

Chapter 3: Assessing the Resource

3.1 Introduction

Archaeological sites are identified through a process of research and assessment. They can be identified through a stand-alone Archaeological Assessment document or through a Conservation Management Plan. This assessment can form a part of a larger Development Application, Environmental Impact Statement or a Heritage Impact Statement. Each of these will be discussed in turn in this chapter and the issues and problems associated with them highlighted, with an analysis of possible improvements.

The development of the heritage protection mechanisms in NSW was based around an artificial separation of the protection of archaeological heritage from the more general heritage protections. This was done in part because of the nature of the archaeological resource; as archaeological sites are largely invisible until excavation, generalised, wide-ranging protections were created as a catchall for protecting these sites. This has however, led to difficulties, including value judgements that archaeological sites were less worthy of conservation as they were not often the subject of Permanent Conservation Orders. Archaeology should however, be viewed as just one other of the range of ways of investigating and appreciating the past and by a better integration with the processes used to protect and promote other types of heritage values, a more representative and fully developed appreciation for the past will be achieved.

In NSW, significance assessment (as outlined in the *NSW Heritage Manual*) is the primary method for determining why a place is significant and what the appropriate course of action for its management. Additional, archaeologically specific assessment criteria have been developed by the discipline but have not been formally adopted by heritage agencies, nor are they universally applied by the profession itself.

One of the major issues with assessing archaeological significance, which is prevalent in virtually all types of heritage study, is the lack of recognition that archaeological remains may be a contributing factor to the significance of a site or in some cases the primary factor relating to its significance.¹ Another issue is that the assessed significance of a site may change during or after excavation has been undertaken, as these works may reveal a site to be more or less significant, based on what is discovered. Similarly, ideas of what is and is not significant will change over time, through the changing priorities and perceptions of the public and the discipline. Significance is therefore dynamic and may require reassessment throughout the process of working on a particular site, rather than something that can be conclusively established at the outset. The

¹ The Parramatta Hospital site is a good example of this. As the site of a hospital and medical facilities since 1790, it is the oldest such site in Australia. The buildings and landscape above ground are highly compromised and have negligible heritage significance, however there are undisturbed archaeological remains of all periods of hospital activity on that site.

significance of a site may also be influenced by the removal of archaeological fabric. The amount of archaeological material (building fabric or other archaeological deposits) removed from a site may reduce the significance of a site, although there is not a distinct formula for determining this. Similarly, on sites of limited significance, the removal of fabric may have little or no influence on the final significance of a site. It may also add to the significance by increasing knowledge of the site.

Significance assessments need consider archaeological sites in their context rather than thinking only within the boundary of the individual site. One basic problem of perception is the belief that archaeological remains will only exist beneath, or in conjunction with, historic buildings or other aboveground historic structures, rather than potentially existing beneath more recent, historically insignificant structures or buildings. Another is the lack of acknowledgment that archaeological sites will often bear little relation to current cadastral boundaries, and may be spread over many adjoining sites. This often leads to important archaeological sites being overlooked in the course of the development assessment process.

3.2 Significance values

The primary significance values are:

- Historic significance
- Aesthetic significance
- Social significance
- Research significance

Supported by the degrees of representativeness and rarity

These have been superseded to a degree by the new criteria for listing on the State Heritage Register, established with the amendments to the *Heritage Act* in 1998. These criteria may not however be appropriate for use with respect to all archaeological sites, as they are geared towards assessing items for State heritage significance. They are also not widely used by the archaeological consulting community when assessing the significance of a site.

The new SHR criteria should however be incorporated into all new or revised Heritage Council guideline documents with respect to archaeology and the existence of these new criteria must be promoted to the archaeological consulting community. They will not always be appropriate for assessing archaeological site, however, as the blanket relics provisions of the *Heritage Act* protect both State significant archaeological relics and relics of lesser significance.

The discussion below examines the earlier set of values with respect to archaeology. This discussion highlights some of the problems of significance assessment with respect to archaeological sites. The new SHR criteria are much

broader in scope and may overcome some of the problems outlined below with respect to historical archaeological sites.

3.2.1 Historic significance

Historical significance is an essential value when assessing archaeological sites and when dealing with an archaeological site alone, it is generally dealt with in a meaningful way. When dealing with a multilayered, multi-use site however, assessment of historic significance in relation to archaeological questions are often overlooked. On a site with a built heritage item above an archaeological site the significance of the archaeological site can be overshadowed by the significance of the built item. The two need to be recognised and assessed as parts of the whole significance of a site.

This is not generally a problem where the built item is not under threat, but becomes problematic:

- when decisions are being made about the retention of the item;
- where a determination has been made that the built item has no significance;
- where major works are planned to a built item with substantial archaeological resources.

In this case, decisions can be made regarding the future use of the site that may not adversely affect the built heritage but could have an effect on the archaeological resource. This will become more of an issue as the intensity of development pushes into areas settled in the mid-20th century. For example, where buildings with little architectural or historical significance, such as light industrial or residential sites, have significant archaeological remains underneath them. It is therefore important to ensure that significance assessments for built items address the historical values of potential archaeological remains and from previous periods of occupation.

3.2.2 Aesthetic significance

This value is often seen to be irrelevant to archaeological sites. In part, this may be because Australia lacks the dramatic and picturesque archaeological ruins of Europe or North America. Most historical archaeological sites in Australia are not visible, such as those in urban areas, which have later development atop them. Some rural archaeological remains would be seen to fit within the “aesthetic” criterion, as would some industrial remains. Most sites however are below ground and make no aesthetic contribution to a landscape or streetscape. The aesthetic significance of most archaeological sites is only realised through their subsequent interpretation (for example First Government House, Foundation Park)². It may also be useful to view the *potential* contribution of archaeological remains to the aesthetic significance of a site or its vicinity.

² Both the First Government House plaza and Foundation Park (in The Rocks) are heavily interpreted landscapes which not only display the significance of the archaeological site in an easily understood manner but also make a positive contribution to their surrounds as interesting landscape elements in their own right.

A more landscape-based concept of heritage significance and setting will allow for a better consideration of the aesthetic significance of archaeological remains. The setting of archaeological remains may be an important factor in assessing any aesthetic significance of an archaeological site. This may need to be examined in conjunction with the historic significance of a site, i.e. was this site chosen for its original purpose due to its visual prominence, or other aesthetic considerations. Such an approach has been taken in the protection of historic views, and a landscape-based concept of archaeology may allow for consideration of such issues.

An archaeological site may also have the potential to offer aesthetic information about an earlier phase of a standing structure or a demolished structure. This typically would be identified as *research/technical* significance but information such as plaster or paint fragments³, decorative woodwork, cornices or other ornamentation or information about placement as size of garden beds or features⁴ can all potentially contribute to a better understanding of the aesthetic significance of a place.

Aesthetic considerations will not always be relevant to archaeological sites. Assessment of aesthetic significance will need to be examined for relevance on a site by site basis, rather than as a given criterion to assess.

3.2.3 Research/Technical significance

Significance assessments of archaeological sites tend to focus on technical or research significance. This refers to their ability to contribute information about the history, development or use of an area through scientific analysis of archaeological data from the site.

This can include scientific analysis such as examination of statistical patterns (through analysis of artefact collections and comparison to other similar sites), faunal or botanical analysis (such as examination of the nature of diet of the inhabitants of a site, or looking for indications of domestication of animals through morphological changes in recovered bones), ecological analysis (microscopic examination of parasites or pollen) or compositional analysis (such as the chemical makeup of pottery or bricks produced at a kiln site). Such analysis is detailed, painstaking, time consuming and all too often left out of the equation when a site is excavated.

Archaeology differs from the other heritage disciplines in this regard as the final value or “use” for the site is often realised after the site itself ceases to exist

³ As at Old Government House, Parramatta.

⁴ As at Valcluse House. The Historic Houses Trust has used archaeological information to assist in the reconstruction of the kitchen garden for the site.

through the process of excavation. Whereas with architecture or planning, the end product is a conserved structure or landscape, the end product of an archaeological project usually involves the excavation of the site in question. The exception to this is the instance where a site is conserved and interpreted as a monument, educational resource or public open space.

To realise the technical significance of a site requires careful research and development of approaches to the site before and during the excavation, then additional analysis and research upon conclusion of the excavation. Without planning or research the technical significance will not be realised making its excavation in some respects, pointless. Additionally, different concepts of what research is, and the different interests of individual practitioners, can shape the definition of what the archaeological site consists of, and the nature of the contribution that site can make in the final analysis.

Conflicts can arise between the desire to realise the research or technical significance of a site at the expense of its conservation. In many cases this is acceptable, and often necessary. However current issues with resources, artefact repositories, outlets for archaeological information, availability of skilled archaeologists and the saturation level of the market for this type of information often means that the technical or research significance of archaeological sites is not realised. Some of these issues will be further explored in Chapter 5.

To further refine this issue of technical significance, Anne Bickford and Sharon Sullivan developed several additional assessment criteria for archaeological sites in the mid-1980⁵s:

Can the site contribute knowledge that no other resource can?

Can the site contribute knowledge that no other site can?

Is this knowledge relevant to:

- General questions about human history?
- Other substantive questions relating to Australia history?
- Other major research questions?

These criteria can assist in refining issues related to the research significance of the site, but even an adequate assessment of these criteria does not necessarily guarantee that the research significance of a site will be realised. These criteria, published in 1984, are to a degree still predicated on an assumption that archaeology is still principally done in an academic context and that the resources are available to answer these questions effectively. They also belie the

⁵ Bickford & Sullivan (1984) "Assessing Research Significance of historic Sites", in Sullivan & Bowdler, 1984, *Site Surveys and Significance Assessment in Australian Archaeology*. These criteria are very similar in their intent to Criterion e) of the new SHR significance criteria.

fact that many consultants may not in fact have any desire to do research, but rather see their role as one of heritage management.

The issue of research remains vexed and a full treatment of the issues is beyond the scope of this document. Nevertheless, the importance of research in archaeology must be recognised, as must the potential for archaeological research to contribute significantly to the understanding and appreciation of Australia's heritage. Sites with substantial, genuine research potential must therefore be protected as such and appropriately dealt with when and if it becomes necessary to excavate them.

3.2.4 Social significance

Social significance is also overlooked on many occasions when an archaeological site is assessed. This may be partly due to the difficulty of identifying a contemporary community of interest for sites that have passed out of everyday use and often not even known to the local community. Adequately assessing social significance is a time-consuming process of consultation with the community and requires specialist skills. This consultative process tends to be undertaken for archaeological sites only where a site has been earmarked as "sensitive" in one way or another. Typically, community consultation occurs for burial sites and cemeteries, religious buildings or for Aboriginal sites, because these classes of site have been prejudged to have "significance" to the contemporary community. A former industrial site however, may elicit strong social significance values from those who formerly worked at the site, or their families, regardless of the presence or absence of aboveground remains of that industry.

Many sites will of course have little or no significance to the contemporary community, but some will have a high level of social significance, such as the Conservatorium of Music or Orange Court House. In both these cases it was only once these projects were underway that the community became widely aware of the site, largely through media coverage, and the level of social significance became apparent. In these cases however much of that significance was due to a community attachment to many aspects of the site simultaneously, with the archaeological remains not necessarily paramount among community concerns.

Despite the difficulties involved, social significance requires additional consideration when assessing archaeological sites. In addition to contributing to a more comprehensive understanding of the value of the site they assist in determining the value and potential benefit a site may give back to the public following archaeological works. Guidelines need to be developed to help identify early on the types of sites where community consultation may be appropriate, to provide opportunities for assessing contemporary social significance. This is especially true for sites with high public profiles or where it is reasonable to assume an active community interest.

3.2.5 Thresholds of Significance

Rarity

In many areas of NSW, archaeological sites will meet the rarity threshold. Sites may be rare due to intensive redevelopment (as in the greater Sydney area), due to sparse land use (as in many country areas) or because the site was used for an uncommon practice (e.g. certain types of industrial sites). For this reason, rarity needs to be considered in the relative context of the area or type of site.

The archaeological resources of NSW are being rapidly reduced, particularly in urban areas where the population and hence the need for development are concentrated. In 1992, it was estimated (in the Central Sydney Archaeological Zoning Plan) that only 5% of the archaeological resource in Sydney was still intact, due to development over the previous 200 years. Since that statement was made the vast amount of development that has occurred has further reduced this percentage. As Sydney has a high concentration of significant archaeological remains it is important to manage them within this framework of urban development to ensure that some of the resource is retained in the ground.

Not all of the remaining resource should be retained in situ, however consideration should be given to which sites are significant and should be retained. This may mean retaining some parts, interpreting other and allowing others to be removed with or without archaeological intervention. This could be achieved through the preparation of archaeological management plans as discussed in Chapter 2.

Representativeness

This threshold can be difficult to apply to archaeological sites, as the actual representativeness of the archaeological resource cannot be fully ascertained until excavated and compared to other sites. Representativeness should be both a measure of how common a site type is (such as inner city terrace houses) as well as how typical that type of site is (e.g. a typical worker's cottage as opposed to a typical middle class townhouse).

It is possible however to make predictions during the assessment phase and through research, certain types of sites (such as urban terrace houses or coal mining sites) can be classed as representative. Representativeness can also be assessed against how well a site type acts as an exemplar of other, broader heritage values of an area. A certain type of industrial site may therefore be highly representative of a particular region and may therefore deserve more detailed consideration than a site which is not associated with the wider historic themes of an area.

Representativeness, therefore, must be taken into consideration in conjunction with the other values identified above, or with other historic themes relevant to a particular place, industry, etc.

3.3 Archaeological assessments

Archaeological resources are usually assessed through the preparation of the Archaeological Assessment. Guidelines for these documents were developed and published by the Heritage Office in 1996 as part of the *NSW Heritage Manual*. These guidelines were developed in consultation with the profession

Archaeological assessments provide an overview of the historical use and development of a site. Using this information a prediction is made in the assessment regarding the likely archaeological remains previous uses may have left behind, their heritage significance and likely state of preservation.

In some cases, assessment documents will examine the potential impacts of proposed works (i.e. development or conservation) on the predicted archaeological resource. Assessments may also contain a research framework for undertaking any necessary archaeological investigation of that resource.

3.3.1 The Assessment Process

Archaeological assessments are prepared for a number of purposes: advice to clients on site-specific issues and constraints; accompanying information with a development application to a local council; information accompanying an application under the *Heritage Act* for the disturbance of relics; supporting information for a heritage listing nomination. Not all archaeological assessments will necessarily lead to an application to the Heritage Council to disturb relics.

Similarly the level of detail required in an assessment will be predicated on the purpose for which it is prepared: a greater level of detail is required for an excavation permit application than may be required where an landowner merely wants to identify a potential issue on a particular site.

The assessment process currently called for in the *NSW Heritage Manual* is broken down into five stages:

1. Background historical research
2. Site inspection
3. Identify issues
4. Assess significance
5. Develop management policies

These are the essential stages to produce an Archaeological Assessment.

The additional stages required are:

1. Assess archaeological impacts
2. Develop appropriate research design and methodology
3. Develop mitigation strategy

The way in which these steps are undertaken can vary from site to site and from assessment to assessment. It has been debated within the archaeological community as to whether it is the place of an Archaeological Assessment to assess heritage impacts, however it is rare that a Heritage Impact Statement specifically addresses archaeological issues. This is an issue which is generally dealt with on a case-by-case basis.

Similarly, there are questions as to what is the appropriate level of detail for a research design and methodology. The guidelines however provide a key basis for negotiation between consultants and clients as to the level of detail required in the assessment process and the scope of recommendations which come out of that process.

The preparation or revision of guidelines in future must take into consideration this commercial aspect of archaeology, as the guidelines provide the benchmark for quality control and professionalism, as well as providing the clients of archaeologists an understanding of their obligations. It may therefore be useful to provide a summary framework in revised guidelines as to what are appropriate levels of intervention or assessment for different types of archaeological sites or relics. The should include a clear explanation of issues such as in situ conservation and the implications this can have on developments.

3.3.2 Resource identification

When a site is assessed for “archaeological potential”, this assessment should include both an identification of the archaeological resource as well as a determination as to its significance. Australia’s historical record is well suited to assisting in the identification of the potential archaeological resources of a site, especially in areas which have been urbanised from the late 18th or early 19th century. Record keeping was reasonably good in built-up areas and careful archival research can generally provide a reasonable idea of the historic uses of a particular site, if not the exact nature of those uses.

Typically resource identification is not problematic, provided the historical research has been adequately undertaken. Resource identification can also be assisted through a site inspection, though this is often not useful in urban areas where existing buildings prevent access to the archaeological resource until after demolition has occurred. Resource identification can be further assisted through a process of test excavation, especially when there are outstanding questions regarding the extent of archaeological remains on a site and/or their likely level of preservation.

3.3.3 Testing

Archaeological testing can assist in understanding the nature and extent of an archaeological resource where the historic records do not provide enough information to make a prediction. This is not often undertaken in NSW for a variety of reasons. One of the most common reasons is that there is an existing

structure on the site, which will not be removed until the development proceeds. Another is that historical records are generally detailed enough to allow accurate predictions to be made. As it adds to the costs of archaeological investigation, testing should only be used where it adds information to the process of decision making.

Depending on the nature of the site and the test program testing may assist in determining that:

- the site has little or no archaeological remains;
- that it has substantial and well preserved archaeological remains, or;
- that it has archaeological remains different from those predicted through historical research.

Testing can also assist in defining which areas are archaeologically sensitive, in order to locate impacts or potential impacts away from significant deposits. This last outcome is beneficial to both the significance of the site and to any development proposed for the site, as it can reduce impacts, cost and time.

Testing is not always appropriate on every site. While it can be a useful technique, it should only be used when appropriate, for example when there are unresolved questions regarding the nature or character of the archaeological resource or its location or condition. Testing can also assist in site assessment where sites are not to be excavated, by providing information, which can be used, for future management of that site.

3.3.4 Research designs

A research design provides the overarching guiding framework for what is to be achieved through excavating an archaeological site. It defines why and how the investigation is being undertaken and sets directions for the way the results will be used.

Because of the unique contribution that archaeological remains can make to understanding the history of NSW, it is important that the goals of any investigation are research oriented.

The research design stems from the need for the archaeologist to assemble and interpret the archaeological information to make it meaningful. Archaeological data itself requires detailed consideration before, during and after excavation works, as well as comparison with similar sites, to draw meaningful conclusions. Otherwise, archaeological works become merely descriptive, and do not contribute to our knowledge and understanding of the history and importance of a place.

A large percentage of archaeological work in NSW is done through the process of redevelopment. It is difficult due to the pressures of construction programs to achieve the same level of research output that purely academic investigations

are able to achieve, and it begs the question ‘should the development industry be responsible for funding research?’ to which there is no easy answer. It is common for the archaeological investigations to occur in a context where the goal of the project is to record the historic site to allow its removal and not to interpret the findings. There are numerous cases where funding is not provided for post-excavating analysis of archaeological material from a site once archaeological investigation work is finished.

Very few investigations in recent years could be considered true ‘research’ excavations and even these generally have a larger commercial outcome, such as the Cumberland St excavations (residential redevelopment) or Prince of Wales cemetery (new medical facilities). In both of these instances, however, the sites are government-owned and government committed significant resources to the archaeological works, to allow the research potential of the sites to be realised. While this has had flow-on economic benefit (increased tourism in the Rocks; medical research into children’s cochlear ear implants) these benefits are subsidiary to the main aims of the site owners.

The issue of research designs is dealt with briefly within the Archaeological Assessments volume of the Heritage Manual. However these guidelines do not outline basic requirement for the scope or contents of research designs. A specific guideline should be prepared in consultation with the profession to address these issues. It may be useful to link the research designs with the proposed thematic frameworks discussed in Chapter 2.

Suggested Actions:

- **Archaeological Assessment guidelines updated;**
- Methods for streamlining excavation permits for test investigation be investigated;
- further discussion held on the issue of Research designs, ultimately leading to consultation with the archaeological community and development of additional guidelines.

3.4 Conservation Management Plans

The Conservation Management Plan was developed as a method for carefully assessing the heritage significance and physical fabric of a place (typically a building) to make recommendations about both physical conservation works and appropriate uses of the site. While CMPs for archaeological sites have been prepared on many occasions in the past, they remain uncommon, as typically proposals relating to archaeological sites involve removal, rather than retention, of fabric.⁶

⁶ Two recent examples are the CMPs for the Conservatorium of Music archaeological remains (Casey & Lowe 1998) and the Dawes Point Battery (SHFA 1999). Earlier examples include Hyde Park Barracks, First government house and The Mint. Note all of these examples are for government-owned sites.

Most CMPs are prepared for items of built heritage and in the majority of cases this means an individual building. CMPs are less frequently prepared for complexes of buildings, precincts⁷, monuments or items of machinery. Most include detailed analysis of the fabric of the item or site and make recommendations about treatment procedures to reverse damage, preventative maintenance guidelines and wider ranging recommendations about site management including future use, access and maintenance.

There are several issues relating to archaeology in the CMP preparation and assessment process:

1. CMPs which do not look at potential archaeological issues or include them only as an appendix;
2. Lack of analysis of the archaeological fabric, whether below ground or hidden by other features of the site;
3. Archaeological values are not used to contribute to the statement of significance;
4. the endorsement of CMPs that do not adequately address archaeological issues.

3.4.1 CMPs which overlook archaeology

When a CMP is prepared for a site, it is typically prepared for a particular purpose such as the conservation of a structure for re-use. While CMPs have brief histories that seek to place the site in its context and trace its development this will generally not extend to a detailed archaeological analysis. CMPs often concentrate on fabric analysis, conservation works and future management of the above ground structure or structures on the site.

If they are prepared in this way, the assessment of significance may overlook important historical aspects of a site. Many sites, which contain historic structures that warrant CMPs, will be in areas that had a previous historic use. This is especially true within urban areas. There may be remains of the earlier use of the site beneath the standing structures that may be significant in their own right. With complexes (rural or industrial) it may include remains of outbuildings or subsidiary structures which contribute to the understanding of the place. The significant building or complex in question may also have archaeological remains associated with its use. By not including an examination of archaeological potential the CMP may overlook important historical aspects of the site.

The CMP may also recommend conservation works or make future use recommendations that may impact upon archaeological remains. This could include common activities such as wall underpinning, clearing of subfloor spaces for ventilation or fire reasons, installation of new services, improvement of drainage, etc. All of these may impact upon archaeological remains depending on the nature of the site and works. The CMP may also be used as justification

⁷ Walsh Bay Precinct Conservation Management Plan 1996, Clive Lucas Stapleton

for more major works, such as extensions or construction of additional structures that may have archaeological impacts that may or may not be appropriate.

If archaeological potential is identified during the preparation of the CMP, then it can be planned for in the management recommendations provided the CMP takes an approach that integrates archaeology into the statement of significance and management policies. The potential for difficulties remains if the archaeological assessment is left to a separate appendix.

If archaeological remains are significant, then they can be planned around and impacts relocated where appropriate. If they are less significant, they can be resolved under appropriate archaeological supervision. This increases certainty on the site in terms of archaeological issues relating to future use, conservation and redevelopment as well as providing a better picture of a site's significance.

3.4.2 Heritage Council endorsed CMPs

Heritage Council endorsement allows works to proceed on a site without further reference to the Heritage Council, provided those works are in accordance with the CMP. A CMP, which calls for underpinning or the installation of new drainage for example, may produce the best conservation option for the built structure while having an unintentional impact on the archaeological resource. The applicant may also be under the impression that further approval for archaeological works is not required, as the endorsed CMP has recommended subsurface works.

This has the potential to delay the project or impact on archaeological remains without appropriate assessment or supervision. The endorsed CMP may also be used to prepare or support an otherwise sympathetic development application, with unintended archaeological impacts.⁸

CMPs that do not adequately address archaeology should not be endorsed unless the site is shown to have no archaeological remains.

Suggested Actions:

- **amend CMP checklist and guidelines to call for a examination of archaeological potential when any subsurface works are called for;**
- **establish conditions for Heritage Council endorsement that ensure that archaeology is addressed and policy is provided where there is reasonable cause to suspect the presence of relics.**

3.5 Environmental Impact Statements

Environmental Impact Statements are part of a more general class of environmental impact assessment (EIA) documents which can include Reviews of Environmental Factors, Statements of Environmental Effect, etc. The discussions here are relevant to these classes of document generally. The

e.g. Sir Joseph Banks hotel, Botany; Orange Court House

differences between the document types are usually related to the scale of the project and the nature of the proponent (public vs private).

EIAs are prepared for most major development or infrastructure projects undertaken in NSW. They range in size from a Review of Environmental Factors for the demolition of a bridge, to a full Environmental Impact Statement for a new road or rail route⁹. EIAs and EISs are required to take account of heritage through the Department of Urban Affairs and Planning Guidelines (issued under the EP and A Act) and the Director-General's Requirements.

The quality and level of detail of archaeological assessments in these documents is quite variable, however. This may be due to a number of factors:

- the specialist environmental consulting firms that prepare most EISs often do not have in house heritage expertise;
- there are no standard briefs for such firms to use to ensure that their sub-consultants adequately assess heritage issues;
- the DUAP Heritage Guidelines briefly cover major content issues but do not provide detailed guidance such issues as format, site survey standards, legislative requirements under the *Heritage Act* and best practice management recommendations.

The Heritage Office strategic plan for 2000-2005 notes the need for these guidelines, which will be prepared by the end of 2000. The Office has also partly addressed this issue by preparing a standard letter in response to inquiries regarding heritage requirements for EISs. This has ensured consistent advice is issued.

A further issue is that where archaeological assessments are undertaken the recommendations are often not actively used to make design modifications which may lessen impacts. This is especially important with large-scale infrastructure projects, which may have substantial and wide-ranging heritage impacts for all types of heritage items.¹⁰

These assessments are also prepared after initial decisions about site choice and preliminary options. From the beginning of this year the Heritage Office has been requesting DUAP to include heritage as a criteria in initial site selection criteria to ensure that major heritage issues are considered at an early stage in the process.

Suggested Actions:

⁹ EISs are typically required for State-significant development, under the EP&A Act 1979.

¹⁰ A recent good example of this is the Eastern Gas Pipeline, a 740km pipeline for natural gas, between Victoria and NSW. The EIS heritage assessment identified 109 archaeological sites along the route of the pipeline and through consultation with the archaeologist, most sites were avoided and those, which were impacted, had minimal impacts.

- **prepare specific EIS heritage and archaeological guidelines, and work with DUAP to amend their guidelines in the EIS Manual;**
- **ensure EISs consider heritage as an issue when making recommendations about site choice for works;**
- **liaise with DUAP regarding D-G's Requirements for heritage;**
- **hold briefing sessions for major environmental assessment firms on heritage and archaeological issues;**
- **prepare standard brief, which can be used, for EIA archaeological/heritage assessments.**

3.6 Heritage Impact Statements

Impacts upon archaeological sites can be discussed within a Heritage Impact Statement or in a separate Archaeological Assessment. The common approach is to prepare a separate Archaeological Assessment.

The problems with this however, include:

- developments altering substantially as a project progresses;
- a lack of assessment of alternatives;
- loss of assessment documents as a site or project changes hands;
- assessing impacts of a particular project without adequately assessing the entire site¹¹.

One option to address this would be to prepare Archaeological Assessments in advance of projects and without reference to particular project impacts and then prepare a separate Heritage (Archaeological) Impact Statement, which refers back to the Archaeological Assessment document once development plans are prepared. This would ensure that impacts directly related to the proposal were addressed as well as consideration being given to alternatives at the design and planning stage of the project.

Another option would be to prepare a single Heritage Impact Statement that incorporates the Archaeological Assessment. A third would be to prepare separate documents that refer to one another.

While all three would be equally effective the second would facilitate a more integrated approach to archaeological site management.

¹¹ A recent example of this last was the School of Arts site in Pitt St, Sydney. Building works were approved by the HC on the basis that there would be no subsurface impacts. The proposal has been progressively amended. However, to include removal of the floor, installation of service trenches, etc. in areas which were not adequately assessed, on the basis that these areas would not be disturbed. This has now, however, caused the perception that "archaeology is delaying the project", despite then inadequacy of the original brief.

3.7 Problems with the assessment process

Issues raised regarding the assessment process above include the need:

- to focus on all aspects of significance when assessing archaeological sites rather than just research significance;
- to consider archaeological sites in broader terms as networks of sites within cultural landscapes;
- for adequate archaeological research and planning within the assessment process;
- to emphasis the potential for community benefit of the archaeological works at the assessment stage;
- to consider alternatives in development which may reduce impacts to a site;
- to consider that excavation may not always be a desirable option;
- to undertake wide-ranging background research which facilitate strategic decision-making about archaeological sites;
- to adopt more appropriate assessment criteria for archaeological sites;
- to improve the nature and quality of research designs and methodologies for archaeological works.

These outcomes will require active work to continue raising awareness of archaeology with local councils, the development industry, municipal authorities (e.g. service providers) and cultural organisations. If archaeology can be identified as an issue early in a project, it:

- a) can be dealt with proactively;
- b) will minimise delays;
- c) can be used to promote a project;
- d) can make a contribution back to the community.

These issues are further dealt with in Chapters 4 and 5.

Suggested Actions:

- **the Heritage Council heritage impact assessment guidelines are updated to incorporate archaeological requirements;**
- **the HC continue to take an active role in promoting archaeology as an essential component of the State's heritage;**
- **excavation of highly significance archaeological remains to be treated as a less desirable outcome when excavation can be avoided.**