





ARCHAELOGICAL MANAGEMENT STRATEGY FOR FREMANTLE PRISON PARADE GROUND

By Archae-Aus Pty Ltd | For the Department of Planning, Lands and Heritage

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Archae-aus Pty Ltd

1/107 Stirling Highway North Fremantle WA 6159 PO Box 742 Fremantle WA 6959

T: 08 9433 1127

E: office@archae-aus.com.au

http://www.archae-aus.com.au

Project Manager: Jim Stedman **Email:** jims@archae-aus.com.au

Acknowledgement of Country

The Department of Planning, Lands and Heritage recognises the diversity of the Aboriginal peoples of Western Australia and acknowledges the Traditional Owners and custodians and their connection to this land and its waterways. We pay our respect to Elders past and present and those who will follow in their footsteps.

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The authors are not accountable for omissions and inconsistencies that may result from information which may come to light in the future but was not forthcoming at the time of this research.

The information contained in this Archaeological Management Strategy relates only to the works detailed in the Scope of Works, which is outlined in Section One.

AUTHORSHIP

The contributing authors were Kate Edwards (BA Archaeology (Hons) *University* of *Manchester*, MA Osteoarchaeology *University of Southampton*) and Jim Stedman (BA (Hons) *University of Manchester*, MMarArch *University of Western Australia*). Editorial assistance was provided by Monica Jimenez-Lozano (BA (Hons) *University of Western Australia*).

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STRUCTURE AND FORMAT

This Archaeological Management Strategy (AMS) was drafted in accordance with guidelines set out by the Heritage Council of Western Australia (Heritage Council of Western Australia 2019).

Section 1 includes an introduction and background to the project with details of the scope of works. Section 2 includes a historical background of the Fremantle Prison Parade Ground Project Area. Section 3 describes the archaeological context of the Project Area and provides a summary of previous archaeological work undertaken there. Section 4 includes assessments of the Project Area's archaeological significance. Section 5 outlines proposed heritage management strategies and Section 6 concludes the report and provides recommendations for the future management of the Project Area's archaeological values.

TERMS AND ABBREVIATIONS

Term / Abbreviation	Meaning / Interpretation
AHA	Aboriginal Heritage Act 1972 (WA)
AMS	Archaeological Management Strategy
AMP	Archaeological Management Plan
Archaeologist	See Project Archaeologist.
Archaeological Site	A place (or group of places) where evidence of past human activity is preserved (either prehistoric, historical or contemporary), and which has been, or may be, investigated using the discipline of archaeology.
Artefact	Any object made, affected, used, or modified in some way by humans.
Assessment	Professional opinion based on information that was forthcoming at the time of consideration.
DPLH	Department of Planning, Lands and Heritage. Comprises the former WA State government bodies of the State Heritage Office and the Department of Aboriginal Affairs.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
Excavation	The systematic and scientific recovery of archaeological material as a means of obtaining data about past human activity.
Feature	A non-moveable element of an archaeological site such as a pit, ditch or hearth. A feature is evidence of past human activity.
Find	Individual artefacts. Also known as 'loose find'.
Ground Disturbing Works	These are defined as any activity that disturbs the ground surface. This can include activities such as topsoil clearing, grubbing, geotechnical testing, grading, cutting, trenching, potholing pits, deep excavation and directional drilling (launch and retrieval pits).
НА	Heritage Act 2018
Heritage site / place	See 'Archaeological site'
НМР	Heritage Management Plan
Loose Find	See 'Find'.
Monitoring	Monitoring, sometimes called an Archaeological Watching Brief, is when an archaeologist monitors ground disturbing activities to ensure that archaeological material is not adversely impacted.
Project Archaeologist	The archaeologist appointed to manage the archaeological and heritage concerns of a project.
Salvage	Process of the retrieval of as much cultural information as possible from an archaeological site before it is damaged or destroyed by development.
SHO	State Heritage Office, now amalgamated into the DPLH.
Scope of Works	The nature of the work undertaken as requested by the proponent or developer.

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INTRODUCTION

AIMS AND SCOPE OF WORK

Fremantle Prison is listed on both the World Heritage List (WHL) and National Heritage List (NHL) for embodying a range of heritage values. It is also included on the Western Australian State Register of Heritage Places (SRHP) for meeting a broader range of heritage assessment criteria (Department of Planning, Lands and Heritage, 2019). The Prison is one of 11 historical sites that together form the Australian Convict Sites World Heritage Property and is the only World Heritage Listed building complex in Western Australia. With regard to the management of archaeology at the Prison, the Fremantle Prison Heritage Management Plan (Extent Heritage Advisors 2019) identifies objectives as:

- to minimise disturbance of the archaeological resource at Fremantle Prison:
- to retain the archaeological resource at Fremantle Prison in situ unless this is precluded by overwhelming research, safety or conservation considerations;
- within the parameters of the above objectives, to maximise the research potential of the archaeological resource at Fremantle Prison;
- to balance the conservation needs of the layered heritage values at Fremantle Prison, including where those values are embodied by archaeological material from different periods;

- to investigate the archaeological resource at Fremantle Prison using 'best practice' archaeological methodologies and experienced practitioners; and
- to harness the potential of archaeology to engage the public's interest in Fremantle Prison.

The Heritage Council of Western Australia describes an Archaeological Management Strategy (AMS) as a document designed to provide practical strategies for the management of the archaeological components of a place (Heritage Council of Western Australia 2019). An AMS should largely be used to supplement an Archaeological Management Plan (AMP), which provides a comprehensive assessment of the archaeological potential and significance of a site, as well as guidelines for appropriate management.

The policies and management recommendations provided in an AMP may require some further practical strategies for their implementation to be outlined prior to the commencement of works that may adversely impact the archaeological potential of a place. In addition, proposed works or unanticipated events may also reveal information / sites that have not been addressed in the AMP, or considerable time may have passed since its completion. An AMS aims to address the specifics of a proposed or potential impact to the archaeology of a place, with reference to the policies and research design in the AMP.

In summary, the objectives of an AMS are to:

- summarise the study area and its history as outlined in the AMP;
- analyse the research strategy and management recommendations provided in the AMP with regard to the site's current context;
- develop a practical guide to investigations which ensures adequate protection of the resource and produces maximum research benefits from the archaeological resource; and
- to outline how the archaeological evidence will be handled.

BACKGROUND AND SITE LOCATION

Fremantle Prison is located at 1 The Terrace, Fremantle, Western Australia. It comprises Crown Land Reserve 24042. The Prison site extends for approximately 6 hectares, and is bounded by Hampton Road to the east, Fothergill Street to the south, The Terrace to the west and Knutsford Street to the north.

The Fremantle Prison Parade Ground is an open area inside the main perimeter wall that dates to the earliest phases of the site's use. For the purposes of this AMS the Parade Ground (the Project Area) is defined by the area shaded in red on Map 1. Upgrade works are proposed across the Parade Ground. These include the removal of all concrete curbing and bitumen, installation of new sub-surface infrastructure (e.g. soak-wells) and replacement of current infrastructure (e.g. fire services), and lowering of lawn beds and associated features close to the original ground surface level (250-300 mm lower than the current level).

Owing to the fact that these works are likely to have an impact on sub-surface archaeological deposits, Archae-aus was contracted by the Department of Planning, Lands and Heritage (DPLH) to draft this AMS in order to minimise and manage the impact to the Parade Ground's archaeological resource during the upgrade works.



Map 1. Fremantle Prison Parade Ground Project Area

LEGISLATION AND GUIDING DOCUMENTS

The following section summarises the relevant legislation and guiding principles that may relate to the Project Area.

The Burra Charter

The Burra Charter (Australia ICOMOS Charter for Places of Cultural Significance) is the key document for conserving Australia's cultural heritage. The Charter encapsulates two important aspects in conserving heritage places. First, it establishes the best practice principles and processes for understanding and assessing a place's significance, as well as developing and implementing a conservation plan. Second, the Charter defines and explains the four primary cultural values that may be ascribed to any place: aesthetic, historic, social or spiritual and scientific. These values are essential as they delineate the types and quality of information needed to accurately determine a heritage place's significance¹.

The following articles of the Burra Charter (Burra Charter 2013) have relevance for the assessment of risk and the management of heritage:

Article 2. Conservation and management

- Places of cultural significance should be conserved.
- The aim of conservation is to retain the cultural significance of a place.
- Conservation is an integral part of good management of places of cultural significance.
- Places of cultural significance should be safeguarded and not put at risk or left in a vulnerable state.

Article 3. Cautious approach

- Conservation is based on a respect for the existing fabric, use, associations and meanings. It requires a cautious approach of changing as much as necessary but as little as possible.
- Changes to a place should not distort the physical or other evidence it provides, nor be based on conjecture.

Article 7. Use

- Where the use of a place is of cultural significance it should be retained.
- A place should have a compatible use.

Article 8. Setting

 Conservation requires the retention of an appropriate setting. This includes retention of the visual and sensory setting, as well as the retention of spiritual and other cultural relationships that contribute to the cultural significance of the place. New construction, demolition, intrusions or other changes which would adversely affect the setting or relationships are not appropriate.

¹ https://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf

Article 9. Location

- The physical location of a place is part of its cultural significance. A building, work or other element of a place should remain in its historical location.
 Relocation is generally unacceptable unless this is the sole practical means of ensuring its survival.
- Some buildings, works or other elements of places were designed to be readily removable or already have a history of relocation. Provided such buildings, works or other elements do not have significant links with their present location, removal may be appropriate.
- If any building, work or other element is moved, it should be moved to an appropriate location and given an appropriate use. Such action should not be to the detriment of any place of cultural significance.

In addition, based on the Burra Charter's guiding principles around Indigenous Cultural Heritage Management (Australian ICOMOS 2013), the following considerations and approaches should be made:

- That the definition of 'place' is broad when applying it to Indigenous places of cultural significance and can include locations that embody spiritual value, sacred landscapes, places of social and historical value, archaeological sites with scientific value, and even single artefacts in some cases. It can also include several related locations that combine to form a single 'place' (i.e. a Songline), or several sites that form a cultural landscape or route.
- That the concept of 'Cultural Significance', as defined by the Burra Charter, includes Indigenous places of cultural significance which can include intangible heritage. The values that are used to assess this significance must consider Indigenous perspectives. In some cases, places may have both Indigenous and non-Indigenous values.

- That heritage practitioners should listen carefully to Indigenous views and include those views in significance assessments in an unbiased and objective manner.
- That the appropriate people should be consulted with and it must be recognised that there are different types of Indigenous connections to places

 including ancestral, traditional and historical.
- That generalisations should be avoided when identifying and assessing Indigenous heritage places and it should be recognised that Indigenous culture is multidimensional. The location and extent of places of cultural significance should be clearly defined.
- That Indigenous heritage values can change over time, in some cases resulting in the change in cultural significance of a place over time.
- That intangible heritage can play a key part of the significance of a place.
- That there is an awareness that Indigenous cultural protocols may limit the information that is able to be shared and used for significance assessments. This should be respected, and an assessment of significance should acknowledge where there may be any limitations in the sharing of information.
- That consent should be obtained from the Traditional Owners if material cultural is to be removed from its original setting for scientific analysis or exhibition. This would include materials that have been salvaged from the surface or retrieved from excavations – including materials that are sent for dating analysis.
- That the significance assessment of a place should include an analysis of the objects that are associated with that place.

The World Heritage Convention 1972

The World Heritage Convention (the Convention) was adopted at the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) meeting in November 1972. In recognition of the threats to natural and cultural heritage, the Convention "links together in a single document the concepts of nature conservation and the preservation of cultural properties. The Convention recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two."

The Convention is a global instrument for the protection of cultural and natural heritage. The World Heritage Convention aims to promote cooperation among nations to protect heritage around the world that is of such outstanding universal value that its conservation is important for current and future generations. To be included on the World Heritage List, the host country must have ratified the Convention and the nominated sites must be of outstanding universal value to meet at least one out of ten selection criteria.3 Management arrangements are required for each Australian property included on the World Heritage List. The Commonwealth considers such plans as vital in implementing Australia's obligations under the World Heritage Convention. Importantly, all of Australia's declared World Heritage properties are also on Australia's National Heritage List and are also considered National Heritage places. As a result, an action may result in a significant impact on both World Heritage values and National Heritage values of a declared World Heritage property/National Heritage place.

Since the criteria and processes for National Heritage listing differ from those for World Heritage listing, the National Heritage values protected under section 15 of the **Environment Protection and Biodiversity** Conservation Act 1999 (EPBC Act) usually differ from the World Heritage values protected under section 12 of the EPBC Act (see EPBC Act description in section below). The boundary of the National Heritage place may also differ from the boundary of the declared World Heritage property, so it is important to check the National Heritage listing(s) relevant to a particular declared World Heritage property. Several Australian World Heritage properties are also home to or overlap with other matters of National Environmental Significance (NES) such as migratory species, Ramsar wetlands or the Commonwealth marine environment.4 It is important to note that the buffer zones of Australian World Heritage properties are not protected under the World Heritage Conventions; rather the buffers are managed by State and Local legislation.

² https://whc.unesco.org/en/convention/

³ https://whc.unesco.org/en/criteria

⁴ http://www.environment.gov.au/heritage/about/world/management-australias-world-heritage-listed/managing-world-heritage-australia/protecting-world-heritage

Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act) is the Australian Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places — defined in the EPBC Act as matters of national environmental significance – including Australia's World Heritage Properties.

The EPBC Act enhances the management and protection of Australia's heritage places - natural, historic or Indigenous places - that are of outstanding national heritage value to the Australian nation as well as heritage places on Commonwealth lands and waters or under Australian Government control.

A declared World Heritage property is an area that has been included in the World Heritage List or declared by the Minister to be a World Heritage property. The National Heritage List includes natural, historic and Indigenous places of outstanding heritage value. The Commonwealth Heritage List comprises natural, Indigenous and historic heritage places on Commonwealth lands and waters or under Australian Government control.

Once a heritage place is listed under the EPBC Act, special requirements come into force to ensure that the values of the place will be protected and conserved for future generations. The EPBC Act provides for the preparation of management plans which set out the significant heritage aspects of the place and how the values of the site will be managed.

World heritage properties and national heritage places are recognised as a matter of national environmental significance under the EPBC Act. Consequently, any action that is likely to have a significant impact on heritage properties and places must be referred to the Minister and undergo an environmental assessment and approval process.⁵

The EPBC Act also regulates actions that may have a significant impact on the World Heritage values of declared World Heritage properties. Section 12 of the EPBC Act provides that a person must not take an action that has or will have or is likely to have a significant impact on the World Heritage values of declared World Heritage properties. Significant impact guidelines have been developed to provide overarching guidance on determining whether an action is likely to have a significant impact on a matter protected under national environment law.

Aboriginal Heritage Act 1972

Western Australia's Aboriginal Heritage Act 1972 (the AHA) is the main legislative framework for Aboriginal heritage in the State. All important and significant Aboriginal heritage sites and objects are protected under it. The AHA protects sites and objects that are significant to living Aboriginal people as well as Aboriginal sites of historical, anthropological, archaeological and ethnographic significance. The AHA is currently administered by the Department of Planning, Lands and Heritage in Perth.

For archaeological places, the primary sections of the AHA that need to be considered are section 5 which defines the term 'Aboriginal Site' and section 39 (2) which details what the Aboriginal Cultural Materials Committee (ACMC) should have regards to in considering the importance of objects and places.

A registered Aboriginal site is a place that fulfils the following definitions for protection under section 5 of the AHA:

- Any place of importance and significance where persons of Aboriginal descent have, or appear to have, left any object, natural or artificial, used for, or made or adapted for use for, any purpose connected with the traditional cultural life of the Aboriginal people, past or present.
- Any sacred, ritual or ceremonial site which is of importance and special significance to persons of Aboriginal descent.
- Any place which, in the opinion of the Committee, is or was associated with the Aboriginal people and which is of historical, anthropological, archaeological or ethnographical interest and should be preserved because of its importance and significance to the cultural heritage of the State.
- Any place where objects to which this Act applies are traditionally stored, or to which, under the provisions of this Act, such objects have been taken or removed.
- Section 17 of the AHA states that it is an offence to: alter an Aboriginal site in any way, including collecting artefacts; conceal a site or artefact; or excavate, destroy or damage in any way an Aboriginal site or artefact; without the authorisation of the Registrar of Aboriginal Sites under section 16 or the Minister of Aboriginal Affairs under section 18 of the AHA.

Noongar Standard Heritage Agreement / Indigenous Land Use Agreement

The intention behind the Noongar Standard Heritage Agreement is the establishment of a proactive rather than reactive heritage management system across the southwest of Western Australia. It is called the Noongar Standard Heritage Agreement because it is a template agreement for each of the six Noongar Regional Corporations and its aim is for heritage matters in a region to be managed through the respective Noongar regional corporation. The Agreement sets out the procedures for the conduct of heritage surveys when a proponent (government or non-government) is undertaking ground-disturbing activities.

The Heritage of Western Australia Act 1990 (repealed)

In July 2019, the Heritage of Western Australia Act 1990 (the HWAA) was repealed and replaced by Heritage Act 2018. Any heritage agreements entered into under Section 29 of the HWAA that were in effect on the commencement day of the Heritage Act 2018 continue to have effect as if it were certified under the new legislation. The municipal heritage inventories that were compiled and maintained under the HWAA are still a maintained repository of information for local governments today. Indeed, the collation of local heritage information is still required under Part 8 of the Heritage Act 2018, now referred to as Local Heritage Surveys.

Heritage Act 2018

The purpose of the Heritage Act 2018 (the HA) is to recognise and promote Western Australian cultural heritage by defining principles for conservation, use, development or adaptation for heritage places. In repealing the HWAA, the HA serves are the main legislative framework for historical heritage, sometimes referred to as European heritage, in the State and the main purpose of this Act is to identify, conserve and enhance places which are of cultural heritage significance.

The Act sets out processes for the management of the State Register of Heritage Places, including the establishment of a Heritage Council. The purposes of this Council include the assessment of places of significance, advising the Minister for Heritage, guiding public authorities on best practice, promoting public awareness and administration of the Register of Heritage Places. The Heritage Council of Western Australia is Western Australia's advisory body on heritage matters and focuses on places, buildings and archaeological sites, with a mission to provide for and encourage the conservation of places significant to the cultural heritage of Western Australia under the jurisdiction of the HA.

The HA requires the keeping of a Register of Heritage Places for places that are protected by the provisions of the Act. Heritage places generally gain registration under the HA by being shown to be of cultural heritage significance or possessing special interest relating to or associated with cultural heritage. Section 38 outlines relevant factors in determining the significance of heritage places. This section uses definitions and values like those of the Burra Charter (see above): The Council are to consider values such as aesthetic, historical, scientific, social or spiritual, and characteristics such as fabric, setting, associations, use and meaning.

Part 5 outlines the responsibilities of public authorities to consider heritage matters within development planning. Under Section 73 of the HA, public authorities must refer a development proposal to the Council when the proposed works have potential to impact a registered place. The advice provided by the Council in response to a referred proposal may consider the restoration, maintenance and interpretation of the heritage place in question.

Part 8 introduces the term 'Local Heritage Survey' which is defined as a survey of places that are, or may become, of cultural heritage significance. Section 103 (i) stipulates that local governments must prepare a Local Heritage Survey of places within their district. This survey serves as a public record or places of significance and assists local government in development planning and in the implementation of its local planning scheme.

Part 11 outlines the definitions and penalties for offences and contraventions of the Act. Under section 129 of the HA, unauthorised impact to registered heritage places is subject to penalty. Section 129 defines damage as including altering, demolishing, removing or despoiling any part of, or thing in, a registered place. The penalties for contravention of the Act are severe, including a \$1 million fine, imprisonment for one year and a daily penalty of \$50,000. Applications to develop, disturb or alter any place entered on the Register can be made under Part 5 Division 2 of the HA. The HA is currently administered by the Department of Planning, Lands and Heritage in Perth.

The Planning and Development Act 2005

The purposes of the Planning and Development Act 2005 (the PDA) are to consolidate the provisions of the Acts repealed by the Planning and Development (Consequential and Transitional Provisions) Act 2005 (i.e. the Metropolitan Region Town Planning Scheme Act 1959, the Town Planning and Development Act 1928 and the Western Australian Planning Commission Act 1985). The PDA is intended to provide for an efficient and effective land use planning system in the State, as well as promoting the sustainable use and development of land in the State.

The PDA requires that the advice of the Heritage Council (within the Department of Planning, Lands and Heritage) be sought in cases relating to places listed on the State Register of Heritage Places under the HA 2018 section 35(1) or in any local heritage survey prepared under section 103(1) (i.e. a Local Government / Municipal Inventory). In such instances the local government in preparing or amending a local planning scheme is to refer the proposed scheme or amendment to the Heritage Council for advice and is not to proceed without the consent of the Minister for Heritage.

HERITAGE LISTINGS

Historical Heritage listings

There are several registers and inventories for historical heritage places in Australia. InHerit is an online database for information about heritage places and listings in Western Australia, containing detailed information about cultural heritage places entered in the State Register of Heritage Places, local government inventories and other lists, the Australian Government's heritage list, and other non-government lists and surveys⁶. A summary of the heritage registers and inventories that Fremantle Prison is listed on is provided below.

World Heritage Listing

Fremantle Prison is one of eleven Australian sites that comprise the Australian Convict Sites Serial Listing on the World Heritage List. These sites were inscribed on the World Heritage List by UNESCO on 31 July 2010 in recognition of their significant heritage and representation of the forced migration and penal transportation of prisoners across the world. Fremantle Prison is the most intact convict establishment in Australia. As an international signatory to the World Heritage Convention 1972, the State Government (representing the Commonwealth Government as the State Party to the Convention) has agreed to protect and conserve the heritage values of the Prison, and to present these values to the community. The Government is required to report to UNESCO every five years on progress, action and risks for the protection, conservation and presentation of these values. Management of Fremantle Prison is also required to meet the core objectives of the Australian Convict Sites Strategic Plan 2017-2020, which seeks to:

- collaboratively manage the values of the nominated Australian Convict Sites;
- conserve and protect the values of the properties for current and future generations;
- present and interpret the values of the properties, emphasising each site's contribution to the whole; and
- give each of the properties a function in the life of the community.

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State and National Heritage Listing

Fremantle Prison's heritage significance has also been recognised by its inclusion in the:

- State Register of Heritage Places Heritage Council of Western Australia (10 January 1992) – Items 1014, 24674 and 3226;
- National Heritage List Australian Government (1 August 2005) – Item 105762;
- Register of the National Estate Australian Heritage Commission (March 23, 1978);
- Classified List The National Trust (WA) (October 3, 1960); and
- Municipal Inventory of Heritage Places City of Fremantle (February 22, 2000).

Governing Legislation

The ongoing conservation and interpretation of Fremantle Prison's State, National and World Heritage values are governed by the statutory requirements of the Western Australian Heritage Act 2018, the Federal Environment Protection and Biodiversity Conservation Act 1999, as well as the UNESCO 1972 World Heritage Convention.

HISTORICAL BACKGROUND AND CONTEXT

SITE HISTORY

Fremantle Prison, originally named the Convict Establishment, was established as a convict depot by the British government following a decision to transport convicts to Western Australia. It was designed by the first Comptroller-General, Edmund Henderson, and built in the period 1852 to 1859. When the convict system officially ended in Western Australia in 1868, the Prison was taken over by the colonial government and continued to operate as a State prison until its closure in 1991.

The following timeline is summarised from the Fremantle Prison Heritage Management Plan (Extent Heritage Advisors 2019).

The Convict Period (1850–1886)		
1849	The Colony of Western Australia is declared a penal colony.	
1850	The first ship, carrying seventy-five male convicts and fifty pensioner guards and families, arrived in Fremantle. An elevated site for a permanent Convict Establishment was selected.	
1852–53	Construction of the southern wing of the Main Cell Block, Terrace houses and the Warders' Cottages began. East Workshops were constructed.	
1854–55	The Entry Complex – including the Gatehouse, entry court, military and civil guard houses flanking the inner gate – were constructed. Southern wing of Main Cell Block was constructed, and the first convicts were transferred to the site. Perimeter Walls were completed.	
1857–59	Guard room, Hospital and Carpenter shop were constructed. Northern wing of Main Cell Block was completed.	
1859	Convict Establishment was officially opened on 31 December.	
1867	Convict Establishment was renamed Fremantle Prison.	
1868	Transportation of convicts to Western Australia officially ceased. Nearly 10,000 convicts were transported to the Colony.	

The Colonial / Early State Period (1886–1918)		
1886	Control of Fremantle Prison was transferred to the Western Australian Colonial Government.	
1888	Prisoners were relocated from Perth Gaol to Fremantle Prison. Gallows were built at the Prison, which was by then the only legal place of execution in the Colony. A tunnels system for water supply was constructed.	
1889	Female Division (Women's Prison) was constructed in the northwest of the site.	
1898	A Royal Commission was undertaken into the operation of the penal system.	
1900s	The West Workshops were constructed in 1900–1901; alterations were made to the Main Cell Block and Exercise Yards. The New Division with radial exercise yards was constructed in the northeast of the site.	
1911	A Royal Commission into Fremantle Prison saw the implementation of additional reforms.	

Post-World War I (1918-present)		
1920	A portion of the Prison was set aside as a reformatory prison.	
1940–45	A part of the Prison was occupied by the Department of Defence during World War II and was returned to civil use after the War.	
Post-1945	A variety of structures were constructed on and below Knoll terraces.	
1964	Eric Edgar Cooke was the last man hanged in Western Australia.	
1968	Prisoners rioted over poor conditions.	
1970	Inmates of Female Prison and staff were transferred to Bandyup Women's Training Centre, and Female Prison buildings become part of the male prison.	
1979	Fremantle Prison Museum was established.	
1988	A fire occurred during a riot at the Prison.	
1991	Inmates were transferred, and Fremantle Prison was closed as a penal institution.	
1992	Fremantle Prison opened to the public as a museum and cultural attraction.	

HISTORY OF THE PARADE GROUND

The Parade Ground (or forecourt to the Main Cell Block) is a key historical component of Fremantle Prison. Identified historical and archaeological features within the Parade Ground Project Area comprise (see Map 2):

- \/\~I
- Drains / Tunnels
- Proposed Metalled Roads
- Parade Area
- Grassed Area
- Officers' Shelter Shed
- Rotunda
- Clothes Store / Old Canteen
- Sentry Box
- Laundry and Ablution Block

The following descriptions of these features are summaries, quotes and extracts from the background research section of Eureka Archaeological Research and Consulting UWA's (Eureka) report on their 2008 archaeological excavation program in the Parade Ground (Eureka Archaeological Research and Consulting 2009a).

Well 1852

Historical plans and written records indicate that there have been at least three wells sunk within the Prison compound. Eureka pieced together the scattered references to these locations in an effort to narrow down the date, location and nature of the well thought to be in the Parade Ground. The following information serves as a summary of their findings.

In 1852, a report by Wray details works carried out in the preceding half year, including a description of a well approximately 40 feet deep having been 'sunk through the rock at the permanent depot site, requiring little or no steening, and affording a plentiful supply of water for the works and for drinking, and will, I have little doubt, be nearly sufficient for the supply of the intended establishment' (Le Page 1986: 70; Royal Engineers' Office Fremantle -Lieutenant R.E [Wray] 1853: 213, cited in Eureka 2009). However, there is no mention of where the well was actually positioned.

A plan of the Prison dated to 1856 shows three wells within the boundary walls (Figure 3, Appendix 5). One of these wells (Well 2) is later described as being sunk in June 1855 in the rear of the prison, confirming that this well is not the one referred to in 1852 (Eureka Archaeological Research and Consulting 2009b). Eureka found additional reference to the bath house and workshop wells that were 'each in the vicinity of the building they are intended to supply' (Royal Engineers' Office Fremantle - Clerk of Works [Manning] 1857: 63, cited in Eureka 2009). Although these wells are not indicated on plans at this time, their locations can be assumed to be in spatial association with known buildings. For example, the well sunk 'for the use of the north wing of the prison' (Royal Engineers' Office Fremantle - Clerk of Works [Manning] 1857: 63, cited in Eureka 2009) is assumed to be the only northern well shown on the 1856 plan (Well 3).

That leaves only one of the three well unaccounted. The secondary source Water, Walls & Yards also states that the first well is believed to have been in the southwest area of the Parade Ground (Fremantle Prison Conservation & Future Use [Project] 1990b: 2.2.01, cited in Eureka 2009). Therefore, Eureka suggested that the remaining well, that in the Parade Ground, was the 1852 Well referred to by Wray. Using this location for the first well would have been practical, given that it would have been central to the major works at the time. A well in this location appears on plans for 1855 and 1856 but not on any dated c.1890 so it may have been capped or redundant by this time (Eureka Archaeological Research and Consulting 2009b).

Attempts to ground truth the 1852 Well position using the location indicated by georeferenced historical maps have, so far, been inconclusive.

Drains / Tunnels 1854

Over the course of the last 160 years, the drain, sewer and water supply systems that serve the Prison have undergone many upgrades and revisions. The Parade Ground is known to be laced with services, some modern and some historical. It is often unclear whether historical layouts that are depicted on plans were removed or left in situ. Historical plans are provided in Appendix 5 (Figure 7 and Figure 8). Therefore, the nature of the archaeology that remains is unknown. Eureka summarise the historical evidence of the drain system as follows.

The half yearly report of works in the Fremantle District for the six months ending 30th June 1855 states 'tunnels of the drains commenced last year have been driven up to the prison....cesspits in the flats have been made good...... [and have been] purposely sunk into rock, to avoid the expense of lining them with masonry' (Royal Engineers' Office Fremantle - Capt. R.E [Wray] 1856: 207, cited in Eureka 2009). These are the main drains shown on the earliest plans running from each end of the Main Cell Block under the west wall of the prison. Although their actual depth is not documented, they are described as 'tunnels' so are presumably at a reasonable depth beneath the surface and excavated into bedrock. A Penal Commission Report published in the Votes and Proceedings 1899 includes a plan showing the drainage and sewage conditions in Fremantle Prison on 7th September 1898 and proposes a new system to stop and replace the old 6' x 3' drainage tunnels (Penal Commission 1899: Plan No. 2). It is not clear if the old drainage pipes have been removed but the engineer, Bedforth, did suggest that surface drains should be avoided wherever possible (Penal Commission 1899: 78-79, cited in Eureka 2009).

Eureka also note that, by 1879, prisoners were pumping water for a large tank to supply the Port so the cisterns on the southern knoll, possibly another tank, and pipes to the port had been constructed by this time (Superintendent Fremantle Prison [Unknown] 1879: 583, cited in Eureka 2009). Again, the depth of this infrastructure is unknown but plans show a 4" iron 'scour pipe' leading from the reservoir on the southern knoll (Penal Commission 1899: Plan No. 1, cited in Eureka 2009) and cutting across the former location of the Wooden Division, which was located immediately outside the southern boundary of the Parade Ground Project Area.

Proposed Metalled Roads 1862

Historical photographs suggest that the current layout of the roads through the Parade Ground was in place by c.1909 (Figure 12). However, the layout and construction of the roads prior to this are not recorded and Louise Bavin's work in 1990 highlighted the possibility of an alternative alignment. Eureka augmented Bavin's research with their own to provide the following synopsis.

Primary and secondary documents indicate that limestone rubble resulting from quarrying stone at the Fremantle Prison site was used in road building (Eureka Archaeological Research and Consulting 2009b, 2009a). The Foreman of Works, Fremantle, suggests stone (limestone presumably) from the excavation of the rifle range was brought to the Prison to be broken into road metal (Superintendent Fremantle Prison [Unknown] 1879: 583, cited in Eureka 2009). Wray suggests the same is used for constructing the main approach to the prison with tips (of stone) at the back and front of the Chaplain's house to be used for the road along the front of the buildings (Royal Engineers' Office Fremantle - Lieut. Royal Engineers [Wray] 1854: 253, cited in Eureka 2009). Photographic evidence suggests the roads were similarly positioned to their present routes and metalled (surfaced) with limestone by c.1909 and remained in this state until 1935, after which sections of the road began to be bitumised. This is corroborated by an aerial photograph from 1948 (Landgate 1948, cited in Eureka 2009).

Eureka conclude that the roads within the Parade Ground were initially metalled using limestone rubble and that, when the Parade Ground was being 'reformed' in approximately 1862, roads were included in this process (Superintendent Fremantle Prison [Lefroy] 1862a: 305, cited in Eureka 2009). A reference to road construction in 1862 suggests the principal road was placed 'make a wide metalled road along and levelled to the entire front of the Prison, and sweeping around the north and south [ends?]

of it to the Hospital and the Blacksmith's shop respectively '.. to make two other short roads leading at right angles from the abovementioned principal road to the wood stack and to the cookhouse respectively' (Superintendent Fremantle Prison [Lefroy] 1862b: 179, cited in Eureka 2009 and Bavin 1990b). Besides this quote, Eureka reported that no other evidence, i.e. plans, were located to support the parallel alignment of the southern end of the main central road as shown in Bavin's archaeological zoning plan (Bavin 1990b) and it is probable she depicted it on plans in the 1990 report due to the interpretation of it being 'levelled' to the front of the Prison. Eureka suggested that the part of the quote that referred to the road 'sweeping around to the south' actually agreed better with the current physical evidence and so they concluded that it is more probable that the main internal road of the Prison maintained a similar route to that of today.

Parade Area & Grassed Area 1862

Today, the area referred to as the Prison Parade Ground encompasses the large open space between the Main Cell Block in the east and the Entrance Gate complex to the west. However, there is evidence of a convict-era 'Parade Area' along the front of the northern wing of the Main Cell Block. The changing use of forecourt to the Prison was discussed by Eureka (2009a).

The Fremantle Prison Superintendent's letter book refers to prisoners being 'employed during the last month in raising and breaking stone to reform the Prison parade ground' (Superintendent Fremantle Prison [Lefroy] 1862a: 305, cited in Eureka 2009) and an earlier letter states that...

'...both of the smaller Division yards and the great yard of this Establishment [remain in an] an unfinished state...the levelling, flooring, concreting, road making, grass and shrub planting which are all requisite or desirable in different portions of the yards...[he suggests these] improvements of our internal state and appearance might be gradually affected

in an (?) manner, and without detriment to the supply of labour for the public works generally,..... [Prisoners could be employed] in the gradual accomplishment of these improvements.....The particular improvements which I solicit authority to carry out in this way are the following..... 'plant with grass and shrubs the whole of the remaining portions of the front yard, except a portion north, north side of the chapel and contained between the line of the proposed principal road and the northern half of the prison, which will be required for (assembling?) and parading the prisoners on' (Superintendent Fremantle Prison [Lefroy] 1862b: 178-179, cited in Eureka 2009).

Although the above quote suggests that the area directly in front of the north Main Cell Block is included, it takes in a greater proportion of the area for both the Parade Ground and the Garden and Shrubs. A plan in Water, Walls & Yards (Fremantle Prison Conservation & Future Use [Project] 1990b) suggests that garden areas were established at either side of the parade area's main entry gate by 1930 and the parade area is shown to be more centrally located i.e. in the road itself. This is partly corroborated by the c. 1909 photograph which shows shrubs just inside and to the north of the parade gate (Bosworth 2004: 71, cited in Eureka 2009). No plans located to date show a garden area in front of the south Main Cell Block and photographic evidence from both c.1909 (Bosworth 2004: 71) and 1935 (Gore 1935) demonstrate that this area was clear. Subsurface archaeological evidence may still be located to support the existence of these features, however it is also possible that the proposed garden and shrub planting of the larger part of the great yard was never undertaken and the 'parade area' was simply left clear rather than constructed for this purpose. The current state of the Parade Ground appears to have been constructed after 1963. The roads were bitumised at some point after this and the grass areas,

as they appear today i.e. raised and lined with modern bricks, are likely to have been a post-c.1970/80 event. The photograph from 1935 (Gore 1935) indicates that the Grassed Areas are level with the road or only slightly raised. Further research, and an examination of the physical evidence, will likely resolve the date for the raised grass bed construction.

Officers' Shelter Shed 1908

Construction of a timber, glass and cement shelter shed on the Parade Ground in 1908 was confirmed (Superintendent Fremantle Prison [Jarvis] Officer in Charge of Works 1908: 118, cited in Eureka 2009) but the specific location of the one mentioned in this source is unknown. A c.1909 photograph of the Parade Ground shows two shelter sheds and a rotunda west of the main roadway (Figure 12). Eureka concluded that the shelter shed described by Bavin, and referred to in the primary documents, is probably one of those in the photograph. Therefore, the location of the Officers' Shelter that Bavin includes on the Construction Sequence Plan (Figure 6, Appendix 5) may not be in the correct location. It is not shown on a 1919 plan (Figure 7, Appendix 5).

Clothes Store c. 1919 / Old Canteen post-1948

The 1919 Electrical Plan depicts a 'Clothes Store' in the north-west corner of the Parade Ground Project Area. The 1909 photograph across the forecourt area also shows a building of similar proportions in this location as does aerial imagery from 1935 and 1948 (Figure 10 and Figure 11, see Appendix 5). A Prison Site Plan dated to 1987 shows structure in the same spot but with a different footprint – it is much longer and narrower than the one shown by the records dated to 1909 - 1948. This altered footprint matches that of modern plans and of that shown by the recent Heritage Management Plan which labels it as "Old Canteen (Toilets)" (Extent Heritage Advisors 2019).

Rotunda c.1909

A c.1909 photograph of the Parade Ground shows a rotunda in the northern part of the Project Area, west of the main roadway (Figure 12, Appendix 5). It is also shown on a 1919 plan (Figure 7, Appendix 5). The georeferenced historical plan and the 1909 photograph suggest that this Rotunda might be further to the north than that of the modern rotunda; however, the lack of documentation of this feature makes this discrepancy difficult to investigate.

Sentry Box 1919

A small Sentry Box is shown in the northwest corner of the Parade Ground on a plan dating to 1919 (Figure 7, Appendix 5). Modern aerial photography shows that the adjacent buildings have been extended and the roofline now covers where this feature would have been.

Laundry and Ablution Block 1964

Plans for a new laundry / ablution block first appear in 1950. The structure was located just inside the Parade Ground, south of the main reception complex as it appears in Bavin's archaeological zoning plan (Bavin 1990b; Chief Secretary's Department 1949, cited in Eureka 2009). Construction of this timber, iron and asbestos building was completed in September 1964 (Chief Secretary's Department 1949; 1963, cited in Eureka 2009).

ARCHAEOLOGY OF THE PLACE

PAST ARCHAEOLOGICAL WORK

Bavin 1990 excavations

In 1990, Louise Bavin undertook a targeted archaeological excavation program in the Prison compound. In preparation, Bavin compiled historical plans and records into a map of past and existing structures, from which zones of archaeological sensitivity were delineated (Bavin 1990a, 1990b). Bavin outlined zones of archaeological sensitivity across the Parade Ground which related to the location of the original Metalled Road that traversed the compound, the original Parade Ground area and historical gardens along the frontage of the southern Main Cell Block (Figure 1, Appendix 5). The alignment of the original metalled road is not entirely known because it was not depicted on historical plans; only a written description of the proposed road system is available as evidence of its initial construction. Bavin's report depicts 'proposed metalled roads' in the construction sequence plans based on historical descriptions of the proposed road plans. However, the zone of sensitivity for the metalled road follows the current road alignment, not that of the historical description.

As part of the 1990 excavation program, Bavin explored the nature of the stratigraphy across the Parade Ground, excavating a 1 m x 1 m trench in the lawn area to the east of the Main Cell Block (Figure 13). This trench was placed just on the edge of the modern road in the location of the proposed original Metalled Road, as per the historical description. The excavation indicated that in

this area the bedrock is approximately 0.6 m below the modern raised lawn surface level, which is 0.3 m above the current bitumised road level. Having not found evidence of a metalled road surface in the remaining 0.3 m of deposit, Bavin concluded that the original metalled road alignment was the same as the original one (built in 1862), following repairs and resurfacing (Bavin 1990a). The recovered cultural assemblage included many nails, screws and bolts, a boot heel cap, scrap metal fragments, ceramics, window and bottle glass fragments and handmade bricks.

Eureka 2008

In 2008, Eureka Archaeological Research and Consulting UWA targeted five areas for excavation, two of which were in the Parade Ground Project Area: Trench A2 and Trench A5 (Figure 14, Appendix 5).

Trench A5 was excavated just to the east of Bavin's 1990 trench to continue exploration for the original metalled road surface. Trench A5 measured 2 m x 6 m was excavated partly over the lawn and partly over the existing bitumen road. Eureka concluded that the crushed, hard-packed limestone layer just below the bitumen was the original Metalled Road and that it followed a similar alignment to the current road. The excavation continued down to bedrock which was reached at a maximum of 0.9 m below the then current ground surface.

A second trench (A2) was positioned in the lawn area to target the possible location of the 1852 well. The trench was excavated down to bedrock, achieving similar depths below surface as Bavin's work (c. 0.6 m). In the upper 0.5 m of deposit, the cultural assemblage included ceramics, nails, bolts, boot heels, slate fragments, clear bottle glass, limestone rubble, bottle glass, building material, brick and animal bone. The lower deposits contained similar cultural material, but also timber fragments, shoe eyelets, a pipe fragment, oyster shell fragments and plastic.

There is very little information about the location of the Well, except for some 1850s historical plans and records noting its presence early in the planning and construction of the prison. Later plans do not plot the location of the well, which suggests that it was only in use for a short period of time. The 2 m x 5 m trench was placed in a lawn area in front of the southern wing of the Main Cell Block, near to where the georeferenced historical plan plots the Well. The presence of electrical services in the preferred trench location meant that excavation had to be moved to the nearest service-free position. No well was found;

however, a hardened limestone surface was encountered at approximately 0.4 m below the surface which Eureka interpreted as an undocumented path, but not that of the alternate route of the original Metalled Road. However, this depth does, in fact, correspond well with the confirmed Metalled Road that was uncovered in trench A5 and it could be speculated that this corresponds with the alternative proposed road alignment, as per Bavin's construction sequence plan (Figure 5, Appendix 5). According to Figure 3 of Bavin's 1990 Stage One work at the Prison, a subsurface road structure runs parallel to the main prison building, unlike the current road alignment where the section to the south of the chapel entrance veers in towards the southwest corner of the building instead of continuing parallel to the frontage. This alternative alignment of the original Metalled Road is discussed in Eureka 2009 Excavation report, but they ultimately concluded that that original road was likely to have followed a similar route to that of today. However, this conclusion is based upon interpretation of the historical description of the road. Eureka speculated that Bavin mapped the road in a parallel position due to a description of the original road as being 'levelled along the entire front of the Prison' but the fuller description could be interpreted another way (Eureka Archaeological Research and Consulting 2009b). Bavin appears to have come to the same conclusion, given that her Zoning Plan does not factor it in.

UWA 2013

In 2013, the University of Western Australia's Masters of Professional Archaeology program excavated a 3 m x 1 m trench in the lawn area in an attempt to locate the missing well (Figure 15). According to the maps provided in the report, the trench was placed just to the east of Eureka's 2009 Trench A2; however, there is some spatial discrepancy between the Eureka mapping and that of the UWA maps which makes it difficult to be sure about the exact spatial relationship between the two excavations, especially given the lack of coordinates provided in the reports.

However, it seems likely that they both targeted approximately where historical plans plot the 1852 Well.

The UWA trench yielded a mixed cultural assemblage of both modern and historical finds including window glass, buttons, faunal bone and a 1920s ketchup bottle. They also identified two archaeological features, one of which (Feature 1) could possibly relate to refuse-fill of the Well. This feature cut through the southwest corner of the trench and was thought to continue beyond the excavation area. Due to time constraints, excavation was stopped before fully exploring the feature and before reaching bedrock.

DPLH 2017 (in press)

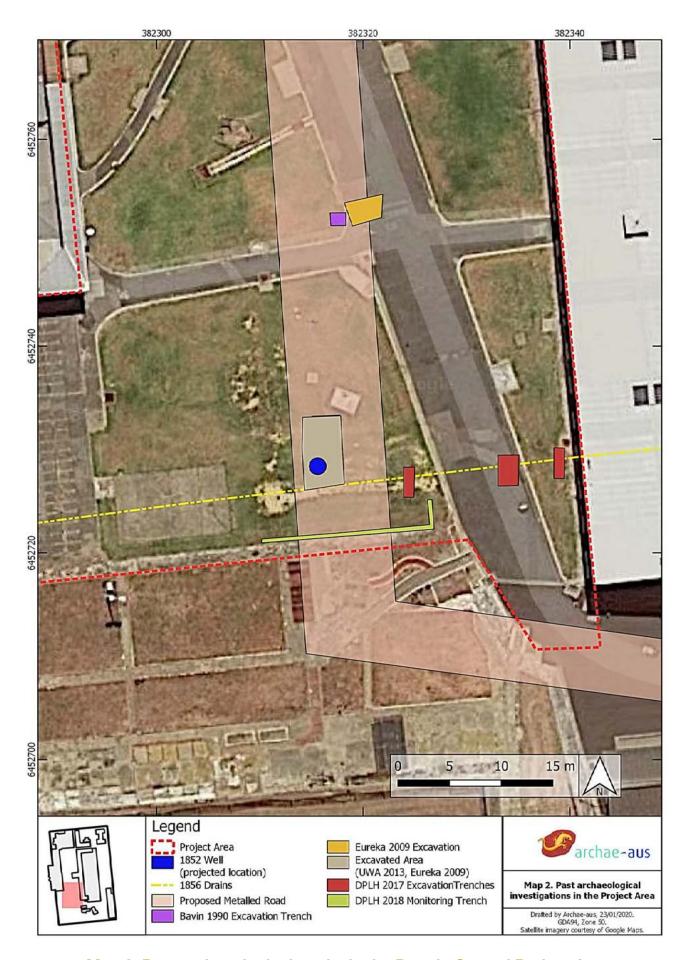
An archaeological investigation was launched by the DPLH after a sinkhole in the Parade Ground revealed a historical sewer (Fleming 2017). Three trenches were excavated along the line of the Convict-era drain and sewer system that passes under the Parade Ground on a roughly east / west alignment from the Main Cell Block building to cess pits outside the prison grounds (Figure 16). Vaulted and timber roofed sewers were uncovered that confirm the historical plans of the original 1850s Drains. The results indicate that sections of the prison's drain system were cut into the bedrock, whilst others were constructed using bricks, limestone and mortar. Presumably this was due to the irregular upper surface of the natural limestone cap rock.

DPLH 2018

In 2018, the installation of a new fire service line required the mechanical excavation of a 2.6 m long channel in the southern part of the Parade Ground (Figure 17) and an archaeological monitoring program was carried out by the DPLH (Wilson 2019).

The upper 0.25 m of deposit was moist, black loamy soil, consistent with the nature of the raised lawn layer. Below this was 0.1 – 0.15 m of mixed soil and crushed limestone on top of 0.4 m of crushed limestone down to the excavated feature (services line), or base of trench. The east end of the trench was excavated to a maximum depth of approximately 1 m without reaching natural soil or bedrock.

A roughly square cement block was uncovered at c. 0.6 m below the surface. This feature measured approximately 0.9 m x 0.9 m and is composed of grey Portland cement. The presence of crushed limestone in the surrounding matrix suggests that limestone may have been used in its construction. It was concluded that the feature and associated rubble was a footing for a past structure, or possibly a concrete plug for a deeper structure. It was reburied and remains in situ.



Map 2. Past archaeological works in the Parade Ground Project Area

ARCHAEOLOGICAL POTENTIAL

The past archaeological works have confirmed that:

- the removal of any paving or turf within the southern part of the Project Area has the potential to reveal archaeological deposits;
- it is likely that, in most lawn areas across the Project Area, modern turf overlays more recent soils initially, which in turn overlay older 19th century archaeological features, such as paths, old drainage pipes, other drainage features and rubbish deposits;
- the existing bitumen road is also likely to overlay and correspond to the original limestone Metalled Road alignment, which the excavation has confirmed remains in situ (Eureka Archaeological Research and Consulting 2009a).

The past archaeological works have not yet confirmed:

- the location of the 1852 Well excavations in 2013 revealed a feature that could relate to the Well but the excavation was terminated prior to confirming this.
- the proposed alternative route for the original Metalled Road – whilst excavations concluded that the current bitumen road matches that of the original layout, the position of the trenches and the presence of compacted limestone rubble in one does not rule out the possibility that another metalled road surface was first constructed in the alignment proposed by Bavin (1990b).
- the archaeological signature of the 1862
 Parade Ground, 1908 Officers' Shelter,
 the historical Grassed Area / Gardens,
 the c. 1909 Rotunda and the Clothes
 Store / Old Canteen the projected
 locations of these features are known
 only from historical plans or scant
 descriptions and photographic evidence.
 The northern end of the Project Area has
 not been subject to much archaeological
 investigation.

In addition to the historical cultural heritage discussed above, Aboriginal cultural material such as flaked stone artefacts may also be present within the Project Area (see Appendix 2 for further discussion).

RISK ASSESSMENT

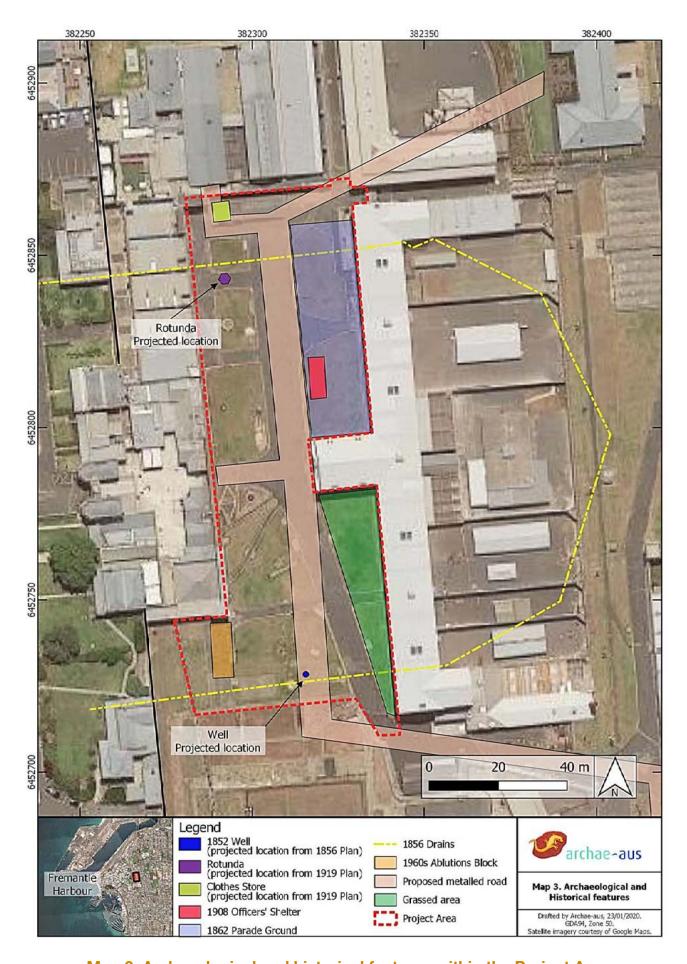
Following their excavation, Eureka recommended that ground disturbance works in bitumen areas should not exceed a depth of 10 cm below the surface and in grassed areas ground disturbance works should not exceed a depth of 30 cm below the surface, owing to the potential for archaeological material below these levels (Eureka Archaeological Research and Consulting 2009a). Excavation works since then have corroborated this. Therefore, ground disturbance works pose a risk to the archaeological resource of the Prison.

The Fremantle Prison Heritage Management Plan identified the following risks:

- disturbance or destruction of highly significant built form or archaeological features in order to expose archaeological features of lower significance;
- inadvertent disturbance or destruction of the archaeological resource due to lack of prior research or inadequate impacts assessment;
- damage to the archaeological resource because investigations were undertaken by inexperienced or inexpert practitioners;
- failure to make the data generated by archaeological investigation publicly accessible;
- disturbance or destruction of Aboriginal archaeology without appropriate consultation taking place because its significance is not recognised relative to the site's non-Aboriginal heritage values; and
- loss/damage due to an under-resourced collection area and lack of postexcavation analysis

In addition to these broad themes, the following specific risks associated with works in the Project Area will be addressed in the management strategies of this AMS:

- the margin of error in predicting locations of archaeological features
 much of the current knowledge of the potential archaeological features is gleaned from scant documentary evidence and georeferencing of historical plans.
- the historical metalled road surface could be encountered immediately below the bitumen surface and, given likely repair and resurfacing that may have taken place, the thickness of the 'modern' (bitumen) surface cannot be assumed to be a set thickness. Thus, any disturbance to the bitumen surface poses a risk to the historical road surface.
- whilst the lawn areas are raised approximately 30 cm above the level of the roads and historical features, archaeological materials were recovered from this layer. Therefore, ground disturbance in the top 30 cm of the lawn areas is highly likely to uncover cultural materials but at low risk of encountering sensitive archaeological structures. Ground disturbance below the humic soils of the lawn layer pose a high risk to archaeological structures.
- the possibility of Aboriginal artefacts cultural material such as flaked stone artefacts being present within the Project Area (see Appendix 2).



Map 3. Archaeological and historical features within the Project Area

ARCHAEOLOGICAL SIGNIFICANCE

ARCHAEOLOGICAL SIGNIFICANCE

Zones of Archaeological Sensitivity

Louise Bavin's archaeological zoning plan of the Fremantle Prison compound (Bavin 1990b) is essentially what is termed today an Archaeological Management Plan (AMP) for the site (see Figure 1). The purpose of the archaeological zoning plan is to classify sites according to their level of archaeological sensitivity. To assist managers in site development decisions the plan includes

basic management recommendations. Areas in which material remains of historical or archaeological research interest are likely to have survived and seem to be highly sensitive to development activities which would disturb sub-surface deposits are allocated the top zoning category to protect them. Conversely, areas which are not likely to contain archaeological remains are given the lowest zoning category (Pearson 1984 quoted in Bavin 1990b).

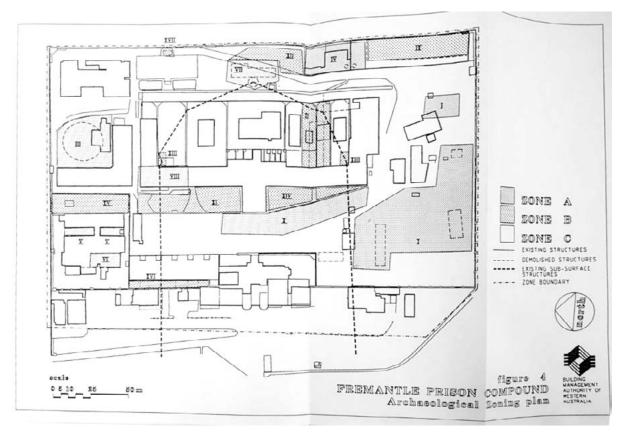


Figure 1. Zoning Plan - Bavin 1990a

Zone A: Areas of High Archaeological Sensitivity

Areas zoned A are suspected of containing archaeological remains in the form of building foundations, stores, amenities and services where associated artefacts are likely to be found, thematically and functionally unique structures which are of historical or archaeological research value, and other sites which may be reactivated to reinforce historical integrity of the prison.

In Zone A areas it is essential that no development activities take place before thorough archaeological investigations have been carried out. If it is found, from test excavations, that a proposed development will threaten a significant archaeological resource, it is strongly recommended that the development be re-designed to avoid that resource. The following parts of the Parade Ground have been allocated Zone A classification:

- Section along west side of southern cell block
- Small section on west side of north cell block.

Bavin recommended that areas classified as Zone A be thoroughly tested and defined before development works are undertaken. Based on archaeological assessments of the sites discussed above, feasible options might be to:

- proceed with development works;
- salvage remains;
- redesign development works to avoid destruction of an unexcavated archaeological resource; and
- expose and display remains.

Zone A areas within the Parade Ground Project Area include the original Metalled Road.

Zone B: Areas of Medium Archaeological Sensitivity

Areas zoned B are suspected of containing archaeological remains of less research potential and significance than those in Zone A sites. Remains may include evidence of minor structures adjoining substantial buildings, artificial landfill, garden plots and less predictable deposits within yards and parade areas. There is still a reasonable chance of locating remains of high research or display value in Zone B areas. Consequently, development works which will disturb subsurface deposits should be preceded by archaeological testing. The following parts of the Parade Ground have been allocated Zone B classification:

- An area in front of the Main Cell Block. The specific of the proposed metalled road is uncertain. Excavations in this area may define the original road boundaries. The old road may eventually be reactivated to reinforce historical integrity in the prison.
- According to Prison Department documents (PD 205), grass and shrubs were planted in front of the southern wing of the Main Cell Block. This area may be examined to determine the boundaries and contents of the garden, if indeed it was a garden.
- The boundaries and surface material of the Parade Ground may also be determined by test excavations. This site is located in front of the North Main Cell Block.

Bavin recommended that areas classified as Zone B be sufficiently archaeologically tested to locate any major remains which may necessitate redesigning development works. Development works proceeding on the basis of test excavation results should be accompanied by archaeological surveillance. During such works contracts should allow for proper salvage of remains.

Zone B areas within the Parade Ground Project Area include the Parade Area 1862, Grassed Area 1862 and Officers' Shelter Shed 1908.

Zone C: Areas of little or no archaeological sensitivity.

Areas zoned C would appear to have little or no potential for archaeological remains. This conclusion is based on documentary research. Zone C areas were not places of concentrated activity nor were substantial buildings constructed in these areas. However, 19th century prison plans indicate that shallow drains dissect various areas within the compound. Contractors should be briefed on the possibility of uncovering such remains. Should archaeological remains be uncovered during the course of development works it is recommended that contractors cease work until the remains have been inspected and assessed by an archaeologist.

Zone C areas within the Parade Ground Project Area include the 1852 Well, 1854 Drains / Tunnels, Clothes Store c. 1919 / Old Canteen post-1948, c.1909 Rotunda, 1919 Sentry Box and 1964 Laundry and Ablution Block.

Zones of Significance

The Fremantle Prison Heritage Management Plan (Extent Heritage Advisors 2019) is a comprehensive management and assessment document for the heritage values of the entire Prison compound. The HMP identifies Parade Ground (or forecourt to the Main Cell Block) is a key historical component of the convict-era planning and development of Fremantle Prison. It has survived as a largely undeveloped and unembellished space - save for defined garden and lawn areas or beds – since the 1850s. It has also acted as the significant setting to the Main Cell Block allowing for uninterrupted views of the imposing west façade and Chapel wing. Other views of note from and within the Parade Ground include the view of South Knoll, north-south views along the length of the space, views

out over the tops of the perimeter walls and Prison buildings, and the axial east-west view between the central entrance to the Chapel wing of the Main Cell Block and Wray Gates (which extends beyond the Parade Ground). Aesthetically, the overall character of the Parade Ground is one of austerity and simplicity, with the dramatic and overscaled space first encountered after entering through the Wray Gates. Of the various paths and roadways, the largest and most prominent, and the one which is evident from the 1850s, runs from north to south, and turns east at the south end of the Main Cell Block. This has historically provided access to the East Workshops which, although important operationally, were otherwise largely isolated from the remainder of the Prison in its early decades.

Those parts of the Parade Ground, as defined in the HMP, that are relevant to this AMS and of exceptional significance are:

- convict-era Parade Ground
- convict-era north-south road alignment

The part of the Parade Ground that is of considerable significance is as follows:

 Old Canteen (possibly overlying an older Clothes Store structure)

The part of the Parade Ground that is of some significance is as follows:

 general form and alignment of the defined lawn areas and garden beds

Those parts of the Parade Ground that are of little or no significance are as follows:

- office addition to Old Canteen
- sentry box to Old Canteen
- current surface and edging materials including bitumen, brick and concrete
- all other modern fabric

RESEARCH QUESTIONS

Bavin's archaeological zoning plan (Bavin 1990b) notes that the archaeological resource at Fremantle Prison has a high potential of yielding cultural material which may be to address significant research questions. Major research questions which may be addressed concern:

- technological developments, such as the unique 19th century water system designed to flush human waste from selected areas;
- structural developments and occupational phases associated with particular buildings;
- an accuracy assessment of early Prison plans based on location of structural remains uncovered during excavation;
- change in social values, including notions of contamination, punishment and reform inherent in the Separate System;
- institutional self-sufficiency in terms of imports and prison products;
- gender relations; and
- · diet and health.

In addition to these research questions identified by Bavin, the archaeology of the Parade Ground also has the potential to provide significant information about specific historical features and buildings, including the well, drains / tunnels, metalled road surface, parade area and officers' shelter etc. This information could be incorporated into future interpretative signage or exhibits, engaging visitors to the Prison with its archaeology and adding to the site's value as an important historical and cultural tourist attraction.

ARCHAEOLOGICAL MANAGEMENT STRATEGIES

INTRODUCTION

The exceptional national and international heritage significance of Fremantle Prison demands that the archaeological values of the place are managed conservatively. The Parade Ground Project Area is of high archaeological sensitivity so any risks associated with ground disturbance works must be mitigated.

In the following pages, we will discuss the guiding principles used in the construction of our Management Strategy.

GUIDING PRINCIPLES

The following principles are taken from the Fremantle Prison Heritage Management Plan (Extent Heritage Advisors 2019):

The Opportunities

Where archaeological investigation is necessary at Fremantle Prison this may present an opportunity to involve the community in a program of 'public archaeology' – a form of interpretation.

The archaeological resource at Fremantle Prison comprises a valuable teaching and learning resource. Fremantle Prison may pursue opportunities to collaborate with students and teachers of archaeology from tertiary education institutions.

Archaeological investigation can augment the collection of movable heritage currently curated by Fremantle Prison.

Overarching Policy Framework

POLICY 8

The known and potential archaeological resource at Fremantle Prison will be managed according to its significance. Usually this will comprise its 'scientific significance' (i.e. its ability to address substantive research questions). However, the archaeological resource at Fremantle Prison may also embody other heritage values (e.g. social significance).

POLICY 9

Archaeological excavation at Fremantle
Prison will be underpinned by substantive
research questions expressed in an
Archaeological Research Design prepared by
an experienced historical archaeologist prior
to works commencing.

POLICY 10

Significant archaeological features will not be damaged or disturbed unless this is necessary for overwhelming research, safety or conservation reasons. Fremantle Prison will seek to retain significant archaeology in situ.

POLICY 11

Where the investigation of archaeological features from an earlier period would require the disturbance or destruction of archaeological material from a later period, the decision to proceed will be based on an assessment of the significance of each cultural layer. In some circumstances, the significance of archaeological material from later periods will be higher than that from earlier periods.

POLICY 12

Fremantle Prison will seek to involve the public in programs of archaeological investigation where this can be achieved without compromising the archaeological resource.

POLICY 13

Only historical archaeologists with a demonstrated high level of knowledge and experience will be engaged to investigate Fremantle Prison's archaeological resource (either as part of impact assessment processes or through field work). These archaeologists will also have sufficient training to identify Aboriginal archaeological deposits and artefacts.

POLICY 14

The data generated by archaeological investigation at Fremantle Prison will be made publicly accessible, ideally through publication in a peer-reviewed academic journal but at least as a quality synthesis of the results as requested.

POLICY 15

Once artefacts recovered through archaeological excavation have been documented and analysed such that their research potential has been met, they should from that time be managed according to the 'Moveable Heritage Overarching Policy' contained in the HMP (Policy also stated in the 'Fremantle Prison Collection Policy' (2019)).

OBLIGATIONS

The following section is taken from the Fremantle Prison Heritage Management Plan (Extent Heritage Advisors 2019).

Statutory Framework

The EPBC Act governs 'actions' that have, or are likely to have, a significant impact on a matter of 'national environmental significance'. Places on the WHL and NHL (such as Fremantle Prison) are matters of national environmental significance. An 'action' may include a project, a development, an undertaking, an activity or a series of activities. It can include ground disturbance works that might impact the archaeological resource. Before taking an action that could have a significant impact on the heritage values of Fremantle Prison, the action must be 'referred' to the Australian Minister for the Environment and Energy. The Minister will determine whether or not further and more formal assessment and approval is required, i.e. a 'controlled action'.

The Department of Planning, Lands and Heritage has prepared a document entitled 'Section 79(2) Permit Archaeological Excavation Form' for applications to excavate places on the State Heritage Register.

Section 129 of the Heritage Act 2018 makes it an offence to damage a registered place, including altering, demolishing, removing or despoiling any part of, or thing in, a registered place. The penalties for contravention of the Act are severe, including a \$1 million fine, imprisonment for one year and a daily penalty of \$50,000

Section 79 of the Heritage of Western Australia Act 1990 'damage or despoil' or 'remove any thing from' a place on the SRHP, which can include damage or despoliation of the archaeological resource. However, an application can be made to the Heritage Council for a permit to carry out archaeological works under Section 79 of the Act.

The Western Australian Aboriginal Heritage Act 1972 governs Aboriginal 'places', which includes archaeological sites (Section 5). If Fremantle Prison encounters Aboriginal archaeology it must notify the WA Registrar of Aboriginal Sites (Department of Planning, Lands and Heritage) (Section 15). It is an offence to excavate an Aboriginal archaeological site without the approval of the Registrar of Aboriginal Sites (Section 16). Such consent will only be given after an assessment is made of the nature and significance of the site (Section 18).

Schedule A, Clause 13B of the City of Fremantle's Local Planning Scheme No. 4 states that where planning approval is granted in respect of a place on the Fremantle Heritage List, the Council may impose a condition on that planning approval which requires an archaeological investigation of the place. The same condition may be imposed where the Council has reasonable evidence to indicate that the place may include 'contents, materials or objects' (which would include archaeological remains) that have aesthetic, historic, scientific, or social significance (see also City of Fremantle Local Planning Policy 2.7). However, the City of Fremantle Local Planning Scheme No. 4 zones Fremantle Prison as a Regional Reserve. By Section 2.2 of Local Planning Scheme No. 4 Council approval is not required for the commencement or carrying out of any use or development on a Regional Reserve.

Approval is required from the Western Australian Planning Commission (which will include input from the Heritage Council of Western Australia).

Non-Statutory Framework

A Practice Note supplementing the Burra Charter entitled 'The Burra Charter and Archaeological Practice' states that the fundamental principles contained in the Burra Charter apply to archaeological sites. Article 13 of the Burra Charter states: 'Coexistence of cultural values should always be recognised, respected and encouraged.

This is especially important in cases where they conflict.' This will be relevant (a) where archaeological features from the convict era underlie post-convict archaeological features of national, state or local significance, and (b) where they overlie Aboriginal archaeological remains.

The Department of Planning, Lands and Heritage has prepared a document entitled 'Heritage Impact Statement – A Guide'. It includes reference to the assessment of archaeological impacts.

State governments around Australia have produced guideline documents on how to assess the significance of historic archaeological sites. They usually emphasise the research potential of such places assessed having regard to (a) research potential relative to other sites, (b) research potential relative to other sources, and (c) the ability to otherwise address substantive questions about human behaviour.

MANAGEMENT STRATEGY

The proposed upgrade works to the Fremantle Prison Parade Ground will address important drainage issues and are considered a necessary part of the site's upkeep and maintenance. Provided that a conservative approach is taken, disturbance to any sub-surface archaeological material will be minimised.

Given the scope of the previous archaeological excavations that have been undertaken, particularly in the southern part of the Project Area, archaeological evaluation trenching / test pitting is not considered necessary prior to the works commencing.

Instead, archaeological monitoring of works (an archaeological watching brief) is considered appropriate. By adopting a proactive but cautious approach, the in-situ preservation of all archaeological features will be the primary goal. The following statements underwrite the recommendations provided in the next section of this AMS.

- All contractors working on the project should be made aware of the heritage significance of the Project Area and understand their obligations under the relevant heritage legislation. This may be achieved by running a heritage-specific induction and providing the team with access to this AMS, along with the guiding Procedures provided in the Appendices.
- The Recommendations provided in the following Section and the Procedures provided in Appendices set out the workflows necessary to fulfil obligations and best practice principles.
- Monitoring of all ground disturbing works by a suitably qualified and experienced archaeologist is considered necessary across the Project Area as there is a high likelihood of sub-surface archaeological material being present.

- The lens of natural sands that sit atop
 the bedrock, below the construction
 levels of the Prison, have the potential
 to yield Aboriginal cultural materials
 dating to the pre-contact period.
 Once a detailed works program
 is established, the DPLH should
 consider the engagement of Aboriginal
 representative(s), as nominated
 by SWALSC, to monitor ground
 disturbance, especially where deeper
 trenching is required.
- All historical loose finds that are discovered during the works should be appropriately recorded, salvaged and stored.
- Given the exceptional significance of the archaeological resource, the outcomes of the archaeological monitoring should be appropriately documented in a detailed report and, where possible, used for interpretation within the Prison Compound.

Table 1. Appendices for Management Procedures

Appendix	Contents
One	Archaeological Monitoring Procedure
Two	Archaeological Discovery Procedure
Three	Find Recording and Collection Procedures
Four	Contractor Procedure Handout



RECOMMENDATIONS

RECOMMENDATIONS

To ensure best-practice management of the archaeological resource of the Fremantle Prison Parade Ground, it is recommended that during the proposed works:

- all ground disturbing activities are monitored by a suitably qualified and experienced archaeologist;
- all contractors working on site should undertake a heritage-specific induction, to be produced by the archaeologist, to introduce them to the heritage values and potential sub-surface archaeology of the Project Area;
- all contractors working on site should be given access to this AMS and provided with copies of the Archaeological Monitoring Procedure (Appendix 1), Archaeological Discovery Procedure (Appendix Two) and Contractor Procedure Handout (Appendix Four);
- the works program should be prepared to allow for alterations / amendments to the locations / alignments of service trenches and / or soak wells, if required;
- the DPLH should consider the engagement of Aboriginal representative(s), as nominated by SWALSC, to monitor ground disturbance, especially where deeper trenching is required;

- the works program should be prepared to allow time for the archaeologist to assess and record any archaeological features or artefacts that may be encountered during the works; and on completion of the works the archaeologist should draft a report on the conduct of the archaeological monitoring for submission to the DPLH. The report should include: and
 - background archaeology and history of the site and surrounding area;
 - methods;
 - personnel and qualifications;
 - descriptions of archaeological features and finds;
 - significance assessments;
 - detailed site plans, stratigraphic sequences and photographs of the work, archaeological features and finds:
 - conclusions and a discussion of the identified archaeological material in terms of the research questions; and
 - guidance for the interpretation of the results and any display or safe keeping of the archaeological material recovered during the development.

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APPENDIX ONE – ARCHAEOLOGICAL MONITORING PROCEDURE

During all ground disturbing works within the Project Area the following should be undertaken:

- The Project archaeologist is provided with sufficient scope to closely monitor works.
- 2) It is the responsibility of the Department of Planning, Lands and Heritage (DPLH) and / or the contractor in charge of the project to ensure that the Project archaeologist is briefed and provided with at least two (2) days notice of commencement of any ground disturbing works.
- 3) The DPLH / contractor should provide the Project archaeologist with accurate maps and, where possible, digital GIS location information of the areas of proposed ground disturbance.
- 4) Continued monitoring of the works will occur at the discretion of the Project archaeologist. In certain instances / situations the archaeologist may decide that their on-site attendance is not required. In such instances if archaeological finds or features are identified during the works then the Archaeological Discovery Procedure should be followed.

- 5) The Project Archaeologist should be contacted immediately in the event of archaeological finds or features and works should cease as per the Archaeological Discovery Procedure in Appendix Two.
- 6) The Project Archaeologist has the right to stop works to sufficiently analyse any identified archaeology as per the Archaeological Discovery Procedure in Appendix Two.
- Once all ground disturbing works are completed the Project archaeologist shall draft a detailed report for submission to the DPLH.

APPENDIX TWO - ARCHAEOLOGICAL DISCOVERY PROCEDURE

- Contractors should familiarise themselves with this Archaeological Management Strategy and be aware of the significant archaeological potential of the Project Area.
- 2) The Department of Planning, Lands and Heritage is the primary custodian of any archaeological finds and features that may be encountered during the works.
- 3) The contactor's works program shall be sufficiently flexible to allow for the implementation of the following Archaeological Discovery Procedure across the Project Area.

- 4) A variety of archaeological material may be encountered during ground disturbing works, including but not limited to:
 - a) flaked and ground Aboriginal stone artefacts (Plate 1 and Plate 2);
 - b) historical artefacts including, but not limited to:
 - glass from bottles or window panes;
 - ceramics from pottery, tobacco pipes etc.
 - metal items such as fastenings (nails) etc. (Plate 3 to Plate 5); and
 - historical building footings or surfaces, these may be of stone or brick (Plate 6 to Plate 10).



Plate 1. Aboriginal flaked artefact (quartz)



Plate 2. Aboriginal ground-edge axe (dolerite)



Plate 3. 19th Century pottery sherds



Plate 4. Clay tobacco pipes



Plate 5. Historical clear glass bottle



Plate 6. Historical brick



Plate 7. Hand forged nails



Plate 8. Buttons



Plate 9. Historical limestone wall footings



Plate 10. Historical brick surface



Plate 11. 19th Century well and drain



Plate 12. Cross section of Metalled Limestone Road (Eureka 2009)

PROCEDURE FOR THE DISCOVERY OF ABORIGINAL ARTEFACTS

Aboriginal cultural material may be identified during the works, which may include Aboriginal artefacts such as stone, or less commonly, wooden or bone tools.

Surface Finds

Should surface Aboriginal artefacts or cultural material be found during works, the following procedures should be implemented:

- all works in the immediate vicinity of the find must cease and the project archaeologist should be notified immediately (if not on site);
- the find should not be removed or disturbed further, and barriers or temporary fences may be erected around the area if required;
- the project archaeologist will create accurate records, including GPS coordinates and photographs of the archaeological material, including an in situ evaluation of the find;
- 4) work may be permitted to continue at an agreed upon distance from the find;
- a written statement of the archaeologist's assessment and recommendations will be provided to the DPLH for their consideration; and
- 6) based on the recommendations of the archaeologist, decisions regarding the treatment of the find shall be made in consultation with the archaeologist, Whadjuk Noongar Traditional Owners and the DPLH.

Sub-Surface Material / Sites

In the event that Aboriginal cultural material is found in a sub-surface context, the following should occur:

all works in the immediate vicinity of the find must cease and the project archaeologist should be notified immediately (if not on site);

the find should not be removed or disturbed further, and barriers or temporary fences may be erected around the area if required; and

an archaeological assessment should be arranged with the consent and involvement of Whadjuk Noongar Traditional Owners, through the South West Aboriginal Land and Sea Council.

PROCEDURE FOR THE DISCOVERY OF HISTORICAL FEATURES/FINDS

- If historical features / finds are encountered during the works, they should not be moved, and works should be halted immediately in the immediate vicinity of the find and the Project Archaeologist notified.
 - a) If the Project Archaeologist is not present, they should be informed at once. Depending on the nature of the find and discussion with the Project Archaeologist, work may be permitted to continue at an agreed upon distance from the find.
 - b) Once the archaeologist is present, they may decide to undertake further hand excavation / cleaning around the cultural material to assess its size / extent and determine its provenance and potential cultural significance.
 - c) At this stage, if considered necessary, the archaeologist will inform the Department of Planning, Lands and Heritage (DPLH) of the cultural material.
 - d) If the cultural material is assessed by the archaeologist as not in its primary context, at the discretion of the archaeologist, works may proceed with caution and with direction from the archaeologist after the cultural material has been recorded, bagged and removed from the work area.
 - e) In the unlikely event that the historical cultural material is assessed by the project archaeologist as a significant historical in-situ feature, in consultation with the DPLH, options for the recording, preservation or salvage of the feature will be determined. This may involve further archaeological excavation to determine the precise nature and extent of the feature.
 - f) After recording, all salvaged finds will be recovered by the archaeologist, bagged and removed from work area.
 - g) The Archae-aus Finds Management Process should be followed for appropriate storage or use of these finds.

PROCEDURE FOR THE DISCOVERY OF HUMAN REMAINS

- There is the possibility that human remains could be found during the project works.
- 2) Should human remains be found during works, the following legislation becomes applicable:
 - a) Coroners Act 1996 all human remains:
 - b) Aboriginal Heritage Act 1972 Aboriginal remains; and
 - c) Commonwealth Aboriginal and Torres Strait Islander Heritage Protection Act 1984 - Aboriginal remains.
- 3) Should human remains be found during works, the following procedures should be implemented:
 - a) all works must cease immediately, and personnel must comply with the instructions of the project archaeologist. The remains should not be removed or disturbed further, and barriers or temporary fences may be erected around the area if required;
 - b) Fremantle Prison authorities and DPLH should be notified immediately;
 - c) under section 17 of the Coroners Act 1996 the local police and Coroner's office must be notified:
 - d) if the human remains are thought to be Aboriginal then the Registrar of Aboriginal Sites at the DLPH must be informed. The Registrar of Aboriginal Sites will inform the Federal Minister for Aboriginal Affairs; and
 - e) in consultation with the police, Coroner and DLPH, steps to identify the remains must be taken. This may necessitate engaging a physical anthropologist to complete this task on site.

- 4) If the human remains are determined to be of Aboriginal (or undetermined) origin:
 - a) Traditional Owners should be consulted as to the management of the remains;
 - b) no further work at the location should be undertaken until all parties have been consulted and an agreement has been reached. Once an agreement has been reached, works may continue at an agreed distance away from the human remains; and
 - c) if left in situ, the location of the remains should be recorded in sufficient detail for their future protection.
- 5) If the human remains are determined to be of Aboriginal (or undetermined) origin, and in situ preservation is not a practical solution, provided all parties agree to the relocation of the remains:
 - a) approval to disturb the remains under section 18 of the Aboriginal Heritage Act (AHA), and/or a permit to excavate the remains for archaeological purposes under section 16 of the AHA should be sought;
 - b) an archaeological excavation plan should be developed and implemented in consultation with the Traditional Owners and the DLPH; and
 - c) provision be made for the return of the remains to the Traditional Owners for their repatriation at a safe location.

- 6) If the human remains are non-Aboriginal and are of a historical nature and cannot be avoided:
 - a) The Heritage Council of Western Australia and the Western Australian Museum will be consulted regarding the proposed disturbance.
 - b) A data recovery programme, planned in consultation with DPLH / Western Australian Museum and a historical archaeologist and osteoarchaeologist, may be developed and implemented.
 - c) The curation / collection of any excavated remains will be discussed between the City of Fremantle and DPLH.

APPENDIX THREE - FIND RECORDING AND COLLECTION PROCEDURES

LOOSE FIND RECORDING PROCESS

- 1) Find is photographed in situ
- 2) Location of find recorded on site plan
- 3) Loose Find recording form completed
- 4) Find placed into a storage bag using the correct conservation collection technique
- 5) Find labelled with find number, location, collectors name and date collected
- 6) Finds stored in durable plastic tubs (see Plate 13)
- 7) Data entered into a digital database



Plate 13. Storage tubs



Plate 14. Storage tubs

FEATURE RECORDING PROCESS

- 1) Feature is photographed
- 2) Location of feature recorded on site plan
- 3) Feature recording form completed
- 4) Data collated on completion of works
- 5) Depending on the type of feature, in consultation with DPLH specific procedures will be required to either preserve in situ or remove and conserve.

COLLECTION PROTOCOLS

Careful collection of finds is required and if finds conservation is required, conservators at the Western Australian Museum need to be consulted immediately.

- Any finds recovered from a waterlogged context need to be kept wet in the same water from which they were collected.
- 2) Organic finds should be wrapped and kept away from direct sunlight, then stored at between 4° 5° C.

- Glass, ceramics, brick and stone should be carefully collected, dry brushed and stored separately in labelled plastic bags.
- 4) Metal items should be carefully collected, dry brushed and stored separately in labelled plastic bags. If metals are recovered from a wet environment they need to be stored wet. Fresh water is preferable to salt water except for lead and lead alloys, such as pewter. Only store like metals in the same container. Retain any adherent concretions. Do not store metals in the same container as organic materials unless they are part of an inseparable, composite object.

STORAGE PROCESS

Once initial recording and reporting on finds is complete, all cultural material should be handed over to the DPLH for appropriate long-term management and storage. Copies of all databases, recordings and analysis should also be provided to the DPLH.

APPENDIX FOUR - CONTRACTOR PROCEDURE HANDOUT

PROCEDURE - ARCHAEOLOGICAL FINDS DISCOVERY

Archaeological potential occurs across the entire Project Area, this procedure should be followed if suspected archaeological material is uncovered and the archaeologist is not present.

During ground disturbing works7 the following must occur if objects such as the following are found:

- 1) Historical artefacts such as bricks, concrete, dressed stone blocks, timber, road surfaces, bottles, ceramics, metal and bone
- 2) Aboriginal artefacts including flaked stone and glass, shell, animal bone and metal, ground stone tools

Ac	tion	Process	Personnel	When
1)	Stop Work Immediately	The discoverer will notify machine operators working in the vicinity to stop work to avoid further disturbance of the structure or object. Do not move or touch the found item.	Discoverer	Immediately upon discovery of any object
2)	Notify the Site Supervisor and the Managing Contractor	Discoverer informs the Site Supervisor. The Site Supervisor informs the Managing Contractor.	Discoverer, Site Supervisor	Immediately
3)	Protect the Find	If possible, fence off the affected area with as large a buffer as possible to protect the find. Keep all work away from the area until it has been assessed by the Archaeologist.	Site Supervisor	ASAP
4)	Document	Take at least two photographs (using mobile phones) of the find with something for scale (pens, hands, ruler, people)	Site Supervisor	ASAP
5)	Notify the Archaeologist	The Managing Contractor contacts the Archaeologist to advise of the find. The Managing Contractor emails the photographs to the Archaeologist and provides details of where the find is located (including depth, if possible).	Managing Contractor	ASAP

These are defined as any activity that disturbs the ground surface. It can include activities such as topsoil clearing, grubbing, geotechnical testing, grading, cutting, trenching, potholing pits, deep excavation and directional drilling (launch and retrieval pits).

Action	Process	Personnel	When
6) Initial Assessment of the Find	The Archaeologist views the photographs and advises the Managing Contractor on whether a site visit is required.	Project Archaeologist	ASAP but within 24 hours to minimise delays
7) On-Site Assessment of the Find	If a site visit is required, the Managing Contractor will notify the Site Owner. The Archaeologist assesses the find and in consultation with the Managing Contractor will arrange the recording of the objects and possible salvage.	Managing Contractor, Project Archaeologist	ASAP
8) Recording / Salvage	The Archaeologist to follow the Project Archaeological Management Plan.	Archaeologist	ASAP
9) Clearance	Once salvage is complete the Archaeologist informs the Managing Contractor that the area is clear. Archaeologist informs the Managing Contractor if additional conditions for continued work are required.	Archaeologist	Following assessment
10) Resume Work	Managing Contractor informs the Site Supervisor.	Managing Contractor	ASAP

APPENDIX FIVE - REFERENCE MATERIAL

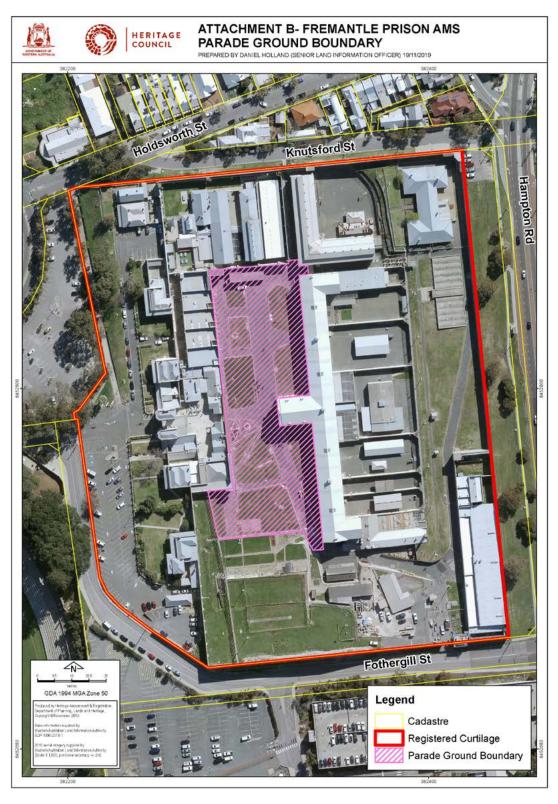


Figure 2. Project Area map, as per scope of works

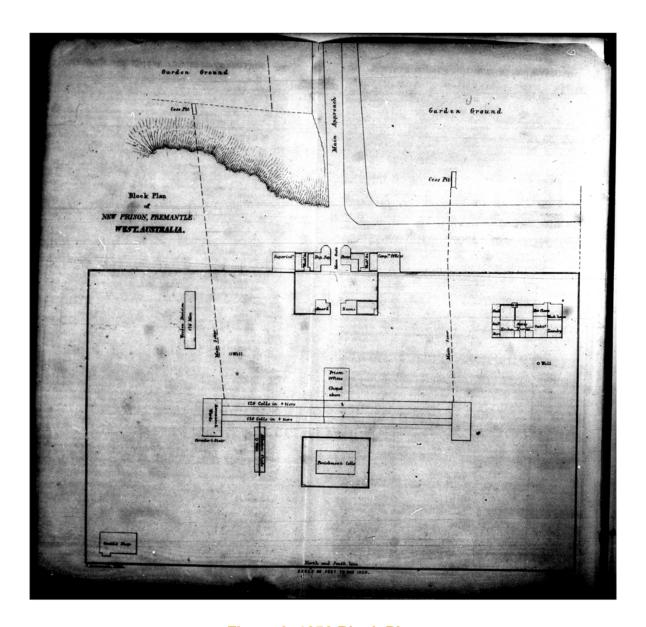


Figure 3. 1856 Block Plan

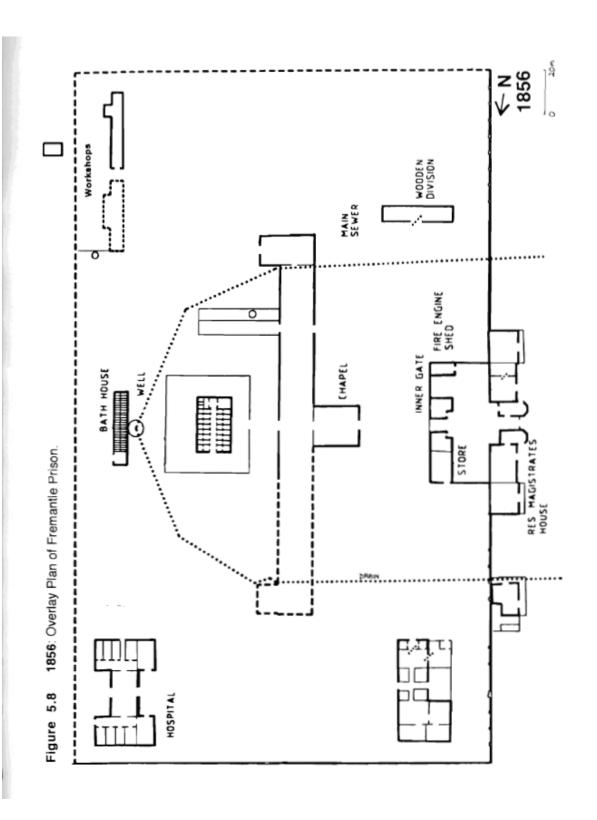


Figure 4. 1856 Plan as per Bavin 1990b, Figure 5.8

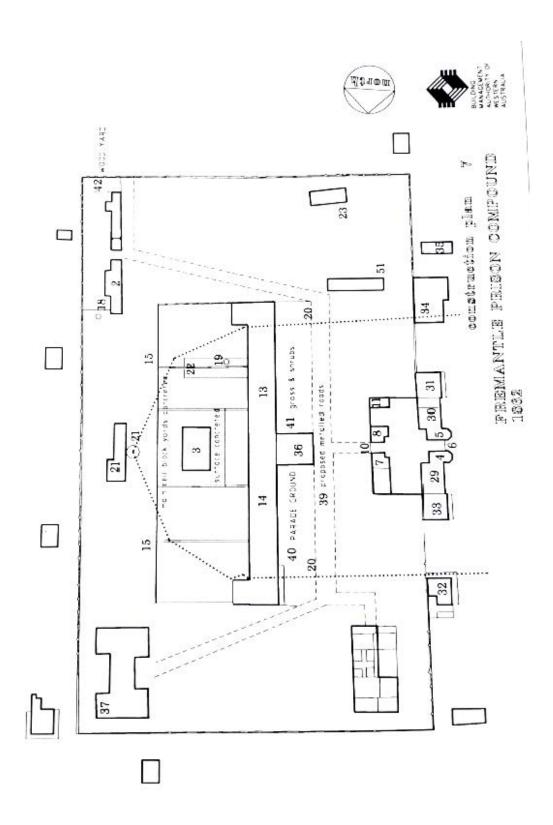


Figure 5. 1862 Construction Plan as per Bavin 1990b

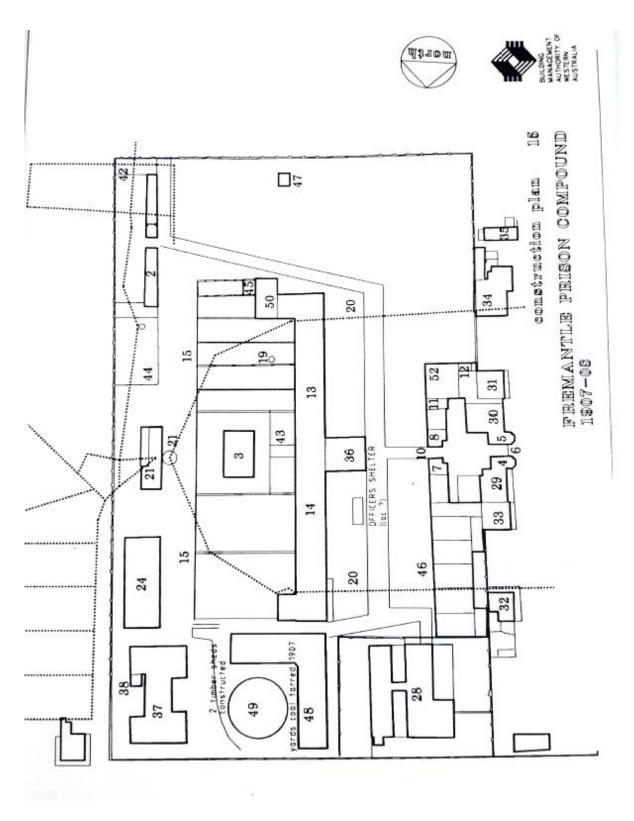


Figure 6. 1907 – 1908 Construction Plan as per Bavin 1990b

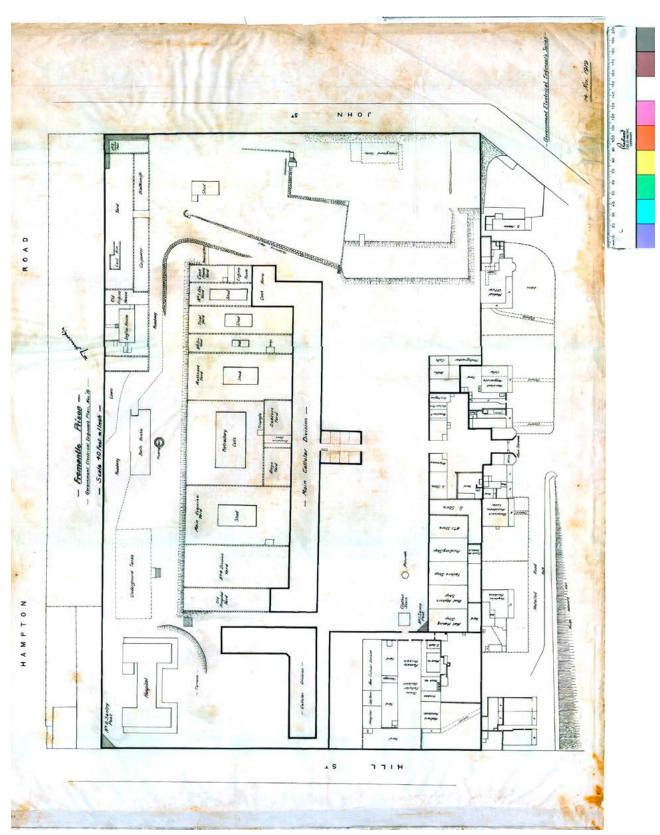


Figure 7. 1919 Electrical Engineer's Plan

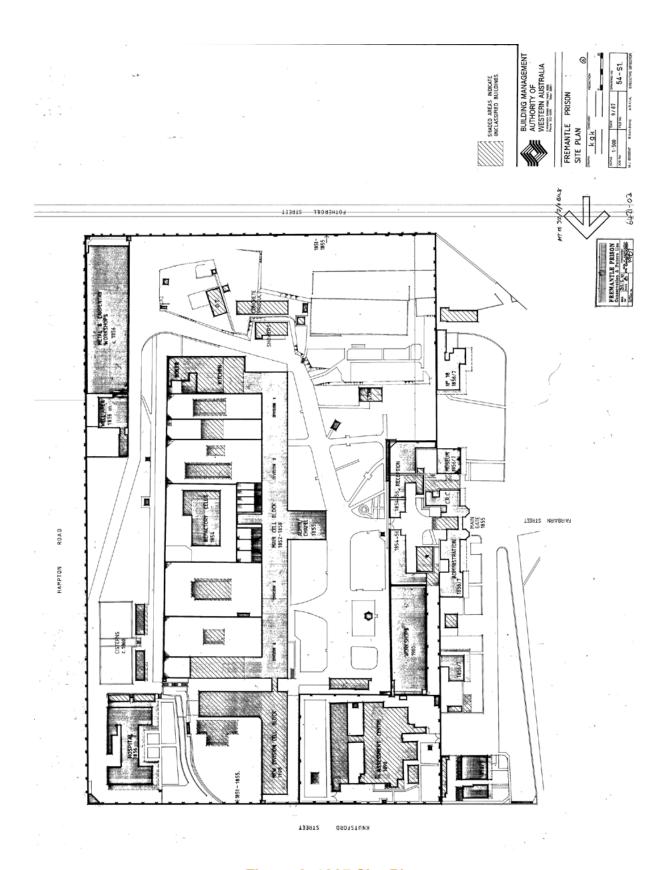


Figure 8. 1987 Site Plan

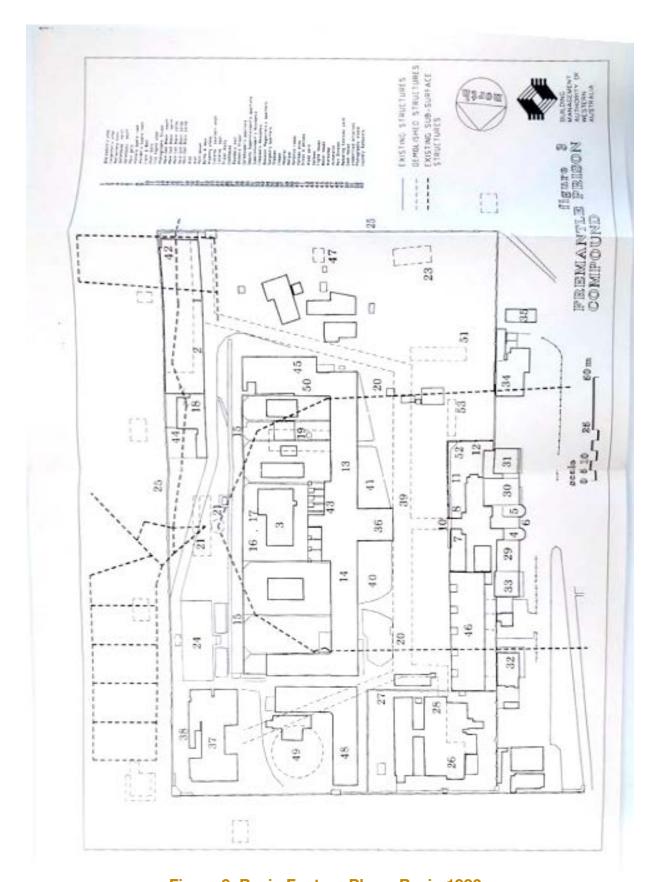


Figure 9. Bavin Feature Plan – Bavin 1990a

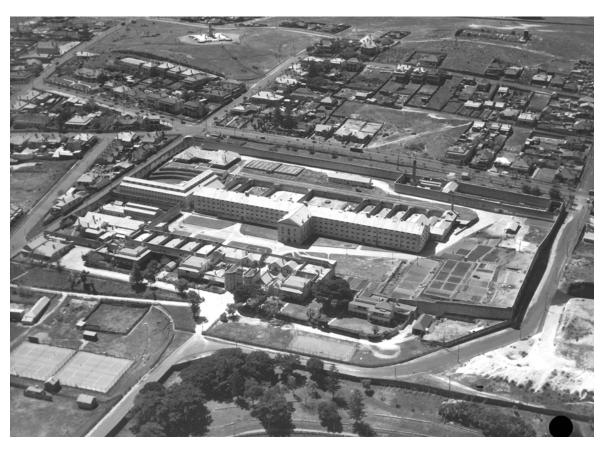


Figure 10. 1935 Aerial Imagery (SLWA Call No 031598PD)



Figure 11. 1948 Aerial Imagery



Figure 12. 1909 Photograph across the Parade Ground Project Area (date provided by Eureka 2009a)

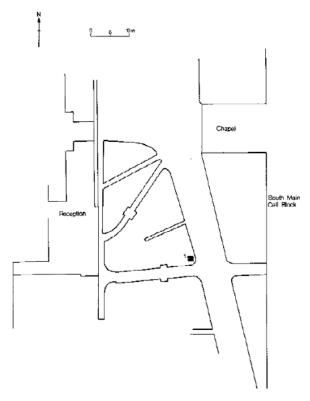


Figure 13. Bavin 1990 Excavation Trench Location (Bavin 1990b Figure 7)

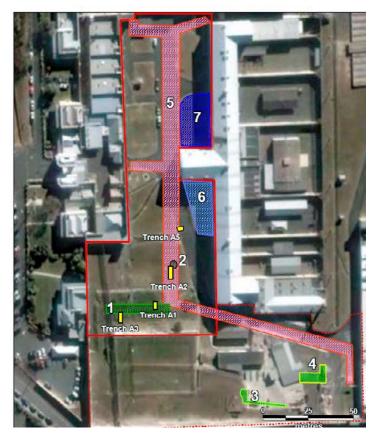


Figure 14. Eureka 2008 Excavation Trench Location (Eureka 2009a, Figure 4)



Figure 15. UWA 2013 Trench Location (Haast et al. 2013, Figure 7)

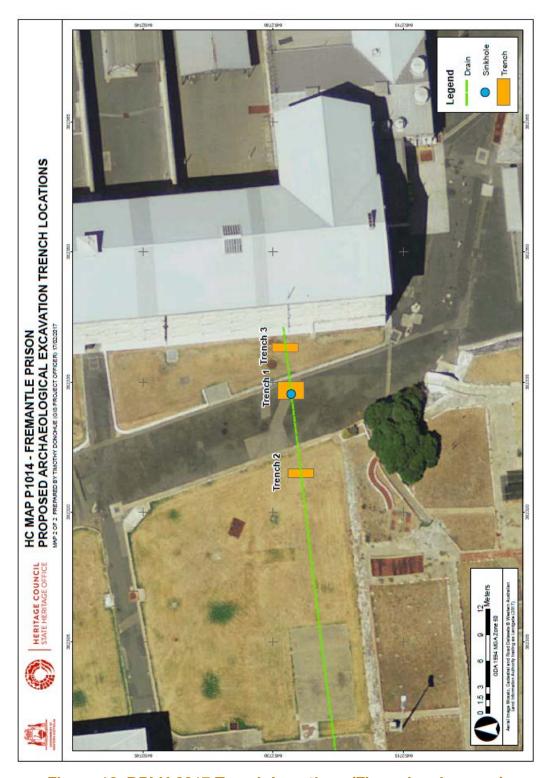


Figure 16. DPLH 2017 Trench Locations (Flemming, in press)

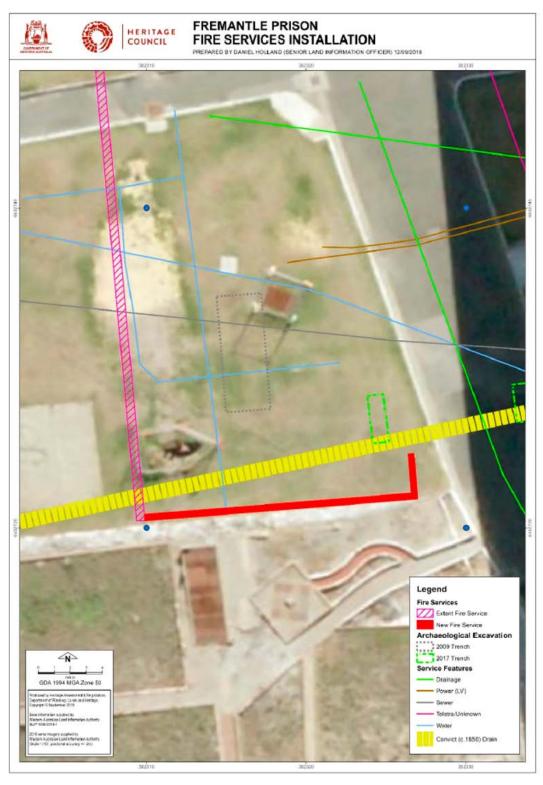


Figure 17. DPLH 2018 Trench Location (Wilson 2019)

NOTES



