NSW NATIONAL PARKS & WILDLIFE SERVICE

Review of Environmental Factors: Me Mel Goat Island Port Emergency Services Building Demolition, Sydney Harbour National Park, NSW





Department of Planning, Industry and Environment, www.environment.nsw.gov.au
EES 2022/0070; February 2022

Cover photographs:

Top: View of the Me Mel Goat Island Port Emergency Services Building. Photograph taken off-shore, looking north-west.

Bottom: Character of the Port Emergency Services Building. Photograph taken facing north.

Document control

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Contents

1. Brief description of the proposed activity 1
2. Proponent's details 3
3. Permissibility and assessment pathway 3
   - 3.1 Permissibility under NSW legislation 3
   - 3.2 Assessment pathways 8
   - 3.3 Indicate if any of the following NSW legislation is relevant 9
   - 3.4 Does Commonwealth legislation apply 12
   - 3.5 Consistency with NPWS policy 13
   - 3.6 Type of approval sought 14
4. Consultation – general 14
   - 4.1 Consultation required under SEPP Transport and Infrastructure 2021 (TISEPP) 14
   - 4.2 Consultation requirements under NPW Act for leases and licences 15
   - 4.3 Targeted consultation 16
5. Consultation – Aboriginal communities 16
   - 5.1 Native title notification requirements 16
   - 5.2 Parks under other joint management arrangements 17
   - 5.3 Other parks 17
6. Proposed activity (or activities) 18
   - 6.1 Location of activity 18
   - 6.2 Description of the proposed activity 18
7. Reasons for the activity and consideration of alternatives 21
   - 7.1 Objectives and reasons for the proposal 21
   - 7.2 Consideration of alternatives 21
   - 7.3 Justification for preferred option 21
   - 7.4 Site suitability 22
8. Description of the existing environment 22
   - 8.1 Natural values 22
   - 8.2 Cultural values 31
   - 8.3 Social values 36
   - 8.4 Matters of National Environmental Significance 36
9. Impact assessment 37
   - 9.1 Physical and chemical impacts during all stages of the activity 37
   - 9.2 Biodiversity impacts during all stages of the activity 45
   - 9.3 Community impacts during all stages of the activity 48
   - 9.4 Natural resource impacts during all stages of the activity 50
   - 9.5 Aboriginal cultural heritage impacts during all stages of the activity 51
   - 9.6 Other cultural heritage impacts during all stages of the activity 52

9.7 Impacts on Matters of national environmental significance (MNES) under the EPBC Act during all stages of the activity 56
10. Summary of impacts and conclusions 57
11. Supporting documentation 60
12. Signature of proponent 60
13. References 61
Appendix A – Consult Marine Demolition Drawings 64
Appendix B – Compliance Hazardous Materials Inspection and Risk Assessment 65
Appendix C – Sampling and Analysis Quality Plan 66
Appendix D – Heritage Assessment 67
Appendix E – Principles of Ecologically Sustainable Development 68
Appendix F – Section 60 approval letter 69
Appendix G – Consideration of controls on development generally (BCSEPP 2021) 70
Appendix H – BioNet and PMST database results 75
Appendix I – Photographic record of the study area 79
Appendix J – Flora species recorded 85

List of figures

Figure 1. Location of Me Mel Goat Island in Sydney Harbour 2
Figure 2. Location of proposed activity on Me Mel Goat Island 2
Figure 3. National Park and State Heritage Register boundary (dotted yellow) over annotated aerial of Me Mel Goat Island. Location of the PESB is indicated in red and with arrow. Source: Heritage Assessment – Appendix D. 10
Figure 4. Protected Matters Search Tool mapping, indicating feature area (1) and 10 km radius search area. 13
Figure 5. Estuarine habitat 24
Figure 6. NSW State Vegetation Type mapping of MMGI 26
Figure 7. Extract of threatened species recorded on MMGI 27
Figure 8. AHIMS basic search results for MMGI 31
Figure 9. Aboriginal Heritage sites located on MMGI (source: former OEH 1994) 32
Figure 10. Areas of high archaeological potential (yellow and pink) in relation to PESB site (red). 34

1. Brief description of the proposed activity

Proposal name	Me Mel Goat Island Port Emergency Services Building demolition.
Location of activity	Me Mel Goat Island, Port Jackson, Sydney Harbour, NSW (Figures 1 & 2).
Name of NPWS park or reserve	Sydney Harbour National Park
Description of any unreserved land	Not applicable (N/A)
NPWS Area	Greater Sydney
Council	Not applicable (N/A). Unincorporated.
NSW State electorate	Sydney
Estimate capital cost of project*	$650,000.00
Estimated duration of project	12 weeks
Proposed commencement date	April 2023
Proposed completion date	June – July 2023

* Publication of the Review of Environmental Factors is required for proposals with a capital investment value of >$5 million and which commence after 1 July 2022.

This Review of Environmental Factors (REF) has been prepared by Lesryk Environmental Pty Ltd (Lesryk) at the request of the New South Wales (NSW) National Parks and Wildlife Service (NPWS). The REF is required to assess any environmental and heritage impact associated with the demolition of the Port Emergency Services Building (PESB) that is present on Me Mel Goat Island (MMGI).

The site at which the works will occur is on the north-easterly edge of MMGI, Sydney Harbour National Park, NSW (Figures 1 and 2); the proposal involving the:

- Demolition of the PESB down to the concrete floor slab (to be retained)
- Removal of demolition material by barge and crane
- Minor vegetation removal to enable access to the site and permit work.

Unless a specific aspect of the project is referred to, the overall works would hereafter be referred to as ‘the proposed work’.

The proposed work will be conducted in accordance with Australian Standard AS 2601—2001, *The demolition of structures*. Demolition drawings have been prepared by Consult Marine (Appendix A).

A Compliance Hazardous Material Inspection and Risk Assessment (Appendix B) and Sampling and Analysis Quality Plan (Appendix C) were prepared for the proposal by Greencap Pty Ltd. A Heritage Statement has been prepared by NPWS (Appendix D).



Figure 1. Location of Me Mel Goat Island in Sydney Harbour



Figure 2. Location of proposed activity on Me Mel Goat Island

It is acknowledged Lesryk (during November 2022) contributed to the *Review of Environmental Factors: Me Mel Goat Island Remediation Wharf 54a demolition and Wharf 54b repairs*, prepared by NPWS for a site on the northern foreshore of Goat Island. Where applicable, results from these reports have been drawn upon and incorporated into components of this REF.

2. Proponent's details

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NPWS/EES proponents

Area Manager or Unit Manager	Ben Khan, Manager Sydney South Area, NPWS

3. Permissibility and assessment pathway

3.1 Permissibility under NSW legislation

The following sections outline how the activity is permissible under applicable NSW legislation.

3.1.1 National Parks and Wildlife Act 1974 (NPW Act) and NPW Regulation

Objects of the Act (s.2A).

According to s.2A(2), the objects of the Act are to be achieved by applying the principles of ecologically sustainable development (ESD) as described in section 6(2) of the *Protection of the Environment Administration Act 1991*. The principles of ESD are addressed in Appendix E.

The objects of the NPW Act are:

a) the conservation of nature, including, but not limited to, the conservation of:
   (i) habitat, ecosystems and ecosystem processes, and
   (ii) biological diversity at the community, species and genetic levels, and
   (iii) landforms of significance, including geological features and processes, and
   (iv) landscapes and natural features of significance including wilderness and wild rivers,

b) the conservation of objects, places or features (including biological diversity) of cultural value within the landscape, including, but not limited to:

   (i) places, objects and features of significance to Aboriginal people, and

   (ii) places of social value to the people of New South Wales, and

   (iii) places of historic, architectural or scientific significance,

c) fostering public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation,

d) providing for the management of land reserved under this Act in accordance with the management principles applicable for each type of reservation.

Land above the high tide line on MMGI is reserved under the NPW Act. The PESB stands within this boundary, therefore the Act is applicable to this proposal. The proposal is consistent with the Objects of the Act:

- s2A1(a) – the proposal does not impinge on or affect the conservation of nature as it is a small scale, minor activity within the much larger Sydney Harbour National Park (SHNP)
- s2A (b) – the proposed demolition of the PESB will contribute to the preparation of the culturally significant MMGI for its handover to Aboriginal ownership and management. As a place of social value to people of NSW, the removal of a dilapidated and dangerous structure will improve safety for visitors, and improve aesthetic values of the island.
- s2A1(c) –The proposed demolition of the PESB will remove an unsightly and dilapidated structure which disfigures and draws attention away from the natural qualities of the island's eastern foreshore. This would enhance SHNP's ability to foster public appreciation, understanding and enjoyment of nature, and cultural heritage of one of Sydney's significant historical places.
- S2A1(d) – the proposal is in accordance with the management of NPWS reserved land and is consistent with the management principles applicable to National Parks in NSW.

MMGI is located within the SHNP. SHNP was created on 4 April 1975 and MMGI was transferred from Maritime Services Board (MSB) late in 1992. The management principles for National Parks (Division 2, s30E-30K) are applicable to MMGI.

The activity involving the PESB will not impact the National Park management principles listed in Division 2, s30E of the NPW Act.

The activity would be completed in accordance with the following principles:

- the conservation of biodiversity, the maintenance of ecosystem function, the protection of geological and geomorphological features and natural phenomena and the maintenance of natural landscapes,
- the conservation of places, objects, features and landscapes of cultural value,
- the protection of the ecological integrity of one or more ecosystems for present and future generations,
- the promotion of public appreciation and understanding of the national park's natural and cultural values,
- provision for sustainable visitor or tourist use and enjoyment that is compatible with the conservation of the national park's natural and cultural values,
- provision for the sustainable use (including adaptive reuse) of any buildings or structures or modified natural areas having regard to the conservation of the national park's natural and cultural values,
- provision for the carrying out of development in any part of a special area (within the meaning of the *Hunter Water Act 1991*) in the National Park that is permitted under section 185A having regard to the conservation of the National Park's natural and cultural values,

- provision for appropriate research and monitoring.

The activity is consistent with the Reserve Management Principles due to the following:

- the proposed work is located within an existing disturbed/modified structural footprint and will not impact biodiversity or conservation of nature
- the activity will contribute to the preparation of MMGI for its handover to Aboriginal ownership and management
- the demolition would promote public appreciation and understanding of the park's natural and cultural values.

☒ Title and relevant sections of plan of management or statement of management intent

NPW Act s.81 requires operations in a National Park to be in accordance with a PoM.

The Sydney Harbour National Park Plan of Management (SHNP PoM; OEH 2012) was adopted in 2012, and identifies MMGI within Precinct 11. The activity aligns with or supports many of the eight key outcomes and implementation priorities listed under the PoM, including:

Key PoM outcomes and implementation priorities	Response
Conserve the natural values of the park	Demolition of the dilapidated and dangerous PESB will improve the park's natural values by improving views to the eastern side of the island and helping to restore the natural appearance of the island.
Celebrate and nurture contemporary and traditional Aboriginal culture	Not applicable. Previously recorded sites of Aboriginal Cultural Heritage (ACH) on MMGI are located beyond the impact footprint of the proposal and will not be directly or indirectly affected by the proposed work.
Celebrate the historic heritage values of the park	Demolition of the dilapidated PESB will allow greater appreciation of other historic heritage features on the island whilst restoring the natural appearance of the eastern aspect of the island.
Provide enriching and memorable experiences in the park	Demolition of the dilapidated and dangerous PESB will improve visitor's experience of the island by allowing greater access to the eastern edge of the island and improving views to the harbour from the island, and to MMGI from offshore.
Improve access to the park for all	Demolition of the PESB will create and open and usable space for future use in this location. Access to the site is currently limited as the PESB is dilapidated and dangerous.
Strengthen and create partnerships	N/A.
Robust management of the park would be sustained	MMGI (and its constituent buildings including the PESB) is listed on the State Heritage Register as Goat Island (no. 00989). Additionally, MMGI (including the PESB) is included on the NPWS Historic Heritage Information Management System Register.

Key PoM outcomes and implementation priorities	Response
	As approval for the proposed activity is required under the Heritage Act, the heritage statement prepared by NPWS supported an application under s.60 of the Heritage Act to demolish the PESB. Application no. HMS ID 1492 was approved by the Heritage Council of NSW on 17 September 2022 (Appendix F), subject to conditions provided in Section 9.6 of this REF. As assessed within this REF, the proposal complies with the strategic planning that provides management principles and a framework for the integrated management, protection, interpretation and monitoring of the heritage values of the park.
Contribute to the goal of easy and safe transport to and within the park.	N/A.

The activity is consistent with the following Goat Island Reference Group Guiding Principles outlined in the PoM (p177):

- "Buildings, structures and operations which have a materially adverse impact on the values of the Magazine and Water Police precincts and their highly significant heritage features, and on the natural heritage values of the island, to be removed, in order to properly present, interpret and experience those heritage values and features".

Furthermore, the SHNP PoM (p178) advises that the PESB has an adverse visual and operational impact and detracts from the island's heritage values and significance.

As detailed within Section 6 of the heritage statement (Appendix D), it is acknowledged the endorsed Goat Island Conservation Management Plan (CMP) advises that the building has an adverse visual impact on the north end of the island and the Water Police precinct by its scale, size and colour. The building and the reclaimed land partially obscure the southern side of Barney's Cut. The CMP advises that it is acceptable to remove, partial remove or modify the building to lessen its impact. Refer to s.8.2.2 and s.8.3.2 of the REF for further details.

In accordance with Outcome 3 – *Celebrate the historic heritage values of the park* (p212), referencing the Goat Island precinct, the management response is to: *Seek approval, as required, from the Heritage Council for the removal of buildings and structures that are not required for visitor service purposes and which detract from the significance, condition, integrity or interpretative potential of the island's exceptional cultural and natural heritage values*.

☐ Title and relevant section of any applicable conservation action plan (CAP) for an asset of intergenerational significance (AIS) and the relevant AIS site number.

No conservation action plan (CAP) under Clause 78G of the NPW Regulation has been prepared for MMGI.

☐ Leasing, licensing and easement provisions (Part 12)

N/A.

☒ (**for internal NPWS/EES projects only)** NPWS/EES management powers and responsibilities (s.8 and s.12)

The proposed activity is consistent with s8;

s.3.8(3) The Secretary shall in the case of every national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve and Aboriginal area—

b) arrange for the carrying out of such works as the Secretary considers necessary for or in connection with the management and maintenance thereof,

s.3.8(9) Without affecting the generality of any other provision of this Act conferring powers on the Secretary, the Secretary may make and enter into contracts with any person for the carrying out of works or the performance of services or the supply of goods or materials in connection with the exercise or performance by the Secretary or the Service of the Secretary's or its responsibilities, powers, authorities, duties or functions conferred or imposed by or under this or any other Act.'

and s. 12;

'The Service is to carry out such works and activities as the Minister may direct, either generally or in a particular case, in relation to the following—

a) the conservation and protection of land reserved under this Act or acquired for reservation under this Act and of land for which the National Parks and Wildlife Reserve Trust is the Crown land manager'.

Assets of Intergeneration Significance (AIS)

Reference to the NPWS AIS Interactive Map (NPWS 2022c) did not identify any AIS within SHNP.

3.1.2 Wilderness Act 1987 (for activities in wilderness areas)

MMGI is not located within a designated Wilderness Area. The provisions of the *Wilderness Act 1987* are not applicable.

3.1.3 Biodiversity Conservation Act 2016 (BC Act)

Justification: Is the activity consistent with the biodiversity conservation objectives of the Act?

The BC Act provides for a strategic approach to conservation in NSW. It includes provisions of risk-based assessment of native plant and animal impacts, including a Biodiversity Assessment Method (BAM) to assess the impact of actions on threatened species, threatened ecological communities and their habitats.

By the completion of the investigation, no Threatened Ecological Communities (TECs) or threatened species were recorded within, or near to, the study area; nor were any considered likely to occur or be impacted by the proposed work.

No assessments referencing Section 7.3 of the BC Act were considered necessary. As no significant impact will occur to a BC Act listed species, population or ecological community as a result of the proposal, the preparation of a Species Impact Statement (SIS) is not required.

3.1.4 Rural Fires Act 1997 (RF Act)

The Act is not applicable to the proposal; however, the proposal remains complaint. The proposed work would not have an impact on bushfires or bushfire management. No asset protection zones, including Vegetation Category 1 zones or vegetation buffers will be affected by the proposed work. The proposed work will not impede firefighter access or public evacuation operations.

With reference to the NSW Bush Fire Prone Land SEED Dataset (State Government and RFS 2022), the proposed study area is not mapped as bushfire prone land.

Relevant reserve fire management strategy

The *Sydney Harbour and Botany Bay (La Perouse Precinct) National Parks Fire Management Plan* (NPWS 2004) is the relevant reserve fire management strategy. The proposed work would not have an impact on bushfires or bushfire management.

3.2 Assessment pathways

3.2.1 Environmental Planning and Assessment Act 1979 (EP&A Act)

It is confirmed that a REF is the applicable assessment pathway if each of the following apply.

☒ The activity may be undertaken without development consent under the provisions of s 2.73(1)(a) of the Transport & Infrastructure SEPP as it is:

- ☒ on land reserved under the NPW Act or acquired under Part 11 of the NPW Act AND
- ☒ for a purpose authorised under the NPW Act.

Under cl5.5(1) of the EP&A Act, NPWS (as the determining authority) is required to '*examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity'* in order to assess applications for approval of the proposed activity of which they are the determining authority.

This REF complies with the requirement for public authorities to assess the impact of an activity under Part 5 of the EP&A Act.

☒ The activity is **not** designated development under Schedule 3 of the Environmental Planning and Assessment Regulation 2021

☒ The activity is **not** state significant infrastructure under Schedule 3(7) of the State Environmental Planning Policy (Planning Systems) 2021.

☒ The activity is **not** designated development under s 2.7(2) SEPP (Resilience and Hazards) 2021 (RHSEPP) as:

- ☒ it is **not** on land mapped as littoral rainforest or coastal wetland, OR
- ☐ it is on land mapped as littoral rainforest or coastal wetland, AND that land is reserved (not acquired) under the NPW Act, AND the activity is consistent with the adopted plan of management (s 2.7(6) of the Resilience & Hazards SEPP), OR
- ☐ it is on land mapped as littoral rainforest or coastal wetland, AND the activity is routine maintenance with adverse effects restricted to the minimum possible (s 2.7(4) of Transport & Infrastructure SEPP), OR
- ☐ it is coastal protection works by a public authority and is either identified in a coastal management program, or is beach nourishment, temporary placement of sandbags or routine maintenance and repair of existing coastal protection works (s 2.16(2)(a) of Resilience & Hazards SEPP).

☐ The activity is **not** declared to be exempt development under an environmental planning instrument or fails to fully meet the requirements for exempt development.

The proposed work is declared exempt under Section 2.21 of SEPP (Transport and Infrastructure) 2021 (TISEPP), as work will be carried out on behalf of NPWS [as a public authority] following requirements of Section 2.20. In line with Section 2.20, the works will be carried out in accordance with Australian Standard AS 2601—2001, *The demolition of structures*.

3.2.2 Strategic plans

Justification: Is the activity proposed on land covered by a local strategic planning statement, regional strategic plan or district strategic plan made under Division 3.1 of the Act.

- ☒ No
- ☐ Yes

The activity does **not** affect coastal wetlands, littoral rainforest or koala habitat and those relevant aims, objectives, principles and provisions of the applicable SEPPs (namely RHSEPP and SEPP Biodiversity and Conservation 2021).

3.3 Indicate if any of the following NSW legislation is relevant

3.3.1 Coal Mine Subsidence Compensation Act 2017

☐ The activity involves the erection or alteration of an improvement within a mine subsidence district.

N/A. The proposed activity is not located within a mine subsidence district.

3.3.2 Fisheries Management Act 1994 (FM Act)

☒ The activity affects fish, fish habitat or marine vegetation, including threatened species.

☐ The activity involves the excavation or deposition of material in 'water land' including land that is only intermittently submerged by water.

The FM Act provides for the protection of fishery resources and values for current and future generations. It is an offence to harm fisheries and resources without an appropriate assessment, including safeguards and/or the appropriate permissions to carry out certain work.

The proposed demolition of the PESB, located above the high tide line on MMGI, is terrestrial in nature; however, access to the subject site will be by water. As no wharf is adjacent to the site, a barge is required to be moored off shore, lifting plant and demolition materials to and/or from the site.

Reference to the Department of Primary Industries (DPI) Fisheries NSW Spatial Data Portal (DPI 2022a) (search layer: Sydney Metro) identifies Sydney Harbour as Key Fish Habitat (KFH), and, in accordance with the DPI (2013) publication: Policy and guidelines for fish habitat conservation and management (DPI 2013), this is a Class 1 'Major Key Fish Habitat' waterway.

Beyond the need for the barge-mounted spuds or pre-placed mooring blocks, and provided recommended mitigation measures are adhered to, the proposed work would not have an adverse impact on the waterway.

The work is not considered to conform to the definitions of 'Dredging and reclamation', provided in Part 7, Division 3 of the FM Act; therefore, consultation with DPI – Fisheries in accordance with s.199 of the Act is not required. Furthermore, as no areas of marine vegetation (e.g. mangroves, seagrasses) will be harmed in the proposal, a s.205 permit under Part 7 of the Act is not required.

No assessments referencing the criteria provided under Part 7A, Division 12, Subdivision 221ZV of the FM Act were considered necessary as no threatened aquatic species or populations listed under the Act are considered to be directly or indirectly affected by the proposal.

3.3.3 Heritage Act 1977

The activity is on land that contains:

- ☒ an item listed on the State Heritage Register (SHR)
- ☐ an item not listed on the SHR but identified by NPWS as being of potential state significance

☒ an item listed on the NPWS Heritage and Conservation Register under s.170 of the Heritage Act (contained in the Historic Heritage Information Management System)

☒ a place, building landscape feature or moveable heritage item older than 25 years.

MMGI (and its constituent buildings including the PESB) is listed as item no. 00989 on the SHR (Figure 3). Goat Island and its component parts, including the PESB, are listed within the NPWS Section 170 Register, listed in the Historic Heritage Information Management System (HHIMS) Register as item no. 1387.

Approval under the *Heritage Act 1977* is required for the proposed activity. A heritage statement was prepared by NPWS (Appendix D) to support an application under s.60 of the Heritage Act to demolish the PESB. Application no. HMS ID 1492 was approved by the Heritage Council of NSW on 17 September 2022 (Appendix F). Refer to s.8.2.2 of this REF for further details.



Figure 3. National Park and State Heritage Register boundary (dotted yellow) over annotated aerial of Me Mel Goat Island. Location of the PESB is indicated in red and with arrow**.** Source: Heritage Assessment – Appendix D.

3.3.4 Marine Estate Management Act 2014 (MEM Act)

☐ The activity affects or directly adjoins a marine park or aquatic reserve, and works are likely to affect plants or animals within the marine park or aquatic reserve.

N/A. The activity is not within a marine park or aquatic reserve.

3.3.5 SEPP (Biodiversity and Conservation) 2021 (BCSEPP)

In reference to Chapter 4 'Koala habitat protection 2021' of this SEPP, s.4.4(3)(a) states that this environmental planning instrument does not apply *to land that is reserved or dedicated under the National Parks and Wildlife Act 1974*; the subject site being within SHNP.

While this is the case, it is NPWS policy to remain consistent with any Koala Plan of Management (KPoM) and the landscape management of koalas and their habitat; however, no KPoM exists for SHNP, and the land within the study area is not considered to constitute Core Koala Habitat.

Chapter 6 'Water catchments' of BCSEPP is applicable to the proposal insofar as the proposed activity is located within the Foreshores and Waterways Area boundary of Sydney Harbour Catchment, identified as Zone 9 National Parks and Nature Reserves on Sheet FWA_001; with the waterway surrounding MMGI being Zone 1 – Maritime Waters. It is noted that MMGI is not shown on the Sydney Harbour Strategic Foreshore Sites Map Sheet SFS_001.

However, the proposed work (i.e. demolition of the PESB) is terrestrial in nature, located on land above the high tide line on MMGI, which is reserved under the NPW Act. As such, development is permitted in accordance with:

> Division 3, s.6.30 'National Parks'
>
> (2) Despite any other provision of this Chapter, development on land in the Foreshores and Waterways Area is permitted without development consent if—
>
> (a) the development site abuts land reserved under the *National Parks and Wildlife Act 1974* (reserved land), and
>
> (b) the development spans the mean high-water mark and is part of other development being carried out on the reserved land, and
>
> (c) the development is for a purpose for which development is authorised to be carried out under the *National Parks and Wildlife Act 1974*.

Division 5 'Strategic foreshore sites', in accordance with s.6.45(3), does not apply to:

a) land reserved or acquired under the *National Parks and Wildlife Act 1974* or waterfront land that abuts, and is managed in the same way as, that land.

In accordance with s.5.10(a) of the EP&A Act – *the factors to be taken into account when consideration is being given to the likely impact of an activity on the environment* – s.171A(1) 'Activities in catchments' of the EP&A Regulation states, *when considering the likely impact on the environment of an activity proposed to be carried out in a regulated catchment, a determining authority must take into account—*

a) the matters a consent authority must consider under BCSEPP 2021, s.6.6(1), 6.7(1), 6.8(1) and 6.9(1), and

b) the matters of which a consent authority must be satisfied under BCSEPP 2021, s.6.6(2), 6.7(2), 6.8(2) and 6.9(2).

Additionally, s.171A(4) states, *when considering the likely impact on the environment of an activity proposed to be carried out in the Sydney Harbour Catchment, the determining authority must, in addition to the matters referred to in subsection (1), take into account the matters a consent authority must consider under BCSEPP 2021, section 6.28(1*).

An assessment of the proposed development against the relevant principles for consideration has been provided in Appendix G.

3.4 Does Commonwealth legislation apply

3.4.1 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The activity is on land that contains the following, or the activity may affect:

- ☐ world heritage or national heritage values of a place on the World Heritage List or National Heritage List
- ☐ the ecology of a Ramsar wetland
- ☒ nationally listed threatened species and ecological communities, or listed migratory species
- ☐ the Commonwealth marine environment.

The EPBC Act 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' (MNES). The EPBC Act requires assessment of whether the proposal is likely to significantly impact on MNES or Commonwealth land (Chapter 4, Part 7, section 67 and 67A).

A search of the Australian Government's Protected Matter Search Tool (PMST) (DCCEEW 2022a) was performed using a buffer of ten kilometres (km) around the site (Figure 4; Appendix H), resulting in:

- 3 World Heritage Properties
- 11 National Heritage Places
- 1 Wetland of International Importance (Ramsar Wetlands)
- 13 Listed TECs
- 111 Listed Threatened Species
- 82 Listed Migratory Species

  Other matters protected by the EPBC
  - 473 Commonwealth Lands
  - 75 Commonwealth Heritage Places
  - 106 Listed Marine Species
  - 13 Whales and other crustaceans.

The proposal, being the demolition of the PESB, is located within a heavily disturbed/modified footprint. No MNES were recorded within, or near to, the study area; nor were any considered likely to occur or be impacted by the proposed work.

The activity is not on land listed on the World Heritage List or National Heritage List. It does not contain the ecology of a Ramsar wetland.

No assessments referencing the EPBC Act's Matters of National Environmental Significance: Significant impact guidelines 1.1 were considered necessary. Therefore, referral of the matter to the Federal Minister for the Environment for further consideration or approval is not required.

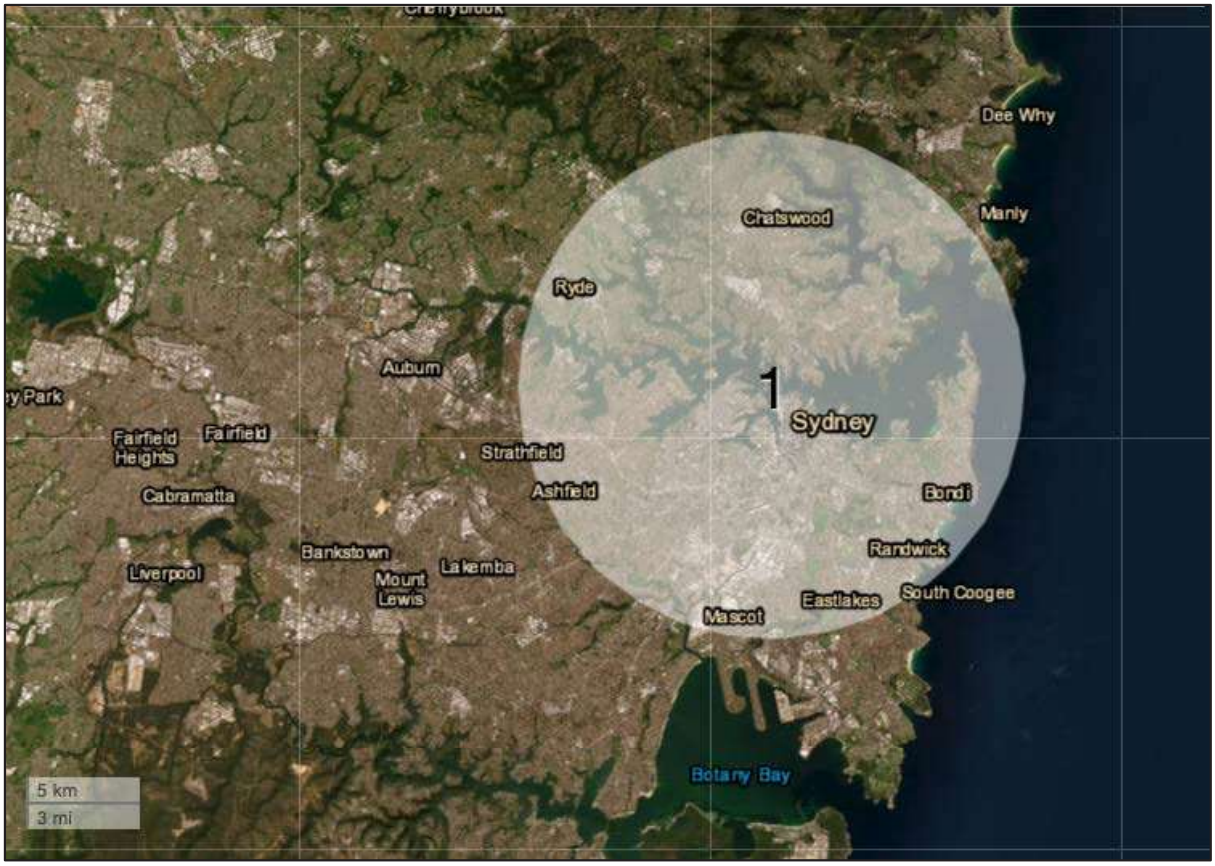


Figure 4. Protected Matters Search Tool mapping, indicating feature area (1) and 10 km radius search area.

3.5 Consistency with NPWS policy

Policy name	How proposal is consistent
Visitor Safety Policy (NPWS 2022d)	NPWS has a duty of care to park visitors. NPWS manages, but cannot eliminate, risks in parks; therefore, park visitors must take some responsibility for their own safety. The PESB is currently unsafe, dilapidated and presents a serious visitor safety risk. Though public access to the PESB is prohibited, physical restrictions are inadequate. The Hazardous Material Inspection and Survey found the PESB to contain the following hazardous materials: non-friable asbestos (material containing asbestos fibres reinforced with a bonding compound), lead paint, *Polychlorinated Biphenyls and Synthetic Mineral Fibre* (Greencap 2022a, Appendix B). Demolishing and removing the PESB will eliminate the visitor safety risk.

3.6 Type of approval sought

3.6.1 NPWS proponents

☒ Internal NPWS approval* or authorisation, including expenditure.

3.6.2 Other proponents

Are there any existing approvals, such as permits, leases, licences or easements, which apply to part or all of the proposed activity?

☒ No

☐ Yes

N/A.

3.6.3 Other approvals

Not applicable.

3.6.4 Publication triggers

Triggers for publication of the REF

Permit or approval	Applicable?
Heritage Act, section 57 (commonly known as a s.60)	Yes
National Parks and Wildlife Act, section 90 (AHIP)	No
Protection of the Environment Operations Act 1997, sections 47–49 or 122 (The Act: - Designates the EPA (Environment Protection Authority) as the regulatory authority)	No

The REF must be published due to required permits or approvals following determination.

4. Consultation – general

4.1 Consultation required under SEPP Transport and Infrastructure 2021 (TISEPP)

Consultation with the following authorities is required as the proposal will affect the items ticked below:

4.1.1 Local Council (section 2.10, 2.11, 2.12 and 2.14)

☐ local council infrastructure or services (such as stormwater, sewer, roads and footpaths)

☐ heritage items listed under the local environmental plan (LEP)

☐ flood patterns on flood-liable land

☐ land within the mapped coastal vulnerability area and the activity is inconsistent with a certified coastal management program for the land.

N/A

4.1.2 National park or other C1-zoned land (section 2.15(2)(a) and 2.15(2)(b))

☒ land zoned C1 (formerly E1) or on/adjacent to land reserved or acquired under the NPW Act

Outcomes of consultation with NPWS:

N/A as NPWS is the proponent.

4.1.3 Roads or maritime (section 2.15(2)(c) or Schedule 3)

Is the activity:

☐ a fixed or floating structure in navigable waters

☐ traffic-generating development on main roads?

N/A.

4.1.4 Siding Spring Observatory (section 2.15(2)(d))

☐ increase the amount of artificial light in the night sky and that is on land within the dark sky region as identified on the dark sky region map (Note—The dark sky region is land within 200 kilometres of the Siding Spring Observatory)

N/A. The proposal is not on land within the dark sky region.

4.1.5 Mine subsidence area (clause 16(i))

☐ land in a mine subsidence district within the meaning of the Mine Subsidence Compensation Act 1961.

N/A. The proposal is not on land within a mine subsidence area.

4.2 Consultation requirements under NPW Act for leases and licences

If the activity requires a lease or licence under s.151 or s.151H of the NPW Act, indicate if it requires:

☐ public consultation under s.151F

☐ referral to the NPW Advisory Council or other advisory committee under s.151G.

N/A.

NPWS is not required under the NPW Act or its policies to consult with communities for this activity. The NSW Government has established a Premier's Priority Project Steering Committee. The committee contains senior officers who represent:

- Sport, Arts and Tourism group of Dept of Enterprise, Industry and Trade
- Aboriginal Affairs
- Dept of Premier and Cabinet
- NPWS
- Heritage NSW
- Ministers for Environment (Hon James Griffin MP) and Aboriginal Affairs (Hon Ben Franklin MP)

The steering committee is kept up to date on the progress of the Me Mel Remediation program and is aware of the proposal to demolish the PESB, and supports this activity.

4.3 Targeted consultation

4.3.1 Adjacent landowners

MMGI is within unincorporated waters. Transport for NSW is the landowner of the unincorporated waters. The proposal is for a localised activity which addresses a safety issue on MMGI.

4.3.2 Wider community consultation and/or notification of works

Not relevant, being a minor, localised activity which addresses a safety issue on MMGI.

4.3.3 Interest groups and/or notification

Not relevant, being a minor, localised activity which addresses a safety issue on MMGI.

5. Consultation – Aboriginal communities

5.1 Native title notification requirements

1. Is the land subject to an Indigenous land use agreement (ILUA)?

☒ No

☐ Yes

2. Has native title been **extinguished**?

☒ No or unclear

☐ Yes

3. Has there been a determination of native title applicable to the land or is there a native title claim pending (check the National Native Title Tribunal website)?

☒ No

☐ Yes

4. If native title is not confirmed as extinguished, is the activity occurring on land reserved as park on or before 23 December 1996 AND is an act in accordance with the purpose of reservation AND
    a. is either a 'public work' as per subdivision 24J of the Native Title Act (e.g. a building or other structure that is fixed to the landscape, a road or bridge, a well or a bore, or involves major earthworks)
    OR
    b. involves the grant of a lease?

☒ No

☐ Yes

No consultation required.

5. If native title is not confirmed as extinguished and the circumstances of Question 4 do not otherwise apply, is the activity either:
    a. a facility for service to the public (as defined in subdivision 24K of the Native Title Act) OR
    b. a low-level activity (as defined in subdivision 24L of the Native Title Act)?

☐ No

☒ Yes

N/A.

5.2 Parks under other joint management arrangements

Is the park's management subject to another joint management arrangement such as a memorandum of understanding?

☒ No

☐ Yes

5.3 Other parks

NPWS is leading a project to transfer MMGI to Aboriginal ownership and management. NPWS will conduct essential works to expedite the transfer process and address immediate maintenance and safety issues. The demolition of the PESB is part of the program to address the island's maintenance and safety issues.

NPWS will establish a Me Mel Transfer Committee. The Transfer Committee will make recommendations for the transfer of Me Mel Goat Island to Aboriginal ownership and determine its future management.

There are no past or current Aboriginal social or cultural associations with the PESB, and it does not demonstrate Aboriginal cultural significance[1]. With this, consultation with Aboriginal communities for this specific activity to demolish the PESB was not required.

[1] OEH, Paul Davies. Goat Island Conservation Management Plan 2011

6. Proposed activity (or activities)

6.1 Location of activity

Description of location	PESB, Me Mel Goat Island		
Site commonly known as	Me Mel Goat Island		
Park name	Sydney Harbour National Park		
Other tenures	N/A		
Lot/DP	Lot 3, DP 837195		
Street address	N/A		
Site reference	Easting: 333273	Northing: 6252834	MGA zone: 56

6.2 Description of the proposed activity

6.2.1 The proposed activity: pre-construction, construction, operation and remediation

NPWS proposes to demolish the PESB and remove any surface bonded asbestos sheet and lead paint contamination. The building's concrete floor slab will be retained to control stormwater erosion and to cap the unconsolidated fill that underlies the slabs. Further activities include:

- A short trench proposed to reposition the existing fire hydrant close to its current position fixed to the building's northern corner. The fire hydrant will be free-standing in almost the same location after demolition.
- Services housed in the PESB will be maintained, though relocated to the area east of the PESB; this having been comprehensively excavated in 2003 to fit new septic tanks, plumbing, electrical and communication lines.
- For the existing underground sewer tanks on the eastern side of the PESB, new cabling will be trenched in an existing trench from package pump to over the tanks. This cabling will replace the cabling removed from the control box inside the PESB.
- Also, a new low steel stand will be erected next to existing power pole to support a new electrical distribution board (approximately 600 mm H x 600 mm W x 300 mm D). The distribution board will replace the PESB mains board and will maintain its use to provide power for the sewer pump as well as for events held in this part of the island.

A crane barge will be used to transport to and from the work area labour, equipment and materials.

Minor vegetation removal (primarily restricted to the pruning/trimming of overhanging branches or clearing of exotics and garden bed plantings) would be required to permit the work. Trees to be retained within the subject site would be protected and a temporary 'no-go' zone established around these. Post work, the site would be permitted to naturally regenerate.

The demolition of the PESB will be conducted in accordance with Australian Standard AS 2601—2001, *The demolition of structures*. The demolition sequence will be developed by the approved works contractor, this considering all environmental and safety matters. NPWS will review the demolition documentation, including the proposed sequence of works, approving this prior to its implementation and commencement of the activities.

Prior to commencement of the works, a copy of the approved contractor's demolition plan is to be affixed to either this REF or the work's Construction Environmental Management Plan.

In accordance with Construction assessment procedures (OEH 2011b), all demolition work would be undertaken safely and will minimise risks to the health and welfare of people (including park visitors) in accordance with work health and safety requirements. A New Works Certificate and Completed Works Certificate will be obtained. Certificates that demonstrate compliance with the Building Code Australia, Premises Standards and Australian Standards will be obtained at the completion of the works. Both certificates will be approved by the NPWS Director, Greater Sydney Branch, in accordance with NPWS Construction Assessment Procedures.

6.2.2 The activity footprint (size of the area of impact)

The total impact disturbance footprint would be an area of approximately 0.161 ha.

The activity would occur within the existing modified/disturbed footprints associated with the PESB. The extent of development and disturbance would be restricted to the proposed work, and the associated short-term 'impacts' that permit the movement of personnel and machinery.

6.2.3 Receival, storage and on-site management for materials used in construction

No on-site materials storage is proposed. All materials and equipment will be delivered and removed by the barge crane. All work amenities will be provided on the barge.

6.2.4 Earthworks or site clearing including extent of vegetation to be removed

No earthwork is proposed. Minor vegetation removal is required to permit access to the PESB (e.g. trimming of branches, removal of groundcover and some garden bed plants).

6.2.5 Environmental safeguards and mitigation measures

A Hazardous Materials Inspection of the proposal area has been conducted (Greencap 2022a, Appendix B). This concluded that the PESB contained the following hazardous materials:

- non-friable asbestos (material containing asbestos fibres reinforced with a bonding compound)
- lead paint
- Polychlorinated Biphenyls
- Synthetic Mineral Fibre.

A Construction Environmental Management Plan (CEMP) would be prepared by the contractor as required under the construction contract conditions. The CEMP will set out the methods to manage the demolition of the PESB. The CEMP will include environmental safeguards and mitigation measures in accordance with all relevant construction, environmental, safety legislation and in accordance with the conditions of determination of this REF. Matters to be addressed with responsibilities attributed for monitoring, review, auditing and reporting include:

- Water Quality Control & Spill Management
- Air Quality Management
- Waste Management
- Noise & Vibration Management
- Hazardous Substances and Chemicals

- Biodiversity and Marine Ecology Management
- Marine Traffic Management Plan
- Soil Erosion and Sediment Controls
- Contaminated Land
- Climate Change
- Aboriginal, Non-Aboriginal and Heritage
- Social and economic
- Waste Streams
- Complaints
- Incident Management
- Emergency Response
- Safety Data Sheets
- Monitoring, Review, Auditing and Reporting
- Responsibilities
- Spill Prevention and Response
- Construction Noise and Vibration Management
- Acid Sulfate and Contaminated Soils
- Sensitive Areas Plan
- Out of Hours Work and Assessment Procedure
- Unexpected Finds Procedure.

6.2.6 Sustainability measures – including choice of materials and water/energy efficiency

Not applicable. The proposal is for the demolition of the PESB.

6.2.7 Construction timetable and staging and hours of operation

The activity is proposed to commence in April 2023 and is estimated to take approximately 12 weeks to complete.

The proposed work would be carried out during standard working hours according to the Draft Construction Noise Guideline (EPA 2020) and may be permitted:

- 7:00 am – 6:00 pm Monday to Friday
- 8:00 am – 1:00 pm Saturday.

No work would be carried out on Sundays or during public holidays unless authorised by written approval from NPWS.

7. Reasons for the activity and consideration of alternatives

7.1 Objectives and reasons for the proposal

NPWS is leading a project to transfer MMGI to Aboriginal ownership and management. NPWS will conduct essential remedial and safety works to expedite the transfer process and address immediate maintenance and safety issues.

As part of the MMGI Remediation program, NPWS proposes to demolish the PESB which is dilapidated and dangerous, posing a safety risk to staff and visitors.

MMGI is listed on the State SHR No. 00989. This statement supports an application under s.60 of the *Heritage Act 1977* to demolish the former 1962 MSB Fire Brigade Barracks, now the PESB.

For all applications for work on MMGI, it is important to note that the SHR listing boundary follows the line of Lot 3 DP 837195, being the mean high-water mark and the boundary of the National Park. Some of the island's buildings and structures are outside this boundary. However, the PESB and the activity for this application are fully within the National Park and SHR boundary.

7.2 Consideration of alternatives

Alternative options would include the use of the PESB for an alternative purpose, or to 'do nothing'.

Alternative purpose

Use of the PESB for alternative purposes would require significant remediation of the site due to the presence of asbestos and other hazardous materials. The PESB is currently unsafe, dilapidated and presents a serious visitor safety risk. The PESB is not usable in its current state; therefore, significant costs would be incurred to repair and maintain the building.

Compared to other buildings on the island, particularly those that are to be retained, the PESB does not offer any advantages or unique features, and detracts from the overall character of MMGI.

Ultimately, the purposes of MMGI have not yet been determined following the transfer to Aboriginal ownership; therefore, no foreseeable alternative use has been identified.

Do nothing

This option is not feasible given the safety risks posed by the current structural state of the PESB, and presence of asbestos and other hazardous materials.

7.3 Justification for preferred option

The preferred option, being the proposed demolition of the PESB, is a prudent, balanced and financially justifiable method to address the safety risks identified. In accordance with the heritage statement provided by NPWS (Appendix D), the proposed demolition of the PESB will not involve an impact to any of MMGI's landscape or natural heritage elements, nor does it involve any alteration to MMGI's SHR listed curtilage. Furthermore, demolition of the PESB would assist in returning this portion of MMGI to an appearance consistent with other sections of the island, eliminating an *adverse visual and operational impact* that *detracts from the island's heritage values and significance* as identified in the SHNP PoM (OEH 2012, p178).

7.4 Site suitability

Not relevant as the proposal is not subject to a lease or licence within a reserve under s.151 NPW Act.

8. Description of the existing environment

Appendix I provides a photographic recorded of the area surveyed and assessed in this REF.

In reference to the Heritage Statement (Appendix D), the proposal involves the demolition of the former 1962 MSB Fire Brigade Barracks, now referred to as the PESB. The PESB is a long, rectangular, low pitched roofed two-storey steel framed and timber clad building with a split-level ground floor. The PESB was comprehensively altered in 1994 to become the set for the television series, 'Water Rats'.

The PESB is constructed with a steel frame on concrete ground slabs with suspended first floor slabs, with pre-cast concrete rear panels, brick and timber internal partitions. The exterior is clad with vertical timber boards with sandstone panels on the northern and eastern elevations.

The building faces southeast and sits on flat land in front of the 1830 quarry face, on ground that was part quarry bench and part reclaimed land behind a c1940s seawall. The ground directly in front of the building on its south-eastern side is concreted; with connecting footpaths.

Surrounding vegetation consists of cultural plantings and regrowth of both exotic and native species, more predominant on the north-western side of the PESB, with a maintained lawn around its south-eastern side (refer to 'Flora species recorded' in Section 8.1.5 of the REF for further details).

8.1 Natural values

8.1.1 Geology, geomorphology and topography

Reference to s.4.1 of the Sampling and Analysis Quality Plan (Greencap 2022b, Appendix C) identifies that the Sydney 9130 1:100,000 Geological Sheet describes the area in which the site lies as being underlain by Hawkesbury Sandstone. Sandstone outcrops were observed adjacent to the Substation in the Magazine Precinct, either side of the footpath in the South Depot Precinct and in various locations in the Residential Precinct. The northern and southern shoreline is also derived from Hawkesbury Sandstone.

Behind the PESB to the north is an 1830's quarry face, 'Barney's Cut', separating the Water Police Station from the remainder of the island (NPWS 2022b, Appendix D). The PESB site occurs on level land approximately 1-2 m ASL, with a sandstone rock revetment at the water's edge.

8.1.2 Soil types and properties (including contamination)

Soil types & technical management considerations/ sediment control measures

Reference to s.4.1 of the Sampling and Analysis Quality Plan (Appendix C) identifies the Soil Landscapes of the Sydney 1:100 000 sheet maps the subject site as occupying disturbed terrain. Site observation determined that the dominant soil material on site within this classification is loamy sand.

No soil disturbance will be required to carry out the proposed works, and the concrete slab underneath and surrounding the PESB will remain in place.

Registered contamination sites/sites of asbestos & other waste

The Greencap Sampling Analysis and Quality Plan (Appendix C) has identified soils at MMGI to contain hazardous materials including elevated heavy metals and PAH concentrations within shallow fill material, as well as asbestos impacted fill.

Acid sulfate soils, sodic or saline soils

With reference to the NSW Government's Acid Sulfate Soil mapping, no acid sulfate soils, sodic or saline soils are present at the activity site (State Government of NSW and DPE 2022a).

8.1.3 Watercourses, waterbodies and wetlands (including their catchment values)

Sydney Harbour is the primary waterbody in the locality, and has been identified by DPI's Fisheries NSW Spatial Data Portal as KFH. The harbour surrounds MMGI, and at its closest lies approximately 10 m to the south-west of the site of the proposed activity.

Demolition of the PESB is terrestrial in nature; however, access to the subject site will be by water. As no wharf is present adjacent to the site, a barge (with crane) is required to be moored off shore, lifting plant and demolition materials to and/or from the site.

The work barge will most likely need to be manoeuvred into position using towing and/or pushing vessels and may need to be kept in-situ over multiple tide cycles. Holding a barge in place for construction works is generally done using one or more barge-mounted spud piles pushed into the seabed to hold the barge in place or by using barge-mounted winches and wires connected to pre-placed mooring blocks (these weighing about one tonne).

Personnel in volved in the demolition are expected to access the site by the wharve that are located either on the northern, or south-western side, of MMGI.

In reference to DPI's Estuarine Habitat Dashboard (DPI 2022c), no vegetation is mapped in the vicinity of the study area. Rock walls occur from the south-west corner of the area investigated and extend south; the eastern foreshore of the study area being mapped as 'natural' (Figure 5).

Beyond the need for the barge-mounted spuds or pre-placed mooring blocks, and provided recommended mitigation measures are adhered to (refer to Section 9 of the REF), the proposed work would not have an adverse impact on the waterway.

No wild or scenic rivers are present within the study area.

Catchment value

The proposed work, within Sydney Harbour NP, is located within the Sydney Harbour Catchment. The site is not located within a drinking water catchment.

For safeguard/mitigation measures, refer to section 9.1 of the REF.

Meteorological data

According to monthly rainfall figures from Sydney Airport AMO[2] (Bureau of Meteorology 2022), the mean annual rainfall experienced by the study region is 1093.4 mm, with the greatest falls of 124.7 mm recorded in March. The warmest month is January with a mean maximum temperature of 26.7 °C, while July is the coldest month with a mean minimum of 7.4 °C.

[2] It is acknowledged this is the nearest operating weather station.



Figure 5. Estuarine habitat

Coastal wetlands and littoral rainforest areas

Reference to s.2.7 of RHSEPP 2021, utilising the Repealed – SEPP (Coastal Management) 2018 SEED Dataset mapping (State Government of NSW and DPE 2022b), identifies that the study area is not mapped as Coastal Wetland or Littoral Rainforest; nor their proximity areas.

8.1.4 Coasts and estuaries

With reference to s.2.10-11 of RHSEPP 2021, utilising the Repealed – SEPP (Coastal Management) 2018 SEED Dataset, the study area is mapped as Coastal Environment and Coastal Use Areas.

Section 2.10 'Development on land within the coastal environment area' of RHSEPP 2021 requires:

1) Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following—
   a) the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment,
   b) coastal environmental values and natural coastal processes,
   c) the water quality of the marine estate (within the meaning of the *Marine Estate Management Act 2014*), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1,
   d) marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms,
   e) existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,

f) Aboriginal cultural heritage, practices and places,
g) the use of the surf zone.

Section 2.11 'Development on land within the coastal use area' requires:

1) Development consent must not be granted to development on land that is within the coastal use area unless the consent authority—
   a) has considered whether the proposed development is likely to cause an adverse impact on the following—
      i. existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,
      ii. overshadowing, wind funnelling and the loss of views from public places to foreshores,
      iii. the visual amenity and scenic qualities of the coast, including coastal headlands,
      iv. Aboriginal cultural heritage, practices and places,
      v. cultural and built environment heritage.

The proposed PESB work would not have an adverse direct or indirect impact on the features/items listed under s.2.10(1) and 2.11(1). As such, the proposed work is not considered to contravene the objectives of RHSEPP 2021.

There are no estuaries present in the study area. The activity is not within a marine park or aquatic reserve.

For safeguard/mitigation measures, refer to section 9 of the REF.

8.1.5 Biodiversity

Overview of terrestrial biodiversity

The proposal is terrestrial in nature and would not affect aquatic biodiversity.

With reference to the NSW Government's NSW State Vegetation Type Map SEED Dataset (State Government of NSW and DPE 2022c) of the Sydney City area, the subject site is mapped as the following PCT (Figure 6):

- Not native vegetation.

This PCT is not associated with any TEC listed or being considered for listing under the EPBC or BC Acts. The site investigation confirmed that the vegetation mapping for the area is generally accurate.

While the native vegetation around the subject site comprises a mixture of planted and naturally regenerating species, this is not considered to constitute an ecological community in the context of either the EPBC or BC Acts.

Areas of outstanding biodiversity value or critical habitat

Reference to the Commonwealth's Register of Critical Habitat (DCCEEW 2022c), DPI's Register of critical habitat (2022d) and the DPE's Areas of Outstanding Biodiversity Value register (2022b) (in conjunction with Part 3 of the Biodiversity Conservation Regulation 2017), per listings provided under the EPBC, BC and FM Acts, no gazetted areas of critical habitat or Areas of Biodiversity Values for any flora or fauna species, populations or communities occur within or near to the scope of work proposed. It is acknowledged, in pursuance of section 220T of the FM Act, 10 areas are identified as critical habitat of the Critically Endangered Greynurse Shark (*Carcharias taurus*) (DPI 2002); however, none of these are located within, or near to, the proposal area.



Figure 6. NSW State Vegetation Type mapping of MMGI

Environmental assets of intergenerational significance (AIS)

The NPW Act was amended to allow the Minister for Energy and Environment to declare an area to be an Asset of Intergenerational Significance (AIS). An AIS can be any area of exceptional value – natural or cultural – that warrants special protection, including dedicated management measures.

In reference to s.3.1.1 of this REF, listings provided under s.153G of the NPW Act, and utilising the NPWS AIS interactive map, no areas declared as AIS occur within, in the vicinity of, or on land adjacent to the proposed works.

Threatened ecological communities

No TECs have been mapped as occurring within, or in the vicinity of, the demolition area.

Threatened species and populations

Results of a review of the BioNet Atlas database (DPE 2022a) and the PMST (DCCEEW 2022a), of threatened species listed under the Schedules of the EPBC, BC and/or FM Acts that have been previously recorded, or are considered to have habitat, within a 10 km radius of the study area, are provided in Appendix H. BioNet Atlas previously recorded threatened species have been presented in Figure 7 [note: some species location may overlap i.e. one dot may represent two or three different species]).

Based on a consideration of the habitat needs of those threatened species listed in Appendix H, combined with the identification of those habitats present within the study area, there is the potential for some of the animals to occur in the vicinity of the subject site. During the field investigation targeted surveys for these species or their necessary habitats were conducted.



Figure 7. Extract of threatened species recorded on MMGI

While previously recorded within and/or predicted as having habitat in the study region, the majority of species listed in Appendix H would not occur within, or be reliant upon, the environments present within the area investigated. A number of the threatened species listed may traverse through, fly over and potentially forage within the area investigated on occasion; however, the scale of the work proposed is not considered to have an adverse impact on any of these animals. Given the extent of better resources within the surrounding national park, a consideration of the scope of work proposed and the surrounding land use history of the area investigated, no areas of habitat relied upon by these animals for any part of their lifecycle requirements are to be removed or significantly disturbed, and no barriers to their movement patterns would be erected.

As the work is terrestrial in nature, if potentially present, no threatened fish would be adversely affected by the proposal. The conducting of assessments (i.e. reference to the EPBC Act's Significant Impact Guidelines or Section 221ZV (Part 7A) of the FM Act) in regards to State and/or Federal listed threatened fish are not required.

The REF prepared for *Me Mel Goat Island Remediation Wharf 54a demolition and Wharf 54b repairs*, considered the impact of those works on the State listed (Endangered – FM Act) White's Seahorse (*Hippocampus whitei*). This species was observed in 2021 among rock rubble kelp habitat around and underneath Wharf 54b, four individuals being detected. No White's Seahorse individual were recorded during a subsequent 2022 investigation, significant rainfall and brackish water considered to have influenced the presence of this animal.

Should the White's Seahorse be present in proximity to the proposed crane barge mooring site, no resources available to this species would be directly affected. Similarly, compared to existing water traffic movements within this section of Sydney Harbour, and the short-term nature of the works, no indirect impacts are considered likely to arise. As such, impacts on this species with

reference to the EPBC Act's Significant Impact Guidelines or Section 221ZV (Part 7A) of the FM Act are not required.

Field investigation

An investigation of the PESB site proposed for demolition was conducted by Deryk Engel (B.Env.Sc Hons) [Senior Ecologist], Isabel Burcher (B.Sc) [Field ecologist] and Kirsty Bloomfield [researcher] on 9 November 2022. For reference, the weather conditions experienced during the field survey were mild temperatures (21ºC), overcast skies (80% cloud cover), and a slight breeze.

The investigations were conducted on foot and lasted for about four (4) person hours.

Given the scale of the proposed work and considering the condition of those fauna habitats and vegetation communities likely to be disturbed, this level of survey effort is considered more than adequate when endeavouring to determine the species and ecological communities present, and their conservation status.

The survey methods employed during the field investigation were:

- the identification of the structure of those vegetation communities and fauna habitats present
- direct observations of any fauna species present within, or close to, the proposed work area
- diurnal call identifications of fauna species, with all calls being identified in the field
- conducting of dedicated bird surveys, these lasting around 20-minutes per survey
- the identification of any indirect evidence such as tracks, scats, diggings and scratchings
- ground debris, leaf litter and tree bark searches for any sheltering reptiles and amphibians
- targeted searches for those species of State and national conservation concern, or their likely habitat areas, that were identified during the literature review stage of the proposal.

When surveying the proposal area, the 'Random Meander Method' (Cropper 1993) with targeted threatened species surveys was employed. This method involves conducting foot traverses through those portions of the site that require investigation, during which time notes are made on the structure and floristic composition of the native vegetation and weeds present.

The 'Random Meander Method' is consistent with the stratified random sampling design as specified in section 5.1 (Stratification, sampling and replication) of the DEC 2004 publication titled, *Threatened Biodiversity Survey and Assessment: Guidelines for development and activities* (working draft). This method is also mentioned under sections 5.2.1 (Sampling techniques) and 5.2.7 (Targeting threatened plants) of this publication. The Random Meander Method is suitable for covering large areas and for locating any rare species (and their associated vegetation communities/habitat types) that may occur within a particular site.

The 'Random Meander Method' is employed until no new species have been recorded for at least 30 minutes.

Whilst traversing the PESB site, any plants or animals observed were noted. Similarly, any evidence that would suggest use of the areas investigated by a native species (such as diggings, scats or tracks) was recorded.

Flora species recorded

By the completion of the field investigation, a total of 36 native and exotic plants were detected (Appendix J). Appendix J is not intended to be a comprehensive list of all species present, only representing those plants that were recorded while conducting searches for:

- native species and ecological communities of State and/or national conservation concern that are known, or expected to occur, in the locality, and
- weeds of significance that would require treatment.

None of the flora recorded is listed, or currently being considered for listing, on the EPBC or BC Acts.

Planted Banksias (*Banksia* sp.) up to 4 m high were the dominant canopy in the investigated area, occurring with an understory of mixed natives, shrubs and weeds up to 2 m tall, these including Tickbush (*Kunzea ambigua*) and Cabbage Palms (*Livistona australis*). Also present were exotic pine trees, with additional canopy made up of *Cypress* sp., Camphor Laurels (*Cinnamomum camphora*) and Port Jackson Figs (*Ficus rubiginosa*). The midstory consisted of Tree Ferns (*Cyathea sp.*), Cassia (*Senna pendula* var. *glabrata*) and native Sweet Pittosporum (*Pittosporum undulatum*); with exotic components of Lantana (*Lantana camara*) and Bougainvillea (*Bougainvillea* sp.).

Ground-cover was absent or, if present (i.e. maintained lawns), was composed of a high density of exotic weeds including Kikuyu Grass (*Cenchrus clandestinus*), Onion Weed (*Asphodelus fistulosus*), Asparagus Fern (*Asparagus aethiopicus*), Formosan Lily (*Lilium formosanum*), Nasturtium (*Tropaeolum majus*), Fishbone Fern (*Nephrolepis cordifolia*), Wandering Dew (*Tradescantia fluminensis*), Lamb's Tongue (*Plantago lanceolata*) and Dandelions (*Taraxacum sp.*). Notable groundcover natives in the area were Bracken Fern (*Pteridium esculentum*).

Raised garden beds with planted native and exotics were present, including self-seeded Coastal Wattle (*Acacia longifolia var. sophorae)*, Mat Rush (*Lomandra longifolia*), Lamb's Tongue, Maiden-Hair fern (*Adiantum aethiopicum*) and Creeping Lantana (*Lantana montevidensis*). Planted Bangalay (*Eucalyptus botryoides*) were found up to 3 m high, with Port Jackson Figs (*Ficus rubiginosa*) also present. Garden edging was present around the base of these plants.

Exotic pine trees occurred with a midstory of native Sweet Pittosporum (*Pittosporum undulatum*). Also present was Coastal Westringia (*Westringia fruticosa*) and exotics including Morning Glory (*Ipomoea indica*) and Asthma Weed (*Parietaria judaica*).

Weeds

Under the *Biosecurity Act 2015* 'all plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.'

Within the study area, the following recorded weeds of significance are listed as Weeds of National Significance (WoNS) (WA 2022) and under Schedule 3 of the Biosecurity Regulation 2017:

- Ground Asparagus (*Asparagus aethiopicus*)
- Lantana (*Lantana camara*).

The list of WoNS is part of a combined State and Commonwealth initiative to combat invasive species.

It is acknowledged 'Invasion, establishment and spread of Lantana' is a KTP listed under the BC Act. The proposed work is not expected to result in further introduction of this species beyond areas in which it currently exists. The proposal is not considered to contribute to, or increase the impact of, this KTP.

Where any weeds are removed as part of the work, they would be disposed of at a licensed waste facility.

Fauna species recorded

During the field investigation, efforts were made to identify any native animals (or areas of their documented habitats) that are of regional, State and/or national conservation significance as listed under the Schedules to the EPBC and/or BC Acts.

While conducting the habitat assessments, efforts were made to identify features such as known vegetation associations, geological features, feed trees, mature trees with hollows, connectivity of fauna corridors, aquatic environments and other habitat features important to the lifecycle requirements of those threatened animals previously recorded in the study region (as listed in Appendix H).

By the completion of the field investigation, the following nine native birds had been recorded within, adjacent to or flying over the areas investigated: Pied Cormorant (*Phalacrocorax varius*), Masked Lapwing (*Vanellus miles*), Silver Gull (*Chroicoephalus novaehollandiae*), Channel-billed Cuckoo (*Scythrops novaehollandiae*), Noisy Miner (*Manorina melanocephala*), Australian Magpie (*Cracticus tibicen*), Pied Currawong (*Strepera graculina*), Australian Raven (*Corvus coronoides*) and Welcome Swallow (*Hirundo neoxena*). In addition, one introduced species, the Rock Dove (*Columba livia*), was recorded.

Of those native animals recorded, none are listed, or currently considered for listing, under the EPBC or BC Acts.

The native species recorded are all protected, as defined by the BC Act, but considered to be common to abundant throughout, and well conserved within, the surrounding region; including in association with a range of coastal and woodland habitats, as well as urban environments. These species would not be solely reliant upon the area present within the subject site such that the further disturbance of these would threaten the occurrence of these animals. The species recorded are all expected to be present within both the subject site and surrounding locality post- work.

Fauna habitats

No established woodland was present within the study area, nor were any hollow-bearing trees observed.

Although an aquatic environment (i.e. Sydney Harbour) is present about 10 m south-west of the proposed activity, the proposal is terrestrial in nature and would not have a direct or indirect impact on this habitat.

The main fauna habitat would be described as landscaped garden beds, within which a mixture of native and exotic horticultural plantings were located. Due to a lack of maintenance, the garden beds and lawns are exhibiting a high-density growth of weeds.

No caves or suitable cave-substitutes were present.

Within the area surveyed, no fauna habitats significant to native species, particularly those threatened species previously recorded on or close to MMGI, were observed.

Survey effort and limitations

By the completion of the field investigation about four person hours of active searches had been accumulated. Access to the PESB site to be directly or indirectly affected by the scope of work was possible, thereby ensuring that all portions of the study area were sampled. In addition, no adverse weather conditions were encountered during the field investigation.

Not all animals can be fully accounted for within any given study area. The presence of threatened species is not static; it changes over time, often in response to longer term natural forces that can, at any time, be dramatically influenced by human-made disturbances.

Though not considered a constraint, in order to overcome any limitations in regards to the level of survey effort employed:

a) database searches were conducted for threatened species, populations and ecological communities known to occur within the region
b) the precautionary approach was adopted where necessary (i.e. suitable habitat for those threatened species known to occur, or that have been previously recorded within the surrounding locality, was identified)

This report is based upon data acquired from the current investigation; however, it should be recognised that the data gathered is indicative of the environmental conditions of the site at the time the field work was conducted.

8.2 Cultural values

8.2.1 Aboriginal cultural heritage

An AHIMS database search (NSW Government 2022b), centred on the study area, was conducted by Lesryk on 15 December 2022; the results indicating that one previously recorded site of ACH was identified beyond the impact footprint of the proposal (Figure 8). Two sites containing Aboriginal heritage material have been surveyed on MMGI, both in an area of bushland (Figure 9). Neither is located within, or near to, the impact footprint of the proposed work.

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : Goat Is.
Client Service ID : 741116

Lesryk Environmental Pty Ltd
20 Woodfield Ave
Bundeena New South Wales 2230
Attention: Deryk Engel
Email: admin@lesryk.com.au

Date: 15 December 2022

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -33.852, 151.1974 - Lat, Long To : -33.8514, 151.1984, conducted by Deryk Engel on 15 December 2022.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

1	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

Figure 8. AHIMS basic search results for MMGI



Figure 9. Aboriginal Heritage sites located on MMGI (source: former OEH 1994)

Given the land-use history of the investigated site, the conducting of the proposed work within a heavily disturbed/modified site, this the site of a previous sandstone quarry, and the limited extent of the proposed demolition works, no unexpected ACH is anticipated to be present.

In reference to the MMGI's SHR listing, the statement of significance does not clearly articulate the island's Aboriginal cultural heritage significance; however, the statement of significance in the endorsed Goat Island CMP (OEH 2011a) is more inclusive.

In the provided heritage statement (Appendix D), the statement reads:

> *It [MMGI] is closely associated with Bennelong (one of the most well-known Aboriginal people in early Sydney) and his family. The island is a documented place of incarceration and education of Aboriginal convicts in the 1830s. It was a site of convict labour and punishment for up to 200 convicts at its peak during the 1830s*.

NSW NPWS is leading a project to transfer MMGI to Aboriginal ownership and management. NPWS will conduct works to expedite the transfer process and address immediate maintenance and safety issues, including the demolition of the PESB.

The proposed demolition of the PESB will not affect any Aboriginal archaeology or any cultural heritage associations. The PESB is not associated with any past or present Aboriginal community and the impact of any excavation will be minor being within existing service trenches (NPWS 2022b, Appendix D).

Consultation with Aboriginal communities for the specific activity to demolish the PESB was not needed, and none was conducted so that it did not pre-empt the formation of the Me Mel Transfer Committee and its decision making (NPWS 2022b, Appendix D).

With reference to the OEH *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* guideline, an Aboriginal Heritage Impact Permit (AHIP) under s.90 of the NPW Act is not required for the proposed activity.

There are no nearby declarations under s153G of the NPW Act of cultural assets of intergenerational significance (AIS) for Aboriginal cultural value. The study area has not been declared an Aboriginal Place under s.84 of the NPW Act.

8.2.2 Historic heritage values

The NSW *Heritage Act 1977* defines a relic as 'any deposit, artefact, object or material evidence that:

a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
b) is of State or local heritage significance'.

MMGI (and its constituent buildings including the PESB) is listed on the SHR as Goat Island no. 00989. Additionally, MMGI (including the PESB) is included on the NPWS HHIMS.

Section 6 of the heritage statement (Appendix D) details the assessment of impact associated with the proposed work. In summary, the demolition of the PESB will not adversely affect the significance of the heritage item, being MMGI. The endorsed CMP advises that the PESB demonstrates moderate significance for its association with the former MSB fire brigade, as an interesting 1960s design (not adversely affected by later modifications), for its association with former MSB staff and for its use as the set for the Water Rats television series.

The endorsed CMP advises that the PESB is not rare (being one of 80 buildings or structures on MMGI). The PESB is one of the most recent and the most prosaic addition to the island.

The PESB is graded in the CMP as demonstrating moderate significance and its condition is recorded as fair in 2011. Since 2011 the building's condition has deteriorated and is now poor.

The proposed demolition of the PESB will not involve an impact to any of the island's landscape or natural heritage elements, nor does it involve any alteration to MMGI's curtilage.

Archaeology

The endorsed CMP identifies areas of known and high archaeological potential (Figure 10). Thorpe W, Schwager Brooks and Partners Pty Ltd. Archaeological Survey and Assessment of Historic Sites 1985 identifies historical archaeological sites across the island. The PESB is not within an area of known or high archaeological potential in the endorsed CMP, or near the sites identified in 1985.

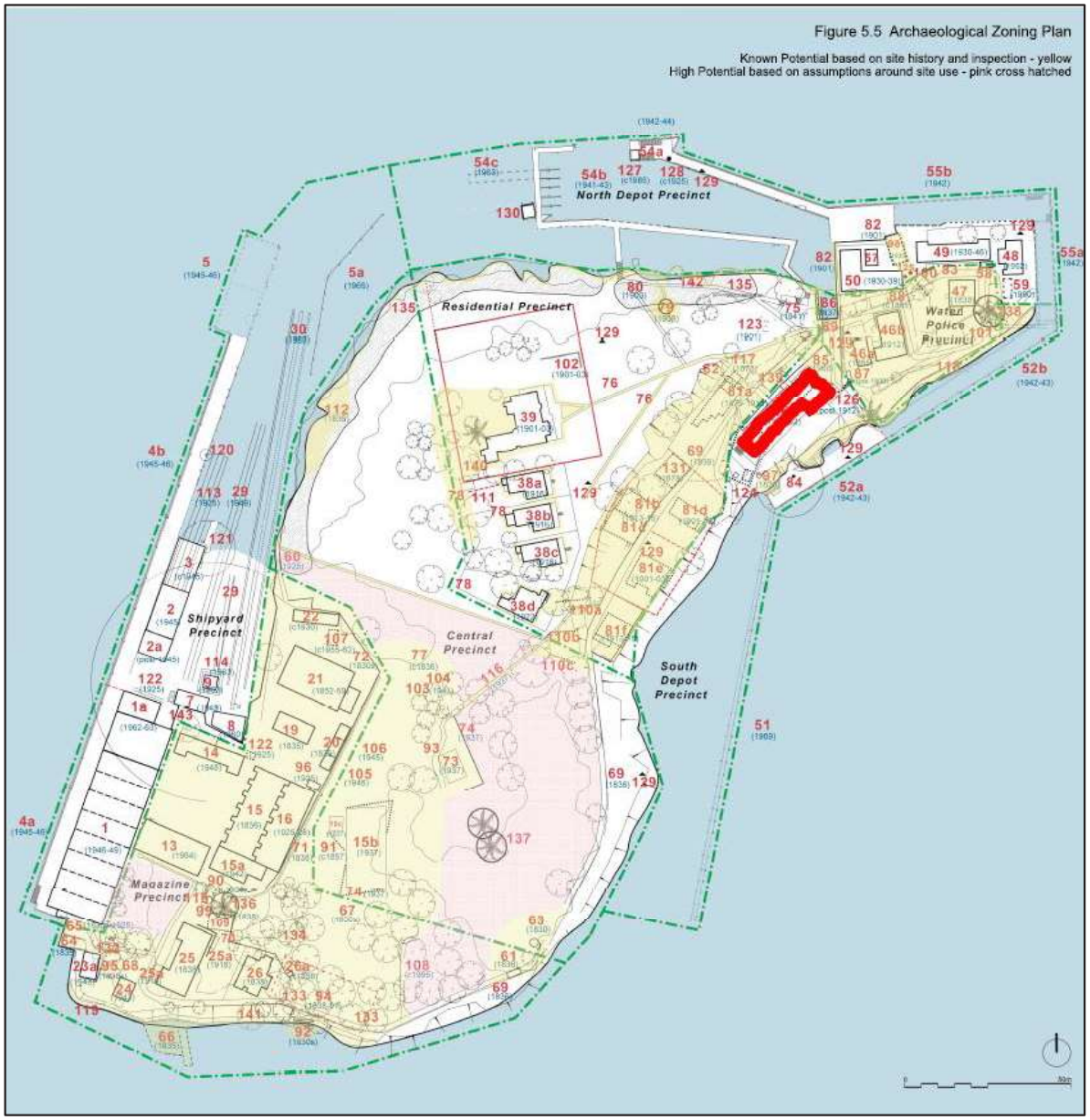


Figure 10. Areas of high archaeological potential (yellow and pink) in relation to PESB site (red).

No excavation is proposed to demolish the PESB, therefore a separate archaeological assessment was not conducted for the proposal; however, any trenching required will be minor, and located within existing service lines and would not disturb unexcavated ground.

Compliance with the CMP policies relevant to the proposal are provided within Section 6 of the heritage statement (Appendix D, p40).

The endorsed CMP describes the history and significance of the PESB (image below).

Item No.	Date of Construction	Name	Graded level of Significance	Assessment of Significance
45	1960-62	Port Emergency Services Building	Moderate	This is one of the last buildings to be constructed on the Island and was the third barracks and facilities building for fire crews as well as the earlier provision of residences for the crews and their families. It is one of the largest buildings on the Island and could be considered in some ways to be visually intrusive on the generally smaller scale of the northern end of the Island. It however is significant as part of a long tradition of buildings to accommodate the fire services that operated from the Island and which occupied much of the northern end of the Island.

The endorsed CMP advises that the PESB has some significance for its association with former MSB staff and as the Water Rats set. It is submitted that, while the building has been the site for these uses, its impractical layout and siting, its awkward post Water Rats appearance, exacerbated by its poor condition, make it impractical and unreasonable to keep the building just for these associations (NPWS 2022b, Appendix D). While the demolition of the PESB will remove some physical evidence of these associations, it is argued that the MSB associations are better evidenced elsewhere on the island in the numerous other MSB ship repair and harbour depot buildings and structures. The Water Rats associations are also more evocatively and permanently evidenced in the footage of the television series itself (NPWS 2022b, Appendix D).

In accordance with Section 7 of the heritage statement, the proposal will not have an adverse impact under s.62(1)(a) of the Heritage Act on the significance of the heritage item being MMGI as follows:

- The proposal will not involve the loss significant fabric, will not affect the island's curtilage, landscape or natural heritage.
- No change of the Island's use is proposed, noting that the PESB has not had a viable use since 1994 when the MSB vacated the island.
- The proposal will not adversely affect significant views and settings identified in the endorsed CMP.
- There is no impact on Aboriginal archaeological site or associations.
- The PESB is not within an area of known or high archaeological potential or near to any of the sites identified in 1985. No excavation is proposed to demolish the PESB itself. Any associated trenching will be minor, will be within existing service lines. The proposed demolition will not have an impact on the island's historical archaeological resources.
- The demolition of the PESB meets the threshold of s.63(3)(c), that the Heritage Council could approve demolition under s.63(2).

As approval for the proposed activity is required under the Heritage Act, the heritage statement prepared by NPWS supported an application under s.60 of the Heritage Act to demolish the PESB. Application no. HMS ID 1492 was approved by the Heritage Council of NSW on 17 September 2022 (Appendix F), subject to conditions provided in Section 9.6 of this REF.

8.3 Social values

8.3.1 Recreation values

Since Me Mel Goat Island became part of the national park, recreation has been focused on guided tours, private and public functions and events, such as the Goat Island Film Festival and Biennale, and prebooked New Year's Eve fireworks viewing (SHNP PoM, OEH 2012).

Concerning public access, demolition of the PESB would open up the area in front of the 1930s quarry face for larger groups to gather in one of the island's few level foreshore areas allowing visitors to appreciate the island's eastern aspect (NPWS 2022b, Appendix D).

8.3.2 Scenic and visually significant areas

Located west of the Harbour Bridge, Me Mel Goat Island has a commanding position in the harbour. Me Mel Goat Island is the largest of the SHNP's five islands, and one of the eight remaining islands of Sydney Harbour. The six and a half-hectare island contains the richest and most diverse array of Aboriginal, historic and natural heritage values of all the park islands. Of particular note are the more than 30 buildings and other structures dating from the 1830s to the 1960s (SHNP PoM, OEH 2012).

As detailed within Section 6 of the heritage statement (Appendix D), it is acknowledged the endorsed CMP advises that the building has an adverse visual impact on the north end of the island and the Water Police precinct by its scale, size and colour. The building and the reclaimed land partially obscure the southern side of Barney's Cut. The CMP advises that it is acceptable to remove, partial remove or modify the building to lessen its impact.

Furthermore, the SHNP PoM advises that the PESB has an adverse visual and operational impact and detracts from the island's heritage values and significance (OEH 2012, p178).

Removal of the PESB and conducting of vegetation remediation works will increase views of Barney's Cut and the sandstone geology of Sydney Harbours foreshore. Visually, the site will be consistent with other sections of the island, such as the south-eastern and southern foreshore areas, that exhibit sandstone walls atopped by vegetation.

8.3.3 Education and scientific values

Educational and scientific values of MMGI would not be adversely affected by the proposed demolition of the PESB within a highly disturbed/modified area.

8.3.4 Interests of external stakeholders

Refer to section 4 of the REF.

8.4 Matters of National Environmental Significance

No MNES were recorded within, or near to, the study area; nor were any considered likely to occur or be impacted by the proposed demolition of the PESB.

As no assessments referencing the EPBC Act's Significant Impact Guidelines were considered necessary, referral of the proposal to the Federal Minister for the Environment for further consideration or approval is not required.

9. Impact assessment

9.1 Physical and chemical impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. impact on soil quality or land stability?	☒	Negligible	Demolition of the PESB will not require any excavation of soils or works that have the potential to affect land stability. The slab beneath the PESB will remain in place.	No safeguards/mitigation measures required.
2. affect a waterbody, watercourse, wetland or natural drainage system – either physically or chemically (e.g. due to runoff or pollution)?	☒	Low	The proposed work is terrestrial. A crane barge will be used to transport to and from the work area labour, equipment and materials; this positioned within Sydney Harbour. Provided mitigation measures are adhered to, no adverse direct or indirect aquatic impact is expected.	• A CEMP would be prepared by the contractor as required under the construction contract conditions. • The CEMP will set out the methods to manage the removal of materials from the PESB. The CEMP will include procedures, and all identified safeguards/mitigation measures, to minimise environmental impacts in accordance with all relevant construction, environmental and safety legislation. • All construction personnel will complete a compulsory site induction that describes the requirements in the CEMP and the legislative requirements, with daily start-up meetings and regular tool box talks on specific environmental issues. • Erosion and sediment control measures will include daily water quality visual inspections and a floating

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				boom and silt curtain in low wash areas close to the foreshore. • To prevent seabed disturbance, all barge mobilisation and movement will be done during favourable tide and wind conditions, with the pushing vessel operated to minimise sediment disturbance and prevent strike or disturbance to seabed aquatic habitats. • Work positioning barges would occur during calm conditions (generally wind speed of about 0.5 m/s and less) to minimise sediment disturbance. • Barge-mounted spuds will be minimised. The locations will be selected to avoid any marine vegetation habitats. • If winches and mooring blocks are used, the blocks will be placed carefully and buoyancy devices used to prevent an impact to habitats such as scalping by sagging cables.
3. change flood or tidal regimes, or be affected by flooding?	☐	N/A	N/A	N/A
4. affect coastal processes and coastal hazards, including those under climate change projections (e.g. sea level rise)?	☐	N/A	The demolition of the PESB will not influence, affect or be affected by coastal processes and coastal hazards.	

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
5. involve the use, storage or transport of hazardous substances, or use or generate chemicals which may build up residues in the environment?	☒	High adverse	The Compliance Hazardous Materials Inspection and Risk Assessment found the PESB to contain the following hazardous materials: non-friable asbestos (material containing asbestos fibres reinforced with a bonding compound), lead paint, Polychlorinated Biphenyls and Synthetic Mineral Fibre (Greencap 2022a, Appendix B). Potential use of transport and equipment fuels and lubricants.	• In reference to Appendix B (refer to this for further details): Asbestos ○ Organise remedial/removal works of all P2 items as soon as practical (within 3 months) by an appropriately licensed asbestos removal contractor under appropriate controlled conditions. Lead paint ○ Engage a lead abatement contractor with appropriate experience and removal controls in accordance with AS/NZS 4361.2:2017 Guide to hazardous paint management - Part 2: Lead paint in residential, public and commercial buildings. In the interim, access should be restricted until remedial works take place. ○ Conduct further testing prior to any refurbishment, remedial or demolition works on painted surfaces that is likely to generate dust or fumes. All surfaces painted prior to 1997 should be assumed to contain lead above 0.1% w/w (AS/NZS 4361.2:2017). ○ Demolition/refurbishment works should be undertaken by a Lead abatement contractor with appropriate experience and controls in accordance with AS/NZS 4361.2:2017 Guide

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				to hazardous paint management - Part 2: Lead paint in residential, public and commercial buildings. ○ Consider engaging an independent hygiene consultant/Lead specialist to undertake Lead air monitoring, clearance inspection and clearance sampling during any removal works to ensure works are conducted safely. Polychlorinated Biphenyls ○ Capacitors and electrical components items must be de-energised by a licensed electrician. Appropriately experienced contractors should use appropriate Personal Protective Equipment (PPE) including face shield, gloves, skin and eye protection. ○ Appropriately dispose of item identified as containing Polychlorinated Biphenyls in accordance with waste and environmental protection guidelines. Synthetic Mineral Fibres ○ Remove/remediate Synthetic Mineral Fibres items in poor condition as soon as possible, under controlled conditions, by appropriately experienced contractor in accordance with the requirements of the Code of Practice for the Safe Use of Synthetic Mineral Fibres NOHSC:2006(1990). In the interim, access

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				should be restricted until remedial works take place. ○ Consider engaging an independent hygiene consultant to undertake SMF air monitoring during any removal works to ensure works are conducted safely Additional measures include: • A Spill Prevention and Response Plan will be prepared by the contractor as required under the construction contract conditions. The plan will provide a systematic framework to prevent environmental impacts from potential spills or inappropriate disposal of contaminants. • All chemicals or fuels will be stored on the barge and will be protected in a bunded area to prevent leaks or spills entering the water. • Fuels, oils and chemicals will be stored in an appropriate cabinet or container with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund. These containers will only be removed for a specific activity and then returned. • Fully stocked spill kits with absorbent pads, granular absorbents and booms will be available on the barges. The contractor's personnel will be trained in the use of the spill kits and will be called

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				upon to contain any spill. All personnel will be made aware of the location of the spill kits. • Floating buoys and floating silt booms will be in place around the construction zone. Visual observations of the silt curtain will be made at least twice each day and results of observations noted in a site notebook maintained specifically for the purpose. • Refuelling on barge must be undertaken within a double bunded system with 120% capacity. Small work boats/barges carrying plant or machinery will be fitted with bunding around equipment to prevent accidental spills or leaks from entering the water. • All equipment, materials and wastes transported between an off-site facility and the work site will be secured to avoid spills during transportation. The quantity held on the barge or deck will be the minimum required for efficient operations. Containers will not be left open and any required decanting and mixing of outboard, or chainsaw fuel will occur over a suitably sized spill tray. • Barges will be refuelled off site. Plant will be properly maintained and regularly inspected for fuel leaks. No vehicle or vessel wash down will occur on site.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				• All material used to contain or clean up spills will be disposed of at the appropriate licenced disposal facility. • If the environmental incident is beyond the scope of the emergency spill kit, Supervisor/Leading Hand will contact Sydney Ports Corporation Spill Response. • In an event of a spill during operation, the incident emergency plan will be implemented in accordance with Sydney Ports response to shipping incidents and emergencies outlined in the '*NSW State Waters Marine Oil and Chemical Spill Contingency Plan'* (NSW Maritime, 2016). If a spill occurs, the NPWS Project Manager and NPWS Principal Authorised Person will be notified as soon as practicable.
6. involve the generation or disposal of gaseous, liquid or solid wastes or emissions?	☒	High	Demolition of the PESB will generate solid waste, including hazardous materials. Potential spill hazard from barge used to transport materials following demolition.	A Waste Management Plan would be prepared as part of the CEMP, including the following control measures: • Waste would be classified before being disposed to an appropriately licenced facility in accordance with Waste Classification Guidelines: Part 1 Classifying Waste (EPA 2014). • All waste from the demolition would be transferred by a licenced contractor to a licenced receiving facility in accordance with EPA Waste Classification Guidelines. Where necessary, this would include sampling and analysis.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				• Wastewater from vessels would be discharged at an approved vessel wastewater disposal facility. No vessel wastewater would be discharged (i.e. pumped out) directly into the water or onto any land adjacent • Lead paint materials would be managed in accordance with the Australian Standard AS4361.1 'Guide to Lead Paint Management – Part 1 Industrial Applications 1995'. • Asbestos removal would be undertaken in accordance with Working with Asbestos: Guide 2008 published by WorkCover Australia. Spill management as noted in 9.1(5) above.
7. involve the emission of dust, odours, noise, vibration or radiation?	☒	Low	The proposed demolition work would, or may, result in the emission of friable materials, dust, odours, noise and vibration. Increased noise and vibration would be introduced during construction; however, this would be temporary. This is unlikely to affect any native species due to the highly disturbed nature of the existing environment. Nearby fauna would be adaptable to high levels of background noise from surrounding activities (e.g. operating vessels).	In addition to measures previously identified: • Vehicles and vessels transporting waste or other materials that may produce odours or dust would be covered during transportation. • Work positioning barges would occur during calm conditions (generally wind speed of about 0.5 m/s) to minimise generation of odour. • Work will be limited to regular construction hours. • In cases where noise exceedances occur, a series of standardised mitigation measures according to the Construction Noise and Vibration Noise Guidelines would apply.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				• Site-specific noise and vibration measures include the following: ○ Limiting number of plant, use of alternative equipment and/or using a different, quieter method ○ Where feasible, limit amount of plant equipment operating at any one time ○ Consider use of temporary noise barriers.

9.2 Biodiversity impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. affect any declared area of outstanding biodiversity value or critical habitat or environmental asset of intergenerational significance?	☐	N/A	Refer to s.8.1.5 of the REF.	No safeguards/mitigation measures required.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
2. result in the clearing or modification of vegetation, including ecological communities and plant community types of conservation significance? ^	☒	Low	An approximate total impact disturbance footprint of about 0.161 ha would be required to permit the proposal; the removal of some vegetation (limited to ground cover, and pruning/trimming of branches) would be less than this. Vegetation requiring removal does not constitute a TEC or PCT of conservation significance.	• Clearing of vegetation would not be more than that required to safely and effectively permit the scope of work. • Identify the limits of clearing; these would be provided to the work crew(s), identified both on site maps/plans and on site through the erection of temporary fencing, bunting or similar. • Vegetation removal would be conducted with hand-held tools/equipment (e.g. chainsaw). • Removed native and non-seedbearing exotic vegetation would be mulched and/or utilised on-site as brush matting, to encourage natural regeneration where required. • Weed contaminated green waste would be disposed of appropriately at a licensed landfill facility.
3. endanger, displace or disturb terrestrial or aquatic fauna, including fauna of conservation significance, or create a barrier to their movement? ^	☒	Negligible	No fauna species listed under the EPBC or BC Acts were recorded during the investigation, or considered likely to occur; however, the proposed work has the potential to temporarily disturb native fauna. No barriers to the movement of fauna would be established.	• Any animals injured during the proposed work would be taken to a local veterinarian for treatment [or euthanising]. Once rehabilitated, these native animals must be released at their point of collection. • Injured exotic species are to be taken to a local veterinarian for euthanising.
4. result in the removal of protected flora or	☐	N/A	N/A	N/A

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
plants or fungi of conservation significance? ^				
6. contribute to a key threatening process to biodiversity or ecological integrity?	☒	Negligible	Of the 35 KTP for mainland NSW listed under the BC Act, 'Clearing of native vegetation' and 'Invasion, establishment and spread of Lantana' would be applicable to the proposal. Given the amount of vegetation proposed to be removed, and that the proposed work would not result in the further introduction of Lantana beyond areas it currently exists, it is not considered that this would increase the impact of these KTP.	No further safeguards/mitigation measures required.
7. introduce weeds, pathogens, pest animals or genetically modified organisms into an area?	☒	Negligible	The proposal to demolish the PESB will not intentionally introduce weeds, pathogens, pest animals or genetically modified organisms into an area. There is a risk that the proposal would introduce, spread or exacerbate the plant diseases caused by *Phytophthora cinnamomi*. This disease is most likely introduced or spread through the importation or movement of soil, water and landscaping materials, either directly or through incidental attachment to machinery.	• In accordance with the NSW *Biosecurity Act 2015*, where recorded Ground Asparagus and Lantana occur on-site, these weeds must be controlled to result in their suppression and avoid further spread of these species. This would be done prior to the commencement of the proposed work to avoid the further spread of these plants. • Potential pathogens (e.g. *Phytophthora cinnamomi*) would be managed by adhering to the following protocols: ○ Before entering and leaving the work site, within a designated wash-down area, workers are to remove excess soil and mud and then spray boots, tools, gloves and small equipment with recommended disinfectant supplied by the

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				contractor (70% Methylated spirits / 30% Water) until runoff is clear.

9.3 Community impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. affect community services or infrastructure?	☐	N/A	Demolition of the PESB will not affect community services or infrastructure. Access to the PESB is currently prohibited and no community use for the building is foreseeable.	No safeguards or mitigation measures required.
2. affect sites important to the local or broader community for their recreational or other values or access to these sites?	☒	Negligible	The demolition of the PESB would be a small, localised activity and will not have an impact on other sites on MMGI.	No safeguards or mitigation measures required.
3. affect economic factors, including employment, industry and property value?	☐	N/A	N/A	N/A

Is the proposed activity likely to…	**Applicable? ***	**Impact level** (negligible; or low, medium or high adverse; or positive; or NA)	**Reasons** (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	**Safeguards/mitigation measures**
4. have an impact on the safety of the community?	☒	Positive	Demolition of the PESB will have an improved safety impact as it is currently dilapidated and dangerous. Access to the PESB is currently prohibited.	No safeguards or mitigation measures needed.
5. cause a bushfire risk?	☐	N/A	N/A	N/A
6. affect the visual or scenic landscape? ^	☒	Positive	The SHNP PoM advises that the PESB be demolished to enhance the scenic landscape of MMGI. The demolition the PESB will remove a dilapidated, unsafe and unattractive asset that presents a safety risk and disfigures views within the island's eastern side. Demolition work will negatively affect the visual landscape; however, this work will be localised and limited to the duration of the works.	No safeguards or mitigation measures needed.

9.4 Natural resource impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. result in the degradation of the park or any other area reserved for conservation purposes?	☐	Positive	The demolition the PESB will remove a dilapidated, unsafe and unattractive asset that presents a safety risk and disfigures views within the island's eastern side.	No safeguards or mitigation measures required.
2. affect the use of, or the community's ability to use, natural resources?	☐	N/A	N/A	N/A
3. involve the use, wastage, destruction or depletion of natural resources including water, fuels, timber or extractive materials? ^	☒	Negligible	The activity will involve the use of water, fuel and energy.	Use of resources will be limited to amounts necessary to complete the works.
4. provide for the sustainable and efficient use of water and energy?	☐	N/A	N/A	N/A

9.5 Aboriginal cultural heritage impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. disturb the ground surface or any culturally modified trees?	☐	N/A	Demolition will not disturb the ground surface or require the removal of any culturally modified trees.	N/A
2. affect or occur near known Aboriginal objects, Aboriginal places or an Aboriginal cultural asset of intergenerational significance? If so, can impacts be avoided? How?	☐	N/A	Two previously recorded sites containing Aboriginal heritage material have been surveyed on MMGI, both in an area of bushland. Neither is located within, or near to, the impact footprint of the proposed work (refer to s.8.2.1 of the REF). No Aboriginal cultural AIS is within, or near to, the study area.	N/A
3. affect areas: - within 200 m of waters - within a sand dune system - on a ridge top, ridge line or headland - within 200 m below or above a cliff face - in or within 20 m of a cave, rock shelter or a cave mouth? If so, can impacts be avoided? How?	☒	Low	The study area is located within 10 m of Sydney Harbour. However, as the proposed work would be located within the footprint of an extensively disturbed/modified area, no unexpected ACH is anticipated to be present.	• If an Aboriginal object is unexpectedly discovered during works: ○ Work must cease in the affected area(s) and Heritage NSW contacted immediately in accordance with s.89A of the NPW Act. The NPWS Unexpected Finds Procedures would be followed. ○ Additional assessment and approval may be required under the relevant legislation prior to works continuing in the affected area(s) based on the nature of the discovery.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
4. affect wild resources which are used or valued by the Aboriginal community or affect access to these resources?	☐	N/A	N/A	N/A
5. affect access to culturally important locations?	☐	N/A	N/A	N/A

9.6 Other cultural heritage impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. affect or occur near places, buildings or landscapes of heritage significance? ^	☒	High.	Me Mel Goat Island (and its constituent buildings including the PESB) is listed as item no. 00989 on the SHR. Goat Island and its component parts, including the PESB, are heritage items within the NPWS s.170 HHIMS Register as item no. 1387.	• In accordance with Application (no. HMS ID 1492) under s.60 of the Heritage Act, approval was granted by the Heritage Council on 19/09/2022, subject to the following conditions: 1. All work shall comply with the information contained within: a) the architectural drawings, prepared by Consult Marine

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				b) the Statement supporting an application under s.60 of the Heritage Act 1977 for Me Mel Goat Island, to demolish the Port Emergency Services Building (Former 1962 MSB Fire Brigade Barracks), prepared by NPWS, dated 19 September 2022. 2. The owner shall ensure that the reinstated significant View V4 is maintained and no permanent structures are constructed in place of the Port Emergency Services Building. 3. A suitably qualified and experienced heritage consultant must be nominated for this project. The nominated heritage consultant must provide input into the detailed design, provide heritage information to be imparted to all tradespeople during site inductions, and oversee the works to minimise impacts to heritage values. The nominated heritage consultant must be involved in the selection of appropriate tradespersons and must be satisfied that all work has been carried out in accordance with the conditions of this consent. 4. All work to, or affecting, significant fabric shall be carried out by suitably qualified tradespersons with practical experience in conservation and restoration of similar heritage structures, materials and construction methods.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				5. Significant built and landscape elements are to be protected during site preparation and the works from potential damage. Protection systems must ensure significant fabric, including landscape elements, is not damaged or removed. 6. The Applicant must ensure that if substantial intact archaeological deposits and/or State significant relics or any other buried fabric such as works not identified, are discovered, work must cease in the affected area(s) and the Heritage Council of NSW must be notified. Additional assessment and approval may be required prior to works continuing in the affected area(s) based on the nature of the discovery. 7. If requested, the applicant and any nominated heritage consultant may be required to participate in audits of Heritage Council of NSW approvals to confirm compliance with conditions of consent. 8. This approval will lapse five years from the date of the consent unless the building works associated with the approval have physically commenced. • The PESB will be archivally photographed prior to demolition in accordance with Heritage Council of NSW guidelines, and the electronic record will be kept as a publicly accessible record by NPWS.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				• If a non-Aboriginal relic is unexpectedly discovered during works, notification is required under s.146 of the Heritage Act; and: o Work must cease in the affected area(s) and the Heritage Council of NSW contacted immediately. o Additional assessment and approval may be required under the relevant legislation prior to works continuing in the affected area(s) based on the nature of the discovery.
2. impact on relics or moveable heritage items, or an area with a high likelihood of containing relics? ^	☒	Low	See above.	No further safeguards or mitigation measures required.
3. impact on vegetation of cultural landscape value (e.g. gardens and settings, introduced exotic species, or evidence of broader remnant land uses)?	☐	N/A	N/A	N/A

9.7 Impacts on Matters of national environmental significance (MNES) under the EPBC Act during all stages of the activity

Is the proposal likely to affect MNES, including:	Applicable? *	Likely impact (negligible, low, medium or high adverse; or positive; or N/A)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. listed threatened species or ecological communities)?	☐	N/A	N/A	N/A
2. listed migratory species?	☐	N/A	N/A	N/A
3. the ecology of Ramsar wetlands?	☐	N/A	N/A	N/A
4. world heritage values of World Heritage properties?	☐	N/A	N/A	N/A
5. the national heritage values of national heritage places?	☐	N/A	N/A	N/A

10. Summary of impacts and conclusions

Environmental factor	Consideration	Significance of impact*
(a) the environmental impact on the community	Social, economic and cultural impacts as described in sections 9.3, 9.5 and 9.6	Not significant
(b) the transformation of the locality	Human and non-human environment as described in sections 9.1, 9.2 and 9.4	Not significant
(c) the environmental impact on the ecosystems of the locality	Amount of clearing, loss of ecological integrity, habitat connectivity/ fragmentation and changes to hydrology (both surface and groundwater) as described in sections 9.1, 9.2 and 9.4 and, for nationally listed threatened ecological communities, in section 9.7.	Not significant
(d) reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality	Visual, recreational, scientific and other impacts as described in section 9.3.	Not significant
(e) the effects on any locality, place or building that has— (i) aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance, or (ii) other special value for present or future generations	Impacts to Aboriginal and historic heritage associated with a locality (including intangible cultural significance), architectural heritage, social/community values and identity, scenic values and others, as described in sections 9.3, 9.5 and 9.6 and (for MNES heritage places) section 9.7.	Not significant
(f) the impact on the habitat of protected animals, within the meaning of the *Biodiversity Conservation Act 2016*	Impacts to all native terrestrial species, including but not limited to threatened species, and their habitat requirements, as described in section 9.2.	Not significant
(g) the endangering of a species of animal, plant or other form of life, whether living on land, in water or in the air	Impacts to all listed terrestrial and aquatic species, and whether the proposal increases the impact of key threatening processes, as described in section 9.2.	Not significant
(h) long-term effects on the environment	Long-term residual impacts to ecological, social and economic values as described in all parts of section 9.	Not significant
(i) degradation of the quality of the environment	Ongoing residual impacts to ecological, social and economic as described in section 9.4.	Not significant
(j) risk to the safety of the environment	Impacts to public and work health and safety, from contamination, bushfires, sea level rise, flood, storm surge, wind speeds, extreme heat, rockfall and landslip, and other risks likely to increase due to climate change as described in sections 9.1, 9.3 and 9.4.	Not significant

Environmental factor	Consideration	Significance of impact*
(k) reduction in the range of beneficial uses of the environment	Impacts to natural resources, community resources and existing uses as described in sections 9.3 and 9.4.	Not significant
(l) pollution of the environment	Impacts due to air pollution (including odours and greenhouse gases); water pollution (water quality health); soil contamination; noise and vibration (including consideration of sensitive receptors); or light pollution, as described in sections 9.1 and 9.3.	Not significant
(m) environmental problems associated with the disposal of waste	Transportation, disposal and contamination impacts as described in section 9.3.	Not significant
(n) increased demands on natural or other resources that are, or are likely to become, in short supply	Impacts to land, soil, water, gravel, minerals and energy supply as described in section 9.4.	Not significant
(o) the cumulative environmental effect with other existing or likely future activities	The negative synergisms with existing development or future activities as considered in section 9.8.	Not significant
(p) the impact on coastal processes and coastal hazards, including those under projected climate change conditions	Impacts arising from the proposed activity on coastal processes, and impacts on the proposed activity from those coastal processes and hazards, both current and future, as considered in section 9.1.	Not significant
(q) applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1	Inconsistency with the objectives, policies and actions identified in local, district and regional plans, as considered in section 3.2.2.	Not significant
(r) other relevant environmental factors.	Any other factors relevant in assessing impacts on the environment to the fullest extent, such as native title.	Not significant

In conclusion indicate if:

- There is likely to be a significant effect on the environment and an environmental impact statement is required

  ☒ No

  ☐ Yes

Reason(s):

The proposed demolition of the PESB would not have a significant effect on the environment such that an Environmental Impact Statement is required. The extent of the impact, taking place within an existing disturbed/modified area, would require a total disturbance footprint of about 0.161 ha; the removal of vegetation (limited to ground cover and pruning/trimming of branches) would be less than this.

- There is likely to be a significant effect on threatened species, populations, ecological communities or their habitats and a species impact statement is required

  ☒ No

  ☐ Yes

Reason(s):

No TECs or threatened species were recorded within, or near to, the study area; nor were any considered likely to occur or be impacted by the proposed work. No assessments referencing Section 7.3 of the BC Act or Section 221ZV (Part 7A) of the FM Act were considered necessary. No SIS is required.

- The activity is likely to have a significant impact on matters of national environmental significance listed under the Commonwealth EPBC Act

  ☒ No

  ☐ Yes

Reason(s):

No MNES were recorded within, or near to, the study area; nor were any considered likely to occur or be impacted by the proposed work. No assessments referencing the EPBC Act's Significant Impact Guidelines were considered necessary. Referral of the proposal to the Federal Minister for the Environment for further consideration or approval is not required.

- The activity will require certification to the Building Code of Australia, Disability (Access to Premises – Buildings) Standards 2010 or Australian Standards in accordance with the NPWS Construction Assessment Procedures

  ☐ No

  ☒ Yes, due to demolition.

11. Supporting documentation

Please provide details of documentation included with this application.

Document title	Author	Date
1. Demolition Drawings	Consult Marine	July 2022
2. Compliance Hazardous Material Inspection and Risk Assessment	Greencap Ltd	May 2022
3. Sampling and Analysis Quality Plan	Greencap Ltd	August 2022
4. Heritage Statement	NPWS	19 September 2022
5. Section 60 approval letter	Heritage NSW	17 November 2022
6. Photographic record of the study area	N/A	November 2022
7. BioNet and PMST results	N/A	9 December 2022

12. Signature of proponent

This Review of Environmental Factors provides a true and fair review of the activity in relation to its likely impact on the environment. In considering the proposed work, this assessment has examined and taken into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of that activity. This assessment is considered to be in accordance with the factors required to be considered under clause 228 of the Environmental Planning and Assessment Regulation 2000 and Environmental Protection and Biodiversity Conservation Act 1999

By signing the REF, the proponent confirms that the information in the REF is accurate and adequate to ensure that all potential impacts of the activity can be identified.

Signature		Signature
Name (printed)	Ed Beebe	Name (printed)
Position	Senior Project Officer, MIDU	Position
Date	9 February 2023	Date

Seal (if signing under seal):

Next steps

- Submit the signed REF to the relevant NPWS Area Office, requesting determination of the REF and advice on when approval for the works may be forthcoming.

13. References

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Appendix A – Consult Marine Demolition Drawings

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PORTS EMERGENCY
SERVICES BUILDING No. 45 (PESB) DEMOLITION
GOAT ISLAND, N.S.W. 2477



LOCALITY PLAN
N.T.S.

DRAWING LIST

0274-00-001	TITLE SHEET, LOCALITY PLAN AND DRAWING LIST
0274-00-011	GENERAL NOTES SHEET 1
0274-00-101	PLAN OF EXISTING FEATURES & CONTRACTORS WORKING AREA
0274-00-102	GROUND & FIRST FLOOR PLANS
0274-00-103	ROOF & EXTERIOR PLANS
0274-00-201	GENERAL ARRANGEMENT
0274-00-301	PHOTO DETAILS SHEET 1
0274-00-302	PHOTO DETAILS SHEET 2
0274-00-303	PHOTO DETAILS SHEET 3
0274-00-304	PHOTO DETAILS SHEET 4
0274-00-305	PHOTO DETAILS SHEET 5
0274-00-306	PHOTO DETAILS SHEET 6

AMENDMENTS	DATE	ISSUE	BY
ISSUED FOR TENDER	27.07.2022	B	S.D.B.
ISSUED FOR CLIENT REVIEW	21.06.2022	A	S.D.B.

NOT FOR CONSTRUCTION

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LEICHHARDT NSW 2040

CLIENT
NSW GOVERNMENT
NATIONAL PARKS & WILDLIFE SERVICES

PROJECT
PORTS EMERGENCY
SERVICES BUILDING No. 45 DEMOLATION
GOAT ISLAND

DESIGNED	DRAWN	CHECKED	DATE	SIZE
A.W.L.	P.B.	S.D.B.	JUN 2022	A1

DRAWING TITLE
TITLE SHEET, LOCALITY PLAN AND DRAWING LIST

PROJECT No.	DRAWING No.	ISSUE
0274-00	001	B

GENERAL NOTES

Units:
- All dimensions are in millimetres, unless noted otherwise.
- All Levels are in metres to CD (Chart Datum) unless noted otherwise.

General:
- During the demolition works, existing structures shall be maintained in a stable condition at all times.
- The Contractor shall be responsible for securing the site (and any storage areas) from unauthorised entry throughout the duration of the works.
- The Contractor shall preserve existing infrastructure to remain, including all existing underground services, ground floor slabs, etc.
- A 2022 utility survey has been provided for information.
- Services are only partially shown on the drawings, refer to the utility survey for further information.
- The Contractor shall inform themselves and carry out their own investigations to locate existing services prior to commencement of work.
- All demolished (and excess) materials shall be lawfully disposed of by the Contractor unless noted otherwise on the drawings.

Work Health & Safety and Environmental Controls:
- All work to be carried out in compliance with the relevant WHS Legislation.
- Prior to commencing works the Contractor will be required to prepare appropriate Safe Work Method Statements which must be adhered to throughout the works.

Utilities:
- When carrying out work near overhead power lines, the Contractor shall comply with the requirements set-out in the WorkCover NSW document: "Work Near Overhead Power Lines - Code of Practice 2006", or the equivalent applicable local standard.
- When carrying out work near buried power lines, the Contractor shall comply with "Work Near Underground Assets - Guide" by Safework NSW 2007, in consultation with the network operator.

Demolition:
- Refer to demolition specification

Estimated Quantities for Demolition
- The following quantities have been estimated from the 1959 Maritime Services Board Drawings and visual site inspection. The quantities are given to assist at the time of tender for information only. No variation will be considered if the quantities vary from those contained in the table.

Item	Material	Approximate Quantity	Units
Suspended First Floor Slab	Reinforced Concrete	50	m³
Ground Floor Workshop Walls	Precast Concrete	8	m³
Steel RSJ Framework	Steel	21	T
Ground Floor Sandstone Walls	Sandstone Blockwork	15	m³
Second Storey Walls (External)	Timber Frame and Cladding, timber framed windows, colour bond cladding	95	lm
First Floor Balcony	Timber Frame with fibreglass coated sheeting & ceiling beneath	125	m²
Roof	Fibreglass Coated Roof Tiles and Frame	320	m²
Roof and Balcony Balustrade	Steel Balustrade	185	lm
Roof Access Ramps	Steel beams with timber joists, steel frame to ground level, fibreglass coated flooring	34	m²
Ground Floor Internal Partitions	Brickwork	54	lm
First Floor Internal Partitions	Mixture of Brickwork and Timber, framed with various cladding types	51	lm
Bathrooms and Wet Areas	Tile walls & floors including wcs, urinals, basins, papertowel disperses, toilet paper holders, bins etc.	40	m²
Temporary Site Fencing	Weldmesh Fencing with temporary feet	35	lm
False Ceilings	Various (incl hangers)	450	m²
External Stairs	Steel frame and Concrete Treads, steel balustrade, webforge grating	30	m²
Internal Stairs	Steel frame and Concrete Treads, steel balustrade, webforge grating	6	m²
Assorted Furniture & Waste	Buckets, steel grates, kayak, freezer, rope, flag poles, steel roof sheeting, internal shelving, hot water heater, desks, drawers, cupboards, boards, sporting equipment, cleaning products, battery acid, lounge chairs, folding tables, steel cage panels (ground floor), signage boards, 2 x roller doors, chairs, raised floor panels, outdoor sink, loose timber, old BBQ, light fittings, doors, windows pipe work, cabling, GPOS, bar heaters, reception counter, Venetian blinds, kitchen benches, zip boil units, general rubbish, etc.	50	m³
Electrical Distribution Boards	Various	2	Ea

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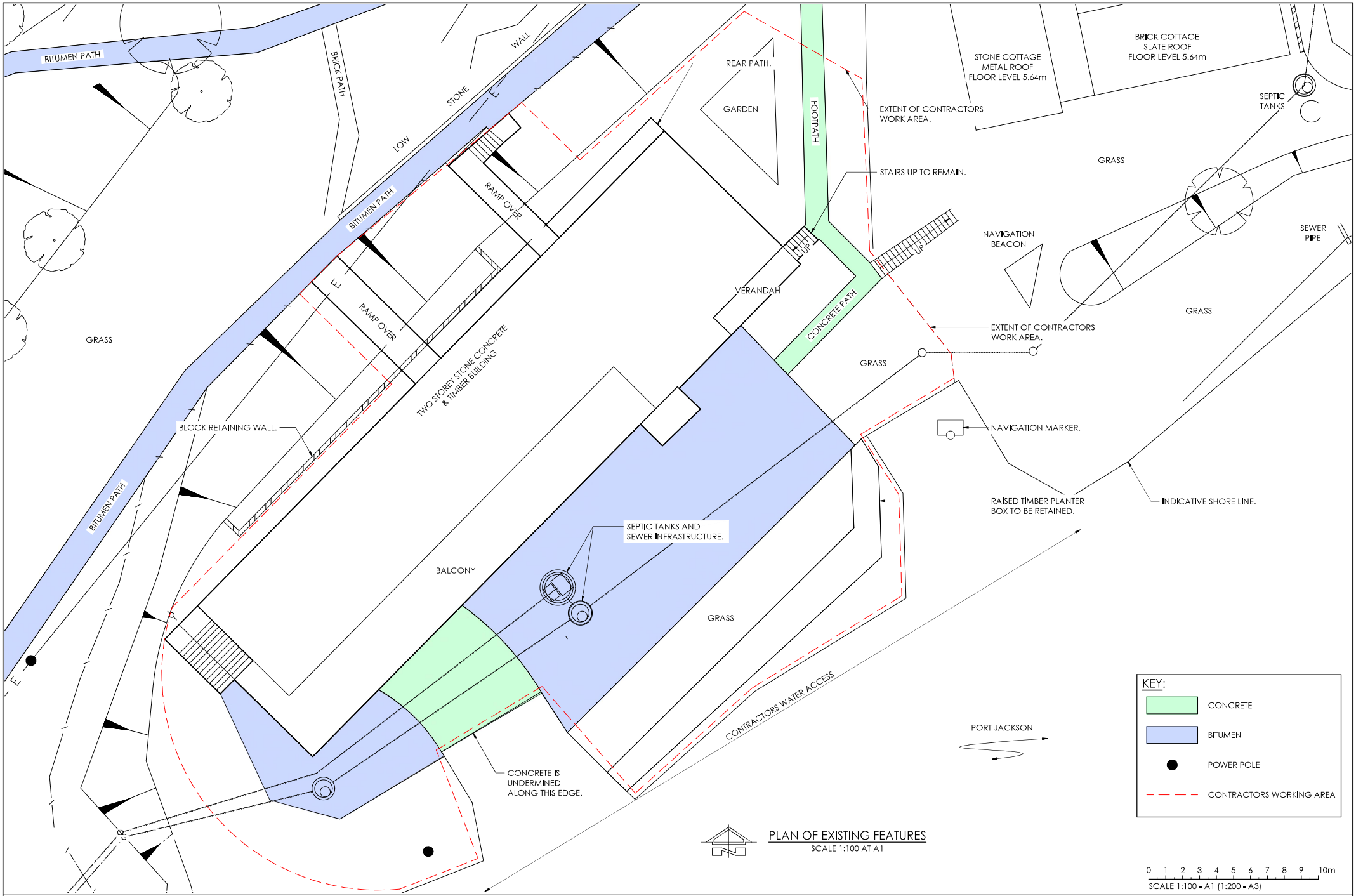
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PORTS EMERGENCY
SERVICES BUILDING No. 45 DEMOLATION
GOAT ISLAND

DRAWING TITLE
GENERAL NOTES SHEET 1

DESIGNED	DRAWN	CHECKED	DATE	SIZE
A.W.L.	P.B.	S.D.B.	JUN 2022	A1

PROJECT No. 0274-00
DRAWING No. 011
ISSUE B



PLAN OF EXISTING FEATURES

SCALE 1:100 AT A1

0 1 2 3 4 5 6 7 8 9 10m

SCALE 1:100 - A1 (1:200 - A3)

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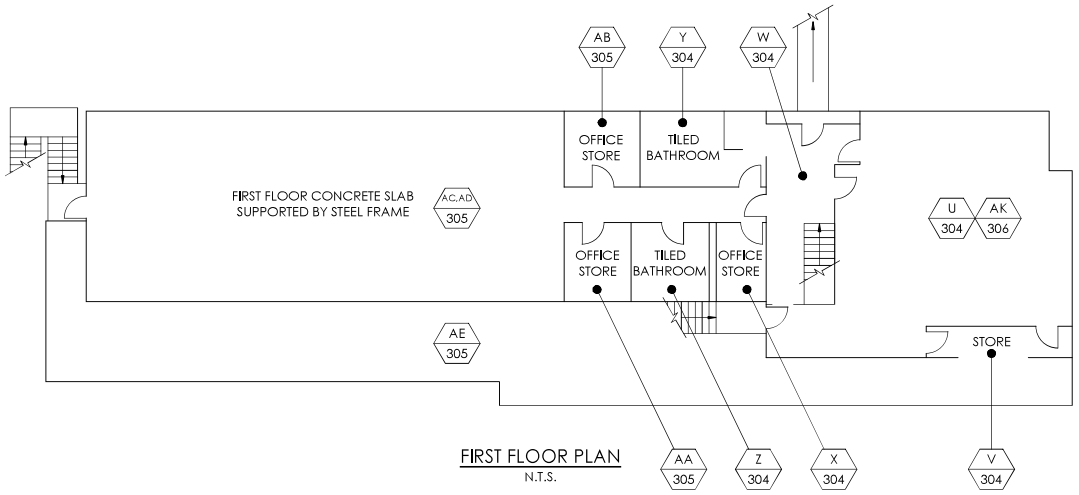
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SERVICES BUILDING No. 45 DEMOLATION
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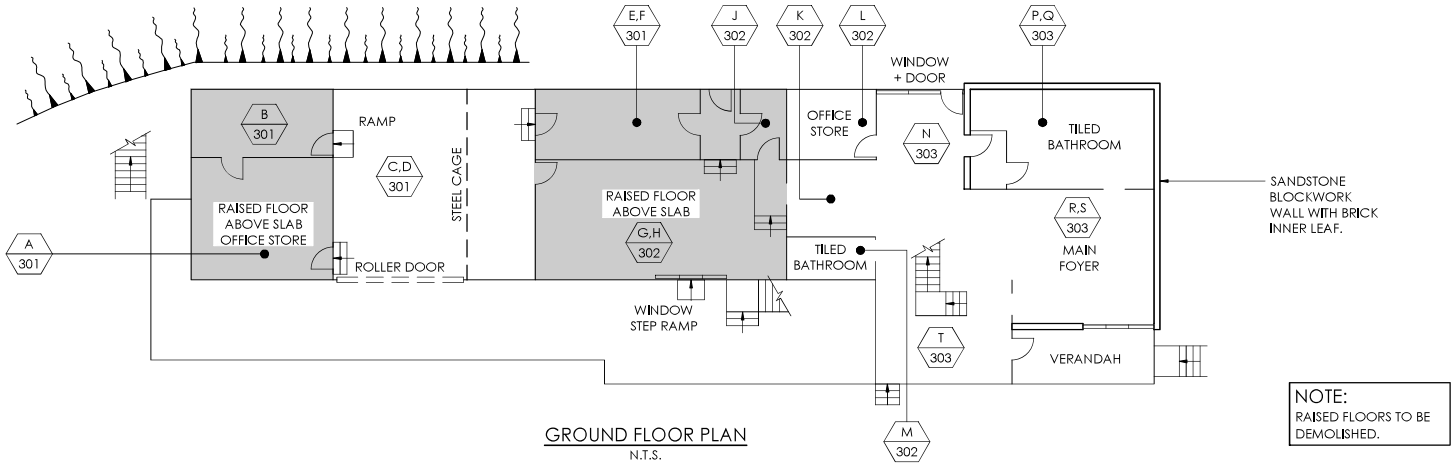
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PLAN OF EXISTING FEATURES & CONTRACTORS WORKING AREA

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A.W.L.	P.B.	S.D.B.	JUN 2022	A1

PROJECT No. 0274-00 | DRAWING No. 101 | ISSUE B



FIRST FLOOR PLAN
N.T.S.



GROUND FLOOR PLAN
N.T.S.

NOTE:
RAISED FLOORS TO BE DEMOLISHED.

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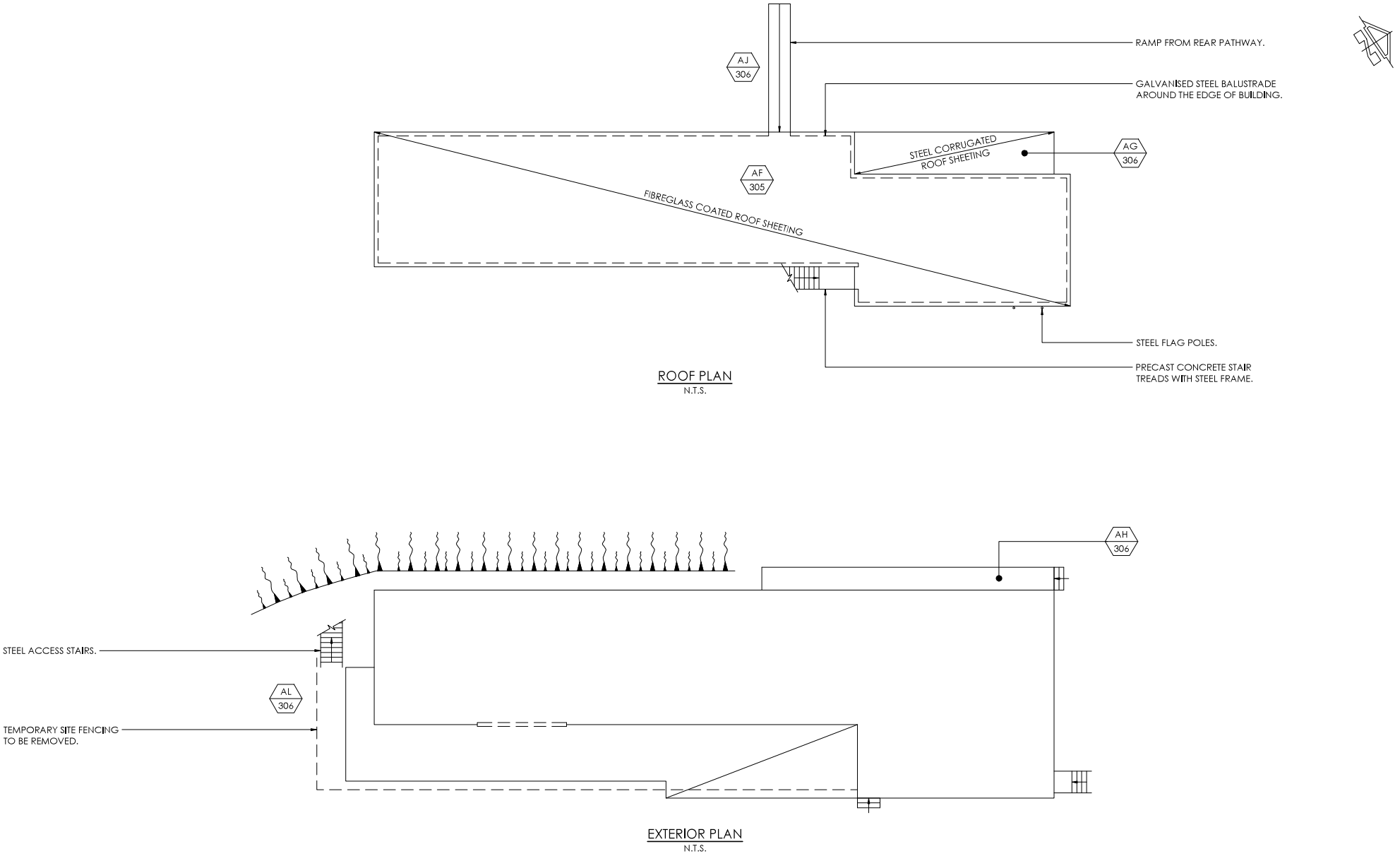
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DRAWING TITLE
GROUND & FIRST FLOOR PLANS

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DRAWING No. 102
ISSUE B



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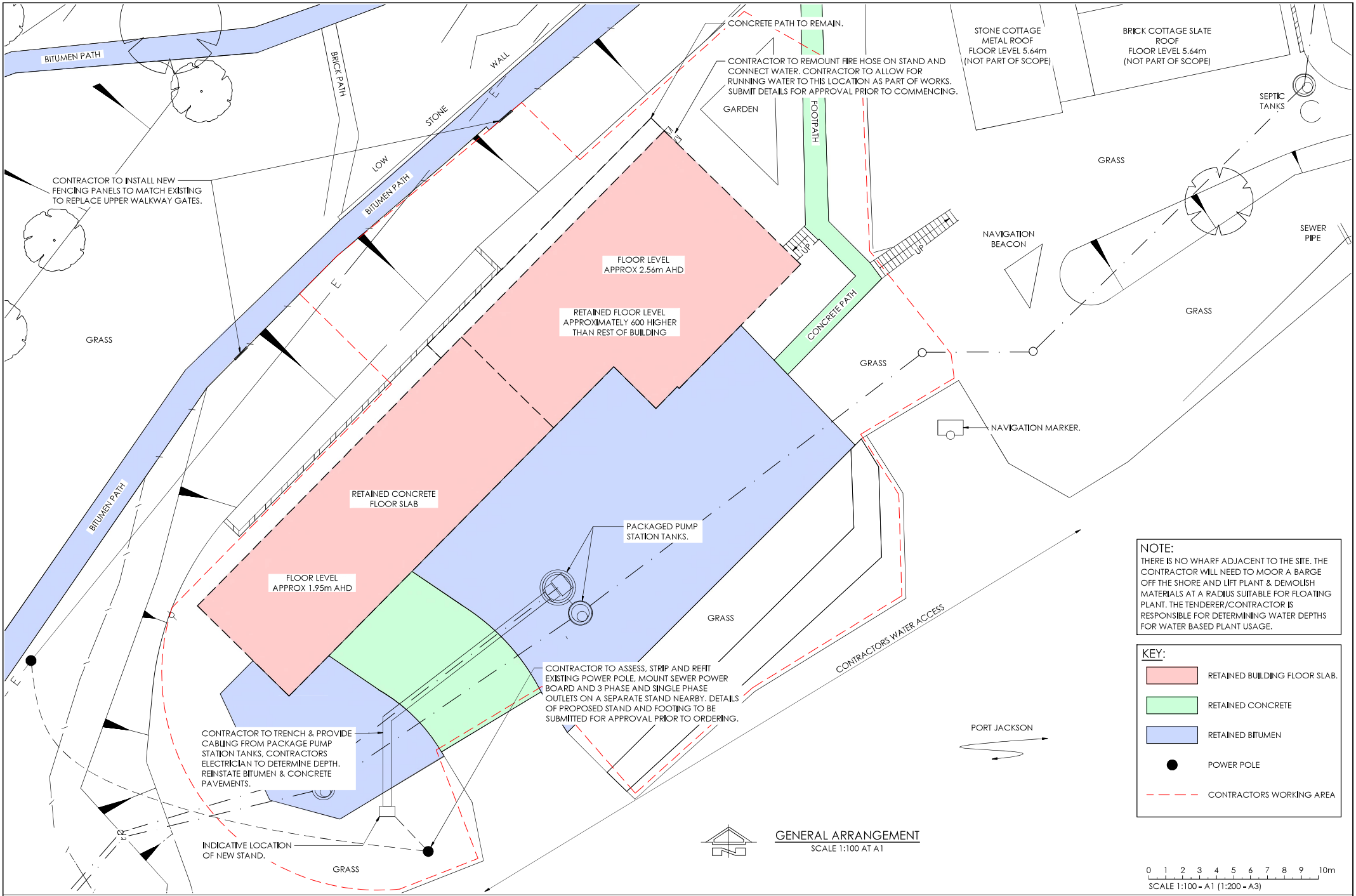
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DRAWING TITLE
ROOF & EXTERIOR PLANS

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A.W.L.	P.B.	S.D.B.	JUN 2022	A1

PROJECT No.	DRAWING No.	ISSUE
0274-00	103	B



GENERAL ARRANGEMENT
SCALE 1:100 AT A1

0 1 2 3 4 5 6 7 8 9 10m
SCALE 1:100 - A1 (1:200 - A3)

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GENERAL ARRANGEMENT

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A.W.L.	P.B.	S.D.B.	JUN 2022	A1	0274-00	201	B



PHOTO IMAGE A - GROUND FLOOR OFFICE SOUTH WEST CORNER
N.T.S.



PHOTO IMAGE B - HALLWAY ADJACANT TO SOUTH WEST OFFICE
N.T.S.



PHOTO IMAGE C - STEEL ROLLER DOORS GROUND FLOOR
N.T.S.



PHOTO IMAGE D - STEEL CAGE AND STAIRS TO GALLEY WORKSHOPS
N.T.S.



PHOTO IMAGE E - GALLEY WORKSHOP PHOTO 1
N.T.S.

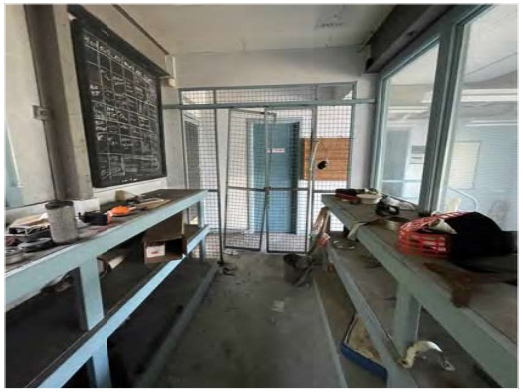


PHOTO IMAGE F - GALLEY WORKSHOP PHOTO 2
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PHOTO DETAILS
SHEET 1

PROJECT No. 0274-00
DRAWING No. 301
ISSUE B



PHOTO IMAGE G - GROUND FLOOR ENTRANCE PHOTO 1
N.T.S.



PHOTO IMAGE H - GROUND FLOOR ENTRANCE PHOTO 2
N.T.S.



PHOTO IMAGE J - STORE ROOM
N.T.S.



PHOTO IMAGE K - MAIN FOYER 1
N.T.S.



PHOTO IMAGE L - GROUND FLOOR STORE WITH WATER HEATER
N.T.S.



PHOTO IMAGE M - GROUND FLOOR EASTERN BATHROOM
N.T.S.

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PHOTO DETAILS
SHEET 2

PROJECT No. 0274-00
DRAWING No. 302
ISSUE B



PHOTO IMAGE N - ENTRY TO NORTHERN GROUND FLOOR BATHROOM
N.T.S.



PHOTO IMAGE P - NORTHERN GROUND FLOOR BATHROOM PHOTO 1
N.T.S.



PHOTO IMAGE Q - NORTHERN GROUND FLOOR BATHROOM PHOTO 2
N.T.S.



PHOTO IMAGE R - MAIN FOYER AND FURNITURE PHOTO 1
N.T.S.



PHOTO IMAGE S - MAIN FOYER AND FURNITURE PHOTO 2
N.T.S.



PHOTO IMAGE T - PRECAST CONCRETE STAIR TREADS WITH STEEL FRAME TO FIRST FLOOR FROM FOYER
N.T.S.

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DRAWING TITLE
PHOTO DETAILS
SHEET 3

PROJECT No.	DRAWING No.	ISSUE
0274-00	303	B



PHOTO IMAGE U - FIRST FLOOR NORTHERN HALL WITH KITCHEN ON SIDE WALL AND 2 FALSE CEILINGS
N.T.S.

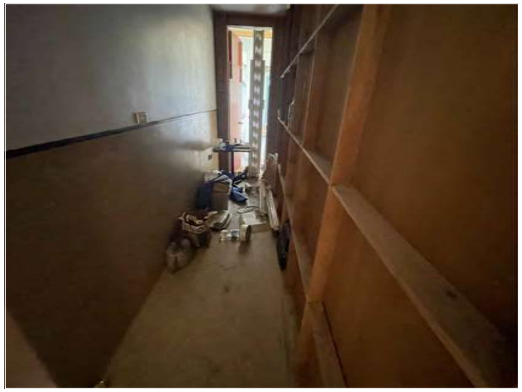


PHOTO IMAGE V - EASTERN FIRST FLOOR STORE
N.T.S.



PHOTO IMAGE W - FIRST FLOOR EXTERNAL ACCESS
N.T.S.



PHOTO IMAGE X - FIRST FLOOR OFFICE/STORE
N.T.S.



PHOTO IMAGE Y - FIRST FLOOR WESTERN BATHROOM
N.T.S.



PHOTO IMAGE Z - FIRST FLOOR EASTERN BATHROOM
N.T.S.

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PHOTO DETAILS
SHEET 4

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PHOTO IMAGE AA - FIRST FLOOR OFFICE
N.T.S.



PHOTO IMAGE AB - FIRST FLOOR OFFICE WITH CHEST FREEZER
N.T.S.



PHOTO IMAGE AC - FIRST FLOOR HALL PHOTO 1
N.T.S.



PHOTO IMAGE AD - FIRST FLOOR HALL PHOTO 2
N.T.S.



PHOTO IMAGE AE - EXTERNAL BALCONY
N.T.S.



PHOTO IMAGE AF - ROOF SPACE AND BALSTRADES
N.T.S.

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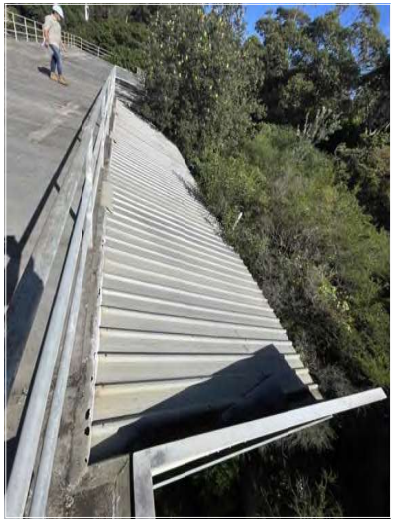


PHOTO IMAGE AG - CORRUGATED ROOF SHEETING
N.T.S.



PHOTO IMAGE AH - REAR CONCRETE PATIO
N.T.S.



PHOTO IMAGE AJ - ROOF ACCESS RAMP
N.T.S.



PHOTO IMAGE AK - MULTI LAYER CEILING IN FIRST FLOOR NORTHERN HALL
N.T.S.



PHOTO IMAGE AL - SOUTHERN STEEL ACCESS STAIRS
N.T.S.

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PROJECT No. 0274-00
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ISSUE B

Appendix B – Compliance Hazardous Materials Inspection and Risk Assessment

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COMPLIANCE HAZARDOUS MATERIAL INSPECTION AND RISK ASSESSMENT

MAY 2022

Report Reference:

J049016

Client:

C120933 NSW Department of Planning Industry & Environment

Address:

MeMel Goat Island
Port Jackson
NSW
2477

Contents

Glossary of Terms / Acronyms 4
Introduction 5
Scope of Works 5
Site Description 6
Site Asbestos Risk Profile 7
Site Asbestos Control Priority Profile 8
Summary of Identified Items 9
Items Requiring Remediation 10
Recommendations 11
How to Use this Register 12
Hazardous Materials Register 25
Areas not Accessed 81
Register Item Details 119
Methodology 196
Asbestos Material Risk Assessment 198
Asbestos Disturbance Risk Assessment 199
Asbestos Control Priority Assessment 200
Limitations 201
APPENDIX - Sample Analysis Results and Plans 203

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Document Control

Document Quality Management Details		
Report Name:	Compliance Hazardous Materials Inspection and Risk Assessment	
Site Details:	MeMel Goat Island, Port Jackson, NSW 2477	
Property ID:	N/A	
Project Number:	J049016 V1	
Client Name:	C120933 NSW Department of Planning Industry & Environment	
Signatures:	Prepared By: Dennis Tam  Consultant LAA: NSW001330 30 Jun 2022	Reviewed and Authorised By: Leigh Rampley  Principal Consultant LAA: NSW001197 30 Jun 2022

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Glossary of Terms / Acronyms

AC	*Asbestos Cement*
ACM	*Asbestos-containing Material*
Asbestos Insulation Board (AIB)	*Low Density Board (LDB)*
Assumed	*Item status is based on a visual assessment*
Class A Unrestricted Licensed Removalist	*Can remove any amount or quantity of friable, non–friable asbestos and asbestos-containing dust*
Class B Restricted Licensed Removalist	*Can remove any amount or quantity of non-friable asbestos and any amount of asbestos–containing dust associated with the removal of non–friable asbestos*
Controlled Conditions	*Use of PPE, RPE & Appropriate Controls*
Friable Asbestos	*ACM in powder form, or able to be crumbled, pulverised, or reduced to a powder by hand pressure when it is dry*
Fully Controlled Conditions	*Within an Enclosure Under Negative Pressure*
LAA	*Licenced Asbestos Assessor*
LARC	*Licenced Asbestos Removal Contractor*
Non–Friable Asbestos	*Material containing asbestos fibres reinforced with a bonding compound*
ODS	*Ozone Depleting Substance*
PCB	*Polychlorinated Biphenyls*
Strongly Assumed	*Item is similar in appearance to another already sampled item and therefore its item status*
SMF	*Synthetic Mineral Fibre*

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Introduction

This report presents the findings of a Hazardous Materials Risk Assessment conducted for C120933 NSW Department of Planning Industry & Environment of the site MeMel Goat Island, Port Jackson, NSW. The site Hazardous Materials Risk Assessment was undertaken by Dennis Tam on 18 May 2022 to 26 May 2022.

The objective of the assessment was to identify and assess the risks associated with the suspected hazardous materials at the site and develop an Hazardous Materials Register.

This report was performed in accordance with:

- Work Health and Safety Regulation 2017 (NSW)
- Code of Practice How to manage and control asbestos in the workplace, SafeWork NSW, 2019
- AS/NZS 4361.2:2017 Guide to hazardous paint management - Part 2: Lead paint in residential, public and commercial buildings, Standards Australia/New Zealand, 2017
- Ozone Protection and Synthetic Greenhouse Gas Management Regulations, Australian Government, 1995
- The Australian and New Zealand Environment and Conservation Council (ANZECC) Polychlorinated Biphenyls Management Plan, Revised Edition 2003.
- Code of Practice for the safe use of Synthetic Mineral Fibres, NOHSC, 2006 (1990)
- National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1 - Guideline on Investigation Levels for Soil and Groundwater (2011)

Scope of Works

The scope of works for this project was as follows:

- Desktop review of previous records including inspections, risk assessments and laboratory ID reports and update existing register (Noel Arnold & Associates Report ref: SD1025 : 47829, Dated May 2006). Conduct a non-destructive compliance inspection ASB/HAZ and Risk Assessment of the site and all buildings.
- Inspect representative and accessible areas of the site to identify the following hazardous materials:
  - Asbestos
  - Lead Paint
  - Lead Dust
  - Ozone Depleting Substance
  - Polychlorinated Biphenyls
  - Synthetic Mineral Fibre
- Identify the likelihood of hazardous materials in inaccessible areas
- Identify the types of hazardous materials, their location, friability, extent, condition and disturbance potential
- Assess the risks posed by the hazardous materials
- Collect samples of suspected asbestos containing materials
- Collection of representative dust samples for analysis of lead concentration (reported as mg/kg)
- Collection of paint chip samples for analysis of percentage lead content (reported as % w/w)
- Take photographs of suspected hazardous materials
- Compile an Hazardous Materials Register for the site
- Recommend control measures and actions necessary to manage any hazardous material related risks

Refer to *Methodology* section of report for full details.

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Site Description

The site consists of 37 building/s.

Building Reference	Central Precinct - Recreational Hall Area
Building Description	Reserve Land
Construction Type	Earth Land
Est. Building Construction Date	N/A
Number of Levels	1
Est. Total Area Surveyed (m²)	500

Building Reference	Central Precinct - Tennis Court (former)
Building Description	Reserve Land
Construction Type	Earth Land
Est. Building Construction Date	N/A
Number of Levels	1
Est. Total Area Surveyed (m²)	100

Building Reference	Central Precinct - Throughout
Building Description	Reserve Land
Construction Type	Earth Land
Est. Building Construction Date	N/A
Number of Levels	1
Est. Total Area Surveyed (m²)	2000

Building Reference	Hammerhead Crane
Building Description	Crane
Construction Type	Metal structure
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	20

Building Reference	Magazine Precinct - Amenities Block
Building Description	Workshop
Construction Type	Brick wall, concrete floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	2
Est. Total Area Surveyed (m²)	1000

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Building Reference	Magazine Precinct - Boat Shed
Building Description	Garage
Construction Type	Brick wall, stone floor and metal roof
Est. Building Construction Date	1940s
Number of Levels	1
Est. Total Area Surveyed (m²)	20

Building Reference	Magazine Precinct - Colonial Barracks
Building Description	Museum
Construction Type	Sandstone wall, stone floor and tile roof
Est. Building Construction Date	1920s
Number of Levels	1
Est. Total Area Surveyed (m²)	300

Building Reference	Magazine Precinct - Colonial Magazine
Building Description	Warehouse
Construction Type	Sandstone and metal wall, concrete floor and metal roof
Est. Building Construction Date	1836
Number of Levels	1
Est. Total Area Surveyed (m²)	400

Building Reference	Magazine Precinct - Kitchen
Building Description	Kitchen
Construction Type	Brick wall, timber floor and tile roof
Est. Building Construction Date	1920s
Number of Levels	1
Est. Total Area Surveyed (m²)	150

Building Reference	Magazine Precinct - Office and Amenities Building
Building Description	Office
Construction Type	Brick wall, concrete floor and tile roof
Est. Building Construction Date	1940s
Number of Levels	1
Est. Total Area Surveyed (m²)	150

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Building Reference	Magazine Precinct - Queens Magazine
Building Description	Warehouse
Construction Type	Snadstone wall, stone floor and tile roof
Est. Building Construction Date	1830s
Number of Levels	1
Est. Total Area Surveyed (m²)	500

Building Reference	Magazine Precinct - Southern Addition to Queens Magazine
Building Description	Warehouse
Construction Type	Metal wall, concrete floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	200

Building Reference	Magazine Precinct - Stores Building
Building Description	Storage
Construction Type	Sandstone wall, timber floor, and metal roof
Est. Building Construction Date	1836
Number of Levels	1
Est. Total Area Surveyed (m²)	100

Building Reference	Magazine Precinct - Substation
Building Description	Power Station
Construction Type	Brick wall, concret floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	30

Building Reference	Magazine Precinct - The Cooperage
Building Description	Warehouse
Construction Type	Sandstone wall, timber floor and tile roof
Est. Building Construction Date	1836
Number of Levels	1
Est. Total Area Surveyed (m²)	100

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Building Reference	Magazine Precinct - Timber Store
Building Description	Storage
Construction Type	Timber wall, timber floor and metal roof
Est. Building Construction Date	1940s
Number of Levels	1
Est. Total Area Surveyed (m²)	100

Building Reference	Magazine Precintct - Scow Shed
Building Description	Warehouse
Construction Type	Metal roof , concrete floor with timber beam
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	500

Building Reference	North Depot Precinct - Dredge Office
Building Description	Office
Construction Type	Timber and cement sheet wall, timber floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	200

Building Reference	North Depot Precinct - Ferry Wharf
Building Description	Storage
Construction Type	Timber wall, timber floor and tile roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	5

Building Reference	North Depot Precinct - Fire Fighting Buildings
Building Description	Workshop
Construction Type	Metal wall with timber beams, concrete floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	500

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Building Reference	North Depot Precinct - Gear Shed
Building Description	Storage
Construction Type	Timbr wall, concrete floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	30

Building Reference	North Depot Precinct - Small Boat Enclosure
Building Description	Outpost
Construction Type	Cement sheeting wall, timber floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	20

Building Reference	Residential Precinct - Cottage No.1
Building Description	Residence
Construction Type	Brick wall, timber floor and tile roof
Est. Building Construction Date	1940s
Number of Levels	1
Est. Total Area Surveyed (m²)	150

Building Reference	Residential Precinct - Cottage No.2
Building Description	Residence
Construction Type	Brick wall, timber floor and tile roof
Est. Building Construction Date	1940s
Number of Levels	1
Est. Total Area Surveyed (m²)	150

Building Reference	Residential Precinct - Cottage No.3
Building Description	Residence
Construction Type	Brick wall, timber floor and tile roof
Est. Building Construction Date	1940s
Number of Levels	1
Est. Total Area Surveyed (m²)	150

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Building Reference	Residential Precinct - Cottage No.4
Building Description	Residence
Construction Type	Brick wall, timber floor and tile roof
Est. Building Construction Date	1940s
Number of Levels	1
Est. Total Area Surveyed (m²)	150

Building Reference	Residential Precinct - Harbour Master's Residence
Building Description	Residence
Construction Type	Brick and timber wall, timber floor and tile roof
Est. Building Construction Date	1940s
Number of Levels	2
Est. Total Area Surveyed (m²)	300

Building Reference	Shipyard Precinct - 500t Winch House
Building Description	Mechanical Roo
Construction Type	Brick wall, concrete floor and metal roof
Est. Building Construction Date	1970s
Number of Levels	1
Est. Total Area Surveyed (m²)	50

Building Reference	Shipyard Precinct - Addition to Ship Repair Workshop
Building Description	Workshop (Leased Areas)
Construction Type	Timber wall, concrete floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	500

Building Reference	Shipyard Precinct - Repair Workshop
Building Description	Workshop
Construction Type	Timber wall, concrete floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	250

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Building Reference	Shipyard Precinct - Ship Repair Workshop
Building Description	Workshop
Construction Type	Metal wall, concrete floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	2
Est. Total Area Surveyed (m²)	1000

Building Reference	Shipyard Precinct - Slipway Workshop Building
Building Description	Workshop
Construction Type	Timber wall, Concrete floor and metal roof
Est. Building Construction Date	1960s
Number of Levels	1
Est. Total Area Surveyed (m²)	600

Building Reference	Shipyard Precinct - Winch House
Building Description	Mechincal Room
Construction Type	Timber wall, comcrete floor and metal roof
Est. Building Construction Date	1980s
Number of Levels	1
Est. Total Area Surveyed (m²)	50

Building Reference	South Depot Precinct - Port Emergancy Services Building
Building Description	Office
Construction Type	Sandstone, timber and cement sheeting wall, concrete and timber floor, and concrete roof
Est. Building Construction Date	1960s
Number of Levels	2
Est. Total Area Surveyed (m²)	600

Building Reference	Water Police Precinct - 1912 Barracks
Building Description	Residence
Construction Type	Brick wall, concrete floor and tiles roof
Est. Building Construction Date	1920s
Number of Levels	1
Est. Total Area Surveyed (m²)	200

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Building Reference	Water Police Precinct - The Cottage
Building Description	Residence
Construction Type	Sandstone wall, concrete floor and tile roof
Est. Building Construction Date	1920s
Number of Levels	1
Est. Total Area Surveyed (m²)	50

Building Reference	Water Police Precinct - Water Police Station
Building Description	Police Station
Construction Type	Sandstone wall, timber floor and tiles roof
Est. Building Construction Date	1920
Number of Levels	1
Est. Total Area Surveyed (m²)	100

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Site Asbestos Risk Profile

The following table provides a summary of the Asbestos Risk Assessment for the site; item–specific findings are presented in the Asbestos Materials Register.

Area	Number of Items by Risk Rating			
	High	Medium	Low	Very Low
Central Precinct - Throughout - Ground Floor	0	0	0	1
Magazine Precinct - Amenities - 1st Floor	0	0	4	0
Magazine Precinct - Amenities - Ground Floor	0	0	11	1
Magazine Precinct - Boat Shed - Ground Floor	0	0	1	0
Magazine Precinct - Colonial B - Ground Floor	0	0	1	0
Magazine Precinct - Colonial M - Ground Floor	0	0	0	1
Magazine Precinct - Kitchen - Ground Floor	0	0	1	4
Magazine Precinct - Office and - Ground Floor	0	0	10	1
Magazine Precinct - Queens Mag - Ground Floor	0	0	0	1
Magazine Precinct - Southern A - Ground Floor	0	1	1	3
Magazine Precinct - Substation - Ground Floor	0	0	2	2
Magazine Precinct - The Cooper - Ground Floor	0	0	0	1
Magazine Precintct - Scow Shed - Ground Floor	0	0	0	1
North Depot Precinct - Dredge - Ground Floor	0	0	5	2
North Depot Precinct - Fire Fi - Ground Floor	1	4	1	1
North Depot Precinct - Small B - Ground Floor	0	0	2	0
Residential Precinct - Cottage - Ground Floor	0	0	1	0
Residential Precinct - Cottage - Ground Floor	0	0	3	1
Residential Precinct - Cottage - Ground Floor	0	0	2	2
Residential Precinct - Harbour - Ground Floor	0	0	0	1
Shipyard Precinct - 500t Winch - Ground Floor	0	0	1	1
Shipyard Precinct - Addition t - Ground Floor	0	0	1	1
Shipyard Precinct - Ship Repai - Ground Floor	0	0	1	1
Shipyard Precinct - Slipway Wo - Ground Floor	0	0	0	1
South Depot Precinct - Port Em - 1st Floor	0	0	1	1
South Depot Precinct - Port Em - Ground Floor	0	0	0	2
Water Police Precinct - 1912 B - Ground Floor	0	0	1	1
Water Police Precinct - The Co - Ground Floor	0	0	1	0
Water Police Precinct - Water - Ground Floor	0	0	0	1
TOTAL	**1**	**5**	**53**	**34**

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Site Asbestos Control Priority Profile

The following table provides a summary of the Asbestos Control Priority Risk Assessment for the site; item-specific findings are presented in the Asbestos Materials Register.

Area	Number of Items by Priority Risk Rating			
	P1	P2	P3	P4
Central Precinct - Throughout - Ground Floor	0	0	0	1
Magazine Precinct - Amenities - 1st Floor	0	0	3	1
Magazine Precinct - Amenities - Ground Floor	0	0	11	1
Magazine Precinct - Boat Shed - Ground Floor	0	0	0	1
Magazine Precinct - Colonial B - Ground Floor	0	0	1	0
Magazine Precinct - Colonial M - Ground Floor	0	0	0	1
Magazine Precinct - Kitchen - Ground Floor	0	0	2	3
Magazine Precinct - Office and - Ground Floor	0	0	9	2
Magazine Precinct - Queens Mag - Ground Floor	0	0	0	1
Magazine Precinct - Southern A - Ground Floor	0	1	2	2
Magazine Precinct - Substation - Ground Floor	0	0	0	4
Magazine Precinct - The Cooper - Ground Floor	0	0	0	1
Magazine Precintct - Scow Shed - Ground Floor	0	0	0	1
North Depot Precinct - Dredge - Ground Floor	0	0	4	3
North Depot Precinct - Fire Fi - Ground Floor	0	3	3	1
North Depot Precinct - Small B - Ground Floor	0	1	1	0
Residential Precinct - Cottage - Ground Floor	0	0	1	0
Residential Precinct - Cottage - Ground Floor	0	0	3	1
Residential Precinct - Cottage - Ground Floor	0	0	1	3
Residential Precinct - Cottage - Ground Floor	0	0	0	4
Residential Precinct - Harbour - Ground Floor	0	0	0	1
Shipyard Precinct - 500t Winch - Ground Floor	0	0	1	1
Shipyard Precinct - Addition t - Ground Floor	0	0	1	1
Shipyard Precinct - Ship Repai - Ground Floor	0	0	0	2
Shipyard Precinct - Slipway Wo - Ground Floor	0	0	0	1
South Depot Precinct - Port Em - 1st Floor	0	0	2	0
South Depot Precinct - Port Em - Ground Floor	0	0	0	2
Water Police Precinct - 1912 B - Ground Floor	0	0	0	2
Water Police Precinct - The Co - Ground Floor	0	0	1	0
Water Police Precinct - Water - Ground Floor	0	0	0	1
TOTAL	**0**	**5**	**46**	**42**

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Summary of Identified Items

The following table provides a general overview of the types of hazardous materials identified on site; specific findings are presented in the Hazardous Materials Register.

Area	Asbestos		Hazardous Materials				
	Friable	Non Friable	Lead Dust	Lead Paint	ODS	PCB	SMF
Central Precinct - Tennis Cour - Ground Floor	No	No	No	No	No	No	No
Central Precinct - Throughout - Ground Floor	No	**YES**	No	No	No	No	No
Hammerhead Crane - Ground Floor	No	No	No	No	No	No	No
Magazine Precinct - Amenities - 1st Floor	**YES**	**YES**	**YES**	**YES**	No	**YES**	**YES**
Magazine Precinct - Amenities - Ground Floor	**YES**	**YES**	No	No	No	**YES**	**YES**
Magazine Precinct - Boat Shed - Ground Floor	No	**YES**	No	**YES**	No	No	No
Magazine Precinct - Colonial B - Ground Floor	**YES**	No	No	**YES**	No	No	No
Magazine Precinct - Colonial M - Ground Floor	No	**YES**	No	No	No	No	No
Magazine Precinct - Kitchen - Ground Floor	No	**YES**	No	**YES**	No	No	No
Magazine Precinct - Office and - Ground Floor	No	**YES**	No	**YES**	**YES**	**YES**	**YES**
Magazine Precinct - Queens Mag - Ground Floor	No	**YES**	No	**YES**	No	**YES**	**YES**
Magazine Precinct - Southern A - Ground Floor	No	**YES**	No	No	No	**YES**	No
Magazine Precinct - Stores Bui - Ground Floor	No	No	No	No	No	**YES**	No
Magazine Precinct - Substation - Ground Floor	No	**YES**	No	**YES**	No	No	No
Magazine Precinct - The Cooper - Ground Floor	No	**YES**	No	**YES**	No	**YES**	No
Magazine Precinct - Timber Sto - Ground Floor	No	No	No	**YES**	No	No	No
Magazine Precintct - Scow Shed - Ground Floor	No	**YES**	No	No	No	No	No
North Depot Precinct - Dredge - Ground Floor	No	**YES**	No	**YES**	No	No	**YES**
North Depot Precinct - Ferry W - Ground Floor	No	No	No	**YES**	No	No	No
North Depot Precinct - Fire Fi - Ground Floor	**YES**	**YES**	No	**YES**	No	**YES**	No
North Depot Precinct - Gear Sh - Ground Floor	No	No	No	No	No	No	No
North Depot Precinct - Small B - Ground Floor	No	**YES**	No	**YES**	No	**YES**	No
Residential Precinct - Cottage - Ground Floor	No	**YES**	No	**YES**	No	No	**YES**
Residential Precinct - Cottage - Ground Floor	No	**YES**	No	**YES**	No	No	**YES**
Residential Precinct - Cottage - Ground Floor	No	**YES**	No	**YES**	No	No	**YES**
Residential Precinct - Cottage - Ground Floor	No	**YES**	No	No	No	No	**YES**
Residential Precinct - Harbour - 1st Floor	No	No	No	**YES**	No	No	No
Residential Precinct - Harbour - Ground Floor	No	**YES**	No	**YES**	No	**YES**	**YES**
Shipyard Precinct - 500t Winch - Ground Floor	No	**YES**	No	No	No	No	No
Shipyard Precinct - Addition t - Ground Floor	No	**YES**	No	**YES**	**YES**	**YES**	No

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Area	Asbestos		Hazardous Materials				
	Friable	Non Friable	Lead Dust	Lead Paint	ODS	PCB	SMF
Shipyard Precinct - Repair Wor - Ground Floor	No	No	No	No	**YES**	**YES**	**YES**
Shipyard Precinct - Ship Repai - Ground Floor	**YES**	**YES**	No	**YES**	No	**YES**	**YES**
Shipyard Precinct - Ship Repai - Mezzanine	No	No	No	No	**YES**	No	No
Shipyard Precinct - Slipway Wo - Ground Floor	No	**YES**	No	No	**YES**	**YES**	No
Shipyard Precinct - Winch Hous - Ground Floor	No	No	No	**YES**	No	No	No
South Depot Precinct - Port Em - 1st Floor	No	**YES**	No	**YES**	No	**YES**	**YES**
South Depot Precinct - Port Em - Ground Floor	No	**YES**	No	**YES**	No	**YES**	**YES**
Water Police Precinct - 1912 B - Ground Floor	No	**YES**	No	**YES**	No	**YES**	**YES**
Water Police Precinct - The Co - Ground Floor	No	**YES**	No	**YES**	No	No	**YES**
Water Police Precinct - Water - Ground Floor	No	**YES**	No	**YES**	No	No	No

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Items Requiring Remediation

The following items were found to be either damaged or in a condition which require control measures to reduce the risk of exposure to asbestos fibres.

Item No.	Hazard Type	Item Location and Description	Recommendations
Item 146	Lead Paint	Magazine Precinct - Amenities Block, 1st Floor, Large Room, Throughout, Ceiling - Paint - White	Remove Under Suitably Controlled Conditions
Item 160	Lead Dust	Magazine Precinct - Amenities Block, 1st Floor, Plant Room, Throughout, Surface - Dust	Restrict Access & Remove Under Suitably Controlled Conditions
Item 71	Lead Paint	Magazine Precinct - Kitchen, Ground Floor, Exterior, Throughout, Wall - Paint - Yellow	Remove Under Suitably Controlled Conditions
Item 72	Lead Paint	Magazine Precinct - Kitchen, Ground Floor, Exterior, Entrance, Floor and Steps - Paint - Green	Encapsulate / Repair & Manage In Situ
Item 75	Lead Paint	Magazine Precinct - Kitchen, Ground Floor, Kitchen, Throughout, Wall - Paint - Pale Green	Encapsulate / Repair & Manage In Situ
Item 175	Lead Paint	Magazine Precinct - Office and Amenities Building, Ground Floor, Exterior, Perimeter - Throughout, Timber Work - Paint - White	Encapsulate / Repair & Manage In Situ
Item 188	Lead Paint	Magazine Precinct - Office and Amenities Building, Ground Floor, Toilets, Throughout, Ceiling -Paint- White	Restrict Access & Remove Under Suitably Controlled Conditions
Item 98	Lead Paint	Magazine Precinct - Queens Magazine, Ground Floor, Storage Chamber, Throughout, Wall - Paint - White and Cream	Restrict Access & Remove Under Suitably Controlled Conditions
Item 89	Lead Paint	Magazine Precinct - Substation, Ground Floor, Exterior, Throughout, Window and Door - Paint - Green	Encapsulate / Repair & Manage In Situ
Item 85	Asbestos	Magazine Precinct - Substation, Ground Floor, Substation, On Ground, Electrical Distribution Board - Bituminous Electrical Panel - Live electrical hazard	Remove Under Suitably Controlled Conditions
Item 219	Lead Paint	Magazine Precinct - The Cooperage, Ground Floor, East Machinery Room, Throughout, Wall - Paint - Silver	Encapsulate / Repair & Manage In Situ
Item 229	Lead Paint	Magazine Precinct - Timber Store, Ground Floor, Exterior, Throughout, Door - Paint - Red	Remove Under Suitably Controlled Conditions
Item 2	Lead Paint	North Depot Precinct - Dredge Office, Ground Floor, Exterior, Toilet Block - Around Roof, Timber Work - Paint - White	Remove Under Suitably Controlled Conditions
Item 368	Lead Paint	North Depot Precinct - Ferry Wharf, Ground Floor, Exterior, Throughout, Timber Work - Paint - White - Assumed positive - No safe access on walk path.	Encapsulate / Repair & Manage In Situ
Item 52	Lead Paint	North Depot Precinct - Fire Fighting Buildings, Ground Floor, Exterior, Throughout, Timber and Metal Work - Paint - Pale Green	Encapsulate / Repair & Manage In Situ
Item 56	Asbestos	North Depot Precinct - Fire Fighting Buildings, Ground Floor, North Store Rooms, Throughout, Wall - Fibre Cement Sheeting on Wall Nails	Restrict Access & Remove Under Suitably Controlled Conditions

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Item No.	Hazard Type	Item Location and Description	Recommendations
Item 57	Asbestos	North Depot Precinct - Fire Fighting Buildings, Ground Floor, North Store Rooms, Throughout, Ceiling - Fibre Cement Sheeting on Nails	Restrict Access & Remove Under Suitably Controlled Conditions
Item 58	Asbestos	North Depot Precinct - Fire Fighting Buildings, Ground Floor, North Store Rooms, Throughout, On Ground - Dust	Restrict Access & Remove Under Suitably Controlled Conditions
Item 59	Asbestos	North Depot Precinct - Fire Fighting Buildings, Ground Floor, North Store Rooms, Throughout - Wall, All Timber Structure Surface - Debris	Restrict Access & Remove Under Suitably Controlled Conditions
Item 282	Lead Paint	North Depot Precinct - Small Boat Enclosure, Ground Floor, Exterior, Throughout, Timber Work - Paint - Beige	Remove Under Suitably Controlled Conditions
Item 233	Lead Paint	Residential Precinct - Cottage No.1, Ground Floor, Kitchen, Throughout, Wall - Paint - White	Encapsulate / Repair & Manage In Situ
Item 270	Lead Paint	Residential Precinct - Cottage No.2, Ground Floor, Bedrooms, Throughout, Wall - Paint - White	Encapsulate / Repair & Manage In Situ
Item 269	Lead Paint	Residential Precinct - Cottage No.2, Ground Floor, Living Room, Throughout, Wall - Paint - White	Encapsulate / Repair & Manage In Situ
Item 267	Lead Paint	Residential Precinct - Cottage No.2, Ground Floor, Rear Storeroom, Throughout, Wall - Paint - White	Restrict Access & Remove Under Suitably Controlled Conditions
Item 260	Lead Paint	Residential Precinct - Cottage No.3, Ground Floor, Bedrooms, Throughout, Wall - Paint - Beige	Restrict Access & Remove Under Suitably Controlled Conditions
Item 264	Lead Paint	Residential Precinct - Cottage No.3, Ground Floor, Dinning Room, Throughout, Wall - Paint - Beige	Encapsulate / Repair & Manage In Situ
Item 258	Lead Paint	Residential Precinct - Cottage No.3, Ground Floor, Kitchen, Throughout, Wall - Paint - Beige	Encapsulate / Repair & Manage In Situ
Item 259	Lead Paint	Residential Precinct - Cottage No.3, Ground Floor, Living Room, Throughout, Wall - Paint - Beige	Restrict Access & Remove Under Suitably Controlled Conditions
Item 263	Lead Paint	Residential Precinct - Cottage No.3, Ground Floor, Verandah, Throughout, Timber Work - Paint - Beige	Encapsulate / Repair & Manage In Situ
Item 273	Lead Paint	Residential Precinct - Harbour Master's Residence, Ground Floor, Exterior, Throughout, Timber Work - Paint - Green Upper Layer Paint and Beige Lower Layer Paint	Encapsulate / Repair & Manage In Situ

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Item No.	Hazard Type	Item Location and Description	Recommendations
Item 278	Lead Paint	Residential Precinct - Harbour Master's Residence, Ground Floor, Exterior, West, Wall - Paint - White	Remove Under Suitably Controlled Conditions
Item 279	Lead Paint	Residential Precinct - Harbour Master's Residence, 1st Floor, Rooms, Throughout, Wall - Paint - Beige	Encapsulate / Repair & Manage In Situ
Item 303	Lead Paint	Shipyard Precinct - Addition to Ship Repair Workshop, Ground Floor, Workshop, Throughout, Timber Work - Paint - Green	Encapsulate / Repair & Manage In Situ
Item 296	Lead Paint	Shipyard Precinct - Ship Repair Workshop, Ground Floor, Exterior, Throughout, Timber Work - Paint - Green	Encapsulate / Repair & Manage In Situ
Item 308	Lead Paint	Shipyard Precinct - Winch House, Ground Floor, Exterior, Throughout, Timber Work - Paint - Green	Encapsulate / Repair & Manage In Situ
Item 320	SMF	South Depot Precinct - Port Emergancy Services Building, Ground Floor, All Areas, Throughout, Ceiling - Compressed Ceiling Tiles	Encapsulate / Repair & Manage In Situ
Item 323	Lead Paint	South Depot Precinct - Port Emergancy Services Building, Ground Floor, All Areas, Throughout, Wall - Paint - Pale Blue	Encapsulate / Repair & Manage In Situ
Item 288	Lead Paint	South Depot Precinct - Port Emergancy Services Building, Ground Floor, Exterior, Throughout, Timber Work - Paint - Light Blue	Encapsulate / Repair & Manage In Situ
Item 330	Lead Paint	South Depot Precinct - Port Emergancy Services Building, Ground Floor, North Front Area, Throughout, Ceiling - Paint - Beige	Restrict Access & Remove Under Suitably Controlled Conditions
Item 334	SMF	South Depot Precinct - Port Emergancy Services Building, 1st Floor, Northeast Room, Throughout, Ceiling - Compressed Ceiling Tiles	Encapsulate / Repair & Manage In Situ
Item 361	Lead Paint	South Depot Precinct - Port Emergancy Services Building, 1st Floor, Southeast Room, Throughout, Timber Work - Paint - Pale Blue	Encapsulate / Repair & Manage In Situ
Item 40	Lead Paint	Water Police Precinct - 1912 Barracks, Ground Floor, Corridor, Throughout, Wall - Paint - Cream	Encapsulate / Repair & Manage In Situ
Item 39	Lead Paint	Water Police Precinct - 1912 Barracks, Ground Floor, East Room, Throughout, Wall - Paint - Cream	Encapsulate / Repair & Manage In Situ
Item 63	Lead Paint	Water Police Precinct - The Cottage, Ground Floor, Entrance Foyer, Throughout, Wall - Paint - Yellow	Encapsulate / Repair & Manage In Situ

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Item No.	Hazard Type	Item Location and Description	Recommendations
Item 62	Lead Paint	Water Police Precinct - The Cottage, Ground Floor, Exterior, Throughout, Wall - Paint - Blue	Encapsulate / Repair & Manage In Situ
Item 64	Lead Paint	Water Police Precinct - The Cottage, Ground Floor, North Room, Throughout, Wall - Paint - Yellow	Encapsulate / Repair & Manage In Situ
Item 31	Lead Paint	Water Police Precinct - Water Police Station, Ground Floor, Central Room, Throughout, Wall - Paint - White	Restrict Access & Remove Under Suitably Controlled Conditions
Item 33	Lead Paint	Water Police Precinct - Water Police Station, Ground Floor, Central Room, Throughout, Door and Window Frame - Paint - White	Restrict Access & Remove Under Suitably Controlled Conditions
Item 29	Lead Paint	Water Police Precinct - Water Police Station, Ground Floor, East Room, Throughout, Wall - Paint - Pale Blue	Restrict Access & Remove Under Suitably Controlled Conditions
Item 32	Lead Paint	Water Police Precinct - Water Police Station, Ground Floor, North Room, Throughout, Wall - Paint - Pale Green	Restrict Access & Remove Under Suitably Controlled Conditions
Item 28	Lead Paint	Water Police Precinct - Water Police Station, Ground Floor, South Room, Throughout, Wall - Paint - Dark Beige Upper Layer Paint and White Lower Layer Paint	Restrict Access & Remove Under Suitably Controlled Conditions
Item 30	Lead Paint	Water Police Precinct - Water Police Station, Ground Floor, West Room, Throughout, Wall - Paint - Pale Green	Restrict Access & Remove Under Suitably Controlled Conditions

Refer to *Recommendations* section of this report for further Asbestos Materials management details.

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Recommendations

Greencap can assist with the implementation of any of the below recommendations:

- **Develop or update the Hazardous Materials Management Plan** (HMMP) to manage the risks associated with remaining in-situ hazardous materials located at the site and ensure compliance with relevant Legislation, Codes of Practice and Australian Standard. *Greencap can assist with preparation and review of HMMP with practical control measures for hazardous materials and clearly assigned responsibilities.*
- **Areas Not Accessed** highlighted in this report must be assumed to contain hazardous materials. Appropriate management planning should be implemented to control access to and maintenance activities in these areas, until such a time as they can be inspected, and the presence or absence of hazardous materials can be confirmed.
- **Prior to demolition or refurbishment works**, engage a competent person to undertake a destructive hazardous materials inspection of the premises as per relevant Legislation, Codes of Practice and Australian Standards.

Asbestos

- **Organise remedial/removal works of all P2 items as soon as practical (within 3 months)** by an appropriately licensed asbestos removal contractor under appropriate controlled conditions.
- **Organise asbestos air monitoring and a clearance certificate** for all remedial/removal works. Engage an independent asbestos consultant/Licenced Asbestos Assessor to undertake asbestos fibre air monitoring during and after the works and to issue a Clearance Certificate to validate the works have been undertaken satisfactorily. *Greencap can assist with the provision of Clearance Certificates and NATA endorsed air-monitoring.*
- **In-situ Asbestos-containing materials must be labelled** appropriately to warn of the dangers of disturbing these materials, in accordance with the requirements of relevant Legislation and Codes of Practice.
- **Provide Asbestos Awareness training** to staff and site personnel to inform them of how to work safely alongside asbestos in accordance with the requirements of relevant Legislation and Codes of Practice. *Greencap offers a variety of onsite and online asbestos training options https://www.greencap.com.au/training/muddy-boots-asbestos-training.*
- **Consult with staff and health and safety representatives** on the findings of this risk assessment and this report must be made available upon request, in accordance with the requirements of relevant Legislation and Codes of Practice.
- **Schedule minimum five yearly periodic reinspection** by a competent person of the identified and assumed asbestos-containing materials to confirm the risk assessment in accordance with relevant Legislation and Codes of Practice.
- **Should removal/remediation of asbestos items** occur it must be conducted by an appropriately licensed asbestos removal contractor under appropriate controlled conditions.
- **Asbestos-related work activities** including maintenance plus unusual and infrequent activities such as emergency activities must be undertaken by appropriately trained personnel using safe work procedures in accordance with relevant Legislation and Codes of Practice

- **All presumed positive ACM should be treated as asbestos** and all requirements for managing asbestos must be followed, until such time as proven otherwise with testing has confirmed that it is not or does not contain asbestos.
- Further investigation and appropriate sampling regime of vermiculite material (fire proofing) should be undertaken prior to refurbishment or demolition to confirm status. Due to the age (pre 1990s) of the buildings, one (1) sample of vermiculite is not sufficient to state the entire area as negative. While one positive hit should be treated as the whole area is positive, but due to the nature of the material and application, negative hits are dubious until a sampling regime of the area is undertaken. This is normally undertaken prior to refurbishment/demolition works, or works likely to disturb the material.

Lead in Dust

- **Implement control measures to** minimise dust disturbance and ingestion/inhalation pathways for dust containing lead.
- **Prior to works that may disturb accumulated dust, undertake further investigative sampling** and analysis of the area to develop a lead in dust management plan for the site.
- **Prior to works that may disturb accumulated dust** a risk assessment should be undertaken and at a minimum housekeeping and hygiene controls should be implemented such as dust suppression, use of PPE including nitrile gloves and suitable decontamination such as hand washing.
- **Removal of dust containing lead >300mg/kg** may be undertaken by an appropriately experienced contractor prior to disturbance, using suitable controls and PPE. *Greencap can assist with the development of a Lead Removal Plan.*
- **Lead Air Monitoring** is recommended to be undertaken during removal to verify that the controls in place are adequate.*Greencap can assist with monitoring.*
- **Lead waste** must be disposed of according to the relevant state or territory waste regulations.

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Lead Paint

- **Undertake stabilisation or removal works of high damage** paint systems as soon as possible. Engage an lead abatement contractor with appropriate experience and removal controls in accordance with AS/NZS 4361.2:2017 Guide to hazardous paint management - Part 2: Lead paint in residential, public and commercial buildings. In the interim, access should be restricted until remedial works take place.
- **Maintain in good condition** all identified lead paint systems.
- **Conduct further testing prior to any refurbishment, remedial or demolition works** on painted surfaces that is likely to generate dust or fumes. All surfaces painted prior to 1997 should be assumed to contain lead above 0.1% w/w (AS/NZS 4361.2:2017).
- **Demolition/refurbishment works** should be undertaken by a Lead abatement contractor with appropriate experience and controls in accordance with AS/NZS 4361.2:2017 Guide to hazardous paint management - Part 2: Lead paint in residential, public and commercial buildings.
- **Consider engaging an independent hygiene consultant/Lead specialist** to undertake Lead air monitoring, clearance inspection and clearance sampling during any removal works to ensure works are conducted safely.

Ozone Depleting Substance

- **Maintain in good condition** all Ozone depleting substance items.
- **Confirm that the contractor conducting works** involving refrigerants holds a Refrigerant Trading Authorisation with the Australian Refrigeration Council (ARC) and a Restricted Refrigerant Recoverer Licence under the Ozone and Synthetic Gas Management Regulations 1995.
- **Ozone depleting substance should be decanted** prior to decommissioning by a contractor who holds Refrigerant Trading Authorisation with the Australian Refrigeration Council (ARC) and a Restricted Refrigerant Recoverer Licence under the Ozone and Synthetic Gas Management Regulations 1995.

Polychlorinated Biphenyls

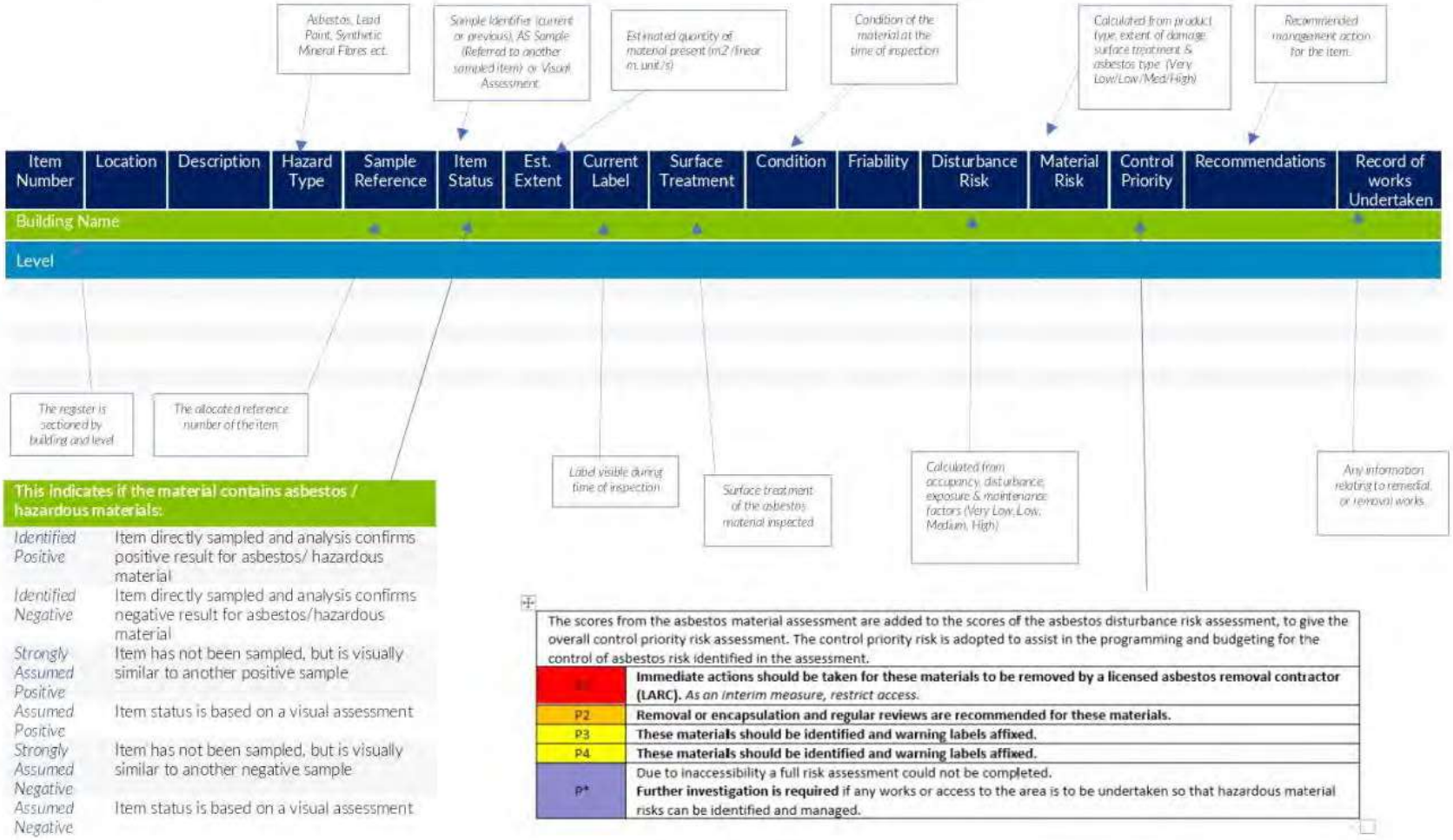
- **Maintain in good condition** all Polychlorinated Biphenyls items.
- **Consider removal during routine maintenance under controlled conditions** items identified as containing Polychlorinated Biphenyls. Capacitors and electrical components items must be de-energised by a licensed electrician. Appropriately experienced contractors should use appropriate Personal Protective Equipment (PPE) including face shield, gloves, skin and eye protection.
- **Appropriately dispose** of item identified as containing Polychlorinated Biphenyls in accordance with waste and environmental protection guidelines.

Synthetic Mineral Fibre

- **Remove/remediate Synthetic Mineral Fibres items in poor condition** as soon as possible, under controlled conditions, by appropriately experienced contractor in accordance with the requirements of the Code of Practice for the Safe Use of Synthetic Mineral Fibres NOHSC:2006(1990). In the interim, access should be restricted until remedial works take place.
- **Consider engaging an independent hygiene consultant** to undertake SMF air monitoring during any removal works to ensure works are conducted safely.

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How to use:
Greencap **Compliance Hazardous Materials Register**



This indicates if the material contains asbestos / hazardous materials:	
Identified Positive	Item directly sampled and analysis confirms positive result for asbestos/ hazardous material
Identified Negative	Item directly sampled and analysis confirms negative result for asbestos/hazardous material
Strongly Assumed Positive	Item has not been sampled, but is visually similar to another positive sample
Assumed Positive	Item status is based on a visual assessment
Strongly Assumed Negative	Item has not been sampled, but is visually similar to another negative sample
Assumed Negative	Item status is based on a visual assessment

The scores from the asbestos material assessment are added to the scores of the asbestos disturbance risk assessment, to give the overall control priority risk assessment. The control priority risk is adopted to assist in the programming and budgeting for the control of asbestos risk identified in the assessment.

[redacted]	**Immediate actions should be taken for these materials to be removed by a licensed asbestos removal contractor (LARC).** *As an interim measure, restrict access.*
P2	**Removal or encapsulation and regular reviews are recommended for these materials.**
P3	**These materials should be identified and warning labels affixed.**
P4	**These materials should be identified and warning labels affixed.**
P*	Due to inaccessibility a full risk assessment could not be completed. **Further investigation is required** if any works or access to the area is to be undertaken so that hazardous material risks can be identified and managed.

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Hazardous Materials Register

MeMel Goat Island, Port Jackson, NSW, 2477 **Audit Date 18 May 2022**

In Line with Asbestos regulations Greencap recommends this register is reviewed every 5 years at a minimum.

Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
-	**Central Precinct - Recreational Hall Area - Ground Floor - Hall Area,**												
	No Hazardous Materials were found during the inspection, Building Component	-	-	-	-	-	-	-	-	-	-	-	-
378	**Central Precinct - Tennis Court (former) - Ground Floor - Tennis Court (former),**												
	No suspect materials found	All	Visual	-	-	-	-	-	-	-	-	Conduct Further Investigations/Sampling Prior to Disturbance	
365	**Central Precinct - Throughout - Ground Floor - Telecom post, Various Locations**												
	Telephone Poles - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	2no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
377	**Hammerhead Crane - Ground Floor - Interior,**												
	No suspect materials found	All	Visual	-	-	-	-	-	-	-	-	Conduct Further Investigations/Sampling Prior to Disturbance	
141	**Magazine Precinct - Amenities Block - 1st Floor - Exterior, Perimeter - Around Roof**												
	Eaves - Fibre Cement Sheeting	Asbestos	As AQ000636	Strongly Assumed, Positive	60m²	No	Good Condition	Non-friable	Very Low	Low	P4	Manage In Situ	
142	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, West - Above Sink**												
	Hot Water Unit - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
143	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, East - Above Sink**												
	Boiler Unit - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
144	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	13no.	-	Good Condition	-	-	-	-	Manage In Situ	
145	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, Throughout - Ceiling**												
	Ductwork - Insulation	SMF	Visual	Assumed, Positive	50m	-	Good Condition	Bonded	-	-	-	Manage In Situ	
146	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, Throughout**												
	Ceiling - Paint - White	Lead Paint	AQ000634	Identified, Positive - 0.76 %w/w	200m²	-	High Damage / Poor Condition	-	-	-	-	Remove Under Suitably Controlled Conditions	
147	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, Throughout**												
	Wall - Paint - Pale Green	Lead Paint	AQ000635	Identified, Positive - 0.26 %w/w	50m²	-	Low Damage	-	-	-	-	Manage In Situ	
148	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, Throughout**												
	Floor Covering - Vinyl Sheet - Beige	Asbestos	As NAA 47829-15 {AQ000629}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
149	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, East and West**												
	Fire Door - Fire Door Core - Installed in 1980s	Asbestos	Visual	Assumed, Positive	4no.	Yes	Good Condition	Friable	Low	Low	P3	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
150	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, North and South**												
	Above Window - Infill Panels - Fibre Cement Sheeting	Asbestos	AQ000636	Identified, Positive	20m²	Yes	Low Damage	Non-friable	Very Low	Low	P3	Manage In Situ	
151	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, West**												
	Boiler - Pipeline Insulation	Asbestos	NAA 47829-19 {AQ000637}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
158	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, East**												
	Infill Panels - Fibre Cement Sheeting	Asbestos	AQ000638	Identified, Negative	-	-	-	-	-	-	-	No further action required	
159	**Magazine Precinct - Amenities Block - 1st Floor - Large Room, North and South**												
	Window Frame - Putty	Asbestos	AQ000639	Identified, Negative	-	-	-	-	-	-	-	No further action required	
153	**Magazine Precinct - Amenities Block - 1st Floor - Plant Room, North - Entry**												
	Fire Door - Fire Door Core - Installed in 1980s	Asbestos	Visual	Assumed, Positive	2no.	Yes	Good Condition	Friable	Very Low	Low	P3	Manage In Situ	
154	**Magazine Precinct - Amenities Block - 1st Floor - Plant Room, Various Throughout**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	3no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
155	**Magazine Precinct - Amenities Block - 1st Floor - Plant Room, Throughout - Ceiling**												
	Vermiculite Sprayed - Additional sampling required prior to works which may disturb this material	Asbestos	As NAA 47829-18 {AQ000633}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
156	**Magazine Precinct - Amenities Block - 1st Floor - Plant Room, Throughout - Ceiling**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
157	**Magazine Precinct - Amenities Block - 1st Floor - Plant Room, Throughout**												
	Ductwork - Insulation	SMF	Visual	Assumed, Positive	10m	-	Good Condition	Bonded	-	-	-	Manage In Situ	
160	**Magazine Precinct - Amenities Block - 1st Floor - Plant Room, Throughout**												
	Surface - Dust	Lead Dust	AQ000640	Identified, Positive - 760 mg/kg	25m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
152	**Magazine Precinct - Amenities Block - 1st Floor - Western Stairwell, Throughout - Ceiling**												
	Vermiculite Sprayed - Additional sampling required prior to works which may disturb this material	Asbestos	As NAA 47829-18 {AQ000633}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
161	**Magazine Precinct - Amenities Block - 1st Floor - Western Stairwell, North**												
	Window Frame - Putty	Asbestos	As AQ000639	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
163	**Magazine Precinct - Amenities Block - 1st Floor - Eastern Stairwell, North**												
	Window Frame - Putty	Asbestos	As AQ000639	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
384	**Magazine Precinct - Amenities Block - 1st Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
108	**Magazine Precinct - Amenities Block - Ground Floor - Exterior, East and West Entrance**												
	Porch Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-14 {AQ000628}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
109	**Magazine Precinct - Amenities Block - Ground Floor - Exterior, East and West Entrance**												
	Fluorescent light fitting - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
110	**Magazine Precinct - Amenities Block - Ground Floor - Exterior, Northwest Corner**												
	Fluorescent light fitting - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
135	**Magazine Precinct - Amenities Block - Ground Floor - Exterior, West Entrance - Switch Box**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
136	**Magazine Precinct - Amenities Block - Ground Floor - Exterior, West Entrance - Switch Box**												
	Switch Box Linings - Fibre Cement Sheeting	Asbestos	AQ000631	Identified, Positive	2m²	Yes	Good Condition	Non-friable	Very Low	Low	P3	Manage In Situ	
127	**Magazine Precinct - Amenities Block - Ground Floor - Eastern Toilet, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-17 {AQ000632}	Strongly Assumed, Positive	8m²	Yes	Low Damage	Non-friable	Low	Low	P3	Manage In Situ	
128	**Magazine Precinct - Amenities Block - Ground Floor - Eastern Toilet, Central**												
	Fluorescent light fitting - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
129	**Magazine Precinct - Amenities Block - Ground Floor - Western Toilet, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-17 {AQ000632}	Strongly Assumed, Positive	8m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
130	**Magazine Precinct - Amenities Block - Ground Floor - Western Toilet, Central**												
	Fluorescent light fitting - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
132	**Magazine Precinct - Amenities Block - Ground Floor - Eastern Showers, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-17 {AQ000632}	Strongly Assumed, Positive	40m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
133	**Magazine Precinct - Amenities Block - Ground Floor - Eastern Showers, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	4no.	-	Good Condition	-	-	-	-	Manage In Situ	
383	**Magazine Precinct - Amenities Block - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
111	**Magazine Precinct - Amenities Block - Ground Floor - Locker Room, Throughout**												
	Floor Covering - Sheet Vinyl - Beige	Asbestos	NAA 47829-15 {AQ000629}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
112	**Magazine Precinct - Amenities Block - Ground Floor - Locker Room, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-17 {AQ000632}	Identified, Positive	30m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
138	**Magazine Precinct - Amenities Block - Ground Floor - Locker Room, Central**												
	Fluorescent light fitting	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
113	**Magazine Precinct - Amenities Block - Ground Floor - Workshop, Throughout**												
	Floor Covering - Sheet Vinyl - Beige	Asbestos	As NAA 47829-15 {AQ000629}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
114	**Magazine Precinct - Amenities Block - Ground Floor - Workshop, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-17 {AQ000632}	Strongly Assumed, Positive	50m²	Yes	Low Damage	Non-friable	Low	Low	P3	Manage In Situ	
115	**Magazine Precinct - Amenities Block - Ground Floor - Workshop, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	4no.	-	Good Condition	-	-	-	-	Manage In Situ	
117	**Magazine Precinct - Amenities Block - Ground Floor - Western Showers, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-17 {AQ000632}	Strongly Assumed, Positive	40m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
118	**Magazine Precinct - Amenities Block - Ground Floor - Western Showers, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	3no.	-	Good Condition	-	-	-	-	Manage In Situ	
119	**Magazine Precinct - Amenities Block - Ground Floor - Western Showers, Northwest**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
120	**Magazine Precinct - Amenities Block - Ground Floor - Storeroom Below Eastern Stair, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-16 {AQ000630}	Identified, Positive	2m²	Yes	Good Condition	Non-friable	Very Low	Low	P3	Manage In Situ	
122	**Magazine Precinct - Amenities Block - Ground Floor - Eastern Corridor, Throughout**												
	Floor Covering - Sheet Vinyl - Beige	Asbestos	As NAA 47829-15 {AQ000629}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
123	**Magazine Precinct - Amenities Block - Ground Floor - Eastern Corridor, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-17 {AQ000632}	Strongly Assumed, Positive	15m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
131	**Magazine Precinct - Amenities Block - Ground Floor - Eastern Corridor, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
124	**Magazine Precinct - Amenities Block - Ground Floor - Western Corridor, Throughout**												
	Floor Covering - Sheet Vinyl - Beige	Asbestos	As NAA 47829-15 {AQ000629}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
125	**Magazine Precinct - Amenities Block - Ground Floor - Western Corridor, Throughout**												
	Ceiling - Behind Vermiculite - Fibre Cement Sheeting	Asbestos	As NAA 47829-17 {AQ000632}	Strongly Assumed, Positive	15m²	Yes	Low Damage	Non-friable	Low	Low	P3	Manage In Situ	
134	**Magazine Precinct - Amenities Block - Ground Floor - Western Corridor, North and East**												
	Fire Door - Fire Door Core - No Date of Manufactured	Asbestos	Visual	Assumed, Positive	6no.	Yes	Good Condition	Friable	Low	Low	P3	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
139	**Magazine Precinct - Amenities Block - Ground Floor - Western Corridor, Throughout - Ceiling**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
140	**Magazine Precinct - Amenities Block - Ground Floor - Western Corridor, Throughout - Ceiling**												
	Vermiculite Sprayed - Additional sampling required prior to works which may disturb this material	Asbestos	NAA 47829-18 {AQ000633}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
91	**Magazine Precinct - Boat Shed - Ground Floor - Exterior, North and South**												
	Eaves - Fibre Cement Sheeting	Asbestos	NAA 47829-06 {AQ000623}	Identified, Positive	5m²	Yes	Good Condition	Non-friable	Very Low	Low	P4	Manage In Situ	
92	**Magazine Precinct - Boat Shed - Ground Floor - Exterior, North and South**												
	Eaves - Paint - Yellow - Avoid Cosmetic Damages	Lead Paint	Visual	Assumed, Positive	20m	-	Good Condition	-	-	-	-	Manage In Situ	
380	**Magazine Precinct - Boat Shed - Ground Floor - Interior, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
81	**Magazine Precinct - Colonial Barracks - Ground Floor - Exterior, Throughout**												
	Wall - Paint - Yellow	Lead Paint	AQ000617	Identified, Positive - 2.9 % w/w	500m²	-	Low Damage	-	-	-	-	Manage In Situ	
82	**Magazine Precinct - Colonial Barracks - Ground Floor - Exterior, Throughout**												
	Window and Door - Paint - Green	Lead Paint	AQ000618	Identified, Positive - 6.8 % w/w	5m²	-	Low Damage	-	-	-	-	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
83	**Magazine Precinct - Colonial Barracks - Ground Floor - Northeast Room, South**												
	Safe - Insulation. Metal encased	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Friable	Very Low	Low	P3	Manage In Situ	
84	**Magazine Precinct - Colonial Barracks - Ground Floor - Northeast Room, Throughout**												
	Wall - Paint - Yellow	Lead Paint	AQ000619	Identified, Positive - 7.0 % w/w	50m²	-	Low Damage	-	-	-	-	Manage In Situ	
385	**Magazine Precinct - Colonial Barracks - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
386	**Magazine Precinct - Colonial Barracks - Ground Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
224	**Magazine Precinct - Colonial Magazine - Ground Floor - Exterior, Throughout**												
	Wall - Pointing - Additional sampling required prior to works which may disturb this material	Asbestos	AQ000653	Identified, Negative	-	-	-	-	-	-	-	No further action required	
225	**Magazine Precinct - Colonial Magazine - Ground Floor - West Workshop, Southeast**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
226	**Magazine Precinct - Colonial Magazine - Ground Floor - East Workshop, Throughout**												
	Window Frame - Paint - Beige	Lead Paint	AQ000654	Identified, Negative - 0.009 %w/w	-	-	-	-	-	-	-	No further action required	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
387	**Magazine Precinct - Colonial Magazine - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
388	**Magazine Precinct - Colonial Magazine - Ground Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
68	**Magazine Precinct - Kitchen - Ground Floor - Exterior, Perimeter - Around Roof**												
	Eaves - Fibre Cement Sheeting	Asbestos	NAA 47829-01 {AQ000606}	Identified, Positive	20m²	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
69	**Magazine Precinct - Kitchen - Ground Floor - Exterior, Entrance**												
	Porch Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-01 {AQ000606}	Strongly Assumed, Positive	2m²	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
70	**Magazine Precinct - Kitchen - Ground Floor - Exterior, Entrance**												
	Electrical Distribution Board - Bituminous Electrical Panel	Asbestos	NAA 47829-02 {AQ000607}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
71	**Magazine Precinct - Kitchen - Ground Floor - Exterior, Throughout**												
	Wall - Paint - Yellow	Lead Paint	AQ000608	Identified, Positive - 13 % w/w	150m²	-	High Damage / Poor Condition	-	-	-	-	Remove Under Suitably Controlled Conditions	
72	**Magazine Precinct - Kitchen - Ground Floor - Exterior, Entrance**												
	Floor and Steps - Paint - Green	Lead Paint	AQ000609	Identified, Positive - 3.1 % w/w	3	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
73	**Magazine Precinct - Kitchen - Ground Floor - Entrance Foyer, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-03 {AQ000610}	Identified, Positive	4m²	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
74	**Magazine Precinct - Kitchen - Ground Floor - Front Rooms, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-03 {AQ000610}	Strongly Assumed, Positive	15	Yes	Good Condition	Non-friable	Low	Very Low	P3	Manage In Situ	
76	**Magazine Precinct - Kitchen - Ground Floor - Front Rooms, Entry**												
	Door & Frame - Paint - White	Lead Paint	AQ000612	Identified, Positive - 0.63 %w/w	5m²	-	Low Damage	-	-	-	-	Manage In Situ	
78	**Magazine Precinct - Kitchen - Ground Floor - Front Rooms, Throughout**												
	Ceiling - Paint - White	Lead Paint	AQ000614	Identified, Negative - <0.005 %w/w	-	-	-	-	-	-	-	No further action required	
75	**Magazine Precinct - Kitchen - Ground Floor - Kitchen, Throughout**												
	Wall - Paint - Pale Green	Lead Paint	AQ000611	Identified, Positive - 0.25 %w/w	20m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
79	**Magazine Precinct - Kitchen - Ground Floor - Kitchen, Central**												
	Partition Wall - Fibre Cement Sheeting	Asbestos	AQ000615	Identified, Positive	5m²	Yes	Low Damage	Non-friable	Very Low	Low	P3	Manage In Situ	
80	**Magazine Precinct - Kitchen - Ground Floor - Bathroom, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-04 {AQ000616}	Identified, Negative	-	-	-	-	-	-	-	No further action required	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
389	**Magazine Precinct - Kitchen - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
390	**Magazine Precinct - Kitchen - Ground Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
165	**Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior, Perimeter - Around Roof**												
	Eaves - Fibre Cement Sheeting	Asbestos	NAA 47829-09 {AQ000642}	Identified, Positive	50m²	Yes	Good Condition	Non-friable	Very Low	Low	P3	Manage In Situ	
166	**Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior, South Verandah**												
	Porch Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-09 {AQ000642}	Strongly Assumed, Positive	20m²	Yes	Good Condition	Non-friable	Very Low	Low	P3	Manage In Situ	
167	**Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior, South Verandah - West**												
	Switch Box Linings - Fibre Cement Sheeting	Asbestos	NAA 47829-11 {AQ000643}	Identified, Positive	1m²	Yes	Good Condition	Non-friable	Very Low	Low	P4	Manage In Situ	
168	**Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior, South Verandah - West**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
175	**Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior, Perimeter - Throughout**												
	Timber Work - Paint - White	Lead Paint	AQ000645	Identified, Positive - 5.5 % w/w	20m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	

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176	**Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior, South Verandah**												
	Fridge - Unknow ODS	ODS	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
391	**Magazine Precinct - Office and Amenities Building - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
392	**Magazine Precinct - Office and Amenities Building - Ground Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
169	**Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-10 {AQ000646}	Identified, Positive	15m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
170	**Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room, Throughout**												
	Floor Covering - Sheet Vinyl - Beige	Asbestos	NAA 47829-12 {AQ000647}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
171	**Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room, Above Sink**												
	Hot Water Unit - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
172	**Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
173	**Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room, Above Door**												
	A/C Unit - R22	ODS	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
174	**Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room, Throughout**												
	Ceiling -Paint - White	Lead Paint	AQ000644	Identified, Positive - 0.12 %w/w	25m²	-	Low Damage	-	-	-	-	Manage In Situ	
177	**Magazine Precinct - Office and Amenities Building - Ground Floor - Offices, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-10 {AQ000646}	Strongly Assumed, Positive	15m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
178	**Magazine Precinct - Office and Amenities Building - Ground Floor - Offices, Throughout**												
	Floor Covering - Sheet Vinyl - Beige	Asbestos	As NAA 47829-12 {AQ000647}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
180	**Magazine Precinct - Office and Amenities Building - Ground Floor - Offices, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
182	**Magazine Precinct - Office and Amenities Building - Ground Floor - Offices, Throughout**												
	Ceiling -Paint - White	Lead Paint	As AQ000644	Strongly Assumed, Positive - 0.12 %w/w	40m²	-	Low Damage	-	-	-	-	Manage In Situ	
183	**Magazine Precinct - Office and Amenities Building - Ground Floor - Toilets, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-10 {AQ000646}	Strongly Assumed, Positive	20m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	

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186	**Magazine Precinct - Office and Amenities Building - Ground Floor - Toilets, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
188	**Magazine Precinct - Office and Amenities Building - Ground Floor - Toilets, Throughout**												
	Ceiling -Paint- White	Lead Paint	As AQ000644	Strongly Assumed, Positive - 0.12 %w/w	40m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
189	**Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-10 {AQ000646}	Strongly Assumed, Positive	30m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
190	**Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room, Throughout**												
	Floor Covering - Sheet Vinyl - Beige	Asbestos	As NAA 47829-12 {AQ000647}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
191	**Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room, Hot Water Cupboard**												
	Hot Water Unit - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
192	**Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	4no.	-	Good Condition	-	-	-	-	Manage In Situ	
193	**Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room, Above Window**												
	A/C Unit - Unknown ODS	ODS	Visual	Assumed, Positive	1	-	Good Condition	-	-	-	-	Manage In Situ	

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194	**Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room, Throughout**												
	Ceiling - Paint - White	Lead Paint	As AQ000644	Strongly Assumed, Positive - 0.12 %w/w	40m²	-	Good Condition	-	-	-	-	Manage In Situ	
214	**Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room, Throughout**												
	Floor Covering - Bituminous Materials Below Vinyl	Asbestos	NAA 47829-13 {AQ000648}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
195	**Magazine Precinct - Office and Amenities Building - Ground Floor - Shower, Throughout**												
	Ceiling - Fibre Cement Sheeting - Height Restricted	Asbestos	As NAA 47829-10 {AQ000646}	Strongly Assumed, Positive	15m²	No	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
198	**Magazine Precinct - Office and Amenities Building - Ground Floor - Shower, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
200	**Magazine Precinct - Office and Amenities Building - Ground Floor - Shower, Throughout**												
	Ceiling - Paint - White	Lead Paint	As AQ000644	Strongly Assumed, Positive - 0.12 %w/w	40m²	-	Low Damage	-	-	-	-	Manage In Situ	
201	**Magazine Precinct - Office and Amenities Building - Ground Floor - Laundry/Wash, Throughout**												
	Ceiling - Fibre Cement Sheeting - Height Restricted	Asbestos	As NAA 47829-10 {AQ000646}	Strongly Assumed, Positive	15m²	No	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
202	**Magazine Precinct - Office and Amenities Building - Ground Floor - Laundry/Wash, Throughout**												
	Floor Covering - Sheet Vinyl - Beige	Asbestos	As NAA 47829-12 {AQ000647}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	

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204	**Magazine Precinct - Office and Amenities Building - Ground Floor - Laundry/Wash, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
205	**Magazine Precinct - Office and Amenities Building - Ground Floor - Laundry/Wash, Above Window**												
	A/C Unit - R22	ODS	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
206	**Magazine Precinct - Office and Amenities Building - Ground Floor - Laundry/Wash, Throughout**												
	Ceiling - Paint - White	Lead Paint	As AQ000644	Strongly Assumed, Positive - 0.12 %w/w	50m²	-	Good Condition	-	-	-	-	Manage In Situ	
-	**Magazine Precinct - Office and Amenities Building - Ground Floor - Unisex/Disable Toilet,**												
	Floor Covering - New Sheet Vinyl - Blue, Building Component	-	-	-	-	-	-	-	-	-	-	-	-
207	**Magazine Precinct - Office and Amenities Building - Ground Floor - Unisex/Disable Toilet, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-10 {AQ000646}	Strongly Assumed, Positive	20m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
210	**Magazine Precinct - Office and Amenities Building - Ground Floor - Unisex/Disable Toilet, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
212	**Magazine Precinct - Office and Amenities Building - Ground Floor - Unisex/Disable Toilet, Throughout**												
	Ceiling - Paint - White	Lead Paint	As AQ000644	Strongly Assumed, Positive - 0.12 %w/w	40m²	-	Good Condition	-	-	-	-	Manage In Situ	

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215	**Magazine Precinct - Office and Amenities Building - Ground Floor - Unisex/Disable Toilet, Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-22 {AQ000649}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
213	**Magazine Precinct - Office and Amenities Building - Ground Floor - Ceiling Space, Throughout**												
	Roof Lining - Sarking Insulation	SMF	Visual	Assumed, Positive	200m²	-	Good Condition	Bonded	-	-	-	Manage In Situ	
94	**Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber, North**												
	Electrical Distribution Board - Bituminous Electrical Panel	Asbestos	Visual	Assumed, Positive	1no.	Yes	Low Damage	Non-friable	Very Low	Very Low	P4	Manage In Situ	
95	**Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber, Office - Throughout**												
	Ceiling - Compressed Ceiling Tiles	SMF	Visual	Assumed, Positive	10m²	-	Good Condition	Bonded	-	-	-	Manage In Situ	
96	**Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber, Adjacent to North Entry**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
97	**Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber, Office**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
98	**Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber, Throughout**												
	Wall - Paint - White and Cream	Lead Paint	AQ000624	Identified, Positive - 1.2 % w/w	200m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	

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106	**Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber, East and West**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
99	**Magazine Precinct - Queens Magazine - Ground Floor - Exterior, Throughout**												
	Wall - Pointing	Asbestos	AQ000625	Identified, Negative	-	-	-	-	-	-	-	No further action required	
101	**Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Warehouse, Northwest**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Low Damage	Non-friable	Very Low	Very Low	P4	Manage In Situ	
102	**Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Store Room & Kitchen, Store Room and Kitchen - Throughout**												
	Internal Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-07 {AQ000626}	Identified, Positive	50m²	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
103	**Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Store Room & Kitchen, Store Room and Kitchen - Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-07 {AQ000626}	Strongly Assumed, Positive	30m²	Yes	Good Condition	Non-friable	Low	Very Low	P3	Manage In Situ	
104	**Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Store Room & Kitchen, Store Room and Kitchen - Throughout**												
	Floor Covering - Sheet Vinyl - Pink	Asbestos	NAA 47829-08 {AQ000627}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
105	**Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Store Room & Kitchen, Store Room and Kitchen - Throughout Ceiling**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	5no.	-	Good Condition	-	-	-	-	Manage In Situ	

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107	**Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Store Room & Kitchen, Store Room and Kitchen - Throughout**												
	External Wall - Fibre Cement Sheeting	Asbestos	As NAA 47829-07 {AQ000626}	Strongly Assumed, Positive	25m²	Yes	Low Damage	Non-friable	Low	Low	P3	Manage In Situ	
164	**Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Exterior, Northwest - Between Wall and Ground**												
	Fibre Cement Debris - Items on grounds were removed during sampling. Possible debris remains within the wall cavity.	Asbestos	AQ000641	Identified, Positive	<1m²	No	High Damage / Poor Condition	Non-friable	Low	Medium	P2	Conduct Further Investigations/Sampling Prior to Disturbance	
222	**Magazine Precinct - Stores Building - Ground Floor - Exterior, Throughout**												
	Wall - Pointing - Additional sampling required prior to works which may disturb this material	Asbestos	AQ000652	Identified, Negative	-	-	-	-	-	-	-	No further action required	
223	**Magazine Precinct - Stores Building - Ground Floor - Southern Rooms, Central**												
	Fluorescent light fitting	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
393	**Magazine Precinct - Stores Building - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
394	**Magazine Precinct - Stores Building - Ground Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
85	**Magazine Precinct - Substation - Ground Floor - Substation, On Ground**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live electrical hazard	Asbestos	Visual	Assumed, Positive	12no.	Yes	Low Damage	Non-friable	Very Low	Very Low	P4	Remove Under Suitably Controlled Conditions	

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86	**Magazine Precinct - Substation - Ground Floor - Substation, West**												
	Plant & Equipment - Gasket - Live Services	Asbestos	Visual	Assumed, Positive	2no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
87	**Magazine Precinct - Substation - Ground Floor - Substation, Throughout**												
	Ceiling - Fibre Cement Sheeting - Height Restricted	Asbestos	As NAA 47829-05 {AQ000620}	Strongly Assumed, Positive	30m²	No	Good Condition	Non-friable	Very Low	Low	P4	Manage In Situ	
88	**Magazine Precinct - Substation - Ground Floor - Exterior, Perimeter - Around Roof**												
	Eaves - Fibre Cement Sheeting	Asbestos	NAA 47829-05 {AQ000620}	Identified, Positive	15m²	Yes	Good Condition	Non-friable	Very Low	Low	P4	Manage In Situ	
89	**Magazine Precinct - Substation - Ground Floor - Exterior, Throughout**												
	Window and Door - Paint - Green	Lead Paint	AQ000622	Identified, Positive - 0.38 %w/w	10m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
90	**Magazine Precinct - Substation - Ground Floor - Exterior, Throughout**												
	Wall - Paint - Beige	Lead Paint	AQ000621	Identified, Negative - 0.067 %w/w	-	-	-	-	-	-	-	No further action required	
93	**Magazine Precinct - Substation - Ground Floor - Exterior, Unknown**												
	Fluorescent light fittings - Capactor - Item not sighted during the inspection.	PCB	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
216	**Magazine Precinct - The Cooperage - Ground Floor - Back Room Opposite to Entrance, North**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	

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217	**Magazine Precinct - The Cooperage - Ground Floor - East Machinery Room, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	6no.	-	Good Condition	-	-	-	-	Manage In Situ	
219	**Magazine Precinct - The Cooperage - Ground Floor - East Machinery Room, Throughout**												
	Wall - Paint - Silver	Lead Paint	AQ000650	Identified, Positive - 4.8 % w/w	80m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
218	**Magazine Precinct - The Cooperage - Ground Floor - West Machinery Room, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	7no.	-	Good Condition	-	-	-	-	Manage In Situ	
220	**Magazine Precinct - The Cooperage - Ground Floor - Entry Foyer, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
221	**Magazine Precinct - The Cooperage - Ground Floor - Exterior, Throughout**												
	Wall - Pointing - Additional sampling required prior to works which may disturb this material	Asbestos	AQ000651	Identified, Negative	-	-	-	-	-	-	-	No further action required	
229	**Magazine Precinct - Timber Store - Ground Floor - Exterior, Throughout**												
	Door - Paint - Red	Lead Paint	AQ000655	Identified, Positive - 2.7% w/w	10m²	-	High Damage / Poor Condition	-	-	-	-	Remove Under Suitably Controlled Conditions	
100	**Magazine Precintct - Scow Shed - Ground Floor - Interior, Perimeter - North**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	

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1	**North Depot Precinct - Dredge Office - Ground Floor - Exterior, Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-41 {AQ000572}	Identified, Positive	60m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
2	**North Depot Precinct - Dredge Office - Ground Floor - Exterior, Toilet Block - Around Roof**												
	Timber Work - Paint - White	Lead Paint	AQ000573	Identified, Positive - 2.6 % w/w	10m²	-	High Damage / Poor Condition	-	-	-	-	Remove Under Suitably Controlled Conditions	
3	**North Depot Precinct - Dredge Office - Ground Floor - Exterior, Adjacent to Rear Entry**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
4	**North Depot Precinct - Dredge Office - Ground Floor - Exterior, Throughout**												
	Wall - Paint - Green	Lead Paint	AQ000574	Identified, Positive - 0.14 %w/w	50m²	-	Good Condition	-	-	-	-	Manage In Situ	
5	**North Depot Precinct - Dredge Office - Ground Floor - Exterior, Throughout**												
	Wall - Paint - Off White	Lead Paint	AQ000575	Identified, Negative - <0.005 %w/w	-	-	-	-	-	-	-	No further action required	
7	**North Depot Precinct - Dredge Office - Ground Floor - Exterior, Entrance**												
	Awning - Fibre Cement Sheeting	Asbestos	NAA 47829-44 {AQ000577}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
8	**North Depot Precinct - Dredge Office - Ground Floor - Kitchen, Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-45 {AQ000578}	Identified, Positive	15m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
9	**North Depot Precinct - Dredge Office - Ground Floor - Kitchen, South**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-45 {AQ000578}	Strongly Assumed, Positive	5m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
10	**North Depot Precinct - Dredge Office - Ground Floor - Kitchen, North & South Toilets**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-46 {AQ000579}	Identified, Positive	20m²	Yes	Good Condition	Non-friable	Very Low	Low	P4	Manage In Situ	
11	**North Depot Precinct - Dredge Office - Ground Floor - Kitchen, North & South Toilets**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-46 {AQ000579}	Strongly Assumed, Positive	5m²	No	Low Damage	Non-friable	Very Low	Low	P3	Manage In Situ	
12	**North Depot Precinct - Dredge Office - Ground Floor - Kitchen, Southeast**												
	Electrical Distribution Board - Electrical Components - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	11no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
13	**North Depot Precinct - Dredge Office - Ground Floor - North Office, Throughout**												
	Lower Wall Panels - Fibre Cement Sheeting	Asbestos	NAA 47829-47 {AQ000580}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
19	**North Depot Precinct - Dredge Office - Ground Floor - North Office, Throughout**												
	Fluorescent light fitting - Capacitor	PCB	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
14	**North Depot Precinct - Dredge Office - Ground Floor - Southeast Office, Throughout**												
	Lower Wall Panels - Fibre Cement Sheeting	Asbestos	As NAA 47829-47 {AQ000580}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	

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20	**North Depot Precinct - Dredge Office - Ground Floor - Southeast Office, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
24	**North Depot Precinct - Dredge Office - Ground Floor - Southeast Office, Access Door**												
	Door and Frame - Paint - Off White	Lead Paint	AQ000583	Identified, Positive - 5.6 % w/w	10m²	-	Low Damage	-	-	-	-	Manage In Situ	
15	**North Depot Precinct - Dredge Office - Ground Floor - Rear Entrance, Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-48 {AQ000581}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
16	**North Depot Precinct - Dredge Office - Ground Floor - Rear Entrance, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-48 {AQ000581}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
21	**North Depot Precinct - Dredge Office - Ground Floor - Rear Entrance, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
18	**North Depot Precinct - Dredge Office - Ground Floor - Ceiling Space, Throughout**												
	Insulation Batts - Insulation	SMF	Visual	Assumed, Positive	200m²	-	Good Condition	Bonded	-	-	-	Manage In Situ	
22	**North Depot Precinct - Dredge Office - Ground Floor - Ceiling Space, Throughout**												
	Roof Lining - Sarking Insulation	SMF	Visual	Assumed, Positive	200m²	-	Good Condition	Bonded	-	-	-	Manage In Situ	

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23	**North Depot Precinct - Dredge Office - Ground Floor - Ceiling Space, Southeast Office**												
	Access Hatch Cover - Fibre Cement Sheeting	Asbestos	AQ000582	Identified, Negative	-	-	-	-	-	-	-	No further action required	
-	**North Depot Precinct - Ferry Wharf - Ground Floor - Exterior,**												
	Wall - Timber, Building Component	-	-	-	-	-	-	-	-	-	-	-	-
368	**North Depot Precinct - Ferry Wharf - Ground Floor - Exterior, Throughout**												
	Timber Work - Paint - White - Assumed positive - No safe access on walk path.	Lead Paint	Visual	Assumed, Positive	20m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
-	**North Depot Precinct - Ferry Wharf - Ground Floor - Interior,**												
	No safe access on walk path, Building Component	-	-	-	-	-	-	-	-	-	-	-	-
-	**North Depot Precinct - Ferry Wharf - Ground Floor - Exterior,**												
	Roof - Ceramic Tiles, Building Component	-	-	-	-	-	-	-	-	-	-	-	-
52	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - Exterior, Throughout**												
	Timber and Metal Work - Paint - Pale Green	Lead Paint	AQ000597	Identified, Positive - 3.2 % w/w	200m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
54	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - Exterior, North**												
	On Ground - Fibre Cement Debris - Item was removed during sampling. Debris may be found within concealed area.	Asbestos	AQ000598	Identified, Positive	<1m²	No	High Damage / Poor Condition	Non-friable	Low	Medium	P2	Conduct Further Investigations/Sampling Prior to Disturbance	

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367	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - Rear Storage Area,**												
	No suspect materials found during the inspection	All	Visual	-	-	-	-	-	-	-	-	Conduct Further Investigations/Sampling Prior to Disturbance	
53	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - East Storage Shed, Throughout Ceiling**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	5no.	-	Good Condition	-	-	-	-	Manage In Situ	
55	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - East Storage Shed, South**												
	Electrical Distribution Board - Bituminous Electrical Panel	Asbestos	NAA 47829-50 {AQ000599}	Identified, Positive	1no.	Yes	Medium Damage	Non-friable	Very Low	Low	P3	Manage In Situ	
56	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms, Throughout**												
	Wall - Fibre Cement Sheeting on Wall Nails	Asbestos	NAA 47829-42 {AQ000600}	Identified, Positive	50m²	No	High Damage / Poor Condition	Friable	Very Low	Medium	P3	Restrict Access & Remove Under Suitably Controlled Conditions	
57	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms, Throughout**												
	Ceiling - Fibre Cement Sheeting on Nails	Asbestos	As NAA 47829-42 {AQ000600}	Strongly Assumed, Positive	20m²	No	High Damage / Poor Condition	Friable	Very Low	Medium	P3	Restrict Access & Remove Under Suitably Controlled Conditions	
58	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms, Throughout**												
	On Ground - Dust	Asbestos	AQ000601	Identified, Positive	20m²	No	High Damage / Poor Condition	Friable	Medium	High	P2	Restrict Access & Remove Under Suitably Controlled Conditions	
59	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms, Throughout - Wall**												
	All Timber Structure Surface - Debris	Asbestos	AQ000602	Identified, Positive	10m²	No	High Damage / Poor Condition	Friable	Low	Medium	P2	Restrict Access & Remove Under Suitably Controlled Conditions	

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61	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
60	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - Electrical Switch Room, North**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard - No Access to Electircal Switch Room	Asbestos	Visual	Assumed, Positive	1no.	No	Good Condition	Non-friable	Very Low	Very Low	P4	Label & Manage In Situ	
395	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
396	**North Depot Precinct - Fire Fighting Buildings - Ground Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
25	**North Depot Precinct - Gear Shed - Ground Floor - Exterior, Throughout**												
	Timber Work - Paint - Green	Lead Paint	AQ000584	Identified, Negative - 0.02 %w/w	-	-	-	-	-	-	-	No further action required	
-	**North Depot Precinct - Small Boat Enclosure - Ground Floor - Exterior,**												
	Gutters and Barge Board - Metal, Building Component	-	-	-	-	-	-	-	-	-	-	-	-
280	**North Depot Precinct - Small Boat Enclosure - Ground Floor - Exterior, Waiting Shed - Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-53 {AQ000673}	Identified, Positive	40m²	Yes	Low Damage	Non-friable	Low	Low	P2	Manage In Situ	

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282	**North Depot Precinct - Small Boat Enclosure - Ground Floor - Exterior, Throughout**												
	Timber Work - Paint - Beige	Lead Paint	AQ000674	Identified, Positive - 0.97 %w/w	5m²	-	High Damage / Poor Condition	-	-	-	-	Remove Under Suitably Controlled Conditions	
284	**North Depot Precinct - Small Boat Enclosure - Ground Floor - Exterior, Around Roof**												
	Eaves - Fibre Cement Sheeting	Asbestos	AQ000676	Identified, Negative	-	-	-	-	-	-	-	No further action required	
281	**North Depot Precinct - Small Boat Enclosure - Ground Floor - Waiting Shed, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
283	**North Depot Precinct - Small Boat Enclosure - Ground Floor - Waiting Shed, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-54 {AQ000675}	Identified, Positive	15m²	Yes	Good Condition	Non-friable	Very Low	Low	P3	Manage In Situ	
255	**Residential Precinct - Cottage No.3 - Ground Floor - Verandah, North and South**												
	Gable - Fibre Cement Sheeting - No safe access due to unstable floor	Asbestos	As NAA 47829-26 {AQ000670}	Identified, Positive	1m²	No	Good Condition	Non-friable	Very Low	Low	P4	Manage In Situ	
256	**Residential Precinct - Cottage No.3 - Ground Floor - Verandah, North**												
	Low Level Infill Panel - Fibre Cement Sheeting	Asbestos	As NAA 47829-29 {AQ000671}	Identified, Positive	2m²	Yes	Good Condition	Non-friable	Very Low	Low	P3	Manage In Situ	
261	**Residential Precinct - Cottage No.3 - Ground Floor - Verandah, North**												
	Switch Box Linings - Fibre Cement Sheeting	Asbestos	NAA 47829-28 {AQ000668}	Identified, Positive	<1m²	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
262	**Residential Precinct - Cottage No.3 - Ground Floor - Verandah, North**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
263	**Residential Precinct - Cottage No.3 - Ground Floor - Verandah, Throughout**												
	Timber Work - Paint - Beige	Lead Paint	AQ000669	Identified, Positive - 5.5 % w/w	15m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
257	**Residential Precinct - Cottage No.3 - Ground Floor - Laundry, North**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
258	**Residential Precinct - Cottage No.3 - Ground Floor - Kitchen, Throughout**												
	Wall - Paint - Beige	Lead Paint	AQ000662	Identified, Positive - 5.6% w/w	20m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
259	**Residential Precinct - Cottage No.3 - Ground Floor - Living Room, Throughout**												
	Wall - Paint - Beige	Lead Paint	As AQ000662	Strongly Assumed, Positive - 5.6% w/w	50m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
260	**Residential Precinct - Cottage No.3 - Ground Floor - Bedrooms, Throughout**												
	Wall - Paint - Beige	Lead Paint	As AQ000662	Strongly Assumed, Positive - 5.6% w/w	50m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
264	**Residential Precinct - Cottage No.3 - Ground Floor - Dinning Room, Throughout**												
	Wall - Paint - Beige	Lead Paint	As AQ000662	Strongly Assumed, Positive - 5.6% w/w	25m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
404	**Residential Precinct - Cottage No.3 - Ground Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
409	**Residential Precinct - Cottage No.3 - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
410	**Residential Precinct - Cottage No.3 - Ground Floor - Fire Place, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
397	**Residential Precinct - Cottage No.1 - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
399	**Residential Precinct - Cottage No.1 - Ground Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
230	**Residential Precinct - Cottage No.1 - Ground Floor - Laundry, Northwest**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
231	**Residential Precinct - Cottage No.1 - Ground Floor - Laundry, North and East**												
	Pipeline - Insulation	SMF	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	

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232	**Residential Precinct - Cottage No.1 - Ground Floor - Kitchen, Below Sink**												
	Pipe Joint - Gasket	Asbestos	AQ000656	Identified, Negative	-	-	-	-	-	-	-	No further action required	
233	**Residential Precinct - Cottage No.1 - Ground Floor - Kitchen, Throughout**												
	Wall - Paint - White	Lead Paint	AQ000657	Identified, Positive - 2.6% w/w	20m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
235	**Residential Precinct - Cottage No.1 - Ground Floor - Bathroom, Throughout**												
	Wall - Paint - White	Lead Paint	As AQ000657	Strongly Assumed, Positive - 2.6% w/w	20m²	-	Good Condition	-	-	-	-	Manage In Situ	
236	**Residential Precinct - Cottage No.1 - Ground Floor - Dinning Room, Throughout**												
	Wall - Paint - White	Lead Paint	As AQ000657	Strongly Assumed, Positive - 2.6% w/w	30m²	-	Good Condition	-	-	-	-	Manage In Situ	
237	**Residential Precinct - Cottage No.1 - Ground Floor - Living Room, Throughout**												
	Wall - Paint - White	Lead Paint	As AQ000657	Strongly Assumed, Positive - 2.6% w/w	40m²	-	Good Condition	-	-	-	-	Manage In Situ	
238	**Residential Precinct - Cottage No.1 - Ground Floor - Bedrooms, Throughout**												
	Wall - Paint - White	Lead Paint	As AQ000657	Strongly Assumed, Positive - 2.6% w/w	100m²	-	Good Condition	-	-	-	-	Manage In Situ	
-	**Residential Precinct - Cottage No.1 - Ground Floor - Verandah,**												
	Electrical Distribution Board - Electrical Backing Panel, Building Component	-	-	-	-	-	-	-	-	-	-	-	-

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240	**Residential Precinct - Cottage No.1 - Ground Floor - Verandah, North and South**												
	Gable - Fibre Cement Sheeting	Asbestos	As NAA 47829-26 {AQ000670}	Strongly Assumed, Positive	5m²	Yes	Low Damage	Non-friable	Very Low	Low	P3	Manage In Situ	
252	**Residential Precinct - Cottage No.1 - Ground Floor - Verandah, Timber Works**												
	New white and pale green paint	Lead Paint	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
398	**Residential Precinct - Cottage No.1 - Ground Floor - Fire Place, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
-	**Residential Precinct - Cottage No.4 - Ground Floor - Exterior,**												
	Entrance Stair Handrail - New Red and Beige Paint, Building Component	-	-	-	-	-	-	-	-	-	-	-	-
248	**Residential Precinct - Cottage No.4 - Ground Floor - Exterior, South of Verandah**												
	Gable - Fibre Cement Sheeting - Height Restricted	Asbestos	Visual	Assumed, Positive	1m²	No	Good Condition	Non-friable	Very Low	Low	P4	Label & Manage In Situ	
249	**Residential Precinct - Cottage No.4 - Ground Floor - Exterior, South of Verandah**												
	Gable Verge Lining - Fibre Cement Sheeting - Height Restricted	Asbestos	Visual	Assumed, Positive	2m	No	Good Condition	Non-friable	Very Low	Low	P4	Manage In Situ	
401	**Residential Precinct - Cottage No.4 - Ground Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	

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402	**Residential Precinct - Cottage No.4 - Ground Floor - Fire Place, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
-	**Residential Precinct - Cottage No.4 - Ground Floor - Verandah,**												
	Electrical Distribution Board - Electrical Backing Panel, Building Component	-	-	-	-	-	-	-	-	-	-	-	-
243	**Residential Precinct - Cottage No.4 - Ground Floor - Rear Entrance, Throughout**												
	Porch Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-32 {AQ000659}	Identified, Positive	10m²	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
244	**Residential Precinct - Cottage No.4 - Ground Floor - Entrance Foyer, Ceiling**												
	Porch Lining - Fibre Cement Sheeting	Asbestos	As NAA 47829-32 {AQ000659}	Strongly Assumed, Positive	2m²	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
245	**Residential Precinct - Cottage No.4 - Ground Floor - Laundry, South**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
246	**Residential Precinct - Cottage No.4 - Ground Floor - Kitchen, South**												
	Fridge - R600a	ODS	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
250	**Residential Precinct - Cottage No.4 - Ground Floor - Dinning Room, Throughout**												
	Wall - New blue paint	Lead Paint	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	

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400	**Residential Precinct - Cottage No.4 - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
254	**Residential Precinct - Cottage No.2 - Ground Floor - Verandah, North and South**												
	Gable - Fibre Cement Sheeing - No safe access towards to gable on verandah floor	Asbestos	NAA 47829-26 {AQ000670}	Identified, Positive	1m²	No	Low Damage	Non-friable	Very Low	Low	P3	Manage In Situ	
271	**Residential Precinct - Cottage No.2 - Ground Floor - Verandah, East**												
	Wall Infill Panel - Fibre Cement Sheeting	Asbestos	NAA 47829-29 {AQ000671}	Identified, Positive	1m²	Yes	Low Damage	Non-friable	Very Low	Low	P3	Manage In Situ	
272	**Residential Precinct - Cottage No.2 - Ground Floor - Verandah, West**												
	Electrical Distribution Board - Bituminous Electrical Panel	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
405	**Residential Precinct - Cottage No.2 - Ground Floor - Fire Place, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
265	**Residential Precinct - Cottage No.2 - Ground Floor - Rear Shed, Throughout**												
	Wall - Fibre Cement Sheeting - Items were not sighted during the inspection and believed to be removed prior to inspection.	Asbestos	NAA 47829-31 {AQ000672}	Identified, Positive	15m²	Yes	Good Condition	Non-friable	Very Low	Low	P3	Conduct Further Investigations/Sampling Prior to Disturbance	
266	**Residential Precinct - Cottage No.2 - Ground Floor - Laundry, North**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
381	**Residential Precinct - Cottage No.2 - Ground Floor - Laundry, Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-27 {TPS000761}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
267	**Residential Precinct - Cottage No.2 - Ground Floor - Rear Storeroom, Throughout**												
	Wall - Paint - White	Lead Paint	AQ000664	Identified, Positive - 8.5% w/w	20m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
268	**Residential Precinct - Cottage No.2 - Ground Floor - Kitchen, Throughout**												
	Wall - Paint - White	Lead Paint	As AQ000664	Strongly Assumed, Positive - 8.5% w/w	30m²	-	Low Damage	-	-	-	-	Manage In Situ	
269	**Residential Precinct - Cottage No.2 - Ground Floor - Living Room, Throughout**												
	Wall - Paint - White	Lead Paint	As AQ000664	Strongly Assumed, Positive - 8.5% w/w	40m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
270	**Residential Precinct - Cottage No.2 - Ground Floor - Bedrooms, Throughout**												
	Wall - Paint - White	Lead Paint	As AQ000664	Strongly Assumed, Positive - 8.5% w/w	30m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
403	**Residential Precinct - Cottage No.2 - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
279	**Residential Precinct - Harbour Master's Residence - 1st Floor - Rooms, Throughout**												
	Wall - Paint - Beige	Lead Paint	AQ000667	Identified, Positive - 11 % w/w	50m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
408	**Residential Precinct - Harbour Master's Residence - 1st Floor - Roof Space, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
273	**Residential Precinct - Harbour Master's Residence - Ground Floor - Exterior, Throughout**												
	Timber Work - Paint - Green Upper Layer Paint and Beige Lower Layer Paint	Lead Paint	AQ000665	Identified, Positive - 3.3% w/w	100m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
278	**Residential Precinct - Harbour Master's Residence - Ground Floor - Exterior, West**												
	Wall - Paint - White	Lead Paint	AQ000666	Identified, Positive - 14 % w/w	60m²	-	High Damage / Poor Condition	-	-	-	-	Remove Under Suitably Controlled Conditions	
274	**Residential Precinct - Harbour Master's Residence - Ground Floor - Servery, North**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	3no.	Yes	Low Damage	Non-friable	Very Low	Very Low	P4	Manage In Situ	
275	**Residential Precinct - Harbour Master's Residence - Ground Floor - Southern Outhouse, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
276	**Residential Precinct - Harbour Master's Residence - Ground Floor - Laundry, North**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
-	**Residential Precinct - Harbour Master's Residence - Ground Floor - Rear Shed,**												
	Rear shed was removed prior the inspection. Footprint of rear shed was sighted and inspected., Building Component	-	-	-	-	-	-	-	-	-	-	-	-

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
406	**Residential Precinct - Harbour Master's Residence - Ground Floor - Subfloor, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
407	**Residential Precinct - Harbour Master's Residence - Ground Floor - Fire Place, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
309	**Shipyard Precinct - 500t Winch House - Ground Floor - Exterior, Perimeter - Around Roof**												
	Eaves - Fibre Cement Sheeting - Height Restricted	Asbestos	Visual	Assumed, Positive	20m²	No	Low Damage	Non-friable	Very Low	Low	P3	Manage In Situ	
310	**Shipyard Precinct - 500t Winch House - Ground Floor - Hoist Area, Central**												
	Plant & Equipment - Break Pad	Asbestos	Visual	Assumed, Positive	2no.	No	Good Condition	Non-friable	Low	Very Low	P4	Manage In Situ	
303	**Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop, Throughout**												
	Timber Work - Paint - Green	Lead Paint	As AQ000684	Strongly Assumed, Positive - 1.7 % w/w	200m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
304	**Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop, Central**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
305	**Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	20no.	-	Good Condition	-	-	-	-	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
306	**Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop, East**												
	A/C Unit - No Tag Info	ODS	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
307	**Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop, North**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	2no.	Yes	Good Condition	Non-friable	Very Low	Low	P3	Manage In Situ	
311	**Shipyard Precinct - Repair Workshop - Ground Floor - Part Storage, Northeast**												
	Fridge - R12	ODS	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
313	**Shipyard Precinct - Repair Workshop - Ground Floor - Part Storage, Throughout**												
	Roof Lining - Sarking Insulation	SMF	Visual	Assumed, Positive	150m²	-	Good Condition	Bonded	-	-	-	Manage In Situ	
382	**Shipyard Precinct - Repair Workshop - Ground Floor - Part Storage, Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	As NAA 47829-20 {AQ000739}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
375	**Shipyard Precinct - Repair Workshop - Ground Floor - Cable Room, Throughout**												
	Wall - Fibre Cement sheeting	Asbestos	NAA 47829-20 {AQ000739}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
376	**Shipyard Precinct - Repair Workshop - Ground Floor - Cable Room, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	3no.	-	Good Condition	-	-	-	-	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
296	**Shipyard Precinct - Ship Repair Workshop - Ground Floor - Exterior, Throughout**												
	Timber Work - Paint - Green	Lead Paint	AQ000684	Identified, Positive - 1.7 % w/w	500m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
297	**Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop, Throughout Ceiling**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	10no.	-	Good Condition	-	-	-	-	Manage In Situ	
298	**Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop, Main Switch Room**												
	Unused Items in Lockers - Electrical Fuse - Woven Materials	Asbestos	AQ000696	Identified, Positive	5no.	No	Good Condition	Friable	Very Low	Low	P4	Manage In Situ	
299	**Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop, Above Kitchen Riser**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
300	**Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop, Southern Workshop - Hoist**												
	Electrical Distribution Board - Bituminous Electrical Panel - Height Restricted	Asbestos	Visual	Assumed, Positive	1no.	No	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
301	**Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop, Southern Work Shop - Northwest Corner**												
	Wall - Fibre Cement Sheeting	Asbestos	AQ000685	Identified, Negative	-	-	-	-	-	-	-	No further action required	
302	**Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop, Kitchen**												
	Wall Behind Stove - Paint - Grey	Lead Paint	AQ000686	Identified, Negative - <0.005 %w/w	-	-	-	-	-	-	-	No further action required	

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290	**Shipyard Precinct - Ship Repair Workshop - Mezzanine - Offices, Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	AQ000681	Identified, Negative	-	-	-	-	-	-	-	No further action required	
291	**Shipyard Precinct - Ship Repair Workshop - Mezzanine - Offices, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
292	**Shipyard Precinct - Ship Repair Workshop - Mezzanine - Offices, Northeast**												
	A/C Unit - No Info Tag	ODS	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
293	**Shipyard Precinct - Ship Repair Workshop - Mezzanine - Offices, Throughout**												
	Timber Work - Paint - Beige	Lead Paint	AQ000682	Identified, Negative - 0.073 %w/w	-	-	-	-	-	-	-	No further action required	
294	**Shipyard Precinct - Ship Repair Workshop - Mezzanine - Offices, Throughout**												
	Floor Covering - Blue Vinyl Sheet and Associated Adhesives	Asbestos	AQ000683	Identified, Negative	-	-	-	-	-	-	-	No further action required	
295	**Shipyard Precinct - Ship Repair Workshop - Mezzanine - Offices, South**												
	Fridge - R134a	ODS	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
314	**Shipyard Precinct - Slipway Workshop Building - Ground Floor - Exterior, East**												
	Electrical Distribution Board - Bituminous Electrical Panel	Asbestos	Visual	Assumed, Positive	2no.	No	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
315	**Shipyard Precinct - Slipway Workshop Building - Ground Floor - Office, Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-21 {AQ000740}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
316	**Shipyard Precinct - Slipway Workshop Building - Ground Floor - Office, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
317	**Shipyard Precinct - Slipway Workshop Building - Ground Floor - Office, South**												
	Fridge - Unknown Gas - Presumed Non-ODS Due to age of product	ODS	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
318	**Shipyard Precinct - Slipway Workshop Building - Ground Floor - Office, Northwest**												
	A/C Unit - R22	ODS	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
308	**Shipyard Precinct - Winch House - Ground Floor - Exterior, Throughout**												
	Timber Work - Paint - Green	Lead Paint	AQ000687	Identified, Positive - 0.14 %w//w	25m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
-	**Shipyard Precinct - Winch House - Ground Floor - Interior,**												
	No Hazardous Materials found, Building Component	-	-	-	-	-	-	-	-	-	-	-	-
333	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Northeast Room, Above Sink**												
	Hot Water Units - Insulation	SMF	Visual	Assumed, Positive	2no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	

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334	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Northeast Room, Throughout**												
	Ceiling - Compressed Ceiling Tiles	SMF	Visual	Assumed, Positive	50m²	-	Medium Damage	Bonded	-	-	-	Encapsulate / Repair & Manage In Situ	
335	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Northeast Room, Throughout**												
	Floor Covering - Sheet Vinyl - Brown	Asbestos	As NAA 47829-34 {AQ000736}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
336	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Northeast Room, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	12no.	-	Good Condition	-	-	-	-	Manage In Situ	
337	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Northeast Room, Throughout**												
	Wall - Paint - Pale Blue	Lead Paint	AQ000692	Identified, Positive - 0.11 %w/w	50m²	-	Low Damage	-	-	-	-	Manage In Situ	
338	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Central Stairwell, West**												
	Electrical Distribution Board - Bituminous Electrical Panels - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	2no.	Yes	Low Damage	Non-friable	Low	Very Low	P3	Manage In Situ	
339	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Central Stairwell, West**												
	Switch Box Lining - Fibre Cement Sheeting	Asbestos	NAA 47829-38 {AQ000693}	Identified, Positive	1m²	Yes	Good Condition	Non-friable	Low	Low	P3	Manage In Situ	
340	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Central Stairwell, Throughout**												
	Ceiling - Compressed Ceiling Tiles	SMF	Visual	Assumed, Positive	10m²	-	Good Condition	Bonded	-	-	-	Manage In Situ	

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341	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Central Stairwell, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	6no.	-	Good Condition	-	-	-	-	Manage In Situ	
364	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Central Stairwell, Throughout**												
	Floor Covering - Vinyl Sheet - Brown	Asbestos	As NAA 47829-34 {AQ000736}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
342	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Room opposite Female Toilet, Throughout**												
	Floor Covering - Vinyl Sheet - Brown	Asbestos	As NAA 47829-34 {AQ000736}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
343	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Room opposite Female Toilet, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
372	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Female Toilet, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
373	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Female Toilet, Throughout**												
	Floor Covering - Vinyl Sheet - Brown	Asbestos	As NAA 47829-34 {AQ000736}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
374	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Female Toilet, Throughout**												
	Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-36 {AQ000738}	Identified, Negative	-	-	-	-	-	-	-	No further action required	

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346	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Corridor, Throughout**												
	Floor Covering - Sheet Vinyl - Blue	Asbestos	AQ000694	Identified, Negative	-	-	-	-	-	-	-	No further action required	
347	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Corridor, Throughout**												
	Ceiling - Compressed Ceiling Tiles	SMF	Visual	Assumed, Positive	25m²	-	Good Condition	Bonded	-	-	-	Manage In Situ	
348	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Corridor, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	8no.	-	Good Condition	-	-	-	-	Manage In Situ	
362	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Corridor, Throughout**												
	Floor Covering - Adhesive	Asbestos	AQ000695	Identified, Negative	-	-	-	-	-	-	-	No further action required	
349	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Male Toilet, Throughout**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-37 {TPS000762}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
350	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Male Toilet, Central**												
	Light Fitting - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
351	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Sergent Room, Throughout**												
	Floor Covering - Vinyl Sheet - Beige	Asbestos	As NAA 47829-34 {AQ000736}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	

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353	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Sergent Room, Central**												
	Light Fitting - Capacitor	PCB	Visual	-, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
354	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Conference and Interview Room, Throughout**												
	Floor coverings - Vinyl Sheet - Beige	Asbestos	As NAA 47829-34 {AQ000736}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
355	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Conference and Interview Room, Central**												
	Light Fittings - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
357	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room, Throughout**												
	Ceiling - Compressed Ceiling Tiles	SMF	Visual	Assumed, Positive	30m²	-	Low Damage	Bonded	-	-	-	Manage In Situ	
358	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room, Throughout**												
	Floor Covering - Sheet Vinyl - Blue	Asbestos	As AQ000694	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
359	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room, Throughout Ceiling**												
	Light Fittings - Capacitor	PCB	Visual	Assumed, Positive	12no.	-	Good Condition	-	-	-	-	Manage In Situ	
360	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room, Throughout**												
	Wall - Paint - Pale Blue	Lead Paint	As AQ000692	Strongly Assumed, Positive - 0.11 %w/w	25m²	-	Low Damage	-	-	-	-	Manage In Situ	

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361	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room, Throughout**												
	Timber Work - Paint - Pale Blue	Lead Paint	As AQ000679	Strongly Assumed, Positive - 0.11 %w/w	20m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
363	**South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room, Throughout**												
	Floor Covering - Adhesive	Asbestos	As AQ000695	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
285	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Exterior, Verandah**												
	Ceiling - Fibre Cement Sheeting	Asbestos	NAA 47829-33 {AQ000678}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
286	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Exterior, Staff Entrance**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-33 {AQ000678}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
287	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Exterior, North Entrance**												
	Ceiling - Fibre Cement Sheeting	Asbestos	As NAA 47829-33 {AQ000678}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
288	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Exterior, Throughout**												
	Timber Work - Paint - Light Blue	Lead Paint	AQ000679	Identified, Positive - 0.11 %w/w	20m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
289	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Exterior, Perimeter - North**												
	Metal Handrail - Paint - Beige	Lead Paint	AQ000680	Identified, Negative - 0.094 %w/w	-	-	-	-	-	-	-	No further action required	

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370	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Exterior, Staff Entrance**												
	Floor Covering - Vinyl Sheet - Brown	Asbestos	NAA 47829-34 {AQ000736}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
319	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - All Areas, Throughout - Ceiling**												
	Fluorescent light fitting - Capacitor	PCB	Visual	Assumed, Positive	20no.	-	Good Condition	-	-	-	-	Manage In Situ	
320	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - All Areas, Throughout**												
	Ceiling - Compressed Ceiling Tiles	SMF	Visual	Assumed, Positive	200	-	Medium Damage	Bonded	-	-	-	Encapsulate / Repair & Manage In Situ	
323	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - All Areas, Throughout**												
	Wall - Paint - Pale Blue	Lead Paint	AQ000688	Identified, Positive - 0.19 %w/w	300m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
369	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - All Areas, Staff Entrance**												
	Floor Covering - Sheet Vinyl - Brown	Asbestos	As NAA 47829-34 {AQ000736}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
371	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Exhibits Room, Central**												
	Fluorescent light fitting - Capacitor	PCB	Visual	Assumed, Positive	2no.	-	Good Condition	-	-	-	-	Manage In Situ	
322	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - North Front Area, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	15no.	-	Good Condition	-	-	-	-	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
330	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - North Front Area, Throughout**												
	Ceiling - Paint - Beige	Lead Paint	AQ000689	Identified, Positive - 0.14 %w/w	100m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
331	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - North Front Area, Central - Stair**												
	Metal Handrail - Paint - Pale Blue	Lead Paint	AQ000690	Identified, Negative - 0.03 %w/w	-	-	-	-	-	-	-	No further action required	
332	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - North Front Area, Ceiling**												
	Beams - Paint - Pale Blue	Lead Paint	AQ000691	Identified, Positive - 0.20 %w/w	10m²	-	Low Damage	-	-	-	-	Manage In Situ	
324	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Store Room, South**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
325	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Police Diving Unit, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	10no.	-	Good Condition	-	-	-	-	Manage In Situ	
326	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Police Diving Unit, North**												
	Electrical Distribution Board - Bituminous Electrical Panel	Asbestos	NAA 47829-35 {AQ000737}	Identified, Positive	2no.	Yes	Good Condition	Non-friable	Very Low	Very Low	P4	Manage In Situ	
327	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Garage, East**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Low Damage	Non-friable	Very Low	Very Low	P4	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
328	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Garage, Throughout**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	4no.	-	Good Condition	-	-	-	-	Manage In Situ	
329	**South Depot Precinct - Port Emergancy Services Building - Ground Floor - Garage, Throughout**												
	Ceiling - Compressed Ceiling Tiles	SMF	Visual	Assumed, Positive	25m²	-	Good Condition	Bonded	-	-	-	Manage In Situ	
34	**Water Police Precinct - 1912 Barracks - Ground Floor - Exterior, Front and Rear Door**												
	Door and Frame - Paint - Light Blue	Lead Paint	AQ000591	Identified, Positive - 0.15 %w/w	5m²	-	Good Condition	-	-	-	-	Manage In Situ	
35	**Water Police Precinct - 1912 Barracks - Ground Floor - Exterior, West - Adjacent to Entrance**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Low Damage	Non-friable	Very Low	Very Low	P4	Manage In Situ	
36	**Water Police Precinct - 1912 Barracks - Ground Floor - Exterior, West - Adjacent to Entrance**												
	Electrical Distribution Board - Box Linings - Fibre Cement Sheeting	Asbestos	AQ000592	Identified, Positive	2m²	Yes	Low Damage	Non-friable	Very Low	Low	P4	Manage In Situ	
37	**Water Police Precinct - 1912 Barracks - Ground Floor - Corridor, Throughout**												
	Floor Covering - Vinyl Sheet - Pink	Asbestos	NAA 47829-43 {AQ000593}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
40	**Water Police Precinct - 1912 Barracks - Ground Floor - Corridor, Throughout**												
	Wall - Paint - Cream	Lead Paint	As AQ000594	Strongly Assumed, Positive - 14 % w/w	60m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
38	**Water Police Precinct - 1912 Barracks - Ground Floor - East Room, Throughout**												
	Floor Covering - Sheet Vinyl - Pink	Asbestos	As NAA 47829-43 {AQ000593}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
39	**Water Police Precinct - 1912 Barracks - Ground Floor - East Room, Throughout**												
	Wall - Paint - Cream	Lead Paint	AQ000594	Identified, Positive - 14 % w/w	50m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
48	**Water Police Precinct - 1912 Barracks - Ground Floor - East Room, North**												
	Window Frame - Paint - White	Lead Paint	As AQ000595	Strongly Assumed, Positive - 3.5 % w/w	2m²	-	Low Damage	-	-	-	-	Manage In Situ	
49	**Water Police Precinct - 1912 Barracks - Ground Floor - East Room, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	1no.	-	Good Condition	-	-	-	-	Manage In Situ	
42	**Water Police Precinct - 1912 Barracks - Ground Floor - Cleaner's Room, Throughout**												
	Wall - Paint - Cream	Lead Paint	As AQ000594	Strongly Assumed, Positive - 14 % w/w	15m²	-	Good Condition	-	-	-	-	Manage In Situ	
43	**Water Police Precinct - 1912 Barracks - Ground Floor - Cleaner's Room, Higher Level Area**												
	Hot Water Unit - Insulation Materials	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
44	**Water Police Precinct - 1912 Barracks - Ground Floor - Kitchen, Throughout**												
	Floor Covering - Sheet Vinyl - Pink	Asbestos	As NAA 47829-43 {AQ000593}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
45	**Water Police Precinct - 1912 Barracks - Ground Floor - Kitchen, Above Sink**												
	Hot Water Unit - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
46	**Water Police Precinct - 1912 Barracks - Ground Floor - Kitchen, East**												
	Fridge - R600a	ODS	Visual	Assumed, Negative	-	-	-	-	-	-	-	No further action required	
47	**Water Police Precinct - 1912 Barracks - Ground Floor - Kitchen, Throughout**												
	Window Frame - Paint - White	Lead Paint	AQ000595	Identified, Positive - 3.5 % w/w	30m²	-	Low Damage	-	-	-	-	Manage In Situ	
50	**Water Police Precinct - 1912 Barracks - Ground Floor - Toilet, Central**												
	Fluorescent light fittings - Capacitor	PCB	Visual	Assumed, Positive	5no.	-	Good Condition	-	-	-	-	Manage In Situ	
51	**Water Police Precinct - The Cottage - Ground Floor - Exterior, West Verendah - South Between Cottage and 1912 Barracks**												
	Wall - Fibre Cement Sheeting	Asbestos	NAA 47829-39 {AQ000603}	Identified, Negative	-	-	-	-	-	-	-	No further action required	
62	**Water Police Precinct - The Cottage - Ground Floor - Exterior, Throughout**												
	Wall - Paint - Blue	Lead Paint	AQ000604	Identified, Positive - 12 % w/w	200m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
77	**Water Police Precinct - The Cottage - Ground Floor - Exterior, North**												
	Telecomm Pit - Moulded Cement	Asbestos	AQ000613	Identified, Positive	1no.	No	Low Damage	Non-friable	Low	Low	P3	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
63	**Water Police Precinct - The Cottage - Ground Floor - Entrance Foyer, Throughout**												
	Wall - Paint - Yellow	Lead Paint	AQ000605	Identified, Positive - 12 % w/w	5m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
64	**Water Police Precinct - The Cottage - Ground Floor - North Room, Throughout**												
	Wall - Paint - Yellow	Lead Paint	As AQ000605	Strongly Assumed, Positive - 12 % w/w	50m²	-	Medium Damage	-	-	-	-	Encapsulate / Repair & Manage In Situ	
66	**Water Police Precinct - The Cottage - Ground Floor - North Room, Above Sink**												
	Boiler - Insulation	SMF	Visual	Assumed, Positive	1no.	-	Good Condition	Bonded	-	-	-	Manage In Situ	
67	**Water Police Precinct - The Cottage - Ground Floor - North Room, Throughout**												
	Floor Covering - Sheet Vinyl - Pink	Asbestos	As NAA 47829-43 {AQ000593}	Strongly Assumed, Negative	-	-	-	-	-	-	-	No further action required	
65	**Water Police Precinct - The Cottage - Ground Floor - South Room, Throughout**												
	Wall - Paint - Yellow	Lead Paint	As AQ000605	Strongly Assumed, Positive - 12 % w/w	50m²	-	Low Damage	-	-	-	-	Manage In Situ	
411	**Water Police Precinct - The Cottage - Ground Floor - Fire Place, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	
26	**Water Police Precinct - Water Police Station - Ground Floor - Exterior, Front Entrance**												
	Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard	Asbestos	Visual	Assumed, Positive	1no.	Yes	Low Damage	Non-friable	Very Low	Very Low	P4	Manage In Situ	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
27	**Water Police Precinct - Water Police Station - Ground Floor - Exterior, Throughout**												
	Wall - Pointing - Additional sampling required prior to works which may disturb this material	Asbestos	AQ000585	Identified, Negative	-	-	-	-	-	-	-	No further action required	
28	**Water Police Precinct - Water Police Station - Ground Floor - South Room, Throughout**												
	Wall - Paint - Dark Beige Upper Layer Paint and White Lower Layer Paint	Lead Paint	AQ000586	Identified, Positive - 7.9 % w/w	50m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
29	**Water Police Precinct - Water Police Station - Ground Floor - East Room, Throughout**												
	Wall - Paint - Pale Blue	Lead Paint	AQ000587	Identified, Positive - 8 % w/w	50m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
30	**Water Police Precinct - Water Police Station - Ground Floor - West Room, Throughout**												
	Wall - Paint - Pale Green	Lead Paint	AQ000588	Identified, Positive - 7.2 % w/w	50m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
31	**Water Police Precinct - Water Police Station - Ground Floor - Central Room, Throughout**												
	Wall - Paint - White	Lead Paint	AQ000589	Identified, Positive - 8.1 % w/w	20m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
33	**Water Police Precinct - Water Police Station - Ground Floor - Central Room, Throughout**												
	Door and Window Frame - Paint - White	Lead Paint	AQ000590	Identified, Positive - 17 % w/w	10m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	
32	**Water Police Precinct - Water Police Station - Ground Floor - North Room, Throughout**												
	Wall - Paint - Pale Green	Lead Paint	As AQ000588	Strongly Assumed, Positive - 7.2 % w/w	20m²	-	High Damage / Poor Condition	-	-	-	-	Restrict Access & Remove Under Suitably Controlled Conditions	

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Item No	Location / Description	Hazard Type	Sample No.	Item Status	Est. Extent	Current Label	Condition	Friability	Disturbance Risk	Material Risk	Control Priority	Recommended Action	Record of Works
412	**Water Police Precinct - Water Police Station - Ground Floor - Fire Place, Inaccessible**												
	Inaccessible	Asbestos	Visual	Assumed, Positive	Inaccessible	-	Unknown	Unknown	-	-	P*	Conduct Further Investigations/Sampling Prior to Disturbance	

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Areas not Accessed

It is noted that hazardous materials may be contained within or behind those areas identified in the below table. Caution should be exercised when accessing these areas, particularly in relation to potential disturbance of the building fabric or concealed spaces.

Area Not Accessed	Comments
Water Police Precinct - Water Police Station, Ground Floor, Fire Place	Enclosed cavity
Water Police Precinct - The Cottage, Ground Floor, Fire Place	Enclosed cavity
North Depot Precinct - Fire Fighting Buildings, Ground Floor, Roof Space	No safe access
North Depot Precinct - Fire Fighting Buildings, Ground Floor, Subfloor	No safe access
Magazine Precinct - Kitchen, Ground Floor, Roof Space	No safe access
Magazine Precinct - Kitchen, Ground Floor, Subfloor	No safe access
Magazine Precinct - Colonial Barracks, Ground Floor, Roof Space	No safe access
Magazine Precinct - Colonial Barracks, Ground Floor, Subfloor	
Magazine Precinct - Boat Shed, Ground Floor, Interior	No safe access to interior/derelict structure
Magazine Precinct - Amenities Block, Ground Floor, Subfloor	
Magazine Precinct - Amenities Block, 1st Floor, Roof Space	No safe access
Magazine Precinct - Office and Amenities Building, Ground Floor, Roof Space	No safe access
Magazine Precinct - Office and Amenities Building, Ground Floor, Subfloor	No safe access
Magazine Precinct - Stores Building, Ground Floor, Roof Space	No safe access
Magazine Precinct - Stores Building, Ground Floor, Subfloor	No safe access

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Area Not Accessed	Comments
Magazine Precinct - Colonial Magazine, Ground Floor, Roof Space	No safe access
Magazine Precinct - Colonial Magazine, Ground Floor, Subfloor	No safe access
Residential Precinct - Cottage No.1, Ground Floor, Fire Place	Enclosed cavity
Residential Precinct - Cottage No.1, Ground Floor, Roof Space	No safe access
Residential Precinct - Cottage No.1, Ground Floor, Subfloor	No safe access
Residential Precinct - Cottage No.4, Ground Floor, Fire Place	Enclosed cavity
Residential Precinct - Cottage No.4, Ground Floor, Roof Space	No safe access
Residential Precinct - Cottage No.4, Ground Floor, Subfloor	No safe access
Residential Precinct - Cottage No.2, Ground Floor, Fire Place	Enclosed cavity
Residential Precinct - Cottage No.2, Ground Floor, Subfloor	No safe access
Residential Precinct - Cottage No.3, Ground Floor, Fire Place	Enclosed cavity.
Residential Precinct - Cottage No.3, Ground Floor, Roof Space	No safe access
Residential Precinct - Cottage No.3, Ground Floor, Subfloor	
Residential Precinct - Harbour Master's Residence, Ground Floor, Fire Place	Enclosed cavity
Residential Precinct - Harbour Master's Residence, Ground Floor, Subfloor	No safe access

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Area Not Accessed	Comments
Residential Precinct - Harbour Master's Residence, 1st Floor, Roof Space	No safe access

The following areas were either partially accessed with representative areas inspected or were considered outside the scope of works and not accessed. Caution should be exercised when accessing these areas, particularly in relation to potential disturbance of the building fabric or concealed spaces.

Central Precinct - Recreational Hall Area		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard

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Central Precinct - Tennis Court (former)		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No safe access on overgrowth vegetation

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Central Precinct - Throughout		
ITEM	**NOT ACCESSED**	**COMMENT**
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard

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Magazine Precinct - Amenities Block		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Fire Door Cores & Fire Rated Door Frames	All	Integrity of fire doors not compromised
Gaskets, Mastics & Sealants to Pipework, Ductwork, Mechanical Equipment	All	Live plant and services.
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Boat Shed		
ITEM	**NOT ACCESSED**	**COMMENT**
Ceiling Spaces	All	No safe access at time of inspection.
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	No safe access at time of inspection.
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection.
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Colonial Barracks		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Colonial Magazine		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground
Construction/Expansion Joints	Some	Non-intrusive inspection undertaken. Refer to register
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	Live services at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Kitchen		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Office and Amenities Building		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	Some	No access beneath fixed floor coverings. Refer to Register
Ceiling Spaces	Some	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Queens Magazine		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground.
Construction/Expansion Joints	Some	Non-intrusive inspection undertaken. Refer to register
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Southern Addition to Queens Magazine		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Stores Building		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground
Construction/Expansion Joints	All	Non-intrusive inspection undertaken. Refer to Register
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live Electrical Hazard
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Substation		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present. Height Restricted. Limited access to 2.7m
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Gaskets, Mastics & Sealants to Pipework, Ductwork, Mechanical Equipment	All	Live services plant
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - The Cooperage		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground
Construction/Expansion Joints	Some	Non-intrusive inspection undertaken. Refer to register
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precinct - Timber Store		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Magazine Precintct - Scow Shed		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	Outside scope of works for non-destructive inspection
Ceiling Spaces	All	Open ceiling space was viewed from ground
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Inside Mechanical Equipment	All	Live plant at time of inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m

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North Depot Precinct - Dredge Office		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	Some	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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North Depot Precinct - Ferry Wharf		
ITEM	**NOT ACCESSED**	**COMMENT**
Air Conditioning Re-Heat Boxes	All	No safe access on walk path at time of inspection
Beneath & Within Floor Slabs and Footings	All	No safe access provided.
Beneath Floor Coverings	All	No safe access to walk path. No access beneath fixed floor coverings
Ceiling Spaces	All	No safe access on the walk path at time of inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	No safe access on walk path at time of inspection Outside scope of works for non-destructive inspection

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North Depot Precinct - Fire Fighting Buildings		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	Some	Open Ceiling Space was viewed from ground. No safe access at time of inspection
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Inside Mechanical Equipment	All	Live plant at time of inspection
Partition Wall Cavities	All	O
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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North Depot Precinct - Gear Shed		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	Some	Open ceiling space was viewed from ground.
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Gaskets, Mastics & Sealants to Pipework, Ductwork, Mechanical Equipment	All	Live plant at time of inspection
Inside Mechanical Equipment	All	Live plant at time of inspection
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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North Depot Precinct - Small Boat Enclosure		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Residential Precinct - Cottage No.1		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present. Limited access to 2.7m
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Subterranean Areas, i.e., Below Ground Surface Level	All	No safe access below 0.5m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Residential Precinct - Cottage No.2		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Subterranean Areas, i.e., Below Ground Surface Level	All	No safe access below 0.5m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Residential Precinct - Cottage No.3		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Subterranean Areas, i.e., Below Ground Surface Level	All	No safe access below 0.5m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Residential Precinct - Cottage No.4		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	Some	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Subterranean Areas, i.e., Below Ground Surface Level	All	No safe access below 0.5m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Residential Precinct - Harbour Master's Residence		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Subterranean Areas, i.e., Below Ground Surface Level	All	No safe access below 0.5m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Shipyard Precinct - 500t Winch House		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground.
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Gaskets, Mastics & Sealants to Pipework, Ductwork, Mechanical Equipment	All	Live plant at time of inspection
Inside Mechanical Equipment	All	Live plant at time of inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Shipyard Precinct - Addition to Ship Repair Workshop		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space in workshop areas was viewed from ground. No access above fixed ceilings at mezzanine level unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Gaskets, Mastics & Sealants to Pipework, Ductwork, Mechanical Equipment	All	Live plant at time of inspection
Inside Mechanical Equipment	All	Live plant at time of inspection
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Shipyard Precinct - Repair Workshop		
ITEM	**NOT ACCESSED**	**COMMENT**
Air Conditioning Re-Heat Boxes	All	No safe access on the walk path to Cable Room at time of inspection.
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Gaskets, Mastics & Sealants to Pipework, Ductwork, Mechanical Equipment	All	Live plant at time of inspection
Inside Mechanical Equipment	All	Live plant at time of inspection
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Shipyard Precinct - Ship Repair Workshop		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space at ground level workshop areas was viewed from ground. No access above fixed ceilings in mezzanine level unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Gaskets, Mastics & Sealants to Pipework, Ductwork, Mechanical Equipment	All	Live plant at time of inspection
Inside Mechanical Equipment	All	Live plant at time of inspection
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Shipyard Precinct - Slipway Workshop Building		
ITEM	**NOT ACCESSED**	**COMMENT**
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Gaskets, Mastics & Sealants to Pipework, Ductwork, Mechanical Equipment	All	Live plant at time of inspection
Inside Mechanical Equipment	All	Live plant at time of inspection
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Shipyard Precinct - Winch House		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space was viewed from ground
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Gaskets, Mastics & Sealants to Pipework, Ductwork, Mechanical Equipment	All	Live plant at time of inspection
Inside Mechanical Equipment	All	Live plant at time of inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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South Depot Precinct - Port Emergancy Services Building		
ITEM	**NOT ACCESSED**	**COMMENT**
Air Conditioning Re-Heat Boxes	All	No safe access at time of inspection. Live electrical hazard
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Subterranean Areas, i.e., Below Ground Surface Level	All	No safe access provided.
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Water Police Precinct - 1912 Barracks		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection. Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Water Police Precinct - The Cottage		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	No access above fixed ceilings unless accessible access hatches were present
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Water Police Precinct - Water Police Station		
ITEM	**NOT ACCESSED**	**COMMENT**
Behind Ceramic Wall Tiles and Wall Cladding	All	Outside scope of works for non-destructive inspection
Beneath Floor Coverings	All	No access beneath fixed floor coverings
Ceiling Spaces	All	Open ceiling space viewed from ground. No access to fixed ceiling unless the access hatch present.
Electrical Switchboards, Fuse Boards, Meter Boards and Distribution Boards	All	Live electrical hazard
Partition Wall Cavities	All	Outside scope of works for non-destructive inspection
Roof	All	No safe access at time of inspection Limited access to 2.7m
Wall Cavities	All	Outside scope of works for non-destructive inspection

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Register Item Details

Location	Central Precinct - Throughout - Ground Floor - Telecom post - Various Locations - Telephone Poles - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	1
		Asbestos Type	1	Maintenance	0
Item Number	365	**Material Score**	2	**Disturbance Score**	2
		Priority Score	4	**Very Low**	



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Location	Magazine Precinct - Amenities Block - Ground Floor - Exterior - East and West Entrance - Fluorescent light fitting - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	109	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - Ground Floor - Exterior - Northwest Corner - Fluorescent light fitting - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	110	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - Ground Floor - Exterior - West Entrance - Switch Box - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	0
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	135	**Material Score**	2	**Disturbance Score**	4
		Priority Score	6	**Very Low**	





Location	Magazine Precinct - Amenities Block - Ground Floor - Exterior - West Entrance - Switch Box - Switch Box Linings - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	AQ000631	Extent of damage	0	Disturbance	1
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	136	**Material Score**	5	**Disturbance Score**	4
		Priority Score	9	**Low**	





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Location	Magazine Precinct - Amenities Block - Ground Floor - Locker Room - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-17 {AQ000632}	Extent of damage	0	Disturbance	2
Result	Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	112	**Material Score**	5	**Disturbance Score**	6
		Priority Score	11	**Low**	



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Location	Magazine Precinct - Amenities Block - Ground Floor - Locker Room - Central - Fluorescent light fitting				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	138	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - Ground Floor - Workshop - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-17 {AQ000632}	Extent of damage	1	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	114	**Material Score**	6	**Disturbance Score**	6
		Priority Score	12	**Low**	



Location	Magazine Precinct - Amenities Block - Ground Floor - Workshop - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	115	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - Ground Floor - Western Showers - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-17 {AQ000632}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	117	**Material Score**	5	**Disturbance Score**	6
		Priority Score	11	**Low**	



Location	Magazine Precinct - Amenities Block - Ground Floor - Western Showers - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	118	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Amenities Block - Ground Floor - Western Showers - Northwest - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	119	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - Ground Floor - Storeroom Below Eastern Stair - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	NAA 47829-16 {AQ000630}	Extent of damage	0	Disturbance	2
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	1
		Asbestos Type	3	Maintenance	1
Item Number	120	**Material Score**	5	**Disturbance Score**	4
		Priority Score	9	**Low**	



Location	Magazine Precinct - Amenities Block - Ground Floor - Eastern Corridor - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-17 {AQ000632}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	123	**Material Score**	5	**Disturbance Score**	6
		Priority Score	11	**Low**	



Location	Magazine Precinct - Amenities Block - Ground Floor - Eastern Corridor - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	131	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - Ground Floor - Western Corridor - Throughout - Ceiling - Behind Vermiculite - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-17 {AQ000632}	Extent of damage	1	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	125	**Material Score**	6	**Disturbance Score**	6
		Priority Score	12	**Low**	



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Location	Magazine Precinct - Amenities Block - Ground Floor - Western Corridor - North and East - Fire Door - Fire Door Core - No Date of Manufactured				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Friable	Product Type	2	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	2
Result	Assumed Positive Amosite	Surface Treatment	2	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	134	**Material Score**	6	**Disturbance Score**	6
		Priority Score	12	**Low**	





Location	Magazine Precinct - Amenities Block - Ground Floor - Western Corridor - Throughout - Ceiling - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	139	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - Ground Floor - Eastern Toilet - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-17 {AQ000632}	Extent of damage	1	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	127	**Material Score**	6	**Disturbance Score**	6
		Priority Score	12	**Low**	



Location	Magazine Precinct - Amenities Block - Ground Floor - Eastern Toilet - Central - Fluorescent light fitting - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	128	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - Ground Floor - Western Toilet - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-17 {AQ000632}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	129	**Material Score**	5	**Disturbance Score**	6

No Photographic Evidence Available

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		Priority Score	11	Low

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Location	Magazine Precinct - Amenities Block - Ground Floor - Western Toilet - Central - Fluorescent light fitting - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	130	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - Ground Floor - Eastern Showers - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-17 {AQ000632}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	132	**Material Score**	5	**Disturbance Score**	6
		Priority Score	11	**Low**	



Location	Magazine Precinct - Amenities Block - Ground Floor - Eastern Showers - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	133	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - 1st Floor - Exterior - Perimeter - Around Roof - Eaves - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	As AQ000636	Extent of damage	0	Disturbance	1
Result	Strongly Assumed Positive Chrysotile + Crocidolite + Fibrous Anthophyllite	Surface Treatment	1	Exposure	0
		Asbestos Type	3	Maintenance	0
Item Number	141	**Material Score**	5	**Disturbance Score**	1
		Priority Score	6	**Very Low**	



Location	Magazine Precinct - Amenities Block - 1st Floor - Large Room - West - Above Sink - Hot Water Unit - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	142	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Amenities Block - 1st Floor - Large Room - East - Above Sink - Boiler Unit - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	143	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - 1st Floor - Large Room - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	144	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - 1st Floor - Large Room - Throughout - Ceiling - Ductwork - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	145	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - 1st Floor - Large Room - Throughout - Ceiling - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000634	Extent of damage	-	Disturbance	-
Result	Positive - 0.76 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	146	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - 1st Floor - Large Room - Throughout - Wall - Paint - Pale Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000635	Extent of damage	-	Disturbance	-
Result	Positive - 0.26 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	147	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Amenities Block - 1st Floor - Large Room - East and West - Fire Door - Fire Door Core - Installed in 1980s				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Friable	Product Type	2	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	2
Result	Assumed Positive Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	149	**Material Score**	5	**Disturbance Score**	6
		Priority Score	11	**Low**	





Location	Magazine Precinct - Amenities Block - 1st Floor - Large Room - North and South - Above Window - Infill Panels - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	AQ000636	Extent of damage	1	Disturbance	2
Result	Positive Chrysotile + Crocidolite + Fibrous Anthophyllite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	150	**Material Score**	6	**Disturbance Score**	5
		Priority Score	11	**Low**	



Location	Magazine Precinct - Amenities Block - 1st Floor - Plant Room - North - Entry - Fire Door - Fire Door Core - Installed in 1980s				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Friable	Product Type	2	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	2
Result	Assumed Positive Amosite	Surface Treatment	1	Exposure	1
		Asbestos Type	2	Maintenance	1
Item Number	153	**Material Score**	5	**Disturbance Score**	4
		Priority Score	9	**Low**	





Location	Magazine Precinct - Amenities Block - 1st Floor - Plant Room - Various Throughout - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	154	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Amenities Block - 1st Floor - Plant Room - Throughout - Ceiling - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	156	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Amenities Block - 1st Floor - Plant Room - Throughout - Ductwork - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	157	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Amenities Block - 1st Floor - Plant Room - Throughout - Surface - Dust				
Hazard Type	Lead Dust	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000640	Extent of damage	-	Disturbance	-
Result	Positive - 760 mg/kg	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	160	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Boat Shed - Ground Floor - Exterior - North and South - Eaves - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-06 {AQ000623}	Extent of damage	0	Disturbance	1
Result	Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	0
Item Number	91	**Material Score**	4	**Disturbance Score**	4
		Priority Score	8	**Very Low**	



Location	Magazine Precinct - Boat Shed - Ground Floor - Exterior - North and South - Eaves - Paint - Yellow - Avoid Cosmetic Damages				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	92	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Colonial Barracks - Ground Floor - Exterior - Throughout - Wall - Paint - Yellow				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000617	Extent of damage	-	Disturbance	-
Result	Positive - 2.9 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	81	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Colonial Barracks - Ground Floor - Exterior - Throughout - Window and Door - Paint - Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000618	Extent of damage	-	Disturbance	-
Result	Positive - 6.8 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	82	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	

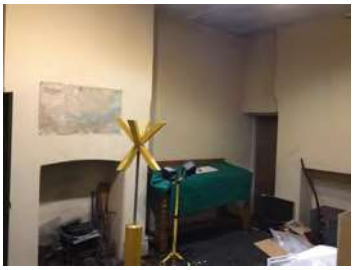




Location	Magazine Precinct - Colonial Barracks - Ground Floor - Northeast Room - South - Safe - Insulation. Metal encased				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Friable	Product Type	2	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	2
Result	Assumed Positive Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	0
Item Number	83	**Material Score**	5	**Disturbance Score**	5
		Priority Score	10	**Low**	



Location	Magazine Precinct - Colonial Barracks - Ground Floor - Northeast Room - Throughout - Wall - Paint - Yellow				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000619	Extent of damage	-	Disturbance	-
Result	Positive - 7.0 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	84	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Colonial Magazine - Ground Floor - West Workshop - Southeast - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	225	**Material Score**	2	**Disturbance Score**	5
		Priority Score	7	**Very Low**	



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Location	Magazine Precinct - Kitchen - Ground Floor - Exterior - Perimeter - Around Roof - Eaves - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-01 {AQ000606}	Extent of damage	0	Disturbance	1
Result	Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	68	**Material Score**	3	**Disturbance Score**	5
		Priority Score	8	**Very Low**	



Location	Magazine Precinct - Kitchen - Ground Floor - Exterior - Entrance - Porch Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-01 {AQ000606}	Extent of damage	0	Disturbance	1
Result	Strongly Assumed Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	69	**Material Score**	3	**Disturbance Score**	5
		Priority Score	8	**Very Low**	



Location	Magazine Precinct - Kitchen - Ground Floor - Exterior - Throughout - Wall - Paint - Yellow				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000608	Extent of damage	-	Disturbance	-
Result	Positive - 13 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	71	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Kitchen - Ground Floor - Exterior - Entrance - Floor and Steps - Paint - Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000609	Extent of damage	-	Disturbance	-
Result	Positive - 3.1 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	72	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Kitchen - Ground Floor - Entrance Foyer - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-03 {AQ000610}	Extent of damage	0	Disturbance	2
Result	Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	73	**Material Score**	3	**Disturbance Score**	5
		Priority Score	8	**Very Low**	



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Location	Magazine Precinct - Kitchen - Ground Floor - Front Rooms - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-03 {AQ000610}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	74	**Material Score**	3	**Disturbance Score**	6
		Priority Score	9	**Low**	



Location	Magazine Precinct - Kitchen - Ground Floor - Front Rooms - Entry - Door & Frame - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000612	Extent of damage	-	Disturbance	-
Result	Positive - 0.63 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	76	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Kitchen - Ground Floor - Kitchen - Throughout - Wall - Paint - Pale Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000611	Extent of damage	-	Disturbance	-
Result	Positive - 0.25 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	75	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Kitchen - Ground Floor - Kitchen - Central - Partition Wall - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	AQ000615	Extent of damage	1	Disturbance	2
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	79	**Material Score**	6	**Disturbance Score**	5
		Priority Score	11	**Low**	



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Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior - Perimeter - Around Roof - Eaves - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-09 {AQ000642}	Extent of damage	0	Disturbance	1
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	165	**Material Score**	5	**Disturbance Score**	5
		Priority Score	10	**Low**	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior - South Verandah - Porch Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-09 {AQ000642}	Extent of damage	0	Disturbance	1
Result	Strongly Assumed Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	1
		Asbestos Type	3	Maintenance	1
Item Number	166	**Material Score**	5	**Disturbance Score**	4
		Priority Score	9	**Low**	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior - South Verandah - West - Switch Box Linings - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-11 {AQ000643}	Extent of damage	0	Disturbance	1
Result	Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	0
Item Number	167	**Material Score**	4	**Disturbance Score**	4
		Priority Score	8	**Very Low**	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior - South Verandah - West - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	168	**Material Score**	2	**Disturbance Score**	5
		Priority Score	7	**Very Low**	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior - Perimeter - Throughout - Timber Work - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000645	Extent of damage	-	Disturbance	-
Result	Positive - 5.5 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	175	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Exterior - South Verandah - Fridge - Unknow ODS				
Hazard Type	ODS	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	176	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-10 {AQ000646}	Extent of damage	0	Disturbance	2
Result	Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	169	**Material Score**	4	**Disturbance Score**	6
		Priority Score	10	**Low**	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room - Above Sink - Hot Water Unit - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	171	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	172	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room - Above Door - A/C Unit - R22				
Hazard Type	ODS	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	173	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





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Location	Magazine Precinct - Office and Amenities Building - Ground Floor - East Conference Room - Throughout - Ceiling -Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000644	Extent of damage	-	Disturbance	-
Result	Positive - 0.12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	174	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Offices - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-10 {AQ000646}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	177	**Material Score**	4	**Disturbance Score**	6
		Priority Score	10	**Low**	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Offices - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	180	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Offices - Throughout - Ceiling -Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000644	Extent of damage	-	Disturbance	-
Result	Positive - 0.12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	182	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Toilets - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-10 {AQ000646}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	183	**Material Score**	4	**Disturbance Score**	6
		Priority Score	10	**Low**	



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Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Toilets - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	186	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Toilets - Throughout - Ceiling -Paint- White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000644	Extent of damage	-	Disturbance	-
Result	Positive - 0.12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	188	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-10 {AQ000646}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	189	**Material Score**	4	**Disturbance Score**	6
		Priority Score	10	**Low**	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room - Hot Water Cupboard - Hot Water Unit - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	191	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	192	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room - Above Window - A/C Unit - Unknown ODS				
Hazard Type	ODS	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	193	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Locker Room - Throughout - Ceiling - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000644	Extent of damage	-	Disturbance	-
Result	Positive - 0.12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	194	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Shower - Throughout - Ceiling - Fibre Cement Sheeting - Height Restricted				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-10 {AQ000646}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	195	**Material Score**	4	**Disturbance Score**	6
		Priority Score	10	**Low**	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Shower - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	198	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Shower - Throughout - Ceiling - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000644	Extent of damage	-	Disturbance	-
Result	Positive - 0.12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	200	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Laundry/Wash - Throughout - Ceiling - Fibre Cement Sheeting - Height Restricted				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-10 {AQ000646}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	201	**Material Score**	4	**Disturbance Score**	6
		Priority Score	10	**Low**	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Laundry/Wash - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	204	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Laundry/Wash - Above Window - A/C Unit - R22				
Hazard Type	ODS	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	205	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Laundry/Wash - Throughout - Ceiling - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000644	Extent of damage	-	Disturbance	-
Result	Positive - 0.12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	206	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Unisex/Disable Toilet - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-10 {AQ000646}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	207	**Material Score**	4	**Disturbance Score**	6
		Priority Score	10	**Low**	



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Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Unisex/Disable Toilet - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	210	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Unisex/Disable Toilet - Throughout - Ceiling - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000644	Extent of damage	-	Disturbance	-
Result	Positive - 0.12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	212	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Office and Amenities Building - Ground Floor - Ceiling Space - Throughout - Roof Lining - Sarking Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	213	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber - North - Electrical Distribution Board - Bituminous Electrical Panel				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	1	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	1
		Asbestos Type	1	Maintenance	1
Item Number	94	**Material Score**	3	**Disturbance Score**	4
		Priority Score	7	**Very Low**	



Location	Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber - Office - Throughout - Ceiling - Compressed Ceiling Tiles				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	95	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber - Office - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	97	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - Queens Magazine - Ground Floor - Storage Chamber - Throughout - Wall - Paint - White and Cream				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000624	Extent of damage	-	Disturbance	-
Result	Positive - 1.2 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	98	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Warehouse - Northwest - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	1	Disturbance	2
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	1
		Asbestos Type	1	Maintenance	1
Item Number	101	**Material Score**	3	**Disturbance Score**	5
		Priority Score	8	**Very Low**	





Location	Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Store Room & Kitchen - Store Room and Kitchen - Throughout - Internal Wall - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-07 {AQ000626}	Extent of damage	0	Disturbance	2
Result	Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	102	**Material Score**	3	**Disturbance Score**	5
		Priority Score	8	**Very Low**	



Location	Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Store Room & Kitchen - Store Room and Kitchen - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-07 {AQ000626}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	103	**Material Score**	3	**Disturbance Score**	6
		Priority Score	9	**Low**	



Location	Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Store Room & Kitchen - Store Room and Kitchen - Throughout Ceiling - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	105	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Store Room & Kitchen - Store Room and Kitchen - Throughout - External Wall - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	2
Sample No.	As NAA 47829-07 {AQ000626}	Extent of damage	1	Disturbance	2
Result	Strongly Assumed Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	107	**Material Score**	4	**Disturbance Score**	7
		Priority Score	11	**Low**	



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Location	Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Exterior - Northwest - Between Wall and Ground - Fibre Cement Debris - Items on grounds were removed during sampling. Possible debris remains within the wall cavity.				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	3	Occupancy	2
Sample No.	AQ000641	Extent of damage	3	Disturbance	1
Result	Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	2
Item Number	164	**Material Score**	8	**Disturbance Score**	7
		Priority Score	15	**Medium**	





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Location	Magazine Precinct - Stores Building - Ground Floor - Southern Rooms - Central - Fluorescent light fitting				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	223	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Substation - Ground Floor - Substation - On Ground - Electrical Distribution Board - Bituminous Electrical Panel - Live electrical hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	1	Disturbance	2
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	1
		Asbestos Type	1	Maintenance	1
Item Number	85	**Material Score**	3	**Disturbance Score**	4
		Priority Score	7	**Very Low**	



Location	Magazine Precinct - Substation - Ground Floor - Substation - West - Plant & Equipment - Gasket - Live Services				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	2	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	1
		Asbestos Type	1	Maintenance	1
Item Number	86	**Material Score**	3	**Disturbance Score**	3
		Priority Score	6	**Very Low**	





Location	Magazine Precinct - Substation - Ground Floor - Substation - Throughout - Ceiling - Fibre Cement Sheeting - Height Restricted				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	As NAA 47829-05 {AQ000620}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	1
		Asbestos Type	2	Maintenance	1
Item Number	87	**Material Score**	4	**Disturbance Score**	4
		Priority Score	8	**Very Low**	



Location	Magazine Precinct - Substation - Ground Floor - Exterior - Perimeter - Around Roof - Eaves - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	NAA 47829-05 {AQ000620}	Extent of damage	0	Disturbance	1
Result	Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	1
		Asbestos Type	2	Maintenance	0
Item Number	88	**Material Score**	4	**Disturbance Score**	2
		Priority Score	6	**Very Low**	



Location	Magazine Precinct - Substation - Ground Floor - Exterior - Throughout - Window and Door - Paint - Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000622	Extent of damage	-	Disturbance	-
Result	Positive - 0.38 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	89	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - The Cooperage - Ground Floor - Back Room Opposite to Entrance - North - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	2
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	216	**Material Score**	2	**Disturbance Score**	5
		Priority Score	7	**Very Low**	



Location	Magazine Precinct - The Cooperage - Ground Floor - East Machinery Room - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	217	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - The Cooperage - Ground Floor - East Machinery Room - Throughout - Wall - Paint - Silver				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000650	Extent of damage	-	Disturbance	-
Result	Positive - 4.8 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	219	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - The Cooperage - Ground Floor - West Machinery Room - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	218	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Magazine Precinct - The Cooperage - Ground Floor - Entry Foyer - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	220	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precinct - Timber Store - Ground Floor - Exterior - Throughout - Door - Paint - Red				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000655	Extent of damage	-	Disturbance	-
Result	Positive - 2.7%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	229	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Magazine Precintct - Scow Shed - Ground Floor - Interior - Perimeter - North - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	1
		Asbestos Type	1	Maintenance	1
Item Number	100	**Material Score**	2	**Disturbance Score**	3
		Priority Score	5	**Very Low**	





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Location	North Depot Precinct - Dredge Office - Ground Floor - Exterior - Throughout - Wall - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-41 {AQ000572}	Extent of damage	0	Disturbance	2
Result	Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	1	**Material Score**	4	**Disturbance Score**	6
		Priority Score	10	**Low**	



Location	North Depot Precinct - Dredge Office - Ground Floor - Exterior - Toilet Block - Around Roof - Timber Work - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000573	Extent of damage	-	Disturbance	-
Result	Positive - 2.6 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	2	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	North Depot Precinct - Dredge Office - Ground Floor - Exterior - Adjacent to Rear Entry - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	0
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	0
		Asbestos Type	1	Maintenance	1
Item Number	3	**Material Score**	2	**Disturbance Score**	1
		Priority Score	3	**Very Low**	





Location	North Depot Precinct - Dredge Office - Ground Floor - Exterior - Throughout - Wall - Paint - Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000574	Extent of damage	-	Disturbance	-
Result	Positive - 0.14 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	4	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	North Depot Precinct - Dredge Office - Ground Floor - Kitchen - Throughout - Wall - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-45 {AQ000578}	Extent of damage	0	Disturbance	2
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	8	**Material Score**	5	**Disturbance Score**	6
		Priority Score	11	**Low**	



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Location	North Depot Precinct - Dredge Office - Ground Floor - Kitchen - South - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-45 {AQ000578}	Extent of damage	0	Disturbance	2
Result	Strongly Assumed Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	9	**Material Score**	5	**Disturbance Score**	6
		Priority Score	11	**Low**	



Location	North Depot Precinct - Dredge Office - Ground Floor - Kitchen - North & South Toilets - Wall - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	NAA 47829-46 {AQ000579}	Extent of damage	0	Disturbance	2
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	1
		Asbestos Type	3	Maintenance	0
Item Number	10	**Material Score**	5	**Disturbance Score**	3
		Priority Score	8	**Very Low**	





Location	North Depot Precinct - Dredge Office - Ground Floor - Kitchen - North & South Toilets - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	As NAA 47829-46 {AQ000579}	Extent of damage	1	Disturbance	2
Result	Strongly Assumed Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	1
		Asbestos Type	3	Maintenance	1
Item Number	11	**Material Score**	6	**Disturbance Score**	4
		Priority Score	10	**Low**	





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Location	North Depot Precinct - Dredge Office - Ground Floor - Kitchen - Southeast - Electrical Distribution Board - Electrical Components - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	1
		Asbestos Type	1	Maintenance	1
Item Number	12	**Material Score**	2	**Disturbance Score**	4
		Priority Score	6	**Very Low**	



Location	North Depot Precinct - Dredge Office - Ground Floor - Southeast Office - Access Door - Door and Frame - Paint - Off White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000583	Extent of damage	-	Disturbance	-
Result	Positive - 5.6 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	24	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





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Location	North Depot Precinct - Dredge Office - Ground Floor - Ceiling Space - Throughout - Insulation Batts - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	18	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	North Depot Precinct - Dredge Office - Ground Floor - Ceiling Space - Throughout - Roof Lining - Sarking Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	22	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	North Depot Precinct - Ferry Wharf - Ground Floor - Exterior - Throughout - Timber Work - Paint - White - Assumed positive - No safe access on walk path.				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	368	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	North Depot Precinct - Fire Fighting Buildings - Ground Floor - Exterior - Throughout - Timber and Metal Work - Paint - Pale Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000597	Extent of damage	-	Disturbance	-
Result	Positive - 3.2 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	52	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





Location	North Depot Precinct - Fire Fighting Buildings - Ground Floor - Exterior - North - On Ground - Fibre Cement Debris - Item was removed during sampling. Debris may be found within concealed area.				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	3	Occupancy	2
Sample No.	AQ000598	Extent of damage	3	Disturbance	1
Result	Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	1
		Asbestos Type	2	Maintenance	2
Item Number	54	**Material Score**	9	**Disturbance Score**	6
		Priority Score	15	Medium	





Location	North Depot Precinct - Fire Fighting Buildings - Ground Floor - East Storage Shed - Throughout Ceiling - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	53	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





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Location	North Depot Precinct - Fire Fighting Buildings - Ground Floor - East Storage Shed - South - Electrical Distribution Board - Bituminous Electrical Panel				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-50 {AQ000599}	Extent of damage	2	Disturbance	2
Result	Positive Amosite	Surface Treatment	0	Exposure	2
		Asbestos Type	2	Maintenance	0
Item Number	55	**Material Score**	5	**Disturbance Score**	5
		Priority Score	10	**Low**	



Location	North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms - Throughout - Wall - Fibre Cement Sheeting on Wall Nails				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Friable	Product Type	1	Occupancy	0
Sample No.	NAA 47829-42 {AQ000600}	Extent of damage	3	Disturbance	2
Result	Positive Chrysotile + Amosite	Surface Treatment	2	Exposure	1
		Asbestos Type	2	Maintenance	1
Item Number	56	**Material Score**	8	**Disturbance Score**	4
		Priority Score	12	**Low**	





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Location	North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms - Throughout - Ceiling - Fibre Cement Sheeting on Nails				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Friable	Product Type	1	Occupancy	0
Sample No.	As NAA 47829-42 {AQ000600}	Extent of damage	3	Disturbance	2
Result	Strongly Assumed Positive Chrysotile + Amosite	Surface Treatment	2	Exposure	1
		Asbestos Type	2	Maintenance	1
Item Number	57	**Material Score**	8	**Disturbance Score**	4
		Priority Score	12	**Low**	





Location	North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms - Throughout - On Ground - Dust				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Friable	Product Type	3	Occupancy	0
Sample No.	AQ000601	Extent of damage	3	Disturbance	3
Result	Positive Chrysotile	Surface Treatment	3	Exposure	2
		Asbestos Type	1	Maintenance	3
Item Number	58	**Material Score**	10	**Disturbance Score**	8
		Priority Score	18	**Medium**	



Location	North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms - Throughout - Wall - All Timber Structure Surface - Debris				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Friable	Product Type	3	Occupancy	0
Sample No.	AQ000602	Extent of damage	3	Disturbance	2
Result	Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	3
Item Number	59	**Material Score**	8	**Disturbance Score**	7
		Priority Score	15	**Medium**	





Location	North Depot Precinct - Fire Fighting Buildings - Ground Floor - Electrical Switch Room - North - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard - No Access to Electircal Switch Room				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	2
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	0
		Asbestos Type	1	Maintenance	1
Item Number	60	**Material Score**	2	**Disturbance Score**	3
		Priority Score	5	**Very Low**	



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Location	North Depot Precinct - Small Boat Enclosure - Ground Floor - Exterior - Waiting Shed - Throughout - Wall - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	2
Sample No.	NAA 47829-53 {AQ000673}	Extent of damage	1	Disturbance	2
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	280	**Material Score**	6	**Disturbance Score**	7
		Priority Score	13	Medium	



Location	North Depot Precinct - Small Boat Enclosure - Ground Floor - Exterior - Throughout - Timber Work - Paint - Beige				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000674	Extent of damage	-	Disturbance	-
Result	Positive - 0.97 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	282	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	North Depot Precinct - Small Boat Enclosure - Ground Floor - Waiting Shed - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	281	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





Location	North Depot Precinct - Small Boat Enclosure - Ground Floor - Waiting Shed - Throughout - Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-54 {AQ000675}	Extent of damage	0	Disturbance	2
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	283	**Material Score**	5	**Disturbance Score**	5
		Priority Score	10	Low	



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Location	Residential Precinct - Cottage No.1 - Ground Floor - Laundry - Northwest - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	230	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.1 - Ground Floor - Kitchen - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000657	Extent of damage	-	Disturbance	-
Result	Positive - 2.6%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	233	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.1 - Ground Floor - Bathroom - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000657	Extent of damage	-	Disturbance	-
Result	Positive - 2.6%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	235	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.1 - Ground Floor - Dinning Room - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000657	Extent of damage	-	Disturbance	-
Result	Positive - 2.6%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	236	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	

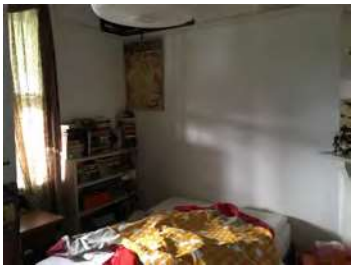


Location	Residential Precinct - Cottage No.1 - Ground Floor - Living Room - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000657	Extent of damage	-	Disturbance	-
Result	Positive - 2.6%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	237	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Residential Precinct - Cottage No.1 - Ground Floor - Bedrooms - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000657	Extent of damage	-	Disturbance	-
Result	Positive - 2.6%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	238	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





Location	Residential Precinct - Cottage No.1 - Ground Floor - Verandah - North and South - Gable - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-26 {AQ000670}	Extent of damage	1	Disturbance	1
Result	Strongly Assumed Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	240	**Material Score**	6	**Disturbance Score**	4
		Priority Score	10	**Low**	

No Photographic Evidence Available

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Location	Residential Precinct - Cottage No.2 - Ground Floor - Verandah - North and South - Gable - Fibre Cement Sheeing - No safe access towards to gable on verandah floor				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-26 {AQ000670}	Extent of damage	1	Disturbance	1
Result	Positive Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	254	**Material Score**	6	**Disturbance Score**	4
		Priority Score	10	**Low**	



Location	Residential Precinct - Cottage No.2 - Ground Floor - Verandah - East - Wall Infill Panel - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-29 {AQ000671}	Extent of damage	1	Disturbance	1
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	271	**Material Score**	6	**Disturbance Score**	4
		Priority Score	10	**Low**	





Location	Residential Precinct - Cottage No.2 - Ground Floor - Verandah - West - Electrical Distribution Board - Bituminous Electrical Panel				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	272	**Material Score**	2	**Disturbance Score**	4
		Priority Score	6	**Very Low**	



Location	Residential Precinct - Cottage No.2 - Ground Floor - Rear Shed - Throughout - Wall - Fibre Cement Sheeting - Items were not sighted during the inspection and believed to be removed prior to inspection.				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-31 {AQ000672}	Extent of damage	0	Disturbance	2
Result	Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	0
Item Number	265	**Material Score**	4	**Disturbance Score**	5
		Priority Score	9	**Low**	



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Location	Residential Precinct - Cottage No.2 - Ground Floor - Laundry - North - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	266	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Residential Precinct - Cottage No.2 - Ground Floor - Rear Storeroom - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000664	Extent of damage	-	Disturbance	-
Result	Positive - 8.5%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	267	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.2 - Ground Floor - Kitchen - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000664	Extent of damage	-	Disturbance	-
Result	Positive - 8.5%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	268	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.2 - Ground Floor - Living Room - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000664	Extent of damage	-	Disturbance	-
Result	Positive - 8.5%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	269	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.2 - Ground Floor - Bedrooms - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000664	Extent of damage	-	Disturbance	-
Result	Positive - 8.5%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	270	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





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Location	Residential Precinct - Cottage No.3 - Ground Floor - Verandah - North and South - Gable - Fibre Cement Sheeting - No safe access due to unstable floor				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-26 {AQ000670}	Extent of damage	0	Disturbance	1
Result	Strongly Assumed Positive Chrysotile + Crocidolite	Surface Treatment	0	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	255	**Material Score**	4	**Disturbance Score**	4
		Priority Score	8	**Very Low**	





Location	Residential Precinct - Cottage No.3 - Ground Floor - Verandah - North - Low Level Infill Panel - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-29 {AQ000671}	Extent of damage	0	Disturbance	1
Result	Strongly Assumed Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	256	**Material Score**	5	**Disturbance Score**	4
		Priority Score	9	**Low**	



Location	Residential Precinct - Cottage No.3 - Ground Floor - Verandah - North - Switch Box Linings - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-28 {AQ000668}	Extent of damage	0	Disturbance	1
Result	Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	261	**Material Score**	3	**Disturbance Score**	4
		Priority Score	7	**Very Low**	



Location	Residential Precinct - Cottage No.3 - Ground Floor - Verandah - North - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	262	**Material Score**	2	**Disturbance Score**	4
		Priority Score	6	**Very Low**	



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Location	Residential Precinct - Cottage No.3 - Ground Floor - Verandah - Throughout - Timber Work - Paint - Beige				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000669	Extent of damage	-	Disturbance	-
Result	Positive - 5.5 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	263	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Residential Precinct - Cottage No.3 - Ground Floor - Laundry - North - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	257	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.3 - Ground Floor - Kitchen - Throughout - Wall - Paint - Beige				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000662	Extent of damage	-	Disturbance	-
Result	Positive - 5.6%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	258	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.3 - Ground Floor - Living Room - Throughout - Wall - Paint - Beige				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000662	Extent of damage	-	Disturbance	-
Result	Positive - 5.6%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	259	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.3 - Ground Floor - Bedrooms - Throughout - Wall - Paint - Beige				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000662	Extent of damage	-	Disturbance	-
Result	Positive - 5.6%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	260	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Cottage No.3 - Ground Floor - Dinning Room - Throughout - Wall - Paint - Beige				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000662	Extent of damage	-	Disturbance	-
Result	Positive - 5.6%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	264	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Residential Precinct - Cottage No.4 - Ground Floor - Exterior - South of Verandah - Gable - Fibre Cement Sheeting - Height Restricted				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Unknown or Crocidolite	Surface Treatment	1	Exposure	1
		Asbestos Type	3	Maintenance	0
Item Number	248	**Material Score**	5	**Disturbance Score**	2
		Priority Score	7	**Very Low**	



Location	Residential Precinct - Cottage No.4 - Ground Floor - Exterior - South of Verandah - Gable Verge Lining - Fibre Cement Sheeting - Height Restricted				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Unknown or Crocidolite	Surface Treatment	1	Exposure	0
		Asbestos Type	3	Maintenance	0
Item Number	249	**Material Score**	5	**Disturbance Score**	1
		Priority Score	6	**Very Low**	



Location	Residential Precinct - Cottage No.4 - Ground Floor - Rear Entrance - Throughout - Porch Ceiling - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-32 {AQ000659}	Extent of damage	0	Disturbance	1
Result	Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	243	**Material Score**	3	**Disturbance Score**	4
		Priority Score	7	**Very Low**	



Location	Residential Precinct - Cottage No.4 - Ground Floor - Entrance Foyer - Ceiling - Porch Lining - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	As NAA 47829-32 {AQ000659}	Extent of damage	0	Disturbance	1
Result	Strongly Assumed Positive Chrysotile	Surface Treatment	1	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	244	**Material Score**	3	**Disturbance Score**	4
		Priority Score	7	**Very Low**	



Location	Residential Precinct - Cottage No.4 - Ground Floor - Laundry - South - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	245	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Residential Precinct - Harbour Master's Residence - Ground Floor - Exterior - Throughout - Timber Work - Paint - Green Upper Layer Paint and Beige Lower Layer Paint				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000665	Extent of damage	-	Disturbance	-
Result	Positive - 3.3%w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	273	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





Location	Residential Precinct - Harbour Master's Residence - Ground Floor - Exterior - West - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000666	Extent of damage	-	Disturbance	-
Result	Positive - 14 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	278	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Residential Precinct - Harbour Master's Residence - Ground Floor - Servery - North - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	1	Disturbance	2
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	274	**Material Score**	3	**Disturbance Score**	4
		Priority Score	7	**Very Low**	





Location	Residential Precinct - Harbour Master's Residence - Ground Floor - Southern Outhouse - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	275	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Residential Precinct - Harbour Master's Residence - Ground Floor - Laundry - North - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	276	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Residential Precinct - Harbour Master's Residence - 1st Floor - Rooms - Throughout - Wall - Paint - Beige				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000667	Extent of damage	-	Disturbance	-
Result	Positive - 11 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	279	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Shipyard Precinct - 500t Winch House - Ground Floor - Exterior - Perimeter - Around Roof - Eaves - Fibre Cement Sheeting - Height Restricted				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	1	Disturbance	1
Result	Assumed Positive Unknown or Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	309	**Material Score**	6	**Disturbance Score**	4
		Priority Score	10	**Low**	



Location	Shipyard Precinct - 500t Winch House - Ground Floor - Hoist Area - Central - Plant & Equipment - Break Pad				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	2
Sample No.	Visual	Extent of damage	0	Disturbance	2
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	310	**Material Score**	2	**Disturbance Score**	6
		Priority Score	8	**Very Low**	



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Location	Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop - Throughout - Timber Work - Paint - Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000684	Extent of damage	-	Disturbance	-
Result	Positive - 1.7 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	303	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop - Central - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	2
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	304	**Material Score**	2	**Disturbance Score**	5
		Priority Score	7	**Very Low**	



Location	Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	305	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop - East - A/C Unit - No Tag Info				
Hazard Type	ODS	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	306	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Shipyard Precinct - Addition to Ship Repair Workshop - Ground Floor - Workshop - North - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	0	Disturbance	2
Result	Assumed Positive Unknown or Crocidolite	Surface Treatment	0	Exposure	2
		Asbestos Type	3	Maintenance	0
Item Number	307	**Material Score**	4	**Disturbance Score**	5
		Priority Score	9	**Low**	





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Location	Shipyard Precinct - Repair Workshop - Ground Floor - Part Storage - Northeast - Fridge - R12				
Hazard Type	ODS	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	311	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





Location	Shipyard Precinct - Repair Workshop - Ground Floor - Part Storage - Throughout - Roof Lining - Sarking Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	313	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Shipyard Precinct - Repair Workshop - Ground Floor - Cable Room - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	376	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	

No Photographic Evidence Available

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Location	Shipyard Precinct - Ship Repair Workshop - Ground Floor - Exterior - Throughout - Timber Work - Paint - Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000684	Extent of damage	-	Disturbance	-
Result	Positive - 1.7 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	296	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop - Throughout Ceiling - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	297	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop - Main Switch Room - Unused Items in Lockers - Electrical Fuse - Woven Materials				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Friable	Product Type	2	Occupancy	0
Sample No.	AQ000696	Extent of damage	0	Disturbance	1
Result	Positive Chrysotile	Surface Treatment	2	Exposure	0
		Asbestos Type	1	Maintenance	0
Item Number	298	**Material Score**	5	**Disturbance Score**	1
		Priority Score	6	**Very Low**	



Location	Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop - Above Kitchen Riser - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	299	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop - Southern Workshop - Hoist - Electrical Distribution Board - Bituminous Electrical Panel - Height Restricted				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	2
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	300	**Material Score**	2	**Disturbance Score**	5
		Priority Score	7	**Very Low**	



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Location	Shipyard Precinct - Ship Repair Workshop - Mezzanine - Offices - Northeast - A/C Unit - No Info Tag				
Hazard Type	ODS	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	292	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Shipyard Precinct - Slipway Workshop Building - Ground Floor - Exterior - East - Electrical Distribution Board - Bituminous Electrical Panel				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	0	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	314	**Material Score**	2	**Disturbance Score**	3
		Priority Score	5	**Very Low**	





Location	Shipyard Precinct - Slipway Workshop Building - Ground Floor - Office - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	316	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Shipyard Precinct - Slipway Workshop Building - Ground Floor - Office - Northwest - A/C Unit - R22				
Hazard Type	ODS	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	318	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Shipyard Precinct - Winch House - Ground Floor - Exterior - Throughout - Timber Work - Paint - Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000687	Extent of damage	-	Disturbance	-
Result	Positive - 0.14 %w//w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	308	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - Exterior - Throughout - Timber Work - Paint - Light Blue				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000679	Extent of damage	-	Disturbance	-
Result	Positive - 0.11 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	288	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - All Areas - Throughout - Ceiling - Fluorescent light fitting - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	319	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - All Areas - Throughout - Ceiling - Compressed Ceiling Tiles				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	320	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - All Areas - Throughout - Wall - Paint - Pale Blue				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000688	Extent of damage	-	Disturbance	-
Result	Positive - 0.19 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	323	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - Exhibits Room - Central - Fluorescent light fitting - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	371	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - North Front Area - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	322	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - North Front Area - Throughout - Ceiling - Paint - Beige				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000689	Extent of damage	-	Disturbance	-
Result	Positive - 0.14 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	330	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - North Front Area - Ceiling - Beams - Paint - Pale Blue				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000691	Extent of damage	-	Disturbance	-
Result	Positive - 0.20 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	332	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - Store Room - South - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	324	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - Police Diving Unit - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	325	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - Police Diving Unit - North - Electrical Distribution Board - Bituminous Electrical Panel				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-35 {AQ000737}	Extent of damage	0	Disturbance	2
Result	Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	0
Item Number	326	**Material Score**	2	**Disturbance Score**	5
		Priority Score	7	**Very Low**	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - Garage - East - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	1	Disturbance	2
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	1
		Asbestos Type	1	Maintenance	1
Item Number	327	**Material Score**	3	**Disturbance Score**	5
		Priority Score	8	**Very Low**	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - Garage - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	328	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - Ground Floor - Garage - Throughout - Ceiling - Compressed Ceiling Tiles				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	329	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Northeast Room - Above Sink - Hot Water Units - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	333	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Northeast Room - Throughout - Ceiling - Compressed Ceiling Tiles				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	334	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Northeast Room - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	336	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Northeast Room - Throughout - Wall - Paint - Pale Blue				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000692	Extent of damage	-	Disturbance	-
Result	Positive - 0.11 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	337	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Central Stairwell - West - Electrical Distribution Board - Bituminous Electrical Panels - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	1	Disturbance	2
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	338	**Material Score**	3	**Disturbance Score**	6
		Priority Score	9	**Low**	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Central Stairwell - West - Switch Box Lining - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	NAA 47829-38 {AQ000693}	Extent of damage	0	Disturbance	2
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	2
		Asbestos Type	3	Maintenance	1
Item Number	339	**Material Score**	5	**Disturbance Score**	6
		Priority Score	11	**Low**	



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Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Central Stairwell - Throughout - Ceiling - Compressed Ceiling Tiles				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	340	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Central Stairwell - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	341	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Room opposite Female Toilet - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	343	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Female Toilet - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	372	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Corridor - Throughout - Ceiling - Compressed Ceiling Tiles				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	347	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Corridor - Throughout - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	348	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Male Toilet - Central - Light Fitting - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	350	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Conference and Interview Room - Central - Light Fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	355	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room - Throughout - Ceiling - Compressed Ceiling Tiles				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	357	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room - Throughout Ceiling - Light Fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	359	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room - Throughout - Wall - Paint - Pale Blue				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000692	Extent of damage	-	Disturbance	-
Result	Positive - 0.11 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	360	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Southeast Room - Throughout - Timber Work - Paint - Pale Blue				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000679	Extent of damage	-	Disturbance	-
Result	Positive - 0.11 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	361	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Water Police Precinct - 1912 Barracks - Ground Floor - Exterior - Front and Rear Door - Door and Frame - Paint - Light Blue				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000591	Extent of damage	-	Disturbance	-
Result	Positive - 0.15 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	34	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - 1912 Barracks - Ground Floor - Exterior - West - Adjacent to Entrance - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	Visual	Extent of damage	1	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	0
		Asbestos Type	1	Maintenance	1
Item Number	35	**Material Score**	3	**Disturbance Score**	2
		Priority Score	5	**Very Low**	



Location	Water Police Precinct - 1912 Barracks - Ground Floor - Exterior - West - Adjacent to Entrance - Electrical Distribution Board - Box Linings - Fibre Cement Sheeting				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	0
Sample No.	AQ000592	Extent of damage	1	Disturbance	1
Result	Positive Amosite + Chrysotile + Crocidolite	Surface Treatment	1	Exposure	0
		Asbestos Type	3	Maintenance	1
Item Number	36	**Material Score**	6	**Disturbance Score**	2
		Priority Score	8	**Very Low**	



Location	Water Police Precinct - 1912 Barracks - Ground Floor - Corridor - Throughout - Wall - Paint - Cream				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000594	Extent of damage	-	Disturbance	-
Result	Positive - 14 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	40	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - 1912 Barracks - Ground Floor - East Room - Throughout - Wall - Paint - Cream				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000594	Extent of damage	-	Disturbance	-
Result	Positive - 14 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	39	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Water Police Precinct - 1912 Barracks - Ground Floor - East Room - North - Window Frame - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000595	Extent of damage	-	Disturbance	-
Result	Positive - 3.5 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	48	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - 1912 Barracks - Ground Floor - East Room - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	49	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - 1912 Barracks - Ground Floor - Cleaner's Room - Throughout - Wall - Paint - Cream				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000594	Extent of damage	-	Disturbance	-
Result	Positive - 14 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	42	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - 1912 Barracks - Ground Floor - Cleaner's Room - Higher Level Area - Hot Water Unit - Insulation Materials				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	43	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - 1912 Barracks - Ground Floor - Kitchen - Above Sink - Hot Water Unit - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	45	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Water Police Precinct - 1912 Barracks - Ground Floor - Kitchen - Throughout - Window Frame - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000595	Extent of damage	-	Disturbance	-
Result	Positive - 3.5 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	47	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





Location	Water Police Precinct - 1912 Barracks - Ground Floor - Toilet - Central - Fluorescent light fittings - Capacitor				
Hazard Type	PCB	**Material Assessment**		**Disturbance Assessment**	
Friability	Good Condition	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	50	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





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Location	Water Police Precinct - The Cottage - Ground Floor - Exterior - Throughout - Wall - Paint - Blue				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000604	Extent of damage	-	Disturbance	-
Result	Positive - 12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	62	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - The Cottage - Ground Floor - Exterior - North - Telecomm Pit - Moulded Cement				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	2
Sample No.	AQ000613	Extent of damage	1	Disturbance	1
Result	Positive Chrysotile + Amosite	Surface Treatment	1	Exposure	2
		Asbestos Type	2	Maintenance	1
Item Number	77	**Material Score**	5	**Disturbance Score**	6
		Priority Score	11	**Low**	



Location	Water Police Precinct - The Cottage - Ground Floor - Entrance Foyer - Throughout - Wall - Paint - Yellow				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000605	Extent of damage	-	Disturbance	-
Result	Positive - 12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	63	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - The Cottage - Ground Floor - North Room - Throughout - Wall - Paint - Yellow				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000605	Extent of damage	-	Disturbance	-
Result	Positive - 12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	64	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - The Cottage - Ground Floor - North Room - Above Sink - Boiler - Insulation				
Hazard Type	SMF	**Material Assessment**		**Disturbance Assessment**	
Friability	Bonded	Product Type	-	Occupancy	-
Sample No.	Visual	Extent of damage	-	Disturbance	-
Result	Assumed Positive	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	66	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Water Police Precinct - The Cottage - Ground Floor - South Room - Throughout - Wall - Paint - Yellow				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000605	Extent of damage	-	Disturbance	-
Result	Positive - 12 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	65	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Water Police Precinct - Water Police Station - Ground Floor - Exterior - Front Entrance - Electrical Distribution Board - Bituminous Electrical Panel - Live Electrical Hazard				
Hazard Type	Asbestos	**Material Assessment**		**Disturbance Assessment**	
Friability	Non-friable	Product Type	1	Occupancy	1
Sample No.	Visual	Extent of damage	1	Disturbance	1
Result	Assumed Positive Chrysotile	Surface Treatment	0	Exposure	2
		Asbestos Type	1	Maintenance	1
Item Number	26	**Material Score**	3	**Disturbance Score**	5
		Priority Score	8	**Very Low**	



Location	Water Police Precinct - Water Police Station - Ground Floor - South Room - Throughout - Wall - Paint - Dark Beige Upper Layer Paint and White Lower Layer Paint				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000586	Extent of damage	-	Disturbance	-
Result	Positive - 7.9 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	28	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - Water Police Station - Ground Floor - East Room - Throughout - Wall - Paint - Pale Blue				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000587	Extent of damage	-	Disturbance	-
Result	Positive - 8 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	29	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - Water Police Station - Ground Floor - West Room - Throughout - Wall - Paint - Pale Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000588	Extent of damage	-	Disturbance	-
Result	Positive - 7.2 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	30	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



Location	Water Police Precinct - Water Police Station - Ground Floor - Central Room - Throughout - Wall - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000589	Extent of damage	-	Disturbance	-
Result	Positive - 8.1 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	31	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Location	Water Police Precinct - Water Police Station - Ground Floor - Central Room - Throughout - Door and Window Frame - Paint - White				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	AQ000590	Extent of damage	-	Disturbance	-
Result	Positive - 17 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	33	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	





Location	Water Police Precinct - Water Police Station - Ground Floor - North Room - Throughout - Wall - Paint - Pale Green				
Hazard Type	Lead Paint	**Material Assessment**		**Disturbance Assessment**	
Friability	-	Product Type	-	Occupancy	-
Sample No.	As AQ000588	Extent of damage	-	Disturbance	-
Result	Positive - 7.2 %w/w	Surface Treatment	-	Exposure	-
		Asbestos Type	-	Maintenance	-
Item Number	32	**Material Score**	-	**Disturbance Score**	-
		Priority Score	-	-	



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Methodology

Asbestos

This assessment was undertaken within the constraints of the scope of works in accordance with Greencap in-house procedures Work Health and Safety Regulation 2017 (NSW) and Code of Practice How to manage and control asbestos in the workplace, SafeWork NSW, 2019 .

25 representative samples of suspected asbestos-containing material were collected. These samples were analysed by Polarised Light Microscopy and/or X-ray diffraction by a NATA-accredited laboratory for the presence of asbestos.

Where it was determined that asbestos was present or assumed to be present, a risk and priority assessment was conducted in accordance with Greencap's standard Risk Assessment and Priority Ranking System. Refer to section on Priority Rating System for detailed information on this system.

Inaccessible areas that are likely to contain asbestos have been assumed to contain asbestos until further inspection and analysis of samples has been undertaken by an approved analyst.

A strategy of using representative samples of suspected asbestos-containing materials has been used to minimise the number of samples and degree of disturbance. Because of this strategy, findings of the inspection should be interpreted such that all visually similar materials in the same vicinity must be assumed to be composed of the same material until proven otherwise.

Lead Dust

1 suspected dust containing lead sample were collected during the inspection and sent to an external NATA-accredited laboratory for analysis of lead content (lead content reported as mg/kg) by ICP-AES methods.

No specific level or concentration (mg/kg or %) requirement relating to lead in dust in occupational environments has been specified or provided by Safe Work Australia or the various state-based WHS regulators. The main Australian screening criteria for lead in dust are found in the National Environment Protection (Assessment of Site Contamination) Measure (the NEPM) Schedule B1 - Guideline on Investigation Levels for Soil and Groundwater (2011). The NEPM provides Health-based Investigation Levels (HILs) for contaminants in soil for varying exposure scenarios, primarily based on public health. Greencap has adopted the most sensitive and protective Health Investigation Level (HIL) for lead in soil of 300 mg/kg in soil as an initial guideline value for lead in dust. As dust is more likely to become airborne the lowest measure for lead in soil is used.

Lead is an accumulative poison and can be inhaled or swallowed when a process generates lead dust, fumes or mists. Once absorbed into the body, lead can cause both immediate and long-term health problems

Lead Paint

53 paint chip samples were collected and sent to an external NATA-accredited laboratory for analysis of lead content (lead content reported as a percentage weight by weight) by ICP-AES methods.

As per the Australian/New Zealand Standard (AS/NZS 4361.2:2017): Guide to hazardous paint management: Part 2: Lead paint in residential and commercial buildings: Section 1.4.16, Lead paint is defined as a paint film that contains greater than 0.1% lead by mass in the dry film.The presence of lead paint may be assumed based upon the age of the building, with 1997 indicated by the Standard as the date non-industrial paints were manufactured with less than or equal to 0.1% lead by mass. As per AS/NZS 4361.2:2017 laboratory analysis is required to confirm the presence of lead and its concentration in an existing paint film.

Lead in any form is toxic to humans when ingested or inhaled, with repeated transmission of particles cumulating in lead poisoning. Any work relating to lead paint should be conducted in accordance with the AS/NZS 4361.2:2017 Guide to hazardous paint management - Part 2: Lead paint in residential, public and commercial buildings.

Polychlorinated Biphenyls (PCBs)

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Representative light fittings containing capacitors were inspected where safely practicable and details noted for cross-referencing with the database Identification of PCB-Containing Capacitors, Australian and New Zealand Environment and Conservation Council (ANZECC), 1997. Where metal capacitors were not listed on the database, these capacitors are noted as suspected to contain polychlorinated biphenyls.

Any materials labelled as containing PCBs will be recorded on the register along with any suspicious oils or fluids used in plant and machinery.

Polychlorinated Biphenyls (PCBs) are a toxic organochlorine used as insulating fluids in electrical equipment such as machinery, transformers, capacitors, and fluorescent light ballasts that were largely banned from importation in Australia in the 1970s. PCBs are listed as a probable human carcinogen and should be managed in accordance with the ANZECC Polychlorinated Biphenyls Management Plan, 2003.

Ozone Depleting Substances (ODSs)

Representative items of refrigerators, air conditioners, chiller units, other refrigerated equipment and any equipment labelled as containing ODSs or suspected of containing ozone-depleting substances (ODSs) were noted and cross referenced with known ozone-depleting gases published in Inventory of Trade Names of Chemical Products Containing Ozone Depleting Substances and their Alternatives, United Nations Environment Programme (UNEP) Division of Technology, Industry and Economics (DTIE) OzoneAction Programme, 2001

Ozone Depleting Substances (ODSs) are those substances which deplete the earth's ozone layer and have been widely used in a range of commercial and industrial applications. All bulk imports of these substances (except HCFCs and methyl bromide) are banned into Australia under an international agreement known as the Montreal Protocol.

Synthetic Mineral Fibre (SMF)

Accessible areas where Synthetic Mineral Fibre (SMF) products were visually confirmed as being present were noted to give a general indication to the presence of SMF materials throughout the building.

Synthetic Mineral Fibre (SMF) a generic name used to describe a group of man-made fibrous material used extensively in industrial, commercial and residential sites as fire rating, reinforcement in construction materials and as acoustic and thermal insulators. Exposure to SMF can result in short-term skin, eye and respiratory irritation. Synthetic Mineral Fibres in the form of Refractive Ceramic Fibres have been classified as possibly carcinogenic to humans.

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Asbestos Material Risk Assessment

The asbestos material risk assessment looks at the type and condition of the Asbestos-containing Material and the ease with which it will release fibres if disturbed. The presence of asbestos-containing materials does not necessarily constitute an exposure risk.

The scores of the four sections are added together to get the total Material Risk Score.

Product type (or debris from product)	
Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement etc)	**1**
Asbestos insulating board, mill boards, other low density boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt	**2**
Thermal insulation (eg pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing	**3**
Extent of damage/deterioration	
Good condition: no visible damage	**0**
Low damage: a few scratches or surface marks; broken edges on boards, tiles etc	**1**
Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres	**2**
High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris	**3**
Surface type/treatment	
Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles	**0**
Enclosed sprays and lagging, low density board (with exposed face painted or encapsulated), asbestos cement sheets etc	**1**
Unsealed asbestos insulating board, or encapsulated lagging and sprays	**2**
Unsealed laggings and sprayed asbestos	**3**
Asbestos type	
White (Chrysotile) only	**1**
Brown (Amphibole asbestos excluding crocidolite) and mixtures (not blue)	**2**
Blue (Crocidolite) and mixtures or type unknown	**3**

Score Range	2-3	4-6	7-9	10-12
Material Risk	Very Low	Low	Medium	High

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Asbestos Disturbance Risk Assessment

The Asbestos Disturbance Risk Assessment looks at the likelihood of someone disturbing the Asbestos-containing Material. The normal occupant activity score is added to the three average scores from the likelihood of disturbance, human exposure potential and maintenance activity sections to get a total disturbance score.

Normal occupant activity		
Main type of activity in area	Rare disturbance activity (eg little used store room)	0
	Low disturbance activities (eg office type activity)	1
	Periodic disturbance (eg industrial or vehicular activity which may cause contact with ACMs)	2
	High levels of disturbance, (eg fire door with asbestos insulating board sheet in constant use)	3
Likelihood of disturbance		
Location	Outdoors	0
	Large rooms, warehouse or well-ventilated areas	1
	Rooms up to 100 sq metres in area	2
	Restricted or confined areas	3
Accessibility	Usually inaccessible or unlikely to be disturbed	0
	Occasionally likely to be disturbed	1
	Easily disturbed	2
	Routinely disturbed	3
Extent/amount	Small amounts or single items (eg strings, gaskets)	0
	Less than 10 sq metres area, or 10 metre pipe run	1
	10 to 50 sq metres area or 10 to 50 metres pipe run	2
	More than 50 sq metres, or 50 metres pipe run	3
Human exposure potential		
Number of occupants	None	0
	1 to 3	1
	4 to 10	2
	More than 10	3
Frequency of use of area	Infrequent	0
	Monthly	1
	Weekly	2
	Daily	3
Average time area is in use	Less than 1 hour	0
	1 to less than 3 hours	1
	3 to less than 6 hours	2
	More than 6 hours	3
Maintenance activity		
Type of maintenance activity	Minor disturbance (eg possibility of contact when gaining access)	0
	Low disturbance (eg changing light bulbs in asbestos ceiling tiles)	1
	Medium disturbance (eg lifting one or two asbestos ceiling tiles to access a valve)	2
	High levels of disturbance (eg removing a number of asbestos ceiling tiles to replace a valve or for recabling, or leak repair)	3
Frequency of maintenance activity	Unlikely – almost never	0
	Less than once a year	1
	Less than once a month	2
	More often than once a month	3

Score Range	0-5	6-7	8-9	10-12
Disturbance Risk	Very Low	Low	Medium	High

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Asbestos Control Priority Assessment

The scores from the asbestos material assessment are added to the scores of the asbestos disturbance risk assessment, to give the overall control priority risk assessment. The control priority risk is adopted to assist in the programming and budgeting for the control of asbestos risk identified in the assessment.

Score Range	Less than 9	9 - 12	13 - 18	More than 19
Priority Risk	Very Low	Low	Medium	High
Control Priority	P4	P3	P2	P1

P1	Materials that pose a high health risk to people in their current state. They are generally friable materials in poor condition, with potential to transfer into other locations. Due to poor condition/location/activities, have a high disturbance potential. **Immediate actions should be taken for these materials to be removed by a licensed asbestos removal contractor (LARC).** *As an interim measure, restrict access.*
P2	Materials that pose a medium health risk to people in their current state. They can be friable materials with minor damage, or non-friable materials in poor condition. Due to poor/fair condition/location/surface treatment, release of asbestos fibres upon contact may occur. **Removal or encapsulation and regular reviews are recommended for these materials.** Where planned maintenance, refurbishment or demolition works will disturb these materials, removal by a LARC is recommended.
P3	Materials that pose a low health risk to people in their current state. They are either friable materials in good condition or non-friable with slight damage or unpainted surfaces, with a low disturbance potential. Due to nature of the material, they do not readily release asbestos fibres upon contact. **These materials should be identified and warning labels affixed.** The material does not present a health risk unless disturbed. Where planned maintenance, refurbishment or demolition works will disturb these materials, removal by a LARC is recommended.
P4	Materials that pose a very low health risk to people in their current state. They are generally non-friable materials in good condition and have a very low disturbance potential. Due to the nature of the material, they do not readily release asbestos fibres upon contact. **These materials should be identified and warning labels affixed.** The material does not present a health risk unless disturbed. Where planned maintenance, refurbishment or demolition works will disturb these materials, removal by a LARC is recommended.
P*	Due to inaccessibility a full risk assessment could not be completed. **Further investigation is required** if any works or access to the area is to be undertaken so that Asbestos material risks can be identified and managed.

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Limitations

This report has been prepared in accordance with the agreement between C120933 NSW Department of Planning Industry & Environment and Greencap.

Within the limitations of the agreed upon scope of services, this work has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

This report relates only to the identification of Hazardous materials used in the construction of the building and does not include the identification of dangerous goods or hazardous substances in the form of chemicals used, stored or manufactured within the building or plant.

The following should also be noted:

While the survey has attempted to locate the Hazardous materials within the site it should be noted that the review was a visual inspection and a limited sampling program was conducted and/or the analysis results of the previous report were used. Representative samples of suspect Hazardous materials were collected for analysis. Other Hazardous materials of similar appearance are assumed to have a similar content.

Not all suspected Hazardous materials were sampled. Only those Hazardous materials that were physically accessible could be located and identified. Therefore it is possible that Hazardous materials, which may be concealed within inaccessible areas/voids, may not have been located during the audit. Such inaccessible areas fall into a number of categories.

(a) Locations behind locked doors;
(b) Inset ceilings or wall cavities;
(c) Those areas accessible only by dismantling equipment or performing minor localised demolition works;
(d) Service shafts, ducts etc., concealed within the building structure;
(e) Energised services, gas, electrical, pressurised vessel and chemical lines;
(f) Voids or internal areas of machinery, plant, equipment, air-conditioning ducts etc;
(g) Totally inaccessible areas such as voids and cavities created and intimately concealed within the building structure. These voids are only accessible during major demolition works;
(h) Height restricted areas;
(i) Areas deemed unsafe or hazardous at time of audit;
(j) Sub–surface soil layers; and
(k) Areas around and below building slabs.

In addition to areas that were not accessible, the possible presence of hazardous building materials may not have been assessed because it was not considered practicable as:

1. It would require unnecessary dismantling of equipment; and/or
2. It was considered disruptive to the normal operations of the building; and/or
3. It may have caused unnecessary damage to equipment, furnishings or surfaces; and/or
4. The hazardous material was not considered to represent a significant exposure risk; and
5. The time taken to determine the presence of the hazardous building material was considered prohibitive.

Only minor destructive auditing and sampling techniques were employed to gain access to those areas documented in the Hazardous Register. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of hazardous material has been identified.

During the course of normal site works care should be exercised when entering any previously inaccessible areas or areas mentioned above and it is imperative that work cease pending further sampling if materials suspected of containing Hazardous materials or unknown materials are encountered. Therefore, during any refurbishment or demolition works, further investigations and assessment may be required should any suspect material be observed in previously inaccessible areas or areas not fully inspected previously, i.e. carpeted floors

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All and any Services proposed by Greencap to the Client were subject to the Terms and Conditions listed on the Greencap website at: https://www.greencap.com.au/terms–conditionsUnless otherwise expressly agreed to in writing and signed by Greencap, Greencap does not agree to any alternative terms or variation of these terms if subsequently proposed by the Client. The Services were carried out in accordance with the current and relevant industry standards of testing, interpretation and analysis. The Services were carried out in accordance with Commonwealth, State, Territory or Government legislation, regulations and/or guidelines. The Client was deemed to have accepted these Terms when the Client signed the Proposal (where indicated) or when the Company commenced the Services at the request (written or otherwise) of the Client.

The services were carried out for the Specific Purpose, outlined in the body of the Proposal. To the fullest extent permitted by law, Greencap, its related bodies corporate, its officers, consultants, employees and agents assume no liability, and will not be liable to any person, or in relation to, any losses, damages, costs or expenses, and whether arising in contract, tort including negligence, under statute, in equity or otherwise, arising out of, or in connection with, any matter outside the Specific Purpose.

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The Client was to ensure that Greencap had access to all information, sites and buildings as required by or necessary for Greencap to undertake the Services. Notwithstanding any other provision in these Terms, Greencap will have no liability to the Client or any third party to the extent that the performance of the Services was not able to be undertaken (in whole or in part) due to access to any relevant sites or buildings being prevented or delayed due to the Client or their respective employees or contractors expressing safety or health concerns associated with such access.

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The conclusions, or data referred to in this Report, should not be used as part of a specification for a project without review and written agreement by Greencap. This Report has been written as advice and opinion, rather than with the purpose of specifying instructions for design or redevelopment. Greencap does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise in relation to the site it investigated.

This Report should be read in whole and should not be copied in part or altered. The Report as a whole set outs the findings of the investigations. No responsibility is accepted by Greencap for use of parts of the Report in the absence (or out of context) of the balance of the Report.

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APPENDIX - Sample Analysis Results and Plans

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Greencap Pty Ltd
ABN: 76 006 318 010
Ground Floor, North Building, 22 Giffnock Avenue
Macquarie Park NSW 2113
Australia
T: 02 9889 1800

Report Date: Wednesday, 08/06/2022 Our ref: C120933:J049016

NSW Department of Planning Industry & Environment
25-27 Fitzroy Street
TAMWORTH NSW 2340

Re: Asbestos Identification Analysis - MeMel Goat Island, Port Jackson NSW 2477

This letter presents the results of asbestos fibre identification analysis performed on 25 samples collected by Dennis Tam of Greencap on Tuesday, 24 May 2022. The samples were collected from MeMel Goat Island, Port Jackson NSW 2477.

All sample analysis was performed using polarised light microscopy, including dispersion staining and trace analysis in our Sydney Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method LAB04 Asbestos Identification by PLM. Any and all services carried out by Greencap for the Client are subject to the Terms and Conditions listed on the Greencap website at https://www.greencap.com.au/terms-conditions and are governed by our statements of limitation available at https://www.greencap.com.au/statements-limitation .

The analysis was completed on Monday, 06 June 2022.

The samples will be kept for three months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table. Accreditation covers testing activities only, sampling activity is outside the scope of ISO 17025 accreditation. Results relate only to the items tested and are for the sole use by the client.

Should you require further information please contact our project manager Leigh Rampley.

Yours sincerely,
Greencap

Vanesa Aguasa : Approved Identifier

Vince Nguyen : Approved Signatory

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Accredited for compliance with ISO/IEC 17025 - Testing.
Accreditation No. 5450, Site No. 3402 Sydney Laboratory.

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Report Date: Wednesday, 08/06/2022 Our ref: C120933:J049016

Site Location:		MeMel Goat Island, Port Jackson NSW 2477	
	Sample ID	**Sample Location/Description/Weight or Size**	**Analysis Result**
1	J049016 - AQ000582	North Depot Precinct - Dredge Office - Ground Floor - Ceiling Space - Southeast Office - Access Hatch Cover - Fibre Cement Sheeting Off white-painted gold-grey layered fibre-cement sheet material ~ 15 x 7 x 5 mm	No Asbestos Detected Organic Fibres
2	J049016 - AQ000585	Water Police Precinct - Water Police Station - Ground Floor - Exterior - Throughout - Wall - Pointing Cream-painted grey compressed/formed crystalline, quartz-like material ~ 40 x 15 x 11 mm	No Asbestos Detected
3	J049016 - AQ000592	Water Police Precinct - 1912 Barracks - Ground Floor - Exterior - West - Adjacent to Entrance - Electrical Distribution Board - Box Linings - Fibre Cement Sheeting Unpainted grey flat compressed fibre-cement sheet material ~ 25 x 10 x 4 mm	**Chrysotile (white asbestos)** **Amosite (brown asbestos)** **Crocidolite (blue asbestos)**
4	J049016 - AQ000598	North Depot Precinct - Fire Fighting Buildings - Ground Floor - Exterior - North - On Ground - Fibre Cement Debris Unpainted grey flat compressed fibre-cement sheet material ~ 30 x 20 x 6 mm	**Chrysotile (white asbestos)** **Amosite (brown asbestos)**
5	J049016 - AQ000601	North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms - Throughout - On Ground - Dust Dark brown non-homogenous dust, loose organic matter, rocks and vitreous fibres, including four fibre cement fragments of approximate net asbestos content 0.015g. This is estimated to be a total asbestos content of 5.83 g/kg* ~ 2.5 g	**Chrysotile (white asbestos)** **Organic Fibres** **Synthetic Mineral Fibres** **Note 1**
6	J049016 - AQ000602	North Depot Precinct - Fire Fighting Buildings - Ground Floor - North Store Rooms - Throughout - All Timber Structure Surface - Debris Dark brown fibre cement fragment material and associated loose fibres 2 x 1 x <1 mm	**Chrysotile (white asbestos)** **Organic Fibres** **Synthetic Mineral Fibres**
7	J049016 - AQ000613	Water Police Precinct - The Cottage - Ground Floor - Exterior - North - Telecomm Pit - Moulded Cement Unpainted white-grey compressed cementitious material ~ 25 x 11 x 6 mm	**Chrysotile (white asbestos)** **Amosite (brown asbestos)**
8	J049016 - AQ000615	Magazine Precinct - Kitchen - Ground Floor - Kitchen - Central - Partition Wall - Fibre Cement Sheeting Cream-painted grey fibre-cement sheet material ~ 5 x 3 x 4 mm	**Chrysotile (white asbestos)** **Amosite (brown asbestos)** **Crocidolite (blue asbestos)**

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Report Date: Wednesday, 08/06/2022 Our ref: C120933:J049016

Site Location:		MeMel Goat Island, Port Jackson NSW 2477	
	Sample ID	**Sample Location/Description/Weight or Size**	**Analysis Result**
9	J049016 - AQ000625	Magazine Precinct - Queens Magazine - Ground Floor - Exterior - Throughout - Wall - Pointing Cream-painted grey compressed/formed crystalline,quartz-like material ~ 15 x 15 x 3 mm	No Asbestos Detected
10	J049016 - AQ000631	Magazine Precinct - Amenities Block - Ground Floor - Exterior - West Entrance - Switch Box - Switch Box Linings - Fibre Cement Sheeting Brown-painted compressed fibre-cement sheet material ~ 7 x 3 x <1 mm	**Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)**
11	J049016 - AQ000636	Magazine Precinct - Amenities Block - 1st Floor - Large Room - North and South - Above Window - Infill Panels - Fibre Cement Sheeting Off white-painted grey flat compressed fibre-cement sheet material ~ 20 x 15 x 4 mm	**Chrysotile (white asbestos) Amosite (brown asbestos) Crocidolite (blue asbestos)**
12	J049016 - AQ000638	Magazine Precinct - Amenities Block - 1st Floor - Large Room - East - Infill Panels - Fibre Cement Sheeting Unpainted grey flat compressed fibre-cement sheet material ~ 25 x 11 x 6 mm	No Asbestos Detected Organic Fibres
13	J049016 - AQ000639	Magazine Precinct - Amenities Block - 1st Floor - Large Room - North and South - Window Frame - Putty Unpainted brown-grey hardened mastic material ~ 20 x 20 x 3 mm	No Asbestos Detected Organic Fibres
14	J049016 - AQ000641	Magazine Precinct - Southern Addition to Queens Magazine - Ground Floor - Exterior - Northwest - Between Wall and Ground - Fibre Cement Debris - Items Removed During Sampling Dirty unpainted grey flat compressed fibre-cement sheet material ~ 90 x 70 x 7 mm	**Chrysotile (white asbestos)**
15	J049016 - AQ000651	Magazine Precinct - The Cooperage - Ground Floor - Exterior - Throughout - Wall - Pointing Off white-painted grey compressed/formed crystalline,quartz material ~ 15 x 10 x 2 mm	No Asbestos Detected
16	J049016 - AQ000652	Magazine Precinct - Stores Building - Ground Floor - Exterior - Throughout - Wall - Pointing Off white-painted grey compressed/formed crystalline,quartz material ~ 18 x 14 x 2 mm	No Asbestos Detected
17	J049016 - AQ000653	Magazine Precinct - Colonial Magazine - Ground Floor - Exterior - Throughout - Wall - Pointing Unpainted grey compressed/formed crystalline,quartz material ~ 17 x 12 x 4 mm	No Asbestos Detected

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Report Date: Wednesday, 08/06/2022 Our ref: C120933:J049016

Site Location:		MeMel Goat Island, Port Jackson NSW 2477	
	Sample ID	**Sample Location/Description/Weight or Size**	**Analysis Result**
18	J049016 - AQ000656	Residential Precinct - Cottage No.1 - Ground Floor - Kitchen - Below Sink - Pipe Joint - Gasket Black-brown compressed resinous hardened mastic material ~ 10 x 6 x 3 mm	No Asbestos Detected
19	J049016 - AQ000676	North Depot Precinct - Small Boat Enclosure - Ground Floor - Exterior - Around Roof - Eaves - Fibre Cement Sheeting Unpainted grey fibre-cement sheet material ~ 10 x 6 x 4 mm	No Asbestos Detected Organic Fibres
20	J049016 - AQ000681	Shipyard Precinct - Ship Repair Workshop - Mezzanine - Offices - Throughout - Wall - Fibre Cement Sheeting Off white-painted grey layered fibre-cement sheet material ~ 10 x 15 x 3 mm	No Asbestos Detected Organic Fibres
21	J049016 - AQ000683	Shipyard Precinct - Ship Repair Workshop - Mezzanine - Offices - Throughout - Floor Covering - Vinyl Sheet Light blue semi-flexible vinyl material and associated amber adhesive material ~ 20 x 8 x 2 mm	No Asbestos Detected
22	J049016 - AQ000685	Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop - Southern Work Shop - Northwest Corner - Wall - Fibre Cement Sheeting Unpainted gold-grey layered fibre-cement sheet material ~ 13 x 8 x 4 mm	No Asbestos Detected Organic Fibres
23	J049016 - AQ000694	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Corridor - Throughout - Floor Covering - Sheet Vinyl - Blue Grey semi-flexible vinyl material ~ 65 x 20 x 3 mm	No Asbestos Detected Organic Fibres
24	J049016 - AQ000695	South Depot Precinct - Port Emergancy Services Building - 1st Floor - Corridor - Throughout - Floor Covering - Adhesive Amber adhesive material and associated grey compressed powder, quartz-like screed material attached to underside of sample AQ000694 ~ 65 x 20 x <1 mm	No Asbestos Detected Organic Fibres
25	J049016 - AQ000696	Shipyard Precinct - Ship Repair Workshop - Ground Floor - Workshop - Main Switch Room - Unused Items in Lockers - Fuse - Woven Materials White formed fibrous membrane within red-brown ceramic and metal HRC fuse with metal contacts ~ 75 x 35 x 35 mm	**Chrysotile (white asbestos)**

*** Shaded row with bolded text indicates sample contains a positive Analysis Result for asbestos.**
If Synthetic Mineral Fibre and Organic Fibre are not stated in Analysis Results, it implies not detected.

NOTE 1 The reporting limit for this non-homogeneous analysis is 0.1g/kg (0.01%). The above result can be interpreted that the sample contains no detectable 'respirable' asbestos fibres (AS4964-2004 Clause 9.5).

Results denoted with * are outside our scope of accreditation.

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CERTIFICATE OF ANALYSIS 296576

Client Details

Client	Greencap Pty Ltd
Attention	Dennis Tam
Address	Ground Floor, North Building, 22 Giffnock Ave, MACQUARIE PARK, NSW, 2113

Sample Details

Your Reference	**J049016**
Number of Samples	53 Paint, 1 Dust
Date samples received	27/05/2022
Date completed instructions received	27/05/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details

Date results requested by	03/06/2022
Date of Issue	03/06/2022

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Giovanni Agosti, Group Technical Manager

Authorised By

Nancy Zhang, Laboratory Manager

Envirolab Reference: 296576
Revision No: R00

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Lead in Paint						
Our Reference		296576-1	296576-2	296576-3	296576-4	296576-5
Your Reference	UNITS	AQ000573	AQ000574	AQ000575	AQ000583	AQ000584
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	2.6	0.14	<0.005	5.6	0.02

Lead in Paint						
Our Reference		296576-6	296576-7	296576-8	296576-9	296576-10
Your Reference	UNITS	AQ000587	AQ000588	AQ000589	AQ000590	AQ000591
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	3.9	7.2	8.1	17	0.15

Lead in Paint						
Our Reference		296576-11	296576-12	296576-13	296576-14	296576-15
Your Reference	UNITS	AQ000594	AQ000595	AQ000597	AQ000604	AQ000605
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	14	3.5	3.2	12	12

Lead in Paint						
Our Reference		296576-16	296576-17	296576-18	296576-19	296576-20
Your Reference	UNITS	AQ000608	AQ000609	AQ000611	AQ000612	AQ000614
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	13	3.1	0.25	0.63	<0.005

Lead in Paint						
Our Reference		296576-21	296576-22	296576-23	296576-24	296576-25
Your Reference	UNITS	AQ000617	AQ000618	AQ000619	AQ000621	AQ000622
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	2.9	6.8	7.0	0.067	0.38

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Lead in Paint						
Our Reference		296576-26	296576-27	296576-28	296576-29	296576-30
Your Reference	UNITS	AQ000624	AQ000634	AQ000635	AQ000644	AQ000645
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	1.2	0.03	0.26	0.12	5.5

Lead in Paint						
Our Reference		296576-31	296576-32	296576-33	296576-34	296576-35
Your Reference	UNITS	AQ000650	AQ000654	AQ000655	AQ000657	AQ000662
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	4.8	0.009	2.7	2.6	5.6

Lead in Paint						
Our Reference		296576-36	296576-37	296576-38	296576-39	296576-40
Your Reference	UNITS	AQ000664	AQ000665	AQ000666	AQ000667	AQ000669
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	8.5	3.3	14	11	5.5

Lead in Paint						
Our Reference		296576-41	296576-42	296576-43	296576-44	296576-45
Your Reference	UNITS	AQ000674	AQ000679	AQ000680	AQ000682	AQ000684
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	0.97	0.11	0.094	0.073	1.7

Lead in Paint						
Our Reference		296576-46	296576-47	296576-48	296576-49	296576-50
Your Reference	UNITS	AQ000686	AQ000687	AQ000688	AQ000689	AQ000690
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	<0.005	0.14	0.19	0.14	0.03

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Lead in Paint						
Our Reference	UNITS	296576-51	296576-52	296576-54	296576-55	296576-56
Your Reference		AQ000691	AQ000692	A2000586	AQ000587 - [TRIPLICATE]	AQ000634 - [TRIPLICATE]
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Date analysed	-	03/06/2022	03/06/2022	03/06/2022	03/06/2022	03/06/2022
Lead in paint	%w/w	0.20	0.11	7.9	8.0	0.76

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Lead (dust)		
Our Reference	UNITS	296576-53
Your Reference		AQ000640
Type of sample		Dust
Date prepared	-	02/06/2022
Date analysed	-	02/06/2022
Lead	mg/kg	760

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Method ID	Methodology Summary
Metals-020	Determination of various metals by ICP-AES.
Metals-020/021/022	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.

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QUALITY CONTROL: Lead in Paint						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			03/06/2022	6	03/06/2022	03/06/2022		03/06/2022	[NT]
Date analysed	-			03/06/2022	6	03/06/2022	03/06/2022		03/06/2022	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	6	3.9	8.7	76	90	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			[NT]	27	03/06/2022	03/06/2022		03/06/2022	[NT]
Date analysed	-			[NT]	27	03/06/2022	03/06/2022		03/06/2022	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	27	0.03	0.83	186	91	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-3	[NT]
Date prepared	-			[NT]	31	03/06/2022	03/06/2022		03/06/2022	[NT]
Date analysed	-			[NT]	31	03/06/2022	03/06/2022		03/06/2022	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	31	4.8	4.8	0	86	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	38	03/06/2022	03/06/2022		[NT]	[NT]
Date analysed	-			[NT]	38	03/06/2022	03/06/2022		[NT]	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	38	14	12	15	[NT]	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	46	03/06/2022	03/06/2022		[NT]	[NT]
Date analysed	-			[NT]	46	03/06/2022	03/06/2022		[NT]	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	46	<0.005	<0.005	0	[NT]	[NT]

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QUALITY CONTROL: Lead (dust)						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			02/06/2022	[NT]	[NT]	[NT]	[NT]	02/06/2022	[NT]
Date analysed	-			02/06/2022	[NT]	[NT]	[NT]	[NT]	02/06/2022	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	104	[NT]

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Result Definitions	
NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

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Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

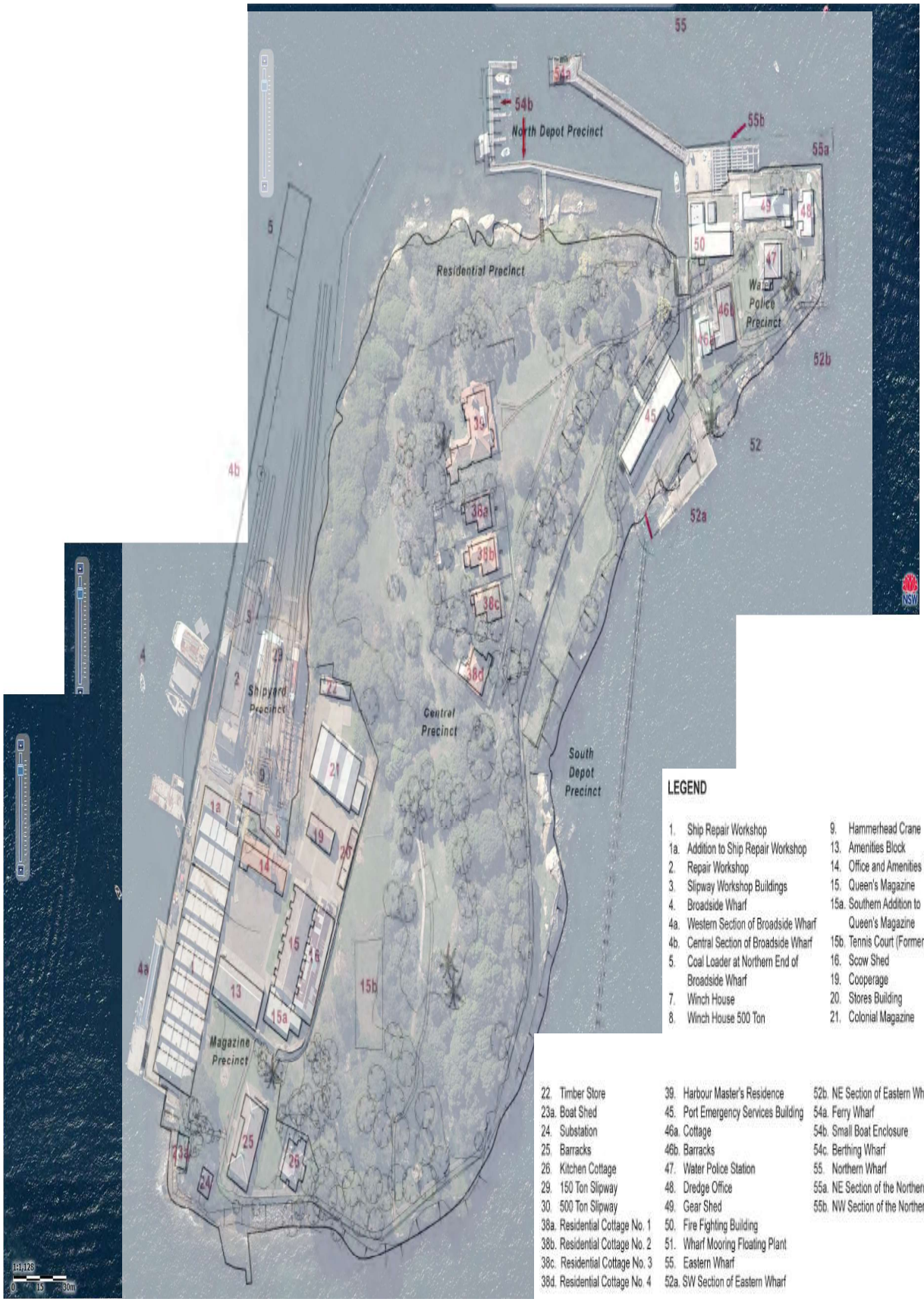
Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

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Report Comments

Lead in Paint:
- The laboratory RPD acceptance criteria has been exceeded for 296576-6 for Pb. Therefore a triplicate result has been issued as laboratory sample number 296576-55.
- The laboratory RPD acceptance criteria has been exceeded for 296576-27 for Pb. Therefore a triplicate result has been issued as laboratory sample number 296576-56.

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Asbestos Sample Analysis Report
Goat Island, Sydney Harbour National Park NSW

This report presents the results of an asbestos fibre identification analysis performed on fifty three (53) samples collected by Kirsten Hartshorne of Noel Arnold & Associates Pty Ltd from Goat Island, Sydney Harbour National Park NSW on the 26th, 27th & 28th April and the 8th,10th & 31st May 2006.

Sample analysis was performed in our Sydney Laboratory in accordance with Noel Arnold and Associates Pty Ltd Test Method Number 2 "Qualitative Identification of Asbestos in Bulk Samples" and following the guidelines of the NOHSC. The samples will be kept for six months and then disposed of, unless notified otherwise.

The results of the asbestos identification analysis are presented in the appended table overleaf.

Should you require further information please contact the undersigned.

Yours sincerely,

NOEL ARNOLD AND ASSOCIATES PTY LTD



BERNARD DAY

Approved Identifier & Signatory

NATA Accredited Laboratory Number: 3409

This document is issued in accordance with NATA's accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

This document shall not be reproduced, except in full.

Date of Analysis: 02/05/2006, 10/05/06, 16/05/06, 31/05/06

The design of sampling strategies is outside the scope of accreditation because each situation is individual, which does not allow for an objective assessment of this aspect.

***All samples are analysed by polarised light microscopy, including dispersion staining.**

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NAA Sample Id.	Location / Description / Total Sample Dimensions	Analysis Result
Location: Goat Island, Sydney Harbour National Park		
47829-01	Magazine Precinct; Kitchen – exterior eaves; White painted grey compressed fibre cement sheet material; 28 x 21 x 1 mm.	**Chrysotile (White Asbestos)**
47829-02	Magazine Precinct; Kitchen – exterior electrical backing board; Brown compressed board material; 5 x 2 x 1 mm.	No Asbestos Fibres Detected
47829-03	Magazine Precinct; Kitchen – interior hall ceiling; White painted grey compressed fibre cement sheet material; 10 x 9 x 1 mm.	**Chrysotile (White Asbestos)**
47829-04	Magazine Precinct; Kitchen – interior bathroom ceiling; White painted grey layered fibre cement sheet material; 12 x 5 x 1 mm.	No Asbestos Fibres Detected
47829-05	Magazine Precinct; Substation – exterior eaves; White painted grey compressed fibre cement sheet material; 34 x 16 x 3 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)**
47829-06	Magazine Precinct; Boatshed – exterior eaves; Yellow painted grey compressed fibre cement sheet material; 15 x 6 x 1 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)**
47829-07	Magazine Precinct; Queens Magazine Addition – interior store room walls; Beige painted grey compressed fibre cement sheet material; 80 x 43 x 6.5 mm.	**Chrysotile (White Asbestos)**
47829-08	Magazine Precinct; Queens Magazine Addition – interior kitchen floor; Brown semi-flexible vinyl tile/sheet material and associated clear amber adhesive; 35 x 20 x 2.5 mm.	No Asbestos Fibres Detected Note 1
47829-09	Magazine Precinct; Office & Amenities Building – exterior eaves; White painted grey compressed fibre cement sheet material; 14 x 5 x 2 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**

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NAA Sample Id.	Location / Description / Total Sample Dimensions	Analysis Result
47829-10	Magazine Precinct; Office & Amenities Building – interior conference room ceiling; White fibrous friable insulation material; 27 x 10 x 1 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)**
47829-11	Magazine Precinct; Office & Amenities Building – exterior electrical switch cupboard lining; Brown painted grey compressed fibre cement sheet material; 37 x 12 x 6 mm.	**Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-12	Magazine Precinct; Office & Amenities Building – interior floor throughout; Light grey brittle vinyl tile/sheet material and associated clear amber adhesive; 55 x 40 x 2.5 mm.	No Asbestos Fibres Detected Note 1
47829-13	Magazine Precinct; Office & Amenities Building – interior locker room floor; Black bituminous fibrous flexible insulating material; 55 x 34 x 2 mm.	No Asbestos Fibres Detected
47829-14	Magazine Precinct; Amenities Block; ground level exterior front porch ceiling; White painted grey compressed fibre cement sheet material; 28 x 21 x 1.5 mm.	No Asbestos Fibres Detected
47829-15	Magazine Precinct; Amenities Block; ground level interior workshop and locker room floor; Brown and dark green patterned, flexible vinyl tile/sheet material and associated Clear amber adhesive; 64 x 40 x 2.5 mm.	No Asbestos Fibres Detected Note 1
47829-16	Magazine Precinct; Amenities Block; ground level storeroom below stairs – ceiling; Blue painted grey compressed fibre cement sheet material; 16 x 11 x 6 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-17	Magazine Precinct; Amenities Block; ground level – ceiling throughout; White painted grey compressed fibre cement sheet material; 10 x 5 x 1 mm.	**Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-18	Magazine Precinct; Amenities Block; ground level – west stairwell – ceiling; White compressed, shiny gold mica vermiculite material; 45 x 31 x 3 mm	No Asbestos Fibres Detected

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NAA Sample Id.	Location / Description / Total Sample Dimensions	Analysis Result
47829-19	Magazine Precinct; Amenities Block; level 1 – boiler pipe; White woven synthetic mineral fibre insulation material; 65 x 38 x 2 mm	No Asbestos Fibres Detected
47829-20	Shipyard Precinct; Slipway Workshop Building – cable room wall; Beige compressed fibre cement sheet material; 25 x 5 x 2 mm.	No Asbestos Fibres Detected
47829-21	Shipyard Precinct; slipway Workshop Building – office wall; Beige compressed fibres cement sheet material; 15 x 8 x 3 mm.	No Asbestos Fibres Detected
47829-22	Magazine Precinct; Amenities & Office Building disabled toilet walls; White painted beige compressed fibre cement sheet material; 20 x 3 x 1 mm.	No Asbestos Fibres Detected
47829-23	Residential Precinct; Harbour Masters Residence – exterior shed wall; Unpainted grey compressed fibre cement sheet material; 24 x 13 x 4.5 mm	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)**
47829-24	Residential Precinct; Harbour Masters Residence – exterior shed roof; Unpainted brown compressed fibre cement sheet material; 18 x 9 x 4 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)**
47829-25	Residential Precinct; Cottage no 1; subfloor; Unpainted grey compressed fibre cement sheet material; 18 x 10 x 3 mm.	**Chrysotile (White Asbestos)**
47829-26	Residential Precinct; Cottage no 2; verandah gables; White painted grey compressed fibre cement sheet material; 4 x 3 x 1 mm	**Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-27	Residential Precinct; Cottage no 2; interior laundry walls; Grey painted grey compressed fibre cement sheet material; 13 x 3 x 2 mm.	No Asbestos Fibres Detected

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NAA Sample Id.	Location / Description / Total Sample Dimensions	Analysis Result
47829-28	Residential Precinct; Cottage no 3; verandah- electrical box lining; Unpainted pink layered fibre cement sheet material; 5 x 3 x 1 mm	**Chrysotile (White Asbestos)**
47829-29	Residential Precinct; Cottage no 2; verandah insert panel; White painted grey compressed fibre cement sheet material; 6 x 3 x 1 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-30	Residential Precinct; Cottage no 2; rear shed – ground; Unpainted grey compressed fibre cement sheet material; 22 x 19 x 5 mm	No Asbestos Fibres Detected
47829-31	Residential Precinct; Cottage no 2; rear shed – wall panel; Unpainted grey compressed fibre cement sheet material; 37 x 17 x 4 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)**
47829-32	Residential Precinct; Cottage no 4; rear porch ceiling; White painted grey compressed fibre cement sheet material; 2 x 1 x 1 mm.	**Chrysotile (White Asbestos)**
47829-33	South Depot Precinct; Port Emergency Services Building; ground level exterior – verandah ceiling; white painted grey fibre cement sheeting material; 51 x 38 x 4 mm	No Asbestos Fibres Detected
47829-34	South Depot Precinct; Port Emergency Services Building; ground level exterior – staff entrance floor; Light brown semi-flexible vinyl tile/sheet material; 95 x 58 x 2.5 mm.	No Asbestos Fibres Detected Note 1
47829-35	South Depot Precinct; Port Emergency Services Building; ground level interior – police diving unit wall; Brown compressed fibre cement sheet material; 7 x 4 x 1 mm.	**Chrysotile (White Asbestos)**

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NAA Sample Id.	Location / Description / Total Sample Dimensions	Analysis Result
47829-36	South Depot Precinct; Port Emergency Services Building; level 1 interior – female toilet ceiling; White painted beige compressed fibre cement sheet material; 8 x 4 x 1 mm.	No Asbestos Fibres Detected
47829-37	South Depot Precinct; Port Emergency Services Building; level 1 interior – male toilet south wall; Light blue painted beige compressed fibre cement sheet material; 10 x 4 x 1 mm.	No Asbestos Fibres Detected
47829-38	South Depot Precinct; Port Emergency Services Building; level 1 interior – panels in electrical switch box; Light blue painted grey compressed fibre cement sheet material; 15 x 8 x 2 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-39	Water Police Precinct; entrance between 1912 barrack & the cottage – wall panels; Light blue painted grey compressed fibre cement sheet material; 15 x 12 x 1 mm.	No Asbestos Fibres Detected
47829-40	Water Police Precinct; 1912 Barracks – floor; Light brown flexible linoleum sheet material and associated amber adhesive backing; 105 x 48 x 1 mm.	No Asbestos Fibres Detected Note 1
47829-41	North Depot Precinct; Dredge Office exterior walls; Light blue painted grey compressed fibre cement sheet material; 15 x 5 x 2 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)**
47829-42	North Depot Precinct; Fire Fighting Buildings; northeast storage shed wall; Unpainted grey compressed dimpled fibre cement sheet material; 100 x 60 x 5 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)**
47829-43	Water Police Precinct; Water Police Station Building – Exterior north of building – ground; Pink painted grey compressed fibre cement sheet material; 115 x 82 x 4.5 mm.	**Chrysotile (White Asbestos)**
47829-44	North Depot Precinct; site shed adjacent to Dredge Office – ext stair awning; Unpainted grey layered fibre cement sheet material; 65 x 22 x 2 mm.	No Asbestos Fibres Detected

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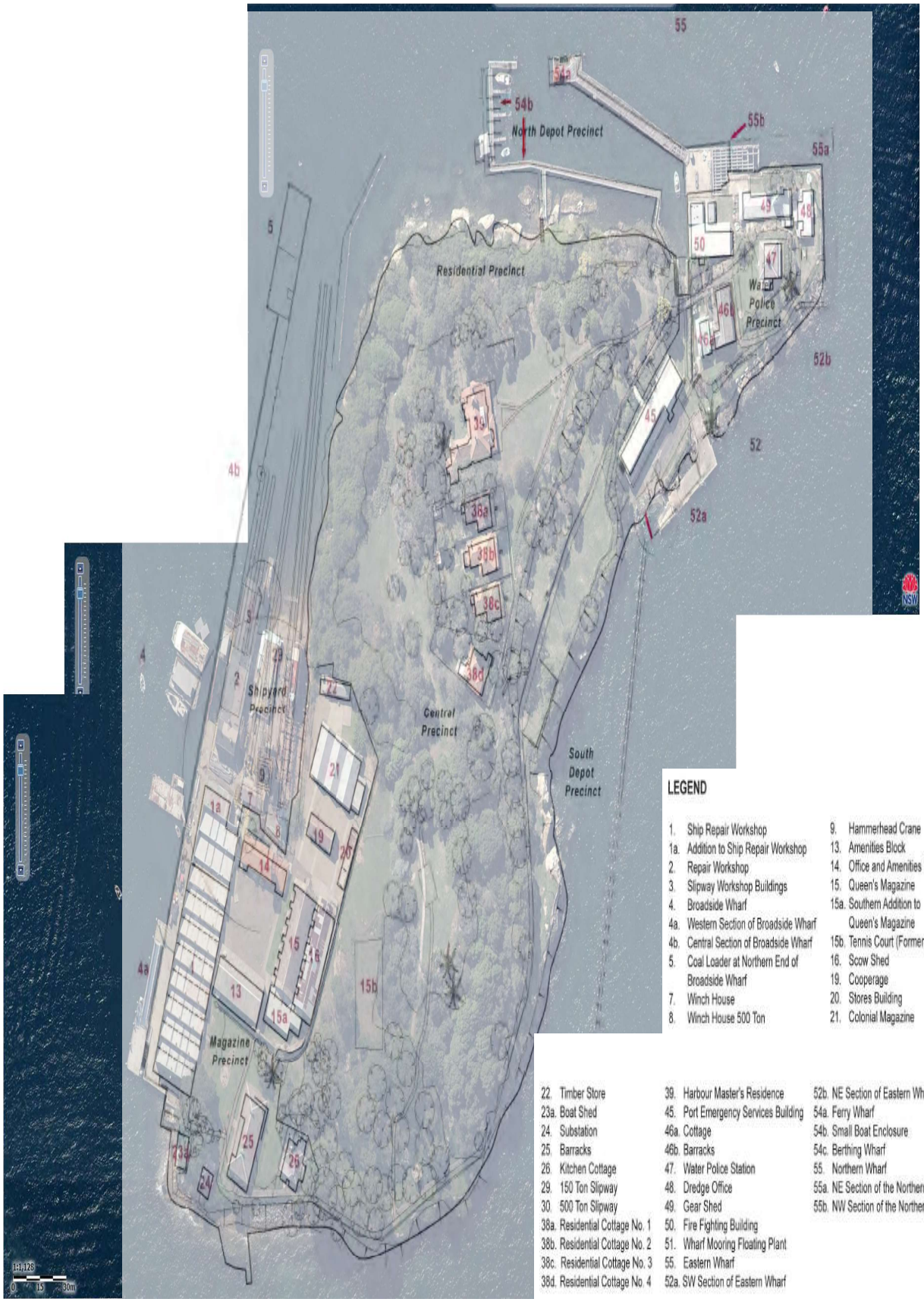
NAA Sample Id.	Location / Description / Total Sample Dimensions	Analysis Result
47829-45	North Depot Precinct; Dredge Office; kitchen walls; Unpainted grey compressed fibre cement sheet material; 24 x 17 x 5 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-46	North Depot Precinct; Dredge Office; Interior, toilet – walls; White painted grey compressed fibre cement sheet material; 22 x 12 x 1.5 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-47	North Depot Precinct; Dredge Office; Interior, north office – lower wall panels; Unpainted grey layered fibre cement sheet material; 28 x 6 x 1 mm	No Asbestos Fibres Detected
47829-48	North Depot Precinct; Dredge Office; rear entrance vestibule – walls; White painted fibre cement sheet material; 25 x 12 x 2 mm.	No Asbestos Fibres Detected
47829-49	North Depot Precinct; Dredge Office; exterior, below switch box – ground; Unpainted grey dimpled compressed fibre cement sheet material; 55 x 36 x 5 mm.	**Chrysotile (White Asbestos)**
47829-50	North Depot Precinct; Fire Fighting Buildings; southeast storage shed–Electrical backing board; Brown fibrous friable insulation material; 7 x 5 x 1 mm	**Amosite (Brown Asbestos)**
47829-51	North Depot Precinct; Fire Fighting Building; front of buildings – ground; Unpainted grey compressed fibre cement sheet material; 50 x 32 x 5 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-52	North Depot Precinct; Fire Fighting Building; front of buildings; Black bituminous, fibrous felt material; 145 x 85 x 2 mm.	No Asbestos Fibres Detected
47830-30	Central Precinct; Former Recreation Hall area-ground; White fibrous friable layered board-like material; 80 x 55 x 5 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)**

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NAA Sample Id.	Location / Description / Total Sample Dimensions	Analysis Result
47829-53	North Depot Precinct; Small boat enclosure Waiting shed exterior walls; Light blue painted grey compressed fibre cement sheet material 28 x 30 x 5 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**
47829-54	North Depot Precinct; Small boat enclosure Waiting shed interior walls; White painted grey compressed fibre cement material; 8 x 10 x <1 mm.	**Amosite (Brown Asbestos)** **Chrysotile (White Asbestos)** **Crocidolite (Blue Asbestos)**

Shaded rows indicate a positive result for asbestos
***All samples are analysed by polarised light microscopy, including dispersion staining.**
Note 1 – Confirmation by another analytical technique advised due to the nature of the sample.

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Appendix C – Sampling and Analysis Quality Plan

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Going Further in Managing Risk

Level 2 / 11-17 Khartoum Road
North Ryde NSW 2113
Australia

Sampling and Analysis Quality Plan (SAQP)

August 2022
J178494

NSW Department of Planning and Environment

Me Mel Goat Island, Sydney Harbour National Park

C125091:MB

Document Control

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Signatures:	Prepared By:  Matthew Barberson **Team Manager - Environment East** 	Authorised By:  Dean Noske **Principal Environmental Consultant - CENVP SC** 

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Document Circulation

No of Copies	Type	Customer Name	Position & Company
1	Electronic	Ed Beebe	Senior Project Officer - NSW National Parks and Wildlife Service

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Sampling and Analysis Quality Plan (SAQP)

NSW Department of Planning and Environment

Me Mel Goat Island, Sydney Harbour National Park

Table of Contents

1. Introduction 1
2. Background 1
3. Project Objectives 1
4. Site Description Summary 2
   - 4.1 Site Topography, Geology and Hydrogeology 2
   - 4.2 Summary of PSILS (NAA 2006) Findings 3
     - 4.2.1 Findings of Limited Targeted Sampling 3
   - 4.3 Site Inspection 16th June 2022 4
5. Conceptual Site Model Summary 5
   - 5.1 Current and Potential Future Site Uses 5
   - 5.2 Contamination 5
     - 5.2.1 Contaminants of Concern 5
     - 5.2.2 Contaminants of Potential Concern 6
   - 5.3 Site Receptors 6
   - 5.4 Data Gaps 1
6. Data Quality Objectives 1
7. Control of Decision Errors 8
8. Soil and Groundwater Sampling and Analysis Procedures 9
   - 8.1 Sampling Density Considerations 9
     - 8.1.1 Soil Sampling for Systematic Site Area Coverage 9
     - 8.1.2 Hotspot Leachate Testing and Vertical Delineation 9
     - 8.1.3 Hotspot Delineation 9
   - 8.2 Drilling and Field Data Collection Procedures for Soil Sampling 9
   - 8.3 Laboratory Analysis of Soil Samples 10
     - 8.3.1 Soil Sampling for Systematic Site Area Coverage 10
     - 8.3.2 Hotspot Leachate Testing and Vertical Delineation 11
     - 8.3.3 PFAS Testing of Soils Around the Fire Fighting Building 11
     - 8.3.4 Hotspot Delineation 11
   - 8.4 Groundwater monitoring 11
     - 8.4.1 Well Development Purging 11
     - 8.4.2 Groundwater Sampling Procedure 12
9. Recommendations 13
10. References 14

Figures I

Adelaide | Auckland | Brisbane | Canberra | Darwin | Melbourne | Newcastle | Perth | Sydney | Wollongong

Appendix A: Lot and DP Plan II
Appendix B: Site Orientation Plan III
Appendix C: Map Showing The Reclaimed Land IV
Appendix D: Utilities Mapping V
Appendix E: Archaeological Sites Map VI

1. Introduction

Greencap was engaged by NSW Department of Planning and Environment (the client) to prepare this Sampling and Analysis Quality Plan (SAQP) for Me Mel Goat Island, Sydney Harbour National Park (the site). The site location is shown on *Figure 1*. The site is registered as a heritage item on the NSW State Heritage Register.

This document presents an SAQP for the Detailed Site Investigation (DSI) that is planned to be undertaken to assess the contamination risk on-site. The DSI is required to inform the planned site transaction and provide the necessary data set for the preparation of the required environmental management plan and remediation action plan documentation for the site.

2. Background

Noel Arnold & Associates (NAA) undertook a Preliminary Environmental Site Investigation with Limited Soil Sampling (PSILS) in 2006 and issued a PSILS Report for the site on May 2006 (NAA 2006). The PSILS identified various potentially contaminating activities (historical and current) on-site such as a shipyard, ship maintenance, dangerous goods storage, workshops, manufacturing, quarrying, firefighting, blacksmithing and similar.

Limited targeted soil sampling undertaken in the scope of the PSILS identified soils exceeding the human health criteria at 18 out of 30 investigation locations on-site. Industrial (HIL-D), recreational (HIL-C), and residential (HIL-A) land use criteria were exceeded at five, 15, and 18 locations respectively (see Figure 2 for sample locations and exceedances). Two, five, and seven of these exceedances were noted as hotspots for industrial, recreational, and residential land use criteria respectively (see Figure 3 for Hotspots Map).

The PSILS recommended further soil sampling and the formulation of a remediation action plan (RAP) to be prepared for the site; however, Greencap understands this has not as of yet been undertaken and the nature and the extent of contamination onsite is currently not known. To comply with industry best practice and the current legislation, namely National Environment Protection *(Assessment of Site Contamination)* Measure (NEPC[1] 2013), Guideline on Consultants Reporting on Contaminated Land (NSW EPA 2020) and State Environment Planning Policy (SEPP) 55, a Detailed Site Investigation (DSI) is required to be undertaken prior to preparing a RAP for the site.

3. Project Objectives

The purpose of this SAQP is to establish the necessary sampling and analysis procedures and identify the required quality assurance/control details and procedures in general accordance with the requirements of the NEPM 2013 for the implementation of the DSI.

The SAQP aims to:

- Undertake a data review of the historical PSILS and establish the scope for the DSI, including the delineation of hotspots;
- Establish the site criteria that will be adopted by the DSI;
- Addresses heritage management constraints for the implementation of the DSI;
- Optimise the scope for the DSI, aiming to ensure the cost effectiveness of the proposed intrusive works, and
- Determine the nature and extent of identified soil contamination onsite.

Data to be collected following the implementation of this SAQP will be used to update the Conceptual Site Model (CSM) of the site and inform the preparation of the required remediation action and environmental management plan documents.

[1] National Environment Protection Council

4. Site Description Summary

The site is located in Sydney Harbour approximately 1.2km west of Sydney Harbour Bridge and covers an approximately 6 ha land (including the shipyard lease area, see Figure 1).

The site is defined as Lot 3 DP 837195 and owned by the Sydney Harbour National Park under NSW Department of Planning and Environment (DPE).

The site is vegetated with native regrowth along the northern shoreline and southern section of the Island. An operational shipyard and associated structures is located on the western shoreline. The centre of the Island contains five residential houses situated on the highest point of the island. The eastern shoreline is dominated by a large wharf and a large two level building. Smaller wharves are located on the northern shoreline along with a number of sheds and storage areas.

At the time of writing this SAQP, the shipyard on the western shoreline was operational (see Figure 4, ship yard lease area). One residential dwelling was used to house a National Parks & Wildlife Service ranger and their family.

Table 1: Site Details

Item	Details
Address	Me Mel Goat Island, Sydney Harbour National Park
Registered Lot Details	Lot 3 DP 837195 (see **Appendix A**)
Site Area	6 ha (including the shipyard lease area)
Current Land Use Zoning	National Park
Site Users	Island residents, workers, and national park staff
Surrounding Site Use	Sydney Harbour

Refer to **Appendix B** for the site survey with most recent site orientation plan and the historical site orientation plan.

4.1 Site Topography, Geology and Hydrogeology

The subject site is a small island within Sydney Harbour, elevated approximately 40m above sea level. The site contains sloping surfaces with cliffs noted around northern, north-western, southern, and south-western shorelines.

No data was available regarding groundwater occurrence on-site. Furthermore, no permanent freshwater water channels were observed on the subject site.

The Sydney 9130 1:100,000 Geological Sheet (NSW Department of Mineral Resources, 1983) describes the area in which the site lies as being underlain by Hawkesbury Sandstone. Sandstone outcrops were observed adjacent to the Substation in the Magazine Precinct, either side of the footpath in the South Depot Precinct and in various locations in the Residential Precinct. The northern and southern shoreline is also derived from Hawkesbury Sandstone.

Soil Landscapes of the Sydney 1:100 000 sheet (Soil Conservation Service 1989) maps the subject site as occupying disturbed terrain. Site observation determined that the dominant soil material on site within this classification is loamy sand.

According to the Conservation Management Plan, site contains some reclaimed land on the northeast and southwest wharves and Shipyard Lease Area appears to have been built on an excavated rock platform (see. **Appendix C**). Site utilities mapping is provided in **Appendix D**.

4.2 Summary of PSILS (NAA 2006) Findings

Me Mel Goat Island's main historical uses of the site are summarised below:

- Sandstone quarrying (1826-1832);
- Gunpowder magazine establishment (1833-1839);
- Water Police Station activities (1837-1865);
- Magazine operation (1840-1899);
- Sydney Harbour Trust Depot (1901-1936);
- Sydney Harbour Trust Shipyard (1925-1936);
- Maritime Services Board (1936-1993); and
- National Parks & Wildlife Services (1993-present)

Potentially contaminating activities on-site were noted as below:

- Sandstone quarry,
- Powder magazine,
- Gunpowder storage, cooperage, explosives laboratory,
- Gunpowder magazine, dredging and fire brigade activities,
- Shipyard,
- Firefighting,
- Repair workshops, and
- Substation.

4.2.1 Findings of Limited Targeted Sampling

The scope of the historical preliminary investigation (NAA 2006) included soil sampling at 30 borehole locations at various depths (via hand auger) between 0.1-0.7 metres below ground level (mBGL) targeting identified higher risk areas (see Figure 2 and 3). Results of this assessment identified soils exceeding human health criteria at 18 out of 30 investigation locations on-site. The health criteria exceedances are displayed on Table 2 below.

Table 2: PSILS (NAA 2006) Results and Health Criteria Exceedances Summary

Contaminant	Max Conc. (mg/kg)	Samples Exceeding HIL D (mg/kg)	Samples Exceeding HIL C (mg/kg)	Samples Exceeding HIL A (mg/kg)
Lead	(6,700)	BH 3 0.15 (1,500) BH 7 0.3 (6,500) - BH 8 0.4 (2,700) BH 9 0.2 (3,600) BH 9 0.4 (2,400) BH10 0.24 (6,700) BH13 0.15 (1,900)	BH1 0.15 (1,300) BH5 0.2 (1,400) BH11 0.1 (1,000) BH15 0.15 (930) BH17 0.15 (1,300) BH23 0.05 (1,400) BH23 0.2 (990) BH26 0.1 (770) BH28 0.1 (610) BH30 0.1 (620) + All samples exceeded HIL-D criteria	BH8 0.2 (360) BH17 0.3 (310) BH18 0.15 (410) BH19 0.15 (450) BH19 0.3 (350) BH20 0.15 (410) BH21 0.1 (330) BH12 0.15 (390) BH14 0.1 (370) + All samples exceeded HIL-C criteria (all HIL-C exceedances are

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Table 2: PSILS (NAA 2006) Results and Health Criteria Exceedances Summary				
Contaminant	**Max Conc. (mg/kg)**	**Samples Exceeding HIL D (mg/kg)**	**Samples Exceeding HIL C (mg/kg)**	**Samples Exceeding HIL A (mg/kg)**
				HIL-A hotspots, except for BH28 0.1 and BH30 0.1) + All samples exceeded HIL-D criteria
Arsenic	(260)	-	-	BH11 0.1 (260)
PAH	(1502.3)	-	BH06 0.2 (1502.3)	BH06 0.2 (1502.3)
Mercury	(57)	-	-	BH08 0.4 (57)

Notes:

1. Red font means: Hotspot(s)
2. See Figure 2 and Figure 3 for sample locations

Other chemical results were summarised as follows:

- Total petroleum hydrocarbons C6-C9—*41 samples were analysed, and all results were below laboratory limit of detection;*
- Total petroleum hydrocarbons C10-C36—*41 samples were analysed, 6 samples showed detections, and 2 samples (BH06 and BH08) exceeded 1000 mg/kg (formerly adopted site criteria, NEPM 1999 Criterie E) with 2550 and 4050 mg/ kg concentrations respectively;*
- Benzene, toluene, ethylbenzene, xylene, and naphthalene—*41 samples analysed and all results were below laboratory limit of detection;*
- Cadmium (Cd), Chromium (Cr), Copper (Cu), Nickel (Ni), and Zinc (Zn)—*43 samples analysed all results were below relevant health criteria;*
- Benzo(a)pyrene—*41 samples were analysed, 5 samples (BH03, BH06, BH12, BH20, and BH31) returned results above formerly adopted site criteria (NEPM 1999 Criterie E, with concentrations 16, 95, 1.7, 3.7, and 6 mg/ kg and respectively), all other samples were this criteria;*
- Poly chlorinated bi-phenyls (PCBs)—2 samples were analysed both were below the detection limit:
- Phenols—20 samples were analysed, all were below the detection limit;
- Asbestos—All 27 soil samples returned negative results. 5 fragments collected from fill material returned positive results for bonded asbestos;
- Organochlorine and organophosphorus pesticides (OCP and OPP)—10 samples were analysed, all were below the detection limit.

Relying on limited soil data collected with a hand auger, PSILS (NAA 2006) commented the natural soils on-site were encountered in relatively shallower depths (~0.7 mBGL)—to be confirmed with further sampling. PSILS (NAA 2006) recommended further soil assessment and remediation at the areas where hotspots were detected.

No leachate testing or groundwater monitoring were undertaken in the scope of the PSILS (NAA 2006).

4.3 Site Inspection 16th June 2022

The site was inspected by a suitably qualified and experienced Greencap Senior Environmental Consultant on 16th of June 2022 (the entire site as inspected except for the Shipyard Lease Area, see. Figure 1). This

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investigation confirmed no material changes had occurred on site setting since the completion of the 2006 investigation. The following were noted during this investigation following visual observations and discussions with site personnel (see. Figure 4 for site locations):

- Shipyard Lease Area (see. Figure 4) was operational and was kept outside of the scope of the site inspection (this area requires to be inspected prior to the sampling event);
- Garden accessible soils with well-maintained grass were noted around the Queens Magazine and Barracks;
- Soils around the Colonial Magazine were noted to be covered by gravel;
- Banana trees were observed near the legacy lead hotspot location at BH08 (site manager advised there are other fruit trees on-site, e.g. avocado trees)—*site personnel were advised not to consume unvalidated fruits growing on existing fruit trees on the island due to risk of potential contaminant uptake;*
- Cliffs were observed around the north, north-west, south, and south-east of the site;
- Plastic waste from the harbour was observed to accumulate in the shore near the Northern Warf;
- An operational mechanical workshop was observed at the gear shed;
- Bonded asbestos cement sheeting and lead paint was observed on various buildings on-site;
- Fill material was observed on Eastern Warf reclaiming some land from the harbour; and
- Vegetation on-site appeared healthy and grass was well-maintained.

5. Conceptual Site Model Summary

A preliminary CSM of the site was established and presented in the PSILS Report (NAA 2006). Potential contaminant sources, pathways, and receptor linkages are presented in the preliminary CSM are presented below.

5.1 Current and Potential Future Site Uses

Current land uses on-site included residential, recreational, and industrial. As the site is a National Park and a heritage conservation area, it is likely that the current site setting will be largely preserved. Future land uses on-site are not yet determined; therefore, the DSI will compare the analytical results with the applicable land use criteria as per Schedule B1 of ASC NEPM 2013 (namely, Category A, C, and D)[2].

5.2 Contamination

Based on the results to date, the main issue at the site is considered to be elevated heavy metals and PAH concentrations within shallow fill material, as well as asbestos impacted fill. Data gaps exists regarding general site coverage and the contamination status of deeper fill material and groundwater is currently unknown.

5.2.1 Contaminants of Concern

Based on the results of PSILS (NAA 2006) the following are noted as the Contaminants of Concern (CoC) for soil on-site:

- PAH,
- Heavy Metals (lead and arsenic), and
- Asbestos

[2] *Category A - residential with garden/accessible soil (home grown produce <10% fruit and vegetable intake), (no poultry), also includes children's day care centres, preschools and primary schools*
Category C - public open space such as parks, playgrounds, playing fields (e.g. ovals), secondary schools and footpaths. It does not include undeveloped public open space (such as urban bushland and reserves) which should be subject to a site-specific assessment where appropriate
Category D - commercial/industrial such as shops, offices, factories and industrial sites.

5.2.2 Contaminants of Potential Concern

Based on the results of PSILS (NAA 2006) the following are noted as the Contaminants of Potential Concern (CoPC) for soil and groundwater on-site:

- TRH, BTEXN,
- Heavy Metals (As, Cd, Cr, Cu, Pb, Zn, Hg, Ni),
- Asbestos,
- PAH,
- PCB; and
- Per- and poly-fluoroalkyl substances (PFAS).

Note: Phenols, and organochlorine and organophosphorus pesticides (OCP and OPP) have been tested with acceptable coverage (20, 10 and 10 samples respectively) in the scope of PSILS Report (NAA 2006) and were removed from CoPC.

5.3 Site Receptors

Current human receptors include site residents, workers, and visitors. As land use is unlikely to change, future human receptors are deemed likely to be similar.

Pathways for human exposure to the contaminants found at the site are considered to include:

- Ingestion of contaminated soil and potentially impacted vegetable produce;
- Inhalation of contaminated dust; and
- Dermal exposure to contaminated soils.

Terrestrial flora and fauna on-site and marine flora and fauna in the Sydney Harbour are considered the closest ecological receptors. Groundwater flowing underneath the site is expected to discharge to the Harbour.

Table 3: Conceptual Site Model						
Source	**Contaminants of Concern**	**Phases of Contaminants**	**Potential Mobilisation/ Transport/ Exposure Pathways**		**Potential Receptors**	**Comments**
Contaminated soils	<u>Primary concern:</u> PAH, and Heavy Metals (Lead and asbestos) <u>Potential/ secondary concern:</u> TRH, BTEXN, Heavy Metals, PCB	Solid phase	Dermal contact with accessible soils		Site residents, visitors, and workers	Further investigation/ management/ remediation is required
			Ground disturbance during future earthworks	Inhalation, ingestion, and dermal contact		
			Uptake by plants	Ingestion (consuming site grown fresh produce) and dermal contact with site vegetation		
		Potential vapour phase (TRH F1 and F2)	Vapour intrusion risk to the buildings on-site	Inhalation		Appears unlikely considering historical data, DSI to further investigate via soil sampling
		Potential leachate generation (PAH, Heavy Metals) and liquid phase (TRH, BTEXN, PAH, PCB)	Migration into groundwater	Off-site migration Uptake and bioaccumulation	Marine ecosystem surrounding the site	Leachate testing of soils and groundwater investigation are required to close out the relevant data gaps
	Asbestos	Bonded fragments in soil	Ground disturbance during future earthworks	Inhalation, ingestion, and dermal contact	Site residents, visitors, and workers	Long-term asbestos management is required
Fire-fighting building	Per- and poly-fluoroalkyl substances (PFAS)	Adsorbed and dissolved phase	Leaching into groundwater	Off-site migration Uptake, bioaccumulation, and biomagnification Ingestion and dermal contact	Terrestrial and marine flora and fauna on-site. Site residents, visitors, and workers	Soil investigation is required

5.4 Data Gaps

Data gap analysis undertaken in the scope of this SAQP identified the following data gaps that require investigation as part of the DSI:

- Systematic sampling of soils on-site is required to be undertaken to satisfy the sampling density requirements as per NSW EPA Sampling Design Guidelines (NSW EPA 2022);
- Hotspots identified in the scope of the PSILS (NAA 2006) require delineation sampling (horizontally and vertically) as per NSW EPA (2022);
- Leachate generation potential of the identified lead, arsenic, and PAH contaminated soils requires investigation;
- Groundwater quality on-site was unknown, groundwater monitoring is required to investigate whether there is a duty to notify NSW EPA;
- Potential for PFAS contamination on-site due to former fire-fighting activities requires investigation; and
- It was unknown whether there is uptake of heavy metals and PAH by the fruit trees located on hotspot areas on-site.

6. Data Quality Objectives

The objective of the DSI will be to provide sufficient data to enable preparation of a RAP and EMP for the site and assess whether there is a duty to notify contamination to NSW EPA. As the site was observed to include residential, recreational, and industrial land uses and future land uses are yet to be confirmed the DSI should take into account all these three land use settings (Category A, C, and D) as per ASC NEPM 2013.

The Data Quality Objectives (DQO) process is a series of seven steps to guide the planning and collection of data to ensure its suitable (quality and quantity) for the intended use in site assessment. Assessment of the site for remediation action and environmental management planning requires the field sampling and laboratory sample analysis data to be accurate, representative and complete. The NSW EPA guidelines and NEPM 2013 requires this process to be followed for site contamination investigation, assessment and site validation.

DQOs are statements that define the confidence required in conclusions drawn from data produced by a project, and which must be set to realistically define and measure the quality of data needed. The DQO process involves assessing uncertainty in data obtained to characterise subsurface media, the sampling protocols, and the uncertainty that is governed by the analytical laboratory procedures used in analysis of samples. The process is a series of planning steps designed to ensure that the type, quantity, and quality of environmental data used in decision making are appropriate when used to assess compliance of a site with environmental assessment criteria.

Table 1 below summarises the 7 stage DQO process.

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Table 4: Data Quality Objectives		
Step	**Issue**	**Comments**
1	State the Problem	Previous investigation work undertaken on the site, namely the PSILS (NAA 2006) identified various potentially contaminating activities on-site and detected contamination hotspots at various locations on-site exceeding human health criteria for all land use settings. Historical soil results and additional soil and groundwater analytical data will be relied upon to make a risk-based decision on environmental liabilities associated with the site and plan potential future land-uses. Therefore, it is necessary to demonstrate that site contamination data used for decision making is sufficiently robust, representative and complete, primarily for soils and groundwater. There is in-sufficient data to understand with confidence the current risk profile on-site and devise a robust RAP. There is also no groundwater data to conclude there are no risks posed to surrounding offsite ecological receptors (Sydney Harbour) by potential groundwater contamination.
2	Identify the Decisions	1. Are there any unacceptable risks to current and future site receptors (particularly users) posed by soils or groundwater quality? 2. Are there any additional risks associated with mixtures of contaminants? 3. Are there any aesthetic issues associated with soil and groundwater quality? 4. Is there any evidence or potential for migration of contaminants from the site (or onto the site from offsite sources)? 5. Will ongoing site management or monitoring be required? 6. What remediation and environmental management actions would be most appropriate for the site to ensure there is no genuine health or environmental risk on site?
3	Identify the Inputs to the Decision	Inputs to the decision principally comprise the data collected during site investigations, laboratory analysis results and the assessment criteria. These can be summarised as follows: • Information from the site history, current site condition, complete data for all contaminants of concern (comprehensive soil and groundwater contamination data), geology and hydrogeology. Representative and complete soil contamination assessment data; • Data quality assessment using data quality indicators and appropriate field and laboratory QA/QC procedures for sample collection, storage and preservation, chain of custody, laboratory analytical methods performance and NATA accreditation; • Soil and groundwater assessment criteria as per Schedule B1 of ASC NEPM 2013; and • Confirmation that data generated by soil and groundwater sampling and analysis are reliable and complete enough to enable valid comparison to the assessment criteria. Confirmation involves deriving data quality indicators as detailed below. The proposed sampling and analysis strategy is outlined in Step 7 below and in *Section 8* of this report.

Table 4: Data Quality Objectives		
Step	**Issue**	**Comments**
4	Define the Study Boundaries	Site address and boundaries are indicated on *Figure 4*. The site area is approximately 6 ha. Sediment and marine water quality are not included in the scope of this assessment at this stage. Should DSI identify on-site contamination sources that present a genuine risk to sediment and marine water quality around the site, further investigation targeting sediment and marine water quality may be required. Any potential future development works involving activities that may disturb the sediment (e.g. dredging) in the seabed would require sediment assessment and relevant sediment management controls to be implimented. The soil assessment criteria apply to the upper 3 m of soil. Vertical boundary of the investigation will be dictated by the deepest borehole drilled (inc. groundwater monitoring wells). Assessment of potential subsoil contamination is required as well as the surface and near surface layer soils. Seasonality was not assessed as part of the investigations, as temporal variations are not considered to create additional risk for the site.
5	Develop a Decision Rule	The following rules are applied to the decisions identified above: 1. *Are there any unacceptable risks to future site receptors (particularly users) posed by soils or groundwater quality?* Soil and groundwater analytical data will be compared to the NSW EPA endorsed criteria (NEPM 2013 HILs, HSLs, EILs and ESLs) including statistical analysis if appropriate to facilitate decisions. This includes either all sample concentrations are below the threshold HIL and HSL concentrations OR the average site concentration is below the threshold concentration criteria. No single concentration can exceed 250% of the relevant criteria. The standard deviation should be less than 50% of the criteria, if not then appropriate statistics should be used. The 95% UCL average concentration for each analyte is to be less than the adopted criteria concentrations. The DSI should also incorporate EIL, ESL, and management limits as reference criteria to inform environmental management planning for the site. Currently there are heavy metal and/or PAH hotspots with reference to HIL D, C, and A criteria. 2. *Are there any additional risks associated with mixtures of contaminants?* If there is more than one type of contaminant, they likely increase risk. However, if all contaminant concentrations are well below criteria, significant additional risk is unlikely. If concentrations of more than one type of contaminant are significantly elevated to levels near, but below criteria, then consideration should be given to either further remediation or the completion of a human health or ecological risk assessment. Elevated levels of multiple heavy metal species and PAH identified on-site may have combined toxicological impacts. Contamination assessment and management reports to be prepared for the site need to take this into consideration. 3. *Are there any aesthetic issues associated with soil and groundwater quality?*

Table 4: Data Quality Objectives		
Step	**Issue**	**Comments**
		If there are unacceptable amounts of waste materials in soil, odours or discolouration, the aesthetic criteria are exceeded and unacceptable material should be removed. Sydney Harbour is a source of plastic waste accumulation in site shores. Accumulated plastic waste needs to be removed from shoreline in regular intervals. *4. Is there any evidence or potential for migration of contaminants from the site (or onto the site from offsite sources)?* This require further investigation via groundwater monitoring. *5. Will ongoing site management or monitoring be required?* The site's heritage management requirements are expected to limit the practical extent of removal of contaminants from the site; therefore, ongoing site management and /or monitoring is likely to be required. The following acceptance limits for field and laboratory data quality indicators will be applied for assessment of data quality to support the decision rules: • Laboratory spike recoveries to be in the range 70-130% (metals) and 60-140% (organics); • Laboratory surrogate recoveries to be in the range 60-140% (organics); • Relative percentage difference (RPD) to be 0-50% for internal laboratory duplicates where measured concentrations are greater than five times PQL. Any RPD is acceptable where both samples are below five times the PQL; • RPD to be 0-50% for field duplicates where measured concentrations are greater than ten times the PQL. Any RPD acceptable where both samples are below five times the PQL; and • Laboratory and field rinsate blank results less than laboratory PQL. <u>QAQC Sample Rates</u> • Intra-laboratory and inter-laboratory field duplicates will be collected at a frequency of at least 1 each in 20 site samples (combined duplicates to be 1 in 10 samples) and analysed for the basic suite (heavy metals, TRH, BTEX and PAHs); • Equipment rinsate blanks will be collected at a frequency of one per 20 soil samples and analysed for the basic suite (equipment rinsate blanks will not be collected if samples are collected via push-tube by using disposable sleeves); and • Laboratory prepared trip blanks and trip spikes will be taken to site during sampling events at the frequency of 1 each per 20 soil samples analysed.

Table 4: Data Quality Objectives		
Step	**Issue**	**Comments**
		If DQIs fail these decision rules, then further data quality assessment is required regarding significance of bias/uncertainty identified in data. This includes consideration of degree of bias/uncertainty, AND analyte concentrations (order of magnitude) relative to site criteria threshold concentrations. Data would be rejected in cases where large uncertainty is identified, for samples with contaminant concentrations that may exceed criteria when degree of uncertainty is added to analysis results.
6	Specify Limits on Decision Errors	The quantitative decisions will be made with 95% confidence (upper confidence limit for average concentrations in the validation data set are calculated using the 95% probability parameter). Qualitative or semi-quantitative decisions will be based on multiple lines of evidence approach.

7	Optimise the Design for Obtaining Data	The sampling design is to enable assessment of the portion of the site area as specified within the brief. the full depth of fill layer materials and potential impacts on natural soils resulting from historical overlying fill (criteria apply to depths of up to 3 m). If upper layers of natural soils are demonstrated to be free of contamination, sampling to 0.5 m depth in natural soils will be sufficient. The exception is if potential for impact from sources of liquid phase contaminants are identified. Systematic coverage The site is estimated to be 6 ha, which would require minimum 66 sampling locations for systematic coverage (55 points for 5.0 ha site + 11 points / ha x 1 ha remaining site area). Previous investigation included 31 boreholes, which were drilled to 0.7 mBGL. It should be noted, these locations were selected on a targeted manner and some of them were relatively close to each other (not systematically distributed). Taking into consideration the sampling density requirements, existing site setting, and locations of former sampling points, an additional 52 systematically distributed soil sampling locations (aiming to establish a 30 m x 30 m grid within practical constraints) is deemed appropriate to ensure sufficient site coverage (see Figure 4 for the proposed locations). The systematic soil bores should target 3 mBGL or a minimum of 0.5 m into natural soil. It should be noted, the actual locations of these initially proposed sampling points may be adjusted due to various site constraints (inc. physical access, presence of shallow rock, heritage preservation, and underground utility services) during on-site service clearance and heritage locating with heritage consultant (prior to the commencement of drilling). Potential limitations arising from any deviations from the initially proposed 30 m x 30 m grid pattern shall be discussed in the DSI Report. Hotspot delineation The locations where HIL-D, C, and A hotspots were identified in the scope of the PSILS (NAA 2006), will additionally be sampled for leachability testing and for the investigation of potential deeper contamination to 3 mBGL or 0.5 m into natural soil at each location (see Figure 3 and 4). Following the completion of systematic sampling and further testing at the identified hotspots, horizontal hotspot delineation will be required. This will need to be undertaken on a 5 m x 5 m grid pattern around each hotspot targeting 3 mBGL or 0.5 m into natural soil at each location (some indicative locations are shown in Figure 4, which will require confirmation after further testing of hotspots and systematic sampling is undertaken). Groundwater assessment One groundwater well is planned to be installed around the Colonial Magazine building as this area displayed the highest lead and PAH readings on-site. A second well is planned to be installed near the Repair Workshop within the Shipyard Lease Area. A third well is proposed towards the north of Queens Magazine to target the ship repair shop and nearby potentially contaminated fill impacts. These three wells will assist with determining groundwater flow direction in this area (see Figure 4 for the proposed groundwater monitoring well locations).

Table 4: Data Quality Objectives		
Step	**Issue**	**Comments**
		One groundwater well is proposed to target each of the following areas: South of port emergency services building, north of firefighting building (potential PFAS source and lead hotspot) and west of water police station (lead hotspot) (see. Figure 4). These three wells will assist with determining groundwater flow direction in this area.

7. Control of Decision Errors

Data acquisition performance goals are used to minimise uncertainty in site validation data and increase confidence in decisions. AS4482.1 recommends a limit of 5% probability for the main type decision error that a site is acceptable and suitable for use, when in fact it is not.

To achieve these goals the following methods are used:

- Standard field sampling and laboratory analysis procedures;
- Ensuring sampling density is high enough so data is sufficiently representative of the whole site;
- Data quality indicators (DQIs);
- Statistical assessment of site validation data if required (comparison of data with acceptance criteria using 95% UCL of the average contaminant concentration and limits on magnitude single values).

The principal DQIs are measures of precision, accuracy, representativeness, comparability, completeness, and sensitivity of sampling and analytical methods. DQOs are the acceptance thresholds or goals for sample analytical method proficiency data, based on the individual DQIs for each sample and each analyte or analyte group. These DQIs are defined below for purposes of data quality assessment, as follows:

- Precision is the reproducibility of sample analysis results, (consistency providing confidence that one sample or sample data set can be compared to another or compared to common acceptance criteria). Precision is measured and expressed as Relative Percent Difference between duplicate sample analysis results (RPDs), applicable to both field duplicate sample results and internal laboratory duplicate sample results. Precision is evaluated by comparing the RPDs of field and laboratory duplicates to an acceptance limit of 50%;
- Accuracy measures the laboratory method bias and / or the level of agreement between a measured parameter and its true (known) value. Accuracy is measured and expressed as percent recoveries of analytes in laboratory control samples and recovery of known concentrations of analytes added to project samples (surrogates) i.e. the analysis result is compared with the known concentrations, assessed using acceptance limits for recovery of analyte standard additions;
- Representativeness is used to evaluate whether the data represents the actual site conditions during sample collection. The representativeness evaluation includes review of sampling plans, spatial distribution of samples and sampling density, sample collection, handling and storage methods, sample integrity until analysis, equipment rinsate and laboratory method blank results;
- The assessment of comparability includes a review of consistency of sample collection and handling methods and laboratory sample preparation, analysis and quantification limits (NATA accredited standard methods). All are to be consistent throughout collection of site data; and
- Completeness of the data is that portion of the data that is judged as acceptable for use in assessing the site soils based on DQIs for precision, accuracy, representativeness and reproducibility. Sampling density across the site is to be sufficient and complete.

Precision and accuracy of data are assessed using limits on DQIs as follows:

- Relative percentage difference (RPD) to be less than 50% for internal laboratory duplicates where measured concentrations are greater than five times the lab limit of reporting (LOR). Any RPD is acceptable where one or both samples are below five times the LOR;
- RPDs to be less than 30-50% for field (blind) duplicates where measured concentrations are greater than five times the PQL. Any RPD is acceptable where one or both samples are below five times the PQL;
- Laboratory spike recoveries to be in the range 70-130% (metals), 60-140% (organics) and 10-140% for VOCs;
- Trip (field) spikes results to be in the range 70-130% recovery for VOCs
- Laboratory surrogate recoveries to be in the range 60-140% (organics) and 10-140% for VOCs; and

- Laboratory and field rinsate blank results less than laboratory LORs.

Intra-laboratory and inter-laboratory field duplicates should be collected at an overall combined frequency of 1 in 10 samples and analysed for the basic suite (TRH, BTEX, PAH and metals/metalloids).

Trip spikes (field sample spike with VOCs, prepared by laboratory) and trip blank sample analysis for VOCs are to be included in the soil analysis QA/QC program if VOC contamination is identified as a CoPC.

Trip spikes are used for assessment of potential loss of volatile organic compounds and potential for cross contamination between samples during sample collection, transport and storage.

Sampling methods are detailed in *Section 8*.

8. Soil and Groundwater Sampling and Analysis Procedures

8.1 Sampling Density Considerations

8.1.1 Soil Sampling for Systematic Site Area Coverage

As discussed in Step 7 of DQOs (see Table 4) 52 additional soil sampling locations are deemed appropriate to ensure sufficient site coverage when combined with the data presented in PSILS (NAA 2006) (see Figure 4 for the proposed locations). The systematic soil bores to be advanced should target 3 mBGL or 0.5 m into natural soil.

8.1.2 Hotspot Leachate Testing and Vertical Delineation

The locations where HIL-D, C, and A hotspots were identified in the scope of the PSILS (NAA 2006), will additionally require sampling for leachability testing and for the investigation of potential deeper contamination to 3 mBGL or 0.5 m into natural soil at each location. These include the following 14 locations (see Figure 3 and 4):

- Lead hotspots: BH01, BH03, BH05, BH07, BH08, BH09, BH10, BH15, BH17, BH23, BH26, and BH31
- Arsenic hotspot: BH11
- PAH hotspot: BH06

8.1.3 Hotspot Delineation

Following the completion of systematic sampling and further testing at the known hotspots, hotspot delineation (vertical and horizontal) will be required. This will need to be undertaken on a 5 m x 5 m grid pattern around each hotspot targeting 3 mBGL or 0.5 m into natural soil at each location (indicative locations of proposed hotspot delineation points are shown in Figure 4, which will require confirmation after further testing of hotspots and systematic sampling is undertaken).

8.2 Drilling and Field Data Collection Procedures for Soil Sampling

Following sampling procedures are proposed to collect the necessary data to achieve stated DQOs (see Table 4):

- Separate Safe Work Method Statements (SWMS) will be prepared by the environmental consultant and environmental drillers prior to mobilising to the site;
- Undertaking Dial Before You Dig (DBYD) searches;
- Service location by a Telstra accredited service locator by referring to the DBYD reports and utility mapping provided in **Appendix D**;
- An archaeology consultant authorised by DPE will participate in service location, during which final drilling locations will be determined and marked (archaeological values on site are presented in **Appendix E**);
- Environmental drilling for soil sampling via push tube method by using disposable sleeves;
- Push tubing (using 5-10 cm diameter cores) is selected as the preferred soil sampling methodology as it minimises ground disturbance (best option for archaeological heritage preservation purposes) and

provides high quality sample data;

- Drilling will be supervised by a suitably qualified and experienced environmental consultant;
- Drilling to target 3 mBGL or a minimum of 0.5 into natural soil;
- Field screening of core samples will be undertaken by a photo ionisation detector (PID) for hydrocarbons and a handheld XRF analyser for lead;
- Soil samples to be collected in laboratory supplied containers (250 ml glass jars, PFAS sample containers (where relevant) at a minimum)—*laboratory will be provided with the desired analytical suite prior to sampling and confirm the sample volume and container requirements*;
  - At each sampling location two samples will be collected from the first 0.5 m depth interval, and 1 sample per 0.5 mBGL depth interval afterwards;
    - *Where there is sufficient volume of fill to do so: Samples will target to cover the upper surface of each identified fill unit.*
  - At least one natural soil sample will be collected at each location;
- Asbestos (presence/ absence) samples will be taken in laboratory supplied plastic bags;
  - 10L bulk sample sieve testing and AF/FA sampling will not be undertaken to minimise ground disturbance for heritage protection purposes.
- PFAS soil samples will be taken in laboratory supplied PFAS jars at four locations proposed around the Fire fighting building;
- PFAS soil sampling will be undertaken in accordance with the requirements of PFAS National Environment Management Plan (NEPM) 2.0, namely:
  - Prior to sampling, the sampling personnel must wash their hands with plain soap and rinse thoroughly in tap water before donning a clean, new pair of disposable nitrile gloves,
  - Teflon®-coated materials and aluminium foil may not come into contact with the sample,
  - All samples should be double-bagged,
  - During sample processing and storage, minimise the exposure of the sample to light,
  - Regular ice will be used to cool the eskys—*chemical or gel-based coolant products (e.g. BlueIce®) to maintain samples at 4 °C following sample collection will not be used.*
- Samples will be collected directly from cores into soil jars by using disposable nitrile gloves (to be changed between each sample location at a minimum);
- one Intra and one inter laboratory duplicate samples will be collected in each 20 primary sample collected;
- one trip blank and one trip spike samples will be prepared and incorporated into the batch during each day of fieldwork;
- One rinsate blank sample (targeting any rinsed material or disposable new push-tube sleeve) per day will be collected; and
- Samples will be kept in iced containers and transferred to NATA Accredited laboratories for testing.

8.3 Laboratory Analysis of Soil Samples

Analytical suites for soil samples are defined under the following four sub-sections:

8.3.1 Soil Sampling for Systematic Site Area Coverage

A total of 52 systematically collected samples will be tested for the following contamination suite at a minimum:

- TRH, BTEXN (minimum one fill sample/ location and one natural soil sample/ four locations to be tested),

- Heavy Metals (minimum one fill sample/ location and one natural soil sample/ four locations to be tested),
- PAH (minimum one fill sample/ location and one natural soil sample/ four locations to be tested),
- PCB (minimum one fill sample/ four locations and one natural soil sample/ four locations to be tested),
- Asbestos (minimum one fill sample per location to be tested), and
- NEPM Screen for Soil Classification (% FE/ Cation Exchange Capacity/ pH (CaCL2)/ Total Organic Carbon/ % Clay Content) (minimum one natural soil sample/ four locations to be tested).

Leachate testing should be undertaken if heavy metals or PAH exceed one of the HIL criteria following initial testing.

8.3.2 Hotspot Leachate Testing and Vertical Delineation

Following suite will be tested for each hotspot:

- Hotspot contaminant lead, arsenic, or PAH (two samples from the first 0.5 mBGL and one sample from each 0.5 mBGL following depth, minimum one natural soil sample / location)—*see Figure 3 and 4*;
  - Lead hotspots: BH01, BH03, BH05, BH07, BH08, BH09, BH10, BH15, BH17, BH23, BH26, and BH31
  - Arsenic hotspot: BH11
  - PAH hotspot: BH06
- Australian standard (AS4439) leaching procedure (ASLP) and testing for the relevant hotspot contaminant will be undertaken for each sample exceeding the hotspot criteria.

8.3.3 PFAS Testing of Soils Around the Fire Fighting Building

In addition to the above, borehole locations BH23, BH26, BH31, and one systematic sampling location planned towards south of BH23 (see Figure 4) will be analysed for 28 PFAS suite including Perfluorooctanoic acid (PFOA)/ Perfluorooctanesulfonic acid (PFOS) and 6:2 Fluorotelomer sulfonate (FTS) (standard limit of reporting 5 ug/kg).

8.3.4 Hotspot Delineation

Delineation of historical hotspot areas will include the subject contaminant of concern of the hotspot and associated ASLP testing (where applicable). Number of samples per location and per vertical profile will be determined after the scope defined in Sections 8.1.1, 8.1.2, and 8.1.3 is completed.

8.4 Groundwater monitoring

Groundwater monitoring wells will be logged and constructed in accordance with the requirements of NEPM 2013. The wells will be drilled by auguring (hollow flight augers may be needed if material collapses into the pits, air flight augers may be needed should refusal is encountered during auguring). Upper layer unconfined aquifer will be targeted for groundwater investigations.

8.4.1 Well Development Purging

All bores intended for monitoring water quality will be developed after drilling to remove fine sand, silt, clay and any drilling mud residues from around the well screen to ensure the hydraulic functioning of the well.

- Development will be carried out by using a stainless-steel bailer as soon as possible after drilling and installation, however, a minimum of 24 hours will be allowed for bentonite seals to fully hydrate and grout to cure (harden and set).
- A detailed record will be kept of well development activities and reported in the relevant site assessment report.
- During development, bore yield will be estimated by monitoring the rate of recovery of water in the bore after pumping.

Development will continue until:

- Well has been purged dry, or
- pH, Electrical Conductivity (EC), dissolved oxygen, and redox potential are stabilised as follows, or
  - pH (+/-0.1), EC (+/- 5%), Temperature (+/- 0.2), DO (+/- 10%), redox potential (+/- 10mv)
- Reduced turbidity – development is continued until the abstracted water is reasonably clear and free of suspended solids, or
- Four times well water volume has been purged.

- Field logs for sampling location will be recorded showing, field readings of the field parameters, and details of the colour and turbidity and potential contamination indicators (odours and sheens);
- Purging for well development will be undertaken by dedicated waterra tubing and foot valves.
- Purge water will be stored in liquid drums and will be appropriately disposed of following results have been received (without allowing it to enter the stormwater drainage network or to impact uncontaminated soils at the site)—*if contamination is identified in groundwater results, the waste will be disposed at a licenced waste facility*;
- A seven days post-development wait time will be adopted for groundwater sampling.

8.4.2 Groundwater Sampling Procedure

Groundwater sampling will be undertaken approximately seven days following well development. The sampling procedure will entail the following:

- Groundwater sampling will be conducted using dedicated tubing (low flow pump if groundwater is < 8 mBGL) for each well to avoid cross-contamination (for wells closer to the Fire-Fighting Building, where PFAS is deemed to be the primary contaminant of concern, HydraSleeves should be used if low-flow pump cannot be used);
- Water quality parameters (pH, temperature, conductivity, oxidation reduction potential, dissolved oxygen and turbidity) will be monitored during purging using a water quality meter;
- Field logs for sampling location will be recorded showing, field readings of the field parameters, and details of the colour and turbidity and potential contamination indicators (odours and sheens);
- The sampler will wear a clean pair of latex disposable gloves between collecting each sample;
- Samples will be collected using dedicated equipment;

Six primary and two duplicate (inter and intra lab duplicates) groundwater samples will be taken and analysed for the following:

- TRH;
- BTEX;
- PAH;
- Heavy Metals;
- PFAS suite;
- pH and electrical conductivity;

The groundwater and QAQC samples will be placed in bottles/jars provided by the laboratory, specifically for the analytes of concern and transported to the laboratory for analysis under appropriate chain of custody documentation in an esky with ice bricks.

QAQC samples for groundwater assessment will include an intralab and interlab duplicate, a trip spike (VOC's) and rinsate blank.

- All samples collected will be placed in correct sampling bottles provided by the laboratory; and

Groundwater sampling for heavy metals will be field filtered using a hand vacuum pump and a dedicated disposable Stericup 0.45micron filter.

9. Recommendations

As a result of the data review undertaken in the scope of this SAQP, Greencap recommends the following actions for the site, which are in line with the requirements of NEPM 2013 and SEPP55:

- Implementation of this SAQP and preparation of a DSI Report;
- Following the completion of the DSI, a Remediation Action Plan (RAP) will need to be developed for the site;
- Further risk assessment may be undertaken to assess edibility of fruits growing on the existing trees on-site (if required)—*client advised these trees will be kept for decorative purposes and site users are instructed not to consume fruits grown on these trees*;
- An Interim Environmental Management Plan (IEMP) is required to be developed to manage the known contamination risk on-site; and
- The IEMP should be in place until the contamination investigations, remediation, and site validation are completed and a Long-term Environmental Management Plan (LTEMP) is developed for the site.

10. References

Greencap undertook this assessment with reference, but not limited to, the following guidelines:

- NEPC 2013, National Environment Protection (Assessment of Site Contamination) Measures (2013).
- NSW EPA Guideline on Consultants Reporting on Contaminated Land (2020).
- State Environment Planning Policy (SEPP 55) – Remediation of Land (NSW EPA 1998).
- NSW EPA (2022) 'Sampling Design Guidelines'.
- Victorian EPA (2000) Groundwater Sampling Guidelines (EPA Publication 669).

August 2022

Sampling and Analysis Quality Plan (SAQP)

NSW Department of Planning and Environment

Me Mel Goat Island, Sydney Harbour National Park

Figures



Legend:

Site Borders

Ship Yard Lease Area

GREENCAP
Going Further in Managing Risk

G, N - Building, 22 Giffnock Ave
Macquarie Park NSW 2113

Ph: 02-9889-1800

Fx: 02-9889-1811

Client Name:	NSW Department of Planning and Environment				
Client Number:	C120933	Project Number:	J178949		
Project Description:	Sampling Analysis Quality Plan for Goat Island DSI				
Address:	Goat Island, NSW, Australia				
Prepared:	MB	Reviewed:	SW	Version Date:	23/08/2022
Figure 1	Site Locality Map				

Disclaimer: Greencap-NAA Pty Ltd has produced this map for the purpose of presenting a summary of relevant spatial information and gives no warranty in relation to the data (including accuracy, reliability, completeness or suitability) and accepts no liability (including without limitation liability for negligence) for any loss, damage or costs (including consequential damage) relating to any use of or reliance upon the data. Data must not be used for direct marketing or be used in breach of privacy laws. Service Layer Credits: © 2019 NSW Land and Property Information (Six Maps) and © 2019 NearMap Pty Ltd.



Legend:

- Site Borders
- Ship Yard Lease Area
- HIL-D Exceedance
- HIL-C Exceedance
- HIL-A Exceedance
- Former Borehole Locations

GREENCAP
Going Further in Managing Risk

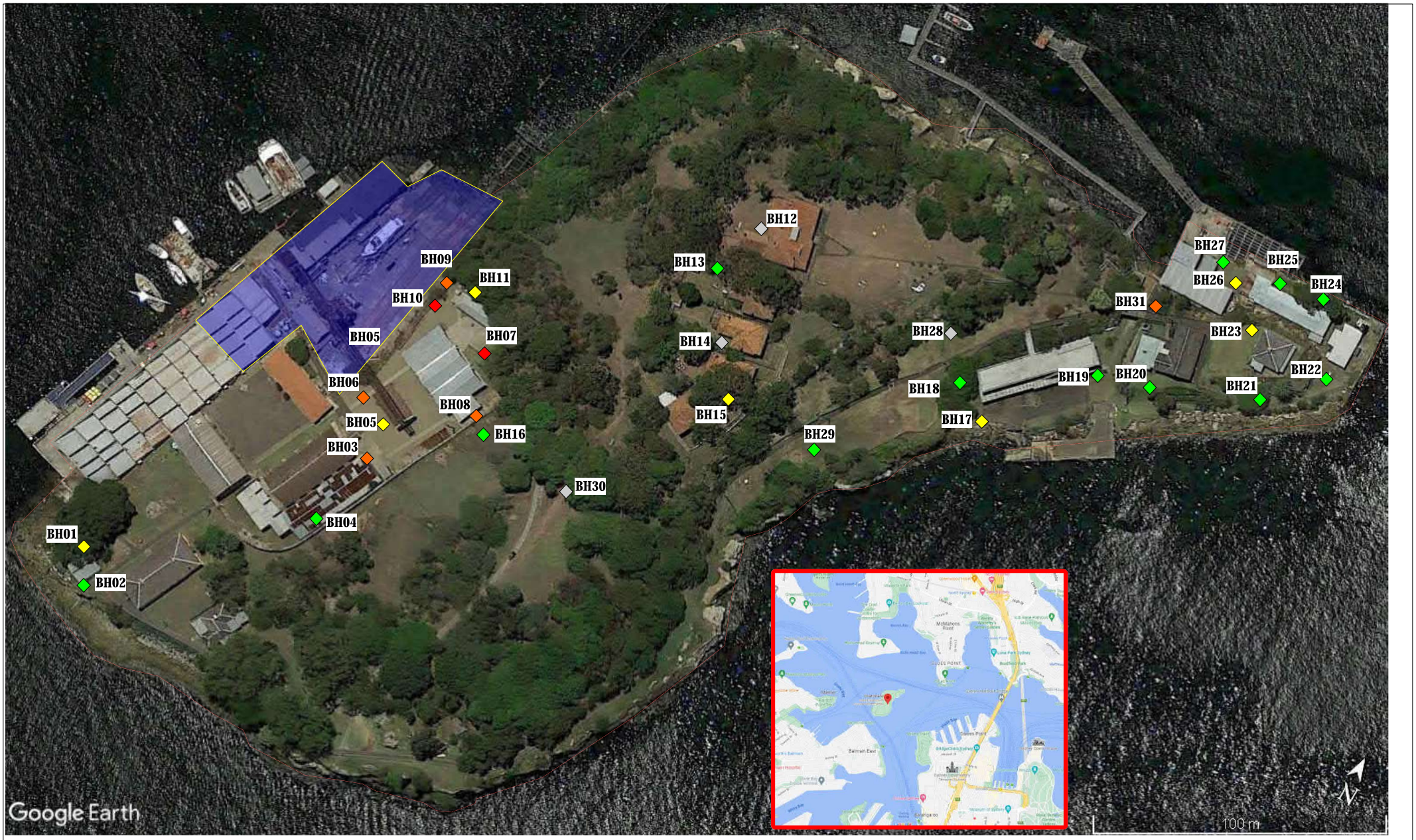
G, N - Building, 22 Giffnock Ave
Macquarie Park NSW 2113

Ph: 02-9889-1800

Fx: 02-9889-1811

Client Name:	NSW Department of Planning and Environment				
Client Number:	C120933	Project Number:	J178949		
Project Description:	Sampling Analysis Quality Plan for Goat Island DSI				
Address:	Goat Island, NSW, Australia				
Prepared: MB	Reviewed: SW	Version Date: 23/08/2022			
Figure 2	2006 Preliminary Site Investigation - Exceedances Map				

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Legend:

Site Borders | Ship Yard Lease Area

HIL-D hotspot | Site criteria exceedance

HIL-C hotspot | No exceedance detected

HIL-A hotspot

Hotspot: Contamination detected more than or equal to 250% of the site criteria

GREENCAP
Going Further in Managing Risk

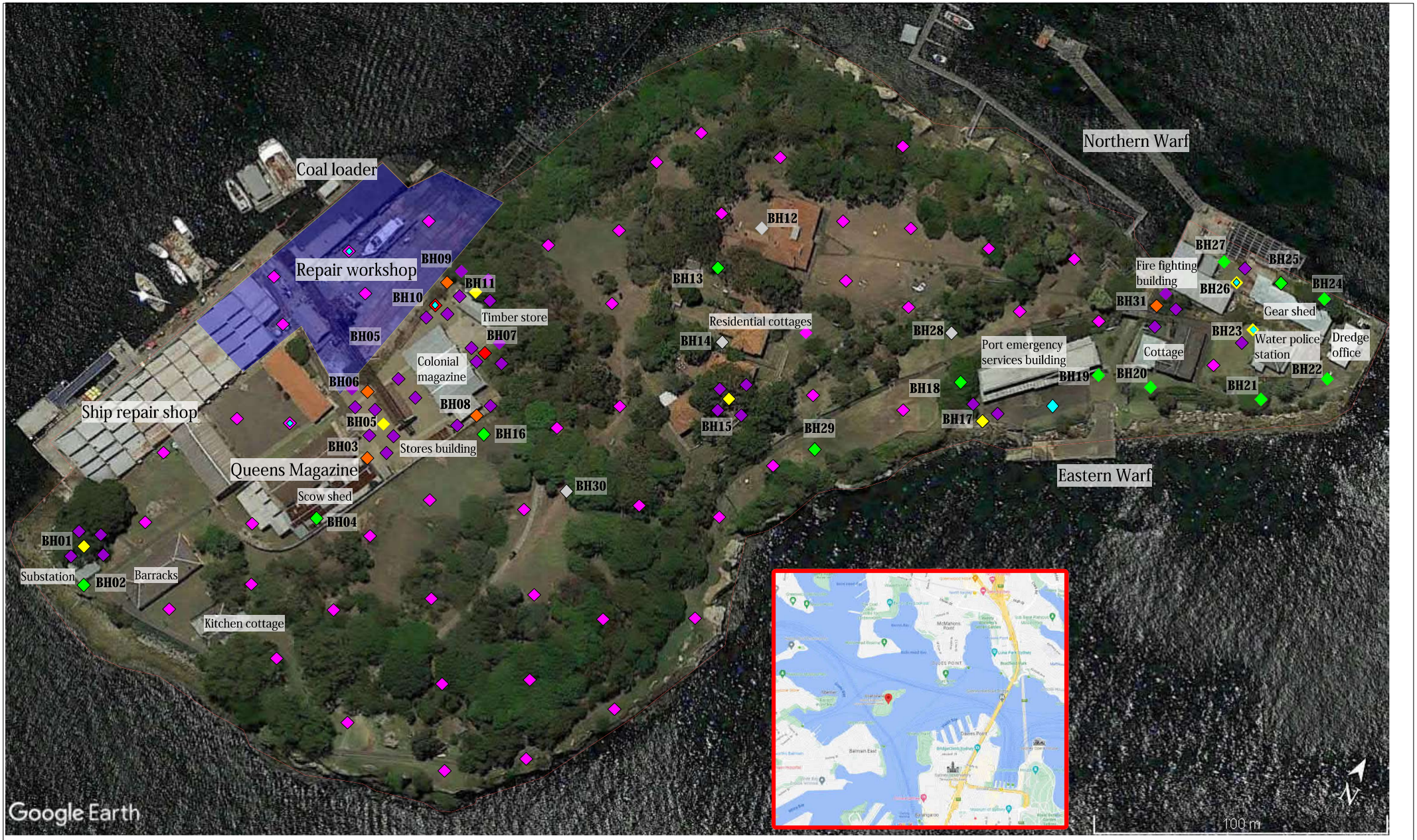
G, N - Building, 22 Giffnock Ave
Macquarie Park NSW 2113

Ph: 02-9889-1800

Fx: 02-9889-1811

Client Name:	NSW Department of Planning and Environment				
Client Number:	C120933	Project Number:	J178949		
Project Description:	Sampling Analysis Quality Plan for Goat Island DSI				
Address:	Goat Island, NSW, Australia				
Prepared:	MB	Reviewed:	SW	Version Date:	21/06/2022
Figure 3	2006 Preliminary Site Investigation - Hotspots Map				

Disclaimer: Greencap-NAA Pty Ltd has produced this map for the purpose of presenting a summary of relevant spatial information and gives no warranty in relation to the data (including accuracy, reliability, completeness or suitability) and accepts no liability (including without limitation liability for negligence) for any loss, damage or costs (including consequential damage) relating to any use of or reliance upon the data. Data must not be used for direct marketing or be used in breach of privacy laws. Service Layer Credits: © 2019 NSW Land and Property Information (Six Maps) and © 2019 NearMap Pty Ltd.



Legend:

Site Borders

Ship Yard Lease Area

Proposed hotspot delineation location

Proposed systematic borehole location

Proposed groundwater well location

2006 - Preliminary Site Investigation - Soil Sampling Data

HIL-D hotspot

HIL-C hotspot

HIL-A hotspot

Site criteria exceedance

No exceedance detected

Hotspot: Contamination detected more than or equal to 250% of the site criteria

GREENCAP
Going Further in Managing Risk

G, N - Building, 22 Giffnock Ave
Macquarie Park NSW 2113

Ph: 02-9889-1800

Fx: 02-9889-1811

Client Name:	NSW Department of Planning and Environment				
Client Number:	C120933	Project Number:	J178949		
Project Description:	Sampling Analysis Quality Plan for Goat Island DSI				
Address:	Goat Island, NSW, Australia				
Prepared:	MB	Reviewed:	SW	Version Date:	26/08/2022
Figure 4	DSI - Proposed Sampling Locations Map				

Disclaimer: Greencap-NAA Pty Ltd has produced this map for the purpose of presenting a summary of relevant spatial information and gives no warranty in relation to the data (including accuracy, reliability, completeness or suitability) and accepts no liability (including without limitation liability for negligence) for any loss, damage or costs (including consequential damage) relating to any use of or reliance upon the data. Data must not be used for direct marketing or be used in breach of privacy laws. Service Layer Credits: © 2019 NSW Land and Property Information (Six Maps) and © 2019 NearMap Pty Ltd.

August 2022

Sampling and Analysis Quality Plan (SAQP)

NSW Department of Planning and Environment

Me Mel Goat Island, Sydney Harbour National Park

Appendix A: Lot and DP Plan

Box: 467 / Request: 2705504 / Document: dp 0878441 PLAN / Revision: 03-Jul-1998 / Status: OK / Printed: 09-Jul-1998 10:16 / Images: 2

PLAN FORM 2

SIGNATURE AND SEALS ONLY.

DP 878441

Registered: 3-7-1998

C.A.:

Title System: TORRENS

Purpose: LEASE

Ref. Map: U0952-94
U1852-73

Last Plan: DP 837195

PLAN OF SUBDIVISION OF LOTS 3 & 4 IN D.P.837195 FOR LEASE PURPOSES

Lengths are in metres. Reduction Ratio 1:1250

L.G.A.

Suburb/Locality: GOAT ISLAND

Parish: PETERSHAM

County: CUMBERLAND

This is sheet 1 of my plan in 2 sheets. (Delete if inapplicable).

I, GREGORY JON FRITH

of P.W. RYDATE & WEST, SYDNEY

a surveyor registered under the Surveyors Act 1929, hereby certify that the survey represented in this plan is accurate, has been made in accordance with the Surveyors (General) Regulation 1998 and was completed on 9TH APRIL 1998

The survey relates to LOTS 15 & 16 ONLY

(Insert specific land actually surveyed, or specify any land shown on the plan that is not the subject of the survey)

Signature: [signature]

Datum Line: "A" - "B"

Type: Urban/Rural

Surveyor registered under the Surveyors Act 1929

Plans used in preparation of survey/compilation.

D.P.837195
M.S.B. PLAN P.M. 1058R

PANEL FOR USE ONLY for statements of intention to dedicate public roads, to create public reserves, drainage reserves, easements, restrictions on the use of land or positive covenants.

ANNEXURE "A"

DP 878441

40

Crown Lands Office Approval

PLAN APPROVED .....
Authorised Officer

Land Owner .....

Papers No. .....

Field Book ..... Pages .....

Council's Certificate

I hereby certify that –

(a) the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and

*(b) the requirements of § Part 3 Division 2 of the Water Board Act 1987, or § Part 6 Division 7 of the Hunter Water Board (Corporatisation) Act 1991,

have been complied with by the applicant in relation to the proposed .....
(insert "new road", "subdivision" or "consolidation (of)") set out herein

Subdivision No. .....

Date .....

(Signature) .....
General Manager/Authorised Person

Council File No. .....

*This part of certificate to be deleted where the application is only for a consolidation lot or the opening of a new road or where the land to be subdivided is wholly outside the areas of operations of the Water Board and the Hunter Water Corporation Ltd.

§Delete if inapplicable

MARK	U.S.G. CO-ORDINATES		ZONE	ACC.
	EASTING	NORTHING		
S.S.M.16415*	316 043.033	1 251 488.079	56S	2
P.M.5558	318 572.419	1 252 268.348	56S	3
T.S.10425	319 218.497	1 250 725.366	56S	2
COMBINED SCALE FACTOR = 0.999975				

SOURCE : U.S.G. CO-ORDINATES OBTAINED FROM DEPARTMENT OF CONSERVATION & LAND MANAGEMENT SURVEY CONTROL INFORMATION MANAGEMENT SYSTEM 6TH APRIL 1998.

SCHEDULE OF SHORT LINES		
No.	BEARING & DISTANCE	
1	176° 46'	11.225
2	88° 10'	4.62
3	357° 38'	1.15
4	75° 28'	4.5
5	345° 28'	3.8
6	59° 49'	1.9
7	178° 16'	0.82
8	278° 41'	0.67
9	177° 28'	16.3
10	266° 26'	3.91
11	353° 15'	3.9
12	235° 37'	5.275
13	295° 37'	5.53
14	319° 53'	18.77
15	289° 22'	6.1
16	18° 35' 28"	0.74
17	16° 35' 28"	10.015
18	289° 53'	6.47
19	19° 35'	2.54
20	290° 16'	6.49

SURVEYORS REFERENCE: 56592 CHECKLIST COMP. 96/328/1

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

August 2022

Sampling and Analysis Quality Plan (SAQP)

NSW Department of Planning and Environment

Me Mel Goat Island, Sydney Harbour National Park

Appendix B: Site Orientation Plan

OVERALL SHEET

NOTE.

THE BOUNDARY INFORMATION SHOWN ON THIS PLAN REGARDING THE LOCATION OF THE PROPERTY BOUNDARIES HAS BEEN TAKEN FROM THE TITLE DEPOSITED PLAN. IT HAS BEEN PLOTTED AS REQUIRED UNDER DIVISION 1, SECTION 8(1) OF THE "SURVEYING AND SPATIAL INFORMATION REGULATION 2017" AND IS ACCURATE TO ABOUT ±0.05m. IT HAS NOT BEEN DETERMINED BY AN ACCURATE BOUNDARY SURVEY.

A DETAIL & LEVEL SURVEY IS NOT A "LAND SURVEY" AS DEFINED BY THE SURVEYING AND SPATIAL INFORMATION ACT, 2002. IF ANY CONSTRUCTION OR DESIGN WORK WHICH RELIES ON CRITICAL SETBACKS FROM THE STREET OR BOUNDARIES IS PLANNED, IT WOULD BE IMPERATIVE TO CARRY OUT FURTHER SURVEY WORK TO DETERMINE THE BOUNDARY DIMENSIONS.

PRIOR TO ANY CONSTRUCTION WORK, SURVEY MARKS SHOULD BE PLACED TO DEFINE THE PROPERTY BOUNDARIES.

SERVICES SHOWN ARE INDICATIVE ONLY. POSITIONS ARE BASED ON SURFACE INDICATOR(S) LOCATED DURING FIELD SURVEY. CONFIRMATION OF THE EXACT POSITION SHOULD BE MADE PRIOR TO ANY EXCAVATION WORK. OTHER SERVICES MAY EXIST WHICH ARE NOT SHOWN.

LEVELS ARE BASED ON AUSTRALIAN HEIGHT DATUM (AHD) USING SSM 99525 WITH RL 7.911 (CRSS OBS) (AHD).

RIDGE & GUTTER HEIGHTS HAVE BEEN OBTAINED BY INDIRECT METHOD AND ARE ACCURATE TO ± 0.05m.

CONTOURS SHOWN DEPICT THE TOPOGRAPHY, EXCEPT AT SPOT LEVELS SHOWN THEY DO NOT REPRESENT THE EXACT LEVEL AT ANY PARTICULAR POINT. THE SPOT LEVELS ARE TRUE FOR THEIR POSITION, AND ARE INTENDED TO BE USEFUL TO REPRESENT THE GENERAL TERRAIN. CARE SHOULD BE TAKEN IF EXTRAPOLATING.

CONTOURS SHOWN ON THIS VERIFICATION SURVEY WERE PROVIDED FROM PLAN "3918" DATED 01/06/2006. NO ADDITIONAL CONTOUR LINES HAVE BEEN CREATED.

AZIMUTH TAKEN FROM PREVIOUS DETAIL SURVEY PLAN "3918"DATED 01/06/2006 FIXED TO SSM 14412 AS THE COMMON POINT FOR THE VERIFICATION DETAIL.

MEAN HIGH WATER MARK BOUNDARY LINE HAS BEEN SCALED IN FROM DP837195 & DP878441 FOR THE PURPOSE OF THIS VERIFICATION PLAN.THE MEAN HIGH WATER MARK HAS NOT BEEN SURVEYED AND SHOULD BE CONFIRMED BY FURTHER SURVEY. DO NOT SCALE OFF THIS PLAN.

AREAS OF LOTS SHOWN ARE TITLE AND LEASE AREAS TAKEN FROM DP837195 & DP878441.

OTS3519 - THE LAND DESCRIBED IS RESERVED UNDER THE NATIONAL PARKS AND WILDLIFE ACT 1974 AS A NATIONAL PARK KNOWN AS SYDNEY HARBOUR NATIONAL PARK AFFECTING PART OF THE LAND DESCRIBED SHOWN IN GAZ.24.11.1995 FOL(OS 8028-29.

DP878441 - PLAN FOR LEASE PURPOSES.

BOUNDARIES HAVE NOT BEEN LOCATED BY SURVEY. THE BOUNDARIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM THE TITLE DEPOSITED PLAN AND ARE APPROXIMATE RELATIVE TO THE DETAIL SURVEY.



LEGEND

BENCH MARK	
TELSTRA PIT	TEL
ELECTRIC LIGHT POLE	LP
POWER POLE	PP
SIGN POST	SP
SEWER INSPECTION PIT	SIP
SEWER VENT	SEWER
MANHOLE	MH
SEWER MANHOLE	SMH
STOP VALVE	SV
WATER HYDRANT	HYD
WATER METER	WM
GAS METER	GM
STATE SURVEY MARK	SSM

NOTES

1. Bearings and distances at boundaries are by title and/or Deed only. No boundary survey has been made.
2. Relationship of improvements to boundaries is diagramatic only. DO NOT SCALE OFF THIS PLAN. They should be confirmed by a further survey.
3. Services shown hereon have been determined from visual evidence only. Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted to establish detailed location and depth.
4. The bearings on these plan boundaries are from Land & Property Information Plans. They are on magnetic meridian. If accurate True North is required a further study would be necessary.
5. Contours shown depict topography. Except at spot levels shown they do not represent the exact level at any particular spot.
6. Only trees with a trunk diameter greater than 0.1 metres are shown on this plan.
7. Australian Height Datum was established from SSM 14412 located on Goat Island.

Asset Mapping and Surveying
Surveyors and Engineers
PO Box 64 Sutherland NSW 2232
Ph: (02) 9521 4666
Fax: (02) 9521 4499
Email: mapandsurvey@bigpond.com

Goat Island Sydney Harbour	Detail SHEET 1 OF 13	NSW National Parks and Wildlife	1:750 LM; AHD MP; 01/06/06 357/3

TSS TOTAL SURVEYING SOLUTIONS
LANE COVE | CAMDEN | MANLY VALE | CENTRAL COAST

NOTE:
INFORMATION CONTAINED IN THIS PLAN IS THE COPYRIGHT OF TOTAL SURVEYING SOLUTIONS. THE USE OR DUPLICATION WITHOUT THE WRITTEN CONSENT OF TOTAL SURVEYING SOLUTIONS CONSTITUTES AN INFRINGEMENT OF COPYRIGHT.

REVISION No.	REVISION DATE:	COMMENT:
B	27/06/2022	PLAN ON MGA94 COORDINATES & SHIPYARD DETAIL

LEGEND:
TG - TOP OF GUTTER
RR - ROOF RIDGE
FL - FLOOR LEVEL
PA - PARAPET LEVEL
TOW - TOP OF WALL
BOW - BOTTOM OF WALL
CHIM - CHIMNEY
BAL - BALCONY
DO - DISHDRAIN
0.4/10 - DIAMETER/SPREAD

PLOTTED SCALE 1:600 (A0 SIZE SHEET)

PLAN SHOWING DETAIL & LEVELS
OVER LOTS 3 & 4 IN DP837195 AND LOTS 13,14,15,16 IN DP878441

CLIENT:	NSW NATIONAL PARKS & WILDLIFE SERVICE	JOB No.: 220263	LGA: UNINCORPORATED AREA
PROJECT:	ME-MEL GOAT ISLAND	PLAN No.: 220263-1B	DATUM: AHD
ADDRESS:	GOAT ISLAND, SYDNEY HARBOUR	DATE: 04/04/2022	SCALE: 1:600@A0
		DRAWN: AP	CONT. INTERVAL: N/A
		CHK: KF	SHEET 1 OF 17

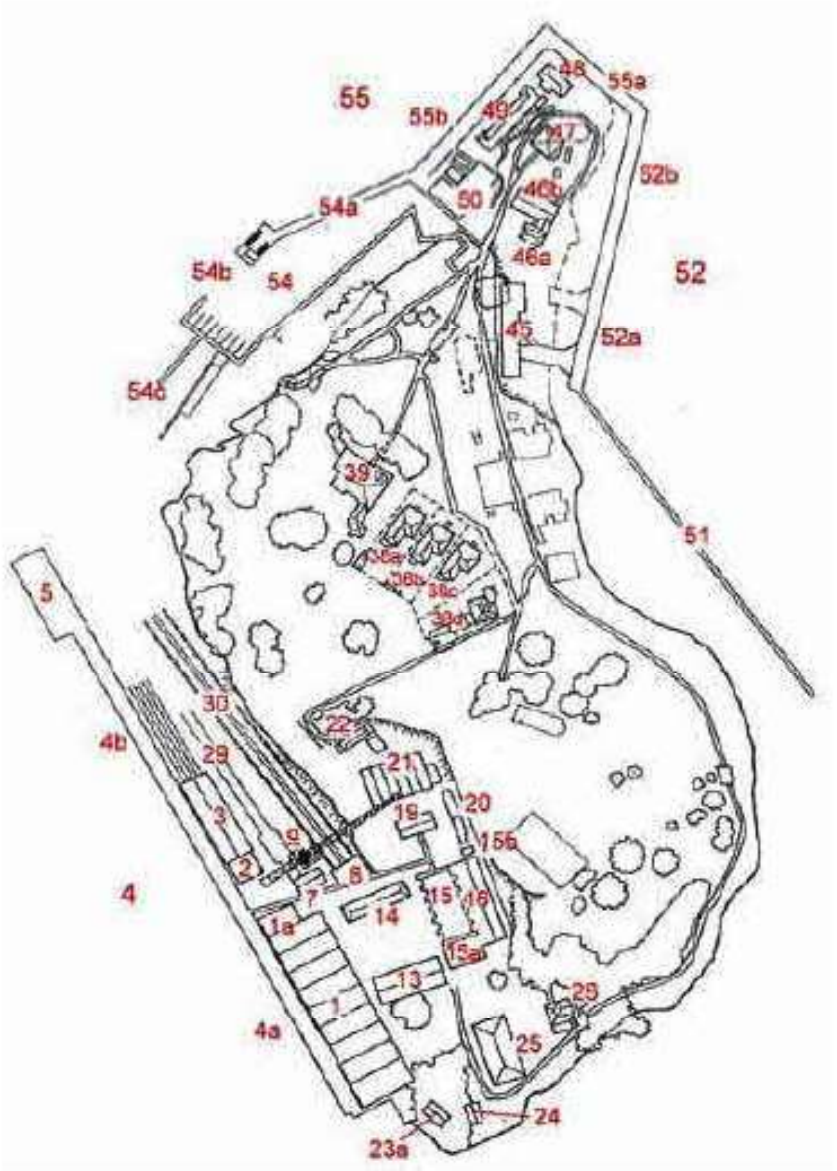


Figure 7

Orientation Plan 2006

(Source: Image from Goat Island Conservation Plan April 1994, p.5)

Key

1. Ship repair workshop	1a. Addition to Ship Repair Workshop	2. Repair Workshop	3. Slipway Workshop Buildings	4. Broadside Wharf
4a. Western section of Broadside Wharf	4b. Central section of Broadside Wharf	5. Coal Loader at northern end of Broadside Wharf	7. Winch House	8. Winch House 500 ton.
9. Hammerhead Crane	13. Amenities Block	14. Office and Amenities Building	15. Queen's Magazine	15a Southern addition to Queen's Magazine
15b. Tennis Court (former)	16. Scow Shed	19. Cooperage	20. Stores Building.	21.Colonial Mag.
22. Timber Store	23a. Boat Shed	24. Substation	25. Barracks	26. Kitchen Cottage
29. 150 ton Slipway	30. 500 ton Slipway	38a. Residential Cottage No. 1	38b. Residential Cottage No. 2	38c. Residential Cottage No. 3
38d. Residential ttage No. 4	39. Harbour Master's Residence	45. Port Emergency Services Building	46a. Cottage	46b. Barracks
47. Water Police Station	48. Dredge Office	49. Gear Shed.	50. Fire Fighting Building	51. Wharf mooring floating plant
52. Eastern Wharf	52a. SW section of Eastern Wharf	52b. NE section of Eastern Wharf	54. Small Boat Enclosure	54a. Jetty to the north of the Small Boat Enclosure
54b. Boat Pens	54c. Berthing Wharf	55. Northern Wharf	55a. NE section of the Northern Wharf	55b. NW section of the Northern Wharf

August 2022

Sampling and Analysis Quality Plan (SAQP)

NSW Department of Planning and Environment

Me Mel Goat Island, Sydney Harbour National Park

Appendix C: Map Showing The Reclaimed Land

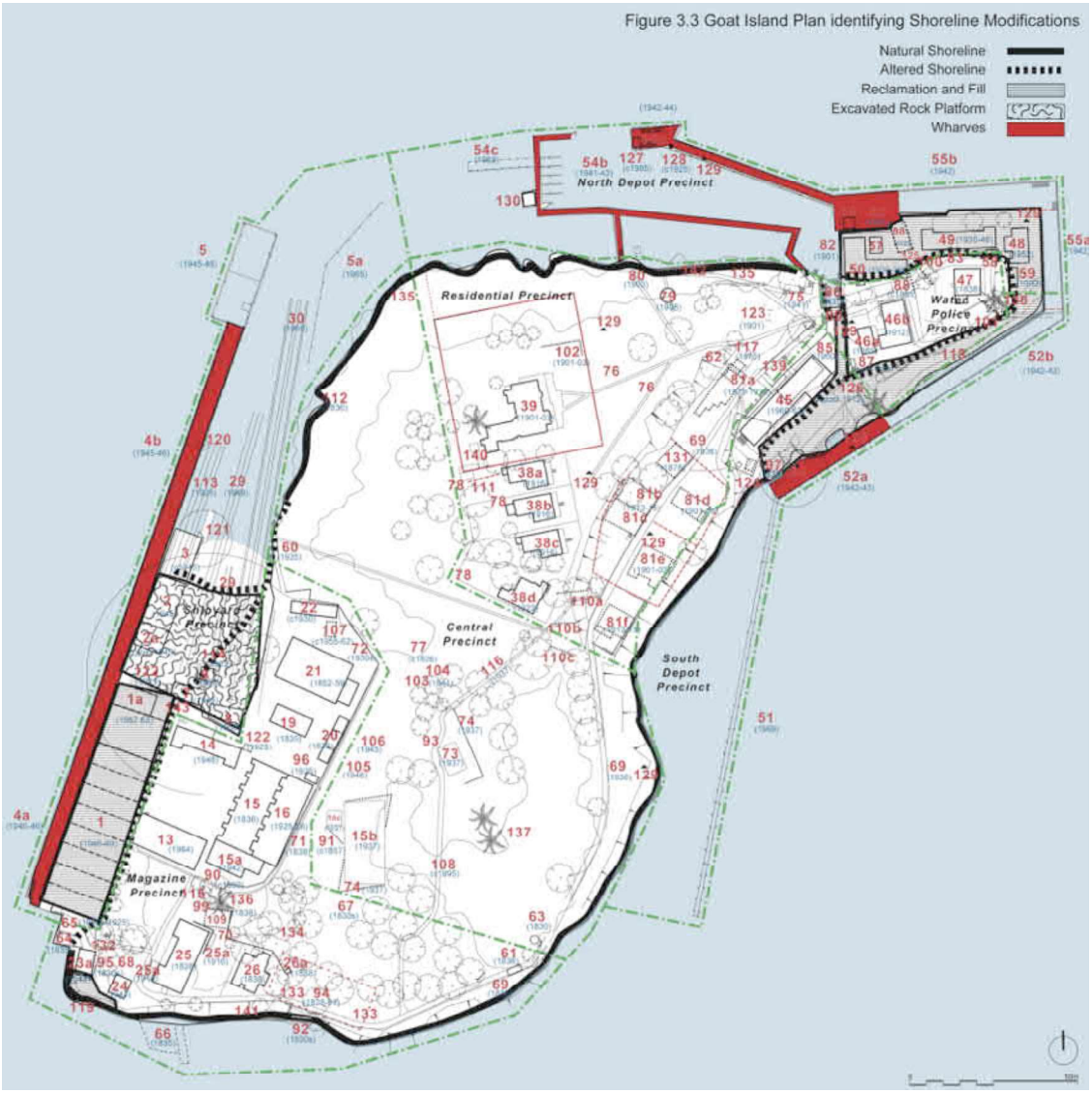


Figure 3.3 Plan of Goat Island showing the extent of modified and non-modified shoreline, areas of fill and excavation around the shoreline and the wharfs. This plan indicates that most of the shoreline remains in intact or with only very minor modifications to the natural edge. This plan is based on the 2007 aerial photograph and it is noted that sections of wharfs 4a, 4b, 5 and 51 and wharves 52b, 54c, 55a and 55b have collapsed and been removed.

Figure 3.4 shows the areas of the site that have undergone the most modification in terms of cut and fill and where there are substantial changes to the soil class. While all of the soil classes (except class 5) have some potential for the growth of certain native species (eg. Ficus sp.), the logical focus for attempts to replicate the original vegetation communities of Goat Island would be in areas with Class 1 or 2 soils which are outside the areas indicated in figure 3.4.



Figure 3.4 Plan of Goat island showing Areas of landform modification. The areas shaded green on the plan are the sections of the island that have undergone substantial landform modification through either quarrying and excavation and or fill including foreshore reclamation and cut and fill to create building platforms. Minor landform changes are not indicated. This plan is based on the 2007 aerial photograph and it is noted that sections of wharfs 4a, 4b, 5 and 51 and wharves 52b, 54c, 55a and 55b have collapsed and been removed.

3.4 FLORA

Before the major phases of European intervention Goat Island is likely to have had a typical vegetation profile similar to the other islands and foreshore areas adjoining the harbour. This would have included Sydney Sandstone Gully Forest and Coastal Sandstone Heath, across the main part of the Island, with species such Bangalay (*Eucalyptus botryoides*), Smooth-barked Apple (*Angophora costata*) and the Coastal Banksia (*Banksia integrifolia*). In more protected areas the local Port Jackson Fig Tree (*Ficus rubiginosa*), Blueberry Ash (*Elaeocarpus reticulatus*), the vine *Pandorea pandorana* and the ubiquitous *Pittosporum undulatum* would have been present.

Many other species are likely to have been found on the Island, however an extensive list would be conjectural. At least the species mentioned above, as well as a few other locally indigenous species, are still found on Goat Island and are probably the progeny of plants that have survived despite concerted efforts from the 1830s and later in the 19th century to clear this vegetation.

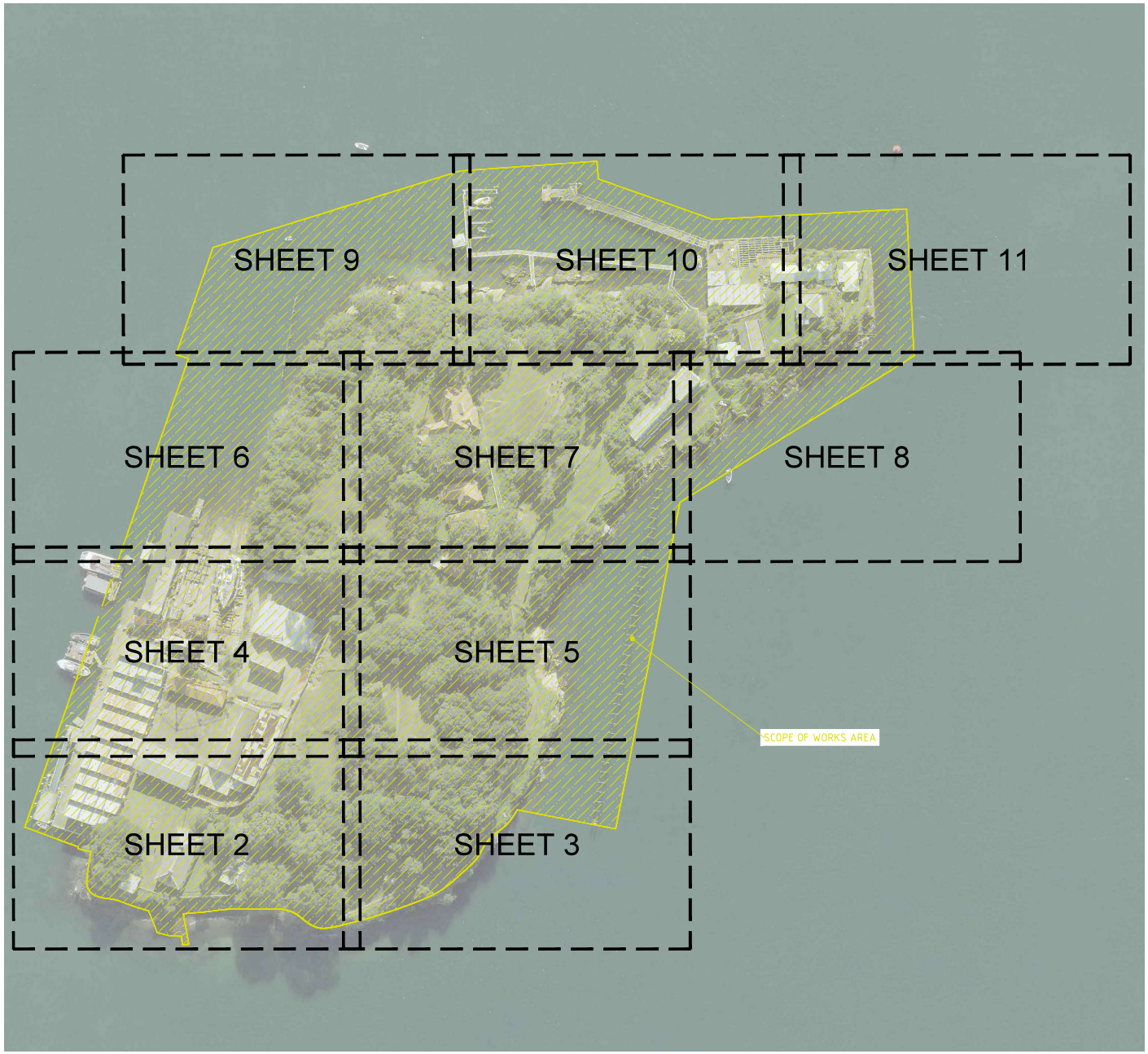
August 2022

Sampling and Analysis Quality Plan (SAQP)

NSW Department of Planning and Environment

Me Mel Goat Island, Sydney Harbour National Park

Appendix D: Utilities Mapping



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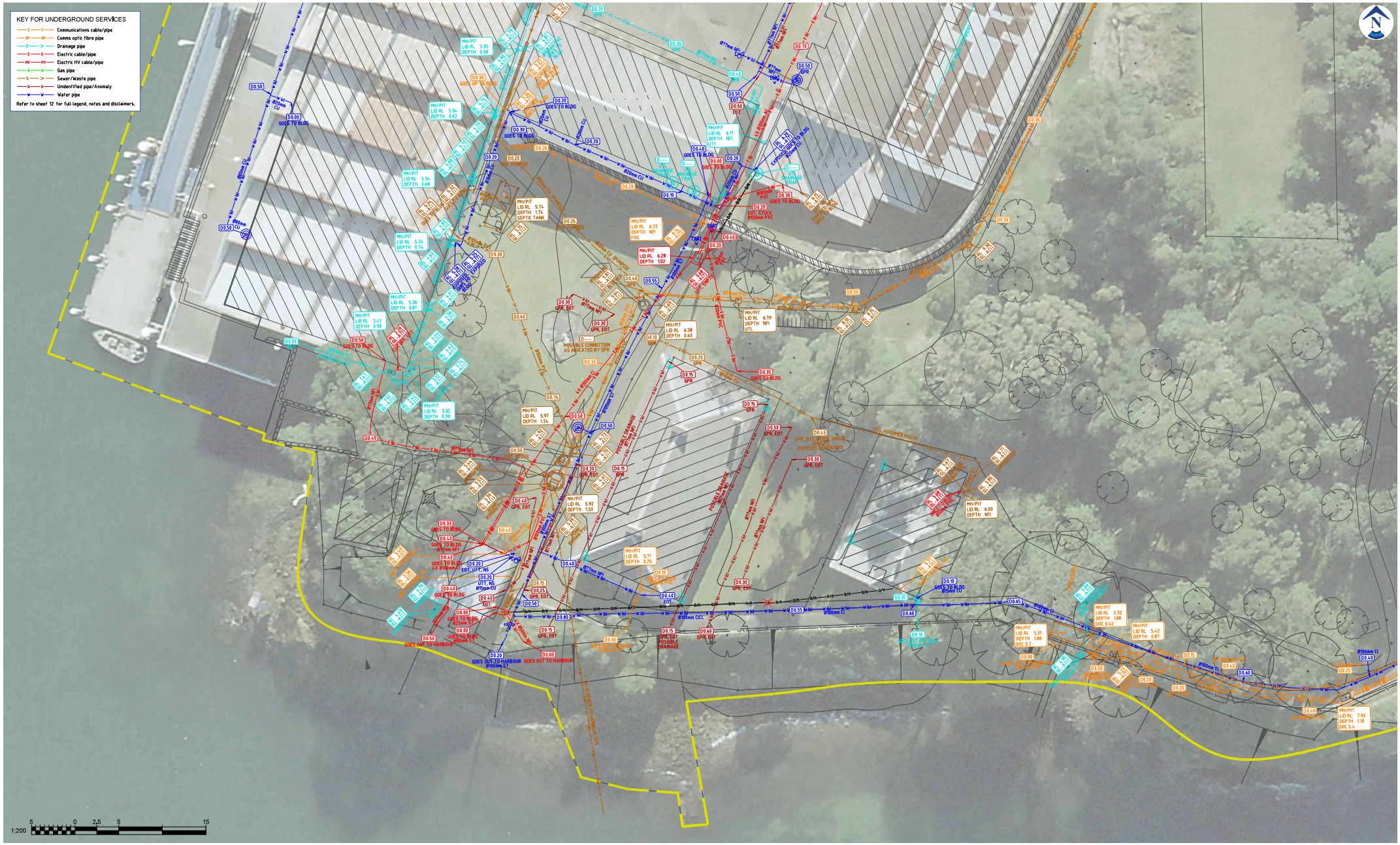
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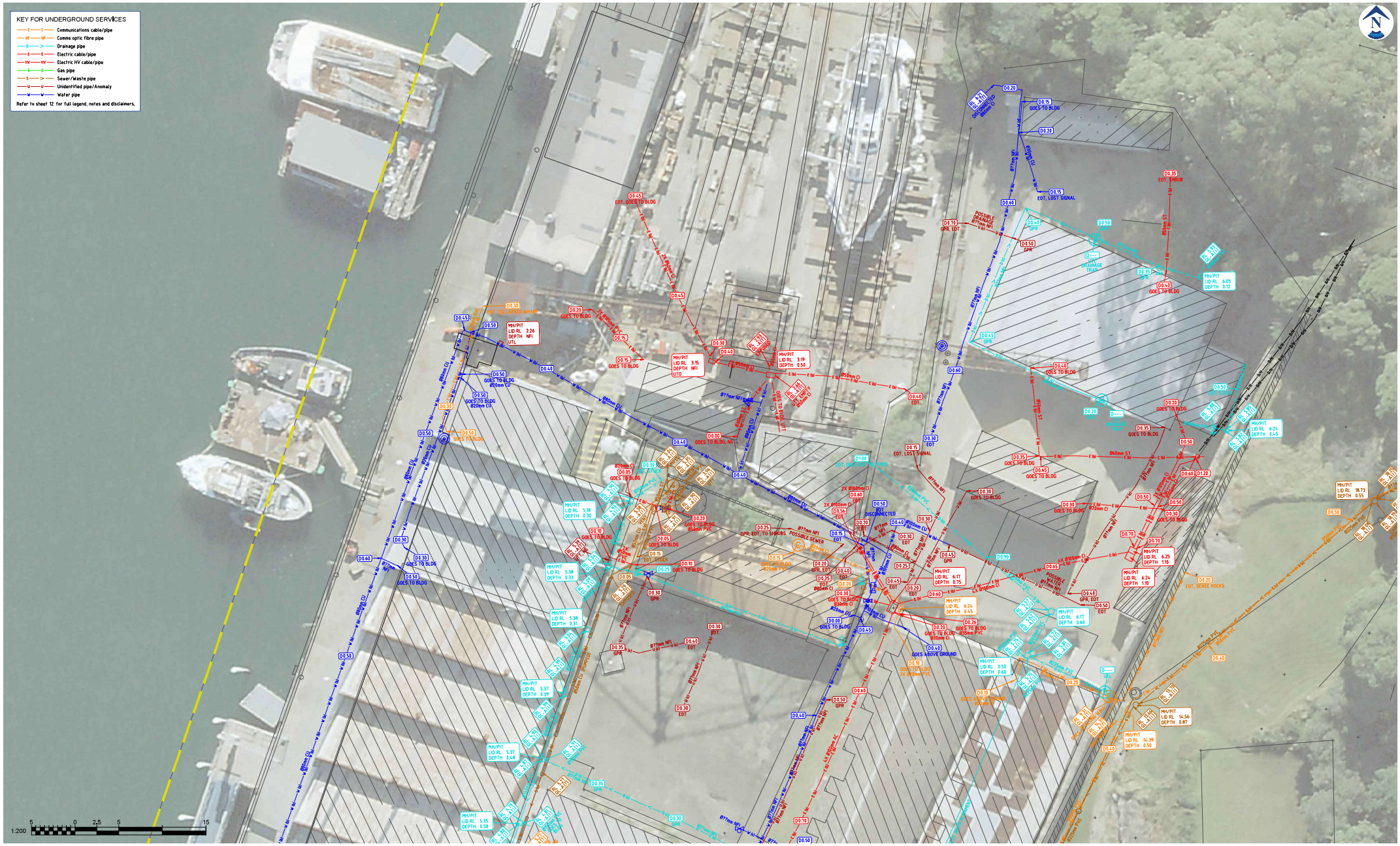
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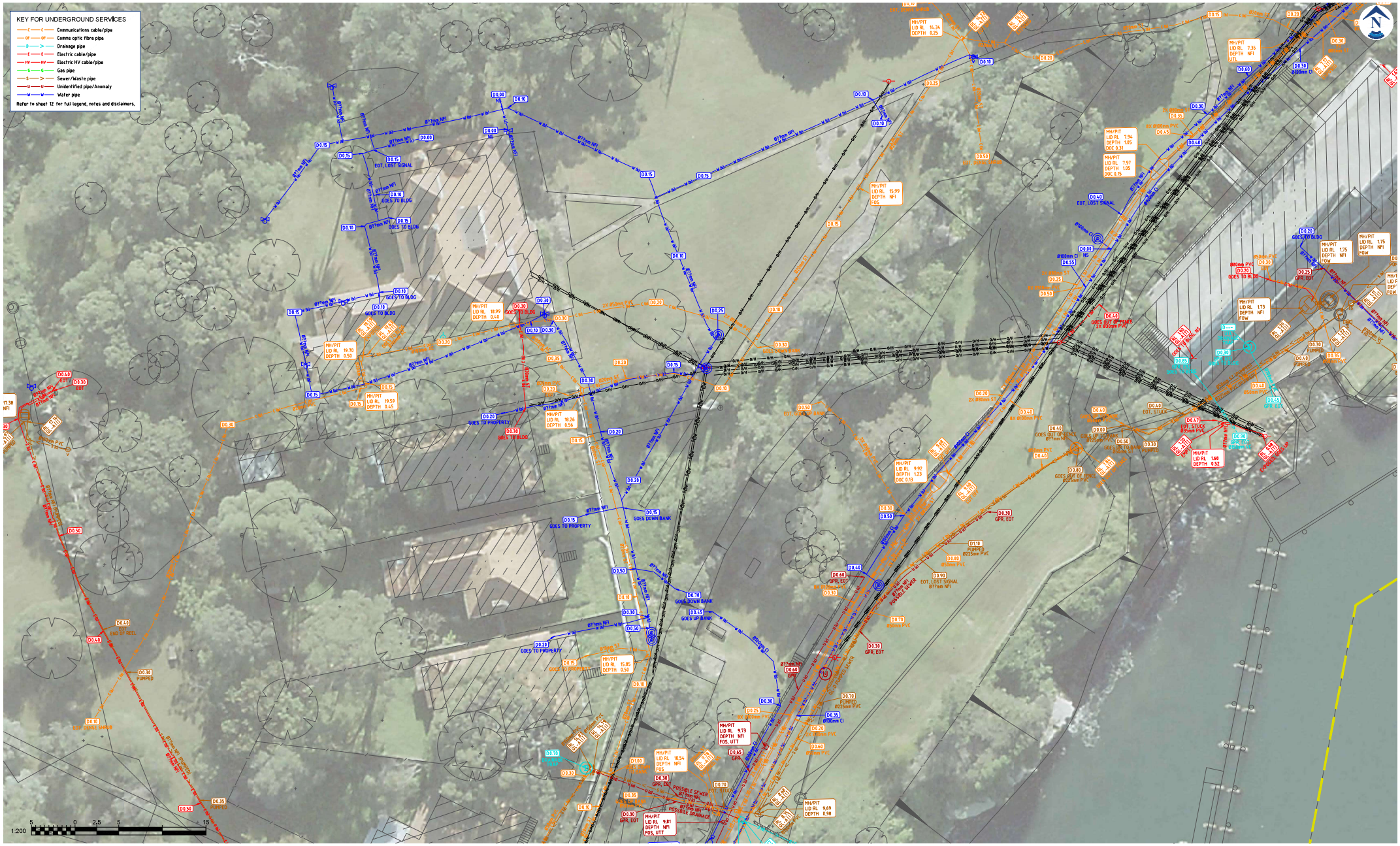
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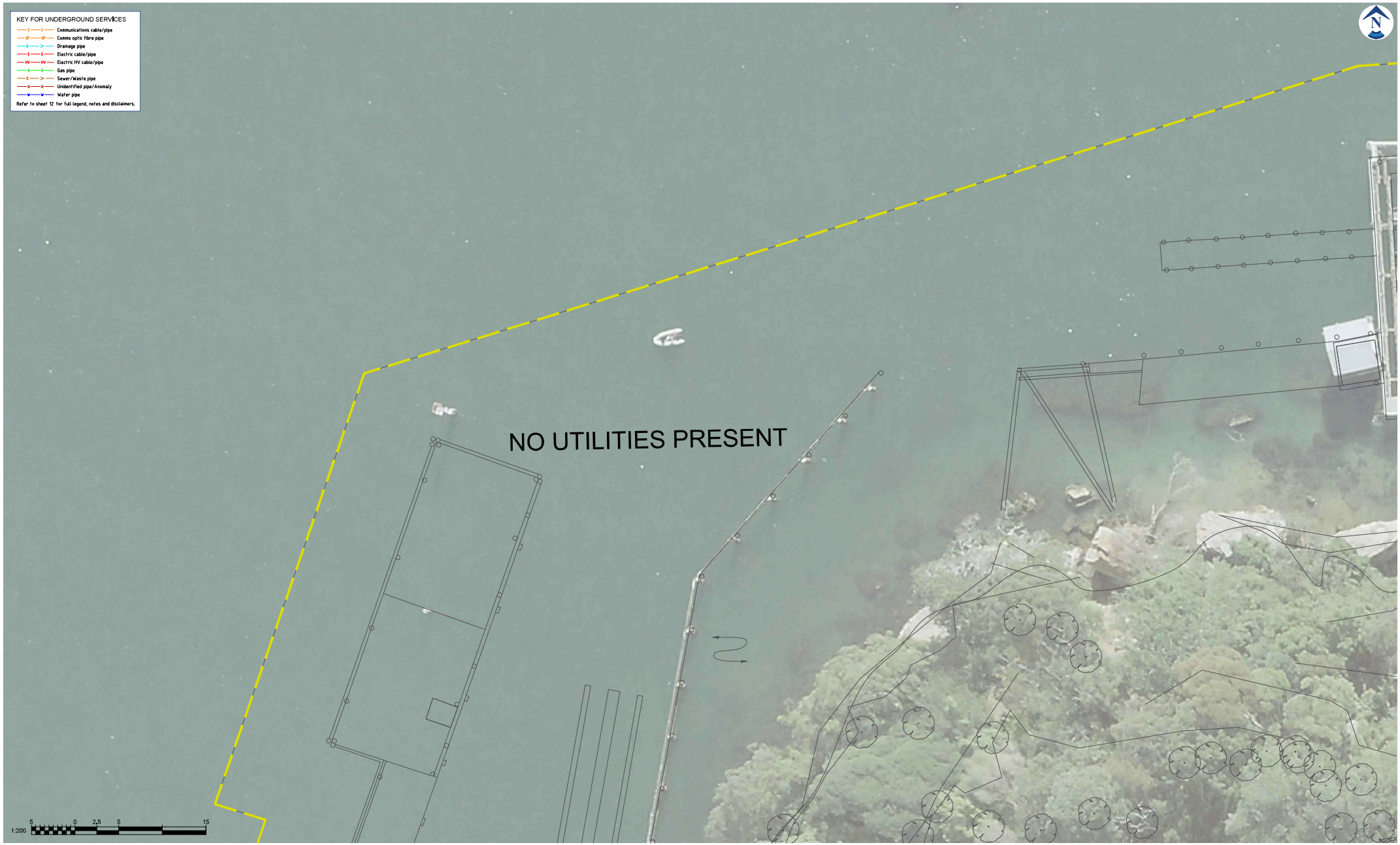
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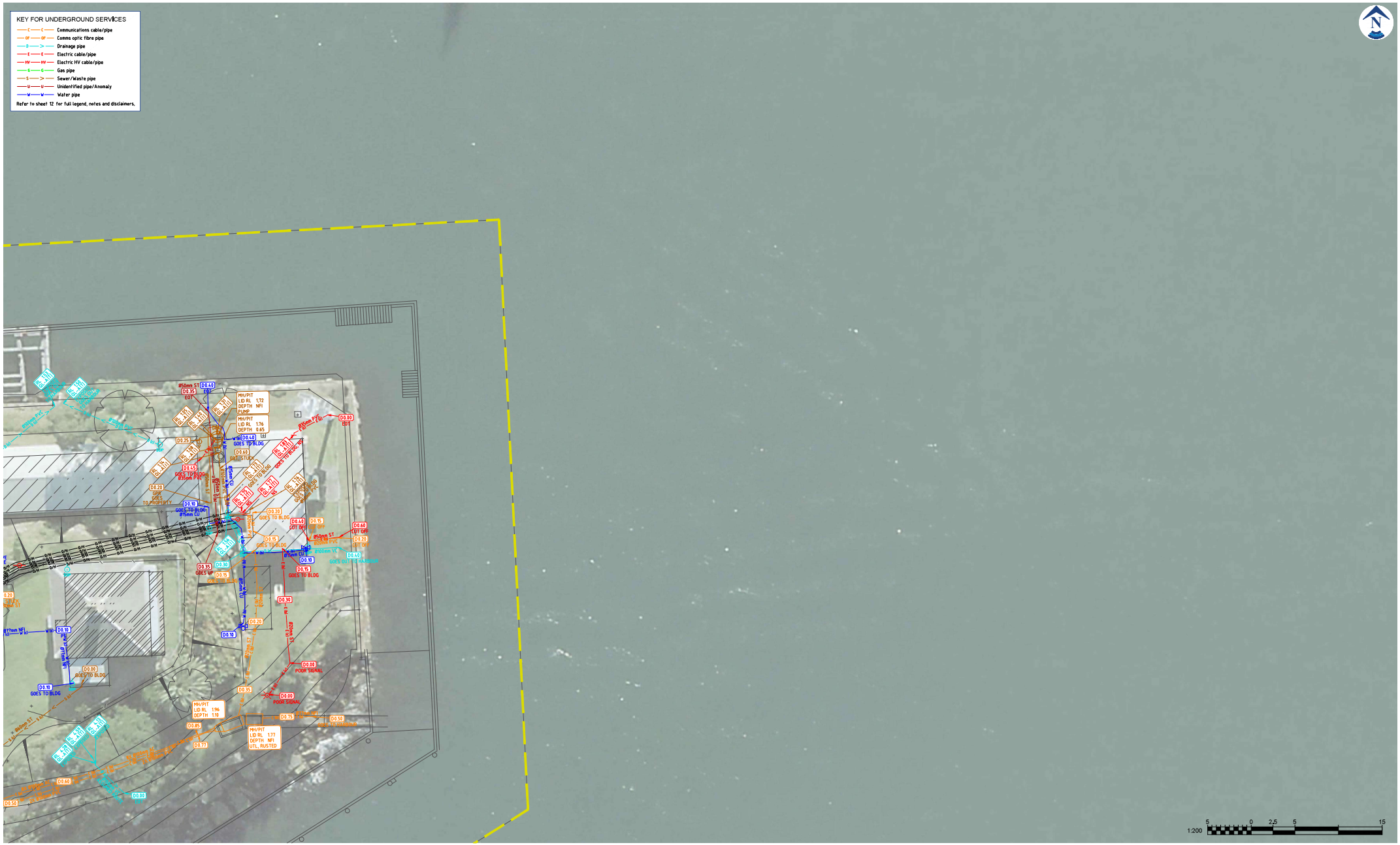
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SUBSURFACE UTILITY INFORMATION (SUI) AS5488 CLASSIFICATION

QUALITY LABELING UTILITY INFORMATION BY A CLASSIFICATION CODE ALLOWS THE USER OF THIS INFORMATION TO UNDERSTAND CLEARLY HOW THE INFORMATION WAS COLLECTED AND THEN PLACE AN APPROPRIATE AMOUNT OF RELIANCE ON IT. PROJECT RISKS RELATED TO UNDERGROUND UTILITIES CAN THEN BE PROPERLY MANAGED.

QUALITY A:

INFORMATION IS THE HIGHEST POSSIBLE LEVEL OF ACCURACY AND IS OBTAINED EXPOSING THE UNDERGROUND UTILITY USING A NON DESTRUCTIVE EXCAVATION (POT HOLING) TECHNIQUE. THE VERTICAL INFORMATION FOR THIS LOCATING METHOD IS TO THE TOP OF THE SHALLOWEST PART OF THE LOCATED SERVICE. THE 3D LOCATION IS RECORDED AS AN X,Y,Z COORDINATE. EXPECTED HORIZONTAL AND VERTICAL ACCURACY IS +/-50mm.

QUALITY B:

INFORMATION IS COLLECTED BY DESIGNATING THE HORIZONTAL AND VERTICAL LOCATION OF UNDERGROUND UTILITIES BY USING ELECTROMAGNETIC PIPE AND CABLE LOCATORS, SONDES OR FLEXI TRACE, GROUND PENETRATING RADAR AND ACOUSTIC PULSE EQUIPMENT. THIS IS THE MOST COMMON FORM OF UTILITY LOCATING AND ALTHOUGH AN X,Y, AND Z AXIS CAN BE ESTABLISHED IT IS NOT ALWAYS ENTIRELY ACCURATE DUE TO DIFFERING ELECTROMAGNETIC FIELDS, SOIL CONDITIONS AND MULTIPLE BANKS OF CABLES AFFECTING THE LOCATING SIGNAL. EXPECTED HORIZONTAL ACCURACY IS +/-300mm, VERTICAL ACCURACY +/-500mm.

QUALITY C:

INFORMATION IS COLLECTED BY CORRELATING THE SURVEY OF VISIBLE UTILITY SURFACE FEATURES SUCH AS MARKER PLATES OR WATER HYDRANTS AND ACQUIRED DIAL BEFORE YOU DIG PLANS TO DRAW A STRING WHICH SHOWS THE APPROXIMATE POSITION OF SERVICES. THIS METHOD DOES NOT USUALLY SHOW MULTIPLE BANKS OF CABLES AND DOES NOT ALWAYS SHOW THREE DIMENSIONAL INFORMATION. EXPECTED HORIZONTAL ACCURACY (SURFACE FEATURES ONLY) IS +/-300mm.

QUALITY D:

INFORMATION IS THE MOST BASIC LEVEL OF UTILITY LOCATIONS USING ONLY INFORMATION BASED ON EXISTING DIAL BEFORE YOU DIG PLANS OR OTHER RECORDS AND BY MEASURING BOUNDARY OFFSETS ETC. THIS METHOD OF UTILITY LOCATION SHOULD ALWAYS BE TREATED AS AN INDICATION OF THE PRESENCE OF A SERVICE ONLY AND SHOULD NOT BE USED FOR DESIGN. TOLERANCE DOES NOT APPLY TO AN INDICATIVE LOCATION THAT IS ATTRIBUTED TO QUALITY LEVEL D.

DETECTION DISCLAIMER:

ELECTROMAGNETIC LOCATING TECHNIQUES AS WELL AS GROUND PENETRATING RADAR HAVE BEEN UTILISED IN THE LOCATION OF UNDERGROUND SERVICES. THESE RESULTS ARE NOT INFALLIBLE AND A NON DESTRUCTIVE DIG PROCESS SHOULD BE CARRIED OUT TO CONFIRM SERVICE IDENTIFICATION, POSITIONS AND PARTICULARLY HEIGHTS, WHERE THESE ARE CRITICAL. ALTHOUGH ALL REASONABLE EFFORT HAS BEEN MADE IN LOCATING AND MAPPING THE UNDERGROUND SERVICES, THE COMPLETE EXTENTS OF THE THIS UTILITY SURVEY INFORMATION CANNOT BE GUARANTEED.

SURVEY TECHNIQUE DISCLAIMER:

ALL SURVEY INFORMATION COLLECTED BY UTILITY MAPPING SHOWN ON THIS PLAN HAS BEEN SURVEYED USING GNSS AND TPS SURVEY METHODS. EXPECTED MINIMUM ACCURACY OF GNSS SURVEY DATA IS +/-50mm. ACCURACY IS SUBJECT TO VARIATION DEPENDANT ON SITE CONDITIONS AND SURVEY CONTROL NETWORK SOURCES. AFOREMENTIONED TOLERANCE PROVIDED SHOULD BE USED AS A GUIDE ONLY AND REVIEWED ON A PROJECT BY PROJECT BASIS.

THIRD PARTY INFORMATION DISCLAIMER:

SOME FEATURES SHOWN IN BLACK HAVE BEEN TAKEN FROM EXTERNAL SOURCES AND AS SUCH UTILITY MAPPING CANNOT VERIFY THE ACCURACY OF THIS INFORMATION. CONTACTING THE RELEVANT PROVIDER IS RECOMMENDED FOR THE LATEST INFORMATION.

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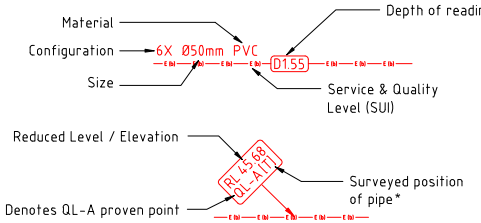
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KEY FOR UNDERGROUND SERVICES

- Air line
- Chemical cable/pipe
- Communications cable/pipe
- Comms optic fibre pipe
- Drainage pipe
- Electric earth cable/pipe
- Electric cable/pipe
- Electric direct buried cable
- Electric HV cable/pipe
- Fuel pipe
- Gas pipe
- Irrigation pipe
- Chilled water pipe
- Heated water pipe
- Oil pipe
- Rail counter cable/pipe
- Sewer/Waste pipe
- Sewer pressure main pipe
- Traffic cable/pipe
- Unidentified pipe/Anomaly
- Water pipe
- Underground storage tank
- Multi user duct
- Empty duct
- Overhead service
- Survey Boundary
- Cable/Pipe group or duct
- Trench scar

- Air pit centre
- Air valve
- Chemical pit centre
- Chemical valve
- Comms main marker
- Comms pillar
- Comms pole
- Comms pit centre
- Drainage connection
- Drainage down pipe
- Drainage pump
- Drainage pit centre
- Electric dome
- Electric earth cover
- Electric earth spike
- Electric junction box
- Electric light
- Electric light pole
- Electric main marker
- Electric power pole
- Electric pit centre
- Electric sign centre
- Fuel access point
- Fuel pit centre
- Fuel valve
- Gas bottle
- Gas meter
- Gas main marker
- Gas pit centre
- Gas test point
- Gas valve
- Irrigation pit centre
- Irrigation sprinkler
- Irrigation valve
- Mechanical chilled water valve
- Mechanical hot water valve
- Mechanical pit centre
- Oil pit centre
- Oil valve
- Rail junction box
- Rail light
- Rail pit centre
- Rail signal control box
- Rail traffic signal
- Sewer main marker
- Sewer connection
- Sewer flush point
- Sewer inspection opening
- Sewer inspection shaft
- Sewer pit centre
- Sewer pipe vent
- Sewer valve
- Traffic camera
- Traffic pit centre
- Traffic signal light
- Traffic sensor
- Unknown main marker
- Unknown pit centre
- Unknown valve
- Water bore
- Water connection
- Water fire hose
- Water hydrant
- Water meter
- Water main marker
- Water pump
- Water pit centre
- Water tap
- Water valve
- Characteristic change
- Pothole (indicative)
- Miscellaneous pipe riser
- End of trace

EXPLANATION OF PIPE ANNOTATION



* Surveyed position of pipe: C = Centre, I = Invert, T = Top, G = Ground Level
Where Ground Level is shown it indicates that no depth has been obtainable.

EXPLANATION OF CONFIGURATION

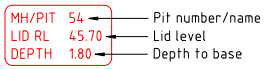
Pipe configuration is annotated as the number of pipes per row. For example:

2x3x4 = (total of 9 pipes)

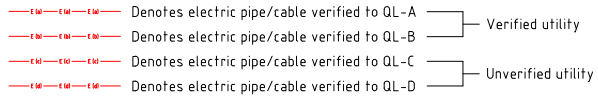


Where pipes are not clearly defined in rows, a single total number is given eg. 9x.

EXPLANATION OF PIT ANNOTATION



EXPLANATION OF SUBSURFACE UTILITY INFORMATION (SUI AS5488)



ABBREVIATIONS FOR UNDERGROUND SERVICES

MATERIALS		GENERAL INFORMATION			
AC	Asbestos cement	AR	Assumed route	PS	Poor signal
ALK	Alkathene	B/D	Backdrop	SL	Silt level
BR	Brick	CL	Cover level	TFR	Taken from records (QL-D)
CI	Cast iron	DB	Direct buried	UTF	Unable to find
CICL	Cast iron cement lined	DOC	Depth of cover	UTL	Unable to lift
CONC	Concrete	DTB	Depth to base	UTR	Unable to rod
CU	Copper	DTI	Depth to invert	UTS	Unable to survey
DI	Ductile iron	DTS	Depth to silt	UTT	Unable to trace
DICL	Ductile iron cement lined	DTW	Depth to water	VP	Vent pipe
DIPL	Ductile iron poly lined	EOT	End of trace	WL	Water level
EW	Earthenware	FOD	Full of debris		
FG	Fibreglass	FOS	Full of silt (silted)		
GI	Galvanised iron	GPR	Ground penetrating radar		
GRP	Glass reinforced plastic	IL	Invert level		
MDPE	Medium density polyethylene	NFI	No further information		
MS	Medium steel	NLA	Not located - route assumed		
MSCL	Medium steel cement lined	NLI	Not located - route plotted from on-site information		
PE	Polyethylene	NLR	Not located - route plotted from records		
PVC	Polyvinyl chloride	NLT	Not located - plotted from visible trench scar detail		
RC	Reinforced concrete	NS	No signal		
SGW	Salt glazed ware	NVP	No visible pipes		
SI	Spun iron	OBV	Obvert		
SPL	Steel poly lined				
ST	Steel				
VC	Vitrified clay				

NOTES FOR UNDERGROUND SERVICES

1. Pipe sizes which cannot be obtained by visual survey are taken from record drawings/marker plates where available.
2. Cable routes shown as a single line may actually consist of many cables, refer to annotated configuration details.
3. Drainage pipe sizes & invert levels have been determined without man entry into chambers. Every effort has been made to correctly obtain this information, however, accuracy is dependent on visibility from the surface.
4. All annotations depict 'depth to service' UNLESS otherwise stated. Annotations marked 'RL' indicate the true elevation of service feature.
5. Utility lines located using Electromagnetic Induction (EMI) or similar proving techniques are assumed to have been located to the approximate CENTRE of the service.
6. Utility lines located using Ground Penetrating Radar (GPR) or similar proving techniques are assumed to have been located to the TOP of the service.

REV	REVISION DESCRIPTION	DATE	DRN	CHK
1	DATA SHIFTED TO MGA94	14/07/22	APP	-
0	PRELIMINARY ISSUE	12/05/22	LCC	LT

Utility MAPPING
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Web: www.utilitymapping.com.au

NSW NATIONAL PARKS AND WILDLIFE SERVICES

UNDERGROUND UTILITY SURVEY

GOAT ISLAND
NSW 2041

LOCATED:	SWS	CHECKED:	LT	DATE:	14/07/2022
SURVEYED:	JKD	SCALE AT A1:	- - -	DATUM:	MGA94 Z56
DRAWN:	LCC/APP	DBYD REF:	31575082	GRID:	AHD

STATE/YEAR	JOB No	DRG TYPE	DRG No	REV
NSW22	0027	US	01	R01

SHEET 12 OF 12

G:\Shared drives\Projects\2022\NSW\NSW22-0027 MeMel Goat Island Utility Investigation\06 Drafting\R01\NSW22-0027-US-01 R01.dwg UM ADMIN

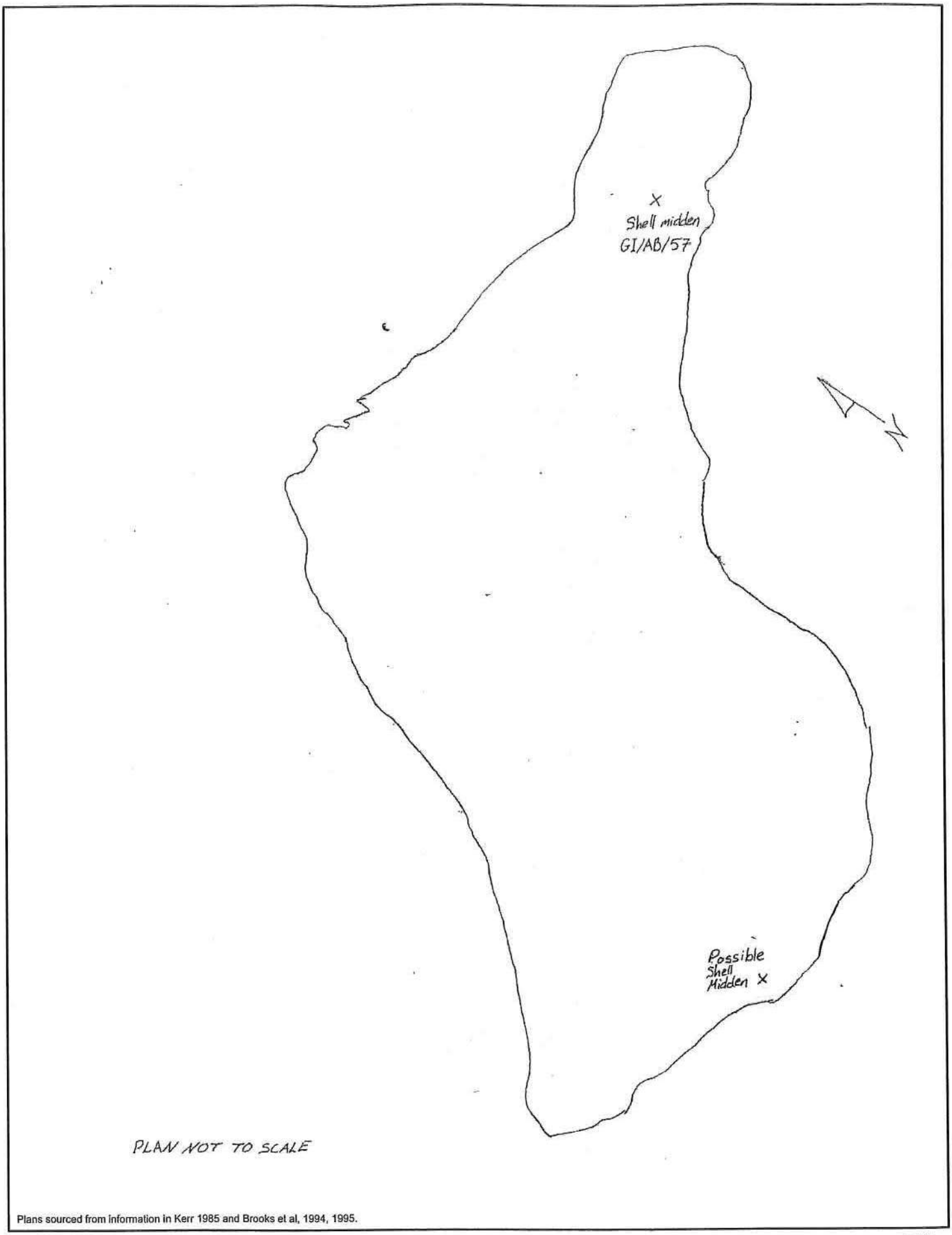
August 2022

Sampling and Analysis Quality Plan (SAQP)

NSW Department of Planning and Environment

Me Mel Goat Island, Sydney Harbour National Park

Appendix E: Archaeological Sites Map



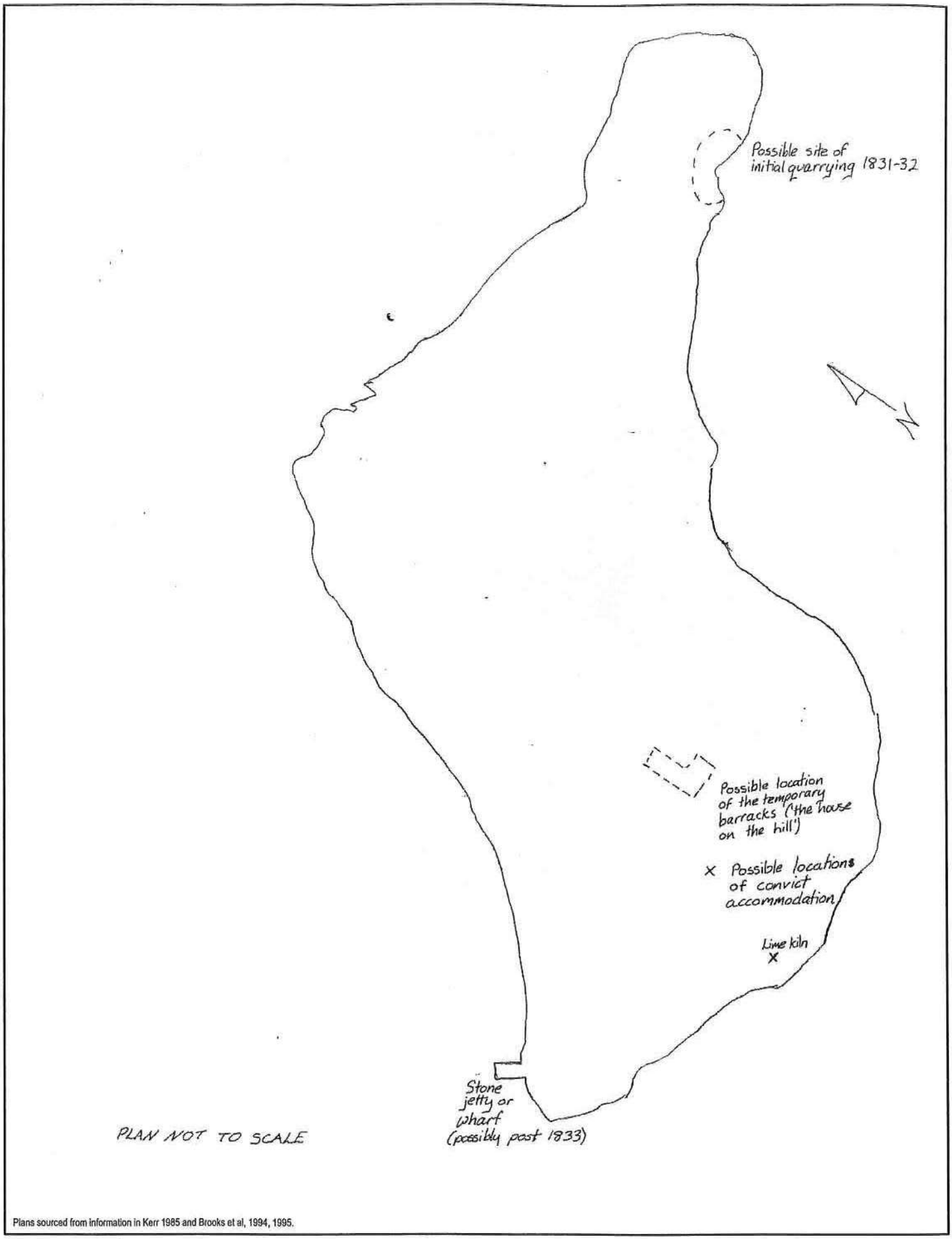
Plans sourced from information in Kerr 1985 and Brooks et al, 1994, 1995.

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Pymble NSW 2073
61 2 9988 4422

GOAT ISLAND PRE 1826
National Parks and Wildlife Service
Archaeological Management Plan
Goat Island, Sydney NSW

FIGURE
2

DRAWN	PROJECT-FILE NUMBER	APPROVED	DATE	REVISED DATE
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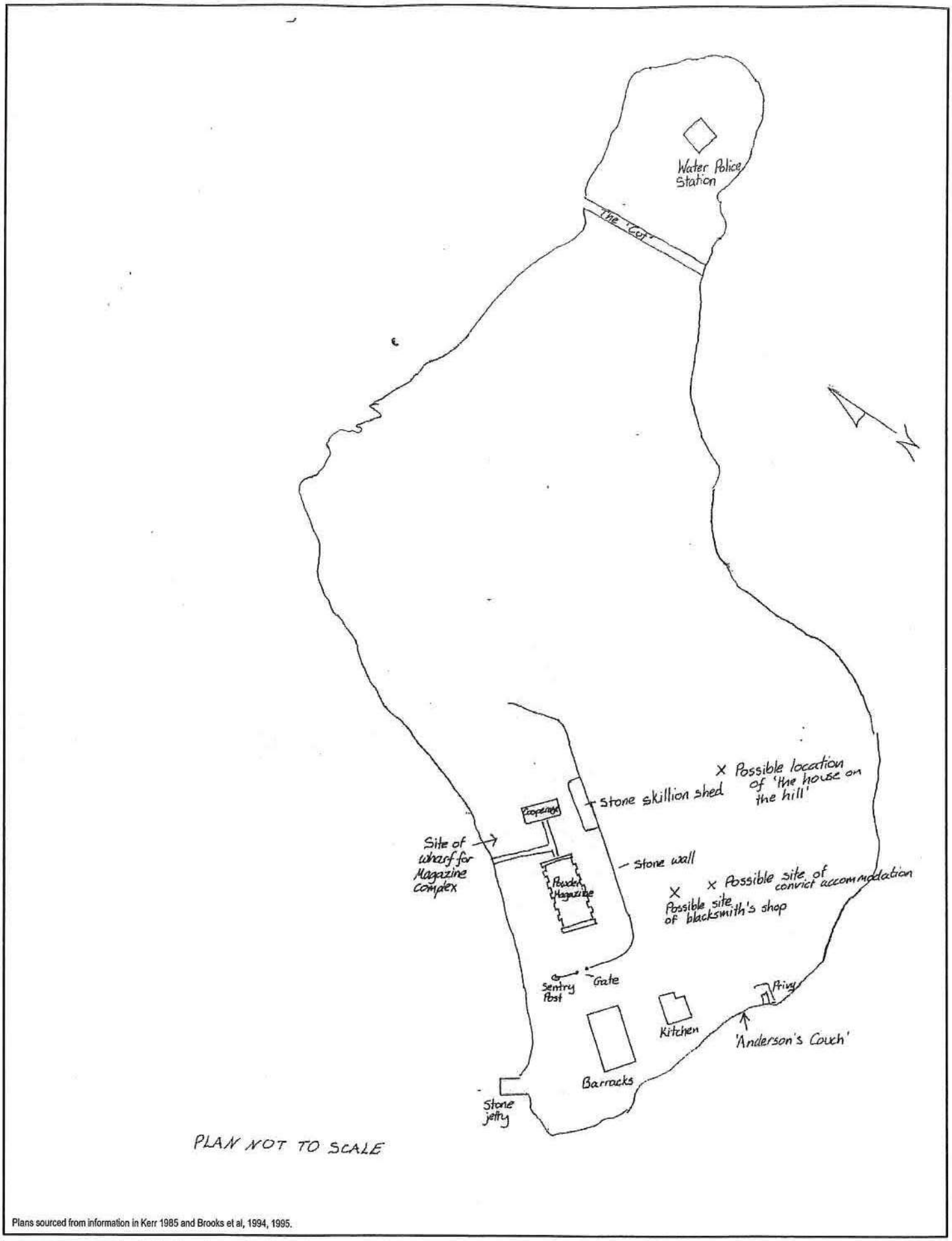
Plans sourced from information in Kerr 1985 and Brooks et al, 1994, 1995.

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GOAT ISLAND 1826 - 1833
National Parks and Wildlife Service
Archaeological Management Plan
Goat Island, Sydney NSW

FIGURE **3**

DRAWN	PROJECT-FILE NUMBER	APPROVED	DATE	REVISED DATE
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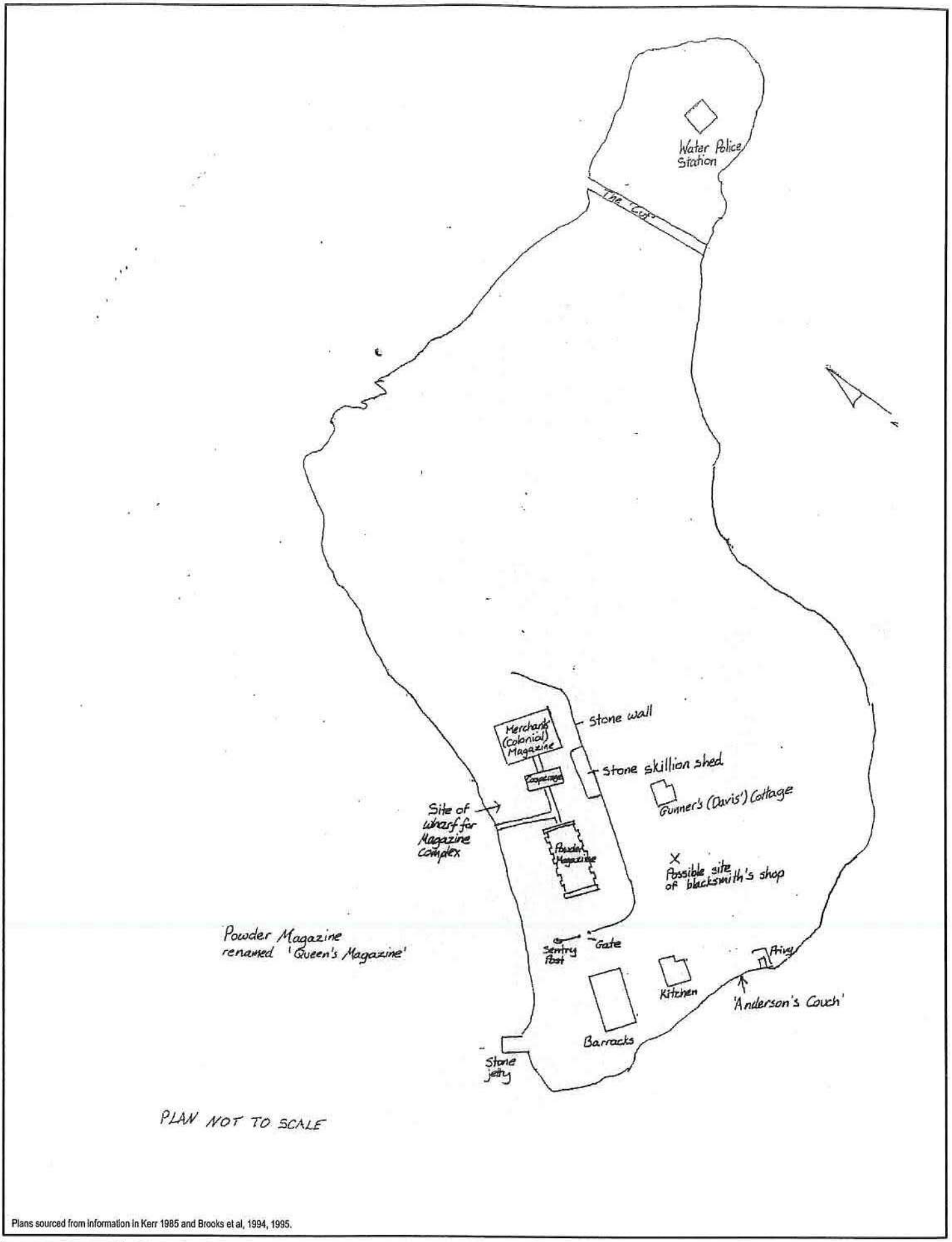
Plans sourced from information in Kerr 1985 and Brooks et al, 1994, 1995.

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GOAT ISLAND 1833 - 1839
National Parks and Wildlife Service
Archaeological Management Plan
Goat Island, Sydney NSW

FIGURE
4

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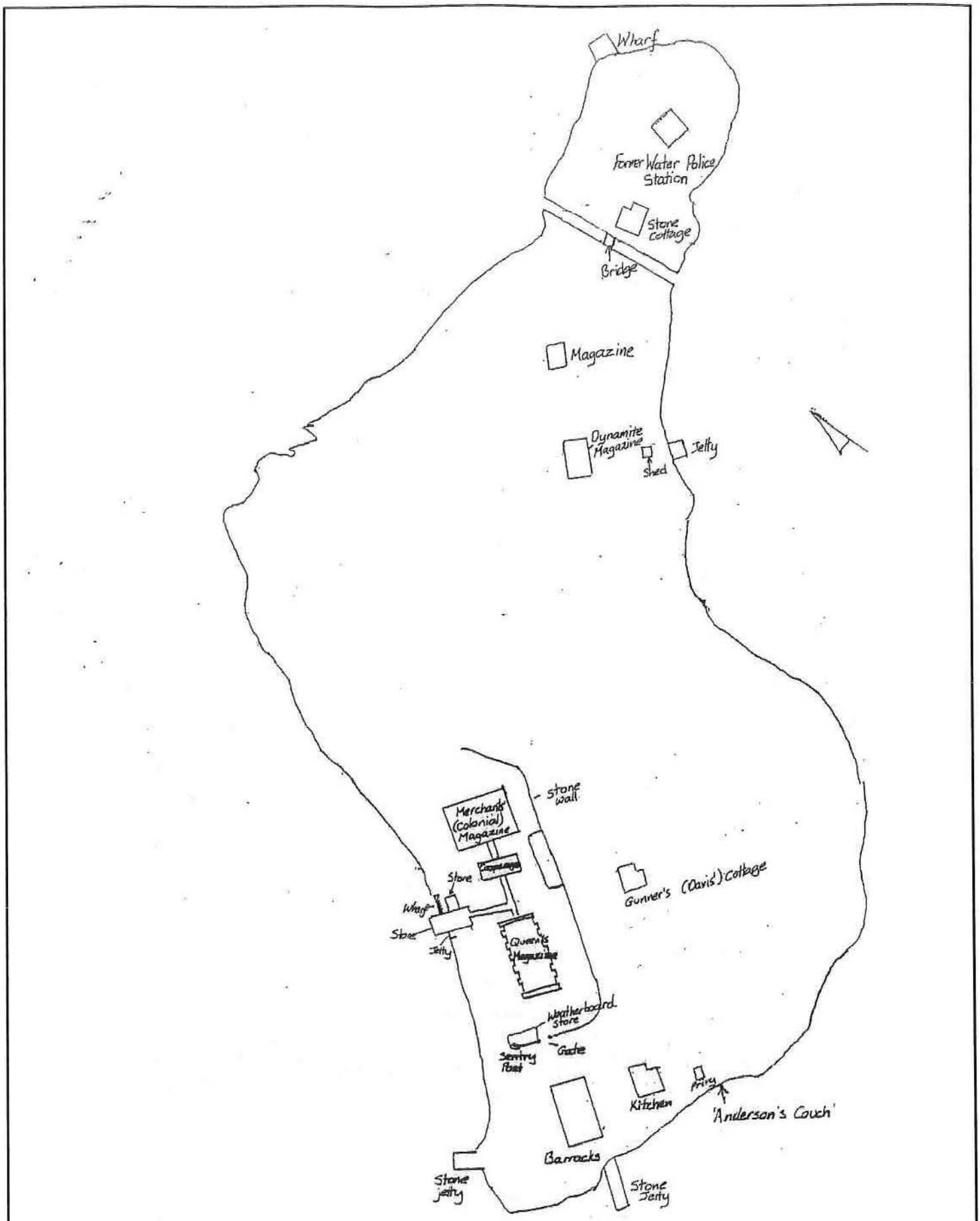
Plans sourced from information in Kerr 1985 and Brooks et al, 1994, 1995.

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61 2 9988 4422

GOAT ISLAND 1840 - 1859
National Parks and Wildlife Service
Archaeological Management Plan
Goat Island, Sydney NSW

FIGURE
5

DRAWN	PROJECT-FILE NUMBER	APPROVED	DATE	REVISED DATE
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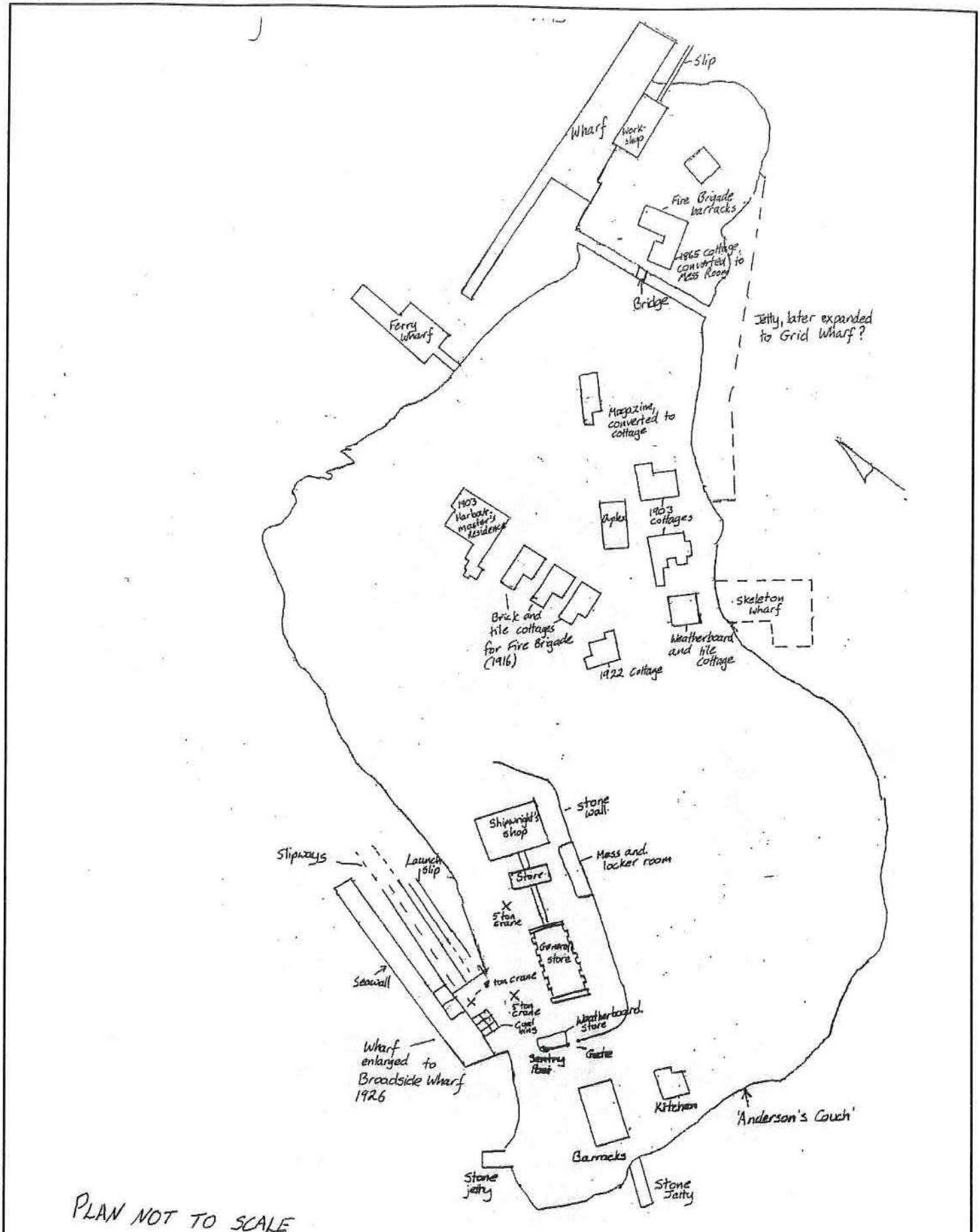
Plans sourced from information in Kerr 1985 and Brooks et al, 1994, 1995.

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GOAT ISLAND 1860 - 1899
National Parks and Wildlife Service
Archaeological Management Plan
Goat Island, Sydney NSW

FIGURE
6

DRAWN	PROJECT-FILE NUMBER	APPROVED	DATE	REVISED DATE
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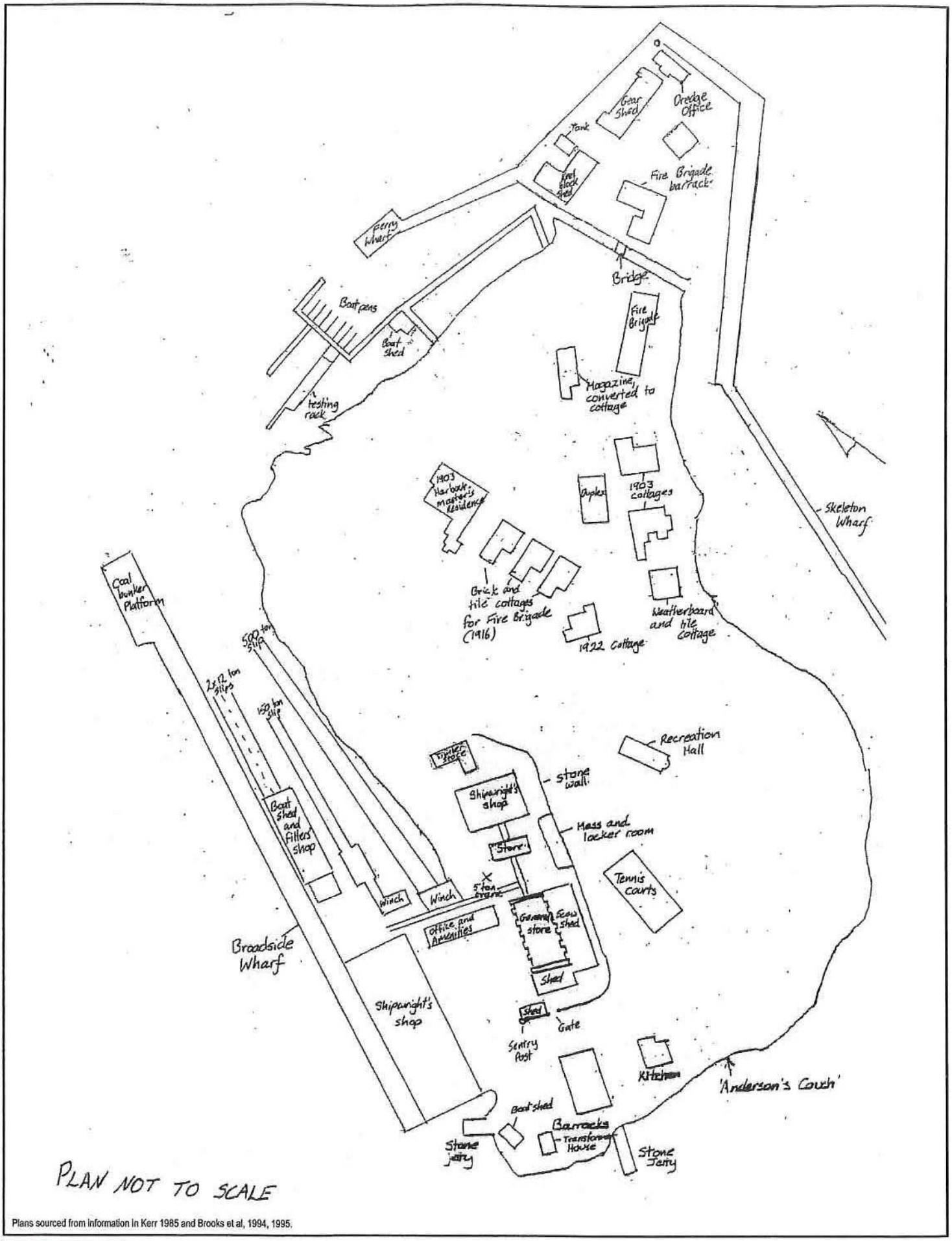
Plans sourced from information in Kerr 1985 and Brooks et al, 1994, 1995.

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GOAT ISLAND 1900 - 1936
National Parks and Wildlife Service
Archaeological Management Plan
Goat Island, Sydney NSW

FIGURE **7**

DRAWN	PROJECT-FILE NUMBER	APPROVED	DATE	REVISED DATE
LJE	W1195-013		May 2003	



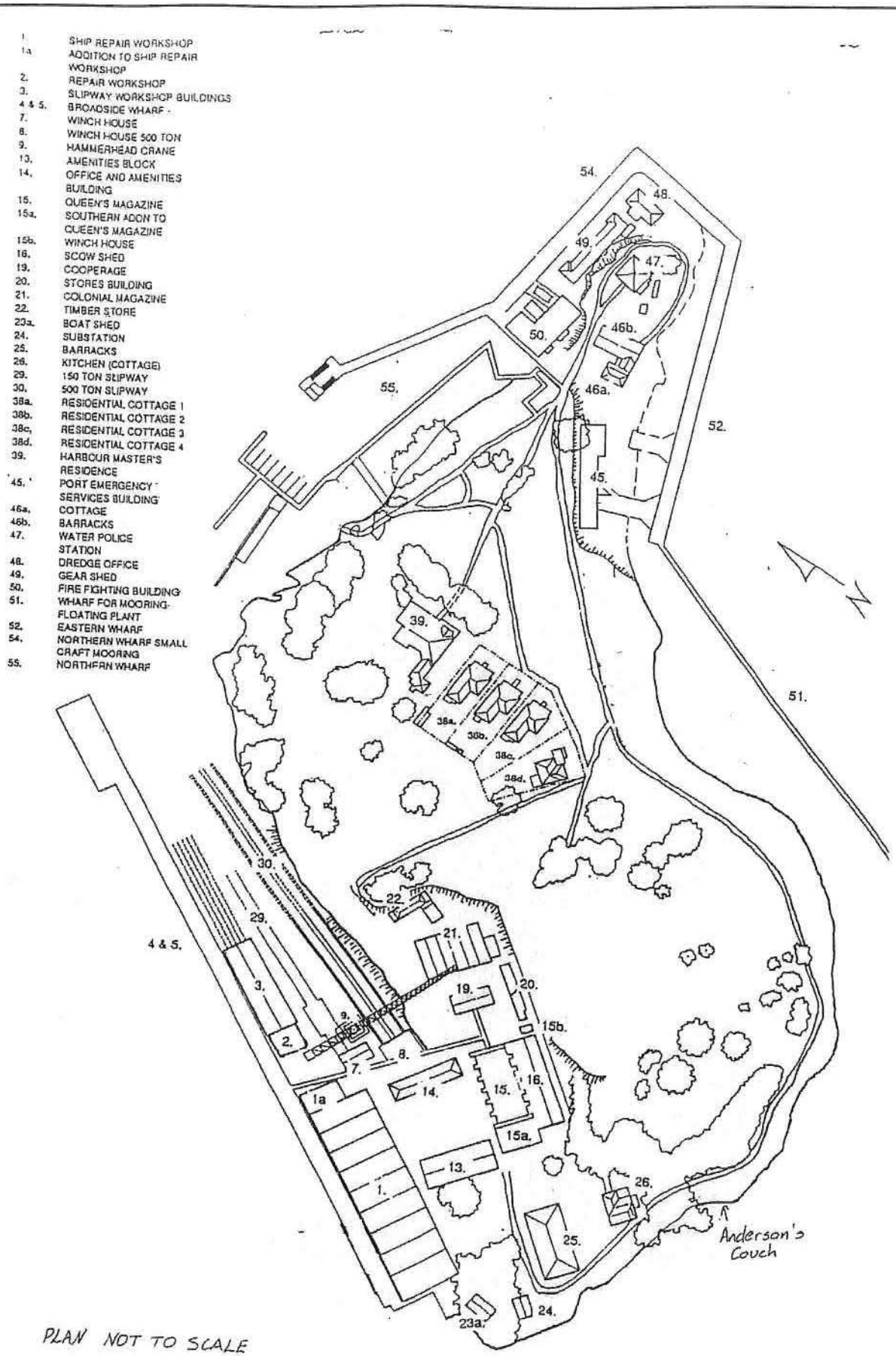
Plans sourced from information in Kerr 1985 and Brooks et al, 1994, 1995.

HLA-Envirosciences Pty Limited
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GOAT ISLAND 1937 - 1959
National Parks and Wildlife Service
Archaeological Management Plan
Goat Island, Sydney NSW

FIGURE **8**

DRAWN	PROJECT-FILE NUMBER	APPROVED	DATE	REVISED DATE
LJE	W1195-014		May 2003	



Plans sourced from information in Kerr 1985 and Brooks et al, 1994, 1995.

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GOAT ISLAND 1960 - 1992
National Parks and Wildlife Service
Archaeological Management Plan
Goat Island, Sydney NSW

FIGURE
9

DRAWN	PROJECT-FILE NUMBER	APPROVED	DATE	REVISED DATE
LJE	W1195-015		May 2003	

Appendix D – Heritage Assessment

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Statement

Supporting an application under Section 60 of the *Heritage Act 1977* for Me Mel Goat Island, to demolish the Port Emergency Services Building (Former 1962 MSB Fire Brigade Barracks)

Me Mel Goat Island, Sydney Harbour National Park.

Date: 19 September 2022

Contents

1. Introduction 4
2. History 9
3. Description 12
4. Images 14
5. Proposal 30
6. Assessment of Impact 31
7. Conclusion 42
8. Attachments 42

Revision	Date	Author
draft	14 September 2022	Ed Beebe
Review	16 September 2022	Robert Newton
Final	19 September 2022	Ed Beebe

1. Introduction

1.1. Purpose of this report

Me Mel Goat Island is listed on the State Heritage Register (SHR) No 00989. This statement supports an application under S60 of the Heritage Act 1977 to demolish the former 1962 MSB Fire Brigade Barracks now the Port Emergency Services Building (PESB).

NSW National Parks and Wildlife Service (NPWS) is leading a project to transfer Me Mel Goat Island to Aboriginal ownership and management. NPWS will undertake essential remedial and safety works to expedite the transfer process and address immediate maintenance and safety issues.

As part of the Me Mel Goat Island Remediation program, NPWS proposes to demolish the PESB which is dilapidated and dangerous, posing a safety risk to staff and visitors.

For all applications for work on Me Mel Goat Island, it is important to note that the SHR listing boundary follows the line of Lot 3 DP 837195, being the mean high-water mark and the boundary of the National Park. Some of the island's buildings and structures are outside this boundary. However, the PESB and the activity for this application are fully within the National Park and SHR boundary.

1.2. Site identification

Me Mel Goat Island, Lot 3, DP 837195, lies in the inner harbour, east of the Sydney Harbour Bridge, north of Balmain East and south of Balls Head.

Me Mel Goat Island is part of Sydney Harbour National Park managed by NPWS, Greater Sydney Branch, Sydney South Area.

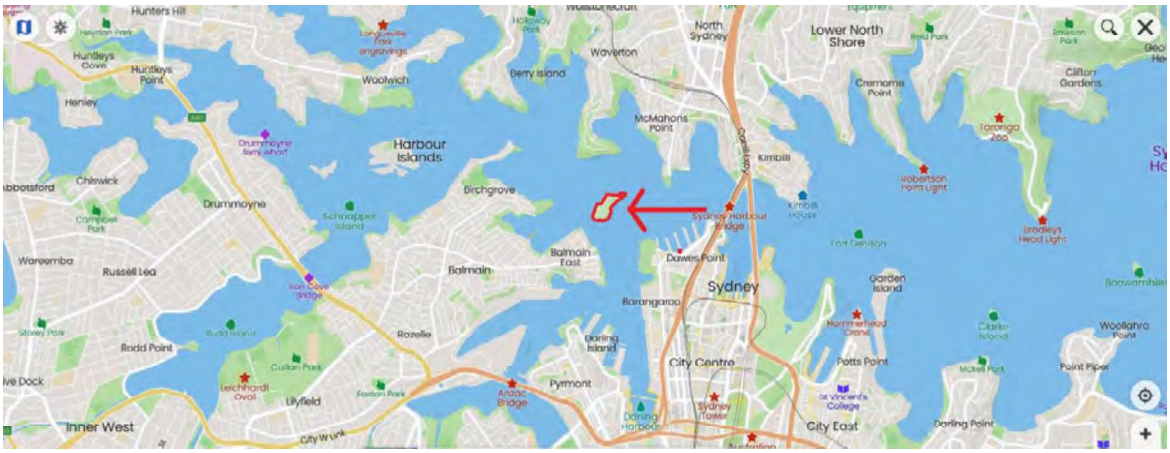


Figure 1 Location Map with Me Mel Goat Island highlighted. Source: Mapcarta June 2022, annotated by Author



Figure 2 Detail location aerial. Source: Mapcarta June 2022, annotated by Author

1.3. Statutory Listings

Me Mel Goat Island is listed on the SHR as Goat Island No 00989, gazetted on 2 April 1999. The SHR listing boundary follows the line of Lot 3 DP 837195, being mean high-water mark and the boundary of the National Park.

Me Mel Goat Island is included on the NPWS Historic Heritage Information Management System (HHIMS)[1]. Fort Denison is identified in HHIMS as being of state significance.

The PESB is within the SHR boundary.

[1] HHIMS is the inventory of the heritage assets managed by NPWS. HHIMS is not the NPWS Section 170 Heritage and Conservation Register until it is furnished to the Heritage Council of NSW in accordance with S170(6) of the Heritage Act 1977.



Figure 3 The State Heritage Register plan of Me Mel Goat Island. Source: www.heritage.nsw.gov.au



Figure 4 Detail view of the National Park and State Heritage Register boundary over an annotated aerial of Me Mel Goat Island. The boundary follows Lot 3 of DP 837195 being the mean high-water mark. Location of the PESB is shown. Source: NPWS annotated by Author

1.4. Significance

Goat Island is of national and state heritage significance for its overall exceptional ensemble of built, natural and archaeological features that evocatively and legibly present three important historical periods within one well defined place - Aboriginal (pre-1830), Colonial (1830-1900), and Maritime (1901-1993). The island retains its isolation from the city and surrounding foreshore development.

The Island is of outstanding significance for its numerous historical associations. It is closely associated with Bennelong (one of the most well-known Aboriginal people in early Sydney) and his family. The island is a documented place of incarceration and education of Aboriginal convicts in the 1830s. It was a site of convict labour and punishment for up to 200 convicts at its peak during the 1830s. The Island is the site of the earliest, largest and most intact.

Magazine complex in Australia which was built in the 1830s to a standard 18th century British naval design, using convict labour and local materials (sandstone quarried on the Island), which operated until 1907. The Island is the location of the Water Police Station, operational from 1838 to 1865, which is the earliest surviving building associated with Water Police in Australia. Together, the Magazine complex and the Water Police Station form one of the most intact and complete sets of Colonial buildings in Sydney, and one of the most intact and complete sets of convict-built structures in Australia. The Island also served as the maritime authority operational headquarters in Sydney Harbour from 1901 to 1993. The first and only purpose-built Harbour Master's residence in Sydney was constructed on

Goat Island. The Island was the place of residence for a community of maritime authority fire brigade staff and their families.

The island is of outstanding significance for its architectural and physical qualities. The convict-built Colonial sandstone buildings and structures (particularly the Magazine complex and Water Police Station) express a very high degree of creative and technical achievement. The Water Police Station and the Harbour Master's residence are significant for their accomplished design, enhanced by their deliberately prominent siting at the bow and top of the Island. The scenic qualities of the Island as a whole are striking. The varied buildings, structures, landscape and topography on the island including the Colonial Barracks and Kitchen, fortified wall and Sentry box, the Hammerhead Crane, Barney's Cut and the Water Police Station combine with the backdrop of Sydney Harbour, the bridge and the City skyline to make the Island a unique focal point within Sydney Harbour.

The Island is of rare national significance as a result of its unique siting in the heart of Sydney Harbour, as Memel, "the place from which you can see far". The Island and its features clearly demonstrate the interaction of its uses over time as an Aboriginal site with natural vegetation, a site of convict labour, an imperial military and Colonial government explosives store, and a maritime authority complex. The interrelationship of the Island's structures, landscape and topographic features and archaeology clearly tell the history of the Island. The Island is closely associated with a long list of prominent historical persons important in Sydney's Colonial and Maritime history, including Bennelong, convicts including Aboriginal convicts and Charles Anderson, Wesleyan missionary George Langhorne, Royal engineer George Barney, Colonial Architects, particularly Mortimer Lewis, and Sydney's harbour masters of the early 20th century

Source: Goat Island Conservation Management Plan Volume 1 2011. Section 5.4 pp203-204.[2]

Significance of the Port Emergency Services Building (PESB)

The PESB is of moderate local significance for its association with the Maritime Services Board and its fire brigade. It is of moderate aesthetic significance as an interesting example of 1960s design, not adversely affected by later modifications. The building also has social significance to both former MSB staff and for its use as a Water Rots film set 1996-2001.

Source: Goat Island Conservation Management Plan 2011 Volume 3 p.142

1.5. References

OEH. Goat Island Conservation Management Plan Vols 1 to 4 June 2011. Endorsed 6 April 2011, under S38A of the *Heritage Act 1977.*

DECC/NPWS. Goat Island, A Contextual History. December 2007.

Tropman & Tropman Architects. 1962 Fire Brigade Barracks, Building 45, Goat Island. Conservation Management Strategy March 2006

Thorpe W, Schwager Brooks and Partners Pty Ltd. Goat Island, Archaeological Survey and Assessment of Historic Sites. September 1985.

Rick E, Schwager Brooks and Partners Pty Ltd. Goat Island, Archaeological Survey and Assessment of Aboriginal Sites Draft. September 1985.

[2] The on-line SHR statement of significance is not quoted as it contains inaccuracies. The endorsed 2011 CMP is accurate and demonstrates a deeper understanding of the island's significance.

Kerr JS. Goat Island, An Analysis of Documentary and Physical Evidence and an Assessment of Significance. MSB 1985.

HLA Environsciences Pty Ltd. Goat Island, Archaeological Management Plan. Unpublished May 2003

Office of Environment and Heritage. Working to Protect Aboriginal Cultural Heritage. December 2011.

1.6. Authorship

This statement has been prepared by Ed Beebe, Senior Project Officer and reviewed by Robert Newton, Principal Project Officer, Greater Sydney Branch, NSW National Parks and Wildlife Service.

2. History

2.1. Me Mel Goat Island

- Me Mel Goat Island would have been one of several hills adjacent to an inland pre-glaciation river valley. Sea level rise of approximately 120m between 18,000 to 6,000 years ago submerged the river valley and created the harbour and the hills became islands.
- Prior to the British annexation of Australia, Aboriginal people had been the sole guardians of the region and had occupied the foreshore and islands thousands of years.
- The island was known to the Wangal people as “Memel” (various spellings), with meanings associated with eyes or vision, and a place from which you can see far.
- Bennelong, who is believed to have been a Wangal man, claimed a hereditary relationship with Me Mel Goat Island. It was reported that Bennelong said that the island belonged to his father. Bennelong was seen frequently with his wife Barangaroo on the island.
- The only surviving evidence of Aboriginal use of the island is a single shell midden. Any other middens have been destroyed by European for lime burning and then subsumed into quarrying, benching and construction which occurred over much of the island.
- One of the earliest European recorded proposals for the island relates to Governor Ralph Darling's possible intention to use the island as a disposal site for waste from prisoners aboard the hulk Phoenix.
- In the late 1820s, whalers sought permission to establish a whaling station on the island. This proposal was rejected by Governor Bourke believing that the island was too important for future defence purposes.
- In May 1831, a quarry was established at the north-eastern tip of the island overseen by the Department of Public Works to supply high quality sandstone for public buildings in Sydney.
- By the early 1830s, the need to safely store gunpowder became a serious problem for the Colonial government. To remove the threat of an explosion in Sydney and centralize the storage of gunpowder, Governor Bourke decided that Me Mel Goat Island would be a suitable gunpowder repository.
- In January 1833, the construction of an Imperial gunpowder Magazine complex (or ordnance depot) commenced in the island’s southwestern corner. By 1838, stone wharves, the Queen’s Magazine, (for the storage of 3000 barrels of gunpowder) first cooperage, compound wall, military barracks, kitchen and privy (demolished), lime kilns and possibly a blacksmith’s shop were complete.

- In October 1835 the Committee of Police and Gaols recommended stationing the Colonial water police on the island's north-eastern tip.
- Captain George Barney ordered a 'wet ditch' to be cut to separate the Water Police Station from the remainder of the island. This ditch was quarried in 1838 and came to be known as "Barney's Cut".
- In June 1838, the Water Police Station was constructed with sandstone quarried from the adjacent "Barney's Cut".
- The island's vegetation was cleared for the Magazine and Water Police Station
- By the 1840s, Me Mel Goat Island principally housed the gunpowder storage facility controlled by the Ordnance Department with the small Water Police Station on the north-eastern tip. The Magazine was guarded by Imperial (British) infantry units from the 1830s and Royal Artillery units by the 1860s.
- In 1853, a Colonial Magazine was constructed to store merchant's powder. Additional bays were completed by December 1859.
- By 1861, there were over 7000 barrels of gunpowder stored on Me Mel Goat Island.
- The Water Police were evicted in 1865 and the station was taken over as a cartridge laboratory and a bridge was constructed across Barney's Cut.
- In 1861-1862 a new stone jetty was constructed on the island's western foreshore and was joined to the two Magazines with a covered way.
- From 1870s to 1900, three small explosive Magazines were constructed elsewhere on the island. They have been demolished.
- From March 1885, the Magazines stopped housing Imperial military explosives and appear to have been the repository for just the Colonial Government's and possibly merchants' powder.
- During 1901- 1902, during an ownership dispute between new Commonwealth Government, NSW Government and Balmain Council, the newly formed NSW Government Sydney Harbour Trust (SHT) established itself on Me Mel Goat Island and constructed its Harbour Master's Residence. Later the SHT constructed several staff cottages, established harbour dredging and firefighting depots and built the first timber wharves on the island.
- In 1907 the Commonwealth Government's claims to the island were weakened when the last obsolete cartridges stored in the Magazine were destroyed. In 1908 the NSW government gained control of the whole of Goat Island with a deal transferring part of Cockatoo Island to the Commonwealth.
- The SHT was in charge of dredging the harbour and all its tugs, barges and dredges were moved to the island. Later, firefighting tugs also used the island as a depot.
- From 1901 to 03, the SHT constructed wharves on the island's north edge comprising the harbour master's jetty, the first ferry wharf and the first broadside wharf with a coal stage and two buildings for stores and workshops.
- After 1901, as the Trust's need for mooring increased, a series of timber wharves were constructed at the northeast, eastern and southwestern access points to the island.
- By March 1902, a depot including a wharf, a substantial two-storey timber workshop and a coal store had been established on the northeast shore of the island, east of Barney's Cut.
- Between 1903 and 1906, a firefighting depot and wharfage was built on the island's northern end, to the west of Barney's Cut, including quarters for a fire captain and crew.
- Between 1901 and 1926, Me Mel Goat Island was transformed into a major shipyard and berth facility with extensive wharves.
- SHT's mooring was concentrated at the north and east wharves. Access to the island was provided at the south end of the Broadside Wharf and at the northern ferry wharf.
- In 1912, a barracks was constructed next to the former Water Police Station for the fire-fighting depot.

- By 1925, there were 27 Harbour Trust Firemen and their families living on Me Mel Goat Island in fifteen cottages and barracks.
- By the end of 1925, the SHT had also moved into the Magazine. The SHT repurposed the old Magazine buildings. The SHT also excavated into the cliff north of the Magazine and filled the foreshore in front to construct a new shipyard.
- The NSW Maritime Services Board was established in 1936 and subsumed the Sydney Harbour Trust. The MSB then took over Me Mel Goat Island as its operational headquarters in Sydney Harbour.
- From 1942 to 1952, the island changed dramatically. Most of the wharves were rebuilt, some extended and new wharves were added. Barney's Cut was partially infilled and more skeleton wharves (now demolished) were added along the island's eastern shore. The overall arrangement now of the island's harbour use is largely based on the MSB's 1940s redevelopment.
- The MSB built the 1943 Ship Repair Workshop, the 1942 southern addition to the Queen's Magazine, the 1945 Repair Workshop and the Amenities Block. The MSB also rebuilt the slipways. In the north-east of the island, the MSB built the 1943 Firefighting building, the 1945 Gear Shed and altered the 1912 Barracks.
- The MSB built recreational facilities, now demolished, for the island's residents: a tennis court and tennis court pavilion, a recreation hall and swimming baths.
- The MSB's use of the island's reached a peak in the 1950's and early 1960's after which there was a gradual decline in the island's usefulness because of the growing use of containerisation.
- The island's wharves were upgraded in 1969 with concrete and steel, including concrete decking which replaced much of the earlier timber decking.
- In July 1994, management was transferred to the NSW National Parks and Wildlife Service (NPWS). In November 1995, most of the island was incorporated into Sydney Harbour National Park. The wharves around the island, the slipways and some of the ship repair buildings were not included in the National Park as the seabed under these structures is owned by NSW Maritime, now Transport for NSW.
- In 1998, the former MSB shipyard was reactivated with a leasing agreement between NPWS and a commercial operator.
- Goat Island has been the venue for several memorable concerts including Midnight Oil, Green Day and Foo Fighters and has been used as a set for a number of television shows, including Water Rats from 1995-2001.

2.2. Former 1962 MSB Fire Brigade Barracks now the Port Emergency Services Building (PESB)

- The site of the PESB was quarried from May 1831 by the Colonial Department of Public Works to supply high quality sandstone for public buildings in Sydney
- A 1943 photo shows the area in front of the 1830s quarry face as vacant, but with a defined seawall.
- A 1951 aerial photo shows at least two undefined structures on the site.
- An MSB plan (C2081) showing elevations and sections of the "New Fire Brigade Barracks" drawn in February 1959 indicates the building was planned.
- The new barracks was constructed in 1960-62 for the single men of the MSB "floating" Fire Brigade (because they fought fires on the water in their fire floats).
- Plans dated 1985 show the conversion of the building into Seamen's Amenities.
- The building was later used for a pollution control centre and as the Port Emergency Services Centre.
- From 1996 until 2001, the PESB was used as the set of the Water Rats television show. The building's exterior and interior were modified for the film set.

- Since Water Rats ended in 2001, the building was used for several years as a workshop (lower floor), on several occasions as a venue (1st floor) and to provide public amenities.
- The building has not been in use for several years.

3. Description

3.1. Me Mel Goat Island

- Me Mel Goat Island is a 5.4-hectare (13.34 acres) rocky island rising in the centre to approximately 20m. The island also has 1.1 hectares of land reclamation
- Like most of the islands of the harbour, the island's geology features shallow skeletal remnant topsoils and subsoils overlaid on Hawkesbury Sandstone.
- The island is crowned with a treed and grassy central north south flat ridge and fringed with a rocky foreshore with cliffs and outcrops.
- Prior to European use of the island, the island was tree covered. Its geology is likely to have supported bushland similar to the reserves on adjacent foreshores, such as Balls Head to the north. Balls Head Reserve has Open Forest/Woodland dominated by *Angophora costata* (Sydney Red Gum) and *Corymbia gummifera* (Red Bloodwood) with lower-growing scrub communities.
- Most of the island's native vegetation was extensively cleared during the nineteenth century. Current vegetation consists of cultural plantings and some regrowth with both exotic and native species.
- The steep edges on the northwestern and southeastern sides of the island were not cleared as they had little value and were difficult to access or use.
- Quarrying, benching, terracing, reclamation and filling have created level platforms in the southwest corner for the 1830s powder Magazine bordered by its fortified wall and the SHT/MSB shipyard. Level platforms were also created the northeast corner for Barney's Cut and for the SHT dredging and firefighting facilities.
- The edges of the island in the northeast and southwest that were more easily accessible were developed. Stone wharves and jetties were first from the 1830s. Extensive timber broadside and finger wharves (including a coal bunker) came after on the island's northern, eastern, and western shores dating from 1901, 1925 and then 1940s, with upgrades made in the 1960s.
- The wharves fronted earlier sandstone stone and later precast concrete seawalls, including some areas of patented Monier precast seawalls.
- Most of the island's timber wharves have been progressively demolished leaving two finger wharves at the island's northern end and the Broadside Wharf at the southwestern corner.
- The west and south of the island contain most of the colonial period development centred on two substantial stone and slate powder Magazines with a nearby stone Barracks and its kitchen outside the wall compound and up the slope to the east.
- The SHT, then MSB, shipyard sits on excavated and reclaimed land in front of the Magazine's original access to the island's western foreshore.
- The shipyard houses a 500T and 150T slipway, two large timber framed repair workshops, one housing two 12T slipways, a 10T hammerhead crane, relocated by the MSB from Morts Bay, as well as smaller extensions, buildings and structures.
- The Colonial Water Police Station sits at the highest part of the northeast of the island next to Barney's Cut and is now surrounded by mostly brick and timber framed SHT and MSB buildings with the northernmost buildings sitting on an apron of reclaimed land.
- The centre of the island features the substantial federation style brick and tile Harbour Master's Residence and four interwar cottages which look east from the island's main

ridge. There are remnants of the Harbour Master's Residence's front garden such as rockeries, flagging and plants. The cottages' front gardens are fenced and terraced. Two cottages are used and two are vacant.

- The island's central level area south of the cottages is now wooded but used to house a SHT interwar recreation hall and a tennis court and pavilion, now demolished.

3.2. Former 1962 MSB Fire Brigade Barracks now the Port Emergency Services Building (PESB)

- The PESB is long rectangular low pitched roofed two-storey building with a split-level ground floor.
- The building faces southeast and sits on flat land in front of the 1830 quarry face on ground that was part quarry bench and part reclaimed land behind a c1940s seawall.
- The ground in front of the building on the eastern side is concreted.
- The area on the remaining sides of the building is grassed with some plantings (some quite overgrown on the western side).
- The PESB is constructed with a steel frame on concrete ground slabs with suspended first floor slabs with pre-cast concrete rear panels, brick and timber internal partitions.
- The exterior is clad with vertical timber boards with sandstone panels on the northern and eastern elevations.
- The building's roof is edged with a deep horizontally metal fascia covering the original shallow timber fascia.
- Doors and windows are timber framed.
- Bridges lead from the island's Magazine path on the higher (western) side of the building to the first floor and the roof-top terrace/observation deck.
- The 1994 alterations for the Water Rats television series were comprehensive and included:
    - The original roof sheeting was replaced by a roof balcony and observation deck with metal balustrading.
    - New steel bridges were added to the rear elevation to connect the roof observation deck and first floor to Magazine Walk. A new rear entry was added to the first floor. The original rear entry was only on the ground floor.
    - A new deep metal fascia replaced the original boarded fascia.
    - A balcony was constructed on the east elevation first floor with concrete stairs to the ground and concrete stairs to the new roof balcony and observation deck.
    - The entry stairs on the east elevation ground floor verandah were altered. The stairs and part of the verandah were enclosed with glazing.
    - New doors were fitted onto the newly constructed verandah.
    - Windows on all elevations were altered or replaced.
    - The building was painted blue and new signs were fitted with, "Sydney Water Police" on the south elevation and "Authorised Personnel Only" on some of the glazed doors.
    - New internal partitions were fitted, since removed.
    - Suspended ceilings were fitted to cover the wood-wool ceiling linings.
    - The interior was refurbished and repainted.
    - The building was soundproofed.

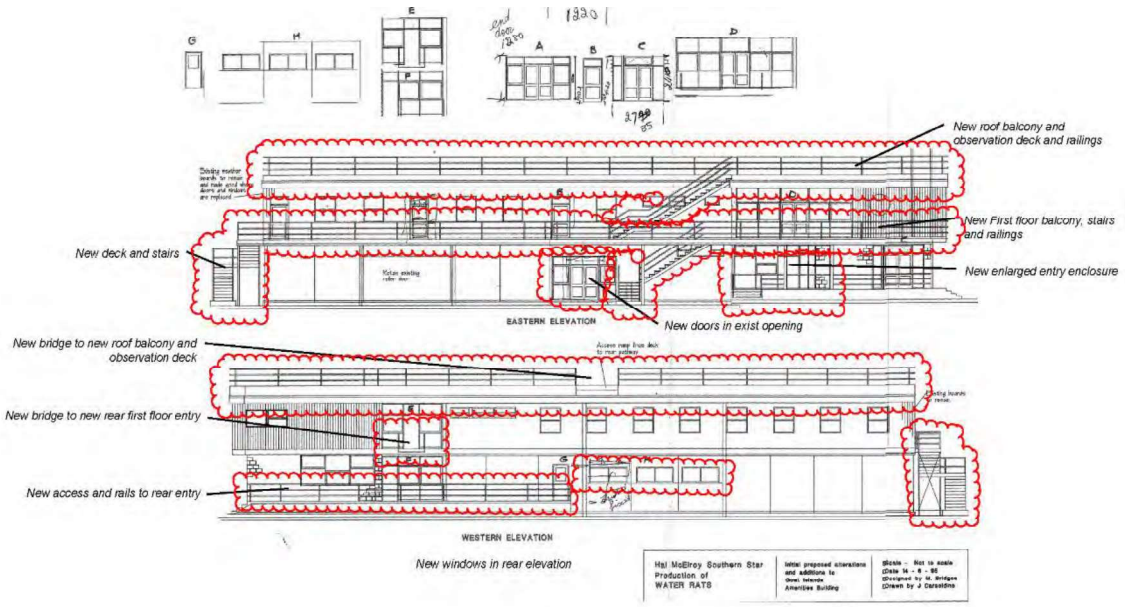


Figure 5 Mark up of the 1994 elevations showin the extent of external alterations for the Water Rats television service. Source: MSB Archives annotated by Author Aug 22

4. Images

4.1. Me Mel Goat Island



Figure 6 Part of a photograph SRC 12220. Circa 1882 photo taken from Sydney Observatory looking northwest towards Goat Island. The Magazine Barracks is discernible on the southern (left) of the island and two small 1870s Magazines are visible. Source: Endorsed CMP from City of Sydney Archives



Figure 7 1892, part of a photograph taken from the North Shore (McMahons Point) looking south. Shows the Water Police Station and the Artillery Sergeant's cottage on the island's northern end. Source: Endorsed CMP from City of Sydney Archives SRC 14960



Figure 8 pre-1885, looking south east to the Magazines, covered way, stone wharf and Barracks. Source: Endorsed CMP, State Library PXA 450 No. 22



Figure 9 1938, looking east over the north of the island from in front of the Harbour Master's Residence. Note the vine covered old Water Police Station. Source: Former MSB Archives. MSBL1868



Figure 10 1939 looking southeast along the island's eastern shore. Source: Former MSB Archives 904497



Figure 11 1940s, looking southeast along the island's eastern shore showing Wharf construction. Note that the 1941 Victory Hall (demolished) sits on high ground in the centre of the island with residential cottages below. Source: SLNSW GPO1-20849

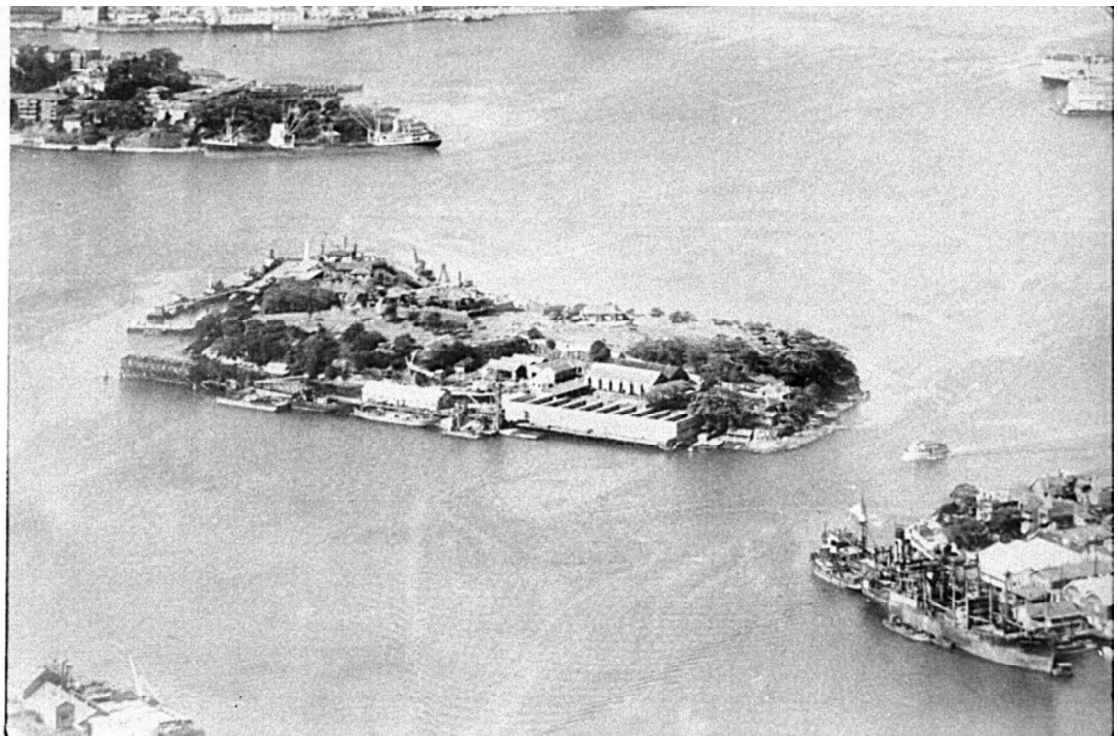


Figure 12 1950s, aerial photograph looking north east over the island. Source: Former MSB Archives File 1072-11



Figure 13 1950s, looking northeast over the shipyard. Source: Former MSB Archives 777009



Figure 14 1960s, birds eye view looking southwest over the northern end of the island. Source: Former MSB Archives 777009



Figure 15 1960s, looking south over the shipyard towards East Balmain prior to the relocation of the Morts Bay crane in 1962. Source: Former MSB Archives MSBL1425



Figure 16 1960s, looking northeast across the centre of the island from the top of the crane. Source: Former MSB Archives 777021-max



Figure 17 1960s, looking east across the centre of the island from the top of the crane. Source: Former MSB Archives 777018

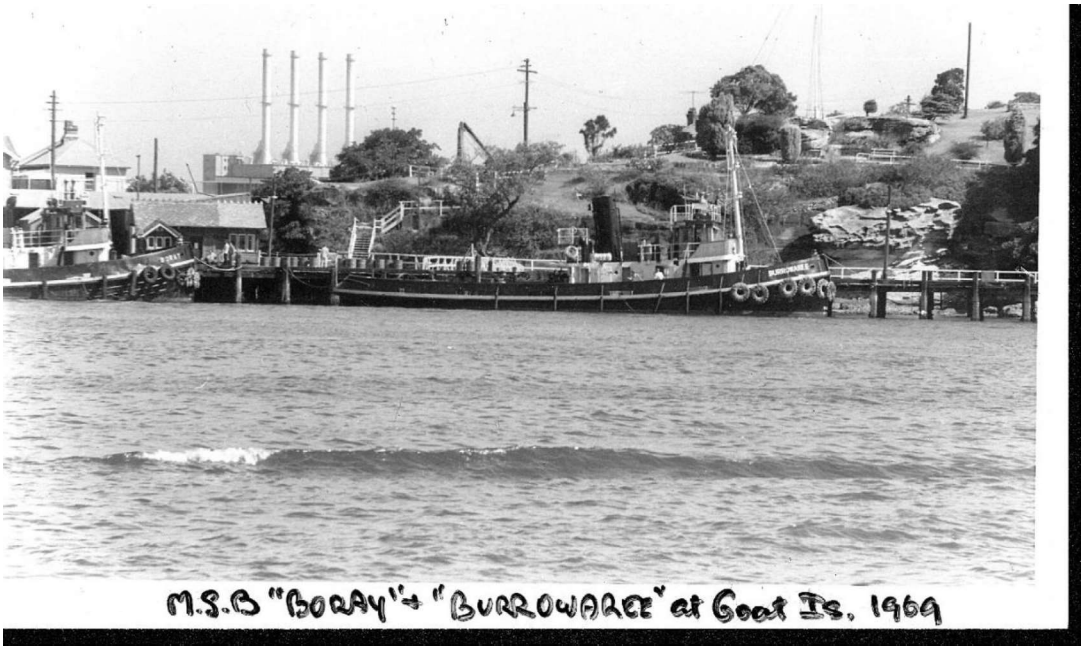


Figure 18 1969, looking southeast to the island's northern shore and its wharves. Source Former MSB Archives.



Figure 19 Current photograph looking from the north with the former Water Police Station on its prominence. The SHT Dredge Office and Gear Shed sit on reclaimed land in the front. The SHT 1912 Barracks sits behind, and the former 1962 MSB Fire Brigade Barracks now the Port Emergency Services Building is beyond. The SHT Harbour Master's Residence and cottages are on the ridge in the far background. Source: NPWS May 2022



Figure 20 Current photograph looking from the southwest showing the shipyard and its Broadside wharf, 2013 pontoon, the Shipyard slipways, crane and 1940s workshops and ancillary buildings in the foreground. The 1830s Magazine within its compound wall is beyond the shipyard. Source: NPWS May 2022



Figure 21 Current photograph looking north showing the Magazine Barracks and its kitchen in the foreground the Magazine compound behind and the shipyard with its largest saw-toothed roof Ship Repair Workshop to the left. Source: NPWS May 2022



Figure 22 A wide view looking from the east showing the island's rocky cliffs and wooded centre, the 1962 MSB Fire Brigade Barracks, now the Port Emergency Services Building, to the right and the former Water Police Station on its prominence further to the right surrounded by SHT buildings on reclaimed land. The Magazine Barracks is visible on the far left with the shipyard buildings behind. The SHT Harbour Master's Residence and cottages are conspicuous on the ridge in the middle of the island. A line of piles from a demolished MSB 1969 skeleton wharf run along the island's eastern foreshore. Source: NPWS May 2022

4.2. Former 1962 MSB Fire Brigade Barracks now the Port Emergency Services Building (PESB)

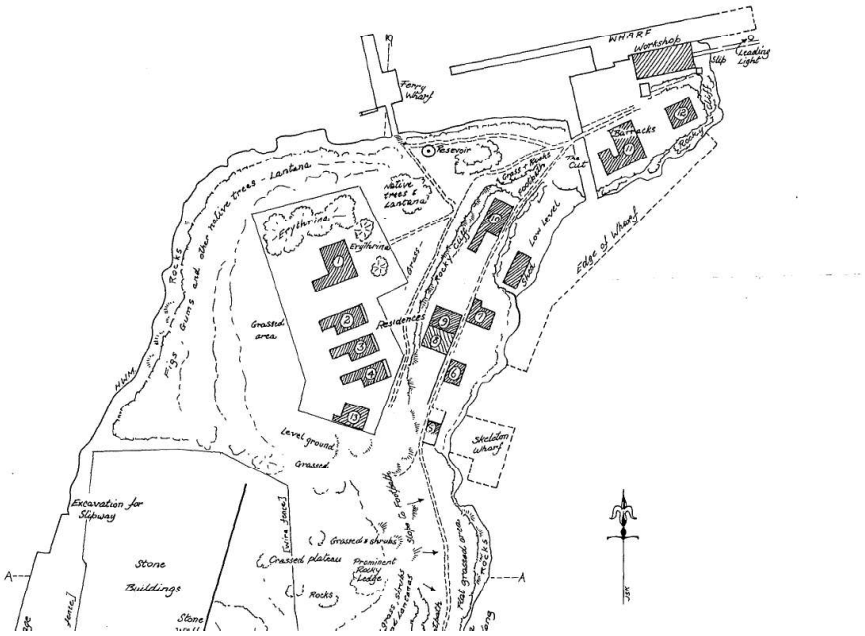


Figure 23 Part of a 1925 plan from Kerr J 1987 p36 showing a shed on the level area where the 1962 Fire Brigade Building now stands. Source: Kerr J Goat Island. An investigation for MSB 1987

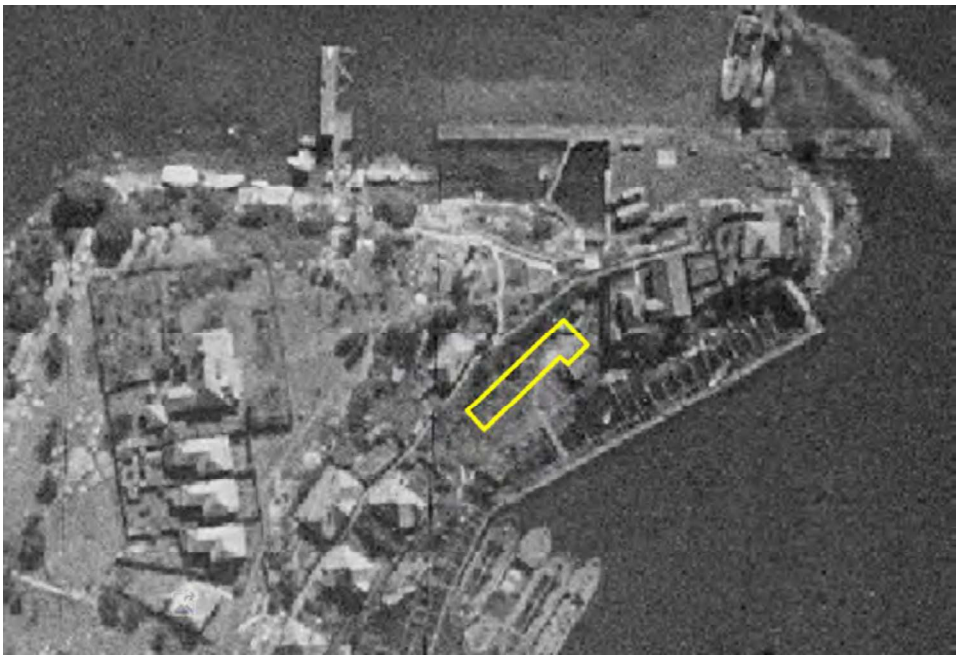


Figure 24 Footprint of the 1962 Fire Brigade Barracks over part of the 1943 aerial showing the future building within a cleared area in the northeast corner of the island backed by a cutting (the 1831-32 quarry Kerr J 1987 p4). Source: www.imagery.nsw.gov.au, annotated by author.

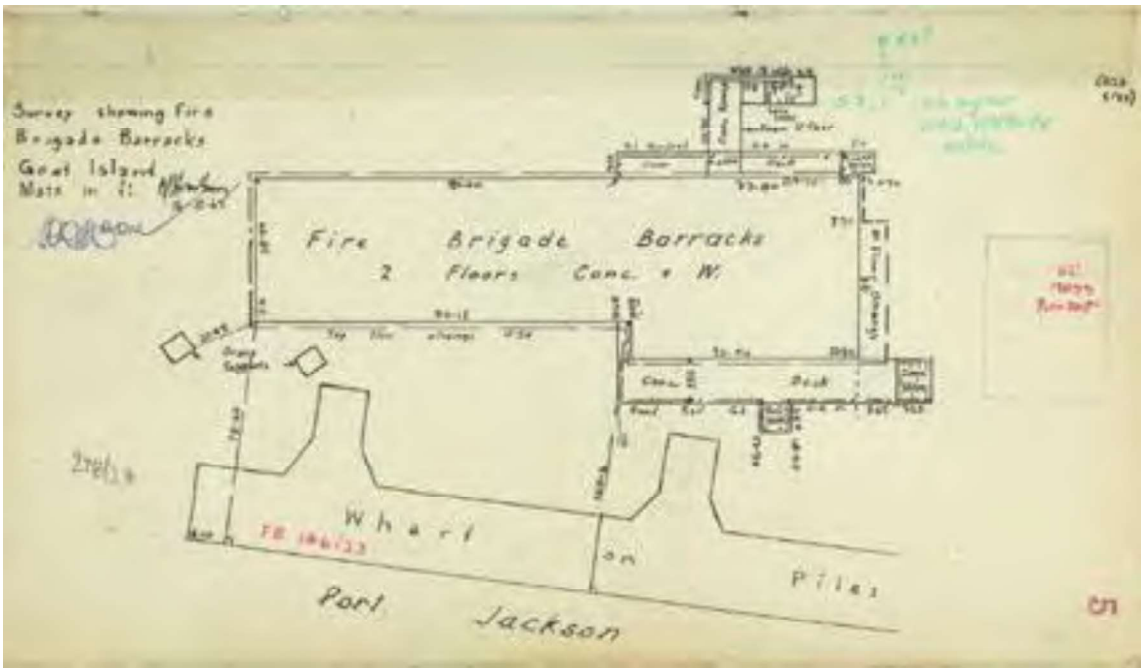


Figure 25 Survey of the Fire Brigade Barracks, October 1963. Source: MSB Field Book 215/5.

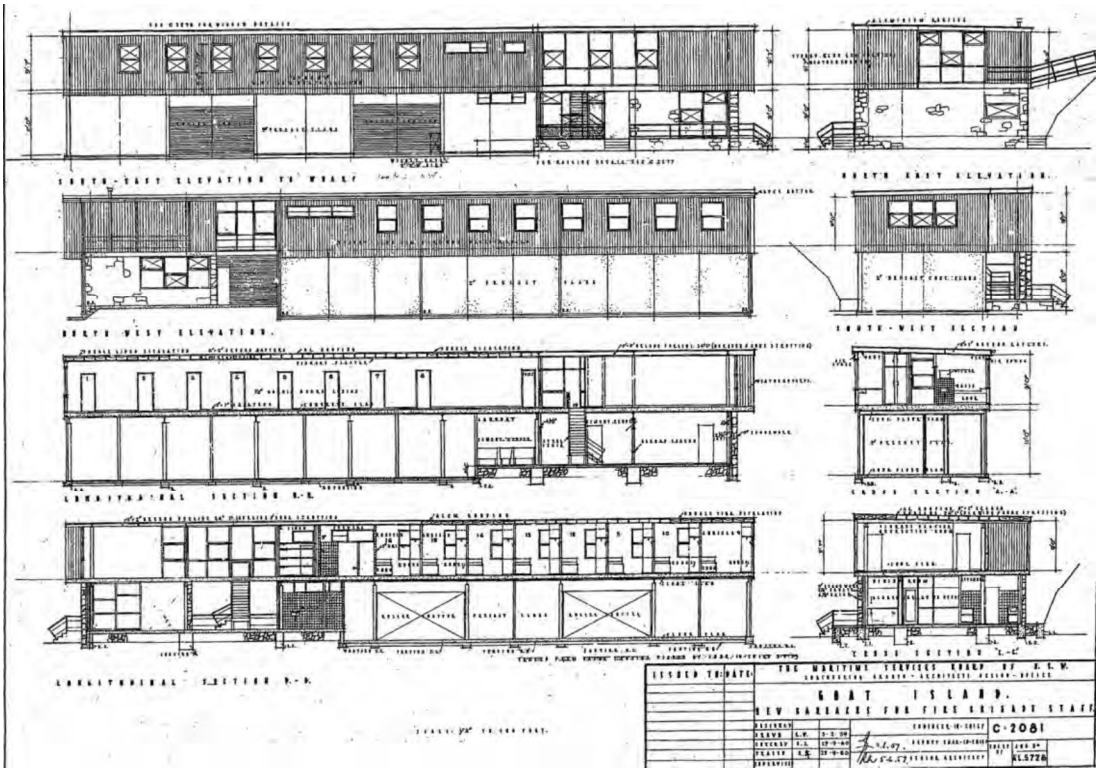


Figure 26 Elevations and sections of the former Fire Brigade Barracks 29.09.60. MSB Drawing No.C2081. Source: Former MSB Archives

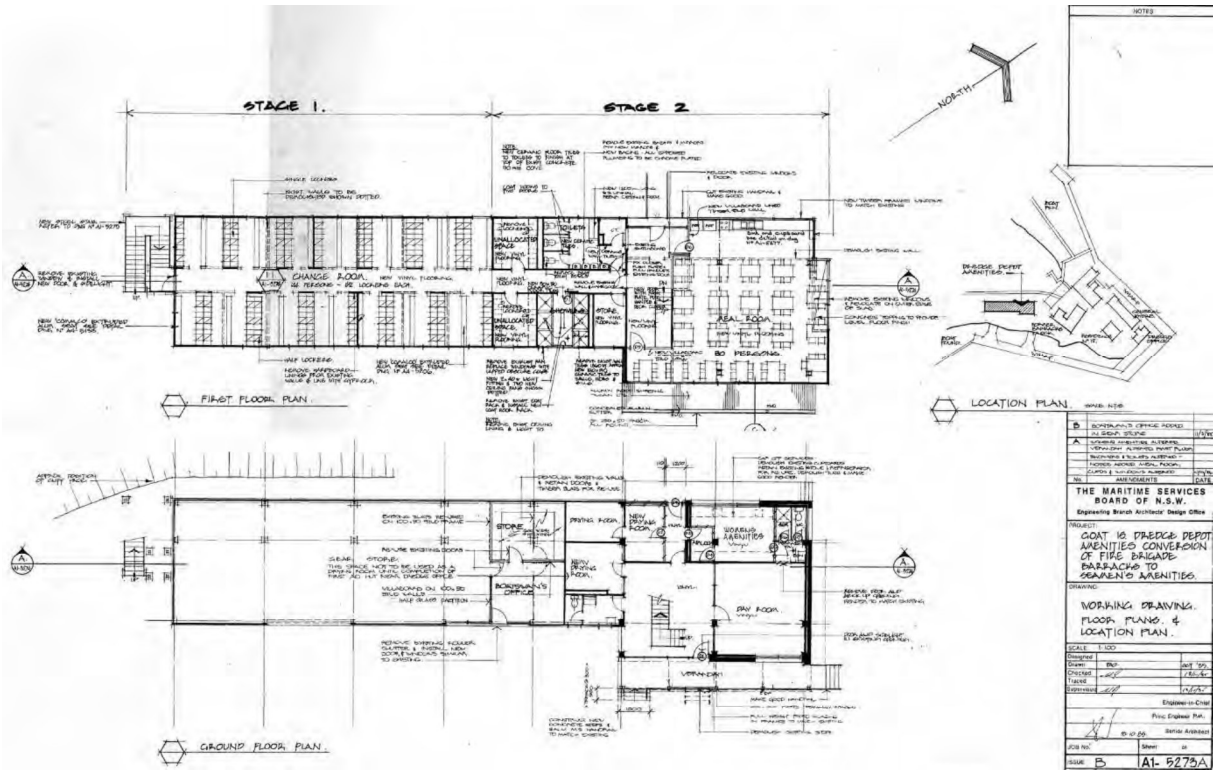


Figure 27 Plan, 1985, shows the changes made to the building when it was converted to Seamen's Amenities for the Dredging Depot staff. MSB Drawing No.A1-5273A



Figure 28 Repairing a vessel in 1972 with the original appearance of the PESB in the background. Source MSB Archives Dredge Depot Goat Island 23031972

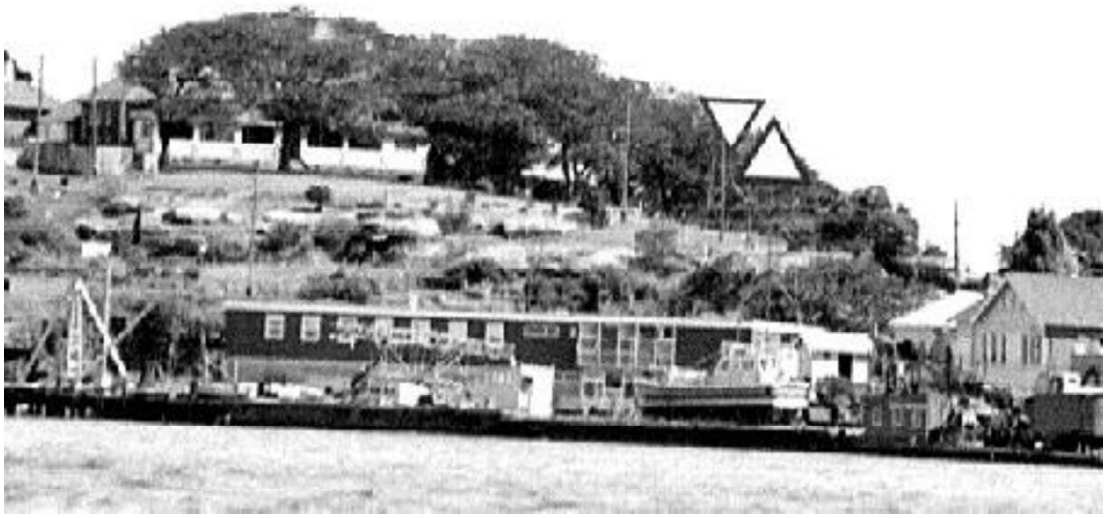


Figure 29 Looking towards the island's eastern shore in 1974 showing the PESB (before the Water Rats alterations) in the middle ground. Source MSB Archives PANDALA, dredge@ Goat Is. 1974. Proof 179-26A.



Figure 30 1983, looking south along the island's eastern shore showing the PESB with its original flat roof, before the Water Rat alterations. Source MSB Archives Proof 757-17a.



Figure 31 East elevation before the work to alter the PESB for Water Rats filming. Source NPWS



Figure 32. Southeast elevation. The deep fascia, roof deck and railings, first floor balcony and railings and the enlarged entry enclosure are Water Rats alterations. Source: Author July 2022



Figure 33. Looking south at the corner of the northeast and southeast elevations. Source: Author July 2022



Figure 34. Looking north at the corner of the southeast and southwest elevations. The timber framed deck is a Water Rats addition. Source: Author July 2022



Figure 35. The southwest elevation. The deck, stairs and doors are Water Rats alterations. Source: Tropman and Tropman 2006



Figure 36. Looking southeast to the northwest elevation. The roof deck, railings, first floor entry and both bridges are Water Rats alterations. Source: Tropman and Tropman 2006



Figure 37. Looking east to the northwest elevation. Source: Tropman and Tropman 2006

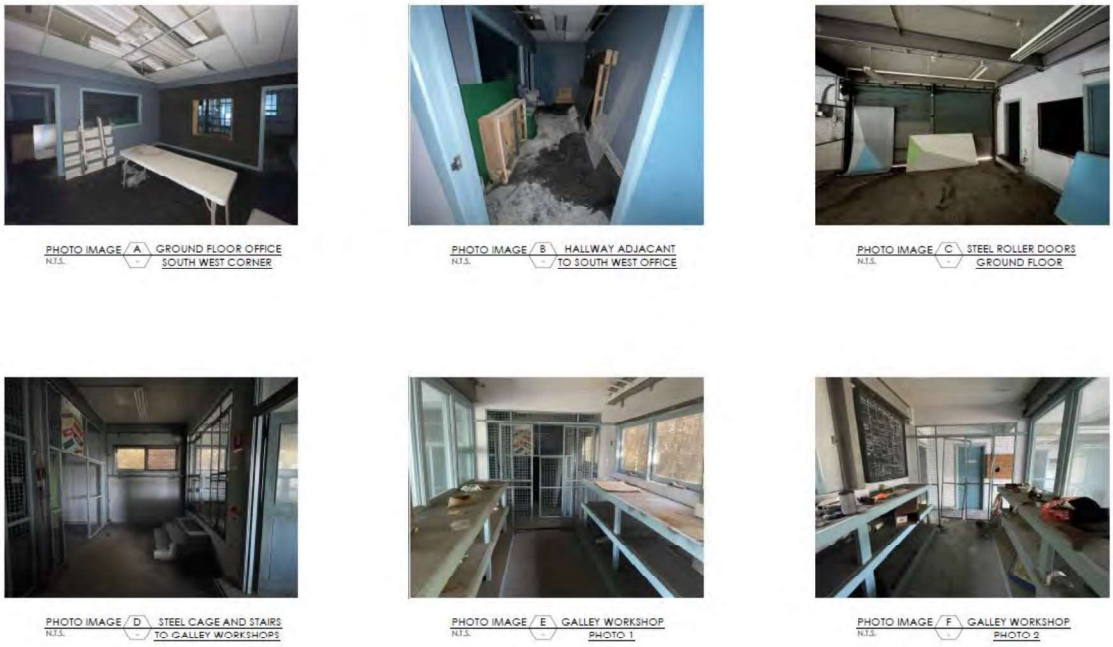


Figure 38. Current interior photographs. Source: Consult Marine Jun 22

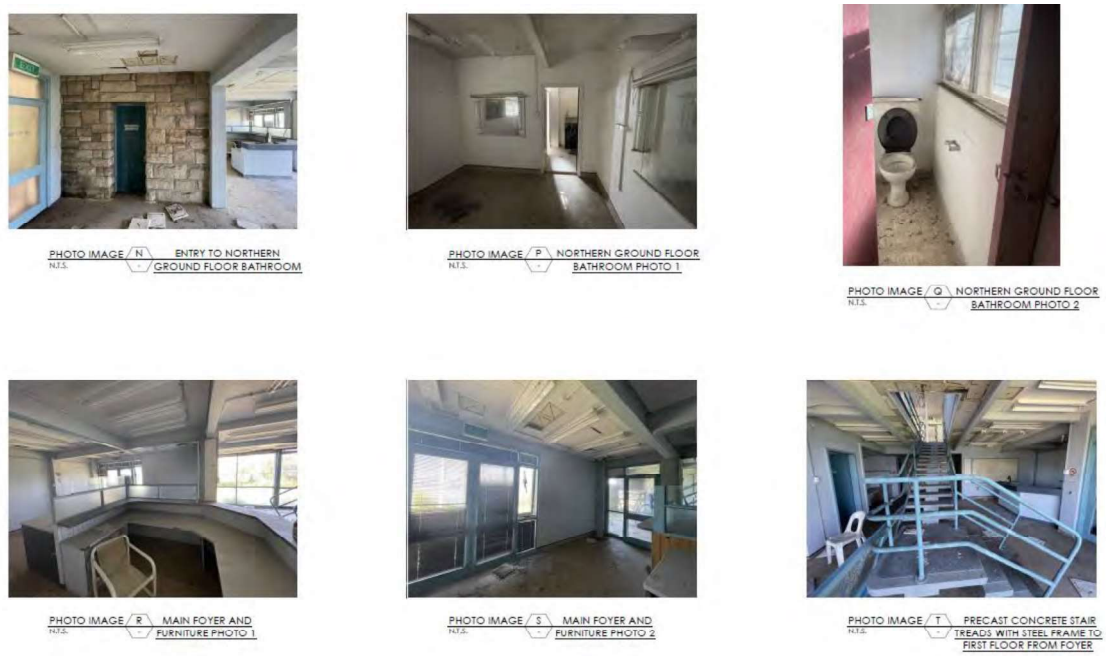


Figure 39. Current interior photographs. Source: Consult Marine Jun 22

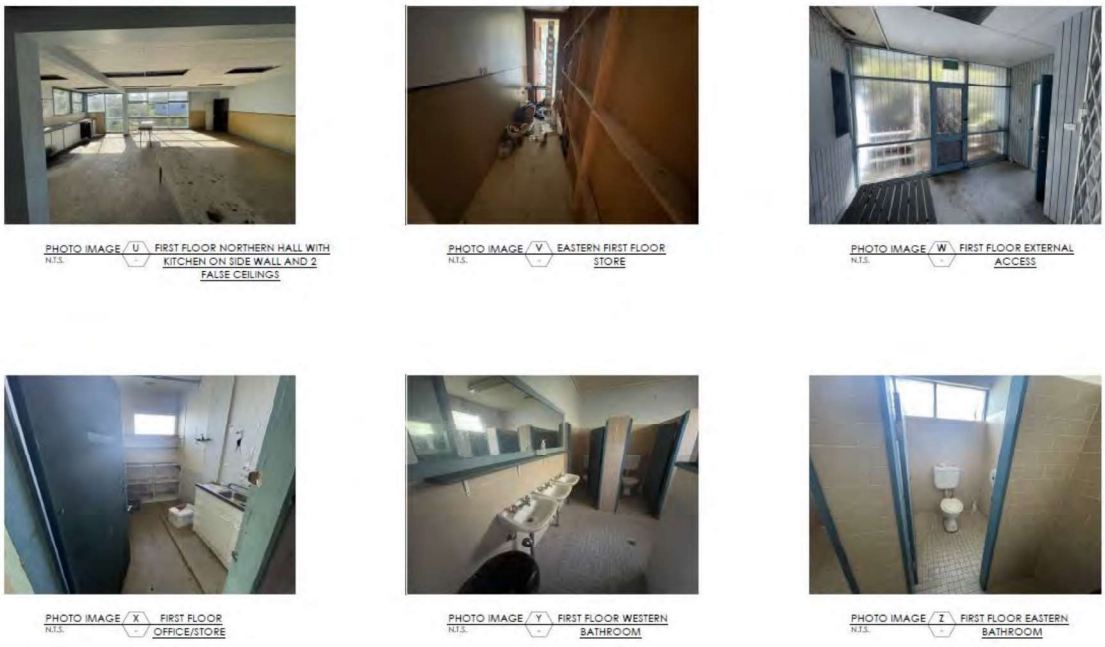


Figure 40. Current interior photographs. Source: Consult Marine Jun 22

5. Proposal

NSW National Parks and Wildlife Service (NPWS) proposes to demolish the Port Emergency Services Building and remove any surface bonded asbestos sheet and lead paint contamination. The building's floor slabs will be retained to control stormwater erosion and to cap the unconsolidated fill that underlies the slabs.

The proposal is shown on drawings by Consult Marine Pty Ltd, Attachment A.

Title: Port Emergency Services Building No 45, Demolition 27 Jul 22.

- 0274-00-001 Title Sheet, Locality Plan and Drawing List
- 0274-00-011 General Notes Sheet 1
- 0274-00-101 Plan of Existing Features & Contractors Working Area
- 0274-00-102 Ground & First Floor Plans
- 0274-00-103 Roof & Exterior Plans
- 0274-00-201 General Arrangement
- 0274-00-301 Photo Details Sheet 1
- 0274-00-302 Photo Details Sheet 2
- 0274-00-303 Photo Details Sheet 3
- 0274-00-304 Photo Details Sheet 4
- 0274-00-305 Photo Details Sheet 5
- 0274-00-306 Photo Details Sheet 6

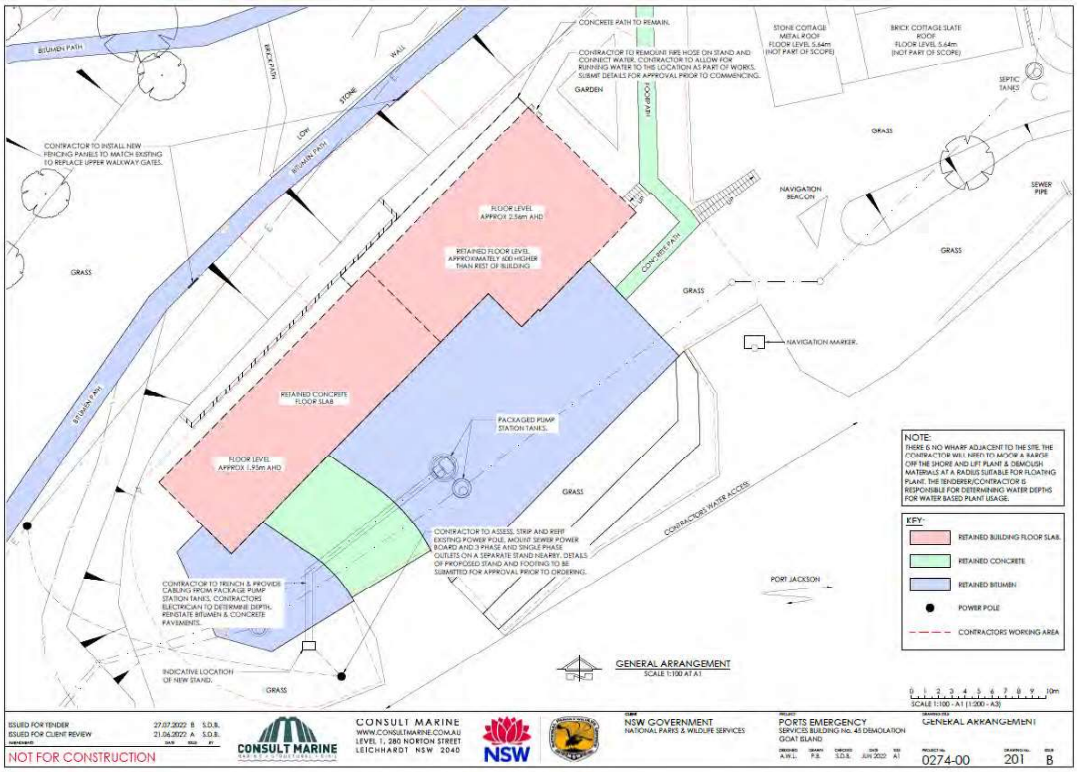


Figure 41. General Arrangement Plan describing proposal. Source: Consult Marine Drawing No 201 27 Jul 22

Item	Material	Approximate Quantity	Units
Suspended First Floor Slab	Reinforced Concrete	50	m³
Ground Floor Workshop Walls	Precast Concrete	8	m³
Steel RSJ Framework	Steel	21	T
Ground Floor Sandstone Walls	Sandstone Blockwork	15	m³
Second Storey Walls (External)	Timber Frame and Cladding, timber framed windows, colour bond cladding	95	lm
First Floor Balcony	Timber Frame with fibreglass coated sheeting & ceiling beneath	125	m²
Roof	Fibreglass Coated Roof Tiles and Frame	320	m²
Roof and Balcony Balustrade	Steel Balustrade	185	lm
Roof Access Ramps	Steel beams with timber joists, steel frame to ground level, fibreglass coated flooring	34	m²
Ground Floor Internal Partitions	Brickwork	54	lm
First Floor Internal Partitions	Mixture of Brickwork and Timber, framed with various cladding types	51	lm
Bathrooms and Wet Areas	Tile walls & floors including wcs, urinals, basins, papertowel disperses, toilet paper holders, bins etc.	40	m²
Temporary Site Fencing	Weldmesh Fencing with temporary feet	35	lm
False Ceilings	Various (incl hangers)	450	m²
External Stairs	Steel frame and Concrete Treads, steel balustrade, webforge grating	30	m²
Internal Stairs	Steel frame and Concrete Treads, steel balustrade, webforge grating	6	m²
Assorted Furniture & Waste	Buckets, steel grates, kayak, freezer, rope, flag poles, steel roof sheeting, internal shelving, hot water heater, desks, drawers, cupboards, boards, sporting equipment, cleaning products, battery acid, lounge chairs, folding tables, steel cage panels (ground floor), signage boards, 2 x roller doors, chairs, raised floor panels, outdoor sink, loose timber, old BBQ, light fittings, doors, windows pipe work, cabling, GPOS, bar heaters, reception counter, Venetian blinds, kitchen benches, zip boil units, general rubbish, etc.	50	m³
Electrical Distribution Boards	Various	2	Ea

Figure 42. List of building elements and materials and estimated quantities for demolition. Source: Consult Marine Drawing No 011, 27Jul 22

6. Assessment of Impact

Built fabric

The proposal involves the demolition of the former 1962 MSB Fire Brigade Barracks, now referred to as the Port Emergency Services Building (PESB). The PESB is a long low two storey steel framed and timber clad former barracks for the MSB's fire fighters that was

comprehensively altered in 1994 to become the set for the Water Rats television series. The building's ground floor slabs will be retained to control stormwater erosion and to cap the unconsolidated fill that underlies the slabs. Local parts of the ground slabs' surface will be repaired to smooth and level surfaces, prevent stormwater ponding, remove obstructions, and prevent trip hazards.

The building, its claddings, fixtures and fittings are in poor condition. This is because the building was constructed by the MSB with lightweight, economical, easily transportable materials that also deteriorate quickly in the marine environment. The building's poor condition is exacerbated by the fact that the building has never had a convincing use that justifies its upkeep since the MSB vacated the island in the early 1990s. Also, the high salt-laden local conditions have accelerated the deterioration of building's linings, claddings, joinery and their finishes. The building's low-pitched roof has always leaked made worse by the post 1994 roof decking and poorly fitted handrails and deep metal fascia. Overall, the 1994 Water Rats alterations are flimsy as they were built as a television set and were not built to outlast the filming. While the building does not constitute an immediate danger now, its deterioration is accelerating due to the difficult local conditions and will become unsafe and inaccessible soon. The bridges providing access from the upper pathway to the first floor have been assessed by an engineer as unsafe, while the balustrade on the roof deck does not comply with Australian Standards.

The demolition of the PESB will not adversely affect the significance of the heritage item, Me Mel Goat Island. The endorsed CMP advises that the PESB demonstrates moderate significance for its association with the MSB fire brigade, as an interesting 1960s design (not adversely affected by later modifications), for its association with former MSB staff and for its use as the set for the Water Rats television series.

The endorsed CMP advises that the PESB is not rare. It is just one of over 80 buildings or structures on the island that chronicle the island's history, first as a Colonial Magazine, then a Sydney Harbour Trust and a Maritime Services Board depot. The PESB is one of the most recent and the most prosaic addition to the island. Its bespoke layout as a barracks with both large and small rooms does not easily support flexible uses unlike the efficiencies inherent in the large open plan Ship Repair Workshop.

The demolition of the building will not involve the loss of any rare or interesting construction techniques or materials as the building is a matter of fact, prosaic 1960s municipal style steel framed and timber clad mid-twentieth century building which is still common throughout Sydney and NSW.



Before Water Rats alterations 1974



After Water Rats alterations 2008

Figure 43 Looking west to the PESB's main elevation illustrating the impact of the Water Rats alterations on the building's appearance. The new deeper fascia and new roof decks and balconies substantially change its appearance as well as enlarging its apparent size and complexity. Source MSB Archives PANDALA, dredge@ Goat Is. 1974. Proof 179-26A and NPWS 2008

The endorsed CMP advises that the 1994 Water Rats alterations did not adversely affect the building's appearance. This is refuted and it is asserted that the 1994 alterations did substantially alter the building's 1962 appearance. Faux maritime-style encumbrances were added throughout the building in 1994 covering up an otherwise conservative and austere mid twentieth century design. In particular, the deeper fascia, roof decks and balconies substantially changed the building's appearance significantly enlarging its apparent size, complexity and prominence.

Demolition

Section 63(2)[3] ***Where:***

a) an application for approval is made to demolish the whole of a building or work, or

b) an application for approval is made which would, if it were approved, necessitate the demolition of the whole of a building or work,

the approval body shall determine that application by refusing approval.

(3) Nothing in subsection (2) prevents the approval body from approving an application referred to in that subsection if:

[3] Heritage Act 1977

a) it is of the opinion that the building or work constitutes a danger to the users or occupiers of that building or work, the public or a section of the public, or
b) it is a condition of the approval that the building or work be relocated on other land, or
c) the building or work is situated (whether wholly or partly) in a place or precinct that is an item of State heritage significance, but is not itself such an item, and the approval body is of the opinion that the demolition of the whole of the building or work will not have a materially detrimental effect on the heritage significance of the place or precinct

The proposal involves the demolition of the PESB. The endorsed CMP maps and grades significance (CMP page 95 and reproduced in this report as Fig 4). The PESB is graded in the CMP as demonstrating moderate significance and its condition is recorded as fair in 2011. Since 2011 the building's condition has deteriorated and is now poor.

Demolition of the PESB is addressed under S63(3), as follows:

a) it is of the opinion that the building or work constitutes a danger to the users or occupiers of that building or work, the public or a section of the public, or	The PESB, its claddings, fixtures and fittings are in poor condition. This is because the building was constructed by the MSB with lightweight, economical, easily transportable materials that deteriorate quickly exacerbated the fact that the building has never had a convincing use since the MSB vacated the island in the early 1990s that justify its high maintenance. Also, the high salt-laden local conditions have accelerated the deterioration of building's linings, claddings, joinery and their finishes. The 1994 Water Rats alterations were built as a television set and are generally flimsy as they were not built to outlast the filming. The building's low-pitched roof has always leaked made worse by the post 1994 decking, handrails and fascia. While the building does not constitute an immediate danger now, its deterioration is accelerating due to the difficult local conditions and will become unsafe and inaccessible soon.
b) it is a condition of the approval that the building or work be relocated on other land, or	The building cannot be relocated away from its current position. Its lightweight structure covered by lightweight sheet and boarded claddings and linings would have to be painstakingly disassembled. This is not justifiable as its structure is not rare or unique to justify relocation. Its structure is commonplace and similar to many lightweight mid twentieth century administrative buildings found elsewhere in Sydney and NSW. On the other hand, the building's configuration is bespoke to its position in the former MSB's southern depot and placing the building at another location would remove its legibility and meaning.
c) the building or work is situated (whether wholly or partly) in a place	Demolishing the PESB would not have a materially detrimental effect on Me Mel Goat

or precinct that is an item of State heritage significance, but is not itself such an item, and the approval body is of the opinion that the demolition of the whole of the building or work will not have a materially detrimental effect on the heritage significance of the place or precinct	Island's significance. The endorsed CMP attributes moderate significance to the building as it dates from the mid Maritime Services Board occupancy of the island and not from the island's nineteenth century colonial period, which is the principal reason for the island's significance. The PESB is not significant for its fabric or unusual configuration. It is a matter of fact, simply constructed open planned administrative building with no unique or noteworthy features. Also, it is asserted that the 1994 Water Rats alterations significantly altered the simple original building concealing it under faux maritime encumbrances as a television set for the invented headquarters of the Sydney Water Police

In light of the justifications listed above, this report submits that demolition of the PESB meets the threshold of S63(3)(c), that the Heritage Council could approve demolition under S63(2).

Views and setting

Figure 5.6 of the endorsed CMP sets out significant views for Me Mel Goat Island.

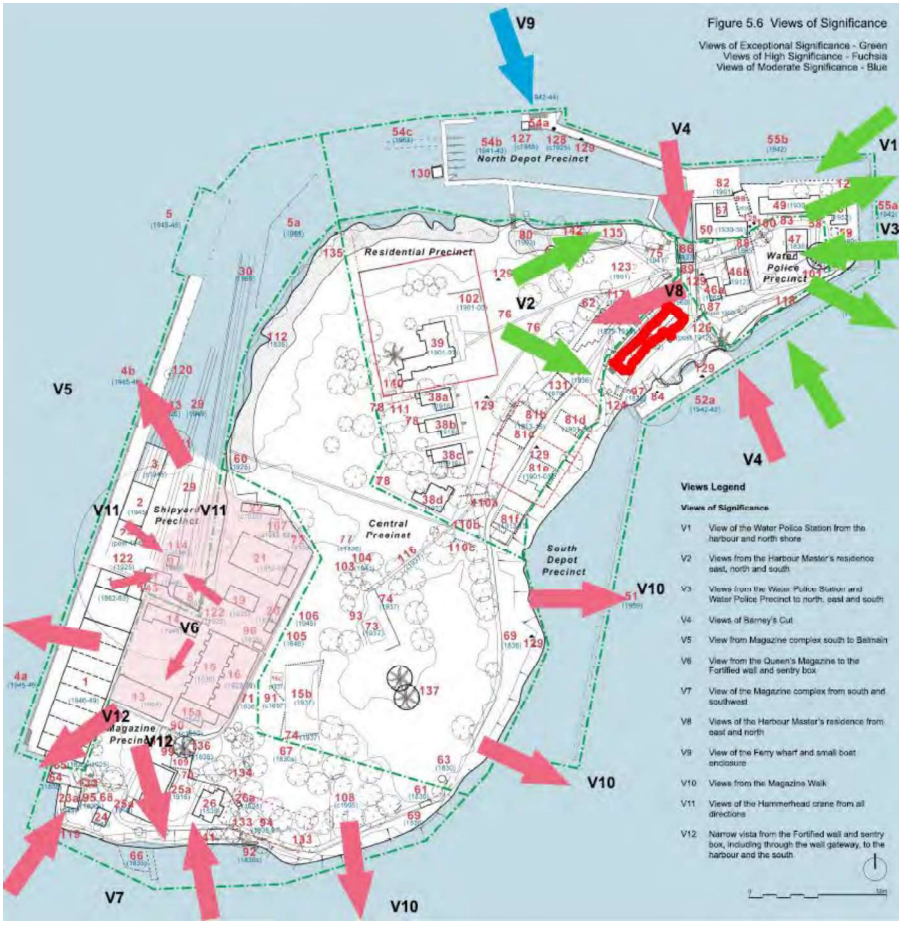


Figure 44 Significant views. Source Endorsed CMP Vol 1 Fig 5.6

The endorsed CMP p273 advises that the building has an adverse visual impact on the north end of the island and the Water Police precinct by its scale, size and colour. The building and the reclaimed land partially obscure the southern side of Barney's Cut. The CMP advises that it is acceptable to remove, partial remove or modify the building to lessen its impact.

The PESB is in the vicinity of views described in the endorsed CMP, such as V2 from the Harbour Master's residence to the north and east, V4 to Barney's Cut from the southeast and V8 to the Harbour Master's Residence from the northeast. The loss of the PESB will not be noticeable in V2 and V8 as they are above and behind the building which sits in a low point backed by the 1830s Colonial quarry face. The PESB is on the periphery of V4 which is focused on Barney's Cut. In fact, the demolition of the PESB will be an improvement to this significant view. Its demolition will re-establish the longstanding historical visual connection between the 1830s quarry face currently hidden behind the PESB and Barney's Cut which was made in 1837, just 5 years after the Colonial quarry. This visual connection between the two quarried features existed for 137 years until the PESB was built in 1960s and obscured the quarry face.

In terms of setting, the endorsed CMP inventory sheet advises that the PESB does not relate to other structures on the island being uncharacteristically large. While its original long and low 1962 appearance was modest, its post Water Rats appearance has always been thought of as too prominent and ungainly marring the composition of the island's eastern shore.

Landscape and Natural Heritage

The proposed demolition of the PESB will not involve an impact to any of the island's landscape or natural heritage elements.

Curtilage

The proposed demolition of the PESB does not involve any alteration to Me Mel Goat Island's curtilage.

Use

The demolition of the PESB does not involve a change to the use of the island as a National Park. The PESB has been unused since 2001 and has not had a convincing use since the MSB vacated the island in the 1990s, albeit as a set for 6 years for the Water Rats television series.

It always been and is still difficult to find a suitable use for the awkwardly planned and sited PESB being in a low point and not easily accessed from the island's main Magazine path. While the building's larger rooms suggest uses involving large groups of people, the building's awkward location in a cul-de-sac below the island's main pedestrian path hampers direct and efficient equal access.

Concerning public access, demolition of the PESB would open up the area in front of the 1930s quarry face for larger groups to gather in one of the island's few level foreshore areas allowing visitors to appreciate the island's eastern aspect.

Aboriginal archaeology and Cultural Heritage Associations

The proposed demolition of the PESB will not affect any Aboriginal archaeology or any cultural heritage associations. The PESB is not associated with any past or present Aboriginal community and any the impact of any excavation will be minor being within existing service trenches.

The PESB, as a former MSB mid twentieth century barracks and administrative building, has no Aboriginal tangible or intangible associations. Communities do not have any association with the 1960s administrative building or any of its functions as a MSB barracks, for port emergency services and as a set for the Water Rats.

The Office of Environment and Heritage (OEH) published the Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 addressing Part 6 National Parks and Wildlife Act 1974 for activities involving Aboriginal Heritage Impact Permits (AHIP). As an AHIP under S90 of the NPW Act 1974 is not required for this activity the requirements do not have to be addressed in this statement. Nevertheless, for thoroughness, the OEH statement of five principles to guide the inclusion of the rights and interests of Aboriginal people into its work will be described.

The five Aboriginal People, the Environment and Conservation (APEC) principles are[4]. ‘

1. Spirituality and Connection
2. Cultural Resource Use
3. Wellbeing
4. Caring for Country
5. Doing Business with Aboriginal People

There is no Aboriginal spiritual connection with the PESB, no former or current cultural use and the building does not support the wellbeing of any Aboriginal communities. Instead, the PESB building undermines the caring for country principle. Unlike its smaller, more inconspicuous, neighbours, the PESB is large and conspicuous placed right on the island’s eastern foreshore. The awkward PESB disfigures one of the island’s significant natural aspects, the view from between Dawes Point and Milsons Point to the island’s eastern sandstone cliffs and its bushland crown. Removing the PESB will offer a positive result for the caring for country principle as it will unblock the view and re-establish the importance of the island’s topography and vegetation in this part of the island.

Historical Archaeology

The endorsed CMP identifies areas of known and high archaeological potential Vol 1 Fig 5.5, below. Also, the Thorpe W, Schwager Brooks and Partners Pty Ltd. Archaeological Survey and Assessment of Historic Sites 1985 identifies historical archaeological sites across the island. The PESB is not within an area of known or high archaeological potential in the endorsed CMP or near to any of the sites identified in 1985.

No excavation is proposed to demolish the PESB itself. The PESB’s existing ground floor slabs will be retained to control stormwater erosion and to cap the unconsolidated fill that underlies the slabs. A short trench is proposed to reposition the existing fire hydrant close to it current position fixed to the building’s northern corner. The fire hydrant will be free-standing in almost the same location after demolition.

[4] Office of Environment and Heritage. Working to protect Aboriginal Cultural Heritage. December 2011

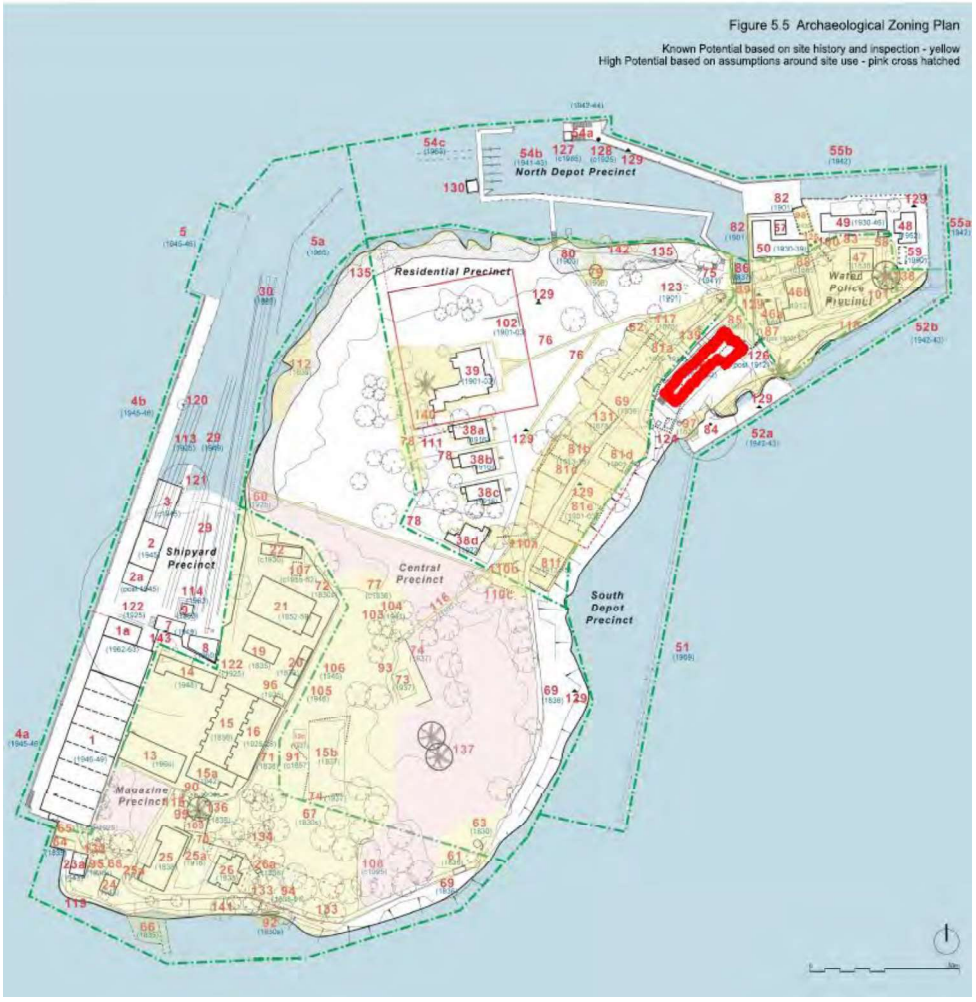


Figure 45 Figure 5.5 from the endorsed CMP showing areas of high archaeological potential, yellow and pink. The area affected by the PESB demolition in the eastern corner of the island is shown. Source: Endorsed CMP

Some tidying up work is required to maintain the services which are housed in the PESB and need to be relocated to the area east of the PESB. Most of the area east of the PESB was comprehensively excavated in 2003 to fit new septic tanks, plumbing, electrical and comms lines.

For the existing underground sewer tanks on the eastern side of the PESB, new cabling will be trenched in an existing trench from package pump to over the tanks. This cabling will replace the cabling removed from the control box which is inside the PESB.

Also, a new low steel stand will be erected next to existing power pole to support a new electrical distribution board approx. 600Hx600Wx300D. The distribution board will replace the PESB mains board and will maintain its use to provide power for the sewer pump as well as for events held in this part of the island.

Any trenching will be minor, will be within existing service lines and will not disturb un-dug ground.

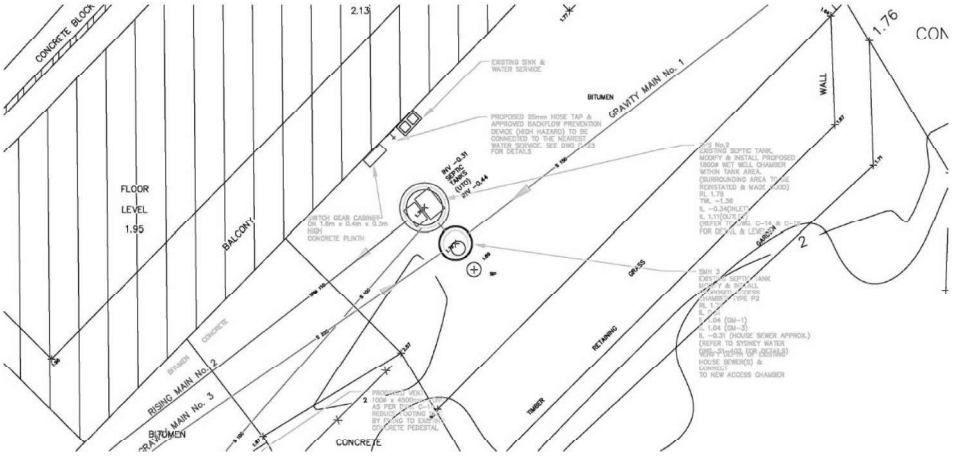


Figure 46 Part of a plan of the 2003 sewer upgrade works showing the extent of excavation in the area east of the PESB for the septic tanks, plumbing, electrical and comms lines. Source: NPWS Archives

A separate archaeological assessment was not undertaken for this application as the proposed demolition, retaining the ground slabs, will not have an impact on the island's historical archaeological resources.



Figure 47 Looking north along the PESB's main elevation under the 1994 Water Rats balcony showing the existing ground slabs which will be retained. Source: Author Apr 22

Consultation

NPWS is not required under the NPW Act 1974 or its policies to consult with communities for this modest activity which involves the demolition of just one moderately significant dilapidated and redundant mid twentieth century building within a site that contains over 80 buildings and structures.

The NSW Government has established a Premier's Priority Project Steering Committee. The committee contains senior officers who represent:

- Sport, Arts and Tourism group of Dept of Enterprise, Industry and Trade

- Aboriginal Affairs
- Dept of Premier and Cabinet
- NPWS
- Heritage NSW
- Ministers for Environment (Hon James Griffin MP) and Aboriginal Affairs (Hon Ben Franklin MP)

The steering committee kept up to date on the progress of the Me Mel Remediation program and is aware of the proposal to demolish the PESB and supports this activity.

Associations and interpretation

The endorsed CMP advises that the PESB has some significance for its association with former MSB staff and for being the set for Water Rats television series. It is submitted that, while the building has been the site for these uses, its impractical layout and siting, its awkward post Water Rats appearance, exacerbated by its poor condition, make it impractical and unreasonable to keep the building just for these associations. While the demolition of the PESB will remove some physical evidence of these associations, it is argued that the MSB associations are better evidenced elsewhere on the island in the numerous other MSB ship repair and harbour depot buildings and structures. The Water Rats associations are also more evocatively and permanently evidenced in the footage of the television series itself.

No interpretation design or media is proposed for the demolition of the PESB. It would be premature and inappropriate to propose piecemeal interpretation on the island before the Aboriginal Transfer Committee is convened. The committee will want to be involved in the development of an informative and sensitive island wide approach to interpretation.

The PESB will be fully archivally photographed prior to demolition in accordance with Heritage Council of NSW guidelines.

Section 62 (c1)[5] any applicable conservation management plan (within the meaning of section 38A) endorsed by the Heritage Council

The Goat Island CMP prepared by the Office of Environment and Heritage was endorsed by a delegate of the Heritage Council of NSW in 2011.

Compliance with the CMP polices that are relevant to this proposal is set out in the table below.

Policy	CMP Policy	Compliance
1	Improve and extend public access	Can comply. Demolition of the PESB will not impede public access to the island. Demolition of the PESB opens up the area in front of the 1930s quarry face for larger groups to gather in one of the island's few level foreshore areas to appreciate the island's eastern aspect.
5	Removal to recover Colonial (exceptional) significance	Can comply. Demolition of the PESB will reveal the 1830s Colonial quarry face and provide enhanced visual appreciation of Barney's Cut which separates the Water Police station from the main island.

[5] Heritage Act 1977

		(The decision to remove the PESB is not underpinned by a current masterplan but is necessary to facilitate the safe and pragmatic transfer of the island to Aboriginal ownership and management).
Table 7.2	Uses, PESB, p256.	Can comply. The CMP policy advises that the building may be removed if a suitable use not found. This report sets out why it has always been and is still difficult to find a new use for the awkwardly planned and sited PESB. While the building's larger rooms suggests uses involving large groups of people, the building's awkward location in a low point below the island's main pedestrian path hampers access.
Table 7.6	Interpretation, consider the island as a whole.	Can comply. The building's MSB associations are better evidenced elsewhere on the island in the numerous other MSB ship repair and harbour depot buildings and structures.
Table 7.7	Undertake urgent conservation work, with priority to elements of exceptional significance.	Can comply, The PESB has been assessed as not demonstrating exceptional significance, only moderate significance.
Table 7.9, V4	Reclaim views of Barney's Cut from 1837.	Complies. The PESB partially blocks the 1837 view. Demolition of the PESB will open the 1837 view.
Table 7.9, 45	Management of the PESB to enhance significance	Complies. The endorsed CMP advises that the PESB has an adverse visual impact as it partially obscures Barney's Cut. The CMP advises that it is acceptable to remove, partial remove or modify the building to lessen its impact.
Table 7.10	Enhancing significance, steps to minimise impact.	Can comply. Removing the moderate significant PESB will recover the significance of Barney's Cut and its association with the 1830's Colonial quarry face
Table 7.18	Conserve and protect archaeological resource	Complies. No excavation is proposed to demolish the PESB itself. Any trenching for the relocated fire hydrant, the sewer tanks control box and the new electrical distribution board will be minor, will be within existing service lines and will not disturb un-dug ground.
Table 7.19	Conserve Aboriginal sites	Complies. No sites are affected by the proposal.
Table 7.21	Retain, manage and enhance exceptional and high significance views	Complies. Demolition of the PESB will recover the view to the 1830s quarry face and its association with Barney's Cut. The view of the harbour from the lawns

		immediately above the budling will be greatly enhanced.
Table 7.22	Movable heritage	Complies. The PESB does not contain or house any movable heritage.

Sydney Harbour National Park Plan of Management (PoM)

The Sydney Harbour National Park Plan of Management (PoM) which includes Me Mel Goat Island was adopted under S73b of the NPW Act 1974 on 1 December 2012. The PoM was publicly advertised for 3 months prior to being adopted.

The PoM advises that the PESB has an adverse visual and operational impact and detracts from the island's heritage values and significance[6]:

7. Conclusion

This statement supports an application under S60 of the Heritage Act 1977 by NSW National Parks and Wildlife Service (NPWS) to demolish and remediate the site of the former 1962 MSB Fire Brigade Barracks, now the Port Emergency Services Building (PESB). The PESB is a long low two storey steel framed and timber clad former barracks for the MSB's fire fighters that was comprehensively altered in 1994 to become the set for the Water Rats television series. The building will be demolished to its ground floor slabs which will be retained to control stormwater erosion and to cap the unconsolidated fill that underlies the slabs.

The proposal will not have an adverse impact under S62(1)(a) of the Heritage Act 1977 on the significance of the heritage item being Me Mel Goat Island as follows.

- The proposal will not involve the loss significant fabric, will not affect the island's curtilage, landscape or natural heritage.
- No change of the Island's use is proposed, noting that the PESB has not had a viable use since 1994 when the MSB vacated the island.
- The proposal will not adversely affect significant views and settings identified in the endorsed CMP.
- There is no impact on Aboriginal archaeological site or associations.
- The PESB is not within an area of known or high archaeological potential or near to any of the sites identified in 1985. No excavation is proposed to demolish the PESB itself. Any associated trenching will be minor, will be within existing service lines and will not disturb un-dug ground. A separate archaeological assessment was not undertaken for this application. The proposed demolition will not have an impact on the island's historical archaeological resources.
- The demolition of the PESB meets the threshold of S63(3)(c), that the Heritage Council could approve demolition under S63(2).

8. Attachments

A Drawings by Consult Marine Pty Ltd. Port Emergency Services Building No 45, Demolition 27 Jul 22

B Port Emergency Services Building No 45, Inventory Sheet, 2011 CMP

[6] Sydney Harbour National Park, Plan of Management p178

Appendix E – Principles of Ecologically Sustainable Development

1. **The precautionary principle –** that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
2. **Inter-generational equity –** that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.
3. **Conservation of biological diversity and ecological integrity –** should be a fundamental consideration [of the decision to undertake the activity].
4. **Improved valuation, pricing and incentive mechanisms –** that environmental factors should be included in the valuation of assets and services, such as:
   (i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
   (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
   (iii) environmental goals, having been established, should be pursued in the most cost-effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

ESD Principle	Application to the Project
Precautionary principle	It is proposed that the dilapidated and dangerous PESB is demolished to remove risks associated with the building's hazardous materials, and the safety risks this [and the state of the building itself] pose to safety. Demolition of the PESB will improve the park's natural values by improving views to the eastern side of the island and helping to restore the natural appearance of the island.
Intergenerational equity	The proposal is part of the island wide remediation program to ready MMGI for its transfer to Aboriginal ownership and management.
Conservation of biological diversity and ecological integrity	The conservation of biological diversity and ecological integrity have been assessed within this REF, within the impact assessment of Section 9.
Improved valuation and pricing of environmental resources	NPWS recognises the value of environmental resources and aims to minimise the impact of its activities by ensuring that appropriate mitigation measures are implemented for all aspects of the proposal.

Appendix F – Section 60 approval letter

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Heritage NSW

HMS Application ID: 1492

Mr Edmund Beebe
NSW National Parks and Wildlife Service
12 DARCY ST
PARRAMATTA NSW 2150

By email: ed.beebe@environment.nsw.gov.au

Dear Mr Beebe

APPLICATION UNDER SECTION 60 OF THE *HERITAGE ACT 1977*
Goat Island
STATE HERITAGE REGISTER N º 00989

Address:	GOAT ISLAND NSW 2477
Proposal:	Me Mel Goat Island - Demolition of Port Emergency Services Building
Section 60 application no:	HMS ID 1492, received 19/09/2022

As delegate of the Heritage Council of NSW (the Heritage Council), I have considered the above Section 60 application. Pursuant to section 63 of the *Heritage Act 1977,* approval is granted subject to the following conditions:

APPROVED DEVELOPMENT

1. All work shall comply with the information contained within:
   a. Architectural drawings, prepared by Consult Marine as listed below:

Dwg No	Dwg Title	Date	Rev
Project Name: Ports Emergency Services Building No. 45 Demolition Goat Island			
001	Title Sheet, Locality Plan and Drawings List	27.07.2022	B
011	General Notes	27.07.2022	B
101	Plan of Existing Features & Contractors Working Area	27.02.2022	B
102	Ground & First Floor Plans	27.07.2022	B
103	Roof and Exterior Plans	27.07.2022	B
201	General Arrangement	27.07.2022	B
301	Photo Details Sheet 1	27.07.2022	B
302	Photo Details Sheet 2	27.07.2022	B
303	Photo Details Sheet 3	27.07.2022	B
304	Photo Details Sheet 4	27.07.2022	B
305	Photo Details Sheet 5	27.07.2022	B
306	Photo Details Sheet 4	27.07.2022	B

   b. Statement supporting an application under Section 60 of the Heritage Act 1977 for Me Mel Goat Island, to demolish the Port Emergency Services Building (Former 1962 MSB Fire Brigade Barracks), prepared by NPWS, dated 19 September 2022.

EXCEPT AS AMENDED by the conditions of this approval:

VIEWS

2. The owner shall ensure that the reinstated significant View V4 is maintained and no permanent structures are constructed in place of the Port Emergency Services Building.

Reason: So that significant views are maintained, and the setting of the island is enhanced.

HERITAGE CONSULTANT

3. A suitably qualified and experienced heritage consultant must be nominated for this project. The nominated heritage consultant must provide input into the detailed design, provide heritage information to be imparted to all tradespeople during site inductions, and oversee the works to minimise impacts to heritage values. The nominated heritage consultant must be involved in the selection of appropriate tradespersons and must be satisfied that all work has been carried out in accordance with the conditions of this consent.

Reason: So that appropriate heritage advice is provided to support best practice conservation and ensure works are undertaken in accordance with this approval.

SPECIALIST TRADESPERSONS

4. All work to, or affecting, significant fabric shall be carried out by suitably qualified tradespersons with practical experience in conservation and restoration of similar heritage structures, materials and construction methods.

Reason: So that the construction, conservation and repair of significant fabric follows best heritage practice.

SITE PROTECTION

5. Significant built and landscape elements are to be protected during site preparation and the works from potential damage. Protection systems must ensure significant fabric, including landscape elements, is not damaged or removed.

Reason: To ensure significant fabric including vegetation is protected during construction.

UNEXPECTED FINDS

6. The Applicant must ensure that if substantial intact archaeological deposits and/or State significant relics or any other buried fabric such as works not identified, are discovered, work must cease in the affected area(s) and the Heritage Council of NSW must be notified. Additional assessment and approval may be required prior to works continuing in the affected area(s) based on the nature of the discovery.

Reason: All significant fabric within a State Heritage Register curtilage should be managed according to its significance. This *is a standard condition to identify to the applicant how to proceed if historical archaeological relics, or other unexpected buried discoveries such as works are identified during the approved project.*

COMPLIANCE

7. If requested, the applicant and any nominated heritage consultant may be required to participate in audits of Heritage Council of NSW approvals to confirm compliance with conditions of consent.

Reason: To ensure that the proposed works are completed as approved.

DURATION OF APPROVAL

8. This approval will lapse five years from the date of the consent unless the building works associated with the approval have physically commenced.

Reason: To ensure the timely completion of works

Advice

Section 148 of the *Heritage Act 1977* (the Act), allows people authorised by the Minister to enter and inspect, for the purposes of the Act, with respect to buildings, works, relics, moveable objects, places or items that is or contains an item of environmental heritage. Reasonable notice must be given for the inspection.

Unexpected discoveries during works
If during works under this approval, you unexpectedly discover a relic or believe you may have discovered an historical archaeological 'relic', notification is required under s.146 of the *Heritage Act 1977*. If you .believe you have unexpectedly discovered an Aboriginal object, notification is required under s89A of the *National Parks and Wildlife Act 1974*.

In these scenarios work must cease in the affected area(s) and the following notifications are required (a relic - the Heritage Council of NSW and an Aboriginal object – Heritage NSW). Additional assessment and approval may be required under the relevant legislation prior to works continuing in the affected area(s) based on the nature of the discovery.

Right of Appeal
If you are dissatisfied with this determination appeal may be made to the Minister for Heritage under section 70 of the Act.

It should be noted that an approval under the Heritage Act is additional to that which may be required from other Local Government and State Government Authorities in order to undertake works.

Stamped documents

Any stamped documents (e.g. approved plans) for this application are available for the Applicant to download from the Heritage Management System at https://hms.heritage.nsw.gov.au under 'My Completed Applications.'

If you have any questions about this correspondence, please contact Mariyam Nizam, Senior Assessments Officer at Heritage NSW on 02 88376375 or via email at Mariyam.Nizam@environment.nsw.gov.au.

Yours sincerely

Rochelle Johnston

Rochelle Johnston
Senior Manager, Major Projects
Heritage NSW
Department of Planning & Environment
As Delegate of the Heritage Council of NSW

17 November 2022

cc: Unincorporated Waterway Council,

Appendix G – Consideration of controls on development generally (BCSEPP 2021)

Planning principle (s.6.6(1) 'Water quality and quantity')	Consideration
(a) whether the development will have a neutral or beneficial effect on the quality of water entering a waterway	Should the proposed activity impact the quality of water entering a waterway, the effect is expected to be neutral provided the mitigation measures outlined in Section 9 of the REF are implemented.
(b) whether the development will have an adverse impact on water flow in a natural waterbody	Not applicable. The proposed demolition of the PESB, located above the high tide line on MMGI, is terrestrial in nature. No development occurs within a waterbody.
(c) whether the development will increase the amount of stormwater run-off from a site	The building's concrete floor slab will be retained to control stormwater erosion and to cap the unconsolidated fill that underlies the slabs.
(d) whether the development will incorporate on-site stormwater retention, infiltration or reuse	As above.
(e) the impact of the development on the level and quality of the water table	Not applicable. The proposed demolition of the PESB, located above the high tide line on MMGI, is terrestrial in nature and any excavation will be minor and occur within existing service trenches.
(f) the cumulative environmental impact of the development on the regulated catchment	The proposed demolition of the PESB is located above the high tide line on MMGI, on land reserved under the NPW Act. No development occurs within a waterbody. However, access to the subject site will be by water. As no wharf is adjacent to the site, a barge is required to be moored off shore, lifting plant and demolition materials to and/or from the site. Beyond the need for the barge-mounted spuds or pre-placed mooring blocks, and provided recommended mitigation measures are adhered to, the proposed work would not have an adverse impact on the regulated catchment.
(g) whether the development makes adequate provision to protect the quality and quantity of ground water.	Not applicable. The proposed demolition of the PESB, located above the high tide line on MMGI, is terrestrial in nature and any excavation will be minor and occur within existing service trenches.
Planning principle (s.6.6(2) 'Water quality and quantity')	**Consideration**
(a) the effect on the quality of water entering a natural waterbody will be as close as possible to neutral or beneficial, and (b) the impact on water flow in a natural waterbody will be minimised.	The proposed demolition of the PESB, located above the high tide line on MMGI, is terrestrial in nature. No development occurs within a waterbody. However, should the proposed activity impact the quality of water entering a waterway, the effect is expected to be neutral provided the mitigation measures outlined in Section 9 of the REF are implemented.

Planning principle (s.6.7(1) 'Aquatic ecology')	Consideration
(a) whether the development will have a direct, indirect or cumulative adverse impact on terrestrial, aquatic or migratory animals or vegetation	Minor vegetation removal (primarily restricted to the pruning/trimming of overhanging branches or clearing of exotics and garden bed plantings) would be required to enable access to the site and permit the work. No TECs or threatened flora or fauna species were recorded within, or near to, the study area during the field investigation; nor were any considered likely to occur or be impacted by the proposed work. As the proposal is terrestrial in nature, no aquatic biodiversity is considered to be directly or indirect affected.
(b) whether the development involves the clearing of riparian vegetation and, if so, whether the development will require— (i) a controlled activity approval under the *Water Management Act 2000* (WM Act), or (ii) a permit under the FM Act,	Not applicable. The proposed work does not involve the clearing of riparian vegetation.
(c) whether the development will minimise or avoid— (i) the erosion of land abutting a natural waterbody, or (ii) the sedimentation of a natural waterbody	Provided mitigation measures outlined in Section 9 of the REF are implemented, it is expected the proposed work will minimise or avoid any erosion or sedimentation involving the adjacent waterbody (i.e. Sydney Harbour).
(d) whether the development will have an adverse impact on wetlands that are not in the coastal wetlands and littoral rainforests area	The proposal does not directly or indirectly impact any wetlands.
(e) whether the development includes adequate safeguards and rehabilitation measures to protect aquatic ecology	The proposal is terrestrial in nature and is not considered to have any direct or indirect impact on aquatic biodiversity. Mitigation measures outlined in Section 9 of the REF have been provided to protect aquatic ecology (notably s.9.1.(2)).
(f) if the development site adjoins a natural waterbody—whether additional measures are required to ensure a neutral or beneficial effect on the water quality of the waterbody.	The PESB site adjoins Sydney Harbour. Should the proposed activity impact the water quality of Sydney Harbour, the effect is expected to be neutral provided the mitigation measures outlined in Section 9 of the REF are implemented.
Planning principle (s.6.7(2) 'Aquatic ecology')	**Consideration**
(a) the direct, indirect or cumulative adverse impact on terrestrial, aquatic or migratory animals or vegetation will be kept to the minimum necessary for the carrying out of the development	The proposed work is not considered to have an adverse impact on terrestrial, aquatic or migratory animals; with vegetation removal (primarily restricted to the pruning/trimming of overhanging branches or clearing of exotics and garden bed plantings to enable access to the site and permit the work) considered minor.

(b) the development will not have a direct, indirect or cumulative adverse impact on aquatic reserves	The proposal does not directly or indirectly impact on any aquatic reserves.
(c) if a controlled activity approval under the WM Act or a permit under the FM Act is required in relation to the clearing of riparian vegetation—the approval or permit has been obtained	Not applicable.
(d) the erosion of land abutting a natural waterbody or the sedimentation of a natural waterbody will be minimised	Provided mitigation measures outlined in Section 9 of the REF are implemented, it is expected the proposed work will minimise or avoid any erosion or sedimentation involving the adjacent waterbody (i.e. Sydney Harbour).
(e) the adverse impact on wetlands that are not in the coastal wetlands and littoral rainforests area will be minimised.	Not applicable.

Planning principle (s.6.8(1) 'Flooding')	**Consideration**
(1) In deciding whether to grant development consent to development on land in a regulated catchment, the consent authority must consider the likely impact of the development on periodic flooding that benefits wetlands and other riverine ecosystems.	In accordance with the ePlanning Spatial Viewer (layer: Flood Planning Map), MMGI is not located on flood liable land.
Planning principle (s.6.8(2) 'Flooding')	**Consideration**
(a) if there is a flood, result in a release of pollutants that may have an adverse impact on the water quality of a natural waterbody, or	MMGI is not located on flood liable land; nor does it involve work within a waterway. However, safeguards provided in Section 9 of the REF address potential pollutants and mitigating any potential adverse impact on the water quality of the adjacent Sydney Harbour.
(b) have an adverse impact on the natural recession of floodwaters into wetlands and other riverine ecosystems.	MMGI is not located on flood liable land; therefore, there would be no adverse impact on the natural recession of floodwaters.

Planning principle (s.6.9(1) 'Recreation and public access')	**Consideration**
(a) the likely impact of the development on recreational land uses in the regulated catchment, and (b) whether the development will maintain or improve public access to and around foreshores without	Public access to the PESB is currently prohibited; however, ultimately, the physical restrictions in place are inadequate. Therefore, the PESB is currently unsafe, dilapidated and presents a serious visitor safety risk. Concerning recreation and public access, demolition of the PESB would open up the area in front of the 1930s quarry face for larger

adverse impact on natural waterbodies, watercourses, wetlands or riparian vegetation.	groups to gather in one of the island's few level foreshore areas allowing visitors to appreciate the island's eastern aspect (NPWS 2022b, Appendix D). However, any improvements to the site to facilitate public access are beyond the scope of this proposal.

Planning principle (s.6.9(2) 'Recreation and public access')	Consideration
(a) the development will maintain or improve public access to and from natural waterbodies for recreational purposes, including fishing, swimming and boating, without adverse impact on natural waterbodies, watercourses, wetlands or riparian vegetation (b) new or existing points of public access between natural waterbodies and the site of the development will be stable and safe (c) if land forming part of the foreshore of a natural waterbody will be made available for public access as a result of the development but is not in public ownership—public access to and use of the land will be safeguarded.	Not applicable to the proposal.

Planning principle (s.6.28(1) 'General')	Consideration
In deciding whether to grant development consent to development in the Foreshores and Waterways Area, the consent authority must consider the following— (a) whether the development is consistent with the following principles— (i) Sydney Harbour is a public resource, owned by the public, to be protected for the public good, (ii) the public good has precedence over the private good, (iii) the protection of the natural assets of Sydney Harbour has precedence over all other interests	The proposed demolition of the PESB is located above the high tide line on MMGI, contained wholly on land reserved under the NPW Act. No development occurs within the adjacent waterbody of Sydney Harbour.
(b) whether the development will promote the equitable use of the Foreshores and Waterways Area,	As above.

including use by passive recreation craft	
(c) whether the development will have an adverse impact on the Foreshores and Waterways Area, including on commercial and recreational uses of the Foreshores and Waterways Area	As above.
(d) whether the development promotes water-dependent land uses over other land uses	As above.
(e) whether the development will minimise risk to the development from rising sea levels or changing flood patterns as a result of climate change	The proposal is for the demolition of the existing PESB (down to the concrete floor slab – to be retained) present on MMGI. Rising sea levels or changing flood patterns as a result of climate change would not impact the demolition of the PESB.
(f) whether the development will protect or reinstate natural intertidal foreshore areas, natural landforms and native vegetation	The proposed demolition of the PESB (down to the concrete floor slab – to be retained) is located above the high tide line on MMGI. The proposed work is primarily restricted to the existing structural footprint of the PESB and would not adversely impact any intertidal foreshore areas or natural landforms. Minimal native vegetation removal (e.g. pruning/trimming of overhanging branches) is required to enable access to the site and permit the work.
(g) whether the development protects or enhances terrestrial and aquatic species, populations and ecological communities, including by avoiding physical damage to or shading of aquatic vegetation	The proposed demolition of the PESB, located above the high tide line on MMGI, would not have an adverse impact on terrestrial or aquatic species, populations or ecological communities; nor will it damage or contribute to shading of aquatic vegetation. Mitigation measures have been provided in Section 9 of the REF.
(h) whether the development will protect, maintain or rehabilitate watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity.	The proposed demolition of the PESB is located above the high tide line on MMGI, contained wholly on land reserved under the NPW Act within an existing disturbed/modified structural footprint. No development occurs within the adjacent waterbody of Sydney Harbour, nor does it involve wetlands, riparian lands, significant remnant vegetation or ecological connectivity.

Appendix H – BioNet and PMST database results

Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria: Public Report of all Valid Records of Threatened (listed on BC Act 2016) or Commonwealth listed Entities in selected area [North: -33.80 West: 151.15 East: 151.25 South: -33.90] returned a total of 2,478 records of 83 species.

Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Comm. status	Records
Animalia	Amphibia	Myobatrachidae	3116	*Pseudophryne australis*		Red-crowned Toadlet	V,P		77
Animalia	Amphibia	Hylidae	3166	*Litoria aurea*		Green and Golden Bell Frog	E1,P	V	2
Animalia	Reptilia	Cheloniidae	2004	*Caretta caretta*		Loggerhead Turtle	E1,P	E	2
Animalia	Reptilia	Dermochelyidae	2013	*Dermochelys coriacea*		Leatherback Turtle	E1,P	E	1
Animalia	Aves	Anseranatidae	0199	*Anseranas semipalmata*		Magpie Goose	V,P		9
Animalia	Aves	Columbidae	0023	*Ptilinopus superbus*		Superb Fruit-Dove	V,P		9
Animalia	Aves	Apodidae	0334	*Hirundapus caudacutus*		White-throated Needletail	P	V,C,J,K	14
Animalia	Aves	Diomedeidae	0086	*Diomedea exulans*		Wandering Albatross	E1,P	E	1
Animalia	Aves	Ardeidae	0197	*Botaurus poiciloptilus*		Australasian Bittern	E1,P	E	3
Animalia	Aves	Ardeidae	0196	*Ixobrychus flavicollis*		Black Bittern	V,P		3
Animalia	Aves	Accipitridae	0223	*^Erythrotriorchis radiatus*		Red Goshawk	E4A,P,2	V	1
Animalia	Aves	Accipitridae	0226	*Haliaeetus leucogaster*		White-bellied Sea-Eagle	V,P		43
Animalia	Aves	Accipitridae	0225	*Hieraaetus morphnoides*		Little Eagle	V,P		2
Animalia	Aves	Accipitridae	0230	*^^Lophoictinia isura*		Square-tailed Kite	V,P,3		1
Animalia	Aves	Accipitridae	8739	*^^Pandion cristatus*		Eastern Osprey	V,P,3		3
Animalia	Aves	Burhinidae	0174	*Burhinus grallarius*		Bush Stone-curlew	E1,P		2
Animalia	Aves	Haematopodidae	0130	*Haematopus longirostris*		Pied Oystercatcher	E1,P		1
Animalia	Aves	Scolopacidae	0161	*Calidris ferruginea*		Curlew Sandpiper	E1,P	CE,C,J,K	8
Animalia	Aves	Laridae	0120	*Onychoprion fuscata*		Sooty Tern	V,P		1
Animalia	Aves	Laridae	0117	*Sternula albifrons*		Little Tern	E1,P	C,J,K	2

Animalia	Aves	Cacatuidae	0265	*^Calyptorhynchus lathami*	Glossy Black-Cockatoo	V,P,2	V	7
Animalia	Aves	Psittacidae	0260	*Glossopsitta pusilla*	Little Lorikeet	V,P		8
Animalia	Aves	Psittacidae	0309	*Lathamus discolor*	Swift Parrot	E1,P	CE	8
Animalia	Aves	Strigidae	0246	*^^Ninox connivens*	Barking Owl	V,P,3		3
Animalia	Aves	Strigidae	0248	*^^Ninox strenua*	Powerful Owl	V,P,3		460
Animalia	Aves	Tytonidae	9924	*^^Tyto tenebricosa*	Sooty Owl	V,P,3		1
Animalia	Aves	Meliphagidae	0603	*Anthochaera phrygia*	Regent Honeyeater	E4A,P	CE	2
Animalia	Aves	Meliphagidae	0448	*Epthianura albifrons*	White-fronted Chat	V,P		1
Animalia	Aves	Meliphagidae	0448	*Epthianura albifrons*	White-fronted Chat population in the Sydney Metropolitan Catchment Management Area	E2,V,P		1
Animalia	Aves	Neosittidae	0549	*Daphoenositta chrysoptera*	Varied Sittella	V,P		1
Animalia	Aves	Artamidae	8519	*Artamus cyanopterus cyanopterus*	Dusky Woodswallow	V,P		3
Animalia	Aves	Estrildidae	0652	*Stagonopleura guttata*	Diamond Firetail	V,P		1
Animalia	Mammalia	Dasyuridae	1008	*Dasyurus maculatus*	Spotted-tailed Quoll	V,P	E	1
Animalia	Mammalia	Peramelidae	1097	*Perameles nasuta*	Long-nosed Bandicoot population in inner western Sydney	E2,P		1
Animalia	Mammalia	Phascolarctidae	1162	*Phascolarctos cinereus*	Koala	E1,P	E	5
Animalia	Mammalia	Burramyidae	1150	*Cercartetus nanus*	Eastern Pygmy-possum	V,P		3
Animalia	Mammalia	Petauridae	1137	*Petaurus norfolcensis*	Squirrel Glider	V,P		1
Animalia	Mammalia	Pteropodidae	1280	*Pteropus poliocephalus*	Grey-headed Flying-fox	V,P	V	1333
Animalia	Mammalia	Emballonuridae	1321	*Saccolaimus flaviventris*	Yellow-bellied Sheathtail-bat	V,P		6
Animalia	Mammalia	Molossidae	1329	*Micronomus norfolkensis*	Eastern Coastal Free-tailed Bat	V,P		10
Animalia	Mammalia	Vespertilionidae	1353	*Chalinolobus dwyeri*	Large-eared Pied Bat	V,P	V	2
Animalia	Mammalia	Vespertilionidae	1357	*Myotis macropus*	Southern Myotis	V,P		47
Animalia	Mammalia	Vespertilionidae	1361	*Scoteanax rueppellii*	Greater Broad-nosed Bat	V,P		4

Animalia	Mammalia	Miniopteridae	1346	*Miniopterus australis*	Little Bent-winged Bat	V,P		22
Animalia	Mammalia	Miniopteridae	3330	*Miniopterus orianae oceanensis*	Large Bent-winged Bat	V,P		91
Animalia	Mammalia	Muridae	1466	*Pseudomys gracilicaudatus*	Eastern Chestnut Mouse	V,P		1
Animalia	Mammalia	Otariidae	1543	*Arctocephalus forsteri*	New Zealand Fur-seal	V,P		3
Animalia	Mammalia	Otariidae	1882	*Arctocephalus pusillus doriferus*	Australian Fur-seal	V,P		5
Animalia	Mammalia	Balaenidae	1561	*Eubalaena australis*	Southern Right Whale	E1,P	E	2
Animalia	Insecta	Petaluridae	I007	*Petalura gigantea*	Giant Dragonfly	E1		1
Plantae	Flora	Casuarinaceae	8321	*^^Allocasuarina portuensis*	Nielsen Park She-oak	E1,3	E	5
Plantae	Flora	Dilleniaceae	11422	*Hibbertia puberula*		E1		1
Plantae	Flora	Doryanthaceae	1020	*Doryanthes palmeri*	Giant Spear Lily	V,P		1
Plantae	Flora	Elaeocarpaceae	6205	*Tetratheca glandulosa*		V		2
Plantae	Flora	Elaeocarpaceae	6206	*Tetratheca juncea*	Black-eyed Susan	V	V	2
Plantae	Flora	Ericaceae	7752	*Epacris purpurascens var. purpurascens*		V		5
Plantae	Flora	Euphorbiaceae	9501	*Amperea xiphoclada var. pedicellata*		E4	X	1
Plantae	Flora	Fabaceae (Mimosoideae)	3728	*Acacia bynoeana*	Bynoe's Wattle	E1	V	4
Plantae	Flora	Fabaceae (Mimosoideae)	15210	*Acacia terminalis subsp. Eastern Sydney*	Sunshine wattle	E1	E	154
Fungi	Flora	Hygrophoraceae	F006	*Camarophyllopsis kearneyi*		E1		1
Fungi	Flora	Hygrophoraceae	F003	*Hygrocybe anomala var. ianthinomarginata*		V		1
Fungi	Flora	Hygrophoraceae	F004	*Hygrocybe aurantipes*		V		2
Fungi	Flora	Hygrophoraceae	F001	*Hygrocybe austropratensis*		E1		1
Fungi	Flora	Hygrophoraceae	F007	*Hygrocybe collucera*		E1		1

Fungi	Flora	Hygrophoraceae	F008	*Hygrocybe griseoramosa*		E1		1
Fungi	Flora	Hygrophoraceae	F005	*Hygrocybe lanecovensis*		E1		1
Fungi	Flora	Hygrophoraceae	F002	*Hygrocybe reesiae*		V		3
Fungi	Flora	Hygrophoraceae	F015	*Hygrocybe rubronivea*		V		1
Plantae	Flora	Lamiaceae	3418	*^^Prostanthera marifolia*	Seaforth Mintbush	E4A,3	CE	4
Plantae	Flora	Myrtaceae	4007	*^^Callistemon linearifolius*	Netted Bottle Brush	V,3		2
Plantae	Flora	Myrtaceae	4067	*Eucalyptus camfieldii*	Camfield's Stringybark	V	V	4
Plantae	Flora	Myrtaceae	4134	*Eucalyptus nicholii*	Narrow-leaved Black Peppermint	V	V	5
Plantae	Flora	Myrtaceae	4163	*Eucalyptus pulverulenta*	Silver-leafed Gum	V	V	1
Plantae	Flora	Myrtaceae	8314	*Leptospermum deanei*		V	V	1
Plantae	Flora	Myrtaceae	4248	*Melaleuca deanei*	Deane's Paperbark	V	V	5
Plantae	Flora	Myrtaceae	4283	*Rhodamnia rubescens*	Scrub Turpentine	E4A	CE	2
Plantae	Flora	Myrtaceae	4293	*Syzygium paniculatum*	Magenta Lilly Pilly	E1	V	37
Plantae	Flora	Orchidaceae	4386	*^Caladenia tessellata*	Thick Lip Spider Orchid	E1,P,2	V	2
Plantae	Flora	Orchidaceae	4464	*^Genoplesium baueri*	Bauer's Midge Orchid	E1,P,2	E	2
Plantae	Flora	Poaceae	4895	*Dichanthium setosum*	Bluegrass	V	V	1
Plantae	Flora	Proteaceae	9680	*Macadamia integrifolia*	Macadamia Nut		V	2
Plantae	Flora	Proteaceae	5458	*^^Persoonia hirsuta*	Hairy Geebung	E1,P,3	E	3
Plantae	Flora	Thymelaeaceae	6965	*Pimelea curviflora var. curviflora*		V	V	1

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 09-Dec-2022

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat
Acknowledgements

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	3
National Heritage Places:	11
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	13
Listed Threatened Species:	111
Listed Migratory Species:	82

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	473
Commonwealth Heritage Places:	75
Listed Marine Species:	106
Whales and Other Cetaceans:	13
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	9
Regional Forest Agreements:	None
Nationally Important Wetlands:	2
EPBC Act Referrals:	87
Key Ecological Features (Marine):	None
Biologically Important Areas:	3
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

World Heritage Properties [Resource Information]

Name	State	Legal Status	Buffer Status
Australian Convict Sites (Cockatoo Island Convict Site)	NSW	Declared property	In buffer area only
Australian Convict Sites (Hyde Park Barracks)	NSW	Declared property	In buffer area only
Sydney Opera House	NSW	Declared property	In buffer area only

National Heritage Places [Resource Information]

Name	State	Legal Status	Buffer Status
Historic			
Bondi Beach	NSW	Listed place	In buffer area only
Bondi Surf Pavilion	NSW	Within listed place	In buffer area only
Centennial Park	NSW	Listed place	In buffer area only
Cockatoo Island	NSW	Listed place	In buffer area only
First Government House Site	NSW	Listed place	In buffer area only
Governors' Domain and Civic Precinct	NSW	Listed place	In buffer area only
Hyde Park Barracks	NSW	Listed place	In buffer area only
North Head - Sydney	NSW	Listed place	In buffer area only
Sydney Harbour Bridge	NSW	Listed place	In buffer area only
Sydney Opera House	NSW	Listed place	In buffer area only
Indigenous			
Cyprus Hellene Club - Australian Hall	NSW	Listed place	In buffer area only

Wetlands of International Importance (Ramsar Wetlands) [Resource Information]

Ramsar Site Name	Proximity	Buffer Status
Towra point nature reserve	Within 10km of Ramsar site	In buffer area only

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Castlereagh Scribbly Gum and Agnes Banks Woodlands of the Sydney Basin Bioregion	Endangered	Community may occur within area	In buffer area only
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area	In feature area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community may occur within area	In feature area
Coastal Upland Swamps in the Sydney Basin Bioregion	Endangered	Community likely to occur within area	In feature area
Cooks River/Castlereagh Ironbark Forest of the Sydney Basin Bioregion	Critically Endangered	Community may occur within area	In buffer area only
Eastern Suburbs Banksia Scrub of the Sydney Region	Critically Endangered	Community likely to occur within area	In feature area
Littoral Rainforest and Coastal Vine Thickets of Eastern Australia	Critically Endangered	Community likely to occur within area	In buffer area only
Posidonia australis seagrass meadows of the Manning-Hawkesbury ecoregion	Endangered	Community likely to occur within area	In buffer area only
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Critically Endangered	Community likely to occur within area	In feature area
Shale Sandstone Transition Forest of the Sydney Basin Bioregion	Critically Endangered	Community may occur within area	In buffer area only
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area	In buffer area only
Turpentine-Ironbark Forest of the Sydney Basin Bioregion	Critically Endangered	Community likely to occur within area	In buffer area only
Western Sydney Dry Rainforest and Moist Woodland on Shale	Critically Endangered	Community may occur within area	In buffer area only

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
Calidris tenuirostris Great Knot [862]	Critically Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Dasyornis brachypterus Eastern Bristlebird [533]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area
Fregetta grallaria grallaria White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area	In buffer area only
Pterodroma neglecta neglecta Kermadec Petrel (western) [64450]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In buffer area only
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
FISH			
Epinephelus daemelii Black Rockcod, Black Cod, Saddled Rockcod [68449]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat known to occur within area	In buffer area only
Macquaria australasica Macquarie Perch [66632]	Endangered	Species or species habitat may occur within area	In feature area
Prototroctes maraena Australian Grayling [26179]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In feature area
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat likely to occur within area	In feature area
FROG			
Heleioporus australiacus Giant Burrowing Frog [1973]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Litoria aurea Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat known to occur within area	In feature area
Mixophyes balbus Stuttering Frog, Southern Barred Frog (in Victoria) [1942]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
MAMMAL			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat known to occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area	In buffer area only
Isoodon obesulus obesulus Southern Brown Bandicoot (eastern), Southern Brown Bandicoot (south-eastern) [68050]	Endangered	Species or species habitat likely to occur within area	In feature area
Notamacropus parma Parma Wallaby [89289]	Vulnerable	Species or species habitat may occur within area	In feature area
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat known to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
OTHER			
Dendronephthya australis Cauliflower Soft Coral [90325]	Endangered	Species or species habitat known to occur within area	In buffer area only
PLANT			
Acacia bynoeana Bynoe's Wattle, Tiny Wattle [8575]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Acacia pubescens Downy Wattle, Hairy Stemmed Wattle [18800]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Acacia terminalis subsp. terminalis MS Sunshine Wattle (Sydney region) [88882]	Endangered	Species or species habitat known to occur within area	In feature area
Allocasuarina glareicola [21932]	Endangered	Species or species habitat may occur within area	In buffer area only
Allocasuarina portuensis Nielsen Park She-oak [21937]	Endangered	Species or species habitat known to occur within area	In buffer area only
Asterolasia elegans [56780]	Endangered	Species or species habitat may occur within area	In buffer area only
Caladenia tessellata Thick-lipped Spider-orchid, Daddy Long-legs [2119]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Cynanchum elegans White-flowered Wax Plant [12533]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Darwinia biflora [14619]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Deyeuxia appressa [7438]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Epacris sparsa [16450]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Eucalyptus camfieldii Camfield's Stringybark [15460]	Vulnerable	Species or species habitat known to occur within area	In feature area
Genoplesium baueri Yellow Gnat-orchid, Bauer's Midge Orchid, Brittle Midge Orchid [7528]	Endangered	Species or species habitat known to occur within area	In feature area
Grevillea caleyi Caley's Grevillea [9683]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
Haloragodendron lucasii Hal [6480]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Lasiopetalum joyceae [20311]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Leptospermum deanei Deane's Tea-tree [21777]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Melaleuca biconvexa Biconvex Paperbark [5583]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Melaleuca deanei Deane's Melaleuca [5818]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Persoonia hirsuta Hairy Geebung, Hairy Persoonia [19006]	Endangered	Species or species habitat known to occur within area	In feature area
Pimelea curviflora var. curviflora [4182]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pimelea spicata Spiked Rice-flower [20834]	Endangered	Species or species habitat may occur within area	In buffer area only
Pomaderris brunnea Rufous Pomaderris, Brown Pomaderris [16845]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Prostanthera densa Villous Mintbush [12233]	Vulnerable	Species or species habitat may occur within area	In feature area
Prostanthera junonis Somersby Mintbush [64960]	Endangered	Species or species habitat known to occur within area	In buffer area only
Prostanthera marifolia Seaforth Mintbush [7555]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
Pterostylis saxicola Sydney Plains Greenhood [64537]	Endangered	Species or species habitat may occur within area	In buffer area only
Rhizanthella slateri Eastern Underground Orchid [11768]	Endangered	Species or species habitat may occur within area	In buffer area only
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat may occur within area	In feature area
Syzygium paniculatum Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Caretta caretta			
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In feature area
Chelonia mydas			
Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Dermochelys coriacea			
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Eretmochelys imbricata			
Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In feature area
Hoplocephalus bungaroides			
Broad-headed Snake [1182]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Natator depressus			
Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
SHARK			
Carcharias taurus (east coast population)			
Grey Nurse Shark (east coast population) [68751]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Carcharodon carcharias			
White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Galeorhinus galeus			
School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453]	Conservation Dependent	Species or species habitat may occur within area	In buffer area only
Rhincodon typus			
Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Sphyrna lewini			
Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In feature area
SNAIL			
Meridolum maryae			
Maroubra Woodland Snail, Maroubra Land Snail [89884]	Endangered	Species or species habitat known to occur within area	In buffer area only
Pommerhelix duralensis			
Dural Land Snail [85268]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Listed Migratory Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus			
Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes			
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea			
Sooty Shearwater [82651]		Species or species habitat likely to occur within area	In feature area
Calonectris leucomelas			
Streaked Shearwater [1077]		Species or species habitat known to occur within area	In feature area
Diomedea antipodensis			
Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea epomophora			
Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat may occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat known to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sternula albifrons Little Tern [82849]		Breeding likely to occur within area	In buffer area only
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Migratory Marine Species			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	In feature area
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Dugong dugon Dugong [28]		Species or species habitat may occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In feature area
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In feature area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area	In buffer area only
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat known to occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]		Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris alba Sanderling [875]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris subminuta Long-toed Stint [861]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Calidris tenuirostris Great Knot [862]	Critically Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius bicinctus Double-banded Plover [895]		Foraging, feeding or related behaviour known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Limicola falcinellus Broad-billed Sandpiper [842]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]		Foraging, feeding or related behaviour known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Numenius phaeopus Whimbrel [849]		Foraging, feeding or related behaviour known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In buffer area only
Philomachus pugnax Ruff (Reeve) [850]		Foraging, feeding or related behaviour known to occur within area	In feature area
Pluvialis fulva Pacific Golden Plover [25545]		Foraging, feeding or related behaviour known to occur within area	In feature area
Pluvialis squatarola Grey Plover [865]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Tringa brevipes Grey-tailed Tattler [851]		Foraging, feeding or related behaviour known to occur within area	In feature area
Tringa incana Wandering Tattler [831]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Foraging, feeding or related behaviour known to occur within area	In feature area
Xenus cinereus Terek Sandpiper [59300]		Foraging, feeding or related behaviour known to occur within area	In buffer area only

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Australian National University		
Commonwealth Land - Australian National University [13156]	NSW	In buffer area only
Commonwealth Bank of Australia		
Commonwealth Land - Commonwealth Bank of Australia [13158]	NSW	In buffer area only
Commonwealth Land - Commonwealth Bank of Australia [14331]	NSW	In buffer area only
Commonwealth Land - Commonwealth Bank of Australia [14408]	NSW	In buffer area only
Commonwealth Land - Commonwealth Bank of Australia [14407]	NSW	In buffer area only
Commonwealth Land - Commonwealth Bank of Australia [14406]	NSW	In buffer area only
Commonwealth Trading Bank of Australia		
Commonwealth Land - Commonwealth Trading Bank of Australia [13209]	NSW	In buffer area only
Commonwealth Land - Commonwealth Trading Bank of Australia [13043]	NSW	In buffer area only
Commonwealth Land - Commonwealth Trading Bank of Australia [14337]	NSW	In buffer area only
Commonwealth Land - Commonwealth Trading Bank of Australia [14322]	NSW	In buffer area only
Commonwealth Land - Commonwealth Trading Bank of Australia [14325]	NSW	In buffer area only
Commonwealth Land - Commonwealth Trading Bank of Australia [14323]	NSW	In buffer area only
Communications, Information Technology and the Arts - Australian Broadcasting Corporation		

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Australian Broadcasting Commission [13116]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Commission [13112]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Commission [13113]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Commission [15605]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [13114]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [13115]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [13117]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [13110]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [13111]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [13107]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [13106]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [13108]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [13109]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [15511]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [15606]	NSW	In buffer area only
Commonwealth Land - Australian Broadcasting Corporation [15607]	NSW	In buffer area only
Communications, Information Technology and the Arts - Australian Postal Corporation		
Commonwealth Land - Australian Postal Commission [13099]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13153]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13131]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14366]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14280]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14348]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13094]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14391]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13290]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13091]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Australian Postal Commission [13047]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13121]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14384]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13195]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13215]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13104]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14338]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14284]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13134]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13137]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14329]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [15538]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14328]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [15537]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14326]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14324]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13164]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [14350]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13291]	NSW	In buffer area only
Commonwealth Land - Australian Postal Commission [13118]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [13152]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [14342]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [14343]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [16164]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [16009]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [15898]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [13214]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Australian Postal Corporation [16021]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [15603]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [16174]	NSW	In buffer area only
Commonwealth Land - Australia Post [15591]	NSW	In buffer area only
Communications, Information Technology and the Arts - Telstra Corporation Limited		
Commonwealth Land - Australian & Overseas Telecommunications Corporation [13155]	NSW	In buffer area only
Commonwealth Land - Australian & Overseas Telecommunications Corporation [16072]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13154]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13157]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13136]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13095]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13092]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13097]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13093]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14279]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13129]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14383]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14388]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13194]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13216]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14285]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Australian Telecommunications Commission [13132]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14281]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14409]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14405]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13057]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14327]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13162]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14351]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13128]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13119]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13293]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14402]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Corporation [13130]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Corporation [14286]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Corporation [13292]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14283]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14368]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14349]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14282]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14340]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14341]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Telstra Corporation Limited [13187]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [15504]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [13213]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14385]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [13100]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14339]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14332]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14333]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14287]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14410]	NSW	In buffer area only
Defence		
Commonwealth Land - Defence Service Homes Corporation [13210]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [13211]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [13064]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [14352]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [13054]	NSW	In buffer area only
Commonwealth Land - Director of Defence Service Homes [13208]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11099]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11098]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11107]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11106]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11104]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11105]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11103]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11102]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11101]	NSW	In buffer area only
Defence - 21 CONST REGT - HABERFIELD DEPOT [11108]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Defence - 21 CONST REGT - HABERFIELD DEPOT [11100]	NSW	In buffer area only
Defence - COCKATOO ISLAND DOCKYARD [10018]	NSW	In buffer area only
Defence - CONCORD OFFICE ACCN [11093]	NSW	In buffer area only
Defence - DEFENCE PLAZA SYDNEY [11179]	NSW	In buffer area only
Defence - DEGAUSSING RANGE [10039]	NSW	In buffer area only
Defence - DSTO PYRMONT - (SEE SITE 1177) [10016]	NSW	In buffer area only
Defence - DSTO PYRMONT - (SEE SITE 1177) [10017]	NSW	In buffer area only
Defence - DSTO PYRMONT - (SEE SITE 1177) [10015]	NSW	In buffer area only
Defence - ENDEAVOUR HOUSE - COOGEE [11172]	NSW	In buffer area only
Defence - FLEET BASE WHARVES [10023]	NSW	In buffer area only
Defence - FLEET BASE WHARVES [10024]	NSW	In buffer area only
Defence - FLEET BASE WHARVES [10021]	NSW	In buffer area only
Defence - FLEET BASE WHARVES [10022]	NSW	In buffer area only
Defence - FOREST LODGE (SYDNEY) TRG DEP [10071]	NSW	In buffer area only
Defence - GARDEN ISLAND [10014]	NSW	In buffer area only
Defence - GLADESVILLE TRAINING DEPOT [10012]	NSW	In buffer area only
Defence - HMAS KUTTABUL (AC 30/5 Lot4 DP218946) [11074]	NSW	In buffer area only
Defence - HMAS PENGUIN [11071]	NSW	In buffer area only
Defence - HMAS PLATYPUS - SPDU FOR DISPOSAL [10040]	NSW	In buffer area only
Defence - HMAS PLATYPUS - SPDU FOR DISPOSAL [10041]	NSW	In buffer area only
Defence - HMAS PLATYPUS - SPDU FOR DISPOSAL [10042]	NSW	In buffer area only
Defence - HMAS WATERHEN [10025]	NSW	In buffer area only
Defence - HMAS WATSON [10029]	NSW	In buffer area only
Defence - JENNER BUILDING [10034]	NSW	In buffer area only
Defence - KENSINGTON DEPOT [11110]	NSW	In buffer area only
Defence - KISMET/HMAS KUTTABUL-POTTS PT [11173]	NSW	In buffer area only
Defence - LADY GOWRIE HOUSE [10045]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Defence - LADY GOWRIE HOUSE [10047]	NSW	In buffer area only
Defence - LADY GOWRIE HOUSE [10046]	NSW	In buffer area only
Defence - LEICHHARDT STORES DEPOT [11112]	NSW	In buffer area only
Defence - MARITIME COMD CTRE-POTTS POINT ; BOMERAH/TARANA [10032]	NSW	In buffer area only
Defence - MARITIME COMD CTRE-POTTS POINT ; BOMERAH/TARANA [10033]	NSW	In buffer area only
Defence - MARITIME HEADQUARTERS [11178]	NSW	In buffer area only
Defence - MATERIAL RESEARCH LAB [10013]	NSW	In buffer area only
Defence - MILLER'S POINT TRAINING DEPOT [11118]	NSW	In buffer area only
Defence - NFI CHOWDER BAY (fuel depot) [10043]	NSW	In buffer area only
Defence - NORTH SYDNEY - HYDRO OFFICE [11161]	NSW	In buffer area only
Defence - OXFORD ST SYDNEY [11166]	NSW	In buffer area only
Defence - OXFORD ST SYDNEY [11168]	NSW	In buffer area only
Defence - OXFORD ST SYDNEY [11169]	NSW	In buffer area only
Defence - OXFORD ST SYDNEY [11164]	NSW	In buffer area only
Defence - OXFORD ST SYDNEY [11165]	NSW	In buffer area only
Defence - OXFORD ST SYDNEY [11167]	NSW	In buffer area only
Defence - PARKVIEW BUILDING - SYDNEY [11170]	NSW	In buffer area only
Defence - RANDWICK (CARRINGTON RD) [11132]	NSW	In buffer area only
Defence - RANDWICK (CARRINGTON RD) [11135]	NSW	In buffer area only
Defence - RANDWICK (CARRINGTON RD) [11134]	NSW	In buffer area only
Defence - RANDWICK (CARRINGTON RD) [11133]	NSW	In buffer area only
Defence - RANDWICK BARRACKS [11124]	NSW	In buffer area only
Defence - RANDWICK BARRACKS [11125]	NSW	In buffer area only
Defence - RANDWICK BARRACKS [11126]	NSW	In buffer area only
Defence - RANDWICK BARRACKS [11127]	NSW	In buffer area only
Defence - RANDWICK BARRACKS [11128]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Defence - RANDWICK BARRACKS [11129]	NSW	In buffer area only
Defence - RANDWICK BARRACKS [11131]	NSW	In buffer area only
Defence - RANDWICK BARRACKS [11130]	NSW	In buffer area only
Defence - RANDWICK FRENCHMANS TRG [11162]	NSW	In buffer area only
Defence - RANDWICK FRENCHMANS TRG [11163]	NSW	In buffer area only
Defence - SPECTACLE ISLAND [10035]	NSW	In buffer area only
Defence - SPECTACLE ISLAND [10037]	NSW	In buffer area only
Defence - SPECTACLE ISLAND [10036]	NSW	In buffer area only
Defence - SPECTACLE ISLAND [10038]	NSW	In buffer area only
Defence - SYDNEY UNIVERSITY REGIMENT - DARLINGTON [11094]	NSW	In buffer area only
Defence - TRAINING SHIP CONDAMINE [11072]	NSW	In buffer area only
Defence - TRAINING SHIP CONDAMINE [11073]	NSW	In buffer area only
Defence - TRESCO [10044]	NSW	In buffer area only
Defence - VAUCLUSE TRAINING DEPOT [11137]	NSW	In buffer area only
Defence - VICTORIA BARRACKS - PADDINGTON [11119]	NSW	In buffer area only
Defence - VICTORIA BARRACKS - PADDINGTON [11120]	NSW	In buffer area only
Defence - VICTORIA BARRACKS - PADDINGTON [11121]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11152]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11157]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11150]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11151]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11158]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11159]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11156]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11154]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11155]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11138]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Defence - WILLOUGHBY TRG DEP [11139]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11142]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11143]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11148]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11149]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11141]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11147]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11140]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11145]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11146]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11144]	NSW	In buffer area only
Defence - WILLOUGHBY TRG DEP [11153]	NSW	In buffer area only
Defence - WOOLLOOMOOLOO CARPARK [11176]	NSW	In buffer area only
Defence - WOOLLOOMOOLOO CARPARK [11177]	NSW	In buffer area only
Defence - WOOLLOOMOOLOO CARPARK [11174]	NSW	In buffer area only
Defence - WOOLLOOMOOLOO CARPARK [11175]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11089]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11088]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11081]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11080]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11085]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11084]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11087]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11086]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11076]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11075]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11077]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Defence - ZETLAND NAVY SUPPLY CENTRE [11079]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11078]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11091]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11090]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11082]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11092]	NSW	In buffer area only
Defence - ZETLAND NAVY SUPPLY CENTRE [11083]	NSW	In buffer area only
Defence - Defence Housing Authority		
Commonwealth Land - Defence Housing Authority [13133]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16132]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16133]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14539]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15683]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15590]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14346]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14347]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15672]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14293]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15671]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14291]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14292]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16062]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14290]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13182]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13183]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13180]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13181]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Defence Housing Authority [16061]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13186]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13184]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13185]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13096]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14289]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14288]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16047]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16163]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16045]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16046]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16048]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13050]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13044]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13045]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14298]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14299]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14295]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14294]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14296]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13049]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13124]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14344]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14345]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13178]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13179]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13172]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Defence Housing Authority [13188]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13189]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13170]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13171]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13177]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16135]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16134]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16056]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13190]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13191]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13196]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16028]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16029]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13288]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15417]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13286]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13289]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15956]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13105]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14330]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15973]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15972]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15711]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16189]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14316]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14317]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14314]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Defence Housing Authority [14315]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14318]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14319]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13212]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15976]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15974]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15977]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15975]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14311]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14313]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14312]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13135]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15608]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14297]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14320]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14321]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13051]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13052]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13053]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13169]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13166]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13167]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16356]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [16357]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13084]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13089]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13168]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Defence Housing Authority [15718]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14300]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14303]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15441]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14305]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14302]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14307]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14304]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14309]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14308]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14306]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13176]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14403]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13175]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13174]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13079]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14367]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13076]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13077]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13074]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13075]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13072]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13073]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13071]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13090]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13048]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13083]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Director of War Service Homes [13085]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13086]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13087]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13088]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13082]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13080]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13081]	NSW	In buffer area only
Education, Science and Training - CSIRO		
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [13070]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [15954]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [13069]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [16535]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [16154]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [16155]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [16152]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [16153]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [16156]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [16536]	NSW	In buffer area only
Transport and Regional Services - Airservices Australia		
Commonwealth Land - Airservices Australia [13098]	NSW	In buffer area only
Commonwealth Land - Airservices Australia [14389]	NSW	In buffer area only
Treasury - Reserve Bank of Australia		
Commonwealth Land - Reserve Bank of Australia [13151]	NSW	In buffer area only
Commonwealth Land - Reserve Bank of Australia [13159]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Reserve Bank of Australia [13138]	NSW	In buffer area only
Commonwealth Land - Reserve Bank of Australia [13148]	NSW	In buffer area only
Commonwealth Land - Reserve Bank of Australia [13149]	NSW	In buffer area only
Commonwealth Land - Reserve Bank of Australia [16499]	NSW	In buffer area only
Commonwealth Land - Reserve Bank of Australia [13160]	NSW	In buffer area only
Commonwealth Land - Reserve Bank of Australia [13150]	NSW	In buffer area only
Unknown		
Commonwealth Land - [13078]	NSW	In buffer area only
Commonwealth Land - [14369]	NSW	In buffer area only
Commonwealth Land - [14364]	NSW	In buffer area only
Commonwealth Land - [14365]	NSW	In buffer area only
Commonwealth Land - [16159]	NSW	In buffer area only
Commonwealth Land - [15674]	NSW	In buffer area only
Commonwealth Land - [15670]	NSW	In buffer area only
Commonwealth Land - [15673]	NSW	In buffer area only
Commonwealth Land - [14396]	NSW	In buffer area only
Commonwealth Land - [16283]	NSW	In buffer area only
Commonwealth Land - [14397]	NSW	In buffer area only
Commonwealth Land - [16161]	NSW	In buffer area only
Commonwealth Land - [14392]	NSW	In buffer area only
Commonwealth Land - [16160]	NSW	In buffer area only
Commonwealth Land - [14393]	NSW	In buffer area only
Commonwealth Land - [14394]	NSW	In buffer area only
Commonwealth Land - [14395]	NSW	In buffer area only
Commonwealth Land - [14398]	NSW	In buffer area only
Commonwealth Land - [14399]	NSW	In buffer area only
Commonwealth Land - [14390]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [15503]	NSW	In buffer area only
Commonwealth Land - [15435]	NSW	In buffer area only
Commonwealth Land - [15434]	NSW	In buffer area only
Commonwealth Land - [15436]	NSW	In buffer area only
Commonwealth Land - [13123]	NSW	In buffer area only
Commonwealth Land - [13139]	NSW	In buffer area only
Commonwealth Land - [13122]	NSW	In buffer area only
Commonwealth Land - [13120]	NSW	In buffer area only
Commonwealth Land - [14386]	NSW	In buffer area only
Commonwealth Land - [13173]	NSW	In buffer area only
Commonwealth Land - [15729]	NSW	In buffer area only
Commonwealth Land - [16116]	NSW	In buffer area only
Commonwealth Land - [14387]	NSW	In buffer area only
Commonwealth Land - [14382]	NSW	In buffer area only
Commonwealth Land - [13218]	NSW	In buffer area only
Commonwealth Land - [13219]	NSW	In buffer area only
Commonwealth Land - [13217]	NSW	In buffer area only
Commonwealth Land - [14334]	NSW	In buffer area only
Commonwealth Land - [15410]	NSW	In buffer area only
Commonwealth Land - [14335]	NSW	In buffer area only
Commonwealth Land - [13287]	NSW	In buffer area only
Commonwealth Land - [13101]	NSW	In buffer area only
Commonwealth Land - [14336]	NSW	In buffer area only
Commonwealth Land - [14375]	NSW	In buffer area only
Commonwealth Land - [14376]	NSW	In buffer area only
Commonwealth Land - [14374]	NSW	In buffer area only
Commonwealth Land - [14370]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [14371]	NSW	In buffer area only
Commonwealth Land - [14372]	NSW	In buffer area only
Commonwealth Land - [14373]	NSW	In buffer area only
Commonwealth Land - [14310]	NSW	In buffer area only
Commonwealth Land - [15459]	NSW	In buffer area only
Commonwealth Land - [16562]	NSW	In buffer area only
Commonwealth Land - [13145]	NSW	In buffer area only
Commonwealth Land - [13146]	NSW	In buffer area only
Commonwealth Land - [13141]	NSW	In buffer area only
Commonwealth Land - [13144]	NSW	In buffer area only
Commonwealth Land - [13147]	NSW	In buffer area only
Commonwealth Land - [13142]	NSW	In buffer area only
Commonwealth Land - [13140]	NSW	In buffer area only
Commonwealth Land - [13143]	NSW	In buffer area only
Commonwealth Land - [15690]	NSW	In buffer area only
Commonwealth Land - [14400]	NSW	In buffer area only
Commonwealth Land - [14401]	NSW	In buffer area only
Commonwealth Land - [14353]	NSW	In buffer area only
Commonwealth Land - [13161]	NSW	In buffer area only
Commonwealth Land - [13165]	NSW	In buffer area only
Commonwealth Land - [13163]	NSW	In buffer area only
Commonwealth Land - [15689]	NSW	In buffer area only
Commonwealth Land - [15688]	NSW	In buffer area only
Commonwealth Land - [14301]	NSW	In buffer area only
Commonwealth Land - [11160]	NSW	In buffer area only
Commonwealth Land - [13987]	NSW	In buffer area only

Commonwealth Heritage Places

[Resource Information]

Name	State	Status	Buffer Status
Historic			
Admiralty House and Lodge	NSW	Listed place	In buffer area only
Admiralty House Garden and Fortifications	NSW	Listed place	In buffer area only
Army Cottage with return verandah	NSW	Listed place	In buffer area only
Barracks Block	NSW	Listed place	In buffer area only
Barracks Group HMAS Watson	NSW	Listed place	In buffer area only
Batteries A83 and C9A	NSW	Listed place	In buffer area only
Battery B42	NSW	Listed place	In buffer area only
Battery for Five Guns	NSW	Listed place	In buffer area only
Biloela Group	NSW	Listed place	In buffer area only
Bondi Beach Post Office	NSW	Listed place	In buffer area only
Botany Post Office	NSW	Listed place	In buffer area only
Buildings 31 and 32	NSW	Listed place	In buffer area only
Buildings MQVB16 and VB56	NSW	Listed place	In buffer area only
Buildings VB13, 15, 16 & 17	NSW	Listed place	In buffer area only
Buildings VB41, 45 & 53	NSW	Listed place	In buffer area only
Buildings VB60 and VB62	NSW	Listed place	In buffer area only
Buildings VB69, 75 & 76 including Garden	NSW	Listed place	In buffer area only
Buildings VB83, 84, 85, 87 & 89	NSW	Listed place	In buffer area only
Buildings VB90, 91, 91A & 92	NSW	Listed place	In buffer area only
Building VB1 and Parade Ground	NSW	Listed place	In buffer area only
Building VB2 Guard House	NSW	Listed place	In buffer area only
Chain and Anchor Store (former)	NSW	Listed place	In buffer area only
Chowder Bay Barracks Group	NSW	Listed place	In buffer area only
Cliff House	NSW	Listed place	In buffer area only
Cockatoo Island Industrial Conservation Area	NSW	Listed place	In buffer area only
Commonwealth Avenue Defence Housing	NSW	Listed place	In buffer area only

Name	State	Status	Buffer Status
Cottage at Macquarie Lighthouse	NSW	Listed place	In buffer area only
Customs Marine Centre	NSW	Listed place	In buffer area only
Defence site - Georges Heights and Middle Head	NSW	Listed place	In buffer area only
Factory	NSW	Listed place	In buffer area only
Fitzroy Dock	NSW	Listed place	In buffer area only
Garden Island Precinct	NSW	Listed place	In buffer area only
Gazebo	NSW	Listed place	In buffer area only
General Post Office	NSW	Listed place	In buffer area only
Golf Clubhouse (former)	NSW	Listed place	In buffer area only
Headquarters 8th Brigade Precinct	NSW	Listed place	In buffer area only
Headquarters Training Command Precinct	NSW	Listed place	In buffer area only
HMAS Penguin	NSW	Listed place	In buffer area only
Kirribilli House	NSW	Listed place	In buffer area only
Kirribilli House Garden & Grounds	NSW	Listed place	In buffer area only
Macquarie Lighthouse	NSW	Listed place	In buffer area only
Macquarie Lighthouse Group	NSW	Listed place	In buffer area only
Macquarie Lighthouse Surrounding Wall	NSW	Listed place	In buffer area only
Marine Biological Station (former)	NSW	Listed place	In buffer area only
Marrickville Post Office	NSW	Listed place	In buffer area only
Mess Hall (former)	NSW	Listed place	In buffer area only
Military Guard Room	NSW	Listed place	In buffer area only
Military Road Framework - Defence Land	NSW	Listed place	In buffer area only
Naval Store	NSW	Listed place	In buffer area only
Navy Refuelling Depot and Caretakers House	NSW	Listed place	In buffer area only
North Head Artillery Barracks	NSW	Listed place	In buffer area only
North Sydney Post Office	NSW	Listed place	In buffer area only

Name	State	Status	Buffer Status
Office Building	NSW	Listed place	In buffer area only
Officers Mess, HQ Training Command	NSW	Listed place	In buffer area only
Paddington Post Office	NSW	Listed place	In buffer area only
Power House / Pump House	NSW	Listed place	In buffer area only
Prison Barracks Precinct	NSW	Listed place	In buffer area only
Pyrmont Post Office	NSW	Listed place	In buffer area only
Reserve Bank	NSW	Listed place	In buffer area only
Residences Group	NSW	Listed place	In buffer area only
Rigging Shed and Chapel	NSW	Listed place	In buffer area only
School of Musketry and Officers Mess, Randwick Army Barracks	NSW	Listed place	In buffer area only
Shark Point Battery	NSW	Listed place	In buffer area only
Snapper Island	NSW	Listed place	In buffer area only
Spectacle Island Explosives Complex	NSW	Listed place	In buffer area only
Sutherland Dock	NSW	Listed place	In buffer area only
Sydney Airport Air Traffic Control Tower	NSW	Listed place	In buffer area only
Sydney Customs House (former)	NSW	Listed place	In buffer area only
Ten Terminal Regiment Headquarters and AusAid Training Centre	NSW	Listed place	In buffer area only
Thirty Terminal Squadron Precinct	NSW	Listed place	In buffer area only
Underground Grain Silos	NSW	Listed place	In buffer area only
Victoria Barracks Perimeter Wall and Gates	NSW	Listed place	In buffer area only
Victoria Barracks Precinct	NSW	Listed place	In buffer area only
Victoria Barracks Squash Courts	NSW	Listed place	In buffer area only
Woolwich Dock	NSW	Listed place	In buffer area only

Listed Marine Species

[Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]		Species or species habitat likely to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]		Foraging, feeding or related behaviour known to occur within area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Foraging, feeding or related behaviour known to occur within area	In feature area
Calidris alba Sanderling [875]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In buffer area only
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ruficollis Red-necked Stint [860]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Calidris subminuta Long-toed Stint [861]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In buffer area only
Calidris tenuirostris Great Knot [862]	Critically Endangered	Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In feature area
Charadrius bicinctus Double-banded Plover [895]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius ruficapillus Red-capped Plover [881]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea antipodensis gibsoni as Diomedea gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In feature area
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area overfly marine area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In buffer area only
Limicola falcinellus Broad-billed Sandpiper [842]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa limosa Black-tailed Godwit [845]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat known to occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In buffer area only
Neophema chrysostoma Blue-winged Parrot [726]		Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Foraging, feeding or related behaviour likely to occur within area overfly marine area	In buffer area only
Numenius phaeopus Whimbrel [849]		Foraging, feeding or related behaviour known to occur within area	In feature area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In buffer area only
Phaethon lepturus White-tailed Tropicbird [1014]		Species or species habitat known to occur within area	In feature area
Philomachus pugnax Ruff (Reeve) [850]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Foraging, feeding or related behaviour known to occur within area	In feature area
Pluvialis squatarola Grey Plover [865]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Recurvirostra novaehollandiae Red-necked Avocet [871]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Stercorarius skua as Catharacta skua Great Skua [823]		Species or species habitat may occur within area	In buffer area only
Sternula albifrons as Sterna albifrons Little Tern [82849]		Breeding likely to occur within area	In buffer area only
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat known to occur within area overfly marine area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche bulleri platei as Thalassarche sp. nov. Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche eremita Chatham Albatross [64457]	Endangered	Foraging, feeding or related behaviour may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Tringa brevipes as Heteroscelus brevipes Grey-tailed Tattler [851]		Foraging, feeding or related behaviour known to occur within area	In feature area
Tringa incana as Heteroscelus incanus Wandering Tattler [831]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area overfly marine area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]		Foraging, feeding or related behaviour known to occur within area overfly marine area	In buffer area only
Fish			
Acentronura tentaculata Shortpouch Pygmy Pipehorse [66187]		Species or species habitat may occur within area	In buffer area only
Festucalex cinctus Girdled Pipefish [66214]		Species or species habitat may occur within area	In buffer area only
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In buffer area only
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In buffer area only
Hippocampus whitei White's Seahorse, Crowned Seahorse, Sydney Seahorse [66240]	Endangered	Species or species habitat known to occur within area	In buffer area only
Histiogamphelus briggsii Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area	In buffer area only
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In buffer area only
Solenostomus paradoxus Ornate Ghostpipefish, Harlequin Ghost Pipefish, Ornate Ghost Pipefish [66184]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In buffer area only
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Mammal			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In buffer area only
Dugong dugon Dugong [28]		Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Species or species habitat known to occur within area	In feature area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Pelamis platurus Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area	In buffer area only

Whales and Other Cetaceans [Resource Information]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	In feature area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves [Resource Information]

Protected Area Name	Reserve Type	State	Buffer Status
Bronte-Coogee	Aquatic Reserve	NSW	In buffer area only
Garigal	National Park	NSW	In buffer area only
Lane Cove	National Park	NSW	In buffer area only
North Head	Private Nature Reserve	NSW	In buffer area only
North Sydney Harbour	Aquatic Reserve	NSW	In buffer area only
Parramatta River	Regional Park	NSW	In buffer area only
Sydney Harbour	National Park	NSW	In feature area
Wallumatta	Nature Reserve	NSW	In buffer area only
Wolli Creek	Regional Park	NSW	In buffer area only

Nationally Important Wetlands [Resource Information]

Wetland Name	State	Buffer Status
Botany Wetlands	NSW	In buffer area only
Eve St. Marsh, Arncliffe	NSW	In buffer area only

EPBC Act Referrals [Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Australian Institute of Police Management Facilities Upgrade	2006/2746	Controlled Action	Post-Approval	In buffer area only
Concept Plan Proposal for residential and commercial development of UTS Kuring-	2008/4083	Controlled Action	Post-Approval	In buffer area only
Construction and operation of the Westconnex New M5, Sydney, NSW	2015/7520	Controlled Action	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Cook Cove Southern Precinct development, Sydney, NSW	2016/7767	Controlled Action	Post-Approval	In buffer area only
Cooks Cove Development Project	2006/2685	Controlled Action	Post-Approval	In buffer area only
Development of a Residential Care Facility, Middle Head, NSW	2014/7194	Controlled Action	Post-Approval	In buffer area only
Expansion of Port Botany facilities	2002/543	Controlled Action	Post-Approval	In buffer area only
Garden Island Hammerhead Crane Proposed Removal, NSW	2012/6430	Controlled Action	Post-Approval	In buffer area only
Moriah War Memorial College expansion	2002/575	Controlled Action	Post-Approval	In buffer area only
Pilot Offshore Artificial Reefs	2008/4176	Controlled Action	Post-Approval	In buffer area only
Relocation of Grey-Headed Flying-Fox Colony	2008/4646	Controlled Action	Post-Approval	In buffer area only
Sand Reclamation to Towra Beach	2003/1085	Controlled Action	Post-Approval	In buffer area only
Southern section of the Bonnie Doon Golf Course, Pagewood, NSW	2015/7479	Controlled Action	Completed	In buffer area only
Sydney Opera House Building Renewal Program, NSW	2016/7825	Controlled Action	Post-Approval	In buffer area only
Sydney Opera House Building Renewal Program - Concert Hall and associated works	2017/7955	Controlled Action	Post-Approval	In buffer area only
Upgrade of Floodlighting for Night Sports Training	2009/4798	Controlled Action	Completed	In buffer area only
Not controlled action				
ABC Gore Hill, Lanceley Place Site Redevelopment	2002/908	Not Controlled Action	Completed	In buffer area only
ABC Proposed Sale of Property Commonwealth Land	2020/8855	Not Controlled Action	Completed	In buffer area only
Admiralty House, Kirribilli, foreshore works, NSW	2014/7357	Not Controlled Action	Completed	In buffer area only
APX-East sub-sea telecommunications & data cable system	2014/7139	Not Controlled Action	Completed	In buffer area only
Artarmon Helipad Relocation	2001/186	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Australia-USA Southern Cross NEXT fibre optic cable installation	2019/8405	Not Controlled Action	Completed	In buffer area only
Botany Rail Duplication	2019/8566	Not Controlled Action	Completed	In buffer area only
BP/Mobil Pipeline to Kingsford Smith Airport	2000/104	Not Controlled Action	Completed	In buffer area only
Change of use of existing room in research laboratory	2002/665	Not Controlled Action	Completed	In buffer area only
Conservation and Adaptive Use of Quarantine Station	2002/556	Not Controlled Action	Completed	In buffer area only
Construct and operate an aerial adventure park	2012/6239	Not Controlled Action	Completed	In buffer area only
Construction and Operation of the Parramatta Rail Link - between Parramatta and	2002/673	Not Controlled Action	Completed	In buffer area only
construction of four dwellings and associated facilities	2005/2396	Not Controlled Action	Completed	In buffer area only
Decommissioning of Army Depot, Haberfield	2001/217	Not Controlled Action	Completed	In buffer area only
Decommissioning of NMC and Camperdown Facility	2010/5645	Not Controlled Action	Completed	In buffer area only
Demolition and Removal of Two Naval Cottages	2008/4373	Not Controlled Action	Completed	In buffer area only
Demolition of Ablutions Block, Snapper Island, NSW	2018/8303	Not Controlled Action	Completed	In buffer area only
Demolition of the existing club house and construction of a new club house	2009/4932	Not Controlled Action	Completed	In buffer area only
Environmental Works	2001/396	Not Controlled Action	Completed	In buffer area only
Extension of Hale Street to Foreshore Road and Associated Works	2008/4035	Not Controlled Action	Completed	In buffer area only
Fitout works, 4th Floor, Sydney Customs House, 31 Alfred Street	2004/1449	Not Controlled Action	Completed	In buffer area only
Fuel Reduction Proposal Redfield Road, East Killara	2003/1238	Not Controlled Action	Completed	In buffer area only
Garden Island ADI Warehouse	2000/69	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Georges River Program 2	2003/999	Not Controlled Action	Completed	In buffer area only
Gore Hill Conservation Management Plan	2000/109	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Industrial Subdivision	2004/1859	Not Controlled Action	Completed	In buffer area only
Installation of Sydney-Guam Submarine Cable	2007/3848	Not Controlled Action	Completed	In buffer area only
Internal Modifications to Reserve Bank of Australia	2008/4431	Not Controlled Action	Completed	In buffer area only
M2 Motorway Upgrade	2010/5329	Not Controlled Action	Completed	In buffer area only
Noxious weed removal and controlled burn	2003/1272	Not Controlled Action	Completed	In buffer area only
Rabbit Control Anzac Rifle Range	2005/1940	Not Controlled Action	Completed	In buffer area only
RBA HOWP 65 Martin Place, NSW	2020/8870	Not Controlled Action	Completed	In buffer area only
Redevelopment 60 Martin Place, Sydney, NSW	2015/7490	Not Controlled Action	Completed	In buffer area only
Rehabilitation works of the Coogee Sewer Diversion Submain - Maxwell Avenue, Mar	2004/1683	Not Controlled Action	Completed	In feature area
Remediation of contaminated aesbestos site	2002/608	Not Controlled Action	Completed	In buffer area only
Remediation of Contaminated Buildings	2005/1983	Not Controlled Action	Completed	In buffer area only
Remediation of Contaminated Soil	2005/1985	Not Controlled Action	Completed	In buffer area only
Remediation of contaminated soil around the Macquarie Lighthouse	2004/1836	Not Controlled Action	Completed	In buffer area only
Residential subdivision and stormwater management facilities	2003/1141	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Residential subdivision works, Spurway St, Ermington	2003/1130	Not Controlled Action	Completed	In buffer area only
Sale of New South Head Road, Edgecliff	2001/302	Not Controlled Action	Completed	In buffer area only
sewage treatmemt plant process and reliability renewals project	2005/2186	Not Controlled Action	Completed	In buffer area only
Shipment of Spent Nuclear Fuel to USA	2007/3672	Not Controlled Action	Completed	In buffer area only
subdivision and development on the Rhodes Peninsula for residential and commerci	2003/1249	Not Controlled Action	Completed	In buffer area only
Subdivision and sale of Commonwealth land in Pymble to Ku-ring-gai City Council	2004/1368	Not Controlled Action	Completed	In buffer area only
Subdivision of Precincts 3 and 12, St Patricks Estate	2004/1925	Not Controlled Action	Completed	In buffer area only
Supply of a gigabit ethernet connection with associated trenching, boring and ha	2007/3637	Not Controlled Action	Completed	In buffer area only
Sydney Desalination Plant	2005/2331	Not Controlled Action	Completed	In buffer area only
Sydney Metro Network Stage 2	2010/5307	Not Controlled Action	Completed	In buffer area only
Sydney Primary Loop Gas Pipeline	2006/2622	Not Controlled Action	Completed	In buffer area only
Torpedo Factory Renewal Project	2020/8847	Not Controlled Action	Completed	In buffer area only
Undertake a controlled burn of the Eastern Suburbs Banksia Scrub at Byrne Cresce	2004/1728	Not Controlled Action	Completed	In buffer area only
Undertaking of fire protection measures for the bushland regeneration of the Ranwick Environmental P	2003/959	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
Construction works on SE corner of the grounds of Admiralty House	2012/6278	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Hawaiki Fibre-Optic Submarine Cable installation	2016/7765	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action (particular manner)				
Hyde Park Barracks Proposed New Passenger Lift	2017/7933	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
International fibre optic submarine cable installation, between Sydney and Honiara, Solomon Islands	2015/7502	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Kingsford Defence Land Subdivision and Redevelopment	2002/852	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Moriah Primary School, Centennial Park, Sydney	2004/1676	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Southern Cross Australia-New Zealand-America marine acoustic survey of the seabed	2017/7863	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Walking Track connecting Middle Head Rd & Balmoral Park	2002/572	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				
Alterations and Additions	2006/3081	Referral Decision	Completed	In buffer area only
Breeding program for Grey Nurse Sharks	2007/3245	Referral Decision	Completed	In buffer area only
Demolition and Removal of Five Naval Cottages	2008/4322	Referral Decision	Completed	In buffer area only
Demolition of Naval Cottages & Revegetation as Part of SHFT's Headland Park	2005/2128	Referral Decision	Completed	In buffer area only
Relocation of Grey-Headed Flying-Fox Colony	2008/4568	Referral Decision	Completed	In buffer area only
Renovation and Landscape Rehabilitation of the Championship Course at Royal Sydney Golf Club	2022/9167	Referral Decision	Referral Publication	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Referral decision				
Summer Hill Flour Mills Residential & Commercial development	2011/5859	Referral Decision	Completed	In buffer area only

Biologically Important Areas

Scientific Name	Behaviour	Presence	Buffer Status
Dolphins			
Tursiops aduncus			
Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Breeding	Likely to occur	In buffer area only
Sharks			
Carcharias taurus			
Grey Nurse Shark [64469]	Foraging	Known to occur	In buffer area only
Whales			
Megaptera novaeangliae			
Humpback Whale [38]	Foraging	Known to occur	In buffer area only

Bioregional Assessments

SubRegion	BioRegion	Website	Buffer Status
Sydney	Sydney Basin	BA website	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

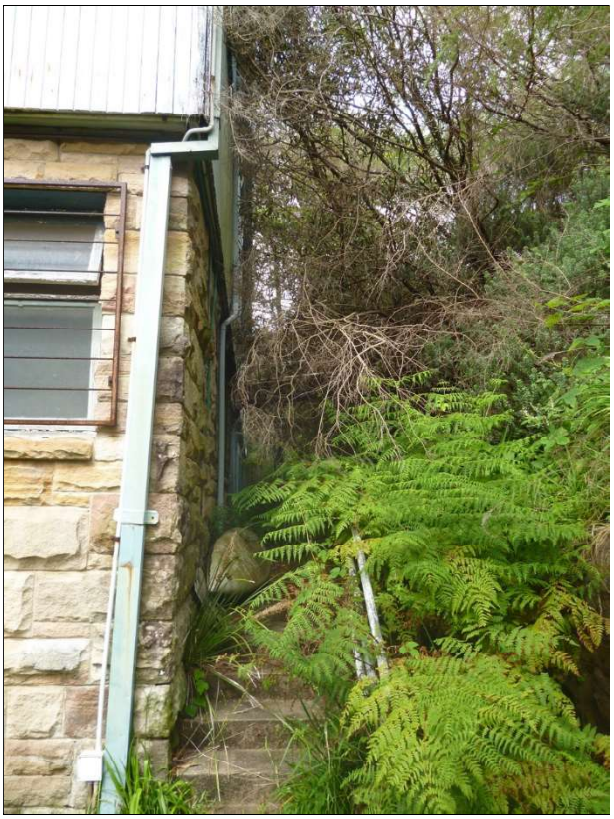
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Appendix I – Photographic record of the study area

 	Character of the PESB and concrete slab. Photograph taken facing south.
	Character of PESB and concrete slab. Photograph taken facing north.

	Character of vegetation adjacent to the southern side of the PESB. Photograph taken facing west.
	Character of vegetation in proximity of the proposed work area, and edge of concrete slab underlaying PESB. Photograph taken facing south-east.
	Character of the PESB and surrounding vegetation. Photograph taken facing southeast, from bridge above Barney's Cut, visible at the bottom right. Photograph taken facing south.

	Character of vegetation at rear of building in north-western corner. Photograph taken facing south.
	Character of vegetation adjacent (to the north) of the PESB. Photograph taken facing west.

	Character Barney's Cut, north of the PESB. Sandstone wall on left continues south behind the PESB. Photograph taken facing north.
	Character of foreshore to east of the PESB. Photograph taken facing south.

	Character of vegetation to the rear of the building. Photograph taken facing south.
	Character of vegetation to the rear of the building. Photograph taken from the upper pathway, facing south.

	Character of vegetation to the rear of the building. Photograph taken from the upper pathway, facing east.
	Character of vegetation to the rear of the building. Photograph taken from the upper pathway, facing south.

Appendix J – Flora species recorded

KEY
- WoNS; * - weed

FAMILY	Scientific Name	Common Name
FILICOPSIDA		
Adiantaceae	*Adiantum aethiopicum*	Common Maidenhair Fern
Asphodelaceae	*Asphodelus fistulosus*	Onion Weed
Cyatheaceae	*Cyathea sp.*	Treefern
Davalliaceae	*Nephrolepis cordifolia* *	Fishbone Fern
Dennstaedtiaceae	*Pteridium esculentum*	Bracken Fern
PINOPSIDA		
Cupressus	*Cupressus sp.*	
MAGNOLIOPSIDA - DICOTYLEDONS		
Asclepiadaceae	*Araujia hortorum* *	Moth Plant
Asteraceae	*Ageratina adenophora* *	Crofton Weed
	Taraxacum sp.	Dandelions
	Bidens pilosa *	Farmers Friend
Commelinaceae	*Tradescantia fluminensis* *	Wandering Jew
Convolvulaceae	*Ipomoea indica* *	Morning Glory
Fabaceae: Caesalpiniaceae	*Senna pendula* var. *glabrata* *	Cassia
Fabaceae: Mimosoideae		
	Acacia longifolia var. sophorae	Coastal Wattle
Lamiaceae	*Westringia fruticosa*	Coast Westringia
Lauraceae	*Cinnamomum camphora* *	Camphor Laurel
Liliaceae	*Lilium formosanum* *	Formosan Lily
Lobeliaceae	*Lobelia alata*	Angled Lobelia
Moraceae	*Ficus rubiginosa*	Port Jackson Fig
Myrtaceae	*Eucalyptus botryoides*	Bangalay
	Kunzea ambigua	Tick Bush
Pittosporaceae		
	Pittosporum undulatum	Sweet Pittosporum
Plantaginaceae		
	Plantago lanceolata *	Lamb's Tongue
Polygonaceae		
	Rumex sp. *	Dock
Proteaceae		
	Banksia sp.	Banksia
Tropaeolaceae	*Tropaeolum majus**	Nasturtium
Urticaceae		
	Parietaria judaica *	Asthma Weed
Verbenaceae		
	# Lantana camara *	Lantana
	*Lantana montevidensis**	Creeping Lantana
Aracaceae	*Livistona australis*	Cabbage-tree Palm
Asparagaceaebank		
	# Asparagus aethiopicus *	Asparagus Fern
Cyperaceae		
	Cyperus eragrostis *	Flatsedge
Lomandraceae		
	Lomandra longifolia	Mat Rush
Nyctaginaceae	*Bougainvillea sp.*	
Phormiaceae	*Dianella carulea* var. *producta*	Blue Flax Lily
Poaceae	*Cenchrus clandestinus* *	Kikuyu Grass