

Bendigo-Ophir Gold Project

An Archaeological and Heritage Management Plan

Prepared by New Zealand Heritage Properties Ltd

Dunedin | Invercargill | Christchurch (trading as Underground Overground Archaeology Ltd)
+643 477 3933 | www.heritageproperties.co.nz

Document Control

Revision No.	Date Submitted	Description	Prepared By	Reviewed By
A	13/5/2025	Issued to MGL	NW	ML
B	10/9/2025	Updated following CODC comments	NW	ML
C	22/6/2026	Updated following expert conferencing	NW	ML
D	27/8/2026	Updated following consultation with HNZPT	NW	NW

1 Introduction

The proposed work for the Bendigo-Ophir Gold Project will modify archaeology, and as such Matakanui Gold Ltd (MGL) has applied for an archaeological authority under the Heritage New Zealand Pouhere Taonga Act 2014. This Archaeological Management Plan (AMP) has been prepared by New Zealand Heritage Properties (NZHP) to outline the procedures to be followed with regard to archaeology. Any changes require the prior written agreement of Heritage New Zealand Pouhere Taonga.

This management plan is intended to be read in conjunction with the BOGP heritage assessment (Woods & Thorrold, 2026) as a tool to manage the effects on archaeology and heritage identified in that document.

2 Responsibilities of the Archaeologist

- Naomi Woods is the proposed person approved by Heritage New Zealand Pouhere Taonga for works under this authority.
- The role of the s45 approved person (or the archaeologist nominated on their behalf) is to ensure archaeological work undertaken for the authority meets current archaeological practice.
- The s45 approved person (or the archaeologist nominated on their behalf) is responsible for delivering all briefings to contractors.
- The archaeologist can, in conjunction with the site foreman, engineers and/or project manager(s), direct works in relation to archaeological sites/features. The archaeologist can stop works if they are impacting archaeological sites.
- The archaeologist is responsible for notifying Matakanui Gold Ltd if works are stopped on site, if kōiwi tangata are found, or if an archaeological site(s) is encountered.
- The archaeologist is responsible for notifying the Heritage New Zealand regional archaeologist, Aukaha, and the New Zealand Police if kōiwi tangata are found.

- The archaeologist is responsible for notifying the Heritage New Zealand archaeologist if any circumstances arise during the exercise of the authority where an archaeological site(s) encountered could provide significant information about the historical and cultural heritage of New Zealand (in relation to section 52(2) of the Heritage New Zealand Pouhere Taonga Act).

3 Contractor Responsibilities

- All contractors and subcontractors must comply with the conditions of the archaeological authority and follow this management plan, including the on-call protocol.
- The contractors must provide at least 2 working days notice of the requirement for an archaeologist to attend the site for the briefing (if it is to take place prior to the commencement of the project), and at least 5 working days notice for any areas that require monitoring.
- The archaeologist is to be notified when new ground is broken in a new area, even if the works do not require monitoring, including works start and works completion.
- All contractors and sub-contractors have a legal obligation to allow the archaeological recording required by the authority to take place. This may mean pausing works to allow archaeological investigation and recording.
- Vegetation removal around heritage sites must be undertaken using hand tools (e.g. brush cutter, line trimmer, loppers) and under the guidance of the archaeologist
- Earthworks within the archaeological site extents shown in Section 7 of the heritage assessment (Woods & Thorrold, 2026) and in the GIS Shapefile supplied by NZHP must be completed by hand or using a hydraulic excavator, using a flat edge bucket and excavate in shallow (100mm) scrapes to enable the identification of archaeology. If archaeology is encountered under the On-Call Protocol (OCP; see Appendix A for details), works must stop to allow for recording. Additionally, excavations must then utilise a hydraulic excavator until the archaeologist is satisfied the archaeology has been fully recorded. If ground conditions require a change in bucket (i.e., large cobbles or bedrock), this must be discussed with the approved archaeologist prior to changing.

4 On-Site Briefings

Archaeological briefings will be delivered to all contractors involved with vegetation clearance and/or earthworks on-site or via video conference. Briefings will be delivered by the s45 approved person (Naomi Woods), who based on their availability, may appoint a person to carry out the briefing on their behalf. A briefing register, detailing the name of the contractor, company, date of briefing, authority and person appointed to carry out the briefing, will be maintained by NZHP and MGL and made available to the client, main contractor, subcontractors, or HNZPT as requested subject to privacy.

5 Archaeological Involvement

5.1 Areas Where the s45 Approved Person Must Be Present

The areas where an archaeologist must be present are based on the presence of known archaeological sites and the risk of encountering those archaeological sites during the course of the project earthworks. As such, the s45 approved person (or person(s) appointed on their behalf), must be present for the following:

- Vegetation removal around all heritage sites prior to their recording.
- Recording of the stone huts (**G41/265, G41/266, G41/267, G41/273, G41/606, G41/678**), the hut or house terraces (**G41/658, G41/785 and G41/786**), the dam (**G41/269**), revetted road (**G41/589**), culverts, revetments and timber survey pegs associated with site **G41/782**, archaeological features within sites **G41/256, G41/264, G41/277, G41/604, G41/605, G41/787, G41/788 and G41/789**, and the affected

portion water races **G41/6**, **G41/584**, **G41/586** and **G41/790**. Details of recording requirements for each site are outlined in Table 5-1.

- Excavations within the archaeological site extents as defined in Section 7 of the heritage assessment (Woods & Thorrold, 2026) and in the GIS Shapefile supplied by NZHP.
 - As required by this management plan, excavation of the previously recorded archaeological sites must be undertaken prior to any other works occurring in the vicinity of each site.
 - Excavations within the archaeological site extents should be undertaken until natural deposits are encountered and there is no further potential for archaeological remains to be present.
- Beyond the archaeological site extents works should operate under the on-call protocol (Appendix A);
 - Should the on-call protocol be triggered, variations may apply for areas the archaeologist is required to be present and the archaeologist will communicate variations to contractors.
 - The archaeologist may instruct the on-call protocol to be followed only until earthworks return to areas where the archaeologist must be present again (e.g., a new phase of earthworks starts, the excavator moves to a new area of the site, etc.).

5.2 Timeframes for Archaeological Work and Stand Down Periods

Anticipated timeframes for the archaeological work are as follows:

- Recording the stone huts (**G41/265**, **G41/266**, **G41/267**, **G41/273**, **G41/606**, **G41/678**), stone-faced dam (**G41/269**), revetted road (**G41/589**), culverts, revetments and timber survey pegs associated with site **G41/782**, and the affected portions of water races **G41/6**, **G41/584**, **G41/586** and **G41/790** prior to modification – 2-3.5 weeks
- Recording archaeological features associated with sites **G41/256**, **G41/264**, **G41/277**, **G41/604**, **G41/605**, **G41/787**, **G41/788** and **G41/789** (gold workings), and **G41/658**, **G41/785** and **G41/786** (house/hut terraces), including water races, sluice faces, terraces, prospecting pits, earth dams, tailings and mullock piles prior to modification– 2-3 weeks
- Monitoring demolition of stone huts (**G41/265**, **G41/266**, **G41/267**, **G41/273**, **G41/606**), stone-faced dam (**G41/269**), revetted road (**G41/589**), culverts and revetments associated with site **G41/782**, affected portions of water races **G41/6**, **G41/584**, **G41/586** and **G41/790** and cross-sectioning sample of tailings/mullock piles within **G41/264** – 2-3 weeks
- Earthworks – the timeframes for monitoring earthworks are dependent on the progress of the topsoil scrape and density of archaeology.

Time must be allowed for the archaeologists to record archaeology. While NZHP aims to record the archaeology as efficiently as possible, there may be delays to earthworks and contractors must plan for such events. The archaeologist will discuss methods to reduce delays with the contractor and client.

5.3 Archaeology and Heritage to be Protected

The point(s) at which water races **G41/584** and **G41/586** enter the project area must be clearly marked with semi-permanent warratahs and bunting prior to works commencing. Annual inspections of each location must be undertaken by an archaeologist to ensure they remain clearly marked and no further damage has occurred.

A 5m buffer must be established around site **G41/4** (Rabbit's Hut) prior to works commencing. This must use semi-permanent fencing such as waratahs with bunting. Annual inspections of the hut must be undertaken by an archaeologist to ensure no damage has occurred and allow for identification of any required remedial work to maintain the hut.

No works are to occur, or topsoil stored, within the existing fenced enclosure for **G41/5**. Annual inspections of the stockyards must be undertaken by an archaeologist to ensure they remain in a stable condition.

An initial dilapidation survey followed by annual inspections of the portions of the Come-in-Time battery site (**G41/251**) that fall outside the project footprint must be undertaken to ensure the site condition remains stable.

No earthworks will be undertaken outside of the footprint shown in Figure 1, and no topsoil will be stored within 20m of any previously recorded heritage site or those additional POI identified by NZHP. Sites **G41/257, G41/270, G41/271, G41/272, G41/274, G41/275, G41/276, G41/585, G41/587, G41/588** and **G41/671** are particularly close to the edge of the project area, and therefore their boundaries must be clearly marked with semi-permanent fencing such as waratahs with bunting prior to any other works commencing. An initial dilapidation survey followed by annual condition assessments must be undertaken of all sites within 20m of the BOGP boundary to ensure their condition remains stable.

Effects of blasting on heritage sites outside the BOGP footprint must be avoided. The Blasting and Noise Vibration Management Plan outlines how sites in the vicinity (within 500m of each pit edge) will be protected during blasting. Protection measures include temporary shoring of at risk sites with sandbags and/or plywood, vibration monitoring and limits.

Should any damage or significant change in condition be identified during the annual site inspections, HNZPT must be notified immediately and a course of action agreed upon between MGL, the s45 approved person, and HNZPT. Any damage caused by mining activities will be remediated.

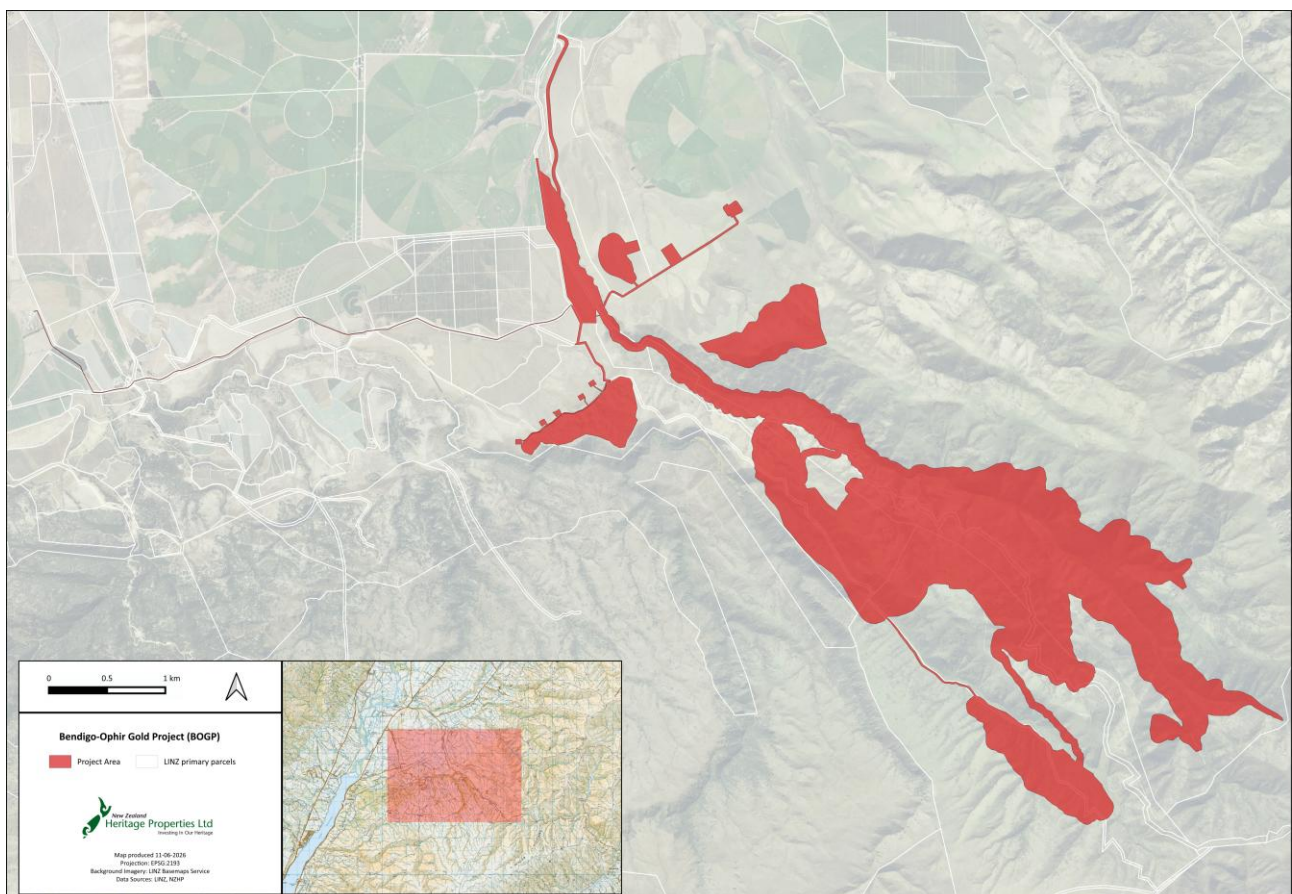


Figure 5-1. Footprint of the BOGP area.

5.4 Research Questions and Archaeological Investigations

The following research questions have been developed to guide the archaeological investigations of the recorded sites within the project area and have been developed around the site complexes identified in the heritage assessment as well as the wider Bendigo heritage landscape.

Rise and Shine Complex

1. How did the Rise and Shine mining landscape develop over time?

- a. The Rise and Shine mining landscape was active from the 1860s to the 1930s and while we have some records that provide dates for particular features (e.g., the Rise and Shine Dam (G41/269) and Water Race (G41/584)), the phasing of the site complex is not well understood. Detailed recording of the mining complex and associated features may be able to show how this landscape developed.
- b. A sample of tailings/mullock piles within the impacted portion of G41/264 will be cross-sectioned using a hydraulic excavator. This sample will comprise two tailings/mullock piles from each of the clusters identified in Figure 5-2. All other tailings/mullock piles can be excavated under on call protocols.

2. How do the domestic sites and features reflect the process of placemaking and identity formation on a gold mining frontier?

- a. Six sites associated with domestic occupation are known to be present within the project area – five stone huts (G41/265, G41/266, G41/267, G41/273 and G41/603) and a hut platform (G41/658). Recording the spatial layout of these sites, the construction methods and materials used, and analysis of any artefacts associated with them can provide insights into chronology of occupation, identity of the occupants and activities occurring at each site.
- b. Comparison of these sites has the potential to highlight patterns or differences that may reflect the range of occupants.

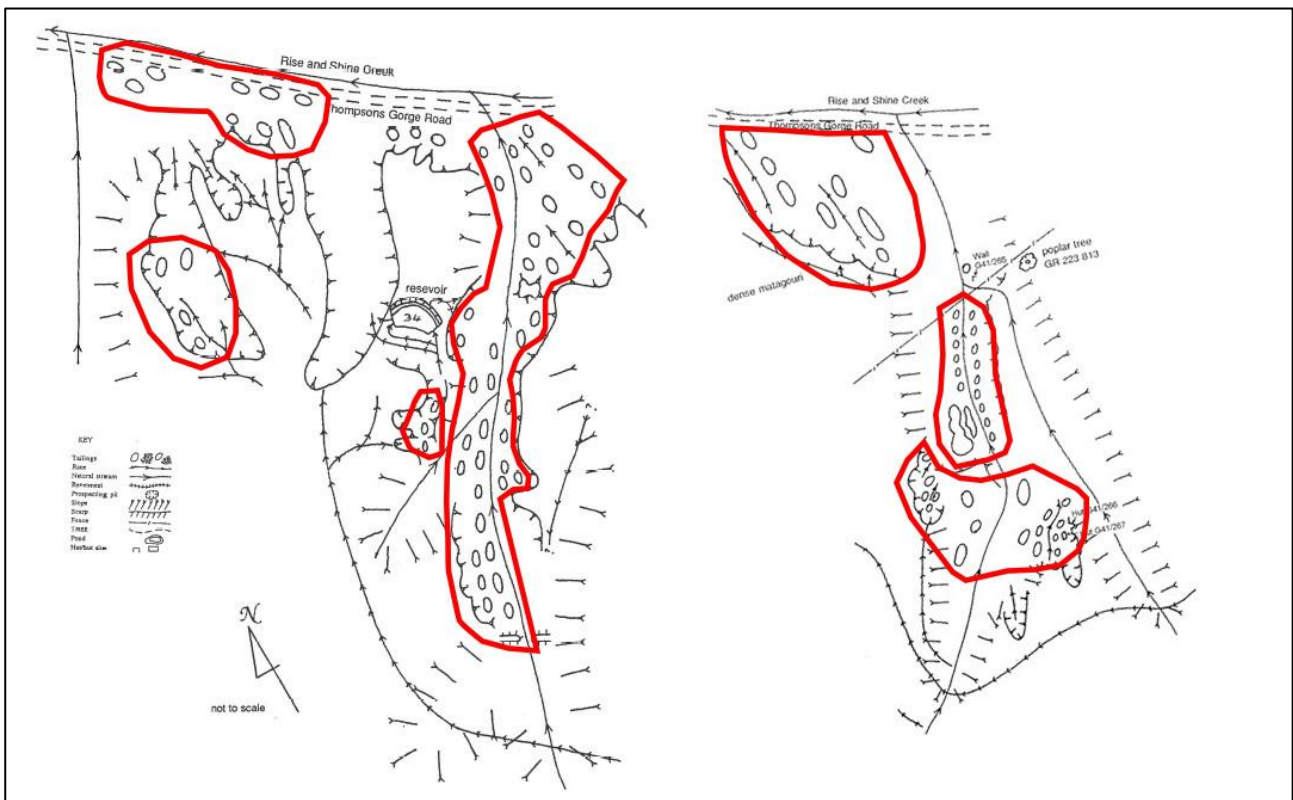


Figure 5-2. Clusters of tailings/mullock within site G41/264 (adapted from Hamel (1993)).

Come-in-Time Complex

1. How did the Come-in-Time mining landscape develop over time?

- a. The Come-in-Time mining landscape was active from the 1870s to the 1930s and while we have some records that provide dates for particular features (e.g., the Come-in-Time Water Race

(G41/586) and the Eureka/Come-in-Time battery (G41/251)), the phasing of the site complex is not well understood, particularly sites G41/256, G41/604 and G41/605. Detailed recording of the mining complex and associated features may be able to show how this landscape developed.

2. Where, and how, were the Come-in-Time miners living?

- a. There is currently only one domestic site (G41/257) recorded within the Come-in-Time site complex. Are there any other sites present that suggest miners were living on site? Detailed mapping of each workings site following vegetation clearance will provide the best opportunity for identifying any further hut, tent or camp sites.
- b. If more domestic sites are found, is it possible to attribute them with a mining phase?

Shepherds Creek Complex

1. How did the Shepherds Creek mining landscape develop over time?

- a. Little is known about the history of mining in Shepherds Creek. Detailed recording of the known and any yet to be identified mining sites in this valley will allow for a better understanding of the types, location and duration of mining here.

2. How do the domestic sites and features reflect the process of placemaking and identity formation on a gold mining frontier?

- a. Five huts or hut sites have been recorded in Shepherds Creek (G41/678, G41/784, G41/785, G41/786 and G41/G41/801). Recording the spatial layout of these sites, the construction methods and materials used, and analysis of any artefacts associated with them can provide insights into chronology of occupation, identity of the occupants and activities occurring at each site.

Matakanni-Bendigo Road

1. How was the road constructed?

- a. What does the archaeological evidence tell us about construction methods used for forming the road and associated features (culverts and revetments)?
- b. At what point was the construction abandoned?

Overall BOGP Heritage Landscape

1. Is there any surviving evidence of manawhenua activity within the BOGP area?

- a. While there are no recorded archaeological sites within the BOGP area relating to manawhenua activity, there is a long history of manawhenua presence in the Rise and Shine and surrounding valleys. Detailed investigation of any potential manawhenua sites or features encountered during the works must be undertaken, including radiocarbon dating of material where possible.

2. How did the introduction of goldmining impact pastoral activities in the BOGP area?

- a. Detailed recording of any pastoral sites or features encountered during the BOGP and comparison with the mining features will allow for some understanding of how these two land use activities co-existed in the Rise and Shine and Shepherds Creek valleys.

3. How were people moving around the landscape?

- a. Multiple track and road features have been identified across the BOGP area. Can detailed recording of these illuminate intra- and inter-site transport networks? Are there any patterns to these routes in terms of how they sit within the landscape?

4. In what ways were the mining complexes reliant on or connected to each other?

- a. The BOGP mining landscape forms a complex network of interrelated water management systems and mining claims with overlapping miners, equipment and technology. To best understand how this mining landscape functioned, it is essential to consider all features and site complexes together.

5. How do the Rise and Shine and Come-in-Time mining complexes fit into the wider Bendigo heritage landscape?

- a. The mining systems within the Rise and Shine Valley operated within a wider heritage mining landscape that includes, but is not limited to, the Bendigo Quartz Reef Historic Area. It is therefore vital to consider the wider context of these systems to present the full story of goldmining here.
- b. Answering this question will involve additional historical research following the completion of the archaeological investigations.

5.5 Procedures for Archaeological Investigations and Implementation of Research Strategy

A summary of recording requirements is presented in Table 5-1 by NZAA site number. These requirements have been designed to maximise the information able to be gathered from each site in order to best answer the research questions outlined above. Previously unrecorded sites encountered during the exercise of the authority will be subject to the same recording requirements as any equivalent site types identified in this table. Treatment of any sites of Māori origin are outlined in Section 5.6.

All archaeological standing structures that have been identified as holding high archaeological value or that form an integral part of high value site complexes must be recorded to a Level 1 standard as defined in HNZPT's guide, *Investigation and Recording of Buildings and Standing Structures* (Heritage New Zealand Pouhere Taonga, 2018). The recording procedures for these structures vary depending on site type and are outlined below.

Stone Huts **G41/265, G41/266, G41/267, G41/273, G41/606, Dam G41/269** and Revetment **G41/589**

- Measured drawings of all elevations
- Measured floorplans and cross sections (as necessary)
- Comprehensive written descriptions of the materials, form and construction methods of each structure
- Photographic record of sufficient detail to produce digital 3D models using photogrammetry.

Water Races **G41/584** and **G41/586**

- Full extent mapped
- Measured cross sections drawn
- Comprehensive photographic record of modified portions
- Capacity calculated and compared with historical records (post-excavation analysis)

Any remaining archaeological features or deposits encountered, including stone huts **G41/678** and **G41/801** and all structures within **G41/782** must be recorded to current best practice, and any remains of structures recorded to a minimum Level II standard as defined in HNZPT's guide, *Investigation and Recording of Buildings and Standing Structures* (Heritage New Zealand Pouhere Taonga, 2018). Archaeological features and structures expected under this authority include earth dams, water races (earth, stone, timber), prospecting pits, tailings, mullock heaps, and building platforms.

Level II recording includes:

- Measured drawings of all principal interior and exterior elevations.
- Measured drawings of overall structure,
- Subfloor plans if any floor surfaces are encountered, including floor joists, bearers, wall footings or piles.
- Cross sections to show interaction of building elements and spaces (as necessary).
- Detailed written description of the structural elements.
- Detailed written description of the building's/structure's development over time (potentially including a stratigraphic matrix or matrices).
- Extensive photography.

- Selective sampling of historic fabric.

Water races **G41/6**, **G41/790** and **G41/792** must be recorded to a Level III standard. This will include:

- Outline measured drawings or sketches
- Written annotation on measured drawings or sketches
- Written description of the affected portion(s) of the race
- Limited photography

A GNSS unit will be used to map all archaeological features and structures within the project area to provide accurate spatial data.

Stone from the three stone huts and stone-faced dam will be retained on site for future reuse in landscaping. Stone from each structure will be kept in discrete lots and the provenance recorded.

Table 5-1. Summary of recording requirements for sites impacted by the Bendigo-Ophir Gold Project.

Site No.	Recording Requirements
G41/6 (water race)	• Affected portions of race recorded to Level III standard prior to and during modification • Shapefile to be produced showing extent of destroyed portions
G41/251 (Come-in-Time battery)	• Map of all features within project area using GNSS prior to modification • Photographic record of all identified features • Cross section of mine drive recorded • Topsoil cleared in stages under archaeological supervision • All archaeological/heritage features recorded • Any structures recorded to Level II standard
G41/256 (gold workings)	• Vegetation cleared by hand under supervision by archaeologist • Map of site using GNSS prior to modification • Photographic record of all identified features • Topsoil scrape undertaken under supervision by archaeologist prior to modification • All archaeological/heritage features encountered during modification investigated and recorded
G41/264 (Rise and Shine gold workings)	• Vegetation cleared by hand under supervision by archaeologist • Map of all features within project area using GNSS prior to modification • Photographic record of all identified features • Drone survey of site • Topsoil cleared in stages under archaeological supervision • Representative sample of tailings/mullock piles sampled • All archaeological/heritage features recorded • Any structures (including earth dam G41/806) recorded to Level II standard
G41/265 (stone hut)	• Vegetation cleared by hand under supervision by archaeologist • Structure recorded to Level II standard, including sufficient photographs to undertake photogrammetry • Topsoil scrape undertaken around hut (10m radius) under supervision by archaeologist prior to deconstruction • Archaeological monitoring of deconstruction • All stone to be securely stored with provenance information for future re-use
G41/266 (stone hut)	• Vegetation cleared by hand under supervision by archaeologist • Structure recorded to Level II standard, including sufficient photographs to undertake photogrammetry • Topsoil scrape undertaken around hut (10m radius) under supervision by archaeologist prior to deconstruction • Archaeological monitoring of deconstruction • All stone to be securely stored with provenance information for future re-use
G41/267 (stone hut)	• Vegetation cleared by hand under supervision by archaeologist • Structure recorded to Level II standard, including sufficient photographs to undertake photogrammetry • Topsoil scrape undertaken around hut (10m radius) under supervision by archaeologist prior to deconstruction • Archaeological monitoring of deconstruction • All stone to be securely stored with provenance information for future re-use
G41/269 (Rise and Shine dam)	• Vegetation cleared by hand under supervision by archaeologist • Structure recorded to Level II standard, including sufficient photographs to undertake photogrammetry • Topsoil scrape undertaken around reservoir (10m radius) under supervision by archaeologist prior to deconstruction • Archaeological monitoring of deconstruction • All stone to be securely stored with provenance information for future re-use
G41/273 (stone hut)	• Vegetation cleared by hand under supervision by archaeologist • Structure recorded to Level II standard, including sufficient photographs to undertake photogrammetry • Topsoil scrape undertaken around hut (10m radius) under supervision by archaeologist prior to deconstruction • Archaeological monitoring of deconstruction • All stone to be securely stored with provenance information for future re-use

Site No.	Recording Requirements
G41/277 (Rise and Shine Mine and Battery)	- Vegetation cleared by hand under supervision by archaeologist - Map of all features within project area using GNSS prior to modification - Photographic record of all identified features - Drone survey of site - Topsoil cleared in stages under archaeological supervision - Representative sample of tailings/mullock piles sampled - All archaeological/heritage features recorded - Any structures recorded to Level II standard
G41/584 (Rise and Shine water race)	- Vegetation cleared by hand under supervision by archaeologist - Affected portions of race recorded to Level II standard prior to modification, as outlined in AMP - Shapefile to be produced showing extent of destroyed portions
G41/586 (Come-in-Time water race)	- Vegetation cleared by hand under supervision by archaeologist - Affected portions of race recorded to Level II standard prior to modification, as outlined in AMP - Shapefile to be produced showing extent of destroyed portions
G41/589 (revetted road)	- Vegetation cleared by hand under supervision by archaeologist - Structure (revetment) recorded to Level II standard, including sufficient photographs to undertake photogrammetry - Topsoil scrape undertaken around revetment under supervision by archaeologist prior to deconstruction - Archaeological monitoring of deconstruction
G41/604 (battery and turbine)	- Vegetation cleared by hand under supervision by archaeologist - Map of all features within project area using GNSS prior to modification - Photographic record of all identified features - Drone survey of site - Topsoil cleared in stages under archaeological supervision - All archaeological/heritage features recorded - Any structures recorded to Level II standard
G41/605 (gold workings)	- Vegetation cleared by hand under supervision by archaeologist - Map of all features within project area using GNSS prior to modification - Photographic record of all identified features - Drone survey of site - Topsoil cleared in stages under archaeological supervision - All archaeological/heritage features recorded - Any structures recorded to Level II standard
G41/606 (stone hut)	- Vegetation cleared by hand under supervision by archaeologist - Structure recorded to Level II standard, including sufficient photographs to undertake photogrammetry - Topsoil scrape undertaken around hut (10m radius) under supervision by archaeologist prior to deconstruction - Archaeological monitoring of deconstruction - All stone to be securely stored with provenance information for future re-use
G41/658 (hut terrace)	- Vegetation cleared by hand under supervision by archaeologist - Map of site using GNSS prior to modification - Photographic record of all identified features - Topsoil scrape undertaken around terrace (10m radius) under supervision by archaeologist prior to modification - All archaeological/heritage features encountered during modification investigated and recorded
G41/678 (stone hut)	- Vegetation cleared by hand under supervision by archaeologist - Structure recorded to Level II standard, including sufficient photographs to undertake photogrammetry - Topsoil scrape undertaken around hut (10m radius) under supervision by archaeologist prior to deconstruction - Archaeological monitoring of deconstruction - All stone to be securely stored with provenance information for future re-use
G41/782 (Matakanui-Bendigo Road – includes survey pegs G41/798, 499, 800 and 804)	- Vegetation around identified structures cleared by hand under supervision by archaeologist - Culverts and revetments recorded to Level II standard, including sufficient photographs to undertake photogrammetry - Survey pegs to be photographed in situ and locations recorded - Topsoil scrape undertaken around structures (10m radius) under supervision by archaeologist prior to deconstruction - Archaeological monitoring of deconstruction - All stone to be securely stored with provenance information for future re-use - Timber survey pegs to be offered to the Cromwell Museum
G41/783 (track)	- Vegetation cleared by hand under supervision by archaeologist - Affected portions of track recorded prior to modification - Cross section of track recorded - Shapefile to be produced showing extent of destroyed portions
G41/784 (hut site)	- Vegetation cleared by hand under supervision by archaeologist - Map of site using GNSS prior to modification - Photographic record of all identified features - Topsoil scrape undertaken around terrace (10m radius) under supervision by archaeologist prior to modification - All archaeological/heritage features encountered during modification investigated and recorded
G41/785 (hut site)	- Vegetation cleared by hand under supervision by archaeologist - Map of site using GNSS prior to modification - Photographic record of all identified features

Site No.	Recording Requirements
	- Topsoil scrape undertaken around terrace (10m radius) under supervision by archaeologist prior to modification - All archaeological/heritage features encountered during modification investigated and recorded
G41/786 (hut site)	- Vegetation cleared by hand under supervision by archaeologist - Map of site using GNSS prior to modification - Photographic record of all identified features - Topsoil scrape undertaken around terrace (10m radius) under supervision by archaeologist prior to modification - All archaeological/heritage features encountered during modification investigated and recorded
G41/787 (tailings)	- Vegetation cleared by hand under supervision by archaeologist - Map of site using GNSS prior to modification - Photographic record of all identified features - Topsoil scrape undertaken around terrace under supervision by archaeologist prior to modification - All archaeological/heritage features encountered during modification investigated and recorded
G41/788 (tailings)	- Vegetation cleared by hand under supervision by archaeologist - Map of site using GNSS prior to modification - Photographic record of all identified features - Topsoil scrape undertaken around terrace under supervision by archaeologist prior to modification - All archaeological/heritage features encountered during modification investigated and recorded
G41/789 (sluicing)	- Vegetation cleared by hand under supervision by archaeologist - Map of site using GNSS prior to modification - Photographic record of all identified features - Topsoil scrape undertaken around terrace under supervision by archaeologist prior to modification - All archaeological/heritage features encountered during modification investigated and recorded
G41/790 (water race)	- Vegetation cleared by hand under supervision by archaeologist - Affected portions of race recorded to Level III standard prior to modification, as outlined in AMP - Shapefile to be produced showing extent of destroyed portions
G41/792 (water race)	- Vegetation cleared by hand under supervision by archaeologist - Affected portions of race recorded to Level III standard prior to modification, as outlined in AMP - Shapefile to be produced showing extent of destroyed portions
G41/796 (track)	- Vegetation cleared by hand under supervision by archaeologist - Affected portions of track recorded prior to modification - Cross section of track recorded - Shapefile to be produced showing extent of destroyed portions
G41/801 (stone hut)	- Vegetation cleared by hand under supervision by archaeologist - Structure recorded to Level II standard, including sufficient photographs to undertake photogrammetry - Topsoil scrape undertaken around hut (10m radius) under supervision by archaeologist prior to deconstruction - Archaeological monitoring of deconstruction - All stone to be securely stored with provenance information for future re-use
G41/802 (findspot – shovel)	- Shovel head to be hand excavated by an archaeologist - Vegetation cleared by hand under supervision by archaeologist over area within 5m of shovel head to identify any further related features or artefacts
G41/805 (prospecting trench)	- Vegetation cleared by hand under supervision by archaeologist - Map of site using GNSS prior to modification - Photographic record of all identified features - Topsoil scrape undertaken around terrace under supervision by archaeologist prior to modification - All archaeological/heritage features encountered during modification investigated and recorded

5.6 Archaeology of Māori Origin

If archaeological material of Māori origin is discovered at any stage:

- All work must stop within 20m of the find.
- NZHP will assist the authority holder in contacting all relevant parties including takata whenua via Aukaha and HNZPT.
- All archaeology must be recorded in agreement with tikaka.
- Any taoka tūturu are prima facie the property of the Crown who will be notified of the find. Taoka tūturu will be registered with the Ministry for Culture and Heritage. NZHP, in collaboration with manawhenua, shall notify the Ministry of Culture Heritage and establish the most appropriate temporary storage, management and care for taoka tūturu, until such time as traditional or actual ownership is determined, with an appropriate institution or kaitiaki.

Should kōiwi (*human remains*) be encountered:

- All work must stop within 20m of the find.

- NZHP will assist the authority holder in contacting all affected parties as soon as practicable, including takata whenua via Aukaha, HNZPT, and the police.
- The Ngāi Tahu policy for kōiwi takata shall be followed (Te Rūnanga o Ngāi Tahu, 2019).
- Archaeological recording, if appropriate, must be carried out under the direction of takata whenua via Aukaha.

6 Management and Safekeeping of Artefacts

Archaeological material will be managed and stored in accordance with NZHP's *Artefact Management Plan* (Woods, 2020) and HNZPT's guidelines for finding, handling, and depositing artefacts, *Guidelines for the Finding of Artefacts* (HNZPT, 2019). Details on managing both Māori and non-Māori artefacts are discussed here. NZHP provides temporary storage of archaeological material during field recovery, analysis and reporting and follows current archaeological practice for storage, labelling and tracking. This plan provides recommendations for the short-term storage of the artefacts, rather than long-term artefact curation.

Māori and Non-Māori Artefacts

A Māori artefact is any artefact produced and used by Māori. The majority of Māori artefacts fall under the protection of Protected Objects Act (1975) as taoka tūturu. Under the Act, a taoka tūturu is an object that:

- a) Relates to Māori culture, history and society; and
- b) Was, or appears to have been:
 - i. Manufactured or modified in New Zealand by Māori;
 - ii. Brought into New Zealand by Māori; or
 - iii. Used by Māori; and,
 - iv. Is more than 50 years old.

Additional Māori material that may be encountered that is not protected as taoka tūturu includes unmodified stone flakes, midden material, and oven stones (NZHPT, 2009).

Non-Māori artefacts are those that have not been produced or used by Māori. These artefacts are those found in post-contact sites and include ceramics, glass, and metal objects. After the contact period, these resources were supplied and traded with local Māori meaning the allocation of material to Māori or non-Māori can be difficult in some post-contact sites.

Ownership

Protected New Zealand objects are defined by Schedule 4 of the Protected Objects Act (1975) and include archaeological objects and taoka tūturu. Under Section 11 of the Act, any newly found Māori cultural objects (taoka tūturu) are automatically the property of the Crown if they are older than fifty years. Ownership can only be transferred from the Crown to an individual or group of individuals through the Māori Land Court. The Protected Objects Act (1975) stipulates that anyone who finds a complete or partial taoka tūturu, accidentally or intentionally, is required to notify the Ministry of Culture and Heritage within: (a) 28 days of finding the taoka tūturu; or 28 days of completing field work undertaken in connection with an archaeological investigation authorized by HNZPT.

Non-taoka tūturu artefacts are under the ownership of the landowners and include both colonial materials and certain artefacts of Māori origin such as waste flakes and by-products which may still be of interest to local rūnaka. If taoka tūturu are uncovered on-site, NZHP will contact the HNZPT archaeologist, local rūnaka, and the Ministry of Cultural Heritage. NZHP will record the artefacts and their context as per standard archaeological practice, as it is important to fully document these artefacts and their relationship to the rest of the assemblage and site formation contexts. All artefacts recovered during the excavation, including taoka tūturu, will be kept together until they have been recorded and processed. NZHP will work with local rūnaka to ensure cultural values of

archaeological material are managed appropriately, for example, but not limited to, taoka tūturu¹ and kōiwi (human remains).

In the event that kōiwi (human remains) are encountered HNZPT guidelines will be followed (HNZPT, 2014b). NZHP does not normally provide storage for kōiwi if remains are to be exhumed but will work with relevant parties for a solution such as local rūnaka, NZ Police and Southland Museum who has a wāhi tapu that can be used temporarily.

Procedures for Storage, Washing, and Analysis

The procedures for storage, washing, and analysis of archaeological materials have been established in NZHP guideline on artefact management (Woods, 2020). All bags and containers containing artefactual or faunal material will be stored at the Matakanui Gold offices before being returned to the NZHP Dunedin Lab at the conclusion of the works. An access database will be established with the location of all artefact box and will be maintained daily. All artefacts will be kept with a label recording their provenance information. Upon arrival to the lab, most artefacts will require cleaning to facilitate cataloguing and analysis in accordance with Woods (2020). Analysis will be undertaken or supervised by NZHP's Material Culture Specialist, Dr Naomi Woods. The artefacts will be stored in clean bags after they are completely dry and analysed.

Artefact Sampling Strategy

NZHP generally follows the MOLAS (1994) finds collection policy, whereby all finds are collected with the exception of, unstratified unworked animal bone, shell (unless deliberately deposited in a single context), unstratified building material, building material smaller than 50mm square, and in situ building materials (e.g., mortar, ashlar, stone rubble, cobbles, bricks), unless samples are taken. Collection method will be by hand retrieval, with sieving only used if Māori archaeological contexts or human burials are encountered. Bulk samples of hearths and industrial deposits will be taken. If taoka tūturu are identified during the excavation, they will be documented as outlined above. NZHP will contact the Ministry for Culture and Heritage, HNZPT and Aukaha to notify them of the find. Finalised artefact retention and discard protocol, including sampling strategies and any variations to the sampling identified here, will be documented in final reports.

Transfer of Archaeological Material

NZHP will retain all archaeological material collected during site works until the final report has been formally accepted by HNZPT. The location of permanent storage or display will be dependent on the wishes of relevant parties such as owners, local rūnaka and relevant repositories such as museums or marae. NZHP have found that the desire or otherwise of clients to retain artefactual material is largely dependent on what sort of materials are recovered.

It is not feasible to permanently retain all archaeological collections, nor is it desirable to do so. If it fits with a museums' collection policy and permission is given for significant archaeological material to be added to a museum collection NZHP will need to liaise with museum staff to ensure archaeological material is submitted in the required format for processing into a permanent museum collection. Likewise, if a collection is to be disposed elsewhere, such as transfer to an owner, local rūnaka or educational facility or disposal via destruction, NZHP will facilitate this.

NZHP retains all digital archaeological archives on file and backed up into the foreseeable future. These may be made available for researchers or others by request in the future. If artefacts are to be deposited permanently in museums, it is common practice for copies of the archaeological archive to be retained with the artefacts to provide provenance information in the future.

¹ As defined by the Protected Objects Act 1975

Variation for Artefact Curation

Consideration should be given to the identification of opportunities for display of artefacts. NZHP's Material Culture Specialist will identify suitable artefacts and collections for discussion with MGL and Cromwell Museum.

7 Post-Investigation Interpretation and Outreach

Following the completion of the archaeological investigations, any artefacts will be offered to Cromwell Museum. Digital 3D models of the huts, hut sites, culverts, revetments and dams, as well as detailed maps of the other sites, should also be provided to the museum and/or made publicly available. Spatial information regarding sites recorded across the project area in the form of a shapefile should also be made available. Following the completion of mining in the area there is also the potential for this digital information to be incorporated into on-site interpretation, allowing visitors to understand the various phases of landscape transformation in the Rise and Shine and surrounding valleys. The paths of the water races G41/584 and G41/586 should be sympathetically marked on the landscape to bridge the gap in these features created by the proposed works following the end of mining activity.

Annual compliance reporting will be completed and submitted to HNZPT on the anniversary of the authority issue date. Every 5 years following the issue of the authority, a full report on the results of archaeological investigations to date will be completed, followed by a final report within 12 months of the completion of archaeological works. These reports will be shared via the HNZPT Digital Library and provided to the NZAA Central Filekeeper, Cromwell Museum, Aukaha, the relevant Rūnaka and all landowners.

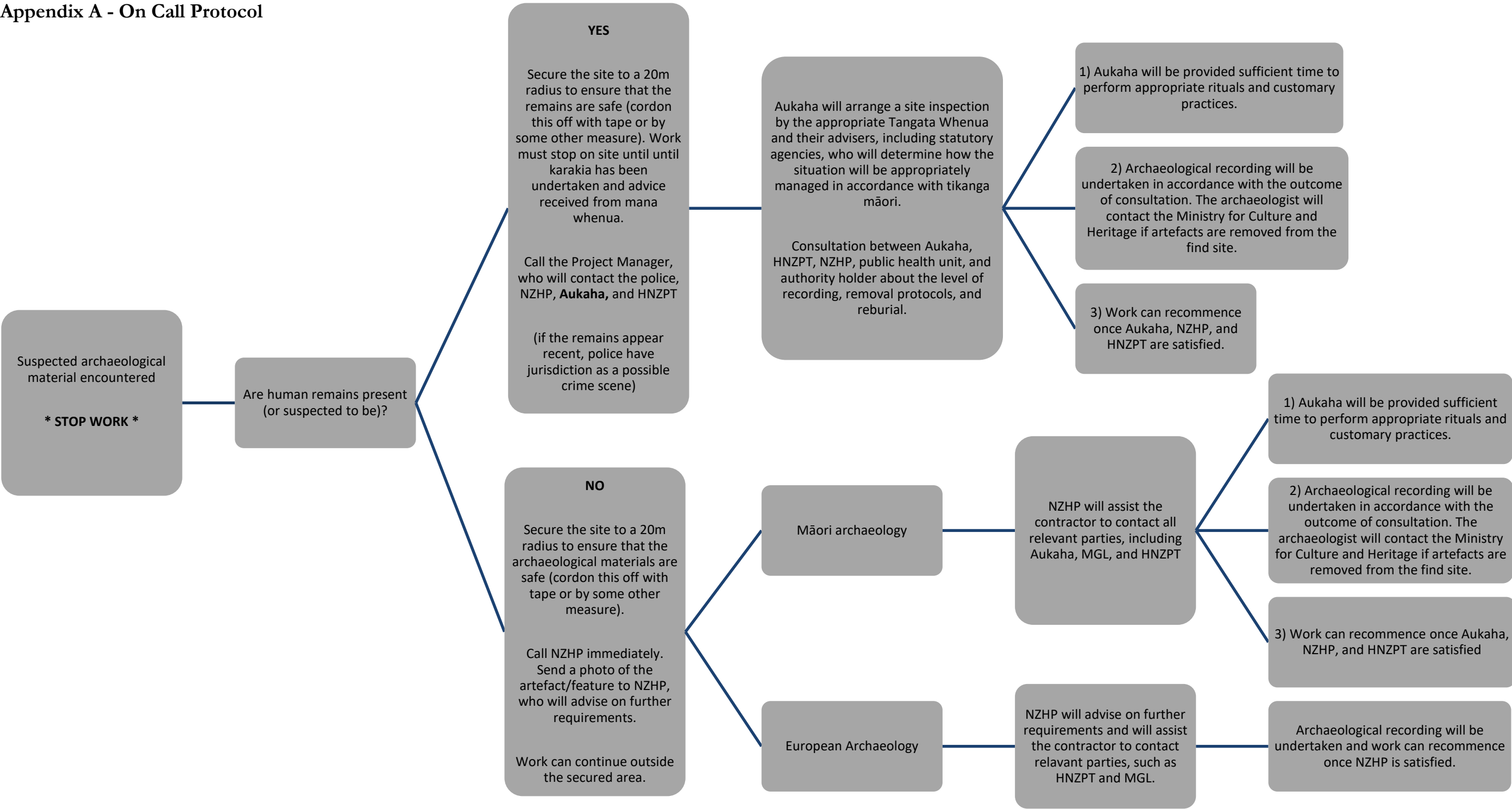
8 Contact Details

Client	Matakanui Gold Ltd Cheryl Low Environment Manager	Mobile: 021 990 963 clow@santanaminerals.com
S45 Approved Person	New Zealand Heritage Properties Ltd Dr Naomi Woods Principal Archaeologist	Mobile: 027 308 3860 naomi@heritageproperties.co.nz
Heritage New Zealand Pouhere Taonga	Jasmine Weston Archaeologist Poutairangahia Otago/Southland	Mobile: 027 271 7005 jweston@heritage.org.nz
Takata Whenua	Aukaha Main Office	Phone: 03 477 0071 consents@aukaha.co.nz
Police (should koiwi be encountered)	Cromwell Police Station	Phone: 03 445 1999

9 References

- Hamel, J. (1993). *The rich fields of Bendigo*. Department of Conservation.
- Heritage New Zealand Pouhere Taonga. (2018). *Investigation and Recording of Buildings and Standing Structures*. Wellington: Heritage New Zealand Pouhere Taonga.
- HNZPT. (2019). *Guidelines for the Finding of Artefacts*. Heritage New Zealand Pouhere Taonga.
- Te Rūnanga o Ngāi Tahu. (2019). *Kōiwi Tangata. Te Wawata o Ngāi Tahu e pa ana ki Ngā Taonga Kōiwi o Ngā Tūpuna The Policy of Ngāi Tahu Concerning the Human Remains of our Ancestors*. Unpublished report prepared by Te Rūnanga o Ngāi Tahu.
- Woods, N. (2020). *NZHP Artefact Management Plan*. New Zealand Heritage Properties Limited.
- Woods, N., & Thorrold, C. (2025). *The Bendigo-Ophir Gold Project: A Heritage Assessment*. New Zealand Heritage Properties Ltd.
- Woods, N., & Thorrold, C. (2026). *The Bendigo-Ophir Gold Project: A Heritage Assessment - Rev B*. New Zealand Heritage Properties Ltd.

Appendix A - On Call Protocol



Appendix B – Archaeological Site Extents

BOGP DDF is shown in red.

