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The information in this guideline is advisory, to assist in understanding the policies and processes for the protection of South Australia's archaeological artefacts through the special protection provisions of the *Heritage Places Act 1993*. Please seek professional advice from Heritage South Australia, DEW, regarding any specific enquiries or for further information.

Heritage South Australia, DEW, would like to thank the consulting archaeologists practising in South Australia for their contribution to this document, and the South Australian Heritage Council (Guidelines Working Group) for review and feedback.

Cover images: (top) Remote sensing survey Redbanks Hotel site (M. Morrison/H. Burke); (left) Peake Ruins, SHP 13624 (DEW); (bottom) Callington Smelter Works Excavation (N. Grguric).

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Preface

Archaeological sites are an important part of South Australia's heritage and a tangible reminder of how people lived in the past. They have great potential to contribute to a further understanding of the state's history, often with information not available from other sources. However, archaeological sites and artefacts are a finite resource that, if not recognised and recorded, can be lost forever.

The Department for Environment and Water is responsible for the protection and management of South Australia's non-Aboriginal archaeological resource under the *Heritage Places Act 1993*, and for advising government on heritage-related matters in the context of development. Accordingly, Heritage South Australia has developed this guideline, along with six complementary fact sheets, to raise awareness of archaeology across the state and to help owners and developers better understand and navigate their statutory obligations under the Act. The aim is to enable good heritage outcomes with minimum impact on construction costs and schedules.

This guideline provides best-practice advice on the process for managing potential, newly discovered or known historical archaeological sites or artefacts in South Australia, and for undertaking historical archaeological assessments and investigations where required by the Act. It was prepared in consultation with the South Australian Heritage Council, South Australian Maritime Museum, History Trust of South Australia, as well as archaeological specialists from Flinders University, Australian Heritage Services, Independent Heritage Consultants and DASH Architects. The department is grateful for their generous support and advice.

The guideline and fact sheets will assist the proper management of South Australia's archaeological resource and help support sustainable development that balances growth with respect for our heritage. Anyone involved in heritage ownership, development or management is encouraged to use these documents and to engage early and often with the Department for Environment and Water.

Part 1 – Introduction

his guideline provides best-practice advice on the process for managing potential, newly discovered, or known, historical archaeological sites or artefacts in South Australia.

What this guideline covers

This guideline describes the process for undertaking historical archaeological assessments and investigations where required by the *Heritage Places Act 1993*. It applies to **all** land in South Australia regardless of whether the land is designated as a place of archaeological significance or not.

Part 1 explains what constitutes an archaeological investigation and when one is required, and it defines key terms and role responsibilities.

Part 2 presents the guiding principles for conducting an archaeological investigation and outlines the key stages of preliminary archaeological assessment, the archaeological investigation proper and reporting.

Part 3 provides references and supporting information.

Who this guideline is for

This guideline is primarily for archaeologists.

It also is useful for others involved in development, including:

- owners of heritage places and their agents
- developers
- government staff, particularly planners who assess Development Applications
- planning consultants.

Key takeaways from this guideline are:

FOR DEVELOPERS/OWNERS – engage with an archaeologist early in the planning process if there is any chance of archaeology being impacted during construction.

FOR ARCHAEOLOGISTS – communicate early and often with Heritage SA throughout the archaeological process (assessment, permitting, investigation) to ensure best outcomes with minimum impact on construction costs and schedules.

Context

What is historical archaeology?

Historical archaeology is the study of physical indications of past human activity. These indications, especially archaeological artefacts, may be located on land or in water throughout South Australia.

Archaeology can provide information about the past that is not obtainable by other disciplines or from other types of evidence. It can rectify biases and fill in omissions in the historical record.

Archaeologists investigate sites through systematic excavation and recording of artefacts and other archaeological features encountered, including their context and relationship with the surrounding landscape. An artefact's context is vital for accurate interpretation of its significance.

Sometimes the presence of archaeological artefacts is known because of previous research. Most artefacts are buried and unknown, only to be discovered by accident, during construction work or, occasionally, because of an extreme weather event.

South Australia's archaeological heritage is nonrenewable – once an artefact is destroyed, if it has not been recorded, its ability to inform on the past is lost forever.

Managing our archaeological heritage is not necessarily about keeping archaeological artefacts in situ, which might otherwise prevent development. Often, systematic recording and scientific examination take place before artefacts are removed, or otherwise disposed of, to allow development to proceed.

Legislative basis

South Australia's *Heritage Places Act 1993* (HP Act) provides the statutory framework for the management of known and newly discovered archaeological artefacts through:

- the designation of State Heritage Places (Section 16(1)), including places of archaeological significance, and their listing in the South Australian Heritage Register (the register)
- the requirement for discoveries of archaeological artefacts of potential heritage significance (Section 16(2)) to be reported to the South Australian Heritage Council and not disturbed pending an assessment of their significance.

The HP Act also has provisions for the 'special protection' of archaeological artefacts, stating that, without a permit from the South Australian Heritage Council, a person must not:

- excavate or disturb a State Heritage Place designated as a place of archaeological significance (Section 26(a))
- remove archaeological artefacts from a State Heritage Place designated as a place of archaeological significance (Section 26(b))
- excavate or disturb any land for the purpose of searching for or recovering archaeological artefacts of heritage significance (Section 27(1)(a))
- excavate or disturb any land knowing or having reasonable cause to suspect that the excavation or disturbance will or is likely to result in an archaeological artefact of heritage significance being discovered, exposed, moved, damaged or destroyed (Section 27(1)(b))
- remove an archaeological artefact from a State Heritage Place designated as a place of archaeological significance (Section 28(1)(b))
- damage, destroy or dispose of an object listed in the register (Section 28(2))
- alter an object listed in the register in a way that would materially affect the heritage significance of the object (Section 28(3)).

Aboriginal cultural heritage

In South Australia, the HP Act does not apply to places associated with Aboriginal culture. Aboriginal sites, objects or remains are managed under the *Aboriginal Heritage Act 1988* by the Department of the Premier and Cabinet, <u>Aboriginal Affairs and Reconciliation</u> (DPC-AAR).

Many places can have overlapping Aboriginal and non-Aboriginal heritage significance where the HP Act can apply, such as parklands, cemeteries, former mission sites, medical institutions and mines.

Multiple layers of heritage significance should be identified early and managed collaboratively. Alternative arrangements may be needed to manage different cultural protocols, especially in relation to highly sensitive issues, such as human remains.

Any archaeological investigation conducted in accordance with the HP Act must take appropriate measures to ensure that no harm is done to any Aboriginal cultural heritage.

Where a site has both historical and Aboriginal heritage values, the owner/archaeologist will need to contact both DPC-AAR and Heritage South Australia (Heritage SA).

Human remains

Human remains may be found when carrying out an archaeological investigation. In South Australia, the handling of human remains is regulated under several Acts. It is a criminal offence to interfere with human remains, regardless of their apparent age, origin or circumstances of discovery. Artefacts associated with historic human remains also may be protected under legislation.

If human remains are located, work must stop immediately and SAPOL must be notified.

Definitions

Appropriately qualified person is someone who has the qualifications and experience required to undertake an archaeological investigation, including:

- an honours, masters or doctoral degree or graduate diploma in archaeology, preferably historical archaeology, or a related discipline
- professional experience in historical archaeology or a related archaeological field appropriate for the level and complexity of the investigation to be undertaken.

Archaeological artefact, as defined in the HP Act, is 'any matter forming part of an archaeological deposit, or any artefact, remains or material evidence associated with an archaeological deposit, that relates to the non-Aboriginal settlement of South Australia, or to an activity undertaken by a person as part of the exploration of South Australia, but does not include the remains of a ship or an article associated with a ship'.

Preliminary archaeological assessment is the process of evaluating the archaeological potential of a site. It consists of desktop research and, if required, non-invasive physical investigations, such as surface survey or geophysical survey. Further information can be found under Part 2 of this guideline.

Archaeological research plan (also known as archaeological research design) is a document that outlines the research framework that will guide an archaeological investigation so that it will provide meaningful information about the past. It includes the specific research question, problem or hypothesis that will be addressed by the investigation (what will be done), the research methodologies that will be employed (how it will be done), and the desired

outcomes and their significance and relevance (why it will be done).

Archaeological investigation is a desktop and/or physical investigation of a site carried out by an appropriately qualified person for the purposes of investigating, recording or conserving archaeological artefacts on the site.

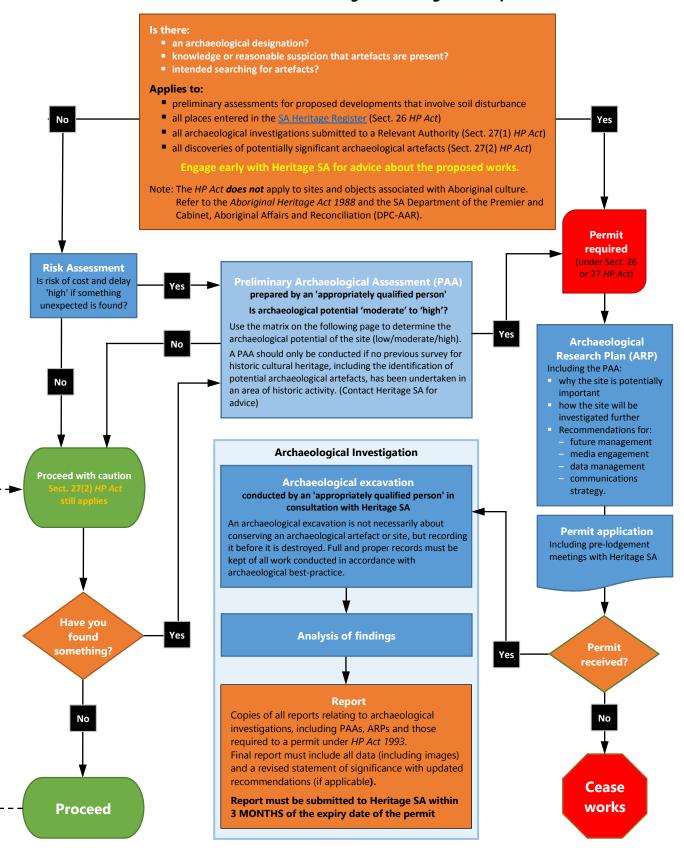
Geophysical survey is a non-invasive method for investigating below the surface of the ground using

various technical devices, without the need for excavation. It can include techniques such as ground-penetrating radar (GPR), electrical resistivity tomography (ERT) and magnetometry, among others.

Physical investigation may refer to other investigations apart from an 'archaeological excavation' and the recovery of archaeological artefacts. There is a range of scientific techniques that can be used to physically locate, assess and manage archaeological artefacts, many of which cause only limited or no disturbance.

Archaeological Guideline Flowchart

When is a historical archaeological investigation required?



Assessing archaeological potential

When conducting a Preliminary Archaeological Assessment (PAA) of a site or project for the **flowchart** on page 4, determine the archaeological potential using the following matrix and criteria for archaeological significance and likelihood of material survival.

Assessment of Archaeological Potential

	Likelihood of Survival				
Significance	Exceptional	High	Moderate	Little	Nil
Exceptional	High	High	Moderate	Low	Low
High	High	High	Moderate	Low	Low
Moderate	Moderate	Moderate	Moderate	Low	Low
Little	Low	Low	Low	Low	Low
Nil	Low	Low	Low	Low	Low
	Archaeological Potential				

Assessment of archaeological significance

The following grades are used to assess the archaeological significance of a site or property.

Grading	Justification
Exceptional	Artefacts or features of exceptional significance will yield information that will contribute significantly to an understanding of the state's history.
High	Artefacts or features of high significance will yield information that will contribute to an understanding of the state's history.
Moderate	Artefacts or features of moderate significance may yield information that will contribute to an understanding of the state's history.
Little	Artefacts or features of little significance are unlikely to yield information that will contribute significantly to an understanding of the state's history.
Nil	Artefacts or features of nil significance will not yield information that will contribute significantly to an understanding of the state's history.

Likelihood of survival

The following grades are used to assess the likelihood that artefacts or features have survived on the site or property.

Grading	Justification
Exceptional	Exceptional potential for artefacts to survive at the site (for instance, little site disturbance).
High	High potential for artefacts to survive at the site.
Moderate	Moderate potential for artefacts to survive at the site.
Little	Little potential for artefacts to survive at the site.
Nil	No potential for artefacts to survive at the site (for instance, major site disturbance).

Part 2 – Conducting an archaeological investigation

When an archaeological investigation is required

Archaeological artefacts can be found any place where there has been previous human activity. Some places may be known and listed in the register, others may be unknown.

An archaeological investigation is required when an activity may interfere with an archaeological artefact or place of heritage significance that is an important source of information about South Australia's history, regardless of whether the place is listed in the register or not.

If a proposed development affects a place listed in the register that is also designated as being of archaeological significance, a permit will be required (Section 26). This requirement should be identified during the preliminary archaeological assessment.

In most cases, the likelihood of archaeological artefacts of heritage significance being present is unknown. To avoid delays during construction work, it is recommended that a preliminary archaeological assessment be prepared for sites where there is a reasonable expectation of archaeological artefacts being present. It also should not be assumed that previous site disturbance has destroyed archaeological artefacts.

Who can conduct an archaeological investigation

The South Australian Heritage Council requires that assessments of archaeological potential be conducted by an appropriately qualified person. Written evidence of the qualifications and experience of the appropriately qualified person may be required as part of a permit application process.

The following matters will be considered when deciding if an individual has the appropriate qualifications and skills to conduct an archaeological investigation:

- previous studies and experience in Australian historical archaeology
- · quality of references and examples of previous work
- local knowledge about the area, specific place and project-specific issues

- where excavation, collection or monitoring is proposed, evidence of experience or knowledge of such practices/techniques and experience or knowledge in assessment, analysis, interpretation and dissemination of recovered archaeological materials. This evidence of experience should demonstrate the relevance and level of experience (such as having directed an excavation of similar scale – monitoring, test excavation or full excavation)
- where conservation or interpretive projects are proposed, evidence of experience or knowledge of conservation techniques relevant to the project and previous interpretive project experience
- associate membership or higher in the Australian Association of Consulting Archaeologists or another professional body relevant to the conduct of the archaeological investigation (e.g., Australia ICOMOS or Australian Society of Historical Archaeology).

Appropriately qualified persons undertaking an archaeological investigation may be assisted by personnel who do not meet these standards, provided they are supervised at all times in the field by an appropriately qualified person.

This is because it often takes expert training to recognise archaeological artefacts and features (for instance, ephemeral features such as buried post holes). The use of appropriately qualified people also reduces the risk of unnecessary discovery reports for items that are not significant.

Heritage SA keeps a register of appropriately qualified archaeologists that meet the required level of expertise and experience.

Guiding principles

- Archaeological investigations should be conducted in accordance with:
 - current statutory requirements (such as the HP Act) and South Australian Government policy, guidelines and advice
 - the guiding principles of heritage conservation and management in *The Burra Charter: The* Australia ICOMOS Charter for Places of Cultural Significance, 2013 (Burra Charter)

- ICOMOS Charter for the Protection and Management of the Archaeological Heritage (1990).
- South Australian legislation and South Australian Government policy, guidelines and advice take precedence over the guiding principles of external documents (such as international conventions), should any differences between them arise.
- Archaeological investigations should be conducted in a manner proportional to the known or potential heritage significance of the site, considering site conditions and other limitations. This should be demonstrated clearly in the archaeological research plan and project methodology.
- Targeted research helps identify and refine the understanding of the archaeological resource for State Heritage Places and non-listed places of archaeological significance. This can include the use of invasive sampling techniques, such as test excavation.
- In-situ conservation may be recommended in certain circumstances, where feasible.
- Salvage excavation is the last option for managing archaeological values within a State Heritage Place, particularly one designated as being of archaeological significance.
- All research, including archaeological excavation, must be conducted in accordance with a welldeveloped archaeological research plan that is guided by a clear research question, problem or hypothesis about South Australia's history.
- All archaeological investigations should contain contingency provisions in case results indicate the initial assessment is inaccurate.

Stages of an archaeological investigation

Archaeological investigations should follow a systematic process that builds upon available information. The key stages are:

- 1. preliminary archaeological assessment
- 2. archaeological research plan
- 3. permit/approval
- 4. implementing the research plan
- 5. analysis of findings
- 6. reporting.

Stage 1: Preliminary archaeological assessment

Required when:	It is suspected that archaeological artefacts may be present on the site of a proposed development
Prepared by:	An appropriately qualified person
Responsibility of:	The developer/proponent

The first stage of an archaeological investigation is the preliminary archaeological assessment. This focuses on evaluating the archaeological potential of an area and makes recommendations regarding the necessity of mitigating actions.

A preliminary archaeological assessment should be conducted if no previous survey for historical cultural heritage, including the identification of potential archaeological artefacts, has been undertaken in an area of historical activity.

It identifies the likelihood of an archaeological artefact existing and the corresponding requirement for an archaeological research plan. It will save the developer/applicant time and costs should an archaeological artefact of heritage significance be discovered and a permit then be required to undertake site investigations.

If construction works begin without a preliminary archaeological assessment being prepared and an archaeological artefact is subsequently encountered, construction must cease and the developer will have to engage an archaeologist to prepare an archaeological research plan and apply for a permit. Archaeological excavation and analysis will follow, which will impact negatively on construction timeframes.

The preliminary archaeological assessment can comprise both desktop research and, if necessary, non-invasive physical investigations, such as surface survey or geophysical remote sensing survey. An appropriately qualified archaeologist will be able to guide developers as to the preferred approach to minimise risks and manage costs.

The nature of the non-invasive assessment will depend upon a range of factors, including the site's use history, its location and current condition, the availability of relevant historical records and budgetary constraints. Non-invasive assessments should examine all available sources of information, such as historical records, images, oral histories, photographs and observable physical evidence. Non-invasive techniques can be

useful, but they vary in the information they can provide and may not be suitable in all cases.

Non-invasive physical investigations are not considered development under the *Planning, Development and Infrastructure Act* 2016 (PDI Act) and **do not** require a permit from the South Australian Heritage Council.

The amount of work involved in a preliminary archaeological assessment will depend upon the nature and significance of the site itself and whether it is already listed in the register, but it should:

- evaluate the land's archaeological potential
- evaluate the likely/predicted/potential extent and location of any archaeological sites present
- outline historic and subsequent land use and how it may/has impacted upon archaeological artefacts
- evaluate the nature, extent, quality and preservation of any visible or potential archaeological artefacts
- describe the proposed development and its potential impact on any archaeological site
- assess the potential archaeological significance of the site and recommend if an archaeological research plan is necessary.

A preliminary archaeological assessment must be prepared by an appropriately qualified person. The assessment will be reviewed by Heritage SA to ensure the approach is suitable for the proposed impacts.

If a place is already listed in the register, it is likely that a heritage significance assessment and detailed history have been prepared previously. If so, a preliminary archaeological assessment is not required prior to developing an archaeological research plan, but the plan should reference the previous assessment work.

Stage 2: Archaeological research plan

Required when:	A preliminary archaeological assessment determines a moderate or high likelihood of archaeological artefacts of heritage significance There are known archaeological artefacts (such as through an archaeological designation)
Prepared by:	An appropriately qualified person
Responsibility of:	The developer/proponent

An archaeological research plan must be developed if previous research or a preliminary archaeological assessment indicates that a site has a moderate or high potential for possessing archaeological artefacts of heritage significance that could be an important source of information about South Australia's history.

The archaeological research plan is the guiding document that outlines why a place is potentially important and how it will be investigated further. It also makes recommendations for future management of the place, including archaeological artefact management, media engagement, data management and communication strategies.

An archaeological research plan should ensure that work occurs on significant aspects of a site and artefacts, and that findings are correctly recorded.

An archaeological research plan should provide a clear framework for developers, owners, site managers and archaeologists to assess and manage archaeological artefacts by considering the balance between the archaeology and possible development constraints. The research plan should incorporate and build upon information gathered through the preliminary archaeological assessment and/or the listing in the register. Recommendations within a research plan should balance development proposals, site significance, timeframes and legislative requirements.

The archaeological research plan also should contain well considered policies and procedures to help provide effective direction and should include contingencies for unanticipated circumstances and unexpected discoveries.

It is possible to have research plan provisions or recommendations recognised in conditions of Development Approval, potentially streamlining processes and saving time and money.

When a project is proposed on the site of a State Heritage Place that is also designated as a place of archaeological significance, Heritage SA will request that an archaeological assessment and research plan be prepared. Impact avoidance or minimisation is the preferred process and invasive archaeological investigations should be considered only where avoidance or minimisation is not possible.

The following questions posed by Bickford and Sullivan (1984: 23–24) are a guide for assessing the research potential of an archaeological site:

 Can the site contribute knowledge that no other resource can?

- 2. Can the site contribute knowledge that no other site can?
- 3. Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

The emphasis in these questions is the need for archaeological research to enhance our knowledge of

the past in an important way, rather than merely duplicating information already known from documentary records or oral history.

When detailed archaeological investigations are recommended in a research plan, the techniques and methods used will vary but can be broadly grouped as shown in **Table 1**.

Table 1 Typical techniques used for an archaeological investigation

Archaeological monitoring	Also known as an archaeological watching brief. This involves an appropriately qualified person observing development activities to identify, recover, protect and/or document archaeological artefacts that may be exposed. Archaeological monitoring is always difficult for an archaeologist; if they identify something that may be of heritage value, it can mean halting construction work, with potential cost implications for the developer. A standard condition in the permit will give the archaeologist the authority to stop work in such cases. Archaeological monitoring should only be proposed where an archaeological assessment indicates that there is some potential for significant archaeological artefacts to be present, but the likelihood is low.
Surface collection	A controlled program to collect and recover surface archaeological artefacts. This could be conducted as part of a defined sampling strategy or be more comprehensive, depending upon the scale of the site and the level of impact.
Test excavation	Small-scale archaeological excavations that can be used to determine the level of previous disturbance at a site, to confirm (or not) an assessment of archaeological potential in a preliminary archaeological assessment, to perform a preliminary significance assessment of a site, to assess the extent of a site to inform development planning, or to determine whether further archaeological investigation or mitigation is required. Test excavation usually involves small 'test' pits (such as 50 cm²) or trenches, but, like all excavation, must utilise accepted archaeological techniques.
Archaeological excavation	The systematic digging into, or disturbance of, the land surface to expose and record artefacts and features. Excavation can range in size from large scale (open area excavation) through to small 'test' pits. Excavation must always be within a clearly defined area and utilise accepted archaeological techniques. Excavation is destructive in nature and should be conducted in the context of addressing clear research questions, even when conducting salvage archaeology, that is, when all or part of an archaeological site is excavated to 'salvage' as much information as possible due to impending destruction.
Conservation and interpretation	The retention of important archaeological artefacts or features, either in situ or recovered for later on-site display.

In preparing an archaeological research plan, the archaeologist should involve the developer (permit applicant) to ensure that there is no misunderstanding of their responsibilities, particularly in managing expectations should previously unknown discoveries be made that could result in the need to expand the scope of the archaeological work.

It is recommended that an initial meeting between the developer, archaeologist and officers of Heritage SA be held to define the appropriate methodology and requirements. This will save time and potential expense knowing up-front that the archaeological research plan is of an acceptable standard.

What an archaeological research plan should include

Archaeological research plans will vary in size depending upon the nature of a particular site, its heritage significance and the type of works proposed. As a minimum, every archaeological research plan should include:

- The study area: Locate and define the study area using maps and diagrams. Map the physical limits of the study area and explain why this area was chosen. Describe the physical environment and outline its history.
- Proposed activities: Identify what triggered the need for the study. Include probable and potential impacts.
- Initial assessment and investigations: Summarise
 any previous assessments or investigations that have
 been undertaken. For example, this may include the
 preliminary archaeological assessment, non-invasive
 initial assessment and previous studies.
- **Significance**: Provide an updated statement of significance about the archaeological potential of the site, based on the available information.
- Identified issues: Given the nature of the site and the proposed work, consider what issues, problems and opportunities are apparent. For example, if the site has been used as a landfill site since its original occupation and the earliest archaeological artefacts are buried beneath several metres of fill.
- Management recommendations: This is the culmination of the report where the research plan is outlined, the specific techniques and methodologies are proposed and the rationale for the above is explained. For a large and/or complex site, it could be a staged process using a combination of techniques. For a small and/or simple site, it could be a single technique. Given the importance of the recommendations, they must logically flow from the previous sections and be well explained, both in terms of methods used and the rationale for recommending the approach. This section should also include contingency plans for unexpected discoveries, and communication procedures on-site and back to Heritage SA. If appropriate, the recommendations should include a justified recommendation regarding a heritage register boundary and/or a physical buffer zone around the potential archaeological place/artefacts during works.

Strategies to be included in an archaeological research plan

There are a small number of strategies that should be included in every archaeological research plan:

- archaeological artefact management strategy
- · results dissemination strategy
- · communication strategy

data management strategy.

Archaeological artefact management strategy

All archaeological artefacts discovered during an investigation/excavation are to be catalogued, fully recorded and their features analysed – this is a condition of any permit issued by the South Australian Heritage Council. While archaeological artefacts are technically the property of the Crown, the Crown will not necessarily require them to be transferred to the Crown.

If an archaeological artefact is discovered during an investigation/excavation, then the following is essential:

- All in-situ features are to be recorded using standard archaeological techniques (measurements, drawings, photographs and so on).
- An artefact management strategy must be provided to Heritage SA, which should include a disposal plan and, where appropriate, a possible open day/public viewing opportunity.

It is essential to plan for curating and storage of any recovered artefacts before commencing collection or excavation works. Archaeological research plans and final reports must detail all arrangements (short and long-term strategies) for the conservation and curating of any recovered artefacts, including nominating an appropriately qualified conservator if necessary.

Important artefacts may, on permission from the Crown, be used by the developer and/or stored. Where they are not required, they must be reburied on site, once catalogued.

As the state's collecting institution, the South Australian Museum may have an interest in acquiring highly significant artefacts; however, the South Australian Museum is not bound to accept collections and it cannot be assumed that they will take all or even some material. It is up to the applicant/developer to make the appropriate arrangements for management of the recovered artefact assemblage.

It may also be appropriate to lodge recovered artefacts with local, regional or university museums. Ideally, collections should remain together, as this will add to their cultural value and aid future research. An index of local and regional museums can be obtained from the History Trust of South Australia. It cannot be assumed that any institution will accept artefacts from an archaeological investigation, and consultation with all interested parties should be commenced as early as possible.

There may also be opportunities to display and interpret conserved artefacts on-site as part of the completed development and this should be assessed as part of the research plan.

Artefacts may be reburied on site with the coordinates of the reburial location included in the excavation report, and possibly included on the property title. Artefacts to be re-buried should be stored within an appropriately robust container (such as a PVC pipe with caps), along with a copy of the artefact catalogue and archaeological research plan. The reburial location should be in a location that is unlikely to be impacted by further development, and location coordinates should be obtained using a differential GPS unit to sub-metre accuracy.

Results dissemination strategy

The Code of Ethics under the Australian Association of Consulting Archaeologists Inc. provides for members to be able to disseminate the results of their work as widely as possible, where appropriate.

Most archaeological excavations are not necessarily about conserving the archaeological artefact, but about recording it before it is destroyed. Promoting archaeological discoveries contributes to an understanding of South Australia's heritage and history.

There needs to be clarity and certainty, in particular for the permit applicant/developer, about the ability of the archaeologist to promote the discovery of archaeological artefacts to the media and to disseminate the results of the archaeological work through professional conferences, public talks and written publication, whether in print or online.

A standard condition of a permit issued under the HP Act is an obligation for the archaeologist to promote significant discoveries to the media. The only exception will be where there are commercial-in-confidence matters involved, and this needs to be articulated clearly in the research plan.

Other forms of public engagement and results dissemination should also be considered, in particular the capacity for public open days and on-site interpretation.

Communication strategy

The archaeological research plan should also include a communication strategy that clearly outlines who talks to whom and the triggers for communicating. This is especially important for monitoring, in which case the communication strategy should articulate what triggers

the need for an archaeologist to be involved or to provide alternative direction.

Data management strategy

All data, including images, will have shared ownership between Heritage SA and the archaeologist who has undertaken the archaeological investigation/excavation. When used, all data, including images, will be credited appropriately.

Stage 3: Permit application

Required when:	there are known, or a likelihood of, archaeological artefacts of heritage significance
Prepared by:	the developer/appropriately qualified person
Responsibility of:	the developer

Section 26 of the HP Act requires a permit to be obtained from the South Australian Heritage Council for the excavation or disturbance of a State Heritage Place that is designated a place of archaeological significance, or to remove archaeological artefacts from such a place. Section 27 requires a permit to search for archaeological artefacts or to excavate or disturb **any other** land.

It is recommended that a preliminary archaeological assessment be undertaken to establish if a permit application and associated archaeological research plan is required.

The permit application and associated archaeological research plan should clearly establish if the role of the archaeologist is to monitor site works or to undertake a full archaeological excavation.

Pre-lodgement meetings

Heritage SA encourages pre-lodgement advice or meetings to discuss legislative requirements and how these relate to a specific project/development proposal. This service is available prior to lodgement of a permit application and associated archaeological research plan and can facilitate the assessment and approval processes. It may save time and expense to discuss the proposal before submitting a permit application.

Archaeological investigations on a State Heritage Place designated as a place of archaeological significance

Permits are required for all invasive archaeological investigations affecting a State Heritage Place listed in the register and designated as a place of archaeological significance, including the investigation or collection of surface artefacts. Any preliminary archaeological assessment or archaeological research plan should be lodged as part of a development application to the relevant planning authority, which are then referred to Heritage SA for assessment.

Archaeological investigations on land not designated as a place of archaeological significance

Invasive archaeological investigations, including the collection of surface artefacts, of any place **not** designated as being a place of archaeological significance still require a permit.

Depending on the nature of the proposed work, an archaeological research plan and artefact discovery protocol may be required as part of the permit application. It is advisable to discuss permitting requirements with Heritage SA before commencing archaeological investigations.

Archaeological investigations conducted as part of a research project

If the archaeological investigation is conducted as a stand-alone research project, a permit application under the HP Act must be made directly to Heritage SA.

Permit conditions

A permit from the South Australian Heritage Council will include standard conditions concerning such matters as the ability of the archaeologist to stop site works under certain circumstances, artefact management, reporting requirements, data ownership and media engagement. Additional permit conditions may be included on a case-by-case basis.

Stage 4: Undertaking an archaeological investigation

An archaeological excavation will be undertaken if a preliminary archaeological assessment identifies that a place has archaeological potential that should be investigated, and a permit has been granted by the South Australian Heritage Council for such excavation.

To ensure a successful archaeological investigation, the archaeological research plan must be implemented consistently throughout the project and have the

Archaeological investigations that do not involve ground disturbance or any other disturbance to archaeological artefacts (such as certain preliminary assessments) do not require a permit from the South Australian Heritage Council.

support of all parties involved. An archaeological research plan submitted to Heritage SA for assessment will be deemed to be an agreed process between the developer and the archaeologist.

All personnel involved in an archaeological investigation should be aware of their legal responsibilities under other South Australian legislation, particularly workplace health and safety legislation.

Full and proper records should be kept of all work conducted during the investigation in accordance with proper archaeological practice.

Archaeological research plans may need to be revised periodically to account for discoveries (or the lack of them), emergent issues or new information. In certain circumstances, a permit may need to be amended. Please discuss any potential variations from an approved archaeological research plan with Heritage SA.

Site inspections by Heritage SA officers during archaeological investigations may be part of approval conditions or requested by the proponent or the South Australian Heritage Council. Site inspections provide a better understanding of a site and any potential issues that might arise, and they help ensure compliance with the approval conditions.

Stage 5: Reporting

All archaeological investigations must be properly documented and an electronic version of all reports, data, images and any other associated documentation must be deposited with Heritage SA.

Reports should be written in plain English and have an executive summary so they can be understood by the project proponent and the community.

The final report on an archaeological investigation is required when the project is complete. The final report should describe the results of the investigation and

Heritage SA requires copies of all reports relating to an archaeological investigation, including preliminary archaeological assessments, archaeological research plans and those subject to a permit under the Act.

include an archaeological research plan. In some cases, it may be necessary to produce interim or periodic reports, especially for complex or highly significant sites, and the scheduling of these should be reflected in the project plans.

Regardless of which archaeological techniques are used, technical recording is essential for all investigations. This includes detailed written descriptions, measured drawings, mapping, photogrammetric or other 3-dimensional models and scaled photography that document artefacts, their features and their associations.

Data collected during the archaeological investigation should be supplied to Heritage SA with the final post-investigation report, including appendices such as artefact and image catalogues. Digital data supplied to Heritage SA must be in a commonly available format (such as Microsoft Office file formats, PDF format, TIFF or JPEG image formats, and so on).

A careful analysis of findings is essential to adequately interpret the results of the investigation. A catalogue of artefacts should be prepared and include the intended location where each artefact will be conserved and/or stored in the long-term.

The final report should describe the results of the investigation and include an archaeological research plan. This helps inform future work and ensures information about South Australia's history is retained.

Reporting timeframes should be commensurate with the length and complexity of the excavation and the permit timeframe.

Submission of reports

Archaeological reports submitted to Heritage SA are subject to relevant legislation to protect information

The final report should include all data (including images), a revised statement of significance and updated recommendations (if applicable). This report must be provided to Heritage SA within 3 months of the expiry date of the permit.

privacy, intellectual property rights, moral rights and copyright held in material submitted.

Heritage SA encourages authors of archaeological investigations and reports to licence their work for copyright prior to submission to ensure usage and reproduction rights are clearly identified. Licensing details for submissions should be clearly noted and marked on the submission and entered in the metadata of electronic material.

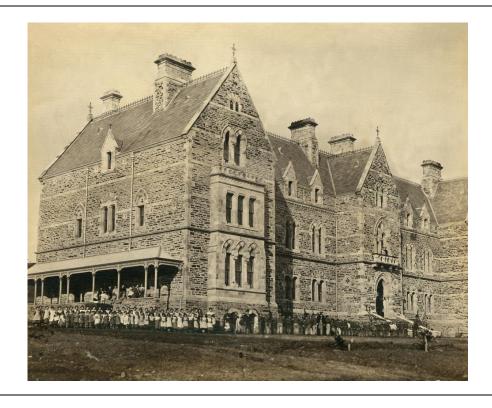
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Heritage SA recommends a Creative Commons licence that is specified as 'Creative Commons Attribution-Non-Commercial-No Derivative Works'. This allows the author to maintain copyright but allows others to copy and distribute the work provided the author is given credit (in a manner specified by the author). The work cannot be altered in any way and cannot be used for commercial purposes.

As a condition of issuing a permit from the South Australian Heritage Council, the state government has shared ownership of all information/data produced as part of the archaeological investigations (including photographs, drawings, photogrammetric data, Lidar data and geophysical data), which must be provided electronically.

Case studies

Case Study No. 1: Excavation of the Former Magill Orphanage Site, Woodford



Magill Orphanage at Woodforde, soon after its construction (circa 1870) Source: Woodforde Collection, Image B-1976, State Library of South Australia

When Renewal SA unexpectedly discovered building remains on the site of the former Magill Orphanage Site at Woodforde, staff contacted the State Heritage Branch in the then Department of Environment, Water and Natural Resources (DEWNR) in 2015 to seek advice on how to proceed with their housing project in light of the finds.

The former Magill Orphanage was demolished to ground level in 1968, prior to heritage legislation in South Australia. Therefore, it was never listed in the South Australian Heritage Register as a State Heritage Place or included on the local council heritage list.

The advice to the team at Renewal SA was that it should apply for a Section 27 permit in accordance with the Act to ensure that an appropriate level of archaeological investigation of the site was undertaken and the remains of the built structure were fully documented prior to their demolition below-ground.

Under the provisions of the Section 27 permit, archaeologists from Australian Heritage Services uncovered the whole of the intact basement area of the former Magill Orphanage building prior to the demolition phase of the project. The extant building remains were recorded in situ using traditional paper-based recording techniques alongside other high-tech methods, such as aerial photography and photogrammetry of the structures using a drone (unmanned aerial vehicle, or UAV), and LiDAR (Light Detection and Ranging) 3-dimensional scanning of the basement area after the backfill rubble had been removed.

The 2016 excavation of the former Magill Orphanage is particularly significant to South Australian historical archaeology, as it is believed to be the largest building area in the state to have been excavated.

Case Study No. 2: Excavation of the U2 on Waymouth Site, Adelaide



Aerial view of the U2 on Waymouth Archaeological Excavation (2017) Source: Independent Heritage Consultant

Following the lodgement of a Development Application to build a luxury 25-storey apartment building, called U2 on Waymouth, at 112-116 Waymouth Street in Adelaide, Heritage SA identified that this site may have significant archaeological potential due to its close proximity to the State Heritage-listed Former Queen's (sometime Royal Victoria) Theatre and Horse Bazaar, built in 1840.

As a result, an archaeological assessment and on-ground test program were carried out at the site well in advance of any on-site works. The work identified areas of archaeological potential through archival research combined with on-ground verification involving the excavation of a number of test trenches. The assessment identified potential for the site to contain extensions for the New Queen's Theatre, built between 1846 and 1850, as well as several other buildings unconnected with the theatre, but also present on the site from 1852.

As a result of the assessment and testing, the client was advised to apply for a permit under Section 27 of the Act for a comprehensive archaeological investigation of the site. Under the provisions of the permit issued, senior archaeologists from Independent Heritage Consultants systematically excavated and recorded the entirety of

the site, which resulted in the recovery of significantly more archaeological material than was anticipated.

All archaeological deposits on the site were recorded using traditional and best-practice recording techniques, including aerial photography. The excavation revealed information relating to the early theatre as well as the theatre expansions and the house of the original builder of the Queen's Theatre. In addition, numerous privies from a tavern located behind the Queen's Theatre were excavated and provided a fascinating insight into the diet and recreational activity of early theatre goers in Adelaide.

This case study highlights the benefits of early archaeological assessment and investigation, as all work was carried out on-site well before critical path works began, with no loss of time or budget blowouts for the developer, who was handed a completely cleared and sterile site, guaranteeing no chance of works encountering additional archaeological features.

Additionally, the 2017 excavation of the U2 on Waymouth site is particularly significant to South Australian historical archaeology, as it is one of the largest open archaeological excavations to be carried out in the Adelaide CBD.

Part 3 – Further information

Heritage South Australia, Department for Environment and Water, encourages you to discuss any archaeological matters with one of its officers before lodging a permit application or when planning major developments. Please contact Heritage South Australia on (08) 8124 4960 or via email.

Heritage South Australia technical guides and other publications are located on the <u>DEW website</u>.

Useful resources

Heritage legislation

Commonwealth

- <u>Environment Protection and Biodiversity Conservation</u>
 Act 1999
- <u>Underwater Cultural Heritage Act 2018</u>
- Australian Government Federal Registration of <u>Legislation</u>

South Australia

- Heritage Places Act 1993
- Historic Shipwrecks Act 1981
- Aboriginal Heritage Act 1988
- South Australian legislation

General references

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Websites

<u>Department of the Premier and Cabinet, Aboriginal</u>
Affairs and Reconciliation (DPC-AAR)

Australian Archaeological Association

Australian Association of Consulting Archaeologists Inc.

Heritage South Australia, DEW