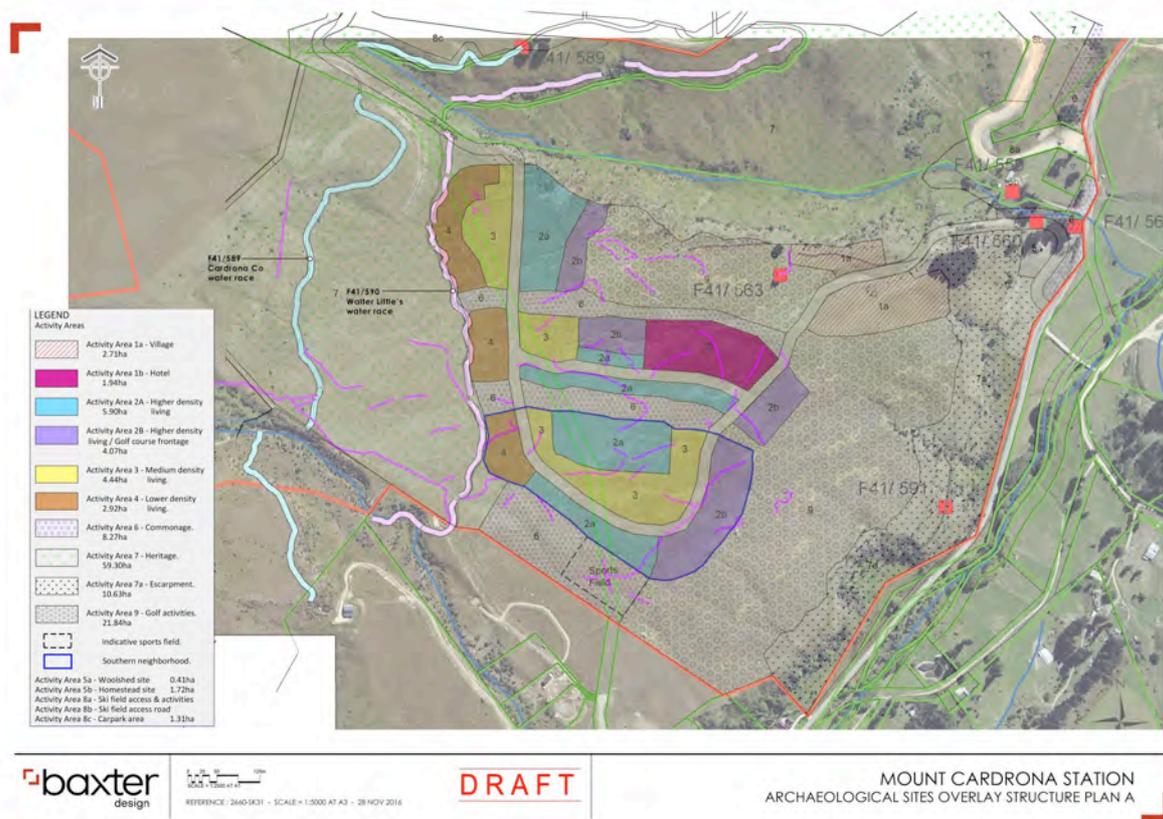


# MT CARDRONA STATION

## ADDENDUM NOVEMBER 2016



**ANGELA MIDDLETON**

**ARCH HILL HERITAGE REPORT No. 165**

**NOVEMBER 2016**

**Arch Hill Heritage Ltd**

**Director: Dr Angela Middleton**

**Phone 0272578403**

**Email: [a.middleton@orcon.net.nz](mailto:a.middleton@orcon.net.nz)**

## ***Executive Summary***

- Mt Cardrona Station is proposing a private plan change to incorporate a golf course into the development. The housing units towards the western boundary have also been reconfigured and public access (pedestrian, bridal and cycle trails) are planned.
- This addendum is concerned with this change and its relationship to the archaeological sites, as shown in Middleton (2006), Figure 12, page 30
- The proposed new golf course will not affect any of the recorded archaeological sites.
- The proposed new Lower Density Living area however is located close to site F41/590, Little's water race.
- It is recommended that planning ensures further protection for Walter Little's water race, archaeological site F41/590, in the light of the housing units located along the eastern berm of the race:
  - The eastern edge of the water race should be fenced at approximately 1m out from the berm, to ensure easier maintenance of this strip of land.
  - This fence should run continuously from the northern road crossing of the water race, to the point where the race crosses the southern boundary of the property, a distance of approximately 1 kilometre.
  - The fencing should be of a style compatible with the location, such as a traditional farm style (post and rail or similar).
  - That no machinery is to cross or be used for race maintenance to ensure no damage. Instead weed eater and other suitable low impact sprays and maintenance methods should be used, on both the Cardrona water race (F41/589) and Little's water race (F41/590).
  - That grazing of animals on the western side of Little's water race should be limited to sheep, as cattle are likely to be much more destructive to the two water races (Cardrona and Little's).
  - Pedestrian users of the public access walkways will be directed to the western side of the water race.
  - From the eastern side, any pedestrian/cycle and bridal way trails crossing the race from the 4 connecting "green fingers" are to be funnelled in to one crossing for each finger and such crossings to be no more than 2 metres wide, constructed of compacted gravel fill in the race
- Before this work is undertaken (fence construction and water race crossings), the existing archaeological authority 2007/306 should be updated, with a plan of the intended work supplied to Heritage New Zealand.



## ***Introduction and background***

This is an addendum to the report Arch Hill Heritage Ltd produced in 2006, *Mt Cardrona Station Archaeological Assessment of Study Area* (Middleton May 2006). In this archaeological assessment, Moira Jackson and Angela Middleton identified a total of seven archaeological sites within the Mt Cardrona Station proposed rezone area. Mt Cardrona Station is now proposing a private plan change to incorporate a golf course into the development and to ensure further protection for Walter Little's water race (site F41/590). The housing areas towards the western boundary have also been reconfigured (Mt Cardrona Station Structure Plan A). This addendum is concerned with this change and its relationship to the archaeological sites, as shown in Middleton (2006), Figure 12, page 30. This report relates to desk-based research. The area concerned has not been re-surveyed for this report and the original 2005 survey data (Middleton 2006) has been consulted again.

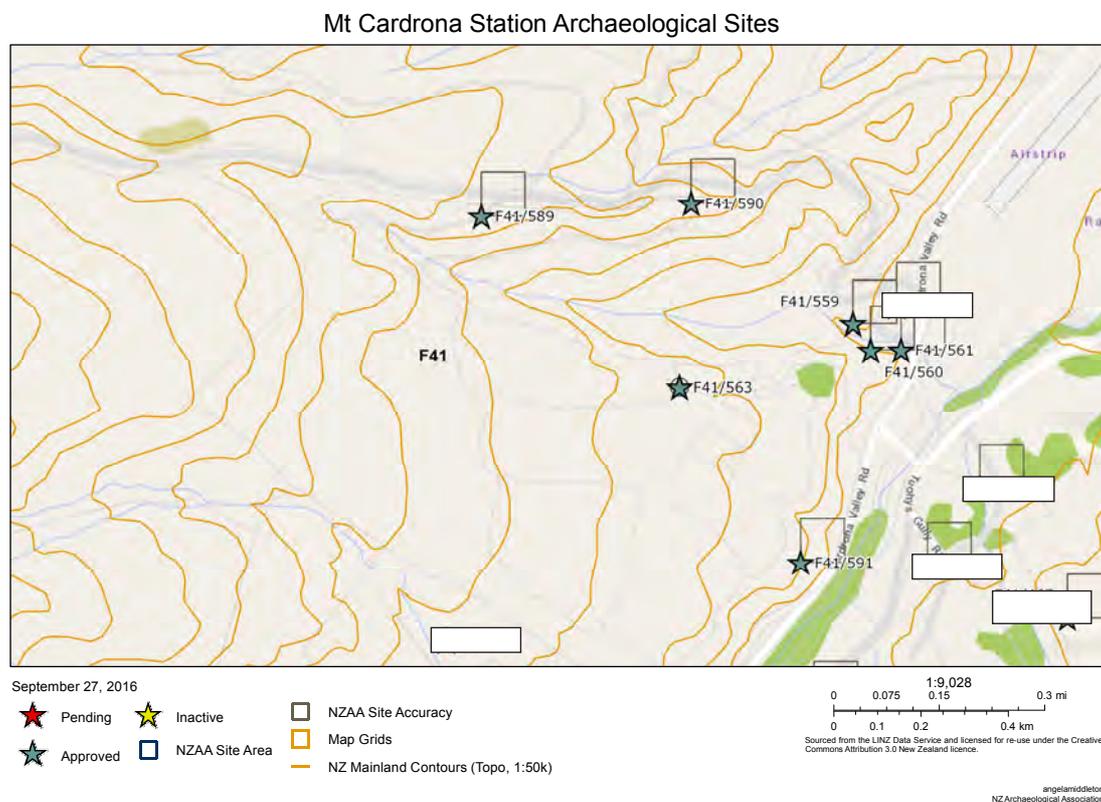
An archaeological authority, number 2007/306, was obtained from Heritage New Zealand (then New Zealand Historic Places Trust) in relation to the archaeology identified in the area and in particular to three of the sites, F41/563, F41/560 and F41/561. Only one of these, F41/563, a chaff cutting site formed from stone, has been investigated (Middleton 2008). In 2008, it was planned to leave this site in situ, with the stone floor exposed. Neither of the other sites was to be affected by the owners' plans.

## ***Research findings***

Figure 1 shows the Mt Cardrona archaeological sites as they are currently identified on [www.archsite.org.nz](http://www.archsite.org.nz), the New Zealand Archaeological Association's archaeological site recording system. Note that for simplification, sites recorded beyond Mt Cardrona Station's boundary have been blocked out. These sites are as recorded and described in Middleton (2006: Figure 12).

Figure 2 shows an overlay of the proposed changes in relation to the recorded archaeological sites. This demonstrates that the golf course (the green areas to the east and north) does not affect any of the archaeological sites as the two nearest, F41/563 and F41/591, are well outside this. The Lower Density area (to the west) is located adjacent to the site F41/590, Walter Little's water race. Public access easements and walkways are planned across the

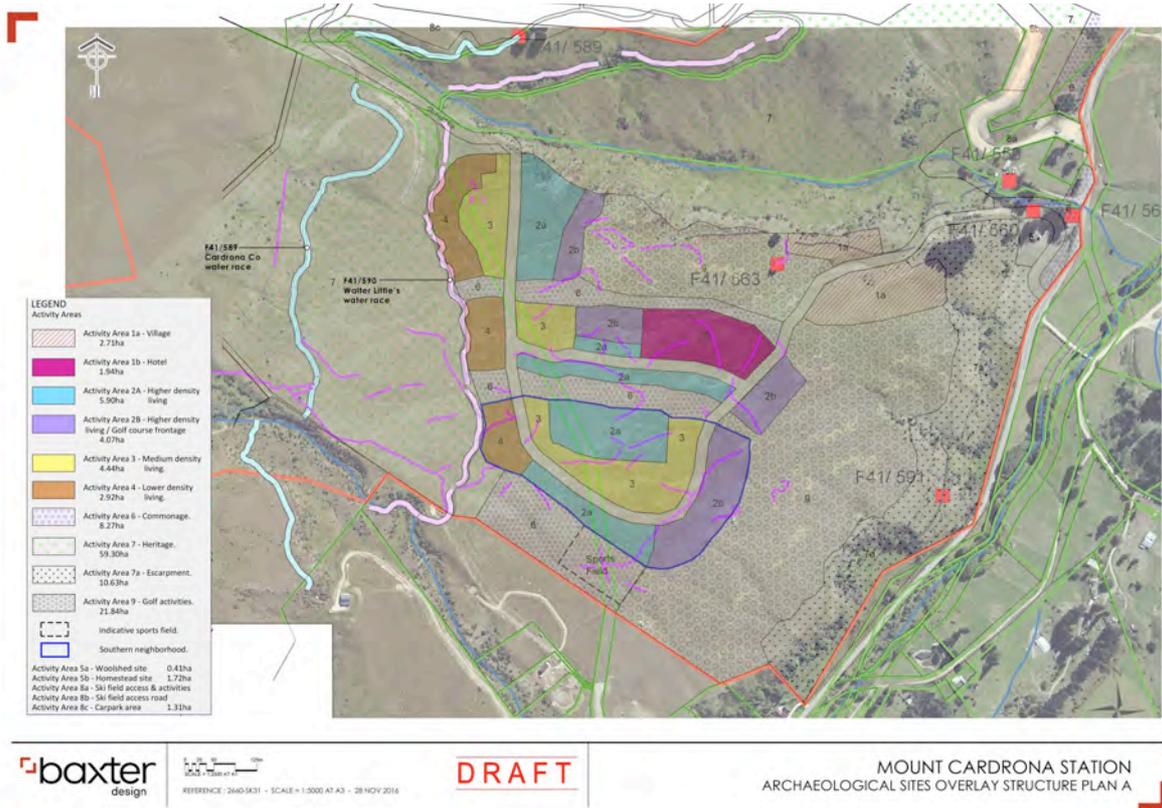
property from four connecting 'green fingers' (Figure 3), four of which will involve crossing Little's water race, which is likely to require further protection from both machinery, cyclists and pedestrians.



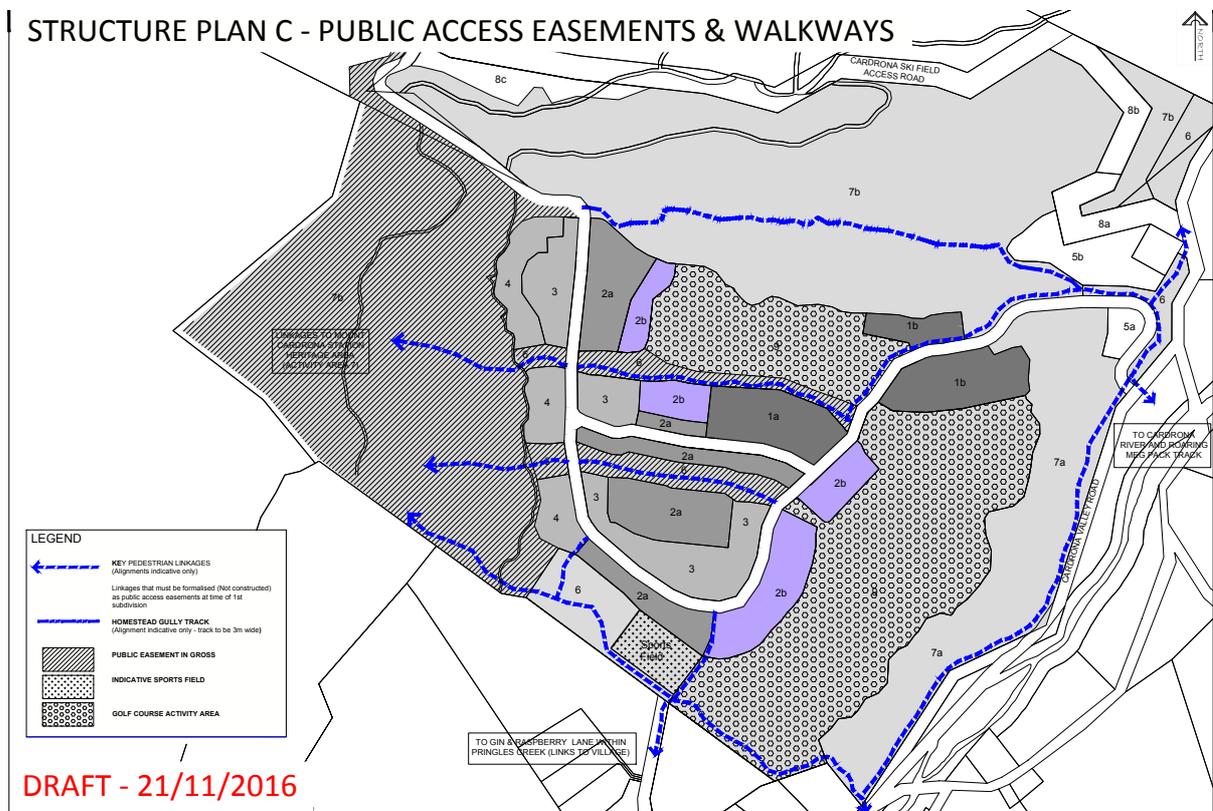
**Figure 1** Mt Cardrona Station archaeological sites. [www.archsite.org.nz](http://www.archsite.org.nz)



**Figure 2** Walter Little's water race, F41/590, 2005.



**Figure 3** Mt Cardrona Station Structure Plan A, overlaid on aerial showing archaeological sites.



**Figure 4** Draft plan showing Lower Density area (grey, numbered 4) and key pedestrian linkages (blue, with arrows) through public access easements and likely points of crossing Little's water race, F41/590.



**Figure 5** Chaff storage platform, F41/563, 2007.

### ***Recommendations***

Of the seven archaeological sites located within Mt Cardrona Station, the two water races, the Cardrona and Walter Little's, are of the most significant heritage interest. While water races like these can be found in other areas of Central Otago, these features are integrally important in the history of technology of gold mining in the region, and the Cardrona Valley in particular. Used to bring water over long distances through very dry areas, they demonstrate considerable engineering ability. Every effort should be made to preserve what remains of these races intact.

The proposed new golf course will not affect any of the recorded archaeological sites. The proposed new Lower Density area however is located close to site F41/590, Walter Little's water race, and pedestrian, bridal and cycle trails are planned through the public easement access, with crossings over the water race. It is recommended that design guidelines ensure:

- Further protection for Walter Little's water race, archaeological site F41/590, in the light of the housing units located along the eastern berm of the race and the planned public access trails:

- The eastern edge of the water race should be fenced at approximately 1m out from the berm, to ensure easier maintenance of this strip of land.
  - This fence should run continuously from the northern road crossing of the water race, to the point where the race crosses the southern boundary of the property, a distance of approximately 1 kilometre.
  - The fencing should be of a style compatible with the location, such as a traditional farm style.
  - That no machinery is to cross or be used for race maintenance to ensure no damage. Instead weed eater and other suitable low impact sprays and maintenance methods should be used, on both the Cardrona water race (F41/589) and Little's water race (F41/590).
  - That grazing of animals on the western side of Little's water race should be limited to sheep, as cattle are likely to be much more destructive to the two water races (Cardrona and Little's).
  - Pedestrian users of the public access walkways will be directed to the western side of the water race.
  - From the eastern side, any pedestrian/cycle and bridal way trails crossing the race from the 4 connecting "green fingers" are to be funnelled in to one crossing for each finger and such crossings to be no more than 2 metres wide, constructed of compacted gravel fill in the race
- Before this work is undertaken (fence construction and water race crossings), the existing archaeological authority 2007/306 should be updated, with a plan of the intended work supplied to Heritage New Zealand.

If any further changes are required, please note the current statutory legislation relating to archaeological sites:

### ***Statutory requirements***

The two main pieces of legislation in New Zealand that control work affecting archaeological sites are the Heritage New Zealand Pouhere Taonga Act (2014) and the Resource

Management Act 1991 (RMA). Heritage New Zealand administers the Heritage New Zealand Pouhere Taonga Act. This legislation requires that an authority be obtained for any work affecting archaeological sites and defines an archaeological site as a place that:

- (a) Either –
  - (i) was associated with human activity that occurred before 1900; or
  - (ii) is the site of the wreck of any vessel where that wreck occurred before 1900; and
- (b) Is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand (Heritage New Zealand Pouhere Taonga Act Section 43(3)).

Anyone who intends to carry out work that may damage, modify or destroy an archaeological site must first obtain an authority from Heritage New Zealand. This process applies to land of all tenure including public, private and designated land. The Heritage New Zealand Pouhere Taonga Act contains penalties for unauthorized site damage or destruction. The archaeological authority process applies to all sites that fit the Act's definition, regardless of whether the site is recorded in the NZ Archaeological Association's site recording scheme or is registered by Heritage New Zealand; or whether the activity is permitted under a regional or district plan, or a building or resource consent has been granted.

## ***References***

- Middleton, A. May 2006. *Mt Cardrona Station Archaeological Assessment of Study Area*. Arch Hill Heritage Report No. 4.
- Middleton, A. March 2008. *A Chaff Storage Platform, Mt. Cardrona Station: Report to NZHPT re Site F41/563, Authority No. 2007/306*. Arch Hill Heritage Report No. 27.