the 1890s to construct an attractive homestead which suitably reflected their economic and social status. The building is listed with heritage New Zealand as a Category II historic place.

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1 “The Pollution of the Makino”, Feilding Star, 21 November 1889
2 “Our Flaxmills”, Feilding Star, 7 December 1889
3 “The Pollution of the Makino”, Feilding Star, 21 November 1889
4 “Feilding Borough Council” Feilding Star, 7 September 1889
5 “Port Street Bridge”, Manawatu Times, 30 July 1926
6 “Feilding Borough”, Manawatu Times, 20 April 1928
7 http://www.heritage.org.nz/the-list/details/2826
Figure 3: Survey plan DP 20 drawn up in 1875 showing the proposed project area (highlighted in green).

Figure 4: The proposed project area in 1949 (highlighted in green).
6. Previous Archaeological Work

There are only three archaeological site records situated within the wider Fielding area (Figure 6). Given that the town was developed prior to 1900, the lack of site records indicates that this area has never been the subject of any archaeological site surveys or systematic recording programs. Thus, the absence of archaeological site records in this area does not necessarily mean an actual absence of archaeological sites.

In addition to the three site records in central Fielding, there are also three records located approximately 8 km south of the proposed development area which are recorded as ovens/hearths. These were recorded in the 1980s on the bank of Taonui Stream.

The three sites recorded are all early European occupation sites. None of these sites will be affected by the development of Precinct 4.

S23/99 – This site was recorded in 2010 as the site of a store that occupied the site in 1893.

S23/102 – This site was recorded in 2011 as the site of pre-1900 buildings.

S23/103 – This site was recorded in 2013 as the site of a historic lodge.
7. Site Visit Results

A site visit to the proposed Precinct 4 area was undertaken by the author on 6 November 2017. The purpose of the site visit was primarily a reconnaissance of the general environment, and to identify any pre-1900 buildings or sites that may be affected by the proposed development area.

7.1. The Makino Stream

The Makino Stream was accessed from Port Street and Roots Street to identify the presence of any pre-1900 bridge structures, and none were observed (Figure 7 and Figure 8). It is unlikely that there was ever a bridge present at Roots Street, given that the street has never had a significant population. The Port Street bridge was washed away in 1926, and after two years the council opted to not replace it due to a lack of need.
7.2. Historic Farm Buildings

The property to the west of the Makino Stream was accessed from Reid Line to assess the structures situated in the field north of Roots Street West. These were identified as most likely being early 20th century farm buildings (Figure 9 and Figure 10). The buildings both had timber-frame poured concrete foundations, with
timber structures, and both were in a state of dilapidation. There was no indication that they were associated with pre-1900 activity.

The houses present within the project area were all observed, and none of these (with the exception of Awatea) appeared to have been constructed prior to 1900.

Figure 9: Disused farm buildings on the property west of the Makino Stream.

Figure 10: Disused farm buildings on the property west of the Makino Stream.
8. Archaeological and Other Values

8.1. Archaeological Values
Although there are no recorded archaeological sites within the Precinct 4 area, there is one known and one potential historic / archaeological sites that have been identified during the course of this report. These are ‘Awatea’ and the location of the bridge at Port Street.

In addition to the known pre-1900 building, there is also the two stream crossings at Port Street and Roots Street where there is minimal potential for the remains of pre-1900 bridge structures. It is likely there was never a bridge at Roots Street, and there has not been a bridge at Port Street since 1926. Therefore, the likelihood of encountering archaeological features associated with pre-1900 structures is considered to be minor.

8.1.1. Awatea
Condition
This building and associated windmill, stable and well remain on the property in good condition. However, the northern half of the land has been subdivided away for the development of Mahi Grove.

Rarity/Uniqueness
While nineteenth century houses are not rare or unique in New Zealand, Awatea is an excellent example of a timber, Queen Anne-style inspired, modest sized, rural homestead of the late nineteenth century. With the compliment of structures on the property, which are contemporary with the homestead’s construction, including a windmill and stable, there is potential to provide an insight into life in the late nineteenth and early twentieth centuries.

Contextual Value
The house has contextual value as a component of early European settlement in the Feilding and wider Manawatu district. By the time Awatea was constructed in 1893, the Manchester Block settlement was maturing and the economic advantages of this were particularly seen in the growth of Feilding during this period.

Amenity Value
The house is currently in private ownership, thus is not accessible by the public. The building has good potential for public amenity.

Cultural Associations
European.

8.1.2. Port Street Bridge
Condition
The bridge was destroyed by a storm in 1926. There is a slight possibility that subsurface structures associated with the abutments remain present. However, these are not likely to remain intact or undamaged.

Rarity/Uniqueness
Timber bridge structures were fairly common during the nineteenth century, and there are many that remain extant around the country.

Contextual Value
The bridge will have contextual value as a component of the early development of Feilding.

Amenity Value
The area where the bridge was located will be developed into an Esplanade Reserve, thus there is good amenity potential. However, the extant remains of the bridge (if any) are unlikely to be very visible.

Cultural Associations
European.
8.2. Other Values
The area may have been the site of early Maori activity, and any sites uncovered during the project pertaining to Maori activities/occupation will hold Maori cultural values. These can only be established through consultation with Tangata Whenua.

9. Assessment of Effects

9.1. Proposed Works
Manawatu District Council are proposing to rezone the land from rural to residential in the Manawatu District Council District Plan to allow for residential development within the area of Precinct 4. No development is currently planned for the area, but in the future landowners will be able to develop the sites.

This assessment report will inform the proposed development rules for subdivision and dwellings in this area following rezoning.

9.2. Evidence of Archaeological Sites
There is one nineteenth century building (Awatea) within the area proposed for rezoning. This building is a Category II heritage site listed by Heritage New Zealand Pouhere Taonga. The house and out buildings hold both heritage and archaeological value, and the property holds potential archaeological value. The house originally sat on a ten acre lot, the northern section of which has since been subdivided away to form Mahi Grove. However, the original house and outbuildings remain intact. Any modifications or demolition of these buildings or disturbance of the ground on this property (Figure 11) have the potential to affect archaeological values of the site.

There is also potential for remnants of the nineteenth-century bridge at Port Street to be present (Figure 11). However, no evidence of any physical remains was identified during the site visit, and historical records show that there has been no bridge at the site since the original one was destroyed by a flood in 1926. Given the lack of physical evidence and the length of time since the bridge was destroyed, the probability of any physical remains being intact is considered to be very low.

Figure 11: Areas of archaeological potential within the proposed Precinct 4 area.
9.3. Effect of Proposed Works
The proposed works are not physical in nature. Therefore, currently there is no potential for the sites to be affected. However, future developments within the property of Awatea have the potential to disturb archaeological material. The remainder of this project area, including the area at the Port Street bridge site, is considered to have a low probability of unrecorded sites being present.

The current proposed works involves rezoning the land from rural to residential, and there is potential to apply development requirements to the Awatea property at 69 Pharazyn Street to ensure the protection of archaeological values.

10. Conclusions and Recommendations
This archaeological assessment report has been prepared for the Manawatu District Council for the purpose of assessing the Precinct 4 area north of Feilding, which is proposed as a new urban growth area. Manawatu District Council proposes to rezone the land within Precinct 4 from rural to residential, which will allow residential development intensification. The purpose of this report is to identify any potential areas of archaeological significance.

There are no previously recorded archaeological sites within the project area. However, the Category II heritage building ‘Awatea’, at 69 Pharazyn Street listed with Heritage New Zealand Pouhere Taonga is situated within the project area, and also holds archaeological values as a farmstead built in 1893. There is also potential for subsurface archaeological features and deposits to remain extant on the property at Awatea.

There was a nineteenth century timber bridge situated at the Port Street crossing of the Makino Stream, however this was washed away in 1926, and was not replaced. No evidence of the bridge was visible during the site visit, and it is considered unlikely that physical material remains at the site.

The remainder of the project area has remained rural, and largely undeveloped since European settlement in the Feilding area, and it is not known to have been an area of permanent settlement for Maori. Thus, the area is considered to have low archaeological potential, and developments outside of the Awatea property are unlikely to require input by an archaeologist.

10.1. Recommendations
The following recommendations are made in this report:

- An Archaeological Authority from Heritage New Zealand Pouhere Taonga should be sought by any developers undertaking ground modifying activities at the Awatea property at 69 Pharazyn Street.

- Development in the remainder of the Precinct 4 area should be undertaken following an Archaeological Discovery Protocol whereby works should cease in the event of the discovery of any archaeological material and an Archaeological Authority should be sought.

- In the event of the discovery of archaeological sites of Maori origin, iwi should be engaged with during the Archaeological Authority process.
11. References

Books / Reports:

Online Sources:
ArchSite (accessed via https://archsite.eaglegis.co.nz/NZAA)
Papers Past (accessed via https://paperspast.natlib.govt.nz/)

Relevant Survey Plans (accessed via QuickMap):
SO 11148
DP 20
DP 3479