Assessment of Historical and Archaeological Resources of the Royal Mint site, Sydney

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The views expressed in this book may not be representative of the Historic Houses Trust of New South Wales or the other project partners and remain the responsibility of the authors.

The Archaeology of the Modern City project incorporates two research ventures: ‘Exploring the Archaeology of the Modern City: Sydney 1788–1900’ and ‘Managing the Archaeology of Central Sydney and Melbourne 1788–1900’. Both projects are funded by the Australian Research Council Linkage Scheme and conducted by Project Partners: La Trobe University, the Historic Houses Trust of New South Wales, Godden Mackay Logan Pty Ltd, the Sydney Harbour Foreshore Authority, the NSW Heritage Office, Heritage Victoria and the Sydney City Council.
Introduction to the Historical and Archaeological Resources Assessment Reports

This is one of seven reports concerning the assessment of historical and archaeological resources at sites selected for the Exploring the Archaeology of the Modern City (EAMC). The series as a whole requires some introduction.

The assessment reports were written for each archaeological site by the EAMC team following the assessment of the status of resources available to the project. While they provide some background to the excavations and historical research undertaken at each site, the reports were not intended as a comprehensive history of such work. Rather, they are an assessment of whether the surviving products of that work were sufficient to justify further research within the scope of the EAMC project.

These reports were originally intended for review by Industry Partners only and have not been written for a general audience. It was decided many months after their preparation, that the contents were significant enough to warrant distribution to interested parties, despite containing some sensitive discussion of the work of peers.

All primary consultants discussed in the reports were provided the opportunity to comment on the presentation of their work prior to publication.

Any errors discovered in the assessment process are presented as matters of fact, and the EAMC assessment should not be read as a judgement upon the professionalism of the consultants and researchers discussed in the report.

Further, it is worth noting that the primary purpose of the EAMC reports should not be confused with a generalised evaluation of past work: resources considered to be inappropriate for EAMC work are not necessarily ruled out for use in other research contexts.

The systematic assessment of artefact catalogues in Australian historical archaeology is uncharted territory and the EAMC team had to develop their own methods to undertake this task. Any feedback on our approach and procedures is most welcomed.

We hope that the circulation of these reports will spark serious consideration of the many important issues raised by the need to systematically record data in heritage archaeology contexts.

Professor Tim Murray
Chief Investigator
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1.0 INTRODUCTION

The bulk of the artefact collection from the Mint was excavated in 1981 when the site was developed for a museum of decorative arts. The remainder was recovered during monitoring works of the Museum grounds in 1994 and 1995.

The ‘Exploring the Archaeology of the Modern City’ project (EAMC) has been established by the Archaeology Program of La Trobe University, and Industry Partners, to comprehensively analyse and interpret the large assemblages excavated from historical archaeological sites which are held in storehouses across Sydney. The aim is to develop a clearer and more precise understanding of Sydney’s past material, personal and working worlds from its archaeological remains, than has been previously attempted in Sydney.

The archaeological collection from the Mint is among the suite of material selected for analysis in this project. Other collections include those from the Hyde Park Barracks, First Government House, Susannah Place, the Cumberland and Gloucester Streets site, the Paddy’s Market site and possibly Lilyvale. Artefacts from each collection will be comprehensively analysed within their specific archaeological and broader historical contexts. Once each site has been successfully analysed and interpreted on its own merits, a program of inter-site research, analysis and interpretation will be undertaken to reach a new perspective on Sydney’s past.

Prior to undertaking intra-site research, the records of each collection (excavation records and reports, the artefact database and related historical material) will be reviewed for their accuracy and their utility within the research program.

A review of records pertaining to the Mint archaeological collection was undertaken in May 2001.

This report presents the recommendations arising from the review, including details of work required to utilise the Mint’s historical and archaeological records in the EAMC project, and other recommendations that the Historic Houses Trust (HHT) may wish to consider (Section 3.0).

The details of the review itself are included as appendices. Appendix One provides an assessment of the documents and reports relating to the history and archaeology of the Mint, including an overview of works on the site, and levels of analysis and interpretation offered to date. Appendix Two provides a detailed review of the artefact database.

This report was prepared in August 2001 for the Industry Partners of the AMC Project: the Historic Houses Trust of New South Wales, the Sydney Harbour Foreshore Authority, Godden Mackay Logan Pty Ltd, the NSW Heritage Office, Heritage Victoria and the Sydney City Council.

1.1 AUTHORSHIP

Sections 1.0–3.0 were prepared by Penny Crook (Project Archaeologist). Appendix One was prepared by Laila Ellmoos (Project Historian) and Penny Crook. Appendix Two was prepared by Penny Crook. Tim Murray (Chief Investigator) reviewed this report.
1.2 ACKNOWLEDGEMENTS

Thanks to Michael Bogle (Curator) and Samantha Fabry (Assistant Curator) of the Hyde Park Barracks Museum and the Mint for providing access to the Museum’s records and assisting our review of them. Special thanks to Michael for his suggestions regarding statistical analysis.

Thanks to Paul Donnelly, Curator at the Powerhouse Museum, for allowing access to historical and exhibition-research material at PHM, and also thanks to the DPWS Library staff.

2.0 SUMMARY ASSESSMENT OF HISTORICAL AND ARCHAEOLOGICAL RESOURCES

The review of historical and archaeological records pertaining to the Mint, held by the HHT (currently held in the Hyde Park Barracks complex) and the Powerhouse Museum was undertaken in May 2001 by the EAMC team. The team reviewed all historical and archaeological documents held at these respective institutions and undertook the analysis of a sampled portion of the archaeological catalogue. Details of the review are included in Appendices One and Two. The major results and conclusions of the review are briefly outlined below.

Overall, research that has been undertaken on the artefact collection, the buildings or historical records of the Mint to date has been focussed on building conservation, or the requirements of individual exhibitions held on site. Recent research by Michael Bogle into the working processes of the Mint is more intensive, and is coming to terms with the complexities and inter-connections of minting processes (HHT 2001).

The Mint’s redevelopment into a museum in the 1980s and again in the 1990s has focussed our understanding of its history on the restoration of its physical fabric and its two main phases of occupation: the Hospital era and the Royal Mint. There is no comprehensive history for the site as a whole during all phases. The EAMC Historian will focus on gathering and extending research where required, pending the results of the stratigraphic review that will shortly be undertaken by the Project Archaeologist (see below).

With respect to the archaeological remains of the site, little or no analysis or interpretation of the relatively modest artefact collection has yet been attempted.

Notwithstanding the fact that there is no synthetic account of the site’s stratigraphy, the excavation records and artefact catalogue of the Mint excavation are considered to be adequate for the EAMC project.

Unfortunately, the current database of the Mint artefact collection as a whole is not accurate enough to allow detailed analysis of the assemblage. (See Appendix Two.)

While some of these specific errors can be rectified, overall there is a lack of confidence in the data at hand. The unreliability of the catalogued type series is one of the key problems with the catalogue at present, which means that it is not useful for establishing minimum vessel counts.

Although the research potential of the collection is not promising, the EAMC team will review trench reports and stratigraphic context records in detail to ascertain the integrity of deposits in the Mint collection, focussing on the cellar deposits in the Main Building. Where required, the team will then undertake correction or improvement of records for those artefacts. It is not envisaged that the Mint database will afford more detailed research as part of the EAMC project, but the decision to discard these data will only be taken after the detailed stratigraphic review.
3.0 **Recommendations**

It is recommended that the EAMC team undertake a more-detailed review of the Mint’s stratigraphic records to identify the most significant archaeological deposits or trenches. If such contexts are identified, they will be included in the project’s analysis. The database records for artefacts in these contexts will be corrected and completed by the EAMC team.

It is recommended also that the curators of the Mint database correct errors identified during the sampling and assessment process.

3.1 **List of Specific Tasks**

Following is a list of tasks required to make the Mint catalogue ready for comprehensive analysis, should contexts of sufficient stratigraphic integrity be identified. The EAMC team will undertake this list of tasks within the current scope of the project.

Also provided are recommended corrections to the database for the HHT to undertake, and other suggestions for improvements to the current database. The latter are suggestions only, concerning issues that will not greatly impact upon the EAMC project.

3.1.1 **Tasks Undertaken for the Current EAMC Research Program**

1. Review stratigraphic records.

   If contexts of sufficient stratigraphic integrity are identified, the following tasks *will be undertaken for artefacts recovered from those deposits only*.

2. Re-examine all artefacts (excepting bone, shell and building materials):
   - check for errors;
   - complete additional fields; and
   - provide additional information about diagnostic or unusual items.

3. Review and revise the activity and function or individual artefacts or artefact types.

4. Complete and further develop the type series.

5. Sort, separate and catalogue items from mixed bags.

6. Review and revise the comparability of activity and function categories.

7. Prepare minimum vessel counts for artefact types.

8. Review ceramic sherds to identify more patterns.

9. Review unidentified ceramic sherds (and others, where necessary) to identify industrial vessels used in the Mint process.

10. Research the manufacturers and dates of diagnostic items.

11. Photograph as many diagnostic artefacts as possible.
3.1.2 RECOMMENDATIONS FOR DATABASE CORRECTION TO BE UNDERTAKEN BY THE MINT CURATORS

12. Correct errors identified in Section 4.2 of Appendix Two, in the HHT copy of the Mint database.

3.1.3 IMPROVEMENTS TO BE CONSIDERED BY THE MINT CURATORS

13. Correct and/or reconsider the use of the Artefact Name field. It is suggested that:
   (i) it be deleted altogether (only after the original type series information for underground material is returned to the type name field); or
   (ii) that each record be thoroughly reviewed to identify whether the term selected (the TS Name for underground, either the function or material name for underfloor artefacts) is appropriate; or
   (iii) make all ‘artefact names’ a consistent field, eg function (again, info should only be altered after the original type series information for underground material is returned to the type name field).

14. Add definitions of activities and functions to the database list of them, so that public users can readily understand what the activity ‘Social’ or ‘Other, Cultural’ means.

15. Re-order artefact bags by Artefact Identification Number rather than Type Series.

16. Gather records relating to the Mint site from DPWS (including site reports as well as annual reports and files showing works carried out on the site since 1975), Powerhouse Museum and the Sydney Hospital Archive.

17. Prepare indices of primary documents currently being sourced for the redevelopment of the Mint’s industrial buildings and also for the research material located in the historical research folders—when this research has been completed. Preferably, these should be prepared in Word, Excel or Access, so that they are readily searchable and may be added to the existing bibliography of the Mint.
4.0 APPENDICES

Appendix One: Assessment of Records Relating to the Site’s History and Archaeology

Appendix Two: Sampling the Accuracy and Utility of the Artefact Catalogue
Appendix One:

Assessment of Records relating to the History and Archaeology of the Royal Mint Site

1.0 Background

The buildings comprising the Mint site include the southern wing of Sydney’s former General Hospital, colloquially known as the ‘Rum Hospital’, which faces Macquarie Street, as well as several purpose-built structures for the Royal Mint at the rear. The Mint site, which originally extended from Macquarie Street to Hospital Road, is bounded by the Hyde Park Barracks to the south and the central wing of Sydney Hospital, rebuilt between 1878 and 1897, to the north.

The oldest extant building on the site is the former southern wing of Sydney Hospital, which was constructed between 1811 and 1816. It was commonly referred to as the ‘Rum Hospital’ owing to the method Macquarie used to pay for its construction, whereby contractors D’arcy Wentworth, Garnham Blaxcell and Alexander Riley were given a limited monopoly on the distribution of spirits in the colony. It is unclear who prepared the design for the three Old Colonial Georgian buildings comprising the Sydney Hospital complex, but there were apparently many involved with its construction. There is speculation that both Governor Macquarie and John O’Hearen contributed, with Wendy Thorp claiming O’Hearen to be the stronger contender for being the building’s designer, for he not only defended the methods of its construction against critics but also signed himself as ‘Architect’ in related correspondence (Thorp 1994: 3, Broomham 1997: 2).

After it was completed, criticism was levelled towards the General Hospital because it was considered shoddily constructed and structurally unsound. By 1820, the southern wing was deemed particularly unsafe, with reports that some of it had collapsed and had to be rebuilt (Thorp 1994: 7). Around this time, convict architect Francis Greenway was commissioned to undertake repairs to both the wings of the hospital, including alterations to the roof of the southern wing and the rearrangement of its internal spaces into two separate apartments ‘with two rooms on the ground floor and three on the upper’. More substantial repairs were carried out on the southern wing in 1826, including ‘new palisading, relaying of stone flagging, repairs to the upper verandah, roof repairs, white washing and painting’ (Thorp 1994: 8).

According to archival research carried out by Thorp, Rosemary Broomham and others, it appears unlikely that the General Hospital was used solely for its intended purpose, with ongoing debate about its future possible use while it was being built. Macquarie was under pressure, both within the colony and from Lord Bathurst, to utilise part of the General Hospital as a temporary Supreme Court, perhaps while awaiting the construction of the Greenway designed law courts opposite. Macquarie capitulated, and the northern wing (now Parliament House) and a portion of the central building were given over to Supreme Court Judge Jeffrey Hart Bent as chambers as well as for a temporary courthouse (Broomham 1997: 2–3).
When the General Hospital was completed in 1816, the southern wing was used for its planned purpose, to house hospital staff, namely the Assistant Surgeon and his family. However, from 1823 the 39th Regiment, and briefly the 57th Regiment, used some of the rooms as hospital wards. From 1836, the Store Master also lived there, sharing the upper rooms with the Assistant Surgeon. These overlapping occupants were accommodated with the provision of partitions dividing the internal spaces.

Despite unrealised plans for the southern wing to become a military hospital in 1840, the building was dedicated as the dispensary ‘attached to the hospital for the treatment of paupers’ between 1845 and 1848. This change in use required more repairs to the internal and external building fabric from 1843, including ‘relaying flagging, repairing old joinery and making new, repairs to ceilings, removing partitions to reinstate the original scale of the rooms, replacing broken window glass, painting, lime washing and plastering’ (Thorp 1994: 11). Following the removal of the dispensary to the central hospital wing for the creation of the New General Hospital in 1848, the staff office (including ‘clerical offices and a medical depot’) for the Military occupied the southern wing until 1854 (Thorp 1994: 11).

In 1851, the New South Wales Legislative Council petitioned to establish a mint in Sydney, to take advantage of the gold discovered by Edward Hargreaves at Ophir, just outside Bathurst. This proposal received Royal Assent in 1853, when it was decided to establish a branch of the Royal Mint in the colony of New South Wales, which would also mint gold from Victoria and Queensland. Captain F. C. Ward, the Deputy Mint Master of the Royal Mint in London, drew up plans for the Sydney branch on a site selected at the corner of Bridge and Macquarie Streets. However, at the suggestion of Charles Trickett, the Royal Mint’s Superintendent of Coining who travelled to Australia to supervise its construction, the Mint was located further along Macquarie Street in the southern wing of the General Hospital to save time and costs (Broomham 1997: 5).

Officially opened in 1854, the establishment of the Royal Mint required the extensive internal remodelling of the former hospital wing for accommodation for the Mint Master, administrative offices and receiving and storage rooms for bullion. Land to the rear of the building was also developed, with prefabricated industrial buildings for rolling, assaying and coining imported from England and erected around a courtyard directly behind the former hospital building. The Royal Sappers and Miners carried out the work for the construction of Sydney’s Royal Mint branch.

The Sydney Mint ceased production in 1926 and the site was dismantled, sold off and thoroughly cleaned. From 1927, both the Department of Attorney General and Justice and a number of Government department offices occupied the site. Tenants in the period from 1926 to 1977 included the Housing Commission, the Family Endowment Department, the Court of Marine Inquiry, the Electrical Contractors Licensing Board, the Local Government Superannuation Board and The Ministerial Garage. The internal and external spaces were again altered and demolished to accommodate the needs of this diverse array of occupants.

In 1975, the NSW State Government announced their intention to restore the Mint and the Hyde Park Barracks. The NSW Public Works Department (PWD) undertook the restoration of the physical fabric of the Mint between 1977 and 1979. In 1978, the Mint was placed on the Register of the National Estate, and three years later was granted one of Australia’s first Permanent Conservation Orders (PCO) under the 1977 Heritage Act, along with the Hyde Park Barracks. At this time, artefacts were revealed in services trenches as well as in underfloor spaces within the buildings and grounds of the Mint site. Following test trenching, the PWD embarked on one of Sydney’s first large-scale public excavations, which attracted media attention and was assisted by the work of many volunteers.
In 1979 it was officially announced that the internal spaces of the Mint building would be converted for use as a decorative-arts museum, to be managed by the Museum of Applied Arts and Sciences (MAAS). At this time, other buildings within the Mint complex continued to be used by the Department of Attorney General and Justice as both the District Court and the Land and Environment Court until 1997 (Bogle pers. comm. May 2001). In 1994, the Powerhouse Museum (PHM, formerly MAAS) undertook a review of the decorative arts focus of the Mint Museum, along with plans to redevelop land to the rear dominated by industrial buildings used in the minting process. The Sydney Mint Museum, which opened in 1995, focused on the history of the site as a Mint and also showcased the PHM’s vast numismatic collection.

In 1997, the Sydney Mint Museum was closed, and the buildings comprising it were transferred to the Historic Houses Trust in 1999. The Mint was reopened for use by the HHT after conservation and refurbishment, with a café on the upper level as well as corporate offices and meeting rooms for members of HHT. The remaining industrial structures to the rear are currently unoccupied, and will be redeveloped over the next three years as the HHT headquarters.

### 2.0 Historical, Archaeological and Conservation Work Undertaken at the Mint

The Heritage Group of the Public Works Department carried out restoration and maintenance work on the Mint between 1977 and 1979, as announced in 1975. At this time, the Mint was still occupied by the Department of Attorney General and Justice, and used as ‘law courts, judges chambers and the Parliamentary Library annex’ (Potter ed c1981: 119). The restoration and maintenance of the exterior of the former hospital building included ‘roof framing and structure repairs, roof re-shingling, timber column repairs, verandah rehabilitation and restoration, renewal of verandah balustrading, replacement of stone columns, demolition of post 1870 verandah additions and facade repairs and repainting’ (PWD 1991: 1). Considerable research and experimentation was carried out on the external finishes of the main building, particularly with regards to the paint finishes and the stone columns. During restoration works, fibro additions considered ‘unsympathetic’, were demolished, while other buildings such as the coining factory were maintained for use by the District Court. Landscape works were also carried out on the garden facing Macquarie Street and the fence was replaced with a replica.

As restoration and construction work was underway, Carol Powell was employed by the Department of Public Works to compile archival research on the Mint and the Hyde Park Barracks buildings, and record important artefacts exposed during the conservations works (Potter ed c1981: 1). It was soon realised that the quantity of archaeological material at both complexes was extensive and Sydney-based historical archaeologist Wendy Thorp was commissioned in September 1980 to undertake a test-trenching program to better identify the nature of the archaeological resource (known as Stage I of the excavation). Trenches A, B and D were focussed on a series of cellars underlying the Main Mint building, constructed after the completion of the Hospital and likely to have been filled between 1854 and 1868 (Thorpe 1994b: 4). Trenches C and E explored the location of the 1811 kitchen in the Mint courtyard and the subfloor spaces of the southern Mint buildings. Unlike the Hyde Park Barracks, the underfloor spaces of the upper levels
had been thoroughly cleansed in or before the mid-19th century, and probably again after the Mint ceased operation in 1927 (Thorp 1994b: 3).\(^1\)

At Thorp’s recommendation, an additional excavation program was proposed and Patricia Burritt was commissioned to undertake the work in 1981 (known as Stage II of the excavation). The Stage II excavations opened larger trenches in the area of the initial test-trenches, which in the case of the Main Building incorporated almost all of the eastern verandah. More cellars were revealed here, and more fill, some of which indicated dumping after the c1854 period suggested by the Stage I excavations. A much larger trench was excavated in the courtyard area, which revealed some foundations of the 1811 kitchen foundations, the base of a 19th-century fountain and post-Mint offices or other structures. No structural or significant evidence was recovered in the hospital-outbuilding trench adjacent to the Hyde Park Barracks nor the southern industrial buildings (Thorp 1994b: 6–7). While Stage II was a larger program than Stage I, it was quite small in comparison to the excavation at the Hyde Park Barracks, because there was ‘limited documentary evidence’ for the Mint available at the time (Potter ed c1981: 13).

In 1979, it was announced that the Mint would be used as a decorative-arts museum, to be managed by the MAAS. The conversion of the Macquarie-era building to a museum meant that services such as air-conditioning and lifts had to be introduced into the internal spaces of the building fabric. According to Mint curator Margaret Betteridge, this led to conflict between the practical needs of a modern museum to display fragile items and the philosophies of conservation policy and historical architecture. The Mint Museum was opened from 1982 to 1994, with minor repairs to the physical fabric of the hospital building carried out in 1992–1993. Two years prior, in 1990, Meredith Walker and Robert Moore Architects had been appointed to prepare a statement of significance and conservation guidelines for the Mint. These guidelines and the statement of significance were updated in 1994, to reflect the PHM’s acquisition of rooms in the former coining factory as well as their plans to redevelop and reconstruct the Melting House site. At this time, the garden courtyard to the rear of the hospital building was reconstructed to the Mint phase.

In 1995, the PHM reopened the Mint as the Sydney Mint Museum, with a strong focus on the site’s industrial heritage as Australia’s first mint and its own numismatic collection. In preparation for the new museum, renovation and maintenance works in the courtyard, forecourt, Melting House and Coining Factory were monitored by archaeologists Godden Mackay Pty Ltd.

In 1997, the Sydney Mint Museum was closed, and the buildings were handed to the HHT to manage and conserve. The HHT established corporate offices, meeting rooms for members and a function centre here, following some refurbishment of the main building and part of the Coining Factory. They continue to manage these buildings and as of May 2001 will be responsible for the entire Mint complex.

Table 1 provides a detailed list of the projects that have been undertaken on the Mint since 1977.

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\(^1\) Like the Hyde Park Barracks central dormitory building, however, the ceilings do date to the mid-19th century.
## Table 1  Conservation, archival and archaeological projects undertaken on the Mint site since 1977.

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<td>Small excavation at the 'south end of the Mint basement'</td>
<td>Powell nd (in Thorp 1994b)</td>
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<td>1980</td>
<td>Stage I: Test-trench excavation by Wendy Thorp et al</td>
<td>Five trenches in the Main Building (A, B &amp; D), the courtyard (C) and southern industrial buildings (E)</td>
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</tr>
<tr>
<td>1981</td>
<td>Stage II: Excavation by Patricia Burritt et al</td>
<td>Extensions of the trenches of Stage I, plus a trench in the roadway between the Mint and the Hyde Park Barracks</td>
<td>Burritt et al c1981, Potter (ed) c1981, see also various site records</td>
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<tr>
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<td>Artefact conservation by Glenda Marsh</td>
<td>Artefact collections from throughout the excavated material</td>
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3.0 RECORDS AND REPORTS

3.1 HISTORICAL RECORDS AND REPORTS

Since the mid 1970s, when restoration work commenced on the exterior of the hospital building, over 100 publications have been produced about the Mint complex. Following is a list of the types of publications produced about the Mint in this 20-year period:

- Archaeological reports
- Conservation reports
- Museum plans
- Educational programs
- Exhibition catalogues
- Annotated bibliographies
- Historical reports
- Archival reports
- Architectural histories
- Maintenance reports
- Market research

Full bibliographic references for these publications, which were prepared by, or on behalf of the PWD (later DPWS), the MAAS (later the PHM) and the HHT, are included at the end of this report.

From 1980 to the present, MAAS and HHT employees and volunteers have collated primary research material about the Mint, largely for the purposes of exhibition and conservation works. The bulk of this research is with the PHM. Additional information about the minting phase is located at the Hyde Park Barracks, recently collected for the proposed redevelopment of the industrial buildings. Another possible source of information about the main building, from its construction until it was taken over by the Mint in 1854, is the Sydney Hospital Archive (which is currently being accessioned and will be open to the public in July 2001).

3.1.1 MINT PROJECT OFFICE

Primary documentation about the Mint recently gathered by HHT staff is presently located in the Mint Project Office at the Hyde Park Barracks (located in the former Judges Rooms, Eastern Range). Here, reproductions of original primary sources, including maps and photographs, are located in lever-arch folders in one corner of the room. Some secondary sources such as reference books and reports relating to the Mint are also located in the Mint Project Office. These reports (which in some cases relate also to the Hyde Park Barracks) include conservation reports, archaeological reports and historical analyses of the site. A bibliography of reports about the Mint, which are located at the Barracks and the DUAP library, was compiled and annotated by Fiona Starr in 2000. This bibliography has been incorporated into an Access database, along with additional reports sourced at the PHM and the DPWS libraries, which have annotations provided by the EAMC team.

3.1.2 CURATORS’ ROOM

In the Curators’ Room, a bookshelf and filing cabinets along one wall of the room and filing cabinets in the ancillary room contain documentation primarily about, and images of, the Hyde Park Barracks as well as administrative documentation. Some reports located in this room relate both to the Hyde Park Barracks and the Mint.
3.1.2 POWERHOUSE MUSEUM

Three filing cabinets located in the PHM Library and three lever-arch files belonging to curator Paul Donnelly contain detailed research material about the Mint in its main phases, particularly the Hospital and Mint phases. Research material on the Mint was collected from the 1980s until 1997. This research material, gathered from a number of repositories including the State Records and the State Library, includes reports, newspaper clippings and reproductions of original source material such as photographs, maps, plans and documentation. Maintenance and conservation reports that are not represented at Hyde Park Barracks complex are also located here.

3.2 EXCAVATION AND ARTEFACT RECORDS AND REPORTS

Given the multi-owner and multi-project nature of the archaeological investigation of the Mint, the records of the many excavations and artefact-analyses are quite well conserved and retrievable. The following discussion is based on resources about the Mint retained by the HHT at the Hyde Park Barracks complex.

While, like the Hyde Park Barracks site, there is no comprehensive, coalescing report on the Mint archaeological remains and relics, there are sufficient descriptions of broad areas of excavation (Potter ed c1981, Thorp 1981 and 1994b) which are appropriate for an artefact assemblage with limited archaeological research potential, retrieved from secondary and disturbed contexts (see Section 4.4, Appendix Two).

The main report of the excavation undertaken by Patricia Burritt at the Mint and the adjacent Hyde Park Barracks remains in draft form, without plates or plans. For the Mint, its content outlines which phases of the excavation occurred when and draws on preliminary artefact analyses. A section titled 'Interpretation of Data from the Stage II Excavations' contains a description of major features and structural remains, organised by the main phase of occupation (Potter ed c1981: 34–40):

- The Hospital Infirming and Military Officer Period (1811–1855)
- The Sydney Mint Period (1855–1927)

Unlike the Hyde Park Barracks, there has been no listing of stratigraphic units (see Varman 1993a, 1993b) and no synthetic account of which deposits or areas are most intact or have the most research potential.

This information can be gleaned from the trench reports, site books, plans, photographs, artefact reports and original artefact data-recording sheets, which survive for the major excavation and artefact-analysis projects with some omissions. The documents and reports, some of which relate to the excavation of the Hyde Park Barracks as well as the Mint, are currently stored in various locations at the Hyde Park Barracks Museum complex including:

- Shelves in the Mint Project Office containing reports relating to the archaeological investigations at the Mint (and Hyde Park Barracks).
- Shelves in the Archaeology Room, containing boxed site books, photographs, plans and drawings and some reports and loose reports and folders, including the database printouts (c1990, 1996, 1997).
- Filing Cabinet in the Archaeology Room, containing most records and finds and trench reports from the Stage II (1981) excavation, in addition to administrative files relating to the transfers of the archaeological collection between the Powerhouse and HHT.
- The map drawer in the Archaeology Room contains inked drawings and plans.
• Filing Cabinets in the Curators’ Room, containing MAAS artefact recording forms.
• Shelves in the Curators’ Room, containing photographs of the HPB and Mint excavations.

Table 2 provides a summary of which of these records and reports are available for each project, and is followed by a more-detailed discussion of these records in relation to stratigraphy and artefacts.

3.2.1 STRATIGRAPHIC RECORDING
Trench reports were prepared for all areas of Thorp’s 1980 test trenching (Trenches A–E, see appendices of Thorp 1994b) and Burritt’s 1981 excavation (B1–B4, B6, see filing cabinet in the Archaeology Room). Stratigraphic recording sheets survive for all these areas (B1–B4, B6). The reports are mostly handwritten, are not illustrated and follow the basic structure of aims, methods and results.

Site books also survive for the 1981 excavation and contain indices of stratigraphic units, plans and samples with some commentary on the developments of the excavations. A small level book contains measurements undertaken for the plans.

An extensive photographic record of the Stage I and II excavations, and some monitoring work also survive. The Archaeology Store room contains boxes of colour slides and black-and-white prints taken during the 1981 excavation, along with an index of which trench each view depicts. In the Curators’ Room are more slides and prints of the 1980 and 1981 excavations, collated by Wendy Thorp. Sheets of slides from Elizabeth Pinder’s monitoring works are stored in the Archaeology Room.

Several inked plans and sections are also retained in the Archaeology Room. Indices of plans and drawings are recorded in the site books.

Overall, most of the site records and reports relating to stratigraphy are present and no gaps in the lists of contexts and units have been identified to date. It is expected that the excavation notebooks will be sufficient for the EAMC’s research purposes, despite the fact that a brief review has revealed some variety in the level of detailed description of the removal of particular stratigraphic layers. Such variety is (unfortunately) not uncommon and it is likely that when work examining catalogued artefacts in their archaeological context begins, the records will be satisfactory.

3.2.2 ARTEFACT RECORDING
As listed in Table 2 above, there are original records for the most comprehensive stage of artefact identification for the Mint collection (undertaken by Thorp between 1990 and 1994). The records are stamped on paper bags in which the artefacts are stored. For artefacts entered into the current HHT database in 2000–2001 for the first time, there are no paper records and the records themselves are not comprehensive.

There are records of cataloguing undertaken by MAAS conservators (see Filing Cabinet, Archaeology Room), MAAS acquisition-cataloguers (see folders, Archaeology Room of the Hyde Park Barracks) and some descriptive artefact lists can be found in the original artefact reports.

The information from the artefact analysis was originally entered into the Minark database system and was later re-entered into the Microsoft Access database in which it is now stored. (See Appendix Two of this report for a discussion of the accuracy and utility of the database.) A print-out of the Access database is currently underway.
Table 2  Summary of excavation and artefact records and reports.

<table>
<thead>
<tr>
<th>Project</th>
<th>Original records</th>
<th>Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archival research and artefact recording by Carol Powell, 1980</td>
<td>▪ None identified</td>
<td>▪ Interim report on basement excavation (Powell nd)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Historical outline and notation of some artefacts (Powell c1981)</td>
</tr>
<tr>
<td>Test-trench excavation by Wendy Thorp et al, 1980</td>
<td>▪ None identified</td>
<td>▪ Trench Reports (A–E) in Thorp 1994b</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Progress Report (Thorp 1980)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Final Recommendations (Thorp 1981)</td>
</tr>
<tr>
<td>Excavation by Patricia Burritt et al, 1981</td>
<td>▪ Site note books (3 volumes)</td>
<td>▪ Trench reports (for B1–B4, B6, some hand-written)</td>
</tr>
<tr>
<td></td>
<td>▪ Stratigraphic recording sheets for Areas B1, B2, B3, B4, B6</td>
<td>▪ Final Report (Burritt 1981) with overview of major features and preliminary assessment of finds (see also Potter c1981)</td>
</tr>
<tr>
<td></td>
<td>▪ Level book</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Finds sheets</td>
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</tr>
<tr>
<td></td>
<td>▪ Inked plans (in map drawer)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Photographs (B&amp;W and slide, with index)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artefact conservation by Glenda Marsh, 1982</td>
<td>▪ Conservation treatment reports for various artefact classes. (Filing cabinet, HPB Archaeology Room)</td>
<td>▪ Marsh 1982</td>
</tr>
<tr>
<td>Salvage excavation by Elizabeth Pinder, 1982–83</td>
<td>▪ Original field records are with the Pinder (Wilson 1985: 14)</td>
<td>▪ Final report (Pinder c1983)</td>
</tr>
<tr>
<td></td>
<td>▪ Plans and sections in map drawer of the HPB Archaeology Room</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Slides of the excavation are held at the HPB Archaeology Room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Final Report (Thorp and Campbell Conservation 1994)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ The Melting House Site: Archaeological Assessment and Management Strategy (Godden Mackay 1995)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Final Monitoring Report (Godden Mackay 1996)</td>
</tr>
<tr>
<td>Artefact Catalogue Re-entry by Fiona Starr, 2000–2001</td>
<td>▪ Hand-marked lists of re-numbered items</td>
<td>▪ None</td>
</tr>
<tr>
<td></td>
<td>▪ No paper records for previously uncatalogued artefacts</td>
<td></td>
</tr>
</tbody>
</table>
4.0 Archaeological Analysis

It is now 20 years since the artefacts and structural remains of the Mint were exposed. The artefact assemblage has not, however, been comprehensively analysed and interpreted. This is in part due to the fact that no detailed stratigraphic report has been prepared, that it took some thirteen years to prepare a database catalogue of the collection and, owing to file corruptions, this catalogue has been inaccessible for most of this period. Another factor is that Mint with its disturbed and construction-fill soil deposits quickly became the ‘poor relation’ to the Hyde Park Barracks in the 1981 Public Works Department excavations.

Artefact reports prepared after the excavation (and long before the database catalogue was made available), merely outlined the potential of the combined Hyde Park Barracks and Mint collections and offered preliminary and questionable ‘interpretations’ based on cursory identification of the artefacts and yet-to-be considered stratigraphic sequences. For example, the primary conclusion drawn from the ceramic assemblage of both sites was that no chronology—the only detectable goal of the analysis—could be established because the site had been subjected to too much disturbance (Potter ed c1981: 61). Given the nature of the excavation project and the pressure of the museum development, the preliminary nature of these conclusions is understandable, but they cannot now stand unchallenged. Time constraints were noted in several finds reports of the 1981 excavation (for example, Potter ed c1981: 53, 57, 62, 81).

Comprehensive analysis could not even be considered until the collection had been comprehensively catalogued. In 1985 a project was established by Andrew Wilson of the MAAS to analyse the artefacts from the ‘Mint and Hyde Park Barracks Archaeological Investigation’. While the project incorporated an integrated research design for both sites, there were no definitive plans to analyse the Mint collection (Wilson 1985: 10, 18, 30–48, 35).

The first plans to catalogue the Mint collection were put in place in c1990 when the Department of Planning commissioned Wendy Thorp to assess, catalogue and make recommendations for the management of the Mint, Hyde Park Barracks underground and First Government House artefact assemblages (Thorp & Campbell Conservation 1990, 1994). The brief also included the development of a research design for the three collections. Thorp was critical of attempts to retro-fit a research design—which should have determined the course of excavation—on the artefact collections (Thorp 1994: 54–56). Nonetheless, she discussed some potential avenues of research regarding the institutional use of the three sites, social status and economic power. Thorp also presented a series of tables indicating the presence and absence of artefacts of the same activity, function or ceramic decoration across the three sites, constituting the first ball-park, but unfortunately not comprehensive, analysis of the Mint artefact collection.

While the Mint did benefit from the inter-site comparison with FGH and the Hyde Park Barracks by drawing it into a shared historical context, the conglomeration of artefacts from several disturbed trenches did little to enhance the understanding of working and domestic life at the Mint (Thorp 1994: 55, 62, 67).

There was little justification for substantial analysis and interpretation of the quantities of artefacts recovered by GML while monitoring excavations in 1995 and 1996, considering the disturbed and in-filled nature of most deposits. Nonetheless a catalogue was prepared and artefacts recovered outside the Coining Factory were identified to be pipeclay tubes from the Melting House.

Despite these catalogues, no thorough artefact-analysis and interpretation of the whole Mint collection that takes into account the integrity of stratigraphic contexts has been prepared.
5.0 Historical, Archaeological and Museological Interpretations of the Mint

An integrated and contextual historical interpretation of the Mint complex, which covers all of its phases equally and draws on its archaeological collection, is yet to be written. Similarly to the Hyde Park Barracks, this absence is due to the emphasis placed on the physical fabric of the main hospital building during restoration from 1977 to 1979 and while it operated as a museum from 1982 to 1997.

In the past 20 years, considerable archival research has been carried out on the Mint complex for a number of purposes including conservation practice, the assessment of archaeological potential and museological interpretation. Accordingly, as outlined in Section 3.0, documents have been gathered from repositories around Sydney and in some cases, synthesised into a variety of reports and publications. For example, in the late 1970s, the PWD’s Historic Buildings Group, which included Don Ellsmore, David Turner and Michael Lehany, undertook substantial archival research for the purpose of restoring the main hospital building. Of particular interest were the changes to the physical fabric of the building, such as its paint finishes and stone columns, as the aim was to take it back to its earliest phase as a wing of the General Hospital. The architectural history of the main building was also the focus of archaeological and archival reports produced by Carol Powell and Wendy Thorp in 1981 (Powell c1981, Thorp 1981), as well as in a report produced by Thorp three years later on the Mint’s industrial buildings. The latter report had the stated aim to ‘determine the maximum archaeological potential of the site’ as well as to ‘provide an archaeological assessment of the site as a basis for future planning decisions’ (Thorp 1984).

Less attention, however, was given to the artefacts already recovered. There is no known written interpretation of the Mint’s artefact assemblage that has gone beyond the descriptions and preliminary conclusions drawn in the original excavation report. Godden Mackay’s archaeological monitoring in 1994–1995 was well-reported and some specific artefacts were identified as relating to specific aspects of the minting process, however the assemblage was not large enough, nor of sufficient stratigraphic integrity, to provide a broader interpretation. It is not known whether artefacts from the 1980–1981 excavations were displayed in the MAAS’ decorative-arts museum, nor whether these and the 1994-1995 industrial artefacts played any role in the Sydney Mint Museum. Some Mint artefacts were probably part of the original displays in the Hyde Park Barracks Museum, and today are part of a small, temporary ‘Focus display’ in the Archaeology Room of the Hyde Park Barracks.

The most detailed interpretation of the Mint produced to date is an historical context report prepared by Thorp in 1994. Again, the focus of this report was very much on architectural history rather than the site’s social history, as the objective was to ‘provide a resource document pertaining to the development of the built environment over the entire site’ (Thorp 1994: 1). Rosemary Broomham’s report on the Mint, accompanied by a volume of maps, also provides a comprehensive historical analysis of the site, which aimed to ‘distil the information in numerous earlier reports on the Mint site and broaden that summary by examining its curtilage’. As a consequence, Broomham’s study is less site-specific than previous Mint reports as it ‘extends to the major influences outside the Mint such as the many planning proposals for the Macquarie Street precinct’ (Broomham 1997: 1). Like Thorp’s 1994 report, however, Broomham’s study lacks a social-history perspective.

Considerable archival research has also been undertaken for the purpose of museum display. In 1982, the Museum of Applied Arts and Sciences (MAAS) opened the Mint to the public as a museum devoted to the display of its vast decorative-arts collection. According to curator Margaret Betteridge, ‘the small, intimate
scale of the interior lends itself well to the display of historical and decorative arts, stamps and coins’ (Betteridge 1981: 13). However, unlike the Hyde Park Barracks museum, the Mint museum was not solely concerned with the presentation of its own history, although one of its rooms was to be dedicated to the display of ‘objects and graphics relating to the architectural and occupational history’ of the site, owing to its significance ‘as an “exhibit” in its own right, and the public history of the Mint’ (Betteridge 1981: 13). The focus on the physical fabric of the main hospital building was again evident in two publications authored by Betteridge at this time, one detailing the controversies surrounding the restoration of the main building for use as a museum with the introduction of amenities and services, and the other a room by room account of the architectural history of the building (Betteridge 1981, 1983).

In the late 1980s, James Broadbent and Terence Measham (Broadbent 1988, Measham 1989) undertook reviews of the Mint’s decorative-arts museum. In 1988, Broadbent called for the history of the building and its construction to be interpreted, and suggested that the ‘building must take precedent over the objects displayed in it’ because ‘there is a conflict between the building, the objects displayed in it and the way in which they are displayed’ (Broadbent 1988: 1). The decorative-arts museum was reviewed again in 1990, when Meredith Walker and Robert A. Moore Architects were commissioned to prepare conservation guidelines and a statement of significance for the Mint, along with the Hyde Park Barracks. The decorative-arts focus of the museum did not change until 1994, at which time the guidelines and the statement of significance were updated to reflect the MAAS’ acquisition of rooms in the coining factory, previously used by the PWD for storage. A year earlier, a proposal had been put forward to redevelop the Mint’s industrial buildings and to reconstruct the Melting House on the hospital boundary wall, in order to reinterpret the most dominant phase of the site’s history as a branch of the Royal Mint.

Although the plans to reconstruct the Melting House never came to fruition, the PHM established the Sydney Mint Museum in 1995 to display the site’s own history as Australia’s first Mint and to showcase the PHM’s vast numismatic collection, including the Vickery stamp collection. As part of the new museum, rooms in the Coining Factory were also interpreted; showing the minting processes and associated machinery, and the courtyard garden to the rear of the main building was also reinstated. Again, it is unclear whether the site’s archaeology collection was interpreted museologically.

The Sydney Mint Museum operated until 1997, when the buildings comprising it were handed over the HHT to manage and conserve. Since this time, there has been no museological interpretation of the site, although public access is enabled by the Mint Café and HHT Members’ Lounge. As part of the recently announced proposal to redevelop the Mint’s industrial buildings (vacated by the district courts in 1997) as the HHT headquarters, extensive research is currently being carried out on the minting processes specific to the Sydney Mint. This research will inform the redevelopment process, such that the industrial buildings are interpreted and conserved in the most appropriate manner, while being adapted for administrative functions.
Appendix Two:  
**Sampling the Accuracy and Utility of the Artefact Catalogue**

### 1.0 History of the Archaeological Collection and Catalogue

The archaeological assemblage excavated from the Mint site (hereafter referred to as the 'assemblage') is the result of work carried out in 1981. The record of this assemblage, the catalogue, has been effectively in the making from 1981 to 2000 when the data were entered into a new database developed by the curators of the Hyde Park Barracks Museum.

The assemblage largely comprises artefacts retrieved from five test-trenches excavated by Wendy Thorp between September 1980 and January 1981 and 19 trenches in these and other locations excavated by Patricia Burritt later in 1981. The assemblage also includes artefacts from monitoring work undertaken by Godden Mackay Pty Ltd in 1994 and 1995.2 Because the Mint and Hyde Park Barracks were excavated by Public Works as part of one project, the history of the Mint collection and its records has been integrally tied to that of the Barracks’ collection.

On completion of the excavation in 1981, the artefact assemblages from both sites were cleaned, and preliminarily sorted, inventoried and bagged.

The Museum of Applied Arts and Sciences (MAAS), who became managers of both the Mint and Hyde Park Barracks and their collections after the excavations, undertook conservation work on several items (see MAAS artefact files, held at the Hyde Park Barracks Museum). The collections were stored on site for some time, then moved to the MAAS store at Redfern. At the MAAS store, both collections were muddled together and affected physically by flood waters. Some objects, including items selected for display, were separated from their context numbers (Wilson 1985: 20; Thorp 1994: 6).

In the late 1980s, the Department of Planning commissioned Wendy Thorp and Campbell Conservation Pty Ltd to review the Hyde Park Barracks, Mint and First Government House archaeological collections and provide recommendations for their management (Thorp & Campbell Conservation 1990, 1994). The project, completed in 1994, undertook the sorting, cataloguing and bagging of the Mint assemblage.3 Artefact recording information was written directly on stamped paper bags in which the artefacts are kept. The information was entered into a Minark database.

In June 1990, the HHT assumed control of the Hyde Park Barracks Museum. The combined Hyde Park Barracks and Mint artefact assemblage was transferred from MAAS to the HHT, even though MAAS

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2 Elizabeth Pinder’s monitoring work in 1983 appears not to have been included in the database, and the GML data awaits incorporation into the current database.

3 Cataloguers were: Leah McKenzie, Mafalda Rossi, Julie Byrnes, Wendy Thorp, Wayne Johnson, Brett Noble, Graham Wilson and Dominic Steele. Jocelyn Brown, John Macdonald and Wendy Thorp undertook data entry.
continued to operate the Mint building, because it was considered important for the two collections dug together to be kept together as one resource.

In 1993, MAAS (soon to be known as the Powerhouse Museum [PHM]) began developing plans for a new numismatic and minting museum in the Mint building, to replace the decorative-arts museum installed in 1982. The Sydney Mint museum was established in 1995 and the archaeological collection and other furnishings from the Mint previously transferred to the HHT were returned. The PHM stored the artefacts at various locations during its ownership of the collection (Lavrenic 1998).

### Table 3 Outline of projects and events involving the Mint collection and its catalogue.

<table>
<thead>
<tr>
<th>Year</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>Excavation and analysis by Carol Powell</td>
</tr>
<tr>
<td>1980</td>
<td>Test-trenching by Wendy Thorp and team</td>
</tr>
<tr>
<td>1981</td>
<td>Excavation by Patricia Burritt and team</td>
</tr>
<tr>
<td>1982</td>
<td>Artefact conservation by Glennda Marsh</td>
</tr>
<tr>
<td>Oct 1983</td>
<td>Mint and Hyde Park Barracks collections transferred to MAAS</td>
</tr>
<tr>
<td>Jun 1990</td>
<td>Mint artefact collection transferred to HHT, along with the Hyde Park Barracks material</td>
</tr>
<tr>
<td>1994</td>
<td>Wendy Thorp Artefact Review and Management Recommendations: completed Mint catalogue</td>
</tr>
<tr>
<td>1994</td>
<td>Wendy Thorp Historical Context and Precis of Archaeological Work for Mint</td>
</tr>
<tr>
<td>1994–1995</td>
<td>Monitoring by Godden Mackay Pty Ltd</td>
</tr>
<tr>
<td>1995</td>
<td>Artefact collection transferred to Powerhouse Museum</td>
</tr>
<tr>
<td>Oct 1997</td>
<td>Artefact collection returned to HHT</td>
</tr>
<tr>
<td>2000</td>
<td>Re-entry of artefact data into new HPB database by Fiona Starr</td>
</tr>
<tr>
<td>2001</td>
<td>Exploring the archaeology of the modern city project</td>
</tr>
</tbody>
</table>

The new Mint museum required the installation of additional features and services in the courtyard, the forecourt, the Melting House and Coining Factory\(^4\) which was monitored by archaeologists from Godden Mackay Pty Ltd (now Godden Mackay Logan [GML]). While most deposits recovered during the monitoring work were secondary deposits used for fill or dumped during demolition, some contained important artefacts, such as those relating to the operation of the Melting House, which were used for fill elsewhere on the site (Godden Mackay 1995: 11–12).

When the Sydney Mint Museum was closed, responsibility of the site was given to the HHT. In October 1997, the Mint collection (including 94 boxes of artefacts) was once again transferred from the PHM to the HHT, who continues to hold the collection in May 2001.

\(^4\) The Coining Factory had been a store used by the Public Works department, and was provided to the PHM at the time of the development of the Sydney Mint Museum.
Table 4 Fields used to compile the Mint catalogue, those available in the current HHT artefact database and those required for the EAMC database. (* = field name repeated; **bold** = crucial or important to EAMC analysis)

<table>
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<th>Mint Catalogue</th>
<th>Current HHT database</th>
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<td>Item ID</td>
<td>Artefact ID</td>
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<td>Item Context</td>
<td>(Included in Unit)</td>
</tr>
<tr>
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<td>Unit Code</td>
<td>Unit</td>
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<td>Phase B (Phase To)</td>
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<td>(no equivalent field, information sometimes recorded in Object Name or Function)</td>
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<td>Note</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(No equivalent: will be contained in notes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>——</td>
<td>Image File</td>
<td>Image File</td>
</tr>
<tr>
<td>——</td>
<td>Image Caption</td>
<td>Image Caption</td>
</tr>
<tr>
<td>General Treatment</td>
<td>General Treatment</td>
<td>Conservation</td>
</tr>
<tr>
<td>Storage Location</td>
<td>Storage Location</td>
<td>Box Number</td>
</tr>
<tr>
<td>Display reason</td>
<td>Display reason</td>
<td></td>
</tr>
<tr>
<td>Date (the artefact was examined: not always recorded)</td>
<td>Date Entered</td>
<td>Date entered (Added 2001)</td>
</tr>
<tr>
<td>Specialist’s Initials (on original form, not entered into database)</td>
<td>Entered By</td>
<td>Entered by (Added 2001)</td>
</tr>
<tr>
<td>Date Updated</td>
<td>Date updated (Added 2001)</td>
<td></td>
</tr>
<tr>
<td>Updated By</td>
<td>Updated by (Added 2001)</td>
<td></td>
</tr>
<tr>
<td>EAMC Notes (Added 2001)</td>
<td>EAMC Checked</td>
<td>(Added 2001)</td>
</tr>
<tr>
<td>Bone/Animal</td>
<td>Bone Type</td>
<td>Species name*</td>
</tr>
<tr>
<td>Skeletal element</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone no. complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone no. fragments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone portion name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone portion percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone condition name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone condition description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone condition assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone attribute type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone attribute location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone attribute assessment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5 The italicised fields are those required for detailed analysis of bone and shell artefacts. While these will not be assessed as part of the EAMC project, the fields will remain in the EAMC database for future research.
<table>
<thead>
<tr>
<th>Mint Catalogue</th>
<th>Current HHT database</th>
<th>EAMC database</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Bone ageing location</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bone ageing stage</td>
</tr>
<tr>
<td>Teeth: tooth</td>
<td></td>
<td>Teeth condition</td>
</tr>
<tr>
<td>Butchery location</td>
<td></td>
<td>Butchery type</td>
</tr>
<tr>
<td>Butchery orientation</td>
<td></td>
<td>Animal size</td>
</tr>
<tr>
<td>Animal max size</td>
<td></td>
<td>Seed</td>
</tr>
<tr>
<td>Seed</td>
<td>Seed Type</td>
<td>Seed scientific name</td>
</tr>
<tr>
<td>Shell</td>
<td>Shell Type</td>
<td>Shell common name</td>
</tr>
<tr>
<td>Shell no. complete</td>
<td></td>
<td>Shell no. fragments</td>
</tr>
<tr>
<td>Shell no. bases</td>
<td></td>
<td>Shell no. lids</td>
</tr>
<tr>
<td>Shell condition</td>
<td></td>
<td>Seed condition</td>
</tr>
</tbody>
</table>

In 2000, Fiona Starr re-boxed the artefact collection, which is now stored in the Mint Project Office at the Hyde Park Barracks complex. As the original catalogue prepared by Thorp in Minark had become corrupted and irretrievable, Starr re-entered artefact data into a new database developed by the curators of Hyde Park Barracks Museum. The new HHT database facilitates simple searching mechanisms for broad categories of artefacts and was developed by subconsultant Brian Robson, in consultation with Hyde Park Barracks’ assistant curators Gary Crocket and Samantha Fabry. In May 2001, the database is largely complete and a few minor adjustments and additions will be made in the near future. (The same database structure has been used for the Hyde Park Barracks archaeological collection, and the collection from Susannah Place.)

In 2001, the EAMC team will utilise the data in this new Mint database, and export it to a database designed to meet the project’s analytical requirements.

### 2.0 Terminology

The following discussion includes the use of some database terminology. For this reason, the following distinctions between the collection, catalogue and database and some additional definitions have been provided.

The **collection** or **assemblage** is comprised of the artefacts excavated from the Mint, presently stored in their boxes. The **catalogue** is the paper and electronic record of what is in the boxes. The **database** is a tool for presenting, searching and electronically storing the catalogue. Each catalogued bag of artefacts has been allocated a unique **Artefact Identification Number** (eg RM0110). Information pertaining to this bag is stored in a single **record** in the database (ie the record for RM0110). Each record is composed of a
number of fields, which comprise the catalogue entry for that item, for example, ‘Function’, ‘Type Name’ and ‘Quantity’. When referring specifically to a field name or its contents, the name is shown as a proper noun.

3.0 Sample Size and Assessment Methods

In total, 88 artefact records (ie one or more artefacts grouped in one bag) were examined in the sample. (See Table 5.) This represents 3.8% of the collection as a whole.

The sample comprised artefacts from a demolition layer, Unit 9001 in the Mint courtyard (Trench B3), excavated in 1981. This context was selected because it represents about 3% of the collection as a whole, which is the target size of the sample.

The records of artefacts retrieved by GML when monitoring maintenance work in 1995 were not included in the Mint Database at the time of the sample and have not been examined in this report.

Table 5 Number of bags and estimated fragments sampled and in the collections.

<table>
<thead>
<tr>
<th>Item</th>
<th>Bags</th>
<th>Est. Fragments</th>
<th>Bags Sampled</th>
<th>Est. Fragments Sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mint 1980–81</td>
<td>2,303</td>
<td>12,555</td>
<td>88 (3.8%)</td>
<td>318 (2.5%)</td>
</tr>
<tr>
<td>Total, excl. Bone &amp; Shell</td>
<td>2,071</td>
<td>10,837</td>
<td>85</td>
<td>309</td>
</tr>
</tbody>
</table>

During the course of the sampling process, eight bags from other contexts were also examined and their records checked. This was to verify common problems and, in the case of some pieces noticed to be diagnostic when looking through the box, to see whether appropriate information was recorded.

The artefacts were inspected box by box, and each artefact was examined for its appropriate correspondence with the records contained in the database. The current Mint database was used for this purpose. Where anomalies were discovered, they were noted in a special project notes field added to the EAMC copy of the database. Where inscriptions were noted these were entered into the EAMC copy of the Mint database, but few other changes were made to the original records.

The re-examination was undertaken over four days.

Michael Bogle, Fiona Starr and Brian Robson were consulted with regard to data-entry procedures and limitations and the database formation.

Data-entry problems were easily identified during the sample because the artefact cataloguing sheets were stamped and completed on paper bags in which the artefacts are stored.

Several boxes of artefacts labelled ‘unstratified’ but not necessarily so, are simply bagged with a label indicating their ID number. Basic artefact cataloguing information for these items were added by Fiona Starr directly into the database, with no additional paper record.

6 This estimate is a total of all quantified artefacts and the total of the minimum number of artefacts whose quantity was estimated, eg those recorded as ‘50–100’ were estimated in this total to be 50.
4.0 Discussion of Issues

4.1 Needs of EAMC

The Exploring the Archaeology of the Modern City Project (EAMC) has been established to comprehensively analyse and interpret Sydney’s major historical-archaeological collections. The project team will analyse all archaeological sites managed by the HHT within the Sydney CBD and two or three of the major sites managed by the Sydney Harbour Foreshore Authority. Altogether, the artefacts from these sites are estimated to comprise over one million in number.

Given the scale of the project, the analysis process needs to be as efficient as possible. This is why the bulk of the analytical work on the artefacts will be undertaken on a computer database. The accuracy and fullness of the information about function, colour, portion, form, quantity and diagnostic features in the database is critical to the database’s effective utility in the analytical process.

The basis of meaningful artefact analysis and interpretation is the development of minimum vessel counts. A minimum vessel count is the minimum number of pipes, teacups or glass bottles, for example, in an archaeological context or entire collection, rather than the number of ceramic or glass fragments into which the objects shattered. Minimum vessel counts are calculated by selecting the highest number of diagnostic portion-parts in one artefact type. For example, if there are several hundred plain pipe stems, 20 mouthpieces and 70 fragments of pipe bowls, there must have been at least 20 whole pipes.

Unfortunately, the calculation of minimum numbers of vessels is not standard practice in Australian historical archaeology, and has not been undertaken for the sites under study. The project team will undertake such counts, but can only do so with confidence if the database is comprehensive and accurate.

Another excellent tool for efficient artefact analysis is a fully catalogued Type Series. This provides an easy mechanism for searching and grouping all bottles, tablewares and pen nibs, for example, of the same specific style or product and quickly sorts the diagnostic artefacts from non-diagnostic ones, to produce a meaningful result. Pen nib Type 10, for example, may include all nibs stamped ‘ECKERSTEIN’S BANK PEN’, distinguishable from ‘ECKERSTEIN’S CLERK PEN’, or other bank pens.

In summary, the key needs of the EAMC team in regard to artefact databases provided to the project are:

- comprehensive records that provide information relevant to minimum vessels counts: quantity, portion and integrity;
- accurate and reliable records; and
- a well developed type series that is recorded in the database.

Unfortunately, the Mint database does not provide the above requirements, particularly the latter two, for all records in the collection. The limitations of the database and other issues affecting the catalogue and collection are also discussed below.

4.2 The Mint Artefact Catalogue

As shown in Table 4, the information parameters of the Mint catalogue satisfactorily correspond with the fields required for the EAMC project and do include a type series. While some fields such as form and technique of manufacture were not included, these were sporadically noted elsewhere on the form, and the
notes field has been used extensively for further descriptive information. Corrections and markings on the paper-bag artefact data sheets indicate that volunteers’ work was reviewed by qualified specialists, and promotes some confidence in the accuracy of the records.

Within the structure of this catalogue, however, there were omissions, errors and questionable determinations of type, function and decoration, among other fields. As 4.2.1 Data entry errors and alterations

Nineteen records in the database (21.5% of the sample) were found to contain information different from that in the original catalogue, stamped on the paper bags.

In a handful of cases, words were omitted from various fields in the database. For example, the word ‘rope’ was omitted from the notes field of ceramic sherd RM0645—it being the only reference to the vessel’s transfer-printed rope decoration (the cataloguer did not note the information in the ceramic pattern field). In other cases, additional information such as dates were omitted (eg RM1502, RM1529), which would not largely alter the reading of the artefact, but impacts upon the effectiveness of dating assemblages from each context. The word ‘milk’ was omitted from an inscription of glass bottle RM0251, as were the leaders ‘Obverse’ and ‘Reverse’ which identified on which part of the bottle the inscription appeared. The quantity was omitted from ceramic sherd RM1246.

Table 6 indicates, 55 (62.5%) of the 88 records were satisfactory or contained relatively minor errors or questionable information. The remaining 33 records (37.5%) contained errors of greater concern (such as the omission of a Type Series Number or an erroneous Portion), and in a handful of cases, major errors (such as the earthenwares catalogued as porcelain). If the sample is a fair representation of the whole database, there are likely to be 864 records with significant or major errors and omissions.

The errors, omissions and questionable information encountered during the sample process are discussed in detail below.

4.2.1 Data entry errors and alterations

Nineteen records in the database (21.5% of the sample) were found to contain information different from that in the original catalogue, stamped on the paper bags.

In a handful of cases, words were omitted from various fields in the database. For example, the word ‘rope’ was omitted from the notes field of ceramic sherd RM0645—it being the only reference to the vessel’s transfer-printed rope decoration (the cataloguer did not note the information in the ceramic pattern field). In other cases, additional information such as dates were omitted (eg RM1502, RM1529), which would not largely alter the reading of the artefact, but impacts upon the effectiveness of dating assemblages from each context. The word ‘milk’ was omitted from an inscription of glass bottle RM0251, as were the leaders ‘Obverse’ and ‘Reverse’ which identified on which part of the bottle the inscription appeared. The quantity was omitted from ceramic sherd RM1246.
Table 6  Assessment of records in the sample of Mint catalogue and a projection of the number of records likely in the assemblage as a whole.7

<table>
<thead>
<tr>
<th>Assessment of Record</th>
<th>No Records</th>
<th>Projected No Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory</td>
<td>35 (39.8%)</td>
<td>916</td>
</tr>
<tr>
<td>Minor errors</td>
<td>20 (22.7%)</td>
<td>523</td>
</tr>
<tr>
<td>Significant errors</td>
<td>30 (34.1%)</td>
<td>785</td>
</tr>
<tr>
<td>Major problem</td>
<td>3 (3.4%)</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>2,303</td>
</tr>
</tbody>
</table>

In other cases, the activity or function noted on the original paper bag was altered or accidentally mis-selected.8 Some of these alterations are minor: for example, glass sherd RM1272 catalogued as ‘Pickle/Oil’ but entered into the database as ‘Oil Vin[egar] Bottle’. Others are more misleading, such as the lead-glazed earthenware sherd RM0700 being catalogued with an Unidentified Activity, but now in the database as Food Preparation, and similarly sherds RM0643 and RM0740 originally of Unidentified Activity, now Food Service. The rim sherds RM0666 were originally catalogued as a ‘Plate’ but now appear in the database as Function: ‘Unidentified’.

The portion ‘Body’ was omitted on the record of RM0663, but in three other records (RM1246–RM1248) the portion ‘body’ was entered into the database although it was not recorded on any of the forms (which

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7 This assessment is based on whether the individual records are adequately representative of ‘what’s in the box’. It does not account for noted errors and inconsistencies in the Type Series, eg that several nail Types group ferrous and copper nails. These issues are discussed in Section 4.2.4.

8 In the HHT database the variables of ceramic and glass decoration are selected from a picklist.
was an error in the cataloguing). In the latter cases, most of the sherds were actually rims, making this alteration quite misleading.

Other cases include the ceramic sherd RM1248 decorated with the ‘Fibre’ pattern, mistyped or mis-selected as Floral and the ceramic pattern ‘linear’ on sherd RM0682 omitted from the database.

Perhaps the most affected example of data-entry errors was the button RM1147 for which the function was changed from ‘Closure’ to ‘Button, four holes’, the material from ‘Metal’ to ‘Ferrous metal’ and for which the Quantity, Integrity and the description ‘deep’ in the Notes field were omitted.

Other changes made during data-entry were actually improvements. The catalogued Material of cupel RM0074 was originally ‘Coarse earthenware’ and was corrected in the current database to ‘Bone Ash’, as informed by current research into the production processes of the Mint (Starr pers. comm. May 2001).

In the Mint Database, the Artefact Name field was taken from the Function field for most artefact classes, but in the case of ceramics, from the Material field. In the HPB database, the Artefact Name is predominantly derived from the Type Series Name field of the original HPB underground database and Function field of the underfloor database (which did not have a Type Series). The field should be made consistent across the databases.

The statistical ‘confidence’9 of data-entry errors in the sample suggest that, throughout the database, a researcher can be 99% confident that, at best, there will be a data-entry error every ten records (ie in 10% of cases) and at worst, one every second record (50% of cases). (Note that this does not include minor typographic errors for which the correct spelling can be easily ascertained.)

4.2.2 MIXED BAGS

Thirteen bags (14% of the sample) contained artefacts of different type, portion or pattern, including diagnostic items.

Nine bags of ceramic sherds contained a mix of artefacts of different decoration, form or portion (RM0888, RM1246, RM1245, RM0666, RM1021, RM1230, RM1243, RM1296, RM1295). These included bag RM1245 with six rims, seven body fragments and one base fragment of blue transfer print, comprising at least nine types; bag RM0888 with 14 white earthenware base, rim and body sherds from more than one jar (the record was attributed the function ‘jar’), a jar lid, a small plate or saucer and a mug handle; and bag RM1246 with unidentifiable Activity and Function, containing a plate or saucer base, a child’s tea-cup saucer and a third piece which is unidentifiable.

Two bags of nails contained nails, brads or screws of various length and thickness (RM0483, RM0487) and a bag of three glass sherds (RM1271) catalogued as tumblers, contained two conjoining tumbler base fragments and another sherd likely to be from another vessel, possibly a jar. Bag RM2245, which was previously uncatalogued (see Section 4.2.3 below), contained a mix of large bolts and metal sheeting.

9 The Confidence formula ‘…returns the confidence interval for a population mean. The confidence interval is a range on either side of a sample mean. For example, if you order a product through the mail, you can determine, with a particular level of confidence, the earliest and latest the product will arrive.’ The size of the range is calculated by dividing the Standard Deviation by the square root of the Sample Size, and multiplying that by a figure representing the desired confidence level, eg 95% or 99%. The value of this interval is then added to and subtracted from the sample’s mean (average) score. (Help Menu, MS Excel 2000, Version 9.0.3821 SR-1)
4.2.3 PREVIOUSLY UNCATALOGUED ITEMS

When artefacts were handed over from the HHT to the Powerhouse Museum in 1995, seven boxes of uncatalogued artefacts from the Mint excavation were discovered (Rossi 1997: 1). (The artefacts are now stored in Boxes 17/3 and 21/1 to 23/1.)

When artefact data was re-entered into a new Access database in 2000, these artefacts were preliminarily bagged and catalogued by Fiona Starr. As much detail as possible was completed for these items, but they cannot be considered comprehensive records and were not incorporated into the site’s Type Series.

Five of the 88 bags sampled contained previously uncatalogued items: one bag of mixed bones and four bags of various building materials. Along with all other previously uncatalogued bags, the bags in the sample are stored in boxes labelled ‘Unstratified’ (probably explaining why they were excluded from the 1990–1994 cataloguing program). However, the five sampled bags—and several other previously uncatalogued bags—contain paper labels with trench and context numbers, indicating that they are not ‘unstratified’. The context details on the paper tags are now recorded in the database.

4.2.4 THE TYPE SERIES

The type series for the Mint artefact assemblage was developed in concert with those of the Hyde Park Barracks underground collection and First Government House, although each site’s series was independent (Thorp and Campbell 1994: 45–46). While this type series is certainly an improvement on the cataloguing of other collections (such as the underfloor collection of the Hyde Park Barracks), it is not without its problems.

In addition to the mixed bags (described in Section 4.2.2), which provide one record for individual items of various type and affect the utilisation of the type series, 37 (42%) artefact records in the Mint sample were not allocated a Type number. On review of the database as a whole, 1,037 (45%) of the 2,303 records did not contain a Type number. A total of 306 of these non-typed bags were previously uncatalogued and, as noted above, were not incorporated into the Type Series. Taking out these items, 36% of items in the database do not have Type numbers. Many of these do have Type names.10

Further, as for the Hyde Park Barracks underground collection, there is no independent list of type-series descriptions to quickly ascertain the features distinguishing ‘Blue-and-white Transfer-print Floral 17’ from ‘Blue-and-white Transfer-print Floral 18’. Some of these features may be apparent from inscriptions or specific patterns identified in the database, but for most (catalogued with pattern: ‘floral’, for example), the artefacts allocated to that type would need to be physically re-examined.

Such a task is further complicated by the fact that several sampled artefacts from different bags attributed to the same type are different in material, form and colour. For example, a flattened, oval, ceramic red-glaze bead (RM1564) was typed as ‘Bead 1’, and a pale-blue glass bead (1573) was considered a repeat of ‘Bead 1’ according to the present database. ‘Button 9’ groups one copper button, one plastic button and one made from AES (a kind of silver-plated metal—definition not yet identified). There are five ferrous and two copper bolts grouped under the type ‘Bolt 1’; ‘Nail 1’ groups eight copper and three ferrous-metal

10 The number of these examples cannot be readily quantified at present. When the Hyde Park Barracks artefact databases for the underfloor and underground collections were restructured by the HHT into a new single database, the type name and type number fields were replaced with the Artefact Name field. When the Mint artefact records were re-entered into this new database, the type series details were placed in the Notes field using a variety of references (eg ‘Type Series Bottle 1’, ‘Type Name Bottle No. 1’ or ‘TS Bottle 1’), among other additional information, hence they cannot be readily quantified.
nails; ‘Nail 3’, 21 ferrous-metal and two copper; ‘Nail 7’, four ferrous-metal and three copper; and ‘Nail 12’, one ferrous-metal and one galvanised nail.

It is not yet clear whether these are numerous cases of mis-typing individual artefacts, mixing-up type numbers during cataloguing, or the type categories themselves are simply very broad. Some artefacts in the sample suggest that the latter may be the case. For example, the distinctive band-and-line ceramic wares in the sample were typed under ‘White glaze’ and cobalt-coloured window glass (RM1270) was typed along with all the clear window-glass. Regardless of the reason, the result makes a significant impact on the utilisation of the Type Series in the detailed analysis of the Mint assemblage.

4.2.5 ERRONEOUS AND QUESTIONABLE RECORDS

Fourteen records in the Mint catalogue contain erroneous or questionable information and identifications that have a significant, and in some cases, major impact on artefact analysis.

Two sherds in the sample that were catalogued as porcelain are probably stonewares (RM0889 and RM1246). Of the other 33 sherds catalogued as porcelain in the collection, 5 were probably stoneware and 3 were actually earthenware. Some of these stonewares were partially translucent (which can occur in stoneware), but do not have the glassy characteristics of the porcelain body, and many had crazed glazes, which do not occur in hard-paste porcelain but may appear in soft-paste porcelain, especially early soft-paste porcelain (Spencer 1991: 66). If the stonewares were considered to be soft-paste porcelains, this should have been noted in the database. While the distinction between fine stonewares and soft-paste porcelain is open to debate, the distinction of porcelain from earthenware is an elementary skill in ceramics analysis. The ‘porcelain’ earthenwares were bagged with a mix of several other items which are porcelain, so perhaps the error was more one of ‘mixed bagging’ rather of mis-identification. While the currency of these cases is small, such conspicuous errors cannot be overlooked and do call into question the accuracy of higher-skilled ceramic identifications of form, glaze or transfer-print pattern.

In addition to these more conspicuous errors, the activity and function allocations of some artefacts examined in the sample are questionable. For example, ceramic sherds RM1064 and RM0633, catalogued as plates, are quite thick (approximately 1cm) and may have been platters. Also, a small, flat metal ring (RM0484) was catalogued as a washer, but at 7 mm thick and 22 mm in diameter, seems too thick for a washer. Allowing multiple descriptors in the Activity and Function fields (eg ‘Function: Plate/Platter’), or additional description in the Notes field (eg, ‘Maybe a platter.’) would provide a more accurate record of these kinds of artefacts.

Also, some identifications of ceramic decoration in the Mint catalogue sample were questionable and/or problematic. For example, the blue-on-white circular pattern of RM1247 was identified as splatterware [sic] (presumably spatterware), but shows no indication of the colouring, motifs or sponge-decoration of spatterwares (Spencer 1991: 104).

Other errors evident in the original, paper records pertaining to Portion, Integrity, Glass Colour and the Inscription field were noted in the sample. For example, three artefact bags were recorded as body fragments when the bags contained either base fragments (RM0961) or rims and bases (RM1243, RM1245). The rim and neck of an aqua-tint bottle RM0256 were catalogued as an aqua rim. The integrity of gunflint RM0146 was recorded as complete but it was actually fragmentary. The inscription ‘RADIO CO. SYDNEY’ was omitted from the record of plastic-coated electrical cable RM0486.
4.2.6 INSUFFICIENT OR MISLEADING INFORMATION

There was also a small number of records that were not incorrect, but did not provide sufficient or unambiguous information to make a clear representation of what the artefact, or group of artefacts, actually is. For example, the rope transfer-printed decoration of sherd RM0645 was inappropriately described as being a ‘geometric’ pattern and the glass sherd RM1300, composed of a layer of clear glass overlain with milk glass, was catalogued as being milk in colour only.\(^{11}\) The moulded panels of the plate rim of sherd RM0739 was not described in the record, and only one of the nine glass sherds in bag RM1272 has clear signs of decorative moulding, but all were catalogued as such in the database entry.

The record for the band-and-line ware sherd RM0682 would be clearer and more useful if it provided more details than the pattern type ‘linear’ and the note ‘brown & blue lines’, such as the number, thickness and sequence of the lines. Similarly, the 25 terracotta sherds of RM0991 may be better understood from the database if it were noted the rims are flat-topped and roughly finished, suggesting, a storage or perhaps non-domestic vessel.

In some cases, sherds were recorded as ‘Unidentified’ when their Activity or Function may well have been determined. For example, ‘Unidentified’ artefacts RM1297 and RM1244 are most likely a teacup handle and saucer or small bowl, respectively.

The catalogued records of other artefacts could have been enhanced by further research. Some artefacts for which no manufacture dates are listed in the catalogue have a high probability of being dated, for example, the near-complete milk bottle RM0251 with inscription ‘DAIRY FARMERS CO OP MILK CO LTD / ½ IMPERIAL PINT / PLEASE WASH & RETURN EMPTY BOTTLE’. In the case of transfer-printed decorations, it is likely that the pattern of several patterns presently identified as ‘scenic’ and perhaps those identified as ‘floral’ may be attributed to particular styles, manufacturers and dates.

Conjoins

Only five of the 2,303 records in the database note conjoins within or between artefacts in different contexts. In the 3% sample review of context 9001, a conjoin was discovered between white-glazed sherds in two bags (RM0888 and RM1243). Other conjoins between bags RM1296 and RM1294, and between RM0610 and RM1282, were also suspected, but not investigated at this stage of research. Given that the case of at least one readily identifiable conjoin within Context 9001, it is possible that several conjoins between contexts have been overlooked during cataloguing.

4.2.7 INCONSISTENCIES BETWEEN THE DATABASE AND REPORTS

While the reports relating to the excavation of the Mint do not provide many individual details about particular records, the discussion of the Mint in the report on Stage II excavations noted a Royal Engineers uniform button recovered from the cellar (Potter ed c1981: 38). Of the 39 buttons in the Mint database, none is identified as a Royal Engineer button. Either this item was not part of the assemblage catalogued by Thorp’s team or the information about the button was not available to them. Alternatively, if the item were reassessed and considered to be something other than a Royal Engineer’s button, this revision should be briefly explained in the Notes field.

\(^{11}\) The latter case may well be a case of the limited selections that could be made in Minark, for example a clay pipe stem and bowl fragment could only be catalogued as a ‘pipe stem’ or a ‘pipe bowl’, never ‘pipe stem and bowl’.
4.2.8 INCOMPLETE FIELDS
Excepting data-entry errors, some fields appear not to have been completed for all items. The specialists’ initials and date fields were not completed for all items. Of greater concern, fifty (6.3%) of 796 ceramic records and 108 (26.4%) of the 409 glass records should contain details about the sherd’s portion but do not.

4.2.9 OTHER
During the course of the sample, it was noted that two bags had been catalogued with the same artefact identification number: RM0481.12

4.3 ARTEFACT STORAGE
During the course of the sampling process, it was noted that the artefacts are grouped in boxes by Type Series Name and Number. This made the searching of individual items in a random context more time-consuming and more complex than necessary because one needs to know the type name as well as the artefact identification number to find the item. Given the power of the database to group and regroup artefacts by a particular variable—type, function or context—and print out such lists, it is recommended that the artefacts be boxed in order of their artefact identification number which is unique.

While the order of artefacts in boxes does not have a major impact on the research program undertaken by the EAMC team, it is important to the collection’s overall accessibility and is considered worthwhile to note.

4.4 RESEARCH POTENTIAL OF THE MINT ARTEFACT ASSEMBLAGE
The utility of the Mint artefact assemblage in the EAMC project rests not only in the accuracy of its database but in the research potential of the collection. No clear statement of the archaeological research potential of the Mint assemblage has yet been prepared, and for this reason, the issues affecting it are discussed in detail below.

Based on historical uses alone, the historical and archaeological evidence of the Mint site have the potential to contribute to our understanding of the following broad areas of research:

Pre-hospital (1788–1819?, possibly 1809?)
- Aboriginal occupation
- Potential remains of early European activities or transient accommodation

The Rum Hospital Southern Wing (1811–1843) and the Sydney Dispensary & Military Offices (1843–1854)
- medicinal technology and change
- institutional life and organisation
- domestic life for the assistant-surgeons and others in the main building

12 These were renumbered RM0481a and RM0481b on the bags and in the EAMC copy of the database.
The Royal Mint (1854–1927)

- working life
- domestic life of the Mint Master
- technological innovation and change

With regard to the research needs of the EAMC project, the target artefacts groups or stratigraphic contexts would be those related to the domestic lives of the Hospital staff and the Mint Master, medicinal technology and institutional life during the Hospital period, because these elements of site history bear the most pertinent comparative or contradictory value with other sites in the study. The technology and working life of the Royal Mint between 1855 and 1927 is of less interest to the project, but it is recognised that it is an area of potentially great interest for other researchers.

Archaeological research potential is not limited to the history of site use, but also includes the many structural changes to its physical landscape. The major redevelopment of the Hospital into the Mint, and its disassembly in the 20th century required substantial alteration to the structural remains and occupation deposits of previous eras (if the latter existed at all). Few artefacts relating to the Hospital and Infirmary phase were recovered during excavations, largely due to the extensive redevelopment of the site undertaken for, and during, the Mint occupation. Of the artefacts relating to the Mint phase, none have been stratigraphically related to the domestic occupation of the Mint Master. Those relating to the working practices of the Mint survive in disturbed or secondary deposits, and are often related to construction or repair. In the original trench reports, concerns were raised about the amount of fill brought onto the site during the Mint construction (Potter ed c1981: 39).

The archaeological collection of the Mint derives from the following areas:

- The main building (Stage I: A, B, D; Stage II: B2/1–9b, B4/1)
- The courtyard (Stage I: C; Stage II: B3/1; GML monitoring 1995)
- Southern industrial buildings (Stage I: E; Stage II: B1/1a–2a)
- Roadway adjacent to the HPB common wall (Stage II: B6/1–2)
- Coining Factory (GML monitoring 1995)
- Forecourt (GML monitoring 1995)
- Site of the Melting House (Core samples A, 1–4)

Excavation in the main building focussed on the cellars underneath the eastern verandah. The main building was originally built as the southern wing of the Hospital, and used as a residence for the Mint Master and offices during the Mint phase. The cellars were built during or shortly after the construction of the Hospital and appear to have been filled at various times prior to and during the operation of the Mint. The cellar underlying room G4 in the main building appears to have been filled during the conversion of the infirmary to the Mint but the cellars in the south of the eastern-verandah (B2/3–4 and Test Trench D) contain remains of the verandah’s original worked stone and column drums, and were probably filled and sealed between 1869 and 1870 (15 years after the Mint began operations) when the verandah was enclosed by a brick wall (Potter ed c1981: 35, 39).

The fill in four cellars (6014, 6033, 6039 and 6094) was noted to be a consistent, artefact-rich deposit containing items dating to 1820s–1830s (B2 trench report). While the individual items may be of intrinsic importance:

13 There are no artefacts for 6039 in the database.
value, they were redeposited and may not even derive from the Mint or nearby sites. Consequently, these deposits have no immediate archaeological value for understanding life on the Mint site.

Further, only two of the seven verandah trenches, B2/1 and B2/2 to the south, were excavated to their full depth (1.55 m in the case of B2/1) because the restorers only required the disturbance of 45 cm of deposit (Potter c1981: 36). A further 40 cm of deposit was removed during unsupervised work recommended by the Building, Construction and Maintenance Department (presumably of the Public Works Department; see Potter ed c1981: 36).14

Unlike the Hyde Park Barracks, Level 2 of the Mint building did not contain an extensive collection of underfloor artefacts. The floors are likely to have been thoroughly cleaned prior to the Mint occupation and the few artefacts noted in the underfloor space in 1980 were substantially disturbed by restoration work prior to archaeological investigation (Potter ed c1981: 40).15

In the courtyard, the few structural remains of the Hospital kitchen were revealed, along with a sandstone drain (Potter ed c1981: 36; see also Godden Mackay 1995: 11). In the south-western industrial buildings of the Mint (formerly a smith’s workshop and a carpenter’s shop), no significant remains other than foundation trenches and a brick machinery base were revealed (Potter ed c1981: 38). No evidence of hospital outbuildings was revealed in the trenches in the roadway between the Hyde Park Barracks and the Mint (Potter ed c1981: 37). Godden Mackay’s monitoring of services in the courtyard, the forecourt, the Melting House and Coining Factory between 1994 and 1995 revealed mostly secondary deposits used for fill or dumped during demolition. Artefacts relating to the operation of the Melting House were found amid fill in the Coining Factory (Godden Mackay 1995: 11–12).

Regarding the comparability of artefact assemblages from trenches across the site, a brief review of the Trench Reports indicates a varying level of artefact-collection strategies. The excavator of B6/2, Rose Young, had the following to say of her trench placed to search for remains of hospital outbuildings:

The limited time allotted allowed me two choices. Firstly, I could dig slowly using only trowel and spade and I could selve [sic] the deposit to make certain I had not missed a thing. Yet I did not make this decision. I see the Mint and Barracks complex excavation as a rescue archaeology job and because of this I thought my most important task was to prove or dismiss the existence of walls and foundations that I had been asked to look for. I decided therefore to break up the units one at a time with a pick and mattock and to search for finds by eye. This proved a satisfactory method as long as it was maintained with care.

Young’s account does not offer many assurances for all-inclusive artefact retrieval from B6/2 but artefacts from other trenches, especially the cellars in B2, were recovered more systematically.

Overall, while the Mint excavation achieved some successes in terms of structural information—establishing the location of the cellars and the 1811 kitchen—it did not produce a stratigraphically secure artefact assemblage.

14 It is not clear if 40 cm was removed from all other trenches in the verandah.

15 The trench report for B5 (Level 2, Rooms 1–7) by L Pinder notes that underfloor areas expected to be intact had not been exposed at the time of writing (Pinder c1981: second page). It is unknown whether these areas were exposed shortly after the time of writing, whether they were monitored by archaeologists, whether they were intact and if so, whether the artefacts were incorporated into the collection. These issues will be investigated by the Project Archaeologist in a more detailed stratigraphic review.
Of all the artefacts in the collection, those from the cellar deposits have the most potential to have retained their stratigraphic integrity. While the only reference in main excavation reports are to fill, it is possible that other layers survive directly related to the occupation of the Mint site, perhaps even the Mint Master’s residence. Given that 43% of the assemblage as a whole contains artefacts relating to domestic or non-industrial activities, a more detailed review of the Trench Reports and Contexts Sheets may suggest a domestic-refuse deposit that may be dated to the Mint Master’s phase of occupation. Any other potential domestic-refuse deposits elsewhere on the site may relate to other residences on site (in the north-east corner, outside of the main excavation area) or may be introduced fill.

Particular artefacts in similar, secondary deposits (eg Trenches B6/1 and B6/2 in the roadway adjacent to the Hyde Park Barracks) may be related to the known and unique use of the site as a Mint, through photographs and other documentary evidence of the operative Mint in the 19th century. In these cases, it may not matter that the artefacts were recovered from secondary or disturbed deposits—for they can be attributed to the period of the Mint’s operation. In other cases, glass and ceramic bottles may (and in the case of some sherds in the bag RM0667 were) mis-catalogued as alcohol or pharmaceutical bottles or food preparation vessels. With the better-researched archive of the Mint’s operation currently held by the HHT, it may be possible to revise many of these determinations. However, while such analysis may contribute to specific studies of the Mint industrial processes, the detailed study of artefacts from stratigraphically dubious contexts, to confirm the documentary record, is not generally considered a valuable utilisation of archaeological material.

In conclusion, the Mint artefact assemblage has limited archaeological research potential, and is of very doubtful utility to the EAMC project. Having been recovered from secondary, disturbed or incompletely excavated stratigraphic contexts in most cases, its greatest research potential lies in individual artefacts which may be identified as relating to specific processes of the Royal Mint.

5.0 Assessment of the Catalogue’s Accuracy and Usefulness

Notwithstanding the assemblage’s limited research potential, the Mint catalogue currently is not ready to provide the basis for comprehensive artefact analysis, due to:

- the inadequate recording and bagging of some items; and
- errors generated by data-entry and reconfiguration into a new database.

Specifically:

- items of different type have been bagged and recorded together;
- some basic ceramic material classes have been mis-catalogued;
- not all artefacts were allocated a type number;
- not all artefacts were allocated a portion and integrity;
- the determination of function is inconsistent across the database;
- type names and numbers, where present, have not been entered into their respective fields; and
- errors have been made during data-entry which are greater than expected.

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16 Edible Food, Food Preparation, Food Service, House Management, Jewellery, Personals, Pharmacy and Sewing.
5.1 IMPLICATIONS

While some of these specific errors can be rectified and the more serious errors are small in number, overall there is a lack of confidence in the data at hand. The unreliability of the catalogued type series is one of the key problems with the catalogue at present, making its use in the process of minimum vessel counts difficult. Consequently, the establishment of these counts will require physical re-examination of large quantities of artefacts. Given our reservations about the usefulness of the assemblages to the EAMC project there is considerable doubt about whether project resources should be committed to improving the quality and accuracy of the Mint database.

The surprisingly high rate of data-entry errors in the sampled records cannot be overlooked and again would require the re-examination of all artefact records to correct.

The few records of major concern, such as the earthenware and stoneware sherds catalogued as porcelain, indicate fundamental errors in basic artefact cataloguing which significantly decrease confidence in the catalogue, despite being small in number.

While these errors are of concern, the Mint collection as a whole is relatively small, and the components of it that are likely to be acceptable for detailed artefact analysis even smaller.

Although the research potential of the collection is not promising, the EAMC team will review trench reports and stratigraphic context records in detail to ascertain the integrity of deposits in the Mint collection, focussing on the cellar deposits in the Main Building. Following this the team will determine whether it is worthwhile using additional resources to correct or improve artefact records.
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