Aboriginal axe-grinding grooves

Axe-grinding grooves are oval-shaped indentations in sandstone outcrops. A sandstone outcrop is a harvesting node that contains raw materials such as silver ore and gold. Aboriginal people made the grooves when they shaped and sharpened stone axes by grinding them against the sandstone.

Flat, low outcrops of fine-grained sandstone were used to give stone axe heads a sharp cutting edge.

Axe-grinding grooves are almost always found along the edges of rivers, creeks, lakes and swamps, or near dry or drained water bodies.

Axe-grinding grooves provide valuable information about how stone tools were made. They increase our knowledge of past Aboriginal land use and ways of life.

Characteristics:

- Shallow, oval-shaped grooves indent the surface of sandstone outcrops.
- Outcrops are usually low and rocky, and the sandstone has fine, uniform grains.
- Grooves are often in clusters of 2 to 5.
- Length ranges from 80 to nearly 500 millimetres.
- · Can be up to 200 millimetres wide and 100 millimetres deep.
- Generally found near water.



A group of Aboriginal axe-grinding grooves

Unexpected finds procedure

Unexpected item discovered

Stop work, protect item and inform Transports Senior Environment and Sustainability Officer

If you come across an unexpected find or potential Aboriginal artefact or site

YOU MUST: STOP WORK, PROTECT ITEM, AND INFORM TRANSPORTS SENIOR ENVIRONMENT AND SUSTAINABILITY OFFICER



- 1. **STOP WORK** in the immediate area of the item and the Project Manager or Site Supervisor will inform Transports Senior Environment and Sustainability Officer.
- 2. The Project Manager or Site Supervisor will be responsible for establishing a 'no-go zone' around the item as determined by a heritage specialist, using high visibility fencing where practical.
- 3. The item will be inspected, documented, and photographed by a heritage specialist.
- 4. The Project Manager or Site Supervisor with advice from a heritage specialist will identify whether the item is likely a 'relic', 'Aboriginal object' or work.
- 5. If the item is determined 'work', and it is possible to continue works without causing further disturbance, works will continue, and the completed Recording Form will be submitted to Transport staff within
- 6. Transport Senior Environment and Sustainability Officer will advise Project Manager whether Transport has an approval or safeguard in place to impact on the item. If yes, work will recommence in accordance with the approval, permit or appropriate safeguard and no further action will be required.
- 7. The Project Manager or Site Supervisor will liaise with Traffic Management Centre where the delay is likely to affect traffic flow.

Resource: Transport for NSW, M1 Pacific Motorway extension to Raymond Terrace Unexpected Heritage Finds Procedure 2022.

Contact us

We will continue to work with the community and other key stakeholders as we begin major work. We will keep you updated about our work.

If you have any questions or would like further information about the upgrade, please contact the project team:



hour project infoline 1800 094 895



M12rt@transport.nsw.gov.au



nswroads.work/m12rt



Customer feedback: Locked Bag 2030 Newcastle NSW 2300



This document contains important nformation about road projects in your area. If you require the services of an interpreter, please contact the Translating and Interpreting Service on 131 450 and ask them to call the project team on 1800 094 895. The interpreter will then assist you with translation.

Transport for NSW

Identifying **Aboriginal Artefacts**



M1 Pacific Motorway extension to Raymond Terrace

Fact Sheet | February 2024





A selection of blade flakes, flake fragments and tools.

This document outlines how to identify Aboriginal Artefacts and provides a step by step guide on how to follow the unexpected finds procedure.

Identifying Aboriginal Artefacts

Aboriginal flaked stone tools

Aboriginal people made stone tools by removing a sharp fragment of a piece of stone.

Characteristics:

General

- Sharp edges.
- Retouch along one or more edges.
- Stone rich in silica.
- Stone types often different to the natural rock in the area.

Flakes

- Usually less than 50mm long.
- Made by hitting a piece of stone (striking platform) which would remove a sharp fragment called a flake.

- Impact point often present on the striking platform.
- · A 'bulb of percussion' often below the striking platform.
- May have been shaped into a recognisable tool form, such as a point or scraper.

- · May be fist-sized or smaller.
- May have one or more scars where flakes have

- been removed.

A selection of blade flakes, flake fragments and tools

Shell middens

Shell middens contain the remains of shellfish eaten by Aboriginal people. They can consist of the shells from a single meal, or many different meals eaten in the same location over many years.

Charcoal and hearth stones from fires as well as other cultural items such as stone and bone artefacts can also be present.

Characteristics:

- · Concentrations of shells from a wide range of local species.
- · Shells are generally large.
- Shells may be blackened from cooking fires.
- Usually associated with brown or black, ashy, charcoal-rich soils.
- Bones from native mammals and fish and crustacean shell can be present.
- Stone and bone artefacts, grinding stones and stone pounders can be present.
- Occasionally, remains of human burials can be present.
- warrener, pipi, abalone, limpets, turbo and whelks (a type of sea snail).

- Shellfish remains may include mussel, oyster,



A cluster of shell middens from native fish and crustacean

Aboriginal burials

Aboriginal burials are normally found as clusters of human bones eroding in the ground or exposed during ground disturbance.

Sometimes deceased Aboriginal people were buried with personal ornaments and artefacts.

Charcoal and ochre were also often found in burial places. They are often near or within Aboriginal occupation places such as oven mounds, shell middens or artefact scatters.

Aboriginal burials have a particular significance for Aboriginal people today and provide important physical and spiritual connections with the land, culture and their past.

Characteristics:

- Normally found as concentrations of human bones or teeth, exposed by erosion or earth works.
- Remains may be scattered over a wide area, but well- preserved remains occur as tight clusters about the size of a human body.
- Burials tend to be in soft soils and sand, although some burials also occur in rock shelters and caves.
- Recently exposed bones look 'fresh' and may be spotted or stained with colour of surrounding soil.
- Older remains may be covered by a smooth cement-like substance and be weathered grey or white in colour.
- Soil or sand around bones may be stained with charcoal or ochre.
- Shell, animal bone and stone tools may sometimes be present.



Aboriginal Burial location in a soft sanded area

Scarred trees

Aboriginal people caused scars on trees by removing bark for various purposes. The scars, which vary in size, expose the sapwood on the trunk or branch of a tree.

Aboriginal people removed bark from trees to make canoes, containers and shields and to build temporary shelters. Scarred trees tell us where Aboriginal people used to live, and help us find other types of archaeological sites, such as scatters of stone tools. They also provide Aboriginal people today with an important link to their culture and their past.

Characteristics:

- · Scar more-or-less regular in shape, often with parallel sides and slightly pointed or rounded ends.
- Scar usually stops above ground level.
- Exposed sapwood free of tree knots or branches or evidence of a branch having been at the top of the scar.
- Exposed sapwood at the base and (more rarely) at the top of the scar may show stone or steel
- Tree an Australian native species which occurs naturally in the district.
- Tree usually over 200 years old.



Healed scarred tree

