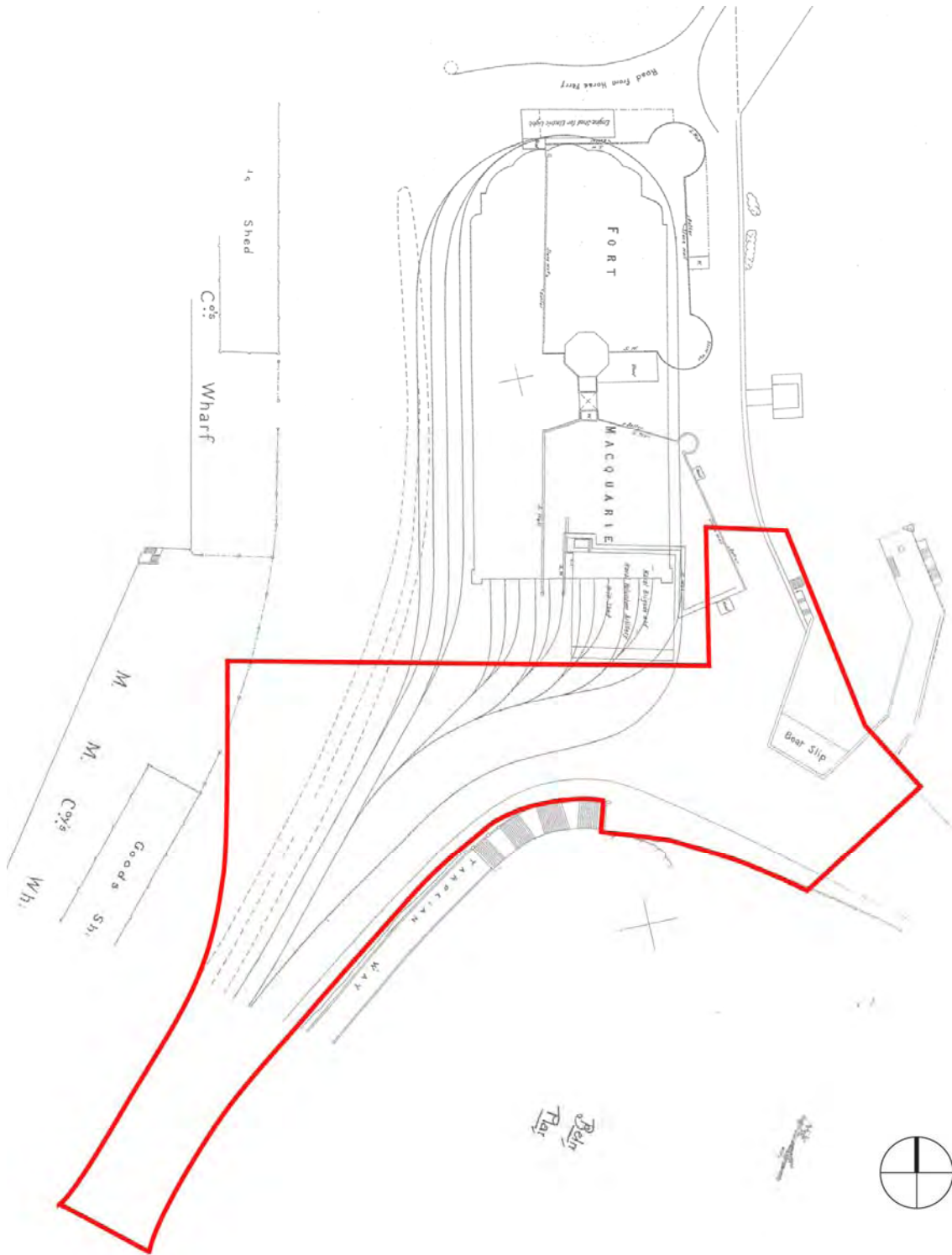
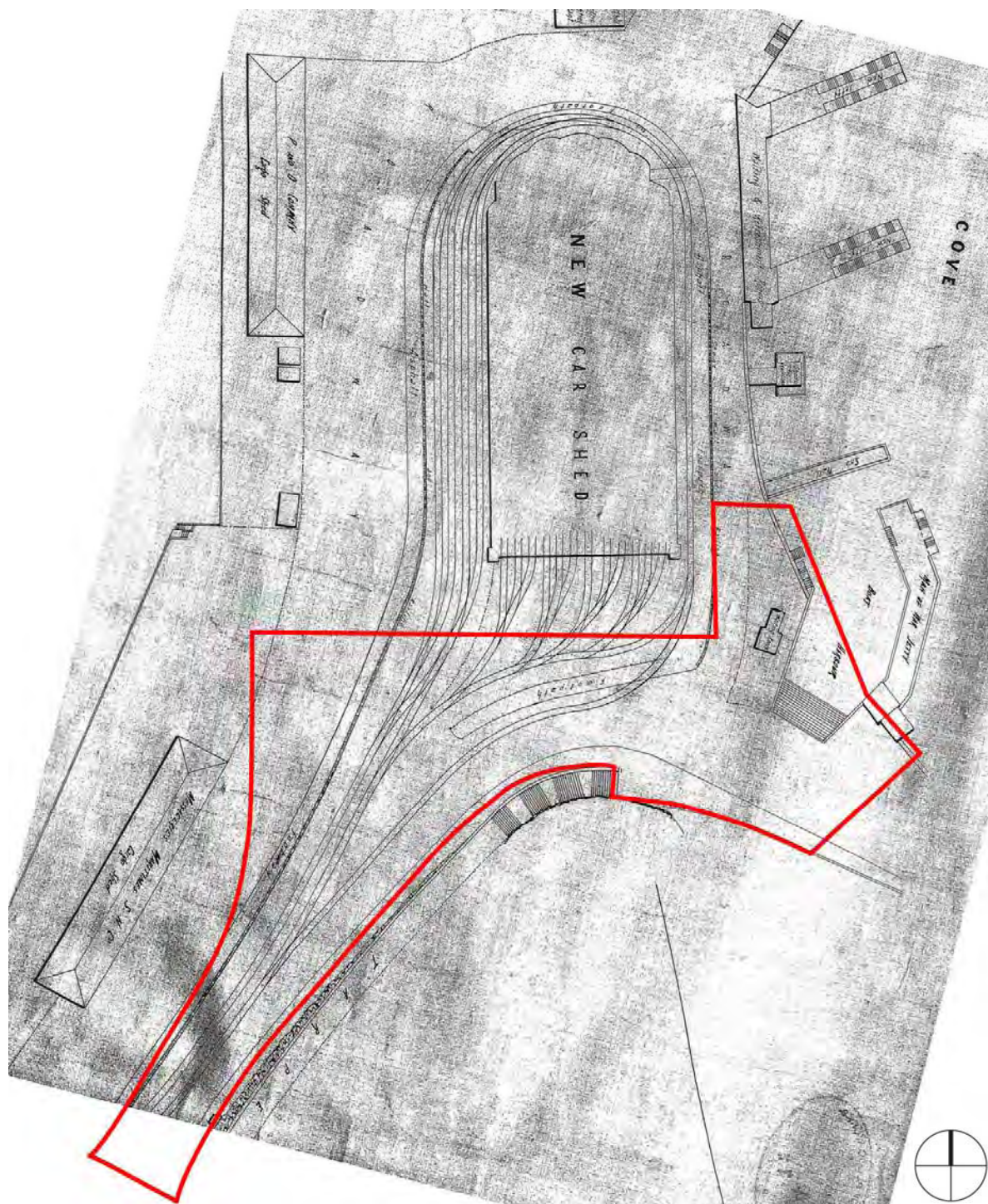


Figure 2.7 Extract of 1899 plan of Bennelong Point showing the southeastern extension of Fort Macquarie, the boat harbour and wharf facilities along the western shore. The study area is outlined. (Source: SRNSW, AO Map No. 521)

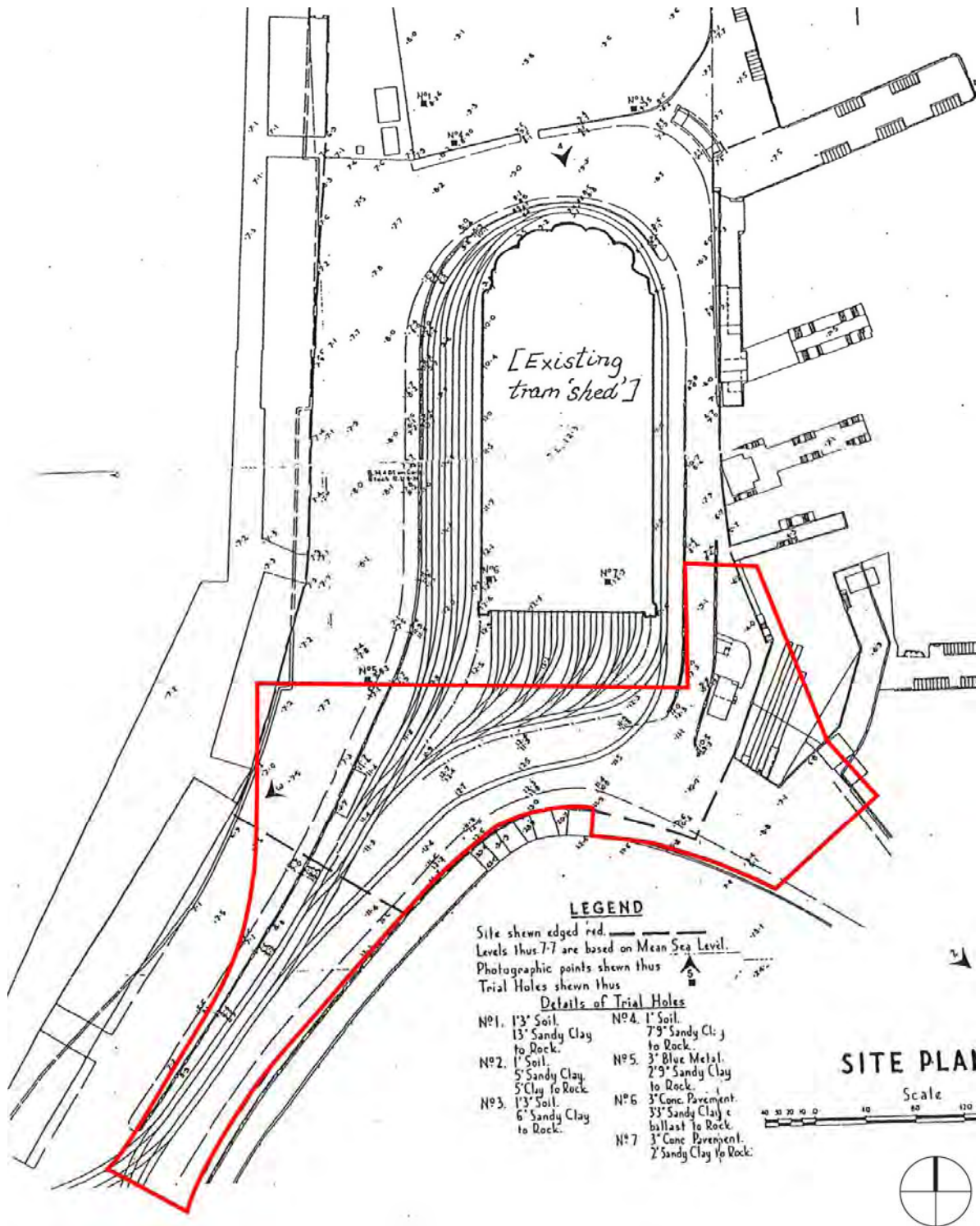


**Figure 2.8** Extract of 1901 NSW Government Transport Plan—'Belmore Park to Fort Macquarie Electric Tramway Plan Showing Position of Car House...'. This plan shows the location of Fort Macquarie in relation to the tram-car house. The study area is outlined. (Source: SRNSW, CGS 12909, SR Plan No. 61078)





**Figure 2.9** Extract of 1902 plan of 'Part of Circular Quay and Fort Macquarie', showing the tramlines and pathways to the south of the tram-car house, as well as a 'waiting room' structure adjacent to the boat harbour/slip. The study area is outlined. (Source: SRNSW, AO Map No. 516)



**Figure 2.10** 1955 plan of Bennelong Point, showing the tramlines and pathways to the south of the tram-car house as well as various structures adjacent to the boat harbour/slip. The study area is outlined. (Source: Reproduced from 2003 Conservation Plan, Figure 12)



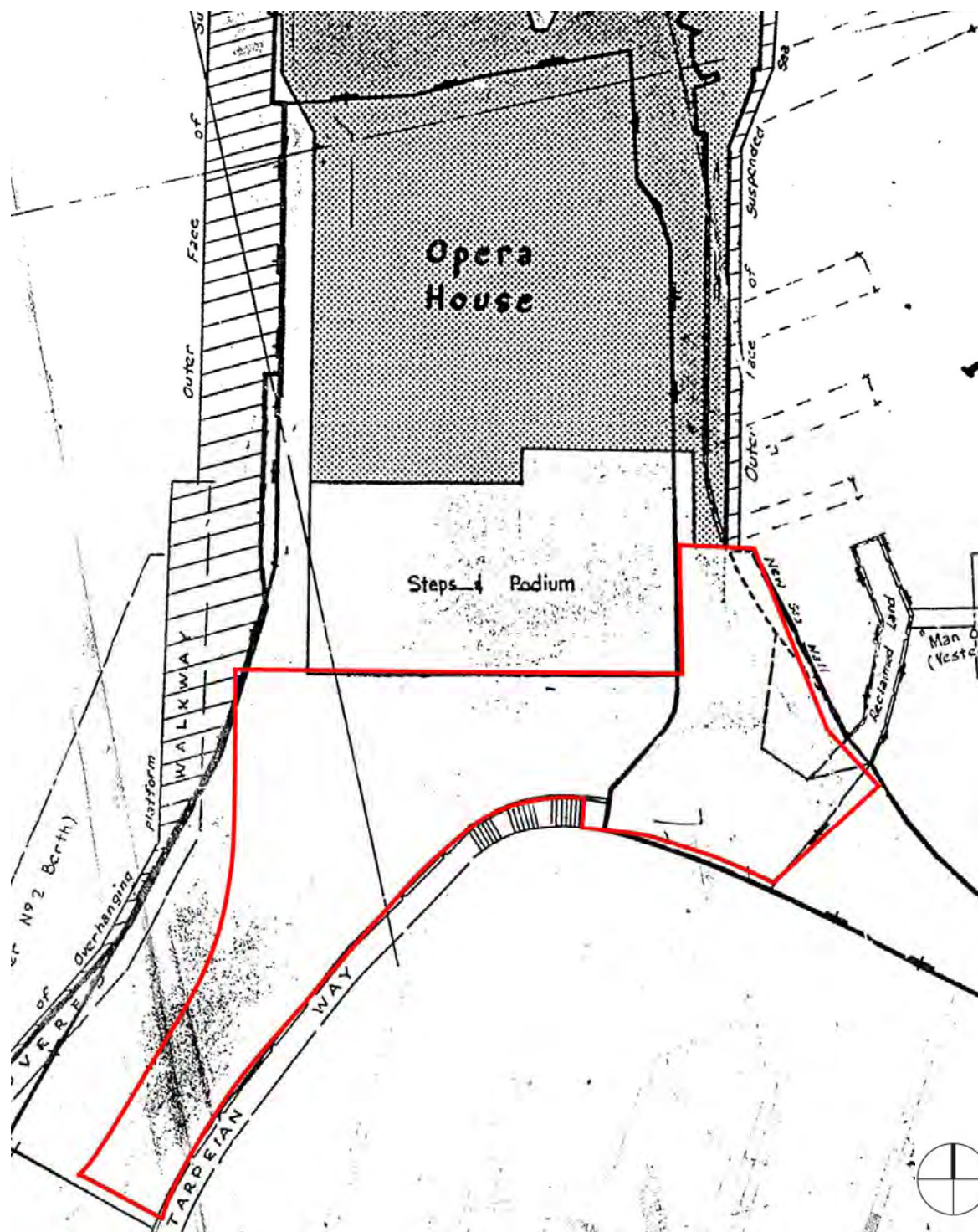
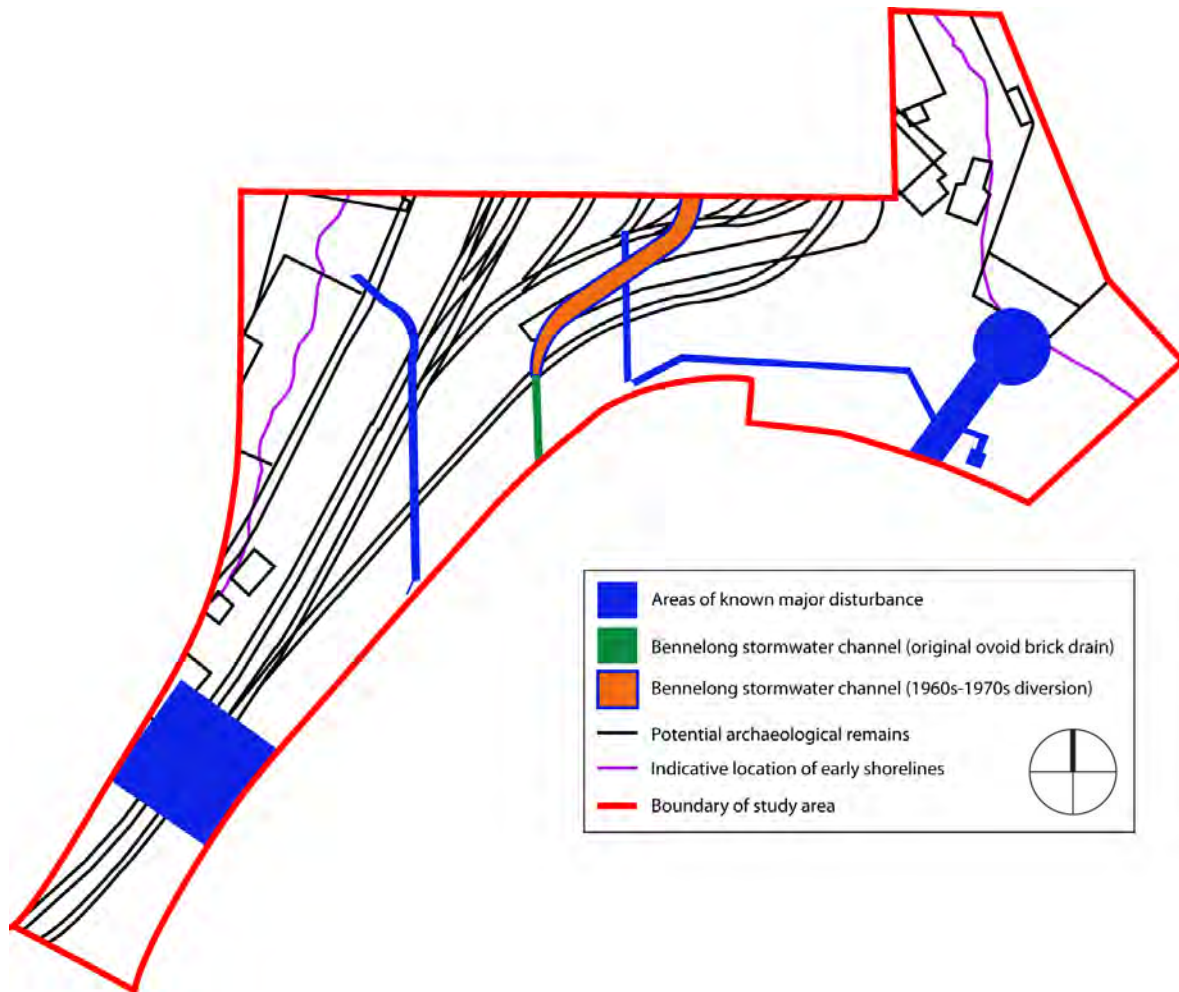


Figure 2.11 c1973 plan of the Sydney Opera House site, indicating the new section of seawall constructed along the eastern shoreline. The study area is outlined. (Source: To be confirmed)



**Figure 2.12** Plan summarising the historical archaeological potential of the study area, showing the location of potential archaeological remains based on site analysis and overlay of historical plans.



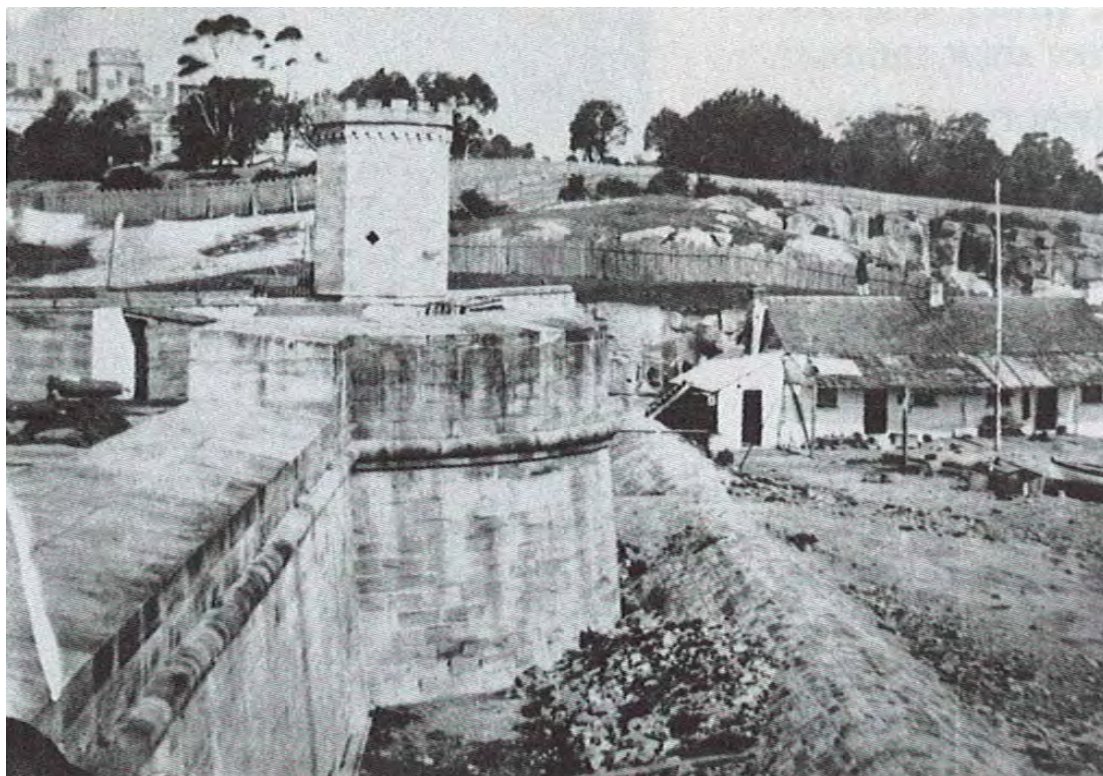


Figure 2.13 Photograph taken in the 1850s showing the top of the original Bennelong stormwater channel (brick oviform drain) running along Bennelong Point adjacent to Fort Macquarie. (Reproduced from the 2003 Conservation Plan, Figure 70, p 94).



Figure 2.14 Photograph taken in the 1960s showing the construction of Sydney Opera House in progress. (Source: unknown)

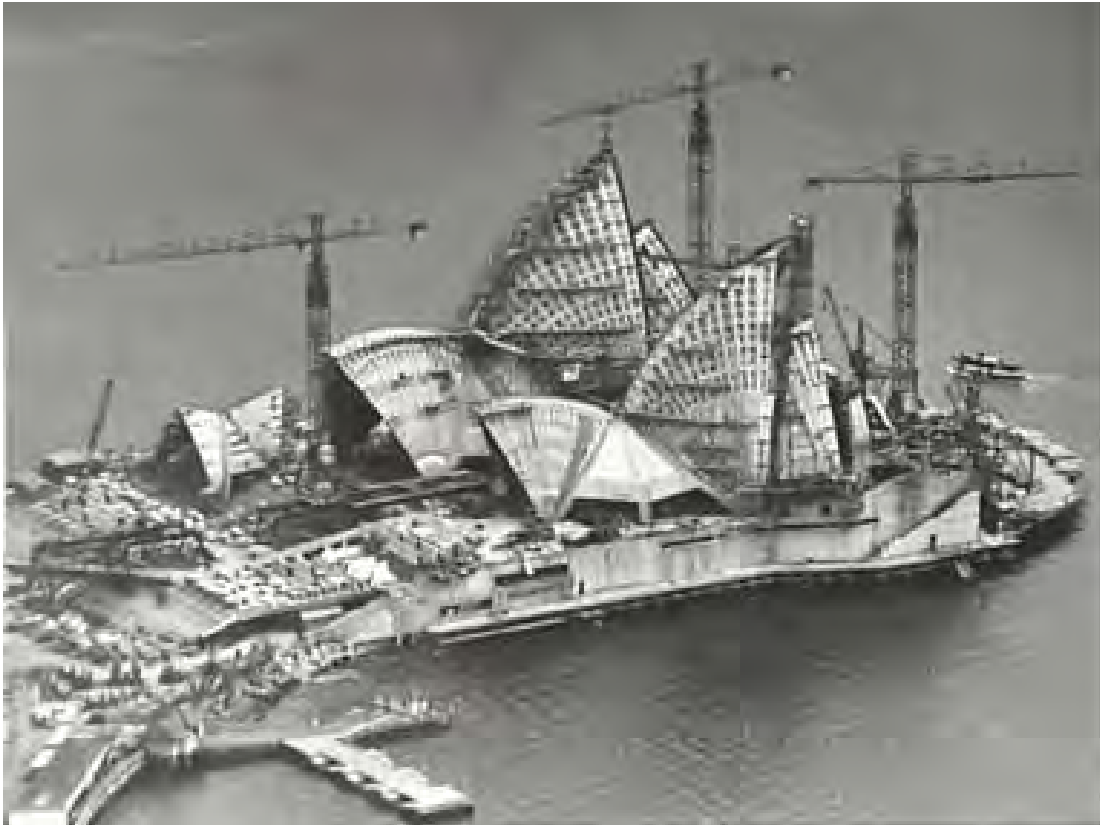


Figure 2.15 Photograph taken in the 1966 showing the construction of Sydney Opera House in progress. (Source: SLNSW, Frame No. Australian Photographic Agency-22157)

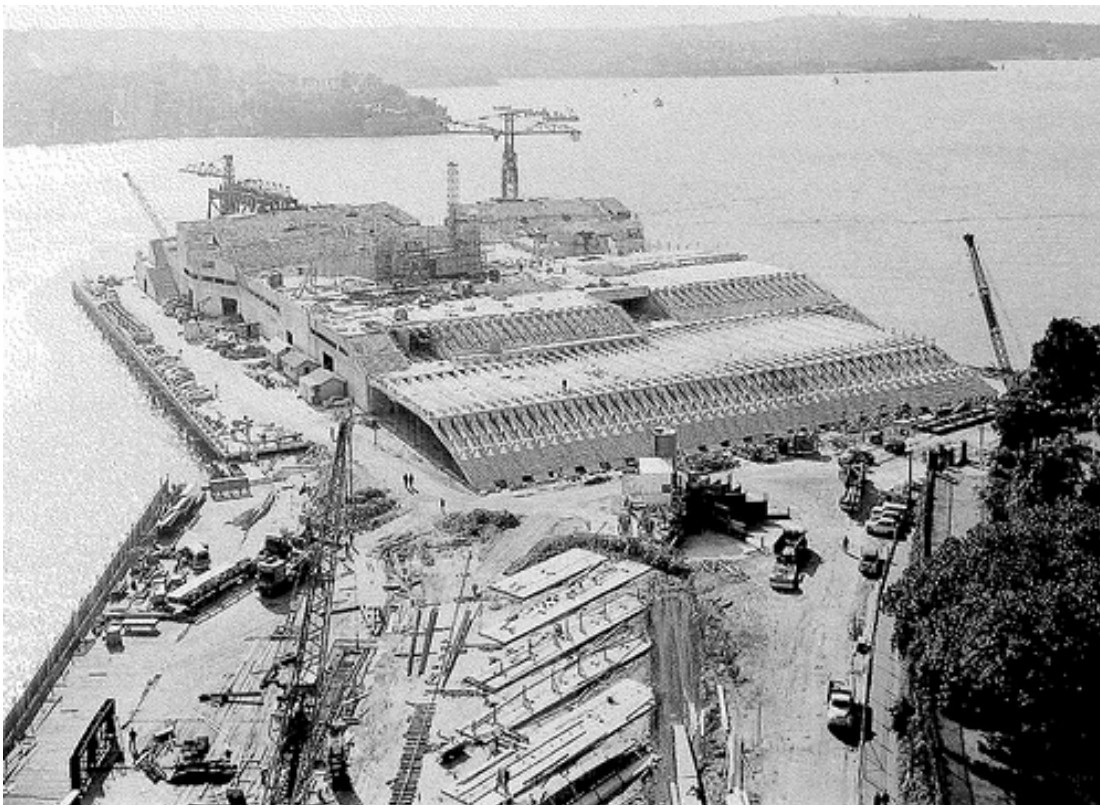


Figure 2.16 Photograph taken in the 1963 showing the construction of Sydney Opera House in progress. (Source: SLNSW, Frame No. GPO 2-23027)



## 3.0 Assessment of Significance

### 3.1 Principles

The concept of 'cultural significance' or 'heritage value' embraces the value of a place or item which cannot be expressed solely in financial terms. Assessment of cultural significance endeavours to establish why a place or item is considered important and is valued by the community. Cultural significance is embodied in the fabric of the place (including its setting and relationship to other items), the records associated with the place, and the response that the place evokes in the community.

The assessment of cultural significance with respect to archaeological sites is more difficult in that the extent and nature of the features is sometimes unknown, therefore it becomes necessary for value judgements to be formulated on the basis of expected or potential attributes. The element of judgement can be enhanced by historical or other research, as has been carried out in the case of the current study.

Archaeological deposits and features provide important evidence of the history and settlement of New South Wales. Archaeological sites may include stratified deposits of material culture which can be analysed to yield information about the history of the place—within a local or broader context—which is unavailable from documentary sources alone. Archaeological investigations can reveal information about technologies, economic and social conditions, taste and style. The features and artefacts extracted and recorded can provide primary evidence about the way of life of previous generations through examination of structural features, artefacts and deposits. Archaeological sites that contain these elements, therefore they have scientific value. This value can be further enhanced where there is a substantial body of supporting documentary evidence that enables further inference to be drawn from the archaeological records. It is through this potential for revealing information that the heritage significance of archaeological sites occurs.

The study area of this report has some potential to contain intact subsurface archaeological features and deposits. These site elements are analysed here primarily in terms of their archaeological significance—that is, their ability to contribute to archaeological research. This assessment partly draws on the significance assessment for the site contained in the 2003 Conservation Plan.<sup>1</sup>

### 3.2 Basis of Assessment

The *NSW Heritage Manual*, published by the NSW Heritage Office and Department of Urban Affairs and Planning, sets out a detailed process for conducting assessments of heritage significance.<sup>2</sup> The manual provides a set of specific criteria for assessing the significance of an item, including guidelines for inclusion and exclusion. The following assessment has been prepared in accordance with these guidelines.

The Heritage Council of NSW has adapted specific criteria for heritage assessment which have been gazetted pertinent to the *Heritage Act 1977* (NSW). The seven criteria upon which the following significance assessment is based are outlined below:

Criterion (a) an item is important in the course, or pattern, of NSW's cultural or natural history;

- Criterion (b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history;
- Criterion (c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW;
- Criterion (d) an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons;
- Criterion (e) an item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history;
- Criterion (f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history; and
- Criterion (g) an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments.

The criteria should also be applied in relation to the local area (Sydney) to determine whether the archaeological resources are of Local significance.

While these criteria provide an overall framework for significance assessment, they are not specific with regard to archaeological sites and historical archaeological sites in particular. This is a matter that has been considered in an influential paper by Bickford and Sullivan, published in 1984.<sup>3</sup> Bickford and Sullivan draw attention to the dilemma faced by archaeologists and developers in connection with sites that are to be destroyed as a result of development and discuss effective means of assessing their heritage value. Archaeological significance has long been accepted in the United States as linked directly to scientific research value:

*A site or resource is said to be scientifically significant when its further study may be expected to help answer questions. That is scientific significance is defined as research potential.<sup>4</sup>*

This is a concept that has been extended by Bickford and Sullivan in the Australian situation and redefined as the following three questions which can be used as a guide for assessing the significance of an archaeological site within a relative framework:

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

The evaluation of cultural significance below is based on the criteria of the Burra Charter, the Heritage Manual and Bickford and Sullivan's approach. Each criterion of the Heritage Manual is considered in turn in Sections 3.3.1 to 3.3.7. The exact definitions of the criteria are also included. As the criteria of the Burra Charter are very similar to the Heritage Manual, they are not considered separately. Each Bickford and Sullivan question is addressed in turn in Sections 3.3.8 to 3.3.10.

The National Heritage List and World Heritage List citations for Sydney Opera House do *not* include the site's archaeological potential. The site is not listed for values associated with criterion (c) of the National Heritage criteria (potential to yield information that will contribute to an understanding of Australia's natural or cultural history). The site is also not listed for values associated with the World Heritage criteria. The New South Wales State Heritage Register citation concludes that the



contribution of the site's potential relics to the site's overall significance is likely to be low. (This report is consistent with these assessments.)

### 3.3 Significance Assessment

#### 3.3.1 Criterion A

*An item is important in the course, or pattern, of NSW's cultural or natural history.*

The primary significance of the site is related to Sydney Opera House, an item of Exceptional significance and as a masterpiece of twentieth-century architecture. The potential archaeological remains within the study area have no direct association with this significant phase of the site's history. However, the site's potential archaeological resource is associated with various significant phases in the historical development of the site that have influenced the current form of the site. In particular, the study area has potential to contain archaeological evidence associated with the modification of the shoreline of Bennelong Point, Fort Macquarie, nineteenth- and twentieth-century wharf facilities, the Bennelong stormwater channel and the twentieth-century tram operations. Kerr notes that the significance of the Sydney Opera House site 'is intensified by the extensive associations of the site and its structures'.<sup>5</sup>

The Bennelong stormwater channel is itself an item of historical significance as the main sewer of the first five original combined sewers built in Sydney around 1857.<sup>6</sup>

#### 3.3.2 Criterion B

*An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history.*

While Sydney Opera House, Fort Macquarie and Bennelong Point are significant for their close associations with prominent individuals who have contributed to the social, cultural and economic life of Sydney and New South Wales, the potential archaeological resources within the study area are unlikely to contribute to this significance. The study area is unlikely to contain substantial archaeological evidence that could be identified as being associated with significant individuals or groups.

#### 3.3.3 Criterion C

*An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW.*

The potential archaeological resources within the study area are generally unlikely to contribute to the aesthetic significance of the site and are unlikely to meet this criterion.

The seawalls surrounding Bennelong Point contribute to the visual coherence of the Sydney Opera House site. Kerr identifies the seawalls as contributing to the aesthetic character of the Sydney Opera House site.<sup>7</sup>

The Bennelong stormwater channel has a relationship with cultural and historical structures. The sewer originally discharged adjacent to Fort Macquarie, one of the earlier forts built in Australia. The stormwater channel now discharges adjacent to Sydney Opera House, one of Australia's most famous landmarks and significant heritage items.<sup>8</sup>

### 3.3.4 Criterion D

*An item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons.*

The potential historical archaeological resources within the study area are unlikely to contribute to the social significance of the site and are unlikely to meet this criterion.

The study area is not known to have any special association with local Aboriginal groups.

In the event that any archaeological evidence of Aboriginal use or occupation of the site were to be discovered, including isolated objects in disturbed contexts, this material may have evocative quality that evidences potential associative values of the place.

### 3.3.5 Criterion E

*An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history.*

The research potential of the site's potential archaeological resource is discussed below according to various categories of potential evidence associated with the historical phasing of the site.

#### *Aboriginal Evidence*

Parts of the study area may have some potential, albeit very low, to contain archaeological evidence associated with Aboriginal use and activity in this area prior to and in the early years of European presence. This evidence, if present, may be located beneath introduced fill deposits in areas that have not been subject to major disturbance. Such evidence has potential to contribute to our understanding of Aboriginal use of this area. Isolated artefacts may also be located in introduced fill deposits, but such evidence would have limited research value.

#### *Development of the Shoreline*

The changing configuration of the land that is most closely associated with the first settlement of Australia by the First Fleet in 1788 is a matter of historical interest. Archaeological evidence of the changing shoreline therefore has the potential to contribute to our understanding of the landforms that existed around Sydney Cove prior to non-Aboriginal settlement and after land reclamation works in the nineteenth century.

#### *Incidental Remains Associated with Early Use and Development of Bennelong Point*

There is some potential for incidental remains associated with unrecorded development or activities on Bennelong Point to survive within the study area. These remains may include artefact scatters, rubbish dumps (on land or in areas of reclaimed land that were previously under water) or remains associated with undocumented structures or other site features. The research potential of such remains is difficult to ascertain at this stage and would be dependent to some degree on the extent to which these remains could be linked to particular phases of the site's history, development or use. However, the research potential of such remains is enhanced as the information that they may provide could generally not be obtained from any other source.

#### *Fort Macquarie*

Fort Macquarie represents a significant phase in Australia's defensive history, despite the fort's limited defensive capacity. The Gothic-style fort was a prominent landmark for its picturesque



qualities. There is some potential for structural remains (stone foundations) associated with the southeastern battery of the fort to be present within the study area. If present, they are likely to represent the most intact section of the fort's structural remains (albeit marginal to the main fort structure). The research potential of these remains would likely be limited to information about the construction of the fort and how the southeastern battery was used and developed over time. There is also limited potential for deposits and/or features associated with this section of the fort to survive intact, which may provide further insight into the operation and occupation of the fort throughout its history.

#### *Boat Harbour*

Structural remains of the boat harbour/slip established on the southeastern section of Bennelong Point by 1845 are likely to survive relatively intact beneath introduced fill deposits. There is also some potential for remains of other infrastructure associated with the boat harbour/slip such as wharf structures, buildings and steps to survive in adjacent areas. The research potential of these remains is likely to be limited to information about the construction and location of former seawalls, buildings and other infrastructure. There is only limited potential for any occupation deposits or other features that would provide further information associated with operation and use of these facilities.

#### *Nineteenth and Twentieth Century Wharf Facilities*

The development of the eastern side of Sydney Cove along the western shore of Bennelong Point for wharves, ferries and other facilities related to seaborne trade is a matter of considerable historical interest, having a bearing on our understanding of the local area's development and the growth of Australian trade and industry during the nineteenth century. Relics relating to the nineteenth-century wharf facilities have potential to shed light on early and changing attitudes to the visual qualities of the harbour's built environment (from the picturesque to the utilitarian) and the changing functions of Bennelong Point (from defensive position to transport hub). Their research potential in this regard is likely to be limited by a degree of disturbance caused by subsequent activities on the site, as well as the limited extent to which the study area may include such remains.

#### *Twentieth Century Tram Operations*

Archaeological remains associated with the operation of the trams on Bennelong Point would have limited potential to yield information relating to the development of Sydney's public transport system that could not be provided by other sources.

#### *Bennelong Stormwater Channel*

The Bennelong stormwater channel is an excellent example of the engineering construction techniques of the mid and late 1800s and of the city's early infrastructure. The numerous extensions and modifications made throughout the years provide a good example of the advancement of drainage construction techniques.<sup>9</sup> The later modifications and diversions of the channel, such as the 1960s–1970s diversion associated with the development of Sydney Opera House, would make less of a contribution to the significance of this item than would sections of original oviform or tunnel construction.

The research potential of the section of the stormwater channel located in the study area would likely be limited to confirmation of the surviving extent of the original oviform channel that is still in use and confirmation of the condition of part of the decommissioned section of the original oviform

channel. Investigation of the study area could also provide information about or confirm the form and location of the original oviform channel and later diversions, but this information could also be obtained from other sources.

### **3.3.6 Criterion F**

*An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history.*

Archaeological sites in the Sydney Central Business District dating to the nineteenth century are increasingly rare (as part of an ever-diminishing resource). The potential archaeological resources at this site could therefore be considered as a rare surviving element of Sydney's history. In particular, archaeological remains associated with modification of the shoreline, early wharf and harbour facilities and early defensive sites would be relatively rare.

On the basis of this assessment, it is likely that the forecourt area of Sydney Opera House may include some of the least disturbed areas of Bennelong Point and may therefore provide a unique opportunity to gain information about various aspects of early development on Sydney Harbour.

The Bennelong stormwater channel was the original oviform sewer of the five harbour sewerage systems constructed in Sydney around 1857, and one of a number of oviform sewers that were built.

### **3.3.7 Criterion G**

*An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments.*

Information relating to land reclamation is likely to be representative of this activity that dramatically changed the shape of Sydney throughout the nineteenth and early twentieth centuries. Information relating to the wharf facilities and tram operations is also likely to be representative of these aspects of Sydney's transport system.

### **3.3.8 Can the site contribute knowledge that no other resource can?**

The shoreline of Bennelong Point is recorded in a number of historical plans dating to the nineteenth century, although they vary in detail and accuracy. Historical photographs and illustrations also record the changing shoreline throughout the nineteenth century. Archaeological evidence may serve to confirm or correct these plans and other images, and may provide additional knowledge only partially accessible from other sources.

The research potential of incidental remains associated with the early use and development of Bennelong Point is difficult to ascertain at this stage and would be dependent to some degree on the extent to which these remains could be linked to particular phases of the site's history, development or use. However, the research potential of such remains is enhanced as the information that they may provide could generally not be obtained from any other source.

Information about the form and construction of Fort Macquarie, the boat harbour/slip and other wharf facilities is generally available from historical documentation (plans, illustrations, photographs and historical texts). This documentation provides extensive evidence related to the date, siting, form, function and occupants of these sites. Structural remains of these features may complement or confirm this information which is available from other sources. Therefore, archaeological investigation would be likely to principally confirm these other sources rather than provide additional knowledge not accessible from other sources. Deposits or artefacts associated with these features,



if present, may provide information about the occupation and use of the site that may not be available from any other source.

The development of the tram system in Sydney, and on Bennelong Point in particular, is well documented in other sources (written, drawn and photographic). The technologies employed are also well documented and understood. Archaeological relics at Bennelong Point relating to this phase of use are unlikely to yield additional information not obtainable from the existing alternative sources.

The Bennelong stormwater channel has been well documented, including various phases of modification and diversion. Investigation of the channel may complement or confirm this information which is available from other sources.

### **3.3.9 Can the site contribute knowledge which no other site can?**

The archaeological remains of the original and developing shoreline would be peculiar to Bennelong Point. No archaeological remains from another site could contribute the same knowledge about the development of the area that the remains at Bennelong Point could.

Evidence associated with incidental or unrecorded activities throughout the history of the site would be particular to the occupation and development of Bennelong Point and would provide specific information about how this site was used.

Archaeological remains associated with Fort Macquarie, the boat harbour/slip and other wharf facilities may provide information that is particular to the form and function of these sites. However, similar sites around Sydney Harbour or elsewhere may provide comparable information about these types of sites. For example, sites of other defensive locations around Sydney Harbour such as the Dawes Point battery or Fort Denison may provide similar information about this type of site. Similarly, the wider area of Sydney Cove was characterised by wharves and associated facilities in the nineteenth century that were similar to those at Bennelong Point. Wider research questions that may be asked of such sites may be able to be addressed by reference to other sites in Sydney Harbour and elsewhere.

Although the Bennelong Point tram-car house was particular to the site, and to that degree can yield information specific to that site, it is unlikely to yield substantive information that could not be obtained from tram depots and related facilities elsewhere in Sydney and Australia.

Investigation of the Bennelong stormwater channel may provide particular information about the form and function of this particular site feature. As one of five combined sewers built in Sydney in the mid nineteenth century, the other channels may be able to provide comparable information about the form and function of this type of item. Other sections of the Bennelong stormwater channel may also be able to provide comparable information.

### **3.3.10 Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?**

Information regarding the development of Sydney Harbour's shoreline, on the location of the first non-Aboriginal settlement of the country, would contribute to questions relating to Australia's history including the early settlers' responses to the pre-existing natural environment, the development of the harbour and the defensive uses to which the area was put. Archaeological remains could also be used to test the veracity of early surveys and illustrations of the city.

The potential archaeological relics in the area of the proposed works might contribute to research questions relating to the study of early and changing attitudes to the visual qualities of harbour's built environment (from the picturesque to the utilitarian) and the changing functions of Bennelong Point (from defensive position to transport hub). Relics could also be used to test the veracity of early surveys, written reports and illustrations of the city. Their principal value would lie in the contribution that they may make to our knowledge of the nature of development of the site itself (Bennelong Point) and the surrounding area.

### 3.4 Summary of Significance of Site Features

The following table summarises the significance of the site's features including potential archaeological resources, the Bennelong stormwater channel and the eastern seawall.

Phase	Site Features	Date	Potential Remains	Significance
—	Aboriginal evidence	Pre-1788–1802	Deposits and features associated with Aboriginal use or activities in this area (eg middens, artefact scatters, isolated artefacts).	High
1–2	There is no specific development or land use activity recorded within the study area during this period.	1788–1802	Deposits associated with the original shorelines (eastern and western sides of Bennelong Point) and original land form.  Evidence associated with incidental activities in this area, such as artefact scatters/rubbish dumps.	High
1–5	Rubbish dumps into water—later reclaimed land.	1788–1960s	Concentrations of artefacts within areas of reclaimed land, beneath introduced fill deposits.	Moderate–High
3	Rectangular structure shown on plan adjacent to eastern shoreline (form/function unknown).	By 1829	Structural remains.	High
3–4	Fort Macquarie (the southeastern section of the battery extends within the study area).	1817–1901	Stone foundations associated with the southeastern section of the battery.	Moderate–High
3–4	Fort Macquarie.	1817–1901	Structural remains associated with internal and/or external features or additions of this section of Fort Macquarie.	High
3–4	Fort Macquarie.	1817–1901	Deposits associated with occupation/use of Fort Macquarie (internal and external).	High
3–4	Fort Macquarie.	1817–1901	Roadways or pathways around Fort Macquarie.	Moderate
4–5	Boat harbour/slip in southeastern section of Bennelong Point.	By 1845 to 1960s	Remains of stone seawalls defining boat harbour; stone steps on external face of seawall; stone boat ramp.	Moderate
4–5	Infrastructure associated with boat harbour/slip.	By 1845 to 1960s	Structural remains (stone, brick or timber) associated with sheds, offices, stores and waiting rooms adjacent to boat harbour/slip.	Moderate

Phase	Site Features	Date	Potential Remains	Significance
4–5	Wharf infrastructure—western shoreline.	By 1860s to 1960s (rebuilt/ upgraded 1889)	Stone seawall, piers, structural remains and remains of other wharf infrastructure (Messagenes Maritimes Co).	Moderate
5	Tram-car house—associated infrastructure.	1901–1950s	Tram tracks, roads, footpaths extending from and adjacent to the tram-car house (The tram-car house itself was located wholly outside the study area).	Moderate
4–6	Bennelong stormwater channel.	From 1857	Oviform channel. Concrete diversions.	High Low– Moderate
4–6	Seawall along eastern shore of Bennelong Point.	1860s–1960s/70s	Stone seawall. (The section of seawall that would be affected by the proposed works has been assumed to date to the 1860s.)	Moderate

### 3.5 Summary Statement of Significance

Sydney Opera House is an item of Outstanding Universal Value. However, the potential archaeological remains within the forecourt area of the Sydney Opera House site have no direct association with Sydney Opera House itself or this significant phase of the site's history. The site's potential archaeological resource is associated with various significant phases in the site's historical development that have influenced its current form. In particular, the study area has potential to contain archaeological evidence associated with the modification of Bennelong Point's shoreline, Fort Macquarie, nineteenth- and twentieth-century wharf and harbour facilities and the twentieth-century tram operations.

The changing configuration of the land that is most closely associated with the first settlement of Australia by the First Fleet in 1788 is a matter of historical interest. Archaeological evidence of the changing shoreline therefore has the potential to contribute to our understanding of the landforms that existed around Sydney Cove prior to non-Aboriginal settlement and after land reclamation works in the nineteenth century. Such evidence would have High archaeological significance. Any evidence associated with Aboriginal occupation or use of the site, including isolated objects in disturbed contexts, would have High archaeological significance.

Archaeological remains associated with Fort Macquarie, including structural remains or associated deposits or features, would have High archaeological significance and research potential for their ability to contribute to our understanding of this major period in the historical development of Bennelong Point.

The development of the eastern side of Sydney Cove along the western shore of Bennelong Point for wharves, ferries and other facilities related to seaborne trade is a matter of considerable historical interest, having a bearing on our understanding of the local area's development and the growth of Australian trade and industry during the nineteenth century. Relics relating to the nineteenth-century wharf facilities have potential to shed light on early and changing attitudes to the visual qualities of the harbour's built environment (from the picturesque to the utilitarian) and the changing functions of Bennelong Point (from defensive position to transport hub). Their potential in