



52/07

**HERITAGE NEW ZEALAND
POUHERE TAONGA**

22 March 2017

File ref: 33002-106

Queenstown Lakes District Council
C/- pcsubmissions@qldc.govt.nz

Dear Sir/Madam

**FORM 5: SUBMISSION OF HERITAGE NEW ZEALAND POUHERE TAONGA:
Plan Change 52 – Mt Cardrona Station**

TO: Queenstown Lakes District Council

FROM: Heritage New Zealand Pouhere Taonga

1. **This is a submission on** proposed plan change 52 to the Queenstown Lakes District Plan.
2. **Heritage New Zealand could not gain an advantage in trade competition through this submission.**
3. **The specific provisions of the proposal that Heritage New Zealand's submission relates to are:** Those aspects of the proposed plan change that relate to historic heritage, specifically archaeological sites.
4. **Heritage New Zealand's submission is:** Heritage New Zealand generally supports the proposed plan change provisions insofar as they concern historic heritage. There are some areas where Heritage New Zealand considers that the proposed provisions could better provide for the management of historic heritage. Appendix A contains a number of specific submission points.
5. **The reasons for Heritage New Zealand's position are as follows:** The proposed provisions acknowledge the heritage values associated with the plan change area, and generally provide scope for these to be managed appropriately in the future as the zone develops. Notwithstanding this, Heritage New Zealand considers that the proposed plan change should address the protection of the chaff storage platform historic feature. Please also refer to the table attached as Appendix A for further specific submission points.
6. **Heritage New Zealand seeks the following decision from the local authority:** Adopt the heritage-related provisions of the proposed plan change as notified, except where alternative relief is sought as set out in Appendix A.
7. **Heritage New Zealand does not wish to be heard in support of our submission.**

Yours sincerely

Sheila Watson
General Manager (Southern Region)

Appendix A: Specific Submission Points of Heritage New Zealand Pouhere Taonga on Queenstown Lakes District Plan Change 52

Appendix B: A Chaff Storage Platform, Mt Cardrona Station: Report to the New Zealand Historic Places Trust re. Site F41/563, Authority No. 2007/306 by Angela Middleton, March 2008

Address for service:

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Appendix A

Specific Submission Points of Heritage New Zealand Pouhere Taonga on Queenstown Lakes District Plan Change 52

Key:

Strike eg. ~~abc~~ = delete text

Underline eg. abc = additional text

Provision ref./ Issue	Support or oppose	Reasons for submission	Relief sought
General	Support	Heritage New Zealand supports the recommendations of the Archaeological Assessment Addendum Report by Angela Middleton and confirms that the existing archaeological authority will require updating prior to any works affecting the water race, for example the proposed pedestrian accessways. Any future activities impacting on other archaeological sites will also require an archaeological authority pursuant to the Heritage New Zealand Pouhere Taonga Act 2014.	None – advice only.
Walter Little's Water Race (F41/590) 12.22.4.2 x 15.2.6.3 i (h)(v)	Amendments sought	<p>It is noted that under the current proposed plan change, proposed Lower Density Living Area 4 would be located significantly closer to Walter Little's water race (F41/590) than the existing Activity Area 4, meaning there would be a reduction in the buffer area to the east of the water race. Fencing of the water race, allowing for a 1m buffer between the race and the fence, are proposed in order to manage impacts on the water race.</p> <p>Heritage New Zealand supports the proposed fencing off of the water race at such time as Activity Area 4 is subdivided. Furthermore, Heritage New Zealand supports the erection of a fence prior to section 224(c) RMA certification of any subdivision, as this means that the developer will be responsible for undertaking this work rather</p>	<p><u>Amend</u> provision</p> <p>12.22.4.2x as follows:</p> <p><i>Prior to the commencement of development occurring on-site, the landowner shall be responsible for preparing and submitting to the Council for its approval a Management Plan for the water races and their margins. The Management Plan will set out the on-going care and protection of the water races and their margins, including</i></p>

		<p>than the individual purchasers of the lots created.</p> <p>The Management Plan required under proposed provision 12.22.4.2 should address the ongoing maintenance of the fence required under 15.2.6.3 i (h) (v). In this regard, Heritage New Zealand's recommendation is that the fence should be fully contained within Area 7b (as opposed to forming the boundary between Areas 7b and 4), in order to ensure that there is a sufficient buffer between residential properties and the water race, to make future maintenance of the fence more straightforward, and to ensure that maintenance of the fence does not become the responsibility of individual property owners.</p>	<p><i>fencing and the planting of the downhill side of the water races in Chionochloa ecosystem species, and the management recommendations set out in the report Mount Cardrona Station Addendum November 2016 (Arch Hill Heritage Report No. 165).</i></p> <p><i>The landowner shall also fill in any breaches in the water races except for drainage to the open space areas in Activity Area 6.</i></p> <p><i>The Management Plan shall be complied with on an ongoing basis.</i></p> <p><u>Adopt 15.2.6.3i(h)(v)</u></p>
12.22.2.2(viii)	Support	Heritage New Zealand supports this provision insofar as it will assist in managing effects on the historic water races.	<u>Adopt 12.22.2.2(viii)</u>
12.22.4.2x.	Support	Heritage New Zealand supports this provision insofar as it will assist in managing effects on the historic water races.	<u>Adopt 12.22.4.2x</u>
12.22.5 (i)	Support	Heritage New Zealand supports this provision insofar as it will assist in managing effects on the historic water races.	<u>Adopt 12.22.5(i)</u>
Chaff storage platform	Advice	In relation to the chaff storage platform, the plan change which will have the effect of this feature being located within an area identified for a golf course (activity Area 9), rather than an open space zone intended to provide recreational opportunities and protection for heritage features (Activity Area 7). This is based on Figure 3 Mt Cardrona Station Addendum November 2016 by Angela Middleton. The plan change documents state that this feature will not be affected by the proposed golf course, but does not specify any particular management mechanism for this site.	<p>Schedule the chaff storage platform (NZAA site F41/563) in the Operative District Plan Inventory of Protected Features, and Proposed District Plan Schedule 26.10 as part of stage 2 of the district plan review.</p> <p>If the above relief is not accepted,</p>

		<p>Heritage New Zealand considers that an appropriate management mechanism would be to schedule the chaff storage platform in the District Plan Inventory of Protected Features or Proposed District Plan Schedule 26.10 (whichever is appropriate in terms of the current status of these documents). This would mean that modification of the site would be subject to resource consent, thereby providing a greater level of certainty in relation to the future protection of the site.</p> <p>Angela Middleton's report 'A Chaff Storage Platform, Mt Cardrona Station' for archaeological authority 2008/306 (attached as Appendix B) provides information on the historical background of the site, describes the physical nature of the site, and discusses the uniqueness of the feature in the context of the Cardrona Valley and literature on New Zealand pastoralism.</p> <p>Heritage New Zealand considers that the development of a golf course offers an opportunity not just to protect the chaff floor, but to integrate this feature into the course so that it can be maintained, interacted with, and appreciated. For example the area could be turned into a shelter with the chaff storage platform as the floor and a shelter structure above. Heritage New Zealand would welcome the opportunity to work with the developer to achieve such an outcome.</p> <p>If the Council considers that District Plan scheduling of the chaff floor is not merited, Heritage New Zealand requests that the management plan required under 12.22.4.2 x, should address the future management of this feature, including how it will be integrated into the golf course.</p>	<p>amend 12.22.4.2x as follows:</p> <p><u>x. Protection of water races in Activity Area 7B & Chaff Storage Platform in Activity Area 9</u></p> <p><u>Prior to the commencement of development occurring on-site, the landowner shall be responsible for preparing and submitting to the Council for its approval a Management Plan for the water races and their margins, and the chaff storage platform. The Management Plan will set out the on-going care and protection of the water races and their margins, including fencing and the planting of the downhill side of the water races in Chionochloa ecosystem species, and the management recommendations set out in the report Mount Cardrona Station Addendum November 2016 (Arch Hill Heritage Report No. 165).</u></p> <p><u>The landowner shall also fill in any breaches in the water races except for drainage to the open space areas in Activity Area 6.</u></p> <p><u>The management plan will also set out the on-going care and protection of the chaff storage platform, and how this feature will be incorporated into the golf course as a feature of historical interest.</u></p> <p><u>The Management Plan shall be compiled</u></p>
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				<i>with on an ongoing basis.</i>
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Appendix B:

A Chaff Storage Platform, Mt Cardrona Station: Report to the New Zealand Historic Places Trust re. Site F41/563, Authority No. 2007/306 by Angela Middleton, March 2008

**A Chaff Storage Platform, Mt. Cardrona Station:
Report to New Zealand Historic Places Trust re Site
F41/563, Authority No. 2007/306**



Angela Middleton
Arch Hill Heritage Report No. 27
March 2008

Introduction

NZHPT Authority No. 2007/306 relates to several features identified on Mt. Cardrona Station during fieldwork Moira Jackson and Angela Middleton carried out in November 2005, reported in Middleton (2006). The present report is concerned with the investigation of the chaff cutter and associated floor (site F41/563), discussed in paragraph 5 of the authority. This report is also concerned with paragraphs 6 and 7 of the authority.

The chaff cutter site and associated floor was investigated by Angela Middleton and Bill Edwards on November 30th 2007. The purpose of the investigation was to find out more about the nature of the site and the various pieces of farm machinery found there in November 2005 (Figure 1), in particular the whim embossed with “Reid & Gray Dunedin”, its Dunedin manufacturers; to further investigate and assess the archaeological remains; and to enable the property owners to incorporate any archaeological features into plans for the development of the area.

During fieldwork at the chaff-cutting site Mt. Cardrona Station partners Andrew Spencer, Ross Hawkins and Tony Fountain were present. Discussion was held about the sod huts (F41/560) and track (F41/561), as well as the feasibility of preserving sections of the rabbit fencing. Bill Edwards, who is currently completing an MA on the Hayes engineering site at Otarehua in Central Otago, where fencing wires and other farming materials were produced, was able to advise about the historic nature of farm fencing.

Investigation of Chaff Cutting Site, F41/563

Methods

Before investigating the site I examined catalogues held at the Hocken Library from the farm implements factory of Reid and Gray in order to identify machinery similar to that found at the site.

The location of the likely stone floor was identified by an outline of exposed stones in the vicinity of the horse whim, located during the first period of fieldwork at Mt. Cardrona Station in 2005 (Figure 1). The whim itself had since been moved to a flat paddock where other historic farm machinery is stored adjacent to the farm implement shed, but the site was marked by the stone outline beneath two trees.

The area of stone was excavated by hand, while a small digger was used to attempt to find a circular track that may have been associated with the whim. Following the exposure of the stone floor, local people were asked for information about its function.

Results

Reid and Gray catalogues from the year 1879 were examined for chaff cutters and horse whims similar to the one found at the chaff-cutting site. Catalogues (Reid and Gray 1879-1925) showed "Reid & Gray's Improved Horse Power", illustrated with exactly the same drawing (representing "our Two-horse Power") between the years from about 1885 to 1925, along with a hand powered chaff cutter (Figure 2). Chaff was grown to feed horses, animals essential for working the land in the years prior to the development of modern farm machinery. Comparison with the now-restored whim displayed at Mt. Cardrona Station revealed the exact same pieces of machinery, except that the restored whim is a three-horse power model (Figures 3 and 4). The chaff cutter varies slightly from the hand-powered version illustrated, as the Mt. Cardrona one was operated off a belt from the whim. Tony Fountain, the Mt. Cardrona Station partner who has restored these items along with other pieces of nineteenth century farm machinery, pointed out that the horse whim and chaff cutter were mobile implements that could be moved from place to place across the farm, rather than bringing a harvested crop to a central point. This meant that there may not have been a single circular track associated with the whim.

The removal of topsoil from the outline of exposed stone revealed a circular stone platform or floor approximately 6 metres in diameter (Figures 5, 6, 7). This has larger stones around the perimeter, creating a higher outer edge, and a row of larger stones across the north – south diameter, effectively creating two slightly different levels. The entirety of the stone floor was not completely excavated, as there was limited time available and the stone platform is located in a paddock grazed by cattle (Figure 8); exposing the whole surface may have been counter-productive and may have resulted in damage to the surface. Only the outer circumference stones were exposed, as well as the larger stones along the north-south diameter, and the north-east quarter-section excavated of topsoil to a lower level. The floor itself was uneven rather than having a level working surface. It was hypothesized that this may have been the location of the whim itself, with horses working around the perimeter of the circle, but efforts to find a beaten track were not successful. The digger was used to look for a track in other areas adjacent to the floor but this was also unsuccessful. However, in subsequent discussions, locals Tim Scurr and John Lee identified that the stone platform was

used to store bundles of chaff, stacked like a haystack with a tapered top. As noted above, they also pointed out that the chaff cutter was moved around and different types of cutters were used at different times to cut the pasture to dry before bundling (Ross Hawkins pers. comm. 5/12/2007).

Artefacts

During the investigation a small number of artefacts were collected from the surface of the exposed stone (Figure 9). These were mostly metal items associated with the chaff cutter and whim, such as a handle for the chaff cutter. Several twentieth century glass bottles were also found. These items were left on the site, as they will be used in the restoration of the machinery, where appropriate.

Discussion

The chaff storage platform and associated chaff-cutting machinery demonstrate an important aspect of the Cardrona Valley's history, that is, the era of pastoralism that followed the 50 years or more of gold mining. Farming in the valley continues into the present, although the machinery used today differs from that used in the nineteenth and much of the twentieth century when run holders and farmers were entirely dependent on horses for transport and to pull farm machinery such as ploughs. Chaff was grown on farms in order to feed these animals.

The stone storage platform appears to be a unique feature on the station and also within the wider valley. No similar features have been identified so far in any of the literature associated with New Zealand farming and pastoralism. The owners of Mt. Cardrona Station Ltd. intend to maintain the storage platform in situ in their planned development and subdivision and will leave a buffer of at least three metres around the platform itself. It is likely that the platform will form a feature of a public area adjacent to a planned road. It has been suggested that the uneven stony surface could be planted with a suitable mossy, alpine vegetation such as *Scleranthus uniflorus*. This would assist in identifying and marking the feature in the wider environment and in softening its sharp, irregular surface.

Other archaeological sites

Remains of sod huts (F41/560) and pack track (F41/561) (Paragraph 6)

Mt. Cardrona Station Ltd. intends to maintain these two sites in situ. The section of the old road (pack track) leading from Cardrona Valley Road to the stream, where the sod huts are located will be kept intact. It is likely that over time the sod remains of the huts will disintegrate further as they are exposed to weather events and depositional processes. At some time in the future consideration could be given to investigating and excavating these sod features. Mt. Cardrona Station also plan to develop some on-site interpretation of these features that are somewhat difficult to read and understand due to their ephemeral nature. This interpretation will be developed with a possible series of photographs showing the decay and devolution of sod structures in other parts of Central Otago, where this building method was commonly used in the nineteenth century. Many of these structures remain dotted throughout the landscape in varying states of decay as the mud used in their construction is washed away, particularly after roofing iron has been removed for re-use. Some (perhaps limited) investigation could add to this interpretation.

Rabbit fencing (Paragraph 7)

During the site visit on November 30th there was some discussion about the feasibility of preserving a representative section of the rabbit fence. Mt. Cardrona Station Ltd would like to review this section of the authority relating to the preservation of the rabbit fence. Preserving a section of this in its current location is unrealistic as it incorporates strands of barbed wire, presenting health and safety risks in a public area. It also seems that the existing remnants of the fence are likely to date from the twentieth century, using the characteristics of the barbed wire as a dating tool (Bill Edwards pers. comm.). Tony Fountain has suggested that interpretation of the rabbit fencing and the chronology of the changing characteristics of fencing wires could be shown in the former woolshed, where historic machinery as well as photographs and documents relating to the history of Mt. Cardrona Station and the Cardrona Valley are stored and displayed. An interpretive display relating to rabbit fencing in the area would fit in with these other items.

Conclusion

Investigation of the chaff cutting site and adjacent exposed stone revealed a roughly circular stone floor with an uneven surface, used for the storage of cut chaff. Mt. Cardrona Station

Ltd. intends to preserve this stone floor in situ in their planned development of the area, leaving a buffer zone around it of at least three metres. The machinery associated with the site, that is the horse whim and chaff cutter, will also be preserved in its restored state next to the farm implement shed.

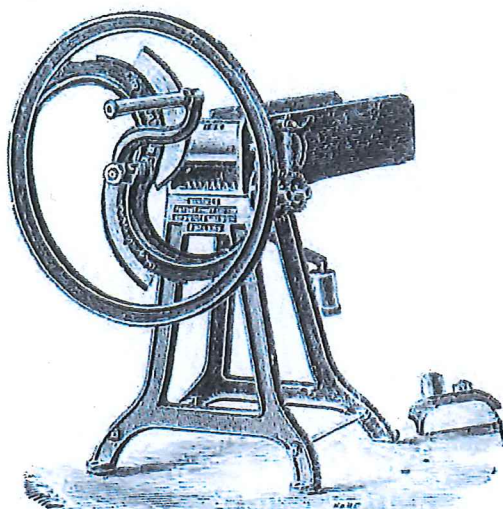
The remains of the sod huts and old track will be left in situ. Consideration may be given to some partial investigation of the sod remains in the future. It is intended to develop some interpretation of these features on site. Mt. Cardrona Station also intends to develop some interpretation relating to rabbit fencing and fencing wires to be displayed in the former woolshed located on the property.

References

- Reid and Gray, 1879 – 1935. *Catalogues*. Hocken Library Collections MS-1165/45.
 Middleton, A. 2006. *Mt. Cardrona Station Archaeological Assessment of Study Area*.
 Unpublished report to Mt. Cardrona Station Ltd.



Figure 1 Parts of the whim scattered over the site, November 2005. The outline of exposed stone is beneath the tree at upper left.



CHAFFCUTTERS

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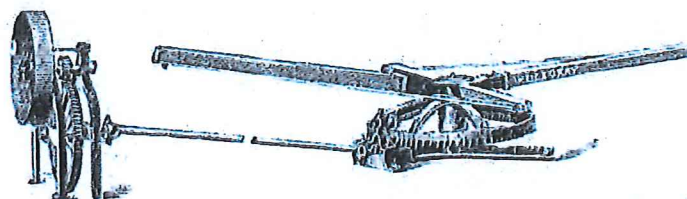
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Light Two-horse Power	"	"	"	"	...	
Two-horse Power, medium	"	"	"	"	...	
Three-horse Power, medium	"	"	"	"	...	
Three-horse Power, extra heavy	"	"	"	"	...	
Four-horse Power, medium	"	"	"	"	...	
Four-horse Power, extra heavy	"	"	"	"	...	
If Connecting Shaft in two lengths, extra	"	"	"	"	...	

REID & GRAY Pay Freight to your nearest Port, or Railage to your nearest Station, on nearly all their Implements, as per Page 3.

Figure 2 Reid & Gray's Improved Horse-Power whim and chaff cutter.



Figure 3 Reid and Gray's three-horse power whim, restored to its original configuration.

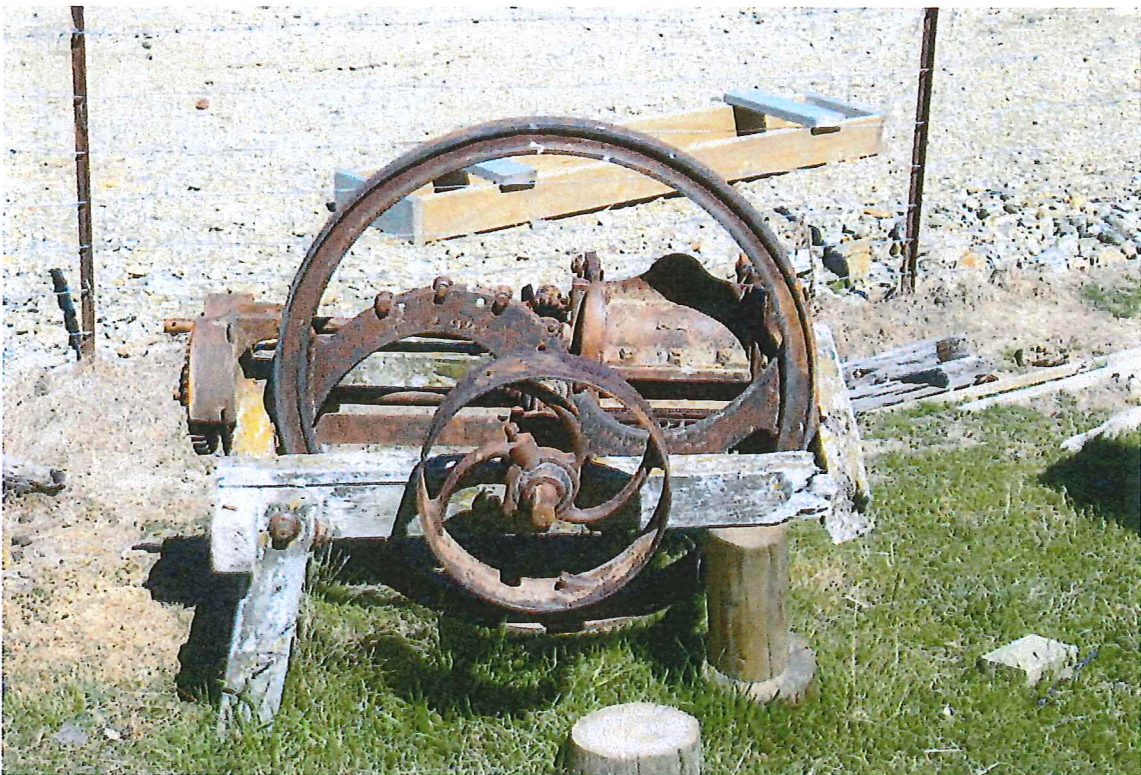


Figure 4 The chaff cutter, once used in association with the whim, Mt. Cardrona Station.



Figure 5 Chaff storage platform, showing cleared north-east quadrant.



Figure 6 Chaff storage platform, view towards south-west with elder tree in background.

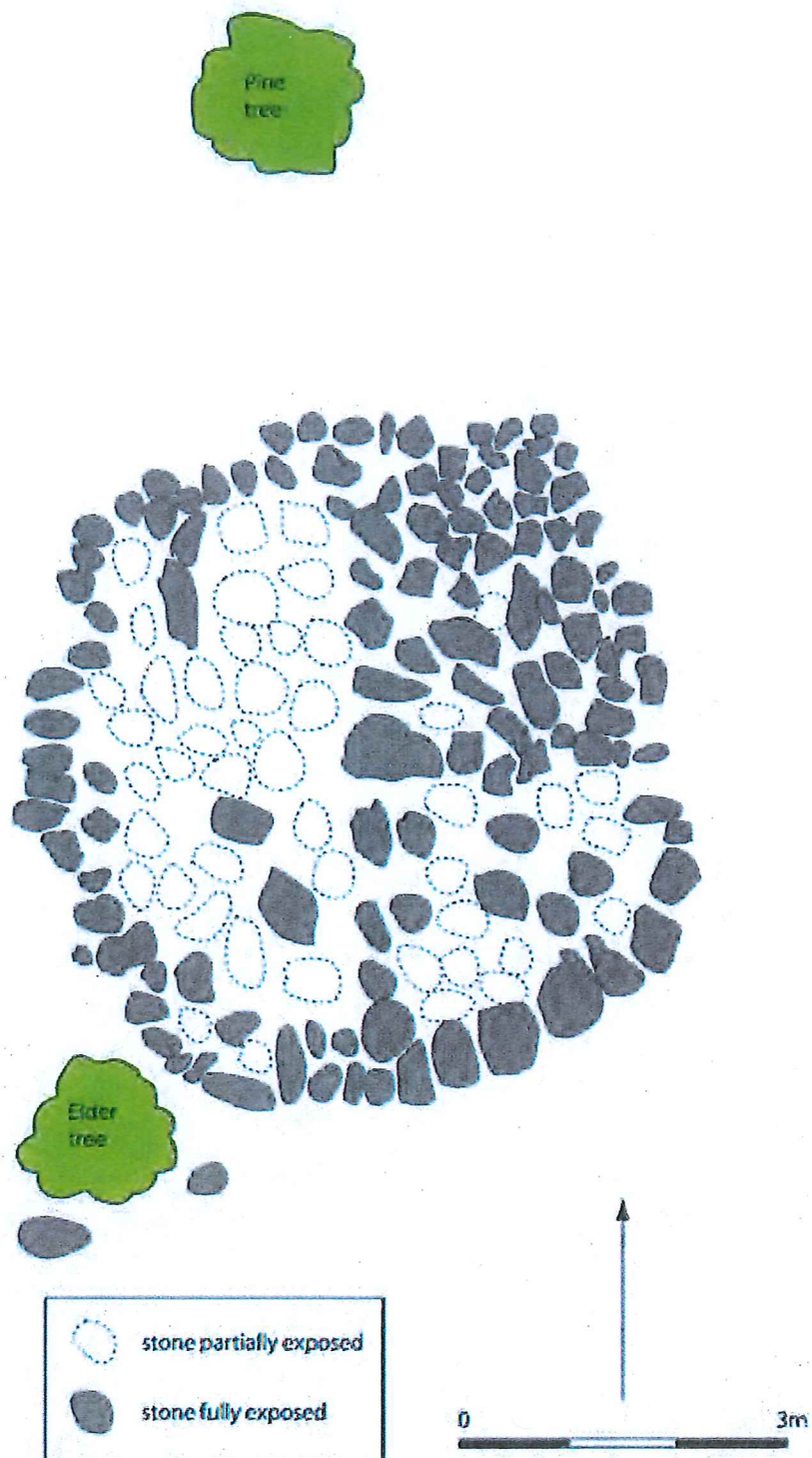


Figure 7 Plan of the chaff storage platform, Mt. Cardrona Station.



Figure 8 Site of the chaff storage platform, looking to the north-west.



Figure 9 Artefacts recovered during the site excavation. These are mostly associated with the chaff-cutting machinery.

