

# Practice Notes

## for Consulting Archaeologists

Edition 1, April 2009

Aboriginal Heritage Tasmania (AHT) is committed to a continuing and increasing high standard of consultancy work. From time to time AHT will issue Practice Notes for Consulting Archaeologists. These Notes will address specific issues as they arise. They will provide additional guidance to consultants regarding the standards expected for work on Aboriginal heritage in Tasmania. These Notes should be read in conjunction with the Consultancy Brief and the Aboriginal Heritage Investigation Report Guidelines.

### Note CA 09.1 Desktop Study

The Tasmanian Aboriginal Site Index (TASI) holds location information of almost 11,000 Aboriginal cultural heritage sites currently recorded in Tasmania. Access to this database will give an understanding of the sites already recorded within or close to your investigation/study area. TASI searches must be completed prior to, not after undertaking any Aboriginal heritage investigations. This must include coming in to AHT and reviewing all previous survey reports and TASI site record files for the area. You will need to allow up to 10 working days to have TASI searches completed – larger areas may take longer. Similarly, AHT need at least 5 working days notice to arrange your viewing of reports and files. Files must not leave the AHT premises and copyright laws allow only 10% to be photocopied. You may take as many notes as you require.

### Note CA 09.2 TASI Access

All TASI search requests must be emailed to [aboriginal@heritage.tas.gov.au](mailto:aboriginal@heritage.tas.gov.au) (this email can only be checked by Aboriginal Heritage Advisors) or posted to Aboriginal Heritage Tasmania Operations, GPO 771, Hobart, Tasmania, 7000, using the current TASI Access Form. This method of requesting access will enable the first available Advisor to process your request, thereby alleviating delays caused by leave, field work and individual work loads.

TASI information will, under no circumstances, be given over the phone. AHT require TASI Access Forms to be completed and lodged, along with appropriate maps and/or grid references and a clear description of the purpose of the search (preferably with a copy of your brief).

### Note CA 09.3 Briefing AHT

Following a desktop study and prior to undertaking field investigation(s), consultants and project manager(s) or proponent(s) must meet with AHT to give a full briefing of the project.

It will be expected at this meeting that the consultant will be able to describe the development and its potential impacts, the work they will be carrying out and their survey methodology and/or sampling strategy. It is also expected that the consultant will be able to show a best scale map (better than 1:25,000) of the proposed development and its surrounds and describe how their investigation will relate to it. At this meeting, any variation required from the Consultancy Brief and/or the Aboriginal Heritage Investigation Report Guidelines should be discussed. Any specialist requirements should also be noted.

### Note CA 09.4 Reporting Aboriginal Heritage Sites

It is a requirement under the *Aboriginal Relics Act 1975*, that Aboriginal heritage sites in Tasmania are reported to the Director of National Parks and Wildlife as soon as practicable. This means that TASI Site Recording Forms must be completed and forwarded to AHT in a timely manner. If you identify a potentially significant or complex site, phone AHT as soon as possible and forward Site Recording Forms when practical.

### Note CA 09.5 TASI Numbers

All figures, tables and references to sites recorded during the project/survey must show TASI numbers, not field designations. TASI numbers will be allocated by AHT and will, under no circumstances,

be given out until site-recording forms are completed accurately and lodged with AHT. It may take up to 5 working days for TASI numbers to be allocated.

## Note CA 09.6 GPS

Site locations should be defined by GPS.

Grid references should be noted on the TASI Site Record Forms and be presented in a gazetteer as an appendix of the report. Eastings and northings should be recorded as six and seven figure numbers respectively.

Where Aboriginal heritage investigations are carried out in areas which have recently been mapped using the GDA coordinate system then grid references should be based on the GDA 94 datum only. Currently, in most cases in Tasmania, 1:25,000 maps are still published based on the older AGD 66 system. In this case, grid references should be given using both GDA 94 and AGD 66 datums.

The datum used should be clearly defined on TASI Site Recording Forms and in your report. The datum of your GPS should be checked – there are numerous occurrences of incorrect datums being used and quoted.

For large artefact scatters (>50 x 50 metres) polygons should be defined by GPS and presented on any maps.

The “tracking” function on your GPS must be used to identify the transects walked. These GPS “tracks” together with site locations must be presented as files on a CD and incorporated in a map in the final report.

## Note CA 09.7 Differential GPS

Consultants should consider the use of a Differential GPS in recording and defining artefacts and site edges. These instruments are particularly useful on broad acre surveys where artefact scatters might appear as widespread background ‘noise’ with discrete concentrations here and there. They are also useful for describing the fall off over distance of artefacts in a workshop or away from a source.

A differential GPS can be used to log artefacts of different types and materials and this data can form the basis of GIS layers which in turn can lead to a more sophisticated examination and description of the characteristics of artefact distributions.

Differential GPS measurements of surface artefacts should be used as a precursor to designing a

sampling strategy involving sub-surface exploration.

It is mandatory that the position of the sites located within 20m of cadastral boundaries be located by Differential GPS. If grid references for sites are inaccurately recorded using more conventional methods, liability may arise if neighbouring property owners are required to carry out works based on site positions placed erroneously on their property.

## Note CA 09.8 Mud Maps

Even in this day and age of GPSs, it is still important for each site to hand-draw a ‘mud map’ in the space provided on the TASI Site Recording Form. Mud-maps have been used for relocating sites where the GPS readings are incorrect or have been quoted using an incorrect/unknown datum.

Mud maps of site locations should place the site in relation to geographical features that are unlikely to move in the next few decades - streams, roads, bridges and to a lesser extent fences and gates. Do not use a photocopied 1:25,000 map for your mud map. The scale is too small to be of use at a local level.

## Note CA 09.9 Test Pitting

Where test-pits are required to be dug to locate Aboriginal heritage they must be hand-dug and contents should be wet sieved through a minimum of 3mm mesh.

All test-pits should be recorded adequately. This entails locating test-pits in space to  $\pm 10$ cms from an established datum and describing their orientation and their depth. Sections should be photographed and described. Any obvious stratigraphy should be followed and drawn; otherwise spits of 5cm should be excavated. Any variation is to be discussed and agreed upon with AHT.

All test-pits should be backfilled.

A permit to excavate under the *Aboriginal Relics Act 1975* should be discussed prior to undertaking subsurface investigations.

## Note CA 09.10 Auguring

Auguring must not be undertaken with a power augur. Only hand augurs are permissible.

Auguring should be undertaken in short stages of approximately 15cms. Successive lengths of material recovered should be laid out on plastic and

examined and the contents recorded.

Ideally, enclosed augurs enabling the recovery and recording of an intact column should be used.

The location of augur holes should be recorded to  $\pm 10$ cms from an established datum. Contents should be recorded fully.

Augur holes should be plugged.

A permit to augur under the *Aboriginal Relics Act 1975* should be discussed prior to undertaking subsurface investigations.

## Note CA 09.11 Dating Sites

An appropriate dating technique must be demonstrated in the research methodology.

## Note CA 09.12 Sampling Procedures

From time-to-time consultants will be required to carry out sampling procedures for surveys or test-pitting and excavations.

Consultants will be required to defend their research design and statistical methodology in their initial meeting(s) with AHT.

It is highly recommended that consultants engage a statistician to advise on research design and sampling procedures.

## Note CA 09.13 Predictive Statements

Archaeologists tend to use the phrase 'predictive model' in a loose fashion. When archaeologists undertake a prediction of site density or distribution on the basis of a literature search or their feelings about a landscape or something similar it should be termed a predictive statement or an opinion.

In contrast, however, a predictive model is a result of a process (modelling) where the probability of the presence/absence of Aboriginal sites is estimated using rigorous statistical methods in conjunction with a well thought out research design. Such models are testable and verifiable and should be so tested and verified in the course of the consultancy.

A predictive statement or an opinion is best guess and should not be used to constrain or modify an investigation. Doing so will just continue a circular argument. If only a predictive statement can be given for an area to be surveyed, then that area

should be surveyed with 100% coverage.

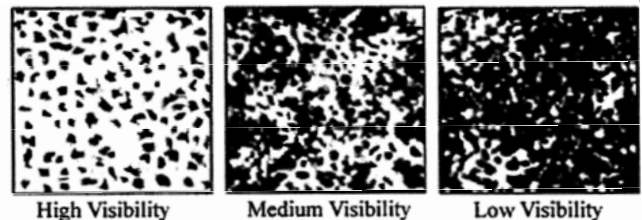
A predictive model on the other hand is testable and verifiable and lends itself to more sophisticated survey strategies and testing procedures.

## Note CA 09.14 Visibility Estimations

Visibility estimations could be a useful gauge of survey coverage. However, if visibility estimations are not undertaken with any rigour or standardised manner there is great inter-observer variability. It is impossible for observers to estimate in a replicable manner and without careful measurement more than five classes of visibility; full, high, medium, low and no visibility.

Consultants are required, therefore, to employ the following visibility guide in order to estimate visibility:

### Ground Visibility Guide



Low = 25%; Medium = 50%; High = 75%. Two additional designations of "Full" visibility = 100% and "None" = 0% should be used.

## Note CA 09.15 Transects

Transect widths determine the capacity to find artefacts. Transect widths are also used to estimate survey coverage. However, many consultants over-estimate their capacities of observation and thus bias their estimation of transect widths and survey coverage to the detriment of site recovery.

Figures as high as 25 metres wide for single transects have been quoted.

Most observers are only capable of seeing artefacts 2-3 metres either side of them in good visibility. This figure reduces in poor visibility.

Consultants are asked to ensure they achieve adequate coverage by:

having enough people on the ground covering the survey area with a sufficient density of transects  
using different personnel in a second survey to check results, and/or

undertaking additional surveys at right angles to the first in order to maximise recovery.

## Note CA 09.16 Weather

As the weather can effect survey recovery, consultants are asked to remark on those aspects of the weather that could influence efficiency of observations, e.g. rain, sun, cloudiness, ash from recent bush fires, etc. These observations should be marked against each day of survey and the area covered and the sites found under those conditions.

## Note CA 09.17 Lithic Analysis

Consultants should advise AHT as to their lithic analysis strategy. AHT is striving towards a high standard of lithic analysis and consultants should consider involving a specialist if they are unable to meet the standard.

## Note CA 09.18 Role of Aboriginal Heritage Officers

It is best practice for any archaeologist working on Aboriginal heritage to be accompanied by an Aboriginal community representative. In Tasmania it is generally expected that this community representative be a Aboriginal Heritage Officer (AHO) as they have the requisite skills and knowledge to take on this role. The role of an AHO when working in conjunction with an archaeologist is to:

- assist in the field survey
- conduct Community consultation
- provide an Aboriginal Community perspective for inclusion in your final report.