



VICTORIA HARBOUR DOCKLANDS

CONSERVATION MANAGEMENT PLAN

VICTORIA HARBOUR

DOCKLANDS

Conservation Management Plan

Prepared for

Places Victoria &
City of Melbourne

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1.0 INTRODUCTION

1.1 Background and brief

This conservation management plan (CMP) has been prepared by Lovell Chen Architects & Heritage Consultants with MacLeod Consulting Pty Ltd for Places Victoria and the City of Melbourne. The report addresses the heritage-listed components of Victoria Harbour, being the water body (Victoria Dock), dock edge, berths, perimeter wharf apron, Central Pier, and various sheds including those (such as Sheds 8 and 15) which have been removed from the dock environs and stored off site. The Shipping Control Tower and sheds on the South Arm of Victoria Harbour, while outside the extent of heritage registration, are also addressed.

Victoria Harbour is located in the suburb of Melbourne Docklands (generally referred to in this report as 'Docklands').

Victoria Dock was constructed as an artificial basin by the (then) Melbourne Harbor Trust between 1889 and 1892. It ceased operating as a dock in the 1980s, and the area surrounding it has subsequently been subject to significant redevelopment and renewal for predominantly residential and commercial purposes.

1.2 Melbourne Docklands¹

Docklands comprises approximately 200 hectares of land and water, with the historic Victoria Dock at its centre. The suburb incorporates Etihad Stadium, and various residential and commercial precincts including New Quay, Waterfront City, Central City Studios, Yarra's Edge, Digital Harbour, Village Docklands, Stadium Precinct, Batman's Hill and Central Pier as well as Victoria Harbour. By early 2010, Docklands had 28 completed residential developments with a total of 3,820 apartments, mostly housed in contemporary tower buildings. This had grown from seven buildings in 2002, with 868 apartments. Moreover, as of March 2011, 1,400 new apartments were under construction, and more are due for completion in 2012.²

The area also incorporates community and public spaces, including landscaped spaces and parks, public artworks, and several historic buildings and structures. Southern Cross Station is located to the east of the area, as is Melbourne's CBD. Docklands additionally accommodates the national headquarters for a number of major businesses and government organisations including the National Australia Bank, ANZ, Myer, AXA, Bendigo Bank, Medibank Private and the Bureau of Meteorology.

There are also a number of sites and precincts which historically have been inter-related with the fabric of Victoria Harbour as well as the activities which took place here. The larger dock area takes in the lower reaches of the Yarra River below Queen's bridge, including the partly-reconstructed turning basin and Queen's Wharf, the north and south Yarra wharves including the Duke & Orr Dry Dock. On land, these elements include the dock sheds to both sides of the river including berth no.5 shed to the North Wharf, the Mission to Seafarers, as well as the high brick retaining wall opposite in Flinders Street Extension. This last was a gathering place for waterside workers in the 'boom' years of the docks in the early years of the twentieth century. Railway infrastructure including the No. 2 Goods Shed are also sites and places inextricably linked to the larger Docks area.

1.3 Master planning & development

The approach to development at Docklands, including Victoria Harbour, has been driven by Development Agreements, or binding contracts between developers and Places Victoria. The Agreements specify how the land will be developed, and outlines the design intent and development approach for the contracted land. A component of each Development Agreement is a Master plan. For the precincts/development areas which abut Victoria Dock, the master planning process can potentially impact on the heritage fabric and heritage values. Consideration of the heritage issues is therefore a component of the master planning.

It is also noted that these Master plans may be renegotiated and updated subject to agreement between the State Government, Places Victoria and the developer. Such Master plans may give rise to impacts on the heritage fabric and heritage values of Victoria Harbour.

Preparation of this CMP has not involved a review of previous and current Master plans for Docklands, of which there have been several. In terms of the current situation, the following is a brief overview.

Lend Lease issued a revised Master plan for Victoria Harbour (southern side of Victoria Dock) in 2010. The revised plan addresses the wharf precinct, public realm and open space, activation and community facilities, pedestrian and bicycle access, etc.

For Harbour Esplanade, on the east side of dock, new works commenced in 2010, as part of a revamp and revitalisation of this public area. The works included landscaping, plantings, a new configuration of the tramlines in the centre of the roadway, a new paved tram reserve, and new tram platform stops.

On the north side of the dock are the precincts of New Quay, New Quay West and Waterfront City. MAB lodged a new master plan for planning approval for New Quay Central in 2011, which provided for the development of new residential buildings, an international hotel and a major public park.

1.4 Heritage status

Victoria Harbour is included in the *Victorian Heritage Register*, as H1720. Further detail on this, including the extent of heritage registration, and other relevant heritage listings, is included in Chapter 2.

1.5 Location

The location of Victoria Harbour is illustrated in the map below.

1.6 Methodology

The report broadly follows the format of the Australia ICOMOS (International Council on Monuments and Sites) guidelines for the preparation of conservation plans, and the principles set out in the *Australia ICOMOS Burra Charter*, 1999, adopted by Australia ICOMOS to assist in the conservation of heritage places (see Appendix A). The methodology also reflects that outlined in the Heritage Council of Victoria's publication, *Conservation Management Plans: Managing Heritage Places, A Guide* (2010).³



Figure 1 Map showing the location of Victoria Harbour. North is at top.
Source: Street-directory.com.au.

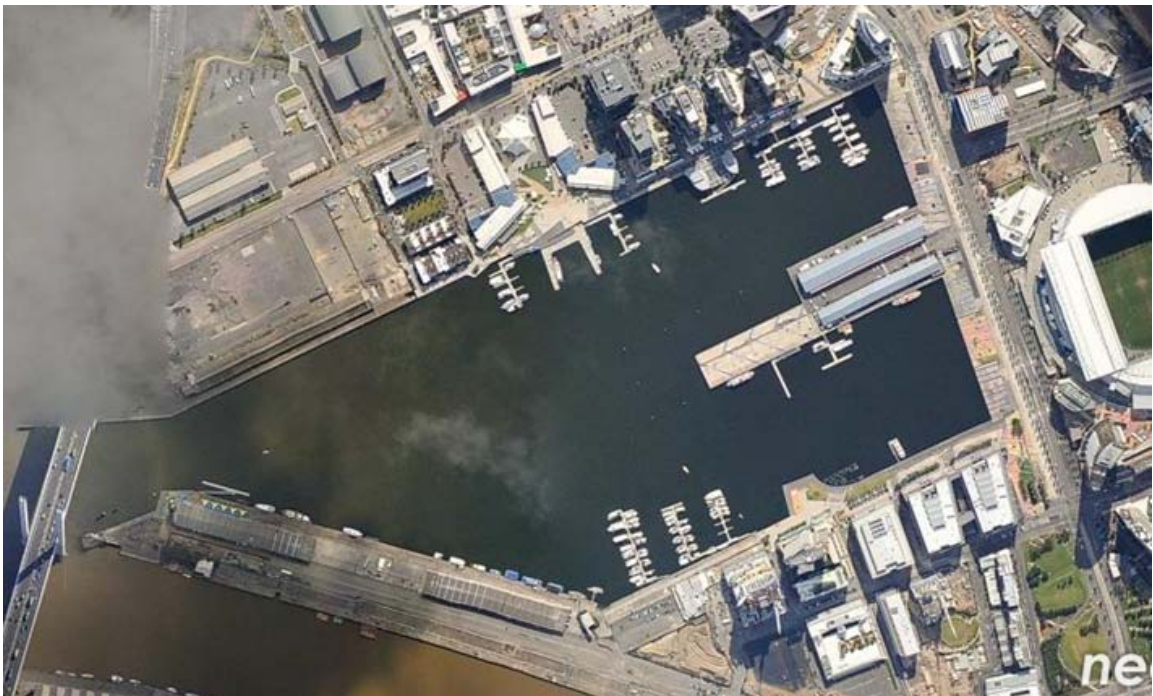


Figure 2 Recent aerial image of Victoria Harbour. North is at top.
Source: Nearmap.

1.7 Report content

The report includes the following.

1.7.1 *Management and development*

Chapter 2 provides an overview of the current roles and responsibilities of the various local and state government agencies associated with Victoria Harbour, chiefly through its Melbourne Docklands context. The chapter also summarises the heritage status, controls and statutory obligations relating to the place.

1.7.2 *Background and contextual history*

Chapter 3 includes a brief history of the Melbourne Docklands area, and Victoria Harbour, examining the latter's construction and use in the context of Melbourne's nineteenth century port and maritime trade needs, and its later evolution. The chapter concludes with an overview of the more recent history of redevelopment and urban renewal of the area including and surrounding Victoria Dock; together with a short chronological summary of change and development through to the 2000s. The history is not intended to be a comprehensive and detailed historical overview; rather the research and analysis is intended to assist in understanding how the historical values of the place are reflected or represented in the existing fabric.

Appendix C also contains a summary history of the development of the broader area of the Port of Melbourne, with graphics illustrating the history of development. This is reproduced from the *Port of Melbourne Heritage Strategy* (Lovell Chen with ERM Australia, May 2009), and is included in this report with the permission of the Port of Melbourne Corporation.

1.7.3 *Physical survey and analysis*

Chapter 4 includes a detailed overview of the physical nature and fabric of Victoria Harbour, including the dock, berths, dock edge, and below dock structure, Central Pier, and the various sheds which remain or have been removed from the site (and stored elsewhere). The chapter can also be read as a brief 'audit' of the historic harbour structure, with particular focus on the berths/wharves as that part of the structure which have been subject to the greatest change and modification. The audit is not a detailed structural survey or condition assessment of the harbour structure, but is more in the way of identifying/clarifying where original fabric remains, and where it has been modified. The survey and analysis also helps establish the relative significance of the individual components of the place.

Note: this chapter in particular reproduces images of Victoria Dock, and individual elements and structures within it, from the Lovell Chen archives. The images have been taken over the last 10 or more years, and are included so as to illustrate these elements prior to more recent works and development.

1.7.4 *Heritage significance*

Chapter 5 addresses heritage significance, including a brief comparative analysis to determine the relative importance of the harbour in the context of related sites. Recommended revisions to the existing Victorian Heritage Register statement of significance are also included. The chapter additionally includes a ranking of the relative significance of Victoria Dock and its individual elements.

1.7.5 Conservation policy and strategy

Chapter 6 contains the conservation policy, which provides guidelines for the future conservation, care, management, use, adaptation and development of Victoria Harbour, as well as specific conservation actions for individual components. The policy also provides guidance on avoiding or limiting impacts on Victoria Harbour, deriving from the experience of previous and current development proposals at and near the harbour. Recommendations are also included which address replacement of components and fabric of the harbour structure.

1.8 Sources

A number of reports and documents have been consulted in the preparation of the report. For a full list of sources, please refer to the bibliography.

- *Docklands Reflections: Living History, an Interpretation Strategy*, (draft May 2002), prepared for the Docklands Authority by Allom Lovell & Associates, with Baron Planning & Projects, and Dr Judith Buckrich.
- Philip Bentley and David Dunstan, *The Hub of Victoria: A History of Melbourne Docklands*, prepared for the Docklands Authority 1996.
- Melbourne Harbour Trust Commissioners, *Jubilee Report 1877-1937*, 1927
- *Docklands Heritage Study*, Ward, Milner, Vines & Greenaway, 1991.
- *Melbourne Docklands Heritage Review*, McDougall & Vines, 1996.
- *Port of Melbourne Heritage Strategy*, Lovell Chen with ERM Australia, May 2009 (a summary development history of the Port of Melbourne, as included in the *Heritage Strategy*, is reproduced at Appendix B).

The structural assessment of the dock structure has been undertaken by MacLeod Consulting and has reviewed and built upon the following reports, provided by Places Victoria:

- *Conditions Survey, Victoria Dock, Berths 8 to 15*, Docklands Authority, Melbourne, Australia, October 1993 (this report contains drawings by Connell Wagner (Vic) Pty Ltd, who are judged the probable authors of this report)
- *Preliminary Report on Central Pier, Existing Wharf and Pile Condition Wharves 9 and 14*, Melbourne Docklands, Robert Bird and Partners, 17 March 2000
- *Durability Plan, Grand Plaza, Victoria Harbour Development*, Arup-Connell Wagner, revision 4, 3 September 2002
- *Durability Plan, NAB Promenade/Grand Plaza Stages 2 & 4, Victoria Harbour Development*, Arup-Connell Wagner, revision 1, 29 April 2003
- *Wharf Assessment, Draft Report, Waterfront City, November 2003* (this report covers Berths 17, 18 and 19 and was prepared by GHD who had been engaged by Meinhardt Pty Ltd)
- *Cursory Structural Assessment of Wharf 20/21, Docklands*, Hyder Consulting Pty Ltd, 16 June 2010.

1.9 Historic images and documents

This report reproduces a number of historic images of Victoria Harbour and the Port of Melbourne, including historic aerial and oblique images; photographs reproduced from the Melbourne Harbour Trust *Jubilee Report 1877-1937*; historic maps and plans; and extracts from historic street directories (such as Melways). Given the quantity of historic graphic material available, some of this material is included in Appendices D, E and F, and some is reproduced in the body of the report. Appendix G contains copies of select original and early drawings of the dock.

2.0 MANAGEMENT

2.1 Introduction

This chapter includes an overview of the current roles and responsibilities of the various local and state government agencies associated with Victoria Harbour, chiefly through its Melbourne Docklands context. The chapter also summarises the heritage status, controls and statutory obligations relating to the place.

2.2 Management responsibilities

2.2.1 Management history

Victoria Dock and its environs were historically the responsibility of the Port of Melbourne, with the Victorian Railways Department responsible for the adjoining railway yards and infrastructure. This changed in the early 1990s, following the *Docklands Authority Act 1991*, and the establishment of the Docklands Authority (Chapter 3 provides further detail on the history of management and use of the area). The latter was charged with responsibility for facilitating the private sector development of Docklands, and for establishing the necessary infrastructure to support development. In 1999, the Docklands Authority was also made responsible for the municipal management of Docklands. VicUrban (now Places Victoria) became the development authority when the Docklands Authority merged with the (then) Urban and Regional Land Corporation in 2003.

The Port of Melbourne remains responsible for the remainder of the operating port area (see Figure 4).

2.2.2 Current management arrangements

In July 2007, municipal management of Docklands was transferred from VicUrban to the City of Melbourne, albeit the former continued its role as the agency responsible for development decisions and planning of Docklands. The City of Melbourne became formally responsible for delivering municipal services to the Docklands area. In 2011, VicUrban was replaced by Places Victoria. The 'shared management' of Docklands is guided by a protocol agreement, which also provides for the Docklands Coordination Committee. The latter has representatives of both the City of Melbourne and Places Victoria, and is the decision-making body in defined developed areas. Parks Victoria also has a role in the management of the waterways.

Victoria Harbour is included in the 'coordination area' of Docklands.⁴ The 'coordination area' includes areas which remain reserved for public purposes. In addition to Victoria Harbour, other elements of the 'coordination area' include:

- waterways
- promenades
- waterfront spaces
- parks
- high profile or high traffic areas

Place management decisions about the 'coordination area' are made by the Docklands Coordination Committee. The plan at Figure 3 illustrates the current management responsibilities, and the elements included in the 'coordination area'.



Figure 3 Plan showing current management responsibilities (as of May 2011).
Source: City of Melbourne

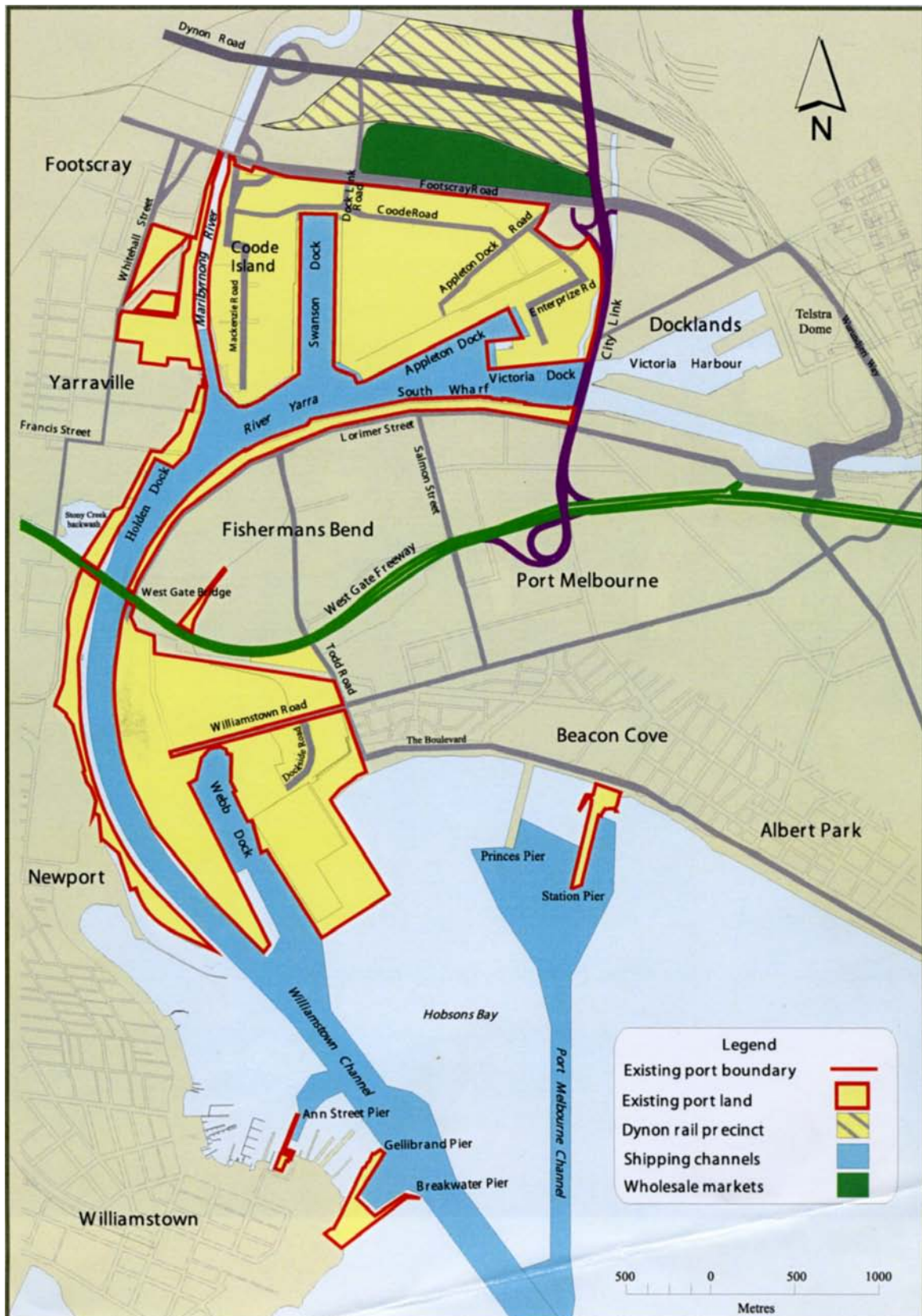


Figure 4 Map of Port of Melbourne, showing current port area in relation to Victoria Harbour (at top right).

Source: Courtesy Port of Melbourne Corporation.

2.3 Heritage controls

2.3.1 *Victorian Heritage Register*

Victoria Harbour is included in the *Victorian Heritage Register*, maintained by the Victorian Heritage Council, as H1720. A copy of the full citation is included at Appendix B. The extent of registration is illustrated at Figure 5 below, and is described in the VHR citation as follows. However, it should be noted that of the buildings and structures listed below not all are in-situ or located as broadly indicated on the accompanying map. Buildings and structures which are not at the time of writing (April 2012) located as indicated include the Berth 8, 15 and 19 Sheds. The Berth 8 and 15 Sheds have been removed and are stored off-site and the Berth 19 Shed has been demolished.

All of the buildings and structures marked B1 to B7 on Diagram 605066 held by the Executive Director comprising:-

- the linear perimeter wharves and central pier with wharf bollards; wharf fittings and railway tracks (B1)
- shed 8 (B2)
- shed 9 (B3)
- shed 14 (B4)
- shed 15 (B5)
- shed 19 together with the adjacent bluestone pitcher paving (B6)
- shed 20-21 together with the adjacent bluestone pitcher paving (B7)
- All of the land marked L1 on Diagram 605066 held by the Executive Director being all of the land beneath the waters of Victoria Dock and its wharves.

The extent of the registered place therefore incorporates the body of water contained within the dock, perimeter wharf area and wharf sheds, bluestone pitched paving, bollards, fittings and rail tracks. While the extent of registration of the perimeter wharf area is unclear, it is understood to include the width of individual sheds where they exist or have existed previously, and otherwise back to the concrete sea wall constructed beneath the wharves.

The Shipping Control Tower is not delineated as a structure on the plan in the extent of registration, and nor is it referred to in the VHR citation. Its location appears to place it immediately outside the registered area, as are the sheds (berths 1 and 2 shed, and berths 3 and 4 shed) on the South Arm. While outside the registered area, these latter elements are still addressed in this report.

The statement of significance included in the VHR citation is reproduced in full in Chapter 5.

2.3.2 *Victorian Heritage Inventory*

At the time of writing (April 2012), no sites within the study area are identified or included in the Victorian Heritage Inventory (inventory of historical archaeological sites). However, several archaeological sites (or sites of archaeological potential) are listed to the south of the dock; these include two sites associated with the former Metropolitan Gasworks, the Australian Wharf, and the site of the Berry Bond & Free Stores.

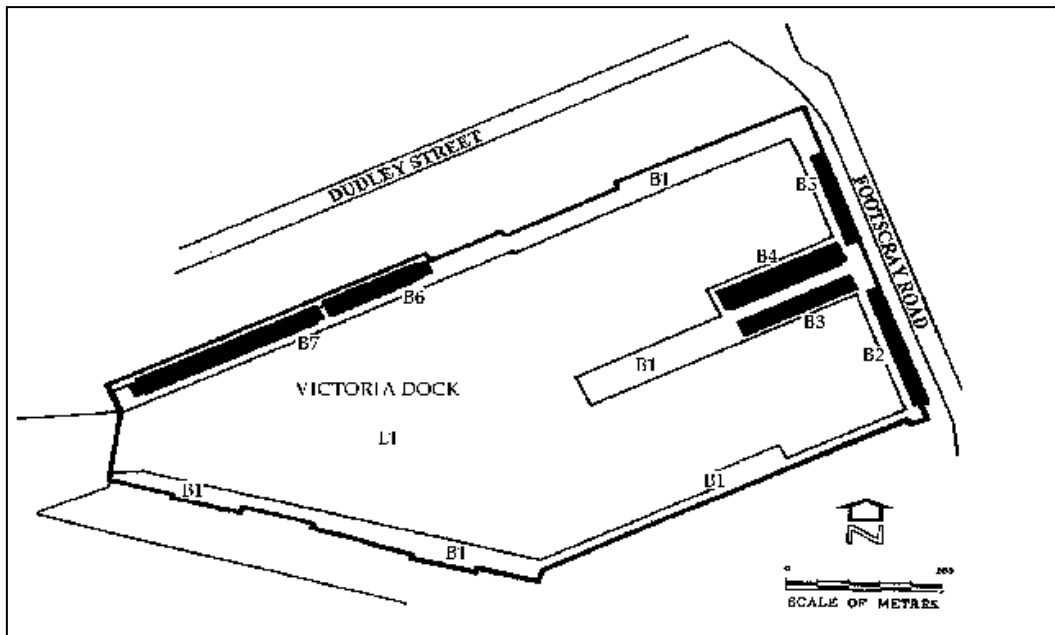


Figure 5 VHR extent of registration. Note that Berth No. 8, 15 and 19 Sheds, annotated as B2, B5 and B6 respectively are not extant.
Source: Victorian Heritage Register.

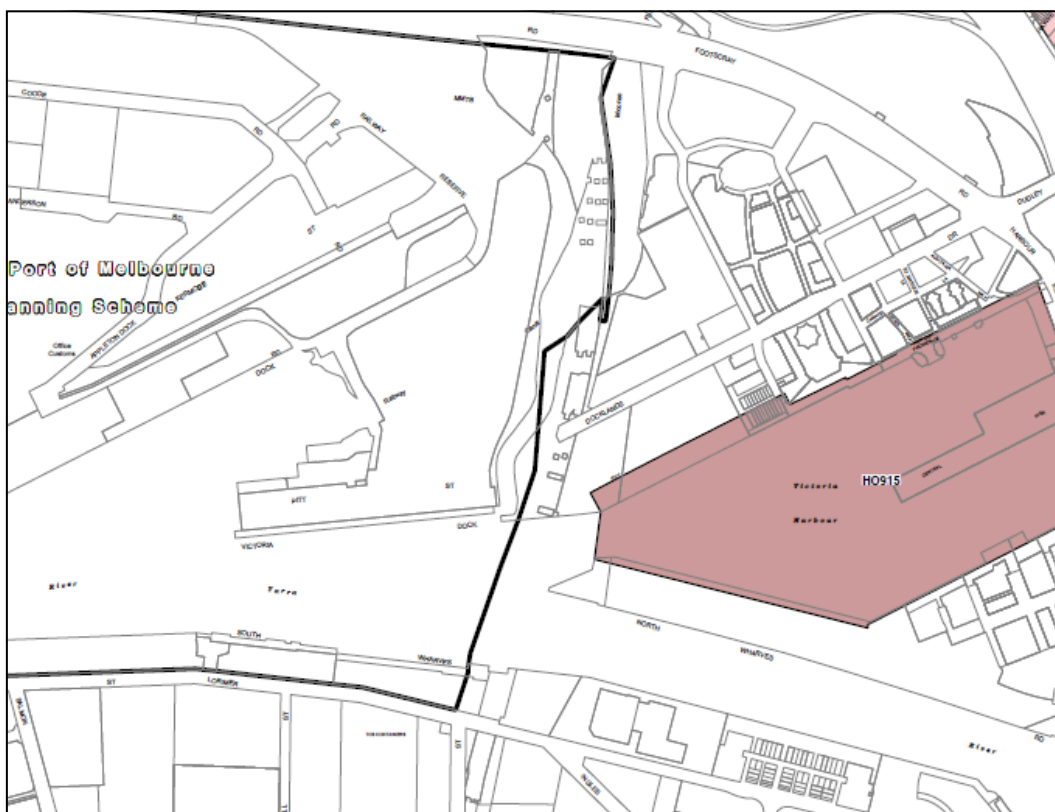


Figure 6 Detail from the Melbourne Planning Scheme map showing the extent of the site-specific heritage overlay HO915.
Source: Melbourne Planning Scheme.

2.3.3 *Melbourne Planning Scheme*

Victoria Harbour is identified as HO915 in the City of Melbourne Schedule to the Heritage Overlay (Figure 6). Note that the mapping excludes the southeast corner of the harbour – the adjoining planning scheme map does not illustrate this section of the harbour. This is considered to be a mapping error rather than a determination that this section of the harbour is not of heritage significance.

2.3.4 *National Trust of Australia (Victoria)*

Victoria Dock is classified by the National Trust of Australia (Victoria) as a place of national significance (File No. B6247). There are no statutory requirements as a consequence of this classification.

2.4 **Heritage approvals & statutory obligations**

The following is an overview of the requirements and protocols that apply to Victoria Harbour under the *Victorian Heritage Act* 1995, and in line with the Victorian Heritage Register inclusion of Victoria Harbour (H1722).

2.4.1 *Where permits are required*

A permit is typically required from Heritage Victoria for any physical intervention, excavation or action to Victoria Harbour that may result in a change to the character, appearance or physical nature of the place. For Victoria Harbour this could include the following:

- Introducing new permanent elements such as pathways, roadways, gates, fencing, seating, signage, play equipment, buildings, shelters, statues, sculptures, art works, telecommunications structures, etc;
- Demolition or relocation of existing buildings, structures and elements including those which are not identified as being of significance;
- Altering or extending the existing buildings, linear wharves and structure of the dock; also pathways and roadways;
- Modifying existing elements such as re-surfacing the linear wharves, pathways, roadways, etc which involves a change in materials;
- Introducing plantings in new locations;
- Construction of, and excavation for, sub-wharf elements; and
- Temporary structures proposed to be in place for greater than four weeks.

Considerations

Under the provisions of the *Heritage Act*, the Executive Director, in determining a permit to undertake works to a registered place, must consider the extent to which the proposal, if approved, would affect the cultural heritage significance of the registered place. In cases where the proposal would have a major adverse affect on the heritage significance of the place, the Executive Director of Heritage Victoria must also, under Section 73(1) (b) of the *Heritage Act*, consider the extent to which the application, if refused, would affect the 'reasonable or economic use' of the registered place, or cause undue financial hardship to the owner in relation to the place.

Heritage Victoria generally acknowledges that many heritage registered places can absorb change without an adverse impact on their heritage significance.

2.4.2 *Permit exemptions and minor works*

The VHR citation for Victoria Harbour (see Appendix B) does not presently include a suite of works which are permit exempt (meaning no permit is required from

Heritage Victoria to undertake these works). Permit exemptions are declared under Section 66 (3) of the *Heritage Act* on the basis that the works proposed will not have an impact on the stated significance of the heritage place.

Exempt works typically cover all normal maintenance and upkeep issues faced by owners of heritage places. A VHR permit is also not normally required when the works involve replacing new for old material on the basis of 'like with like'. For instance, replacing hard surfaces (such as the wharf aprons) with the same materials; and replacing the components of seating, lighting, signage etc with the same materials.

Where there is uncertainty or doubt as to whether works constitute minor repairs or maintenance, which would normally be permit exempt, the advice of a qualified heritage practitioner should be sought. Approval for minor works can also often be obtained from Heritage Victoria via correspondence.

2.4.3 *Heritage Victoria permit process and requirements*

For most permit applications, documents to be lodged/submitted to Heritage Victoria include a completed permit application form signed by the applicant and owner, application fee, three copies of any plans,⁵ and reports or other documentation associated with the application such as:

- Photographs which help to illustrate the existing conditions and reason for the alterations or works
- Existing conditions/survey drawings
- Plans and other drawings, such as elevations or sections (where relevant) which provide detail on the proposed works
- Photomontages if available and of assisting in determining an application
- Heritage Impacts Statement report (prepared by a qualified heritage practitioner, see below)

These documents should also be lodged electronically with Heritage Victoria.

After permit applications are lodged, permits are normally processed within 60 days unless an extension is granted by the Heritage Council. Minor matters can be dealt with in less than 30 days, while more major proposals, or those which the Executive Director of Heritage Victoria believes may have a detrimental effect on the place, require advertising for 14 days to enable interested parties to make submissions. Typically, the advertisements are placed in the public notices section of *The Age* on Wednesdays; a sign (or signs) advertising the application at the site is also usually required. The application documentation is additionally uploaded onto the Heritage Victoria website during the advertising period, for anyone with an interest in the proposal to download and review, and make a submission. Submissions and representations are accepted from interested parties up to 14 days from the date of advertising.

If the Executive Director can determine the matter on the information supplied, a permit is likely to be issued. If the application is contentious and submissions have been received from other parties, the applicant and the other parties may be invited to discuss aspects of the application before a determination is made (this is known as an 'interested parties' meeting). The process of discussion is kept as informal as possible. The permit 'clock' (timing) may also be stopped (put on hold) for an interested parties meeting. After the meeting, Heritage Victoria may also make a request in writing for the issues raised at the meeting (and by the submitters) to be addressed/responded to by the proponent.

2.4.4 *Heritage impacts*⁶

A Heritage Impact Statement (HIS), commissioned by the applicant/proponent of the works, prepared by a heritage practitioner, and lodged with the permit application, assists Heritage Victoria in making an assessment and reaching a decision.

In the case of relatively minor works a brief assessment of the heritage impacts on the registered place should be sufficient. For more major proposals, a more detailed and comprehensive HIS report may be needed, together with (in some instances) other reports which support particular aspects of the proposal, such as planning, engineering, arboricultural assessments or economic feasibility reports.

2.4.5 *Project planning and timing*

Where statutory approvals are required for heritage reasons, provision needs to be made in the initial project planning stages for the time involved in the approvals process.

Prior to lodging the permit application, it is recommended that the advice of a heritage practitioner be sought. This step can assist in determining an appropriate path to lodgement, including advice on consulting all relevant sources and preparing all necessary documentation. The heritage practitioner can also advise on, and participate in, pre-application discussions with Heritage Victoria, which are typically encouraged in the lead up to lodging a permit for works of any substantial nature. Depending on what is proposed, such a meeting could be held on site or in the offices of Heritage Victoria.

The following table provides indicative time provisions for particular approvals processes. Variables affecting the timing of the process include the length of time required pre-application, the complexity of the application itself, and any involvement by third parties. Provision may also need to be made for the fulfilment of permit conditions, once a permit is issued. Such conditions may include a requirement for recording and/or interpretation of the heritage place, or the provision of greater detail in relation to landscaping or new structures. Note that no allowance is made below for any appeals processes in the event these are required.

Type of application	Pre-application phase	Statutory time frame for processing application	Post-application phase
Heritage Victoria request for minor works approval (exempt works)	Allow 2-3 weeks for advice and preparation of documentation.	No statutory period. Allow 3-4 weeks from lodgement.	Generally none.
Heritage Victoria – Victorian Heritage Register permit application (minor permit application)	Allow 3-4 weeks pre-application for advice and preparation of supporting documentation.	Maximum of 60 days plus 1 week for advertising if required. Can be less for minor applications.	Additional time post-approval may be required to satisfy recording, investigation or further detail conditions.
Heritage Victoria – Victorian Heritage	Allow 6-8 weeks pre-application for advice	Minimum 60 days plus 1 week for	Additional time post-approval likely to be

Type of application	Pre-application phase	Statutory time frame for processing application	Post-application phase
Register permit application (major/complex permit application)	and preparation of supporting documentation.	advertising. Potential up to 120 days in the case of very complex or contentious applications, with periods of 'stopping the clock' to provide additional information.	required to satisfy recording, investigation or further detail conditions.

What happens when the permit is obtained?

Once the permit is obtained, i.e. issued by the Executive Director, Heritage Victoria, the first step is to review the conditions attached to the permit, which can include multiple conditions, and where feasible initiate action to meet the conditions. Conditions are also often tied to timeframes which may prove difficult to meet. In many instances, minor aspects of the conditions can be modified through correspondence with Heritage Victoria (such as having a timeframe for completion of work extended from two to three years). In other instances, where the conditions are considered unacceptable, the proponent has up to 60 days (after issue of the permit) to lodge an appeal to the Heritage Council (see below).

2.4.6 Appeals

In the event the permit application is refused, the applicant can appeal against the refusal and the appeal request must be lodged within 60 days of the refusal of the permit. The appeal is made to the Heritage Council. Note there are no appeal rights (third party or otherwise) against a decision by the Executive Director to grant a permit.

The Heritage Council must determine an appeal within 60 days. Other parties (submitters) to the permit application including the National Trust do not have the power to trigger a hearing but could request to be heard in the event a hearing was conducted.

The Heritage Council has the power to:

- Grant the permit with or without conditions; or
- Confirm the decision of the Executive Director of Heritage Victoria; or
- Vary the conditions on the permit.

Once an appeal has been lodged but before it has been determined by the Heritage Council, the Minister for Planning has the power to call in the appeal and determine it himself. Alternatively, subject to certain requirements, he also has the power to refer the appeal to the Victorian Civil and Administrative Tribunal for determination. However, the latter situations are unusual and rarely occur.

The argument put before the Heritage Council for a hearing must focus on the impacts of the proposal on the heritage significance of the place and the extent to which the refusal would affect the 'reasonable or economic' use of the place, or cause undue hardship to the owner.

3.0 HISTORY

3.1 Introduction

This chapter includes a brief history of the Melbourne Docklands area, and Victoria Harbour, examining the latter's construction and use in the context of Melbourne's nineteenth century port and maritime trade needs, and its later evolution. The chapter concludes with an overview of the more recent history of redevelopment and urban renewal of the area in and around Victoria Dock; plus a short chronological summary of change and development through to the 2000s.

A summary development history of the Port of Melbourne, as included in the *Port of Melbourne Heritage Strategy* (Lovell Chen with ERM Australia, May 2009) is also reproduced at Appendix C. Appendices D, E and F contain, respectively, historic images, historic maps and plans, and aerial images. Appendix G contains original or early drawings of the dock. Chapter 4 additionally contains historical information relating to Victoria Dock and its individual components, including construction and materials.

3.2 Pre-contact history 1

Melbourne Docklands is located in an area known as the Lower Yarra Delta, through which the Yarra River historically found a path to Port Phillip Bay across low-lying land south and west of the current city.

The area around Port Phillip has been populated for up to 40,000 years, in effect 1,600 generations of Aboriginal people. However, the present landscape of Melbourne was only formed in the last 5,000 years, including Port Phillip Bay. The Yarra and Maribyrnong rivers formed a much larger river some 18,000 years ago, which ran along the eastern side of the depression that later became Port Phillip Bay. This huge river flowed past what is now the Mornington Peninsula and out through the Heads.

In geological terms, the Lower Yarra Delta is a low lying area of Quaternary sedimentation which spreads seawards from Princes Bridge. It covers much of South Melbourne and takes in the former West Melbourne Swamp (now largely occupied by Melbourne Docklands), Fishermen's Bend and the Port Melbourne area. The low-lying areas of the delta, including the former West Melbourne Swamp, were inundated in wet seasons, with an abundance of water plants, fish and birdlife, which sustained the Aboriginal groups living in the area, including the local Wurundjeri-Willam people. On higher ground, including Batman's Hill, eucalypts, she-oaks and wattles predominated.

3.3 Early European occupation

In 1803, the *Cumberland*, under the command of Lt Charles Robbins, entered Port Phillip Bay. This venture brought about the discovery, by Europeans, of the Yarra River. A party from the boat rowed up the river, following its course to the branch of what would later be known as the Saltwater River (now the Maribyrnong River).

There was little further European interest in Port Phillip Bay, and even less in the Yarra River, until 1835 when John Batman and John Pascoe Fawkner founded their illegal settlement. In 1835, Batman also took up residence on the hill on the western edge of the new settlement, where he erected a house and outbuildings (with materials brought over from Tasmania). John Pascoe Fawkner had also temporarily occupied the hill.² Batman's Hill is shown on Robert Hoddle's survey map of 28 March 1839.³ Originally a small rise approximately 60 feet high, and known also as the 'She-oak Hill', the site provided some relief in a generally

flat landscape on the north side of the Yarra River, and in the area of the current Docklands. Batman's buildings were situated on the south side of the hill, almost on alignment with the current extension of Flinders Street, on the west side of Spencer Street. Batman also cultivated a parcel of land (approximately 20 acres) reaching down to the river, which was known as Batman's Paddock and where he reputedly planted numerous fruit trees before his health deteriorated in the late 1830s.⁴ The Government took possession of Batman's Paddock in 1841, and between 1842 and 1846, Batman's former residence was used as the first Government offices in Melbourne.

As noted above, the area of today's Docklands was associated with the West Melbourne Swamp by Melbourne's early European settlers, who largely ignored the area in the early decades of settlement. There were, however, periodic suggestions that the area be drained and reclaimed, in order to make it more productive and to extend the area of settlement further west. Industry and activity also began to increase in this period along the Yarra and Maribyrnong rivers, including noxious trades such as tanners, curers, wool washers, soap and candle manufacturers, abattoirs and boiling down works.⁵

3.4 Early Melbourne shipping and port activity⁶

The Yarra River, in the early days of European settlement, was difficult to navigate, only eight feet deep in places, with obstructions preventing anything but small boats travelling upriver to the fledgling town. Larger ships anchored in Hobson's Bay, with their freight transferred to lighters and then brought up the river. Wharves, including private wharves, were built along the river's northern edge; Cole's Wharf, Queen's Wharf and the P&O Company Wharf were among them. Goods brought upriver were placed on these wharves or at Flinders Street. A government dock was also erected, located on the river to the immediate south of Batman's Hill. Ships were repaired on the south side of the river. The first pier was built at Sandridge (later Port Melbourne) in the early 1840s, and a road was constructed through to the town. This was followed, in the mid-1850s, by the first railway line in Australia, again connecting Sandridge to the (by then) booming settlement of Melbourne.

The early 1850s was an extraordinarily busy period in Melbourne's development given the recent discovery of gold in Victoria and the onset of the gold rushes. The Chamber of Commerce was formed in this period, and immediately began campaigning for a Harbour Trust to take responsibility for development of the wharves and the management of traffic on the river.

The first Melbourne Gas Works was also established in the area of today's Docklands in 1855-56 (demolished in the 1970s, but still visible in the aerial images from the 1960s and 1970s as reproduced below, see Figure 13, Figure 15 & Figure 16). The site comprised a retort house, purifying house, and tall brick chimney, which remained a highly visible structure in the Docklands context for decades. The gas works also required a wet dock to be constructed on the Yarra River, of over 250 feet long, which allowed for the unloading of coal from ships for direct transferral to the retort house.⁷

In the 1860s, there were 36 berths on the river wharves, and 43 berths at the piers at Williamstown and Sandridge. Passenger steamers used the busy Australian Wharf on the Yarra River, as did coal and timber ships until the 1880s.⁸ The wharves were both publicly and privately owned, but lacked rail connections; they were also subject to the sometimes violent flooding of the river, which caused damage including undermining the piles and impacting on the wharf structures.⁹

By the time the Melbourne Harbour Trust was eventually formed in 1877, comprising mercantile and municipal interests, the river ports were increasingly intensively used. A graving dock had been built at Williamstown, and the dredging and widening of the Yarra River had become a constant labour.¹⁰ It has been noted that by 1872, over one million cubic yards of silt had been removed from the river, but despite this only small vessels could navigate the Yarra, and berth at the river wharves.¹¹ Cargo on the wharves also remained subject to pilfering.

The Trust went on to extend the river wharves further west, taking up extensive river frontage.¹² The Trust was also initially met with hostility by both the Colonial government as well as by neighbouring Williamstown who saw efforts to deepen and alter the course of the Yarra River to improve shipping a threat to its own facilities.¹³

Sir John Coode, a renowned English maritime engineer, was brought out in February 1878 to advise the Trust on harbour and ports development, and was paid the very considerable sum of £5,000. The then inadequate port facilities of Melbourne, and the narrow and winding Yarra River, were a hindrance to larger ships and hampering economic development. Coode prepared an exhaustive report on the Yarra River and Hobson's Bay, and made recommendations on improving navigation and dock accommodation. He proposed widening and dredging of the Yarra River to facilitate traffic flow, the removal of the Yarra Falls, and the cutting of a canal which would effectively shorten and change the course of the river near its intersection with the Maribyrnong River.¹⁴ Ideas for the improvement of shipping and navigation at Melbourne, up until that time, had included digging a channel direct from Port Melbourne to the city wharves. But this approach was not supported by Coode on the grounds that the channel would require constant upkeep in the form of dredging and widening.¹⁵

By mid-1879 the Trust was ready to begin cutting across Fisherman's Bend, to take out the huge loop in the Yarra River, and to provide a more direct river route between the city wharves and the entrance to Hobson's Bay. This 'manipulation' of the river came from a long international tradition of changing and altering the course of rivers and natural waterways, for economic and other benefits. Moreover, Coode was trained in a profession with a long history of shortening and straightening rivers, and building canals.¹⁶

It has also been noted that Coode's proposal for the river was more in the way of a trained and controlled 'canalised river', than a true canal, using training walls to harness the natural scouring power of the river and alleviate the need for constant dredging.¹⁷

Coode (1816-1892), is regarded as one of the most distinguished harbour engineers of the nineteenth century, with an involvement in many significant international engineering projects. Aside from his involvement in the Port of Melbourne, Coode was also retained by the Victorian Government to advise on other harbours and ports, including Portland, Geelong, Warrnambool, Port Fairy and Lakes Entrance. In South Australia Coode reported on navigation of the Murray River mouth; and after returning to Australia in 1885 he examined harbours and river mouths from Fremantle through to the Gulf of Carpentaria, and later advised on rivers and river entrances in New South Wales and Queensland.¹⁸

Digging for what became known as the Coode Canal began in 1880. The soil taken out was recycled and used to reclaim low-lying land adjacent to the river banks. Coode Canal was officially opened on 11 September 1886.

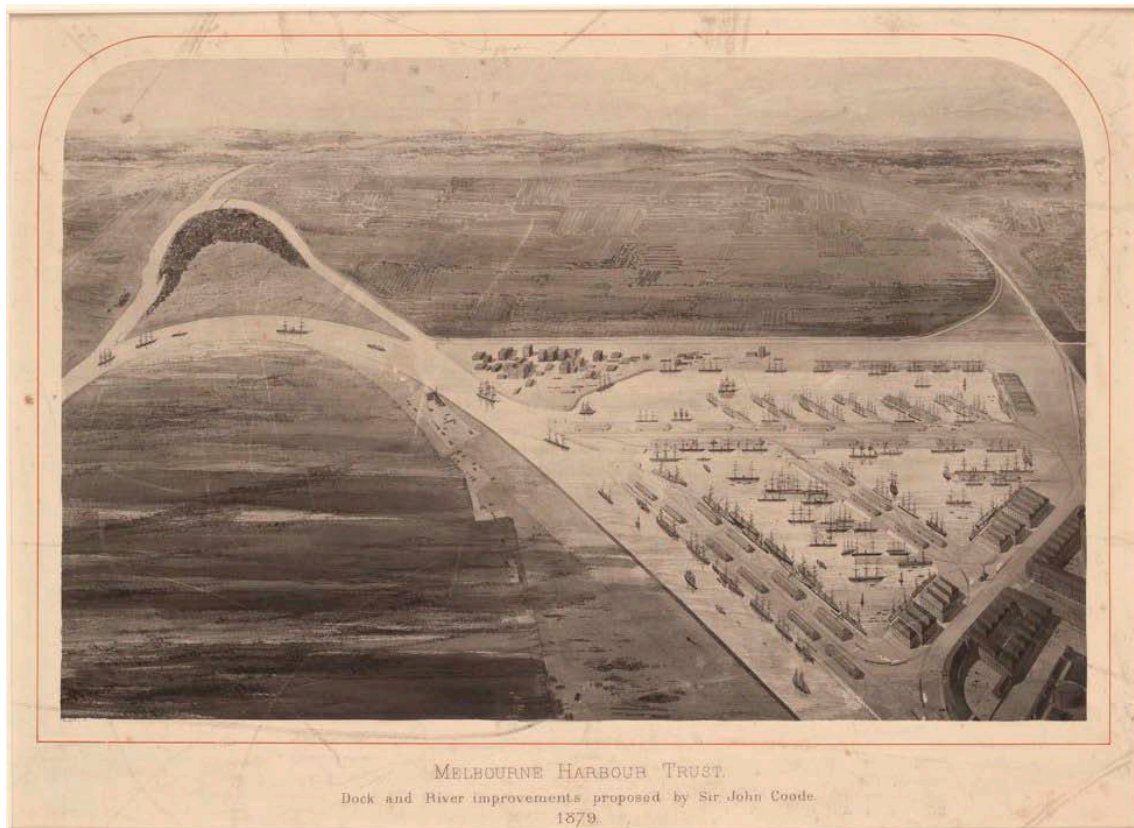


Figure 7 Coode's 1879 scheme for the West Melbourne Dock, in his report to the Melbourne Harbour Trust.

Source: State Library of Victoria

Coode had also proposed that the wasteland located to the south-west of the developing railway yards (see below), be excavated for a major dock facility. Construction of the West Melbourne Dock, or Victoria Dock, also began in this period, with the major works occurring between 1889 and 1892 (see below).

3.5 Railways development and expansion

From the early 1850s, the area around Batman's Hill (and today's Docklands) was also developed for railway purposes, including as a terminus; it would in fact evolve into the administrative centre of the State rail system. In 1859 the Batman's Hill Railway Station (later Spencer Street Railway Station, and more recently Southern Cross Station) was opened.¹⁹ Other early development included offices for the fledgling Victorian Railways Department, and goods sheds in the later 1850s.²⁰ This development coincided with Victoria's booming economic conditions and exploding population.

In 1862 a new central passenger terminal was proposed for Spencer Street Station, to house both passenger and goods traffic.²¹ Batman's Hill was seen as an obstruction to the development of the railways, and some of the hill area was required for the immediate expansion of station accommodation. The hill passed from City of Melbourne control to the Railways Department in December 1862,²² and part of the hill was levelled by mid-1865.²³ Swamp reclamation works, on the lower lying areas to the west, were also undertaken.

By the late 1860s, the station buildings at Spencer Street had grown to include the passenger station, with arrival and departure platforms; offices; carriage shed; engine shed; and several goods sheds. In the 1870s and 1880s new goods sheds were constructed,

including the iron framed No1 Goods Shed of 1872, measuring approximately 35 metres in width and 263 metres long (with an additional 200 metres of external platforms). In 1889-90, the (surviving) No 2 Goods Shed was also built. The huge scale and grand style of the building dramatically reflected the booming economic conditions in Victoria in this period, as well as the volume of traffic in products and goods. The massive Victorian Railways Administration Building was also constructed on Spencer Street in this period, being completed in 1893.

Around this time (in 1890), the Retaining Wall to Flinders Street was constructed in association with the works being implemented by the Melbourne Harbour Trust. A main road was needed to connect the city to the river wharves hence the extension of Flinders Street and the need for a wall to 'retain' what was left of Batman's Hill, being the remnant southern slope.

3.6 Victoria Dock

3.6.1 *Planning the dock*

Sir John Coode's original design and concept (Figure 7) was not in fact implemented. He originally proposed construction of three small docks with wharfs, supported by concrete and masonry pilings. However, local Melbourne Harbor Trust engineer, Joseph Brady, who was largely responsible for the development of the Port of Melbourne in the later nineteenth century, recommended modifications, including opting for one large dock and the use of durable Australian hardwood timbers, for pilings.²⁴ Suggested timbers, on which Brady reputedly experimented,²⁵ included jarrah, red gum, turpentine, Sydney and Victorian iron barks, yellow box, stringy bark, messmate, spotted gum and blue gum, and totara (from New Zealand).²⁶

The Harbour Trust supported Brady, who had greater knowledge of Australian timbers and maritime conditions. The timber docks (and pilings) subsequently proved to be extremely resilient, although some sections were eventually replaced with concrete.

Brady (1828-1908) was born in Ireland, and came out to Sydney in 1850. In 1851 he worked on Melbourne's new Yan Yean water scheme, before returning to Sydney to work for the Sydney Railway Company. By 1858 he was back in Victoria, as engineer to the Sandhurst (Bendigo) waterworks; he was also later responsible for the survey and design of the Coliban River water supply system. By the time of his appointment in 1877 as the engineer to the new Melbourne Harbor Trust, Brady had left his mark on many important civil engineering works in Victoria and Queensland, including railway and water supply projects, and works to harbours and rivers.²⁷ It has been noted that:

..Brady's changes [to Coode's scheme] saved much expenditure at a time when finance for the new port was difficult, reduced the time of construction by several years at a time when harbour accommodation was inadequate and, what proved of greatest value, made the port structures more readily adaptable to changing shipping patterns...The changes that had these marked effects were the building of Victoria Dock as one large dock instead of as three small ones and the substitution of durable Australian hardwood for masonry construction.²⁸

The Harbour Trust Committee adopted the plans and specifications as modified by Brady at its meeting in March 1889.²⁹

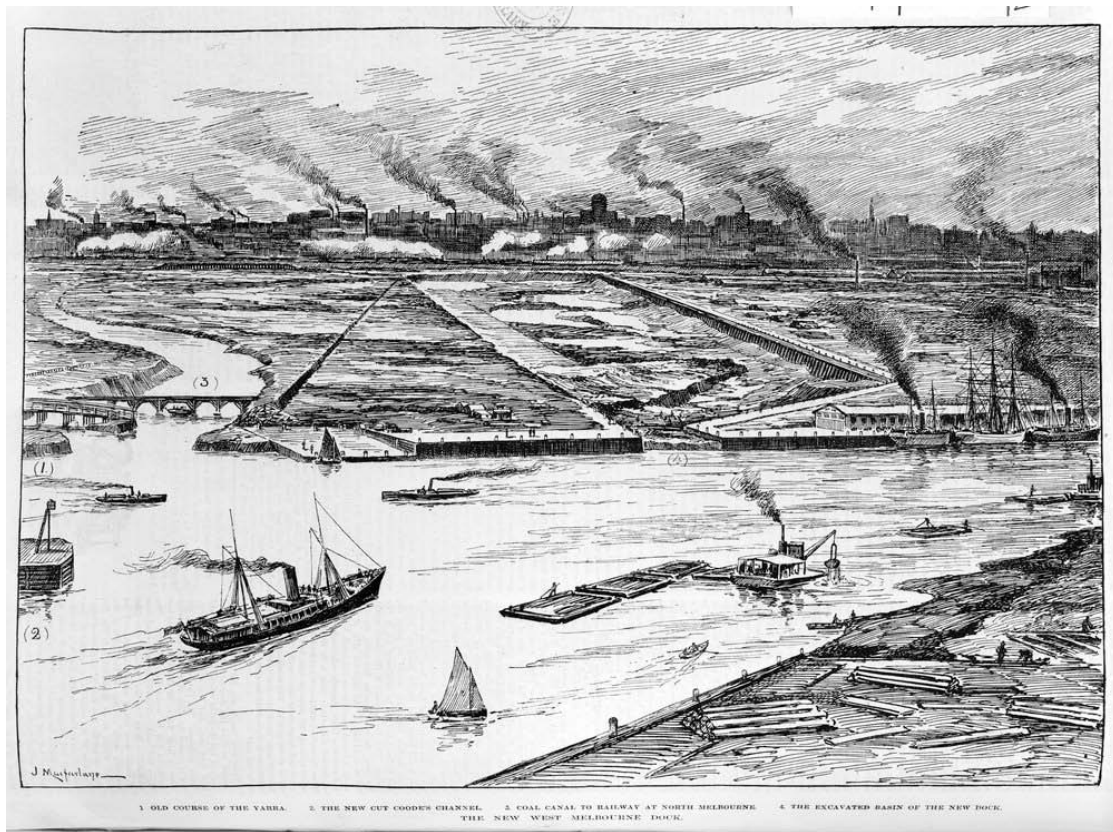


Figure 8 Engraving of the West Melbourne Dock under construction, 1892, by David Syme & Co.

Source: State Library of Victoria.

3.6.2 Constructing the dock

Excavation was the first major task in the construction of Victoria Dock. A T Robb and Co were awarded the contract for £117,000, and by mid-1889 74,000 cubic yards had been excavated by 150 men employed at the site.³⁰

Two years later over 2,000,000 cubic yards of soil had reputedly been removed, which was used to raise and complete the reclamation works in the low-lying land adjoining the dock.³¹

This was also consistent with other Harbour Trust port and river improvement works in Melbourne, whereby the excavated soil and other material was reused. In the Docklands area, recycled soil was also used to raise the site of the proposed new road to Footscray. The Harbour Trust encountered some controversy when it emerged in the press that a contract for £30,000 for the works had been awarded without it first going to tender.³² The contract for the supply of timber was worth £200,000, which was brought in from Western Australia and New South Wales. At the dock's completion a total of 3,114,808 cubic yards had been excavated from the site.³³

An engraving of 1892 printed in the *Illustrated Australian News* shows the scale of development (Figure 8). The excavation of the dock basin is well underway, with the line of the dock edge and entranceway as constructed also visible. The notes under the image explain the works: '1. Old course of the Yarra, 2. The new cut Coode's Channel, 3. Coal canal to railway at North Melbourne, 4. The excavated basin of the new dock'.³⁴

3.6.3 *West Melbourne Dock opens*

On 22 March 1892, the Governor of Victoria, the Earl of Hopetoun, formally opened the West Melbourne Dock, as it was then known, by allowing the Yarra River water to flow into the new basin. The process of filling the dock took about six days and by the end of it 96 acres had been covered with water. The first ship to enter and berth was the Lund Line's SS *Lubuck*, on 20 February 1893. It was also at this time that the dock changed its name from West Melbourne Dock to Victoria Dock.³⁵

The depressed economic conditions of the early 1890s meant that some sheds and linear wharves associated with the dock were not completed for some time after, with the final section of wharf on the north-west side not connected until 1903. Central Pier was also constructed later, in 1916/17.

As originally constructed, the dock was originally between 8.5 and 9.5 metres deep, and bordered on its four sides by the linear wharfage. The wharves initially provided 21 berths, with associated travelling cranes. The dock entrance was at the western end, where the narrow mouth or entrance was 160 feet (approximately 48.76 metres) wide.³⁶ The south-west arm of the dock angled to the north, narrowing the entrance at the west end.

When completed, newspaper reports declared Victoria Dock to be the second largest single dock in the world, after Cavendish Dock, Barrow-in-Furness, Cumbria, England³⁷. It was regarded as an engineering triumph and testament to Melbourne's stature as an international city. It was also the first artificial basin constructed in Victoria, and challenged the British tradition of small dock design. The simple linear wharfage at Victoria Dock was additionally revolutionary, pre-empting similar British designs by at least two decades.³⁸ Through its scale, Victoria Dock could accommodate the (then) largest ships of the day, reinforcing Melbourne's economic importance. The location of such a modern port on the edge of the metropolis, and adjacent to the rail network, enabled the large vessels to be handled closer to Melbourne, with goods more efficiently delivered to city merchants and regional agents. This combination of factors effectively turned Melbourne into a significant port.

The construction of Victoria Dock had other impacts, including negative impacts on other ports and wharves in Melbourne. Williamstown declined in importance, and the long piers at Sandridge (Port Melbourne) adopted a passenger/liner focus. The use of lighters, to convey goods to and from the old river wharves declined. Around this time – i.e. in the decades to either side of 1900 – there was also a gradual change from sail to steam-powered ships, and a consequent huge increase in the amount of cargo carried. This in turn led to an increase in the numbers of 'wharfies' working on the docks, albeit the economic depression of the 1890s affected these workers terribly.³⁹

By today's standards, the creation of Victoria Dock would be regarded as a major piece of environmental meddling, massively impacting on and altering a natural wetlands area and riverine ecosystem. A vast new area of productive land was however created out of the works, whereby the former wetlands were reclaimed and provided new land in West Melbourne for industrial use.⁴⁰

3.6.4 *The dock in operation*⁴¹

By 1908, Victoria Dock was handling ninety per cent of Victoria's imports, and within a few years the bulk of Australia's goods were being handled there and in the associated railway yards. Expansion was soon required, with the widening of wharves on the northern edge and along Cowper Street in 1914, and the construction of Central Pier in 1916-17.⁴² Six

cargo sheds, portal cranes and other goods handling facilities were built along the edges of the new pier over the next three decades. The first two sheds were contracted for construction in 1916, while the construction of the remaining sheds was delayed due to the 'very high cost of iron and steel'.⁴³

With rapidly increasing tonnage figures in the interwar period, further works and development were undertaken to Victoria Dock and its environs, at a time when the Melbourne Harbour Trust oversaw the general expansion of the Port of Melbourne. The composition of the Trust also changed as a result, with municipal representatives giving way to commercial, agricultural and trade interests, as well as shipping owners. This reflected the important economic contribution that the Port made to the wealth of the state. The landmark Port of Melbourne Authority Building, completed in 1931, was also a physical manifestation of this prominence.⁴⁴

Facilities and operations introduced or expanded in and around Victoria Dock during this period, when the dock was Melbourne's principal overseas cargo terminal, included cool stores, bond stores, transport companies, stevedores and shipping agencies. The Missions to Seamen, founded in 1905 by the Anglican Church to provide amenities and religious services, moved into a new building on the Flinders Street Extension in 1917. The entrance to the dock was widened in the mid-1920s.⁴⁵ These works altered the angle of the entrance, and increased the narrowest part of the mouth from 160 feet to 180 feet (approximately 54.8 metres).⁴⁶



Figure 9 Aerial view of Victoria Dock in 1927 following the widening of the entrance, with the 1916 Central Pier in operation.
Source: Public Records Office Victoria.



Figure 10 1927 image of the Cowper Street gateway entrance to Victoria Dock.

Source: Melbourne Harbour Trust *Jubilee Report 1877-1937*

In 1925, Victoria Dock also famously hosted the United States Naval Fleet which was on a two-week visit to Australia and New Zealand. This is still understood to be the largest single contingent of foreign naval vessels ever received in Australia, and included 57 vessels carrying some 25,000 officers and crew, albeit the fleet divided into two contingents that headed to Melbourne and Sydney respectively. Melbourne, which was the temporary seat of Federal Parliament, received the larger contingent of 43 vessels, including the flagship *USS Seattle*, three battleships, four light cruisers, 29 destroyers and six support ships.⁴⁷

An image from the Melbourne Harbour Trust *Jubilee Report 1877-1937*, reproduced at Figure 9 and Figure 10 shows the entrance to Victoria Dock in 1927, which was near the corner of Cowper and Piggot streets (south-west of the dock). The entrance is marked by what appears to have been a large rendered masonry structure, with a prominent pedimented parapet and two wide vehicle (truck) openings. The image citation in the *Jubilee Report* describes this as 'Customs Gates'. The entrance was used by the Harbour Trust to monitor and control access to the dock, including the movement of goods. Fences were also erected around the dock, to enhance the increased security measures, in no small part a reaction to the ongoing theft of goods from the dock wharves and sheds.⁴⁸

In the 1940s, Victoria Dock – as with most Australian ports – was used by war ships; foodstuffs were also exported to overseas destinations. In the immediate post-war period, there was a decline in passenger and cargo trade, although traffic increased rapidly during the economic boom of the 1950s. Australian exports of flour, wool, frozen meat, dried fruits and dairy products were much sought-after in the recovering European countries.



Figure 11 c. 1930-40 aerial view. Note sheds around perimeter of dock and along each side of Central Pier. The chamfered form at the mouth of the dock follows the widening of the entrance.
Source: Charles Pratt, SLV



Figure 12 1945 aerial view of Victoria Dock.
Source: Lands Victoria, Laverton

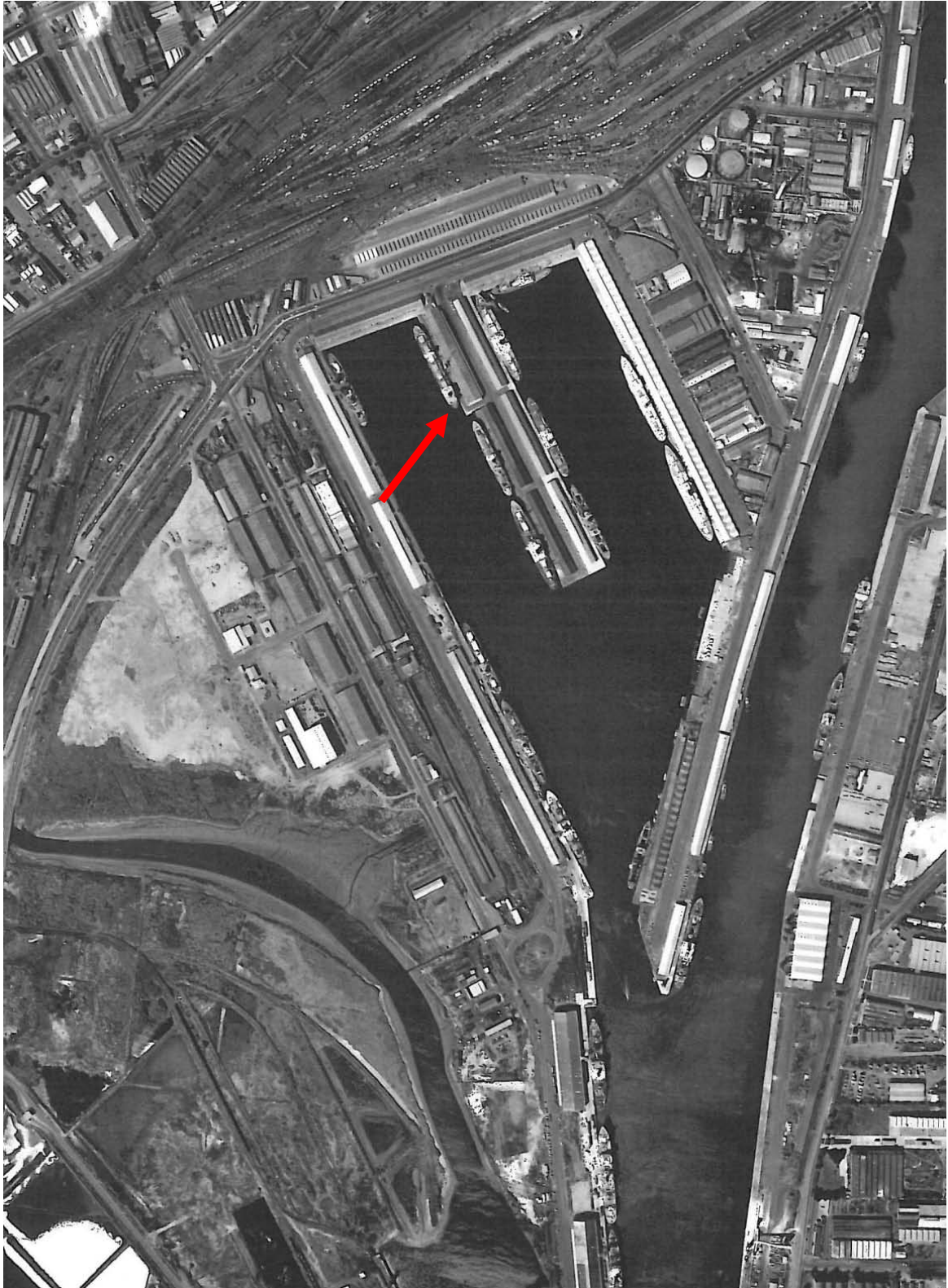


Figure 13 1963 aerial view of Victoria Dock. This shows that Central Pier has been widened at the top end (see arrow). The south side of the dock, bending into the South Arm, appears to have a structure or some modification to the form of the wharf edge. The gas works site is visible at top right.
Source: Lands Victoria, Laverton



Figure 14 Shipping control tower, with Port of Melbourne hostesses, c. 1966
Source: National Archives of Australia

Melbourne also boasted in this period that its port was the 'most mechanised' in the Commonwealth, with more cranes and lift trucks (cargo handling equipment) acquired to support port operations.⁴⁹ By this time, Victoria Dock was handling over two millions tons of cargo annually;⁵⁰ it remained Melbourne's most used dock until the 1960s.

3.6.5 *Shipping Control Tower*

In 1962, a joint conference was held between Trust officers, shipowners and others to discuss the establishment of a central control station for the port. It was agreed that an observation tower would be constructed, and manned by five control officers 24 hours a day, to co-ordinate movements of shipping in the port, including towage pilots and emergency services.⁵¹

The Shipping Control Tower, which replaced an earlier timber octagonal watch tower of 1934, was designed by architect C J Smith.⁵² It was constructed of reinforced concrete, with a lift and stairs, and comprised two decks – one for observation duties containing radar and communication equipment, the other being for amenities for its 24-hour a day operation.⁵³ The control centre also provided an automated telephone service providing shipping information to the public, a service that proved immensely popular with 116,995 calls taken in the first year. The tower was officially opened in April 1966 by the Governor of Victoria, Sir Rohan Delacombe.⁵⁴ The tower was (and remains) located at the end point of the narrow south-west arm of Victoria Dock, near the dock entrance.



Figure 15 1967 aerial view of Victoria Dock. The then new Shipping Control Tower is indicated.

Source: State Library of Victoria

3.7 Decline & redevelopment

3.7.1 *The shift downstream and advent of containerisation*

It was also in the 1960s that Victor Swanson (then Chairman of the Melbourne Harbour Trust) introduced deep water containerisation facilities to the Port of Melbourne, the first Australian port to do so. In 1965, Swanson noted that many ports around the world were changing their facilities for handling shipping and cargo. He continued:

It must be accepted, and preparation made, that "general cargo" will gradually be stowed, handled, shipped and transported on land at both ends as unit cargo and containerised cargo...The traditional facilities provided by ports for general cargo over the past 50 years will be radically changed and to provide the new type of port facilities will require a major revision in sources of port revenue.⁵⁵

Containers were used for every kind of cargo including coal and steel, wood, animals, wool and wheat. Containerised cargo required different storage, handling and berths to those provided by the long sheds and wharves lining Victoria Dock. Larger expanses of land were also needed for the storage and movement of containers, and for associated terminal and depot use. This brought about the building of Swanson Dock, the port's major container terminal, further downstream of Victoria Dock, along with other facilities.⁵⁶

The shift in Melbourne's port activity further downstream had in fact preceded the building of Swanson Dock. Appleton Dock, which was built on the site of the old course of the Yarra River, was planned as early as the 1930s but was not completed until 1956. Webb Dock, at the mouth of the Yarra River, also provided roll-on-roll-off capacity from 1960.⁵⁷ New swinging basins were additionally created downstream, to cope with the larger ships; and old port areas were consolidated.

In the early 1960s, a project commenced to upgrade Victoria Dock to cater for the larger ships arriving and the need for a larger number of rail berths. The work was to cost £1,780,000 and included a new wharf platform of reinforced concrete and a wider wharf apron.⁵⁸ It was also intended to construct new berths capable for container trade.⁵⁹ The need for such improvements was clear in the Chairman's annual review of 1963, with the observation that the volume of trade through the Port of Melbourne had increased, exceeding 10 million tons for the first time.⁶⁰ Due to a shortage of cargo storage accommodation, two purpose built, pre-fabricated steel cargo sheds were also constructed in 1968-9 at Berths 2 and 4 at a cost of \$124,650. Rail facilities were laid in front and behind the two specially built sheds, designed to accommodate containerised cargo.⁶¹ Despite the significant impact of containerisation, the Melbourne Harbour Trust reported in 1970 that the numbers of 'conventional' ships arriving at the port remained virtually steady, albeit Victoria Dock was used exclusively for such arrivals.⁶²

The nearby railway yard facilities and operations were additionally changing in this period. The move from coal-powered to diesel-powered trains meant that the docks were not required for coal storage, and also that large steam locomotive sheds were no longer needed.⁶³ Other later works to the dock included widening the entrance again in 1979-80; and converting berths 6 and 7 to a roll-on roll-off facility. Berths 1, 2, 3, 4, 16 and 17 were converted into container facilities, and the outer section of Central Pier was demolished.⁶⁴ Some berths, however, retained their pre-containerisation form and character, including (in 1991) berths 8, 9, 10, 14, 15, 19, 20, 21, 22 and 24.⁶⁵

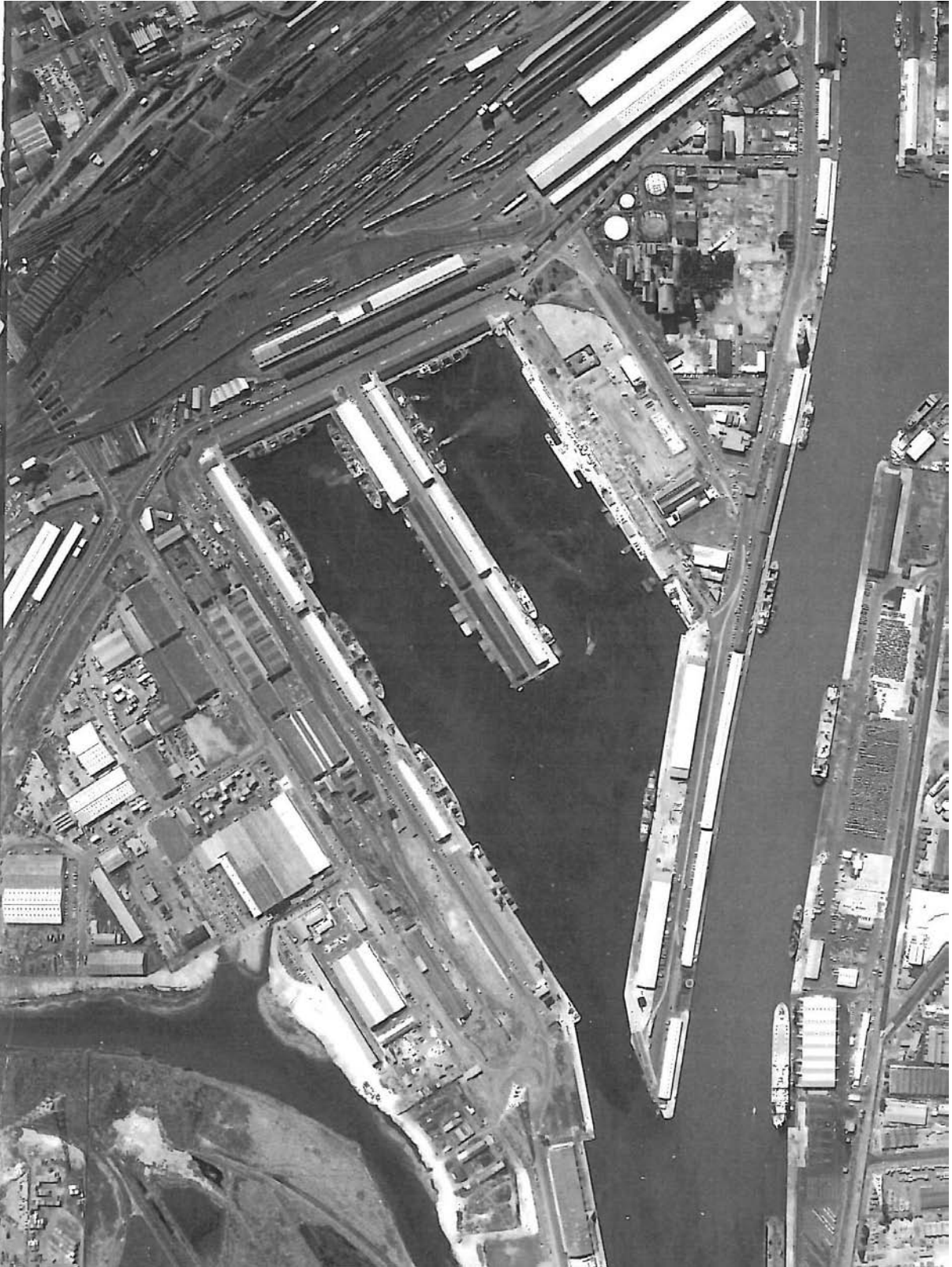


Figure 16 1974 aerial view of Victoria Dock. The gas works site is still visible at top right.
Source: Lands Victoria, Laverton

The building of the Charles Grimes Bridge and Bolte Bridge in 1975 and the late-1990s respectively, and the increasing size of container ships visiting the Port of Melbourne, further hastened the demise of Victoria Dock, as well as the other wharves on the north and south sides of the Yarra River. The approaches to the dock and wharves had become too narrow for the larger ships; and little major shipping has occurred there since the mid-1980s.

In 1978 the Melbourne Harbour Trust was reconstituted as the Port of Melbourne Authority, and after further restructuring, as the Melbourne Port Corporation in 1997. At this time the Corporation took on berthing responsibilities, while the Victorian Channel Authority was established to manage the shipping channels. In July 2003, the Port of Melbourne Corporation was formed absorbing the Melbourne Port Corporation and, in November that year also the Victorian Channel Authority.⁶⁶

In this period there was also a growing awareness in Melbourne of the value and potential of the Victoria Dock water body, and of this now redundant area on the edge of the Melbourne CBD. In the 1980s and 1990s, attention was focused on the former wharves and industrialised areas of the Yarra River, including through the redevelopment of Southbank and the construction of the Casino and Melbourne Convention and Exhibition Centre. There were also, increasingly, calls to revitalise the neglected dock and environs adjoining the western end of the CBD. Victoria Dock and the land around it were even identified as the site of the Olympic Village, in the city's failed attempt to have Melbourne hold the 1996 Olympic Games.⁶⁷

3.7.2 *A new 'Melbourne Docklands'*

In May 1990 the Committee for Melbourne produced a publication entitled 'Melbourne Docklands', which outlined a vision for the area. Victoria Dock was regarded as the centrepiece of Melbourne Docklands, around which different precincts or character areas were identified, with differing uses and development objectives. An outcome of the Committee for Melbourne report was the establishment in 1990 of the Docklands Taskforce which ultimately led to the formation of the Docklands Authority under the provisions of the *Docklands Authority Act 1991*.⁶⁸ The Authority was responsible for facilitating private sector development of the area; it was also given responsibility for establishing the infrastructure to support development and attract investment, such as roads, bridges, tramlines and wharves.⁶⁹

On the eve of this renewal and transformation of the area, Docklands comprised a vast landscape of railway goods yards, historic goods sheds, a two kilometre stretch of the Yarra River extending from Spencer Street to the west, a former gas works site, Melbourne City Council depot, and Victoria Dock with its associated wharves, sheds and remaining infrastructure. The gas works buildings and infrastructure had long gone (the chimney was demolished in 1974)⁷⁰, and pleasure craft largely occupied the berths along the river. While occasional cargo vessels still docked and local interstate traders berthed at the roll-on roll-off facility, the dock was increasingly deserted.

In 1991 it was noted that the travelling cranes had been removed, and sections of the crane gantry had been taken down. The railway tracks along the south-west side of the dock, and the sidings on the north-west side had also been removed.⁷¹

The built heritage had also already greatly diminished from that which existed in the pre-containerisation period. The surviving wharf sheds had ceased to function for shipping purposes and were either abandoned or occupied by a range of alternative uses including

ships chandlers, furniture makers, artists and the like. The core heritage fabric which did however survive was that located around Central Pier at Victoria Dock. Central Pier retained its original wharf sheds (nos 8 and 15) which flanked the entry to the pier; and on the pier a range of modified sheds which reflected an evolving shed form as cargo handling and crane technology changed over the decades.⁷²

Other elements which remained in the area at this time included an old stables complex (buildings and yard) dating from 1913/1914, and known as the (City of) Melbourne Corporation Stables (Figure 19); and a shed that formerly belonged to Patrick's Stevedoring.⁷³ The stables complex was part of the Melbourne City Council depot, associated with the collection and disposal of nightsoil and other rubbish from properties within the city, originally dating back to the 1880s. The depot was bordered by Pigott Street to the north and North Wharf Road to the south.

The Docklands Authority parcelled up this area into separate development precincts, which were released to the market in 1996 for a staged development programme. The precincts varied in size from 7 to 36 ha, and were identified with a range of preferred uses including residential, leisure, commercial, education and recreation. The area in and around Victoria Dock was known as 'Victoria Harbour'. By 1997, Mirvac had signed up for the Yarra's Edge precinct; and MAB Corporation for New Quay precinct. Lend Lease signed on for the Victoria Harbour precinct in 2001, including Central Pier.⁷⁴

The vision for the area was nothing short of total transformation of the former docks. It was then, and remains, Australia's largest construction project and partnership between the government and private sectors; it was also a major urban renewal project by world standards. It was intended to be a waterfront area, combining residential accommodation (in mostly apartment towers), with office blocks, recreational areas, public promenades, restaurants, bars, shops, galleries, and the new Docklands Stadium (to be used predominantly for AFL football).

The development of Docklands has subsequently involved demolition and removal of many former docks buildings and structures; decontamination of land areas; introduction of berths for recreational boats and luxury yachts; and the construction of new roads, streets, bridges and overpasses including the extension of the traditional east-west running CBD streets (including Collins, Bourke and La Trobe streets) across the rail yards. For the first time since the Hoddle Grid was drawn up in the 1830s, central Melbourne was pushed west of Spencer Street, although the extension of Collins Street, involving partial demolition of one of the most important historic buildings in the area, Goods Shed No. 2, was controversial.

Construction of Docklands Stadium (now Etihad Stadium) commenced in 1997, being the first of the major urban renewal works in the area. In 1999, the Docklands Authority was also made responsible for the municipal management of Docklands. VicUrban (now Places Victoria) later became the development authority when the Docklands Authority merged with the Urban and Regional Land Corporation (URLC) in 2003.

In 2000 Docklands Stadium opened, as did several of the new transport links and extensions into the area, including Bourke Street, La Trobe Street and Wurundjeri Way. Two years later the first residents moved into the New Quay precinct, and since that time other developments have come on line, including in the area surrounding and abutting Victoria Harbour.



Figure 17 1984 aerial image. Image shows that entrance to dock has again been modified; a crane is located on the north edge of the dock (see arrows).
Source: Lands Victoria

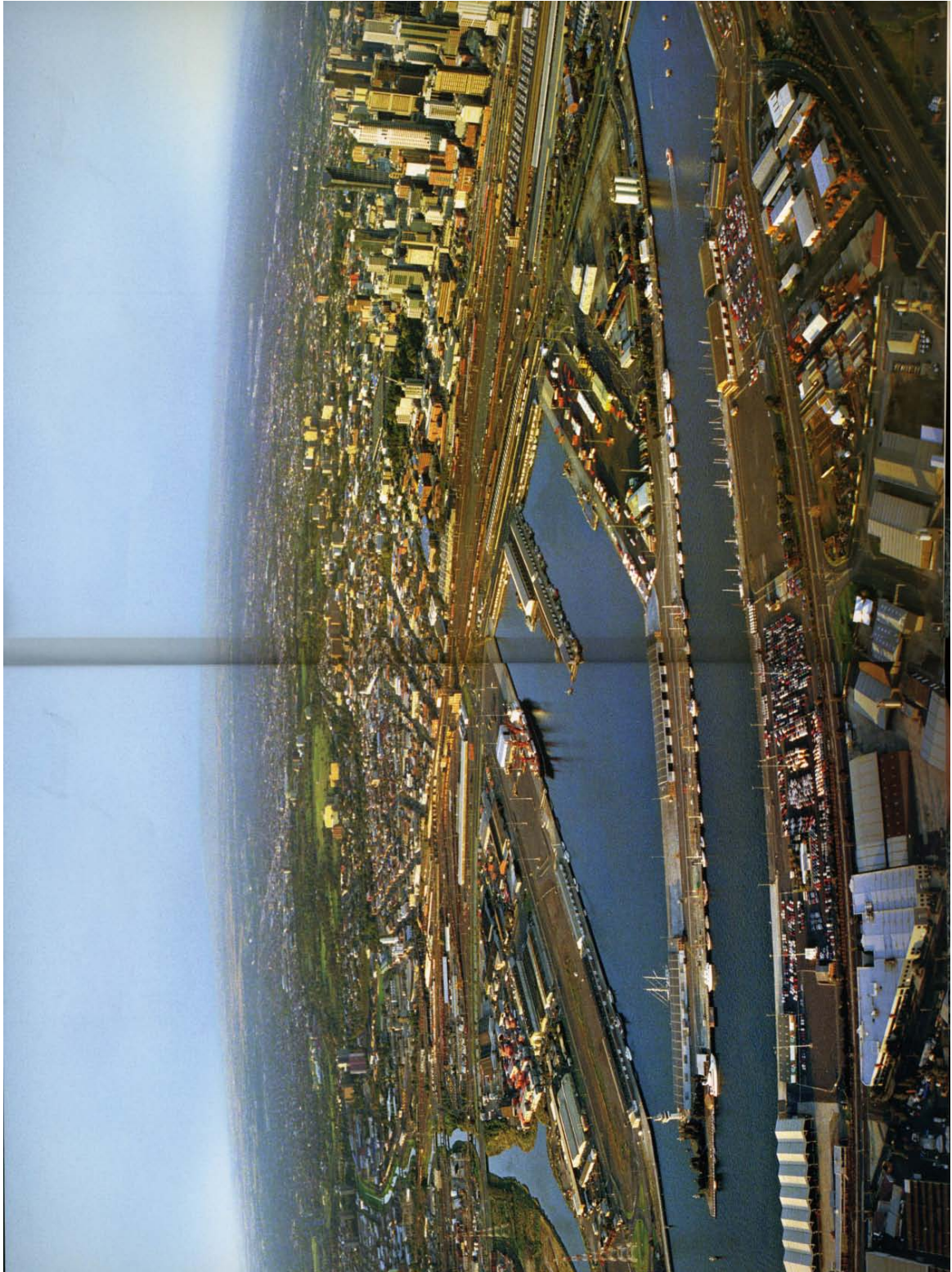


Figure 18 c. 1997 aerial view of Victoria Dock, prior to the start of construction of the Docklands Stadium.
Source: Lovell Chen archive



Figure 19 MCC stables building, 2005 (since demolished).
Source: Lovell Chen

3.8 Summary of development

This chapter has described and outlined some of the changes that have occurred to Victoria Dock and its environs, since the dock opened in the 1890s. Chapter 4 also includes information on, and descriptions of, changes to the structures, fabric and elements of the place. Further, Appendices E and F in particular, include (in largely chronological order) historic maps, plans and aerial images which illustrate and document changes to the heritage place.

The following is a summary of the main changes/developments which have occurred:

- | | |
|---------|---|
| 1889 | Melbourne Harbour Trust begins the construction of the West Melbourne Dock with the excavation of the West Melbourne Swamp. |
| 1892 | West Melbourne Dock officially opened with letting in of water. |
| 1910s | Alterations include widening of wharves on both Cowper Street and Mountain Street sides of the dock. |
| 1913 | Sheds at berths 8 and 15 constructed. |
| 1916-17 | Central Pier constructed with six berth sheds completed by 1920 (includes sheds 9 and 14). |
| 1920s | Amenities constructed at the dock for female passengers, and four buildings for meals for wharf workers constructed on Mountain, Cowper and Pitt Streets. |
| 1924 | Entrance to Victoria Dock widened by 20 feet, with the edge of the dock mouth having a chamfered form. |
| 1926 | Sheds at berths 19-21 constructed. |

- 1930s Two semi-portal electric cranes erected at numbers 19-21 berths.
- 1960s Construction of Shipping Control Tower at the end of the southern arm of the dock in 1966.
- 'Roll-on roll-off' facility constructed on south side of dock in the mid-1960s.
- Brick amenities blocks built for wharf workers on both the south and north arms of the dock.
- Containerisation of the cargo shipping industry increases from the mid-1960s.
- Two pre-fabricated sheds (berths 1, 2, 3 and 4) constructed on the south arm to cope with the rise in demand for storage.
- 1979-80 Entrance to the dock widened/modified again.
- Reconstructed roll-on roll-off facility at number 16 berth opened to shipping.
- Berths 1, 2, 3, 4, 16 and 17 converted into container facilities.
- Outer section of Central Pier demolished.
- 1991 Travelling cranes had been removed, and sections of the crane gantry had been taken down.
- Railway tracks on south-west side of the dock, and the sidings on the north-west side had also been removed.
- Late 1990s Docklands precincts identified for development.
- Development commences with construction of Docklands Stadium.
- c. 2000 Sheds 8 and 15 removed.
- 2000s Development of Melbourne Docklands continues, including in and around Victoria Dock.

4.0 PHYSICAL SURVEY & ANALYSIS

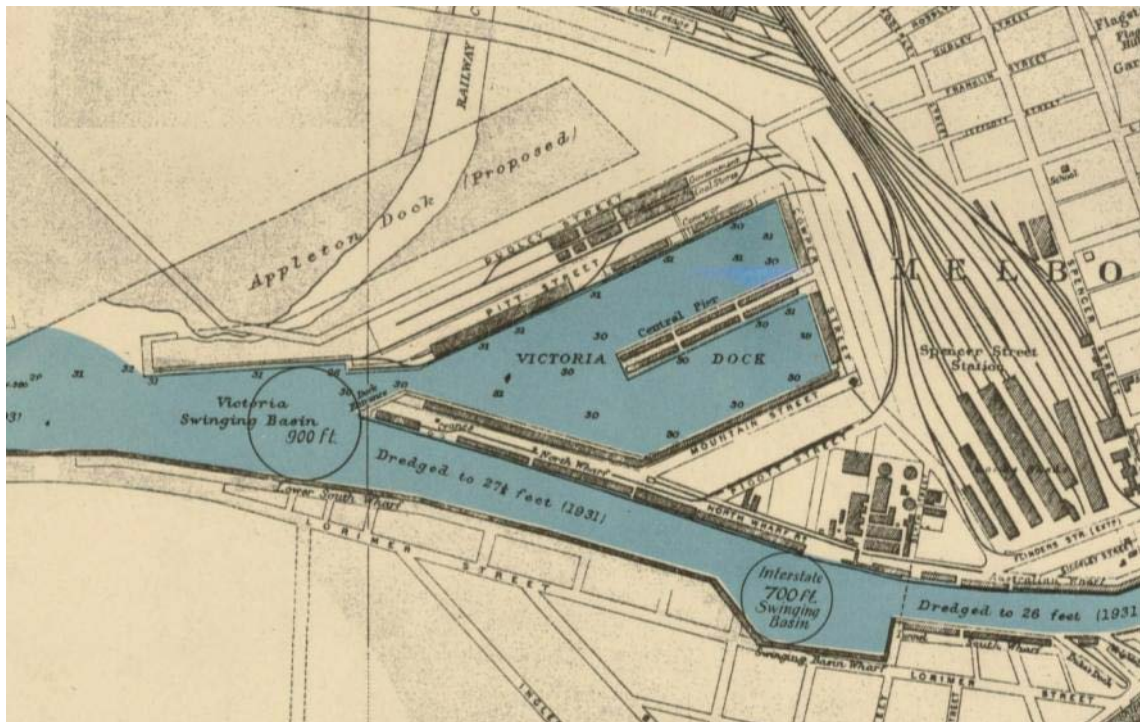


Figure 20 Detail from the Melbourne Harbour Trust Commissioners General Plan of the Port of Melbourne c. 1931 showing the dock layout and streets which enclosed the study area. Note the 'swinging basin' near the Victoria Dock entrance. The depth of the Harbour at this date is approximately 30 feet (9.1 metres). Source: Melbourne Harbour Trust Commissioners.

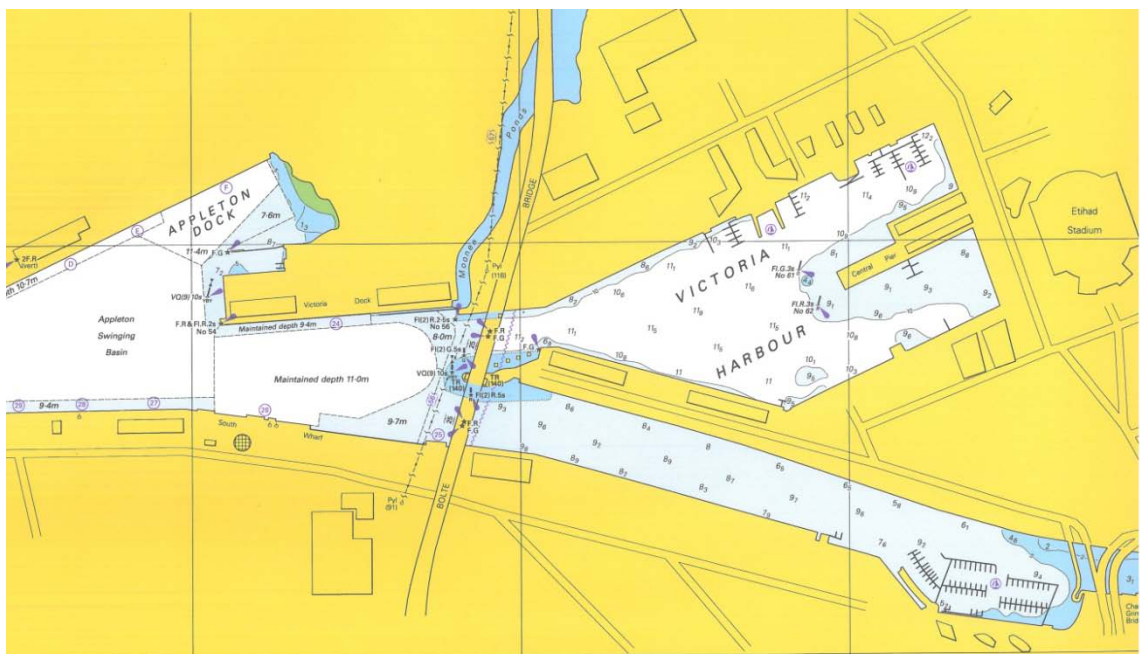


Figure 21 Detail from Admiralty Chart 154, edition 8, 2010, showing the depth of Victoria Harbour.



Figure 22 1990 map, indicating the numbered berths at Victoria Dock.

Source: 1990 Melways Street Directory.

4.1 Introduction

This physical survey and analysis represents the results of a site survey of Victoria Harbour, including the Victorian Heritage Register extent of registration. A physical survey of the structures and elements located on and associated with the dock (above deck) was undertaken on 9 February 2012; a survey/structural assessment of the dock underberth area and the water body was undertaken on 14 February 2012. The chapter comprises two parts:

Description and structural assessment of the dock and berths undertaken by consultant engineers MacLeod Consulting (see Sections 4.3 and 4.4), with a conclusion regarding heritage significance.

Description and assessment of the above deck structures and elements including landscape and context/setting undertaken by Lovell Chen (Sections 4.5 to 4.10), including a brief history of the elements and conclusions regarding the relative levels of significance of the elements.

Note: the physical survey and analysis does not include detailed reference to contemporary buildings and elements associated with, or adjoining, the heritage registered area, with the exception of the Shipping Control Tower and Berths 1, 2, 3 and 4 sheds, as detailed in Chapter 2.

4.2 Victoria Harbour and Dock

Today Victoria Harbour comprises 93 acres (37.6 hectares) of water body, with an overall depth of 11 metres decreasing to between 8 and ten metres close to Central Pier (Figure 21). The entrance at the western end is now approximately 90 metres wide, having been substantially widened over time from its initial width of approximately 48 metres.

Wharves line all sides of the dock, and originally provided 21 berths, varying in length from approximately 140 metres to 187 metres. The wharves are mostly constructed on timber piling, with timber and reinforced concrete beams. The wharf aprons are variously of concrete slab, asphalt over timber, and timber over concrete slab. As part of the phased redevelopment of the Victoria Harbour surrounds, sections of the dock have been renewed and replaced in recent years.

Central Pier, which was originally 497 metres long, 76 metres wide and provided six berths of between 161 metres and 174 metres long and was modified in 2005-6 with the demolition of the deteriorating wharf structure to its west end – namely berths 10, 11 and 13.81

4.3 Structural assessment - dock fabric and structure

4.3.1 Scope of Structural Assessment

MacLeod Consulting was retained in January 2012 to contribute to the structural condition assessment, and an assessment of the engineering significance of the dock and berths. The berths considered are as follows:

- Berths 2 to 6, South Arm;
- Berth 8, Harbour Esplanade;
- Berths 9 and 10, Central Pier;
- Berth 15, Harbour Esplanade;
- Berths 16 and 17, 19 to 21, North Arm.

Structural assessments of the various wharf structures was based upon a visual inspection of the accessible portions available on the day of inspection, recorded with photographs of the typical conditions. The assessments are based on experience and judgment, with no materials testing and geotechnical investigations being undertaken.

Six previous structural engineers' reports and structural assessments were made available for review (see below). These have been used as the primary source data for the actual structural condition of the berths, as some of these previous assessments have utilised detailed physical surveys and site testing/analyses of the various components of the berths.

The inspection undertaken on 14 February 2012 was conducted from the water, and access for viewing the underside of berths was only available at berths 4, 8, 9, 10; the underside of berths 5, 6, 11, 14 was viewed from the face of each berth; berths 19, 20 and 22 were too deteriorated to approach more closely than about 3 metres.

4.3.2 Methodology and tasks

This structural assessment included the following:

- Review of existing engineers' reports and structural assessments;
- Survey and analysis of the existing conditions/fabric/structure of the dock;
- Provision of an abbreviated 'audit' of the dock elements, to identify/clarify where there is original fabric, and where it has been modified;
- Description of the berths, including:
 - original construction
 - current situation
 - main changes/modifications
- Assessment of the significance of the dock in terms of its importance in engineering terms, technological significance, etc.

Table 2 and Table 3 below include the survey of observed berths, as well as the assessment of the fabric and condition of the berths.

In addition to the above, the following recommendations/policies are included in Chapter 6 of this CMP:

- Maintenance and repairs
- Replacement of materials
- Means of modifying the dock structure in future works, if required
- Compliance and safety issues/risk management

4.3.3 Review of existing Structural Assessments

The following structural engineers' reports and structural assessments were reviewed:

Conditions Survey, Victoria Dock, Berths 8 to 15, Docklands Authority, Melbourne, Australia, October 1993 (this report contains drawings by Connell Wagner (Vic) Pty Ltd, who are judged the probable authors of this report)

Preliminary Report on Central Pier, Existing Wharf and Pile Condition Wharves 9 and 14, Melbourne Docklands, Robert Bird and Partners, 17 March 2000

Durability Plan, Grand Plaza, Victoria Harbour Development, Arup-Connell Wagner, revision 4, 3 September 2002

Durability Plan, NAB Promenade/Grand Plaza Stages 2 & 4, Victoria Harbour Development, Arup-Connell Wagner, revision 1, 29 April 2003

Wharf Assessment, Draft Report, Waterfront City, November 2003 (this report covers Berths 17, 18 and 19 and was prepared by GHD who had been engaged by Meinhardt Pty Ltd)

Cursory Structural Assessment of Wharf 20/21, Docklands, Hyder Consulting Pty Ltd, 16 June 2010.

The findings of these reports are summarised below in Table 1.

Report, author, date	Berths	Brief content of report	Recommendations of report	Comments
Conditions Survey, Connell Wagner, October 1993	8 - 15	Visual inspections of berth structures including 4705 piles for general condition assessment	Refer comments	<p>Berths 8 & 9 in moderate condition.</p> <p>Berths 10 & 11 in moderate to sound condition.</p> <p>Berths 12 & 13 in poor condition.</p> <p>Berth 14 in moderate to sound condition.</p> <p>Berth 15 in moderate condition</p> <p>Central roadway in poor condition</p>

Report, author, date	Berths	Brief content of report	Recommendations of report	Comments
Central Pier Wharves 9 and 14, Robert Bird and Partners, March 2000	9 and 14	Visual survey and testing of structure referenced, extent and estimated costs of remediation outlined	Berth 10, 11 and 13 expressly not included in brief	Berth 9 in average condition requiring major remediation before re-use. Central roadway in poor condition requiring major remediation and new concrete deck. Berth 14 in good condition requiring minor remediation before re-use
Durability Plan, Grand Plaza, Arup-Connell Wagner, September 2002	Not Stated	Details responses by Connell Wagner to Maunsell Australia structural design queries, 3 July 2002 and durability review comments 4 July 2002, relating to new concrete wharf construction of Grand Plaza.	Fender details included as sketches	New construction with intended 50 year lifespan
Durability Plan, NAB Promenade/Grand Plaza Stages 2&4, Arup-Connell Wagner, April 2003	5, 6 and 8	Details actions to be undertaken in design, construction and operation stages to ensure these areas achieve a 50 year lifespan. Describes the extant structures as well as the new portions	Identifies the following loading limits: Occupancy loads (primarily pedestrian uses) mooring and berthing Identifies critical structural elements	Berth 5 in good condition Berth 6 in good condition Berth 8 in poor condition

Report, author, date	Berths	Brief content of report	Recommendations of report	Comments
Wharf Assessment, Draft, GHD, November 2003	17, 18 and 19	Detailed engineering assessment of berths 17, 18 and 19 based on divers inspections and visual inspections focuses on the condition of piles	Berth 17 requires pile and deck soffit remedial actions for re-use Berths 18 & 19 to be fenced off due to unsound state	Berth 17 in good condition Berths 18 & 19 piles highly degraded
Wharf 20/21, Hyder Consulting, June 2010	20 & 21	Cursory assessment only of this highly dilapidated structure	Structure not to be used or loaded in any manner. No surcharges to be imposed on sheet pile retaining wall	Failure of the wharf structure and the warehouse occurring/highly likely. Sheet pile retaining wall not assessed, but appeared stable

Table 1 Summary of previous engineering reports and structural assessments.
Source: MacLeod Consulting.

4.4 Description - dock fabric and berths

4.4.1 Original construction

The original construction of berths 3, 4, 5, 6, 8, 9 to 11, 14, 15 and 19 to 21 of Victoria Dock used timber hardwood piles with structural timber framing, generally consisting of corbels (in places), bearers, joists and planking with concrete overlays for the decking (Figure 23, Figure 24 and Figure 26).

Berth 2 has a steel sheet piled facing wall with concrete capping beams (with presumed tie backs anchors), and backfilled accessible level behind the facing wall. It is surmised that the current steel sheet piling is a replacement for original timber sheet piling, which may have encapsulated the junction of the dock and the river course, as originally installed to prevent scour of the junction.

Berths 8 and 15 have a concrete retaining wall to Cowper Street (east abutment) which is visible under the berths. Remnant diagonal timber bracing was noted under berth 8 for the first three bents from the west face of this retaining wall (Figure 26). It is assumed that similar construction occurs under berth 15.

Berths 9 to 14 do not have visible diagonal bracing – refer to Figure 27, Figure 28 and Figure 24. It is expected that these berths relied on the large number of piles to share the mooring and berthing forces. These forces may also have been limited by the slow pace of the berthing vessels, with the surrounding land reducing the wind velocity on vessels at berth, as well as reducing wave creation.



Figure 23 Wharf face, berth 3, showing exposed reinforcement of wharf beam.



Figure 24 Underside of concrete slab deck, berth 10, showing corroded metal formwork, corroded reinforcement, and impacts of water penetration to timber structure level from deck.



Figure 25 Detail of wharf face, berth 15, with fender pile in foreground.



Figure 26 Retaining wall to Cowper Street, under berth 8, showing diagonal cross-bracing.



Figure 27 General under deck view to north with berth 13 beyond. Note there is no diagonal bracing; new galvanised beams on left hand side.



Figure 28 View to north, berth 10. Note deterioration of piles at water level and end grain decay in beams.

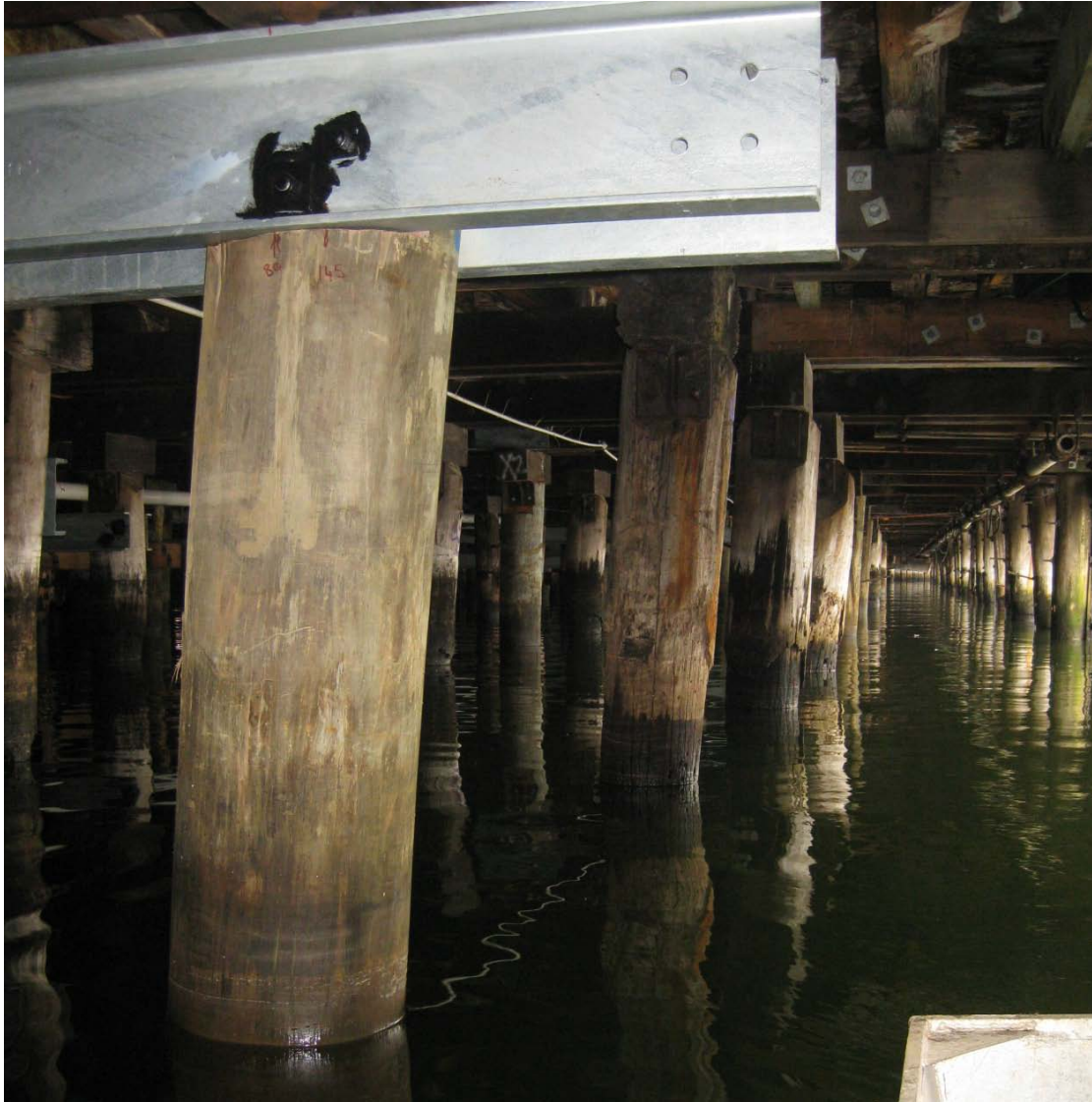


Figure 29 Under deck view to east, berth 10. Note new piles and galvanised channel beams (transfer beams) in foreground; and new timber beams with galvanised bolts in upper middle ground.



Figure 30 Wharf face, berth 5, showing wrapping of timber pile, concrete deck in good order and renewed modern timber fender arrangement.



Figure 31 Under deck view, berth 6, NAB Promenade showing Denso wrapped steel piles, timber beams, joints and decking over.

Berths 16/17 (circa 1975) were constructed with reinforced concrete piles, beams and deck slab. A steel sheet pile retaining wall with concrete capping beam integrated into the deck structure is restrained with concrete raker piles. The construction documentation for berth 17 prepared by the then Port of Melbourne Authority (PMA) is included in the report titled *Wharf Assessment Draft Report, Waterfront City, November 2003* (see above).

In summary, the types of concrete deck and concrete overlays vary across the differing berths, depending on their period of construction and/or re-construction.

4.4.2 Changes and modifications

Generally, repaired and replaced portions of the individual berths follow the same typology as the original construction. For example, repairs to deteriorated piles have been made with additional adjacent piles or transfer beams to effectively allow for the applied loadings to bypass the defective pile – refer to Figure 29. A visible example of the replacement of earlier wharf structure is the lower promenade and deck of berths 5 and 6. These recent constructions are located in front of existing concrete wharf structures (not observed due to limited access but now forming the upper promenade), and have used existing timber piles, wrapped at the tidal zone to increase their lifespan, with added timber or concrete beams – refer here to Figure 30 and Figure 31.

Changes and remedial works appear to all have been driven by the materials deterioration that occurs in these marine environment structures. Typically, it can be expected that wharf structures might have a serviceable life of 25 to 30 years, before the first significant remedial works are required. Thereafter, increasing frequent repairs are needed, as more structural elements exhibit deterioration. Complete reconstruction of a wharf is to be expected every 50 years or so (examples at Victoria Dock are berths 16 and 17 as well as possibly berth 2).

In reconstructing a wharf, an opportunity for the replacement structure to cater for additional deck/traffic loading is possible, which a largely repaired structure may not be able to sustain. As commercial vehicle gross loadings have been increased from time to time, reconstruction of a wharf structure that requires extensive repair becomes more financially prudent. A detailed exposition of possible deterioration mechanisms that wharf structures may be subject to is contained in the report titled *Durability Plan, NAB Promenade/Grand Plaza Stages 2 & 4, Victoria Harbour Development*, Arup-Connell Wagner, revision 1, 29 April 2003 (see above).

Changes and modifications are also identified in Table 2 and Table 3.

4.4.3 Description of berths

The following description of the berths, as observed, also includes the dates (where known) of construction or substantial reconstruction of the berths, and modifications to the berths.

Berth	Date	Typology	Date of modifications	Changes to typology
2	1960s	Steel sheet pile facing with concrete capping beam at face of berth with presumed tie back anchors to the sheet piles. Filled ground behind wharf face.	N/A	N/A

Berth	Date	Typology	Date of modifications	Changes to typology
3	1940s	Concrete beams and deck supported on timber piles.	Concrete deck structures estimated c. 1960	N/A
4	1940s	Concrete beams and precast planks supported on timber piles. Earth batter at southern edge under deck.	Concrete decking structure estimated c. 1970	Concrete deck structure
5	1940s	Concrete beams and precast planks supported on timber piles.	2003/5: Recent concrete deck constructed over existing timber piles, abutting existing concrete wharf structure	Concrete deck structure Pile remedial works Fender system
6	1940s	Concrete beams, timber joists and decking supported on timber piles	2003/5: Recent concrete deck constructed over existing timber piles, abutting existing concrete wharf structure. Concrete wharf structure behind estimated c. 1970s	Concrete beam and timber deck structure Pile remedial works
8	c. 1900	Timber decking, joist and beams supported on timber piles. Timber diagonal bracing at landward side. Concrete retaining wall	c. 2003: Part reconstructed as Grand Plaza	N/A
9	c. 1920	Timber decking, joist and beams supported on timber piles. Concrete decking overlay.	Various periods of repairs, latest in 1950s	N/A
10	c. 1920	Timber piles, concrete and timber decking and timber sub-structure.	Various periods of repairs, latest estimated 2005; defective piles repaired/replaced or substituted with transfer beams; general beams and	N/A

Berth	Date	Typology	Date of modifications	Changes to typology
			pile corbel repairs for re-use	
11	c. 1920	Timber piles, concrete and timber decking and timber sub-structure.	Substantially demolished 1975; defective piles repaired/replaced or substituted with transfer beams; general beams and pile corbel repairs for re-use c. 2005	N/A
14	c. 1920	Timber piles, concrete and timber decking and timber sub-structure.	Various periods of repairs, latest estimated c. 1940-1950; defective piles repaired/replaced or substituted with transfer beams; general beams and pile corbel repairs for re-use	N/A
15	Estimated c. 1897; widened 1913	Timber piles, concrete and timber decking and timber sub-structure.	Roll on/roll off portion estimated 1970s. Recent partial rebuild area estimated 2005	N/A
16	1982(?) similar Berth 17	Not accessible for inspection		Not observed
17	1982	Concrete deck on metal formwork supported on reinforced concrete beams and piles. Steel sheet pile retaining wall with concrete capping beam and concrete raker piles	N/A	N/A
18	?	Boundary to Berth 19 not discernable		

Berth	Date	Typology	Date of modifications	Changes to typology
19	1950s	Timber piles, concrete and timber decking and timber sub-structure.	N/A	N/A
20	1950s	Timber piles, concrete and timber decking and timber sub-structure.	N/A	N/A

Table 2 Description/typology of Berths.

4.4.4 Assessment of the fabric and condition of the berths

The following summary of the berths, as observed, includes previous and current assessments of condition.

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
2		Steel sheet pile facing corroded. Parts of concrete beams at face of berth with corroding reinforcement exposed.	Steel sheet piling with concrete deck structure	Steel sheet piling and concrete deck (1960s)
3		Concrete beams at face of berth with corroding reinforcement exposed. Concrete beams and deck under berth in apparent acceptable condition (chloride ion penetration not known)	Concrete deck structures estimated c. 1960	Timber piles (1940s)
4		Timber pile deterioration in tidal zone. Concrete beams at face of berth with corroding reinforcement exposed. Concrete	Concrete decking structure estimated c. 1970	Timber piles (1940s)

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
		beams and precast planks under berth in apparent good condition (chloride ion penetration not known)		
5	2003: Recent concrete deck constructed over existing timber piles, abutting existing concrete wharf structure	Timber piles wrapped in tidal zone, concrete decking in apparent satisfactory order but some deterioration of bitumen soffit coating	Pile wrapping Concrete deck structure Timber fender system	Timber piles (1940s)
6	2003: New timber decking constructed over existing timber piles, abutting existing concrete wharf structure	Timber piles wrapped in tidal zone, sub-structure framing and underside of decking in good order. Remnant piles of demolished section remain as feature	New lower promenade timber decking and sub-structure (concrete wharf structure estimated 1970s)	Timber piles (1940s)
8	1993: 10% piles severely deteriorated. Overall moderate condition	Significant deterioration of timber piles at tidal zone (structural capacity appears sufficient for pedestrian loading only), loss of diagonal bracing in part, joists and bearers in reasonable condition, timber decking acceptable for pedestrian loadings. Fender timbers in poor order. Grand Plaza 2 concrete structure in	Part reconstructed as Grand Plaza works, c. 2003	Timber piles, decking and sub-structure. Retaining wall (estimated c. 1900)

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
		good condition		
9	1993: 18% piles severely deteriorated. Overall moderate condition	Some timber piles have marine borer damage and loss of section in tidal zone; some new piles and repaired/replaced piles in parts (c. 2005?); joists, bearers and timber decking in good condition	Defective piles repaired/replaced or substituted with transfer beams; general beams and pile corbel repairs for re-use	Timber piles, decking and sub-structure (c. 1920 and later repairs prior to recent works)
10	1993: 12% piles severely deteriorated. Overall moderate condition	Some timber piles have marine borer damage and loss of section in tidal zone; some new piles and repaired/replaced piles in parts (c. 2005?); joists, bearers and timber decking in good condition with the recent addition of galvanised steel transfer beams and deck beams in places. Concrete decking metal formworks corroded and exposed corroding reinforcement visible in places	Defective piles repaired/replaced or substituted with transfer beams; general beams and pile corbel repairs for re-use	Timber piles, concrete and timber decking and timber sub-structure (c. 1920 and later repairs prior to recent works)
11	1993: 10% piles severely deteriorated. Overall moderate condition 1975: Mostly	Some timber piles have marine borer damage and loss of section in tidal zone; some new piles and repaired/replaced piles in parts (c.	Berth 11 mostly demolished in 1975. Defective piles repaired/replaced or substituted with transfer beams; general beams and	Timber piles, concrete and timber decking and timber sub-structure (estimated c. 1920 and later

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
	demolished.	2005?); joists, bearers and timber decking in good condition with the recent addition of galvanised steel transfer beams and deck beam corbels in places. Concrete decking metal formworks corroded and exposed corroding reinforcement visible in places	pile corbel repairs for re-use in conjunction with berth 10	repairs prior to recent works)
14	1993: 2% piles moderately deteriorated. Overall moderate condition	Some timber piles have loss of section in tidal zone. Timber beams and sub-structure aged and partly deteriorated condition. Concrete beams and deck in apparent acceptable condition (chloride ion penetration not tested). Fender timber deteriorating	Concrete deck overlay 1952-1953 when shed built	Timber piles, concrete and timber decking and timber sub-structure (repairs of original piling c. 1940-50)
15	1993: 27% piles severely deteriorated. Overall moderate condition	Significant deterioration of timber piles at tidal zone (structural capacity appears sufficient for pedestrian loading only), loss of diagonal bracing in part, joists and bearers in reasonable condition,	Roll on/roll off portion 1970s. Recent partial rebuild area estimated c. 2005	Timber decking and sub-structure, some diagonal bracing. Retaining wall (c. 1900)

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
		timber decking acceptable for pedestrian loadings. Fender timbers in poor order. Roll on/roll off concrete decking appears in reasonable order Recent concrete structure in good condition		
16		Recent reconstruction of decking and fender system. Piles not accessed for observation	Decking, fenders, pile repairs/replacement (?)	Not observed
17		Recent reconstruction of decking and fender system. Piles not accessed for observation	Decking, fenders, pile repairs/replacement (?)	Not observed
18		Boundary to berth 19 not discernable		
19		Dilapidated and unsafe; derelict structure	Not assessed due to dangerous condition	Timber piles, decking and sub-structure (c. 1900)
20		Dilapidated and unsafe; derelict structure	Not assessed due to dangerous condition	Timber piles, decking and sub-structure (c. 1900)
21		Dilapidated and unsafe; derelict structure	Not assessed due to dangerous condition	Timber piles, decking and sub-structure (c. 1900)

Table 3 Summary of observed conditions, 2012.

4.4.5 *Conclusion regarding significance*

The plan and form of Victoria Dock, including the water body and overall structure incorporating the North Arm, South Arm and Central Pier, is of primary significance. It is of architectural significance for its design, which provided great lengths of wharf space to accommodate the largely manual handling of cargoes at the time of the construction of the dock. It also represents a formal response to the manoeuvring of berthing vessels.

In terms of technological significance, the scale and form of Victoria Dock is considered remarkable. The extent of excavation required to create the dock is of engineering significance, involving over 3,000,000 cubic yards of spoil removal. These excavations followed the construction of Coode Canal, which further highlights the scale and breadth of the public works undertaken in the Port of Melbourne in the last decades of the nineteenth century.

While part of the overall dock structure, the individual berths vary in terms of their date of construction and/or reconstruction, or extent of modification and intactness. They are also generally straightforward pile and beam structures, unremarkable examples of wharf structures, and typical of wharf structures in Australia and elsewhere. Accepting this character, and their varying dates of construction and levels of intactness, the berth structures at Victoria Dock are of contributory significance.

4.5 **Above deck structures and elements**

This description commences with an introductory outline of the above deck elements, followed by an overview of the Victoria Harbour landscape and context/setting. Structures sited on the dock, from north to south are also described. Brief historical overviews and conclusions regarding relative levels of significance are also included.

The dock area comprises the North Arm, abutting and running parallel to Docklands Drive - formerly Dudley Street. The north edge is bordered by New Quay Promenade, a public waterfront pedestrian link. This is lined from east to west by the New Quay residential and commercial precinct, comprising the Conder, Boyd, Nolan, Palladio and Arkley apartment towers; Waterfront City residential and commercial precinct; and a further low-height New Quay residential development. At this point, and at the present time, the pedestrian link terminates here.

From this point North Arm is bordered by an at-grade construction site, formerly the site of the berth 19 shed, demolished in 2004-5, and the conjoined berths 20 and 21 sheds. An internal dock road with inset rail lines known as Pitt Street which ran parallel to Dudley Street bordered the north elevation of these sheds. Part of the adjoining loading apron - referred to as Telford bluestone pitchers in the Heritage Victoria statement of significance - is still in evidence along the north alignment of berths 20 and 21.

Central Pier extends from the west side of Harbour Esplanade, formerly Cowper Street and Footscray Road.⁸² Berth 9 and 14 sheds are located on Central Pier, and there is a large parking apron to the west of berth 9, a truncated section of the pier which was formerly the site of berth 10 and 11 sheds, demolished in 2005-6. Harbour Esplanade dock edge was formerly the site of berth 8 and 15 sheds, removed in c.2000. These berths framed the roadway to the Central Pier. At the present time (March 2012) the sheds are dismantled with the components stored in a depot on the South Wharf (note not all of the components survive).

South Arm abuts and runs parallel to Bourke Street and North Wharf Road. Today the dock's south edge is bordered by Victoria Harbour Promenade, a public waterfront pedestrian link. It is lined from east to west by the National Australia Bank (NAB) headquarters, Ericsson headquarters, Dock 5 retail and residential development, and the Concesso Concavo retail and residential development, presently under construction. At this point the Promenade adjoins the extant dock structure and wharf apron, open to pedestrians the full length of the South Arm.

This walkway borders a car parking area and a Lend Lease site office and display suite; berth 3 and 4 sheds, occupied by Open Channel (Berth 4) and Boatschool.com.au (Berth 3); a temporary Metropolitan Fire Brigade (MFB) depot; berth 1 and 2 sheds, occupied by Docklands Yacht Club Inc., Melbourne Outrigger Canoe Club Inc, Melbourne Dragon Boat, Wooden Boat Centre and a Places Victoria maintenance depot tenancy (Berth 1) and the Alma Doepel/Docklands Ocean Education Centre (Berth 2); and the former Port of Melbourne Shipping Control Tower (also known as the Harbor Control Tower) at the end of the South Arm.

North Wharf Road runs along the south boundary of the South Arm, and previously also delineated the boundary of the adjoining North Wharf berths of the Yarra River. This area is presently fenced off.

4.6 Landscape and context/setting

The historic Victoria Dock context and setting has undergone significant change in recent years, largely associated with the phased redevelopment of the former dock precinct, albeit one with pedestrian promenades and marinas which form interfaces with the harbour and its setting.

Central Pier, the Harbour Esplanade dock edge, the dock area south of Docklands Drive (the North Arm) and the corresponding section of the dock north of Bourke Street and North Wharf Road are being progressively redeveloped, with development moving westwards as further former dock areas are incorporated into the new suburb of Docklands.

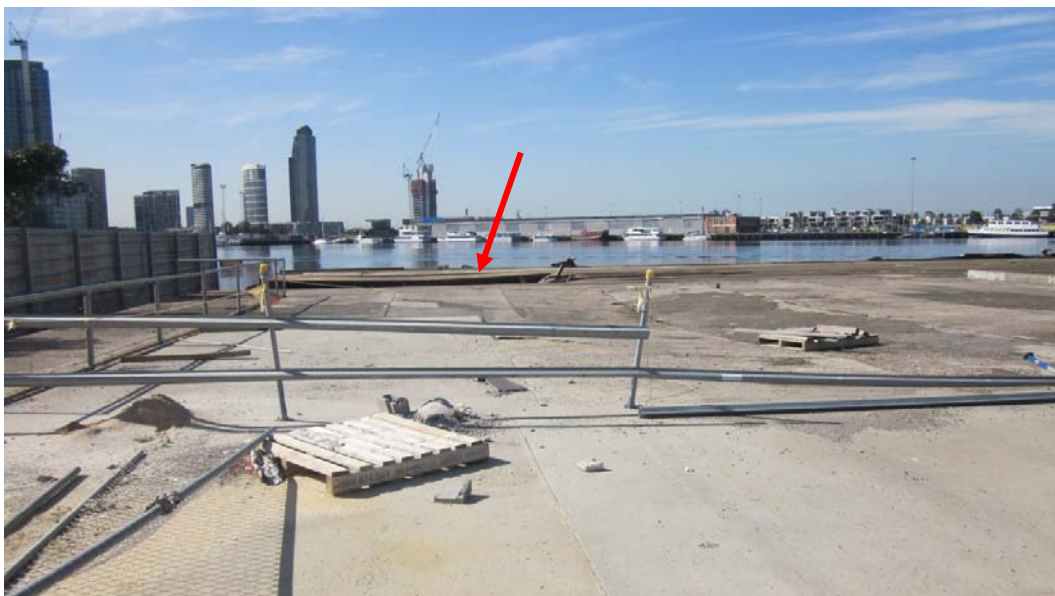


Figure 32 Site of the berth 19 shed, now cordoned off due to safety concerns. Note the collapsed wharf apron (indicated). The New Quay development is visible at left.

Three distinct phases of development are currently apparent:

- areas which are presently fenced off and dormant – this applies to the section of the North arm south of Docklands Drive in the vicinity of berths 19-21;
- areas in a transitional state – this applies to the Harbour Esplanade frontage, Central Pier and berth 9 and 14 sheds as well as the South Arm in the vicinity of Berths 1-4 and the Shipping Control Tower; and
- areas that have been redeveloped – this applies to the New Quay and Waterfront City precincts to the North arm adjoining New Quay Promenade; and residential and commercial developments bordering the South Arm, adjoining Victoria Harbour Promenade and the D’Albora Marinas.

The North Arm adjoins berths 19-21 and extends to the end of Docklands Drive under the Bolte Bridge. This last is a fenced cleared area, outside of the extent of Heritage Victoria registration. Adjoining berth 20 and 21 sheds, areas of bluestone pitcher paving are extant, formerly part of a loading area to Pitt Street. However, in alignment with the east end of berth 20 shed, these have been lifted and stockpiled, and the dilapidated wharf and site of former berth 19 shed fenced off, precluding close inspection (o the new suburb of Docklands. Figure 32). A timber paling fence encloses the adjoining New Quay apartments. East of this fence, the dock edge has been redeveloped as New Quay Promenade with pedestrian access from Harbour Esplanade. While the original alignment of the dock edge has generally been maintained, the landscape treatment here is wholly new – the promenade is formed of smooth concrete and terrazzo composite pavers and inset smooth sawn timbers, with a raised border of sawn bluestone blocks with cast metal bollards. These last are thought to be pre-existing elements reused in the new dock edge treatment (Figure 33).

To the west end – the most recent area of the North Arm to be developed - the promenade deck treatment materials are concrete and areas of granitic sand. The original dock alignment has been modified by the incursion of the Waterfront City Marina, the New Quay Marina and public moorings, as well as various gangways which lead down to these facilities from the dock itself. Towards the east (city end) of the promenade, the two-storey Livebait and Mecca restaurant buildings project south into the dock proper, framing a public plaza area which extends down to a water taxi berth below. A small café kiosk, primarily clad in coloured glazing – the Fish Bar – and the Limoncello gelateria pavilion, clad in zinc panels also project out over the water body, concealing the dock edge (Figure 35).

City of Melbourne street furniture including metal litter bins, custom-designed lamp standards and timber bench form seating is wholly new. The New Quay Promenade also incorporates the artwork *Silence* (2003) by Adrian Mauricks, installed on a plaza outside the two restaurant pavilions. To Waterfront City the Promenade widens into a piazza area to the north before narrowing again and continuing westward, terminating at the temporary fence, where the former berth 19 site adjoins.

The Cowper Street roadway and the adjoining former Footscray Road alignment, now combined, today form Harbour Esplanade, a divided roadway which interconnects Footscray Road (Docklands Highway) with Collins Street. Harbour Esplanade also supports a tramline, pedestrian and cycle pathways. These last pathways utilise part of the former rail alignment embedded into the Cowper Street roadway (Figure 34). Sections of the in-situ concrete plinth and timber buffer rail or fender to the base of berths 8 and 15 sheds are still visible, as are areas of bluestone pitchers which originally adjoined the Cowper Street roadway (Figure 34). The site of the berth sheds is rendered in coloured concrete, as ‘building footprints’ that

also frame the entry to Central Pier. The original level of the wharf apron along Harbour Esplanade has been altered with the central sections of the former berth shed sites lowered.

The wharf edge treatment adopted to these sections –smooth timber with timber uprights - contrasts with the aged timber fenders and cast iron bollards of the extant areas of the original dock edge (Figure 36). Shallow flights of timber steps, bordered with steel post and tensile cable handrails are used to interconnect the different levels of the wharf apron. To the north-east corner, adjoining the corner of the North Arm, there is a concrete loading ramp to the dock edge. Along Harbour Esplanade, City of Melbourne design street furniture including metal and timber bench seats, litter bins and custom-designed lighting have been installed.

Public art works – components of the Docklands Public Art Walk - have also been installed on the Harbour Esplanade wharf apron. These include John Kelly's *Cow up a Tree* (1999) and Cat Macleod and Michael Bellemo's *Shoal Fly By* (2003), set between the Central Pier and the South and the North Arm. Most recently, *Sealight Pavilion* (2011) has been installed opposite the intersection with La Trobe Street. A services facility, screened in a powder-coated perforated metal enclosure is sited in front of berth 9 shed, and there is a smaller facility that terminates the Central Pier roadway (Figure 39).

The Central Pier roadway and ramped access to the south promenade to berth 9 and the north promenade to berth 14 cross Harbour Esplanade and slope upwards to the original wharf apron level. The roadway is asphalt over a concrete deck, supported on timber piles. Service access to the tenancies in the berth sheds and to the car parking area beyond is via this roadway (Figure 39).

In addition, to either side of the berth sheds a ramped roadway runs off the west side of Harbour Esplanade formerly providing vehicle access to the wharf apron. The wharf apron to berth 14 shed retains its inset crane rail, timber fender and bollards to the dock edge (Figure 38). The wharf apron to berth 9 shed similarly retains timber fenders and bollards. To the South Arm, the wharf edge adjoining the Victoria Harbour Promenade – known as Dock 5 precinct - has been reconstructed at a lower level than the original.

Formerly the site of berths 5 and 6, and the roll-on roll-off wharf facility, the wharf apron has been reconfigured and is today clad in broad timber planking, with an elevated timber fender and new cast metal bollards to the water's edge. The promenade proper is a paved landscaped walkway onto which tenancies open, related to the buildings facing Bourke Street behind. Typically these are food and beverage tenancies with outdoor seating. The wharf edge is broken by a ramped access to a lower-level 'water stage' with seating. This portion of the waterfront was for a time known as the Grand Plaza.

Adjoining this stage area and within the water body are timber piles relating to the roll-on roll-off car wharf, recast as a public artwork. Further west, the D'Albora Marinas are also set off the dock edge.

To the west of this redeveloped area, the original concrete wharf apron and inset rail lines are apparent, opposite the Concesso Concavo development (Figure 40). From this point elements of the original dock landscape – berth sheds, concrete wharf apron and in-situ rail lines – are still extant (Figure 40). This has been augmented by City of Melbourne street furniture including stainless steel litter bins and lighting, encouraging pedestrian exploration of the precinct. Cast metal bollards are set along the wharf edge and are in use for boat moorings. Lightweight metal moorings, gangways and a small marina are set off the dock

edge. This last element is towards the west end, in line with berth 1 shed. The west end of the South Arm ends at a gravel car parking area, at the end of North Wharf Road which borders the south side of the berths 1-4 sheds. Previously a landscaped garden area – known for a time as the Osaka Oriental Garden – occupied the extreme end of the South Arm.⁸³ Surrounding the base of the Shipping Control Tower, the dock is paved with cement pavers and there are painted slatted timber benches and a metal handrail.

Within the water body proper are a number of floating navigational beacons, located off the end of the Central Pier (Figure 41). In addition, off the end of the South Arm there is a channel marker affixed to one of a row of five evenly-spaced timber pile clusters. While their date of construction and purpose is not known, it is thought that these were positioned to function as fenders protecting the end of the South Arm (Figure 42). There are several other pile clusters located on the opposite side of the Harbour, opposite berth 22, outside of the Heritage Victoria registered extent of Victoria Dock.

4.6.1 *Conclusion and significance*

In general, original or early fabric and elements associated with the landscape of Victoria Dock, albeit generally of a minor nature, are of contributory significance. These include extant bluestone pitch paving and areas of early concrete deck surface; old timber fenders and cast iron bollards associated with the original dock edge; crane rails; and remnant inset rail lines. Recent public artworks are of contemporary value, and are not assessed here for their heritage value. Recent buildings and structures which occupy, at least in part, the deck/wharf apron, or extend into the water body, are not of heritage value. Similarly, more recent landscaping items and elements are not of heritage value.



Figure 33 New Quay Promenade looking west from near Harbour Esplanade showing contemporary wharf finishes. Note the café structures, moorings and marinas in the water body at left.



Figure 34 From left: Harbour Esplanade, showing original wharf edge and surface to the former Cowper Street alignment; rail lines embedded in the former Cowper Street road surface.



Figure 35 New Quay plaza flanked by restaurant buildings, looking south.



Figure 36 Wharf edge, 2001, after removal of berth 8 and 15 sheds, but before the lowering of sections of the wharf apron and installation of public art.
Source: Lovell Chen.



Figure 37 From left: plant enclosure to Harbour Esplanade with berth 9 shed behind;
Central Pier roadway looking west.

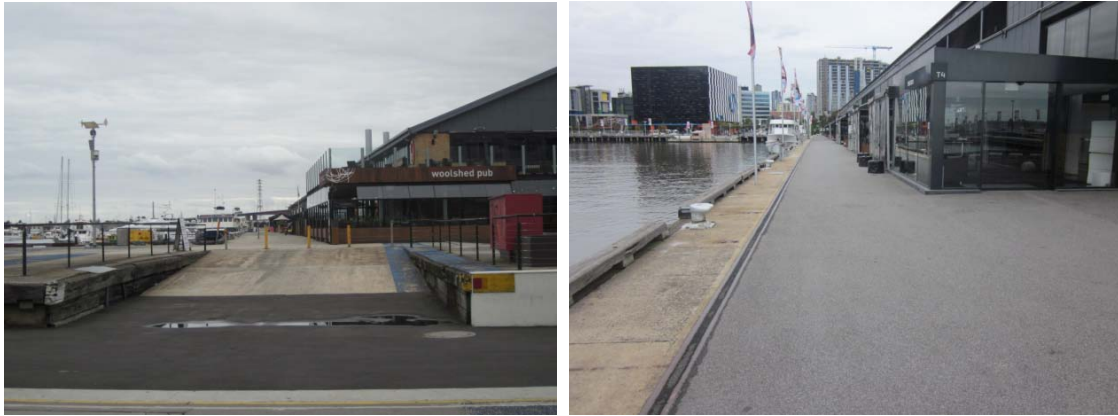


Figure 38 From left: roadway access to wharf apron to berth 9 shed; wharf apron to berth 14 shed showing remnant crane rail embedded in wharf apron.



Figure 39 From left: landscape treatment to Victoria Harbour Promenade, looking west; landscape treatment to South Arm. The piles are thought to relate to the now removed former roll-on roll-off facility.



Figure 40 From left: extent of the Victoria Harbour Promenade landscape treatment, showing the progressive overlaying of the original concrete deck and rail line; South Arm looking east showing the wharf apron and rail lines. Berth 3 and 4 sheds are in the middle distance. Note the bollards and moorings at left.



Figure 41 Floating navigational beacons, moored off the end of the Central Pier.



Figure 42 Pile clusters and channel marker off end of South Arm.

4.7 North Arm structures

4.7.1 Berth 19 - 21 Sheds (1926)

Historical outline

The sheds at berths 20 and 21, along with the demolished berth 19 shed were constructed in 1926 as a single 396.2 metre long (1300 foot) and 24.5 metre wide (80 foot) cargo shed. The shed was reputedly the longest shed structure of the port (Figure 43).⁸⁴ To the north side of the sheds, rail lines embedded in the surface of the adjoining Pitt Street ran across the adjoining apron onto the wharf and connected the berths with the railway Goods Yards. No trace of the rail lines or of Pitt Street itself – beyond limited evidence of its alignment – remains today. In 1931, two three-ton Babcock & Wilcox semi-portal cranes, powered by an electric rail which ran along the top of the fascia dockside, were installed. These cranes, supplemented by further 3 ton Stothert & Pitt cranes installed progressively from 1940, were dismantled in 1981. In 1967-68, the shed structure was divided into three discrete cargo sheds intersticed by newly-constructed two-storey amenities bays.

The amenities bay at the west end, servicing berth 21 shed, is the sole extant block (Figure 46). Berth 19 shed and its accompanying amenities bay and the amenities bay adjoining the east end of the berth 20 shed were demolished in 2004-5, and the exposed end wall of the berth 20 shed reclad in corrugated steel (Figure 47). The Telford bluestone pitcher apron which adjoined the former Pitt Street, which ran parallel to berths 16-24 is largely still extant in the vicinity of the sheds, with the exception of the pitchers east of berth 20 shed which have been lifted and stacked.

Description

At the time of inspection the wharf apron was not accessible due to safety concerns and while the crane rail to the fascia is still in evidence, the presence or otherwise of the deck level crane rail and the rail lines atop the wharf apron could not be determined – a photograph taken in 2004 is included for reference (Figure 45). Berth 20 and 21 sheds are both in an advanced dilapidated state, with berth 21 shed abandoned and heavily vandalised and berth 20 shed occupied by a tenant and in use as a salvage store.⁸⁵

As originally constructed, berth 20 and 21 sheds were a steel portal-framed, gable-roofed structure, carried on steel lattice-form columns and horizontal and diagonal cross-bracing. The shed was clad in corrugated iron, above a dado of horizontal timber members, with approximately 80% of the side elevations comprising retractable metal roller doors. The shed or sheds, as they are today, are elevated above ground level on the wharf apron, formed of in-situ concrete, visible below the wharf level viewed from the north. A timber buffer rail or fascia borders the edge of the apron from the north. To the exterior of the sheds the timber dado has in places been replaced by corrugated metal sheeting, with more of the timber dado extant to the south (apron) elevation, although this was not able to be inspected from the exterior.

The sheds have a floor of reinforced concrete, with asphalt over, and rails set flush to its surface. Sections of this flooring are in a deteriorated condition with a large hole to the west end of berth 20 shed, and evidence of subsidence (Figure 50). To the west end of berth 21 shed there is a double-height wall of varnished timber boarding, and an open tread concrete stair which interconnects the shed proper with the 1968 bay addition. These spaces, divided by partition walls comprising plasterboard over stud, were previously offices, shower and toilet facilities.

Ceilings here are of plasterboard with inset fluorescent luminaires. Windows are timber-framed fixed glazing with awning sashes and wired glass louvers to the amenities. The whole is in a dilapidated and vandalised condition. The ceiling of the shed proper is clad in corrugated asbestos sheet, carried on trusses with knee braces. A clerestory infilled with wired glass provides toplighting to the interior. The north and south elevations are divided into bays by steel lattice columns comprising twenty-five retractable metal roller shutters, with infill panels of corrugated metal over a dado variously of timber or horizontal corrugated metal. Berth 20 and 21 sheds are divided by a full-height non-original corrugated metal partition, and there are twelve roller doors to either side of berth 20 shed and thirteen roller doors to either side of berth 21 shed. There are evenly-spaced pendant light fittings to both sheds.

Conclusion

The present-shed structure comprises approximately 70% of the extent of the original single shed which serviced berths 19-21. The structure was divided by a partition wall in c.1968,

with two-level amenities bays, clad in corrugated metal over a timber dado, appended to either end. It is also apparent that the number of openings to either side has been increased and that the roller shutters are not original. An examination of a c. 1940s photograph at Figure 50 shows bays with pairs of sliding timber doors alternating with panels of the present timber and corrugated metal cladding and, to at least one bay, pairs of elongated timber framed sash windows. Given that there are twenty-five bays to either side which comprise non-original roller doors, out of a total of approximately thirty-six bays, it is apparent that the original intactness of the shed structures has diminished over time. In addition neither the west or east elevations of the shed are as originally constructed.

Significance

Berths 20 and 21 sheds are elements of contributory significance.

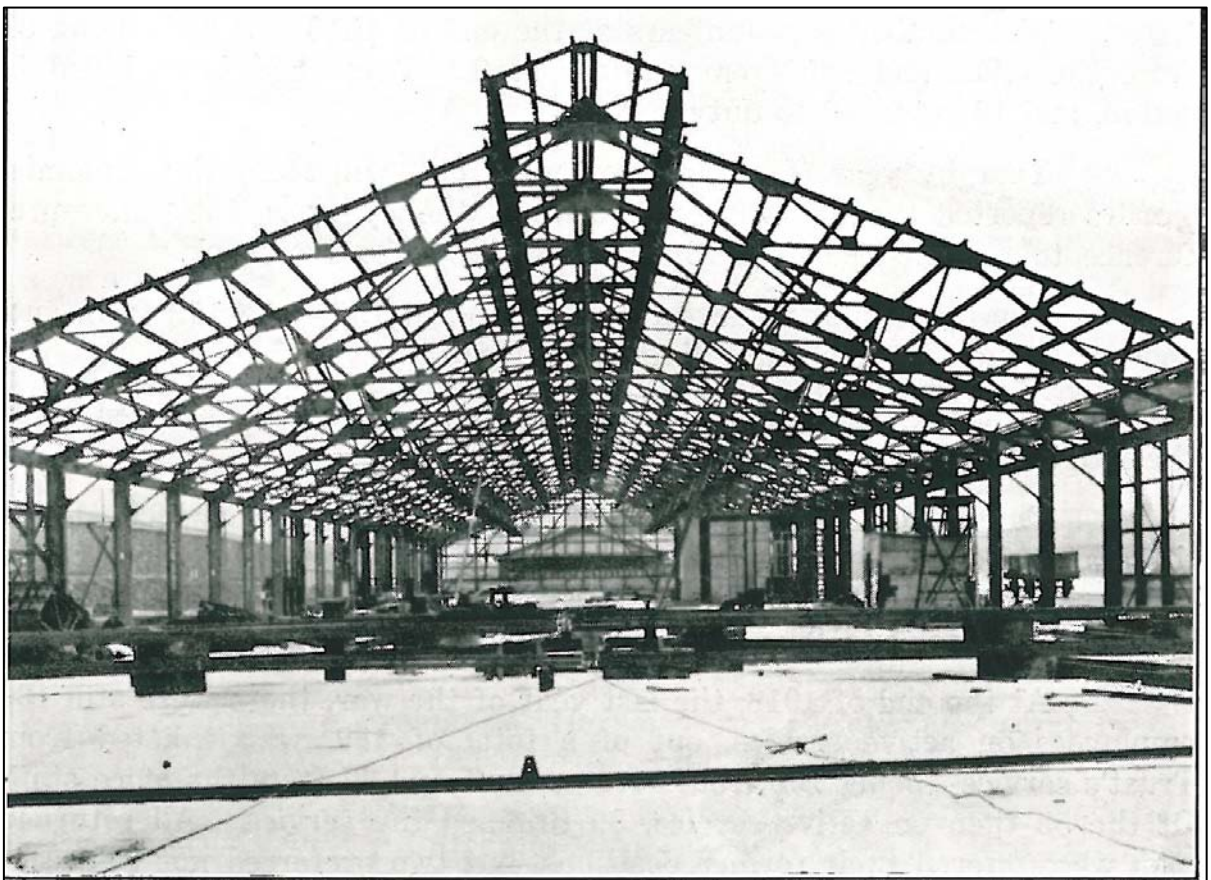


Figure 43 Shed at berths 19-21 under construction, c. 1926.

Source: Melbourne Harbor Trust Commissioners Jubilee Report 1927.



Figure 44 Berth 20 and 21 shed, showing the south elevation, from Victoria Harbour. The 1968 amenities block is visible at the left side. Note the altered pattern of openings and some of the impacts of deterioration and vandalism.



Figure 45 Berth 20 and 21 sheds, showing the rail tracks and wharf edge, looking west, 2004. The now demolished amenities bay to berth 20 shed is shown at right. Source: Lovell Chen



Figure 46 From left: Amenities bay constructed in 1968, to the west end of berth 21 shed; berth 20 shed, looking west. Note the deteriorated wharf structure and missing timber buffer rail at left.



Figure 47 From left; reclad east end of berth 20 shed, after the removal of the 1968 amenities bay; North elevation of berth 21 shed, looking east. The bluestone pitcher apron borders the former alignment of Pitt Street.



Figure 48 From left: interior of berth 21 shed, looking east and west. The two-level amenities addition is at centre. Note the rail track embedded into the shed flooring.



Figure 49 From left: south elevation, berth 21 shed showing wall framing and cladding, flanked by roller doors. Note the evidence of subsidence; interior of the berth 20 shed, looking east.

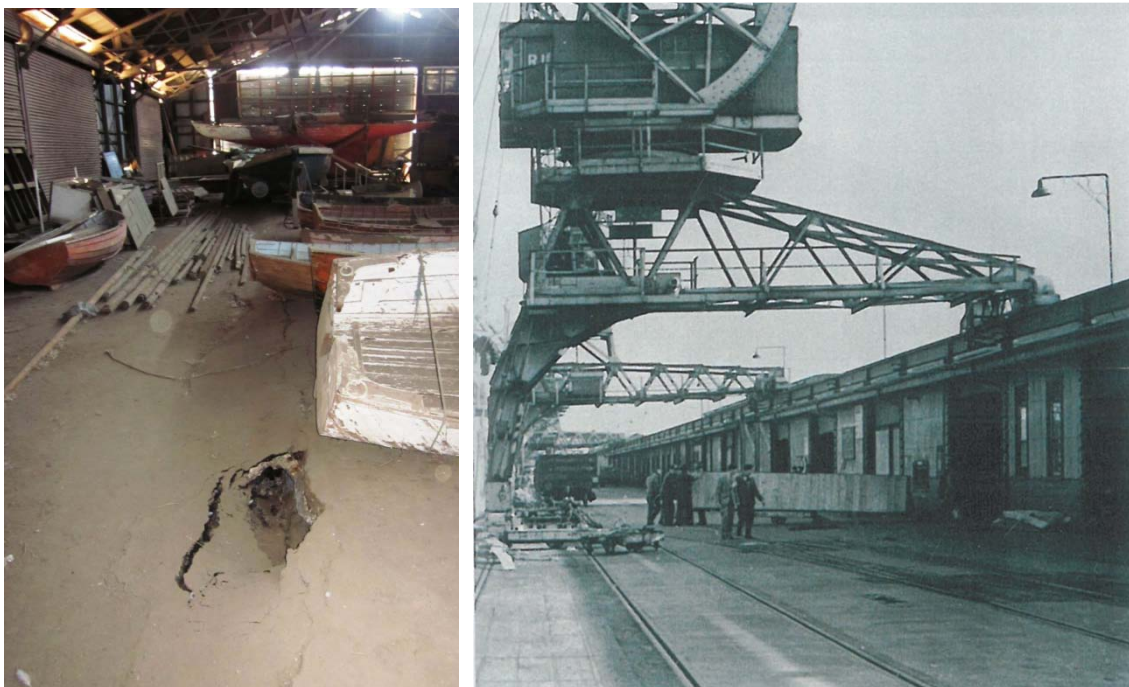


Figure 50 From left: slumped flooring to the north side of berth 20; historic view of the sheds to berths 20 and 21 showing original form of and rhythm of openings.

4.8 Harbour Esplanade structures

4.8.1 *Berths 8 and 15 Sheds (1913)*



Figure 51 Berth 8 shed, showing elevation to Harbour Esplanade, prior to removal in c.2000.

Source: Lovell Chen



Figure 52 Berth 15 shed, showing elevation to Victoria Harbour. Note the ramp – still extant today – in the distance at left, prior to removal in c.2000.

Source: Lovell Chen

Historical outline

Harbour Esplanade, formed from the dock roadway of Cowper Street and the former Footscray Road alignment, previously abutted berths 8 and 15, to either side of the Central Pier. Berths 8 and 15 sheds, originally constructed in 1913, were dismantled in 2000 and stored off site (note not all of the original materials/components survive). The wharf apron, although modified with sections lowered to a new dock level, is largely intact including the fenders to the former Cowper Street roadway – refer to Figure 34.

Description

Prior to their removal, it is understood that these two sheds were the most intact of the surviving sheds at Victoria Dock (Figure 51, Figure 52). As originally constructed, berth shed 8 was 183 metres long and 18 metres wide. It comprised an enclosed central section flanked by open-sided but roofed ends to the north and south. Berth shed 15 was of similar dimensions, and layout. The sheds were steel framed, with Fink trusses, roofs of corrugated iron, and a central clerestory. Sets of double painted timber ledged and braced sliding doors were set along all four elevations. The walls were formed of corrugated iron over a timber dado (Figure 53). When the shed ends were enclosed, a concrete dado rather than timber was constructed, but with a timber fender to the exterior. Smaller sets of timber sliding doors were installed to the previously open shed ends, thus making the original extent of the central (original) enclosed section readily discernible from the exterior. The sheds have been dismantled and stored in a fenced compound under cover at South Wharf. Elements such as the timber doors, iron columns, and walling are generally located together, awaiting reconstruction or integration with extant Victoria Harbour structures. The elements were inspected in late 2011.

Conclusion

Although dismantled and stored off site, berths 8 and 15 sheds have the potential for reconstruction and reinstatement at Victoria Dock, at least in part (this is addressed in Chapter 6, see Section 6.4.4). They are also the oldest of the sheds associated with the dock, and prior to their removal were the most intact of the surviving sheds at the dock.

Significance

Berths 8 and 15 sheds are of primary significance.



Figure 53 Interior views, berth shed 8, c. 2005.
Source: Lovell Chen

4.9 Central Pier structures

Historical outline

Central Pier was constructed in 1916-17 to increase the cargo handling capacity of the dock. Originally 497 metres long and 76 metres wide, Central Pier provided six berths of between 161 metres and 174 metres long, divided by the Central Pier roadway. In the WW2 period the pier was extensively rebuilt, due to the deterioration of the wharf timbers.⁸⁶ The two extant sheds to berths 9 and 14 were also rebuilt between 1946 and 1950.⁸⁷ In 2005, demolition of the deteriorating wharf structure to its west end, namely berths 10, 11 and 13, and the wharf structure beneath berth 13, took place. The roadway was also truncated, and now continues to the south, utilising part of the wharf apron where berth 10 and 11 sheds were previously sited, as a self and valet car parking area. Today the pier comprises berths 9 and 14, their corresponding cargo sheds and the central roadway.

4.9.1 *Berth 9 Shed (1916-17 rebuilt post-WW2)*



Figure 54 From left: north elevation, photographed in April 2004; north elevation today, viewed from the central roadway.

Source: Lovell Chen



Figure 55 North elevation from left: perforated screening and modern timber stairs providing secondary access to tenancies; north west corner showing relocated signage from berth 10 shed and retractable canopy to west end.



Figure 56 From left: west end of the berth 9 shed, photographed in 2004; and in 2012, showing adaptation and alterations including glazed walling associated with the Alumbra tenancy.
Source: Lovell Chen



Figure 57 From left: south elevation, berth 9 shed looking west, prior to the installation of the artwork panels; 2012, showing contemporary glazing and openings, infilling the original doorways. Note retained signage and artwork panels.



Figure 58 From left: Berth 9 shed, east end and part of north elevation, April 2004; and in 2012, showing the Woolshed Pub tenancy, facing to Harbour Esplanade.
Source: Lovell Chen

Historical outline

Berth 9 shed was originally constructed in 1916-17 and extensively rebuilt in the post WW2 period – between 1946 and 1950. Works apparently involved the raising the roofline by 1.3 metres, fitting new columns and the installation of pairs of 4.25 metre high doors to the north and south elevations.⁸⁸ In 2000 works were scoped to rebuild the shed to its pre-1946 form using components salvaged from other shed buildings, but these works did not eventuate. In the mid-2000s, a series of framed banners were installed to the shed exterior, commemorating key events and celebrating aspects of Docklands history. These were also associated with refurbishment works to the shed, undertaken ahead of an international boating event in 2006. These are still extant, along the south elevation of the shed. In 2007 the Atlantic Group, a catering, venue and event management company, extensively refitted the berth 9 and 14 sheds as restaurant, café and function venues. Atlantic Group offices are located in the berth 9 shed.

Description

Berth 9 shed is a steel portal-framed gable-roofed structure, and as reconstructed in the post-WW2 era, comprised twenty-five bays consisting of twelve pairs of painted ledged and braced timber sliding doors flanked by walling of cream brick to dado height and with the upper wall surface clad in painted corrugated iron. To the north (roadway elevation), the shed is set above the central roadway, and a timber buffer rail ran along the bottom of the building which sat upon timber piles and walers, with an in-situ concrete plinth to the east end. A band of fixed timber-framed highlight glazing extends along the north and south elevations, above the openings and atop the walling, lighting the interior of the shed.

At the east end, the brickwork rises to the roof line, enclosing the corners of the building and returning to the Cowper Street end wall. This section of the building comprised a bay of integrated amenities for dock workers as well as offices, set at mezzanine level with access provided from within the shed proper. The shed has a roof of crimped metal roofing (span deck); the gable ends are infilled with painted corrugated metal. To the eastern end of the north and south elevations, a painted three-dimensional metal numeral '9' is fixed to the brickwork.

The west end wall was originally of cream brick with corrugated metal almost to the full height apart from the highlight glazing which continued from the north and south elevations. The internal flooring was of reinforced concrete over timber decking.

Since 2006-7, a number of alterations have occurred through adaptation of the building as a commercially tenanted facility. While these have altered the fabric and footprint of the building, they are generally in the form of insertions and pop-outs which clearly read as new fabric or alterations to earlier fabric, and are characterised by a degree of reversibility. To the north elevation adjoining the roadway, a number of the original openings, previously infilled with paired painted timber sliding doors, have been infilled with steel-framed clear glazing and/or contemporary glazed doors. Shallow timber steps have been constructed to manage the change in levels between the roadway and the floor of the shed. A powder-coated steel perforated screen, set back from the structure and incorporating openable panels to permit egress, screens much of the lower portion of the north elevation, concealing service yards loading bays and the like (Figure 55). The west elevation has also been altered with panels of steel-framed glazing inserted into the steel-clad walling. The brick dado has been cut down and the glazing extends from the deck level to the band of fixed glazing running above.

An outdoor seating area enclosed by glazed half-height screening adjoins the west end of the building (Figure 56).

The south elevation similarly has had original door openings infilled with steel framed glazing and contemporary glazed doors to the café tenancies which open onto the wharf apron, now a public promenade (Figure 57). A projecting steel-framed glazed entry 'pod' extends out from the infilled opening to the Alumbra nightclub tenancy at the west end. A number of painted timber-framed panels celebrating aspects of Docklands history have been fixed to some of the walling between the openings to the south elevation.

The east end of berth 9 shed facing Harbour Esplanade has been opened out to both the ground and first floor levels to incorporate an extensive glazed outdoor dining area to the ground floor and a projecting balcony to the first floor level associated with the Woolshed Pub tenancy. The ground floor area is set on an elevated platform above the original dock height and is divided from the public domain by glazing and a row of timber planter boxes. The first floor glazing has been modified and adapted to provide access to the balcony. Both the ground floor outdoor dining area and the balcony return along the south elevation (Figure 58).

Internally the shed has been divided from north-to south into several discrete tenancies. From east to west these are: the Woolshed pub, the Altantic Group offices, the Va Bene pizzeria, vacant commercial premises in the process of being fitted out as a bakery at the time of inspection, and the Alumbra nightclub. Internally, the double height space, roof framing and the original concrete flooring are to varying degrees expressed within each of the tenancies (Figure 59). The flooring to the Alumbra nightclub has been modified by the insertion of an underlit glazed dance floor area.

Conclusion

While berth 9 shed has been adapted to commercial uses, the works associated with the adaptation have generally been carried out in a manner which enables them to clearly read as new fabric, and as insertions to or adaptations of original fabric. The works are also characterised by a degree of reversibility. Accepting this, the overall form of the shed remains evident, and it still reads as cargo shed.

Significance

Berth 9 shed is of contributory significance.



Figure 59 Berth 9 shed tenancies from left: Alumbra nightclub; Va Bene Pizzeria.

4.9.2 *Berth 14 Shed (1916-17 rebuilt post-WW2)*

Historical outline

Berth 14 shed was originally constructed in 1916-17 and extensively rebuilt in the post WW2 period – between 1946 and 1950. Works apparently involved the raising the roofline by 1.3 metres, fitting new columns and the installation of pairs of 4.25 metre high doors to the north and south elevations.⁸⁹ In the mid-2000s, a series of framed banners were installed to the shed exterior, commemorating key events and celebrating aspects of Docklands history. These were also associated with refurbishment works to the shed, undertaken ahead of an international boating event in 2006. These are still extant, along the north elevation of the shed. In 2007 the Atlantic Group, a catering, venue and event management company, extensively refitted berth 9 and 14 sheds as restaurant, café and function venues. Four function venues – from east to west these are Peninsula, Maia, Sumac and Sketch - have been installed within the former open cargo shed space.

Description

Berth 14 shed is a steel portal-framed gable-roofed structure, and as reconstructed in the post-WW2 era, comprised twenty-five bays consisting of twelve pairs of painted ledged and braced timber sliding doors flanked by walling of cream brick to dado height and with the upper wall surface clad in painted corrugated iron. To the south (roadway elevation), the shed is set above the central roadway, and a timber buffer rail ran along the bottom of the building which sat upon timber piles and walers, with an in-situ concrete plinth to the east end. A band of fixed timber-framed highlight glazing extends along the north and south elevations, above the openings and atop the walling, lighting the interior of the shed. The banded glazing here is of a greater width than that to Shed 9 – compare Figure 57 with Figure 60.

At the east end, the brickwork rose to the roof line, enclosing the corners of the building and returned to the Cowper Street end wall. This section of the building comprised a bay of integrated amenities for Port workers as well as offices, set at mezzanine level with access provided from within the shed proper. Berth 14 shed has a roof of crimped metal roofing (span deck). The gable ends are infilled with painted corrugated metal. To the eastern end of the north and south elevations, painted three-dimensional metal numerals '14' are fixed to the brickwork. The west end wall was originally of cream brick with corrugated metal above the brick dado almost to the full height apart from the highlight glazing which continued from the north and south elevations. The internal flooring was of reinforced concrete over timber decking. The metal crane rail to the north elevation is still in-situ, as is the corresponding metal rail inset into the north side wharf apron.

Since 2006-7, a number of alterations have occurred through adaptation of the building as a commercially tenanted facility. While these have altered the fabric and footprint of the building, they are generally in the form of insertions and pop-outs which clearly read as new fabric or alterations to earlier fabric, and are characterised by a degree of reversibility. To the south elevation adjoining the roadway, the original openings, previously infilled with paired painted timber sliding doors, have been infilled with steel-framed clear glazing and/or contemporary glazed doors. There is a cantilever verandah which runs along this elevation and portions of the undercroft have been enclosed by steel-framed glazed entrance lobbies to the function venues within. Similarly to berth 9 shed, plant, service areas and loading bays are part-concealed by powder-coated steel perforated screening. Similarly to berth 9 shed, the west elevation has also been altered with panels of steel-framed glazing inserted

into the former steel-clad walling. The brick dado has also been cut down and the glazing extends from the deck to the double-width band of fixed highlight glazing. Part of the in-situ concrete plinth and timber fender is visible at the south-west corner (Figure 60).

The north elevation has had the original door openings infilled with steel framed glazing illuminating the function venues behind. Pop out glazed entry pods to the four function venues border the public walkway along the waterfront (Figure 61). Some of the bays between the entry pods have been part enclosed by retractable plastic blinds, providing undercover smoking areas. A number of painted timber-framed panels celebrating aspects of Docklands history have been fixed to some of the walling between the modified openings to the north elevation. The crane rail is in-situ above the high-level timber-framed glazing. In contrast to the east end of berth 9 shed facing Harbour Esplanade, the brick end wall of berth 14 shed remains comparatively intact. The band of timber-framed glazing at first floor level has been infilled with painted metal louvers associated with air services to the building interior (Figure 61).

Internally the space has been divided from north-to south into four discrete function venues. Internally, the double height space, roof framing and the original concrete flooring are to varying degrees expressed within each. The largest space is the Peninsula, which can be divided by a movable wall. Within this space the original sliding timber doors to the openings in the north and south walls have been fixed to the internal face of these walls (Figure 62). There is a large commercial kitchen between the Peninsula and Maia venues, and there are mezzanine level amenities including toilets and 'green rooms' to Peninsula, Maia and Sumac (Figure 63).

Conclusion

As with berth 9 shed, shed 14 has also been adapted to commercial uses, and works associated with the adaptation have generally been carried out in a manner which enables them to clearly read as new fabric, and as insertions to or adaptations of original fabric. The works are also characterised by a degree of reversibility. Accepting this, the overall form of the shed remains evident, and it still reads as cargo shed.

Significance

Berth 14 shed is of contributory significance.



Figure 60 From left: north elevation, Berth 14 shed. Note the broad band of glazing above the infilled openings; west end showing modern glazing.



Figure 61 From left: modern glazed entry 'pod' along the north elevation, Berth 14 shed; east elevation – the glazing has been removed and infilled with venting.



Figure 62 Peninsula venue, looking north-east. The original sliding timber doors are fixed to the walls between the openings, at left.



Figure 63 From left: mezzanine level amenities, Peninsula; Sketch venue – the west end glazing is behind the curtaining.

4.10 South Arm structures

4.10.1 Lend Lease Display Suite (contemporary)



Figure 64 From left: view from the east along the wharf edge; view from the south-west from car parking area.

Description

The Lend Lease display suite is a two-level contemporary structure, with the lower level constructed of concrete blockwork with stone cladding. It is sited to the immediate west of the 'Convesso Concavo' development, presently under construction. The first floor level is steel-framed, incorporating lightweight cladding materials including opaque glazing, timber slats and clear glazing. It draws reference from the framing and bracing of nearby shed structures. A fixed sailcloth canopy provides shading to the outdoor deck which faces east, south and west. Originally constructed in c. 2000, it has been refitted to market the 'Convesso Concavo' development.

Conclusion and significance

The Lend Lease display facility is of little or no significance.

4.10.2 *Berths 3 and 4 Shed (1969)*



Figure 65 From left: berth 3 shed amenities bay which retains its original finishes; berth 4 shed amenities bay showing over-painting and alterations.



Figure 66 North elevation (at left) looking west. Note moorings at right.



Figure 67 Interior looking west showing steel portal framing.



Figure 68 From left: interior looking east. The office 'pod' is visible in the background to the left side of image; Open Channel offices, first floor.

Historical outline

In 1968 tenders were invited for the construction of two basic prefabricated steel sheds for the newly-reconstructed berths 1 and 2 (see below) berths 3 and 4. Concurrently steel-framed, brick clad two level amenities bays comprising facilities for dock workers on the ground floor, and offices on the first floor, were also under construction. Here however, the bays directly adjoined the shed, with a facility at each end, giving the enclosed prefabricated shed a more permanent appearance or presence than the structure to the berth 1 and 2 shed. Berths 3 and 4 shed and the amenities bays to the east and west ends were complete and operational by August 1969.⁹⁰

Description

Berths 3 and 4 shed is sited on the South Arm, and adjoins a two-level Lend Lease display suite, sited to its east. A Metropolitan Fire brigade facility is set between it and berths 1 and 2 shed, further west along the wharf. To the north is the wharf edge to Victoria Harbour, formed of concrete with four rail lines and shunting points embedded in its surface. There are a number of single boat moorings along the dock edge. To the south side, North Wharf Road borders the structure, and a timber construction barrier screens the adjoining former north wharf berths from view. At the east end, North Wharf Road becomes a divided roadway and traverses an at-grade gravel car parking area presently in use for construction vehicles.

Berths 3 and 4 shed is a prefabricated steel portal-framed structure, with the frame clad in corrugated metal sheeting. It has a shallow gabled roof profile, clad in corrugated metal. To both ends there are two-level brick and concrete amenities bays. To the berth 4 end this has been over-painted and modified, providing an entry in the east end to the Open Channel reception area. The first bay of the shed proper in the north elevation has also been modified and infilled with a double-height office suite, set behind a recessed glazed screen. There are additional entry doors and an outdoor seating area, all able to be secured by a retractable roller door (Figure 65). The amenities bay is of over-painted brick and pebbledash concrete.

A large painted moulded metal '4' is fixed to the east elevation at first floor level. The roof of the amenities bays has a flat profile, clad in span deck. To the berth 3 shed the amenities bay retains its unpainted brick and 'pebble dash' concrete finish. Its size and form is similar to that which adjoins berth 2 shed opposite. The shed structure has 'windows' of panels of laserlite set into the side walls and there are also laserlite skylighting inset into the roof (Figure 67). There are sliding corrugated steel panel doors to either side which are thought to be original to the date of construction. There is a fascia of 'span deck' to both the north and south elevations, set forward of the walling, and floodlights are spaced along its length.

Berth 4 shed amenities bay and the shed space proper is utilised by Open Channel; while the berth 3 shed amenities bay is occupied by boatschool.com.au, a licence training facility which utilises the office spaces only. The interior has a floor of painted concrete, and is unlined with the frame and roof trusses exposed and lined externally with metal cladding. The lightweight construction which is the office 'pod' to the north-east corner of the shed is visible within the shed space (Figure 68). The brick end wall of the amenities block, visible within the Open Channel tenancy retains its unpainted cream brick finish. An open tread concrete stair with a painted metal handrail provides access to the upper floor spaces from the shed floor. The shed is lit by suspended pendant form industrial luminaires.

The amenities block exhibits typical finishes of the late 1960s period which include vinyl flooring, lightweight plasterboard partitioning, over-painted brickwork, plasterboard ceilings with flush-mounted fluorescent luminaires and flush panel doors. Windows are a combination of metal-framed fixed glazing with regularly spaced double-hung sashes.

Conclusion

Berths 3 and 4 shed is a prefabricated shed structure, constructed in the later 1960s as part of the last phase of development at Victoria Dock, and in response to a shortage of shed accommodation at the wharves after reconstruction of the berths proper. Its planning and construction is that of a typical large span shed structure. The two-level amenities bays to

the east and west ends are indicative of the post-war period of dock development where there was a focus on improving amenities for dock workers. Berths 22 and 24 sheds (c. 1952-56) incorporated similar facilities to one end, although these are integrated brick and corrugated metal constructions. This post-war phase also saw the construction of two level amenities bays to the berth 19-21 sheds in 1968, and the renovation of Berth 9 and 14 sheds (c. 1938-54), incorporating similar facilities into the (east) Cowper Street ends.

Significance

As with berths 1 and 2 shed, with which it is contemporary, berths 3 and 4 shed is a typical utilitarian post-WWII prefabricated dock shed and amenities building. It is of little or no heritage significance.

4.10.3 Metropolitan Fire Brigade Facility (contemporary)

Description



Description

The MFB facility is a comparatively recent addition to the South Arm and appears to be temporarily housed, ahead of the construction of a permanent facility with a dedicated boat mooring for a fire brigade waterborne vehicle. This facility is set between the berths 1 and 2 and berths 3 and 4 sheds and comprises a portable site shed building set on the concrete wharf apron and enclosed by a high cyclone wire fence. The enclosure also includes two shipping containers. It adjoins a secured yard for MFB vehicles, fenced in late 2010, with gated access from the north, and which opens directly onto the wharf apron.

Conclusion and significance

The MFB facility is of little or no heritage significance.

4.10.4 Berths 1 and 2 shed (1969)

Historical outline

Berths 1 and 2, including the piling and wharf apron were reconstructed in concrete between 1961 and 1966, to facilitate container-offloading. This was rapidly superseded by the dedicated container dock at Swanson Dock in 1969, which became the busiest dock in the port.⁹¹ Subsequently, in response to concerns regarding a shortage of shed accommodation at the wharves, tenders were invited for the construction of two basic prefabricated steel sheds atop the newly-reconstructed berths. George Wimpey and Co were the successful tenderers for the two sheds, with dimensions of 155.4 metres in length (510') and 27.4 metres in width (90'). Sets of sliding doors to either side opened to a width of 9 metres (30'). The tender value was \$124,950.00. By December 1968 the construction works were well advanced. At this time a steel-framed, brick clad free-standing two level amenities block comprising facilities for dock workers on the ground floor and offices on the first floor reached lock-up stage – refer to Figure 69. The tender for these works was awarded to W J Cody & Quinn Pty Ltd. Initially this was set off the east end of the shed, but on completion, works were undertaken to infill the gap between the two structures with walling and roofing.⁹² The berths and amenities bays were complete and operational by August 1969.

Description

Berths 1 and 2 shed is sited at the west end of the South Arm, adjoining the Shipping Control Tower. To the north is the wharf edge to Victoria Harbour, formed of concrete with four rail lines and shunting points embedded in its surface. To the south side, North Wharf Road borders the structure, and a timber construction barrier screens the adjoining north wharf berths from view. The roadway terminates in an informal gravel parking area adjoining the control tower. A number of modern metal City of Melbourne benches and litter bins have been installed at intervals along the north elevation and sail-form sunshades extend out from the north elevation to the wharf edge at the western end of the shed.

Berths 1 and 2 shed is a prefabricated steel portal-framed structure, with the frame clad in crimped steel sheeting (span deck). The eastern section is clad in over-painted corrugated metal sheeting. It has a shallow gabled roof profile, clad in corrugated metal. To the east end there is a two-level brick and concrete amenities bay. To the exterior, this bay has over-painted brick piers alternating with metal-framed fixed and sash form windows with over-painted 'pebble-dash' concrete spandrel panels. To the east end wall two open tread concrete stairs with painted metal handrails provide external access to the first floor offices. In its size and overall form it is similar to the west end amenities bay to the berth 3 shed opposite. A large painted moulded metal 'Z' is fixed to both the north and south elevations at first floor level. The roof of the amenities bay is a flat profile, clad in span deck. A painted corrugated metal 'link' connects it to the main gable-roofed shed beyond. The shed has 'windows' of panels of laserlite set into the side walls and there are also laserlite skylighting inset into the roof. There are both retractable metal roller doors of varying heights to both the north and south elevations, as well as sliding corrugated steel panel doors which are thought to be original to the date of construction. There are also standard size door openings, fitted with flush panel doors, and a public toilet facility accessible from the north and the west elevations. This is thought to have been a former dock use facility, later adapted by the City of Melbourne for use by tenants and wharf visitors. These provide basic amenities including showers. There is a fascia of 'spandek' to both the north and south elevations, set forward of the walling, and floodlights are spaced along its length.

Berths 1 and 2 shed is utilised by a number of tenants who have formally divided by the space into two with a number of sub-tenants more informally dividing the western end of the structure. The east (berth 2) shed is occupied by the Alma Doepel Restoration tenancy and adjoins the Docklands Ocean Education Centre, who occupy the two-level former amenities component. The west (berth 1) shed is occupied by the Melbourne Dragon Boat, which adjoins the public toilets, the Docklands Yacht Club Inc., the Wooden Boat Centre, and a Places Victoria maintenance depot facility. These last tenancies are divided by painted timber 2.0 metre partitions.

The interior has a floor of concrete, painted to the Alma Doepel tenancy and unpainted to the other tenancies. The shed interior is unlined with the frame and roof trusses exposed and lined externally with metal cladding. The brick end wall of the amenities bay, visible within the Alma Doepel tenancy retains its unpainted cream brick finish. An open tread concrete stair with a painted metal handrail provides access to the upper floor spaces of the former amenities block from the shed floor. The shed is lit by suspended pendant form industrial luminaires.

Conclusion

Berths 1 and 2 shed is a prefabricated shed structure, constructed in the later 1960s as part of the last phase of development at Victoria Dock, and in response to a shortage of shed accommodation at the wharves after reconstruction of the berths proper. Its planning and construction is that of a typical large span shed structure. The two-level amenities bay to the eastern end is indicative of the post-war period of dock development where there was a focus on improving amenities for dock workers. Berth 22 and 24 sheds (c. 1952-56) incorporated similar facilities to one end, although these were integrated brick and corrugated metal constructions, rather than a free-standing building, as original conceived here. This post-war phase also saw the construction of two level amenities bays or annexes to the sheds to berths 16-21 in 1968/93, and the renovation of the berth 9 and 14 sheds (c. 1938-54), incorporating similar facilities into the (east) Cowper Street ends.

Significance

Berths 1 and 2 shed is a typical utilitarian post-WWII prefabricated dock shed and amenities building. It is of little or no heritage significance.



Figure 69 Former amenities bay, to the east end of berths 1 and 2 shed, looking west.



Figure 70 From left: brick amenities bay and 'link' connecting it to shed – at right; north elevation showing extent of berth 2 component of the shed (painted) occupied by Docklands Ocean Education Centre and the Alma Doepel restoration tenancy.



Figure 71 From left: west end of north elevation. The single doorways provide access to the public toilets; west end showing termination point of North Wharf Road at right. The Shipping Control Tower is partly visible at left.



Figure 72 From left: south elevation looking east along the North Wharf Road alignment; original sliding metal doors looking from the North Wharf Road side into the berth 2 Alma Doepel tenancy



Figure 73 From left: interior of the berth 2 shed showing Alma Doepel tenancy. The end wall of the amenities bay is at left; typical low-height partitioning to berth 1 shed tenancies.

4.10.5 *Shipping Control Tower (1966)*



Figure 74 The Shipping Control Tower, 1966.
Source: National Archives of Australia.



Figure 75 Inside the Operations Room, 1968.
Source: National Archives of Australia.

Historical outline

The Shipping Control Tower, which is believed to have been known originally as the Harbor Control Tower, is located at the far west end of the south arm of Victoria Dock, with a vehicular approach from North Wharf Road. Pedestrian access is along the dock edge in front of berths 1-4. The present tower was designed by C J Smith, and it replaced an octagonal two-level timber tower constructed in 1938.

It came into operation in April 1966.⁹⁴ Unusually it comprised two levels – services and amenities were located on the lower of the two levels, and there was an Operations Room, fully glazed to all four sides, with an external walkway which encircled the cabin on the upper level. Similarly to an air traffic control tower, the glazing to the cabin was angled to minimise glare. The facility also contained radar equipment, a VHF radio facility to communicate directly with ships, pilots and tugs, and a two-way radio facility to communicate with all Port Authority vehicles and floating plant and emergency services. It operated 24 hours a day.⁹⁵ While the control tower managed shipping movements in Victoria Dock, it also controlled shipping outside the dock, including on the Yarra River to the south, and the port area to the west of present day Bolte Bridge. Its construction came about as part of the shift downstream that occurred with increasing containerisation in the later post-WWII period.

The tower has been superseded by the Victoria Channel Authority control tower, sited further west of the Bolte Bridge. This new facility opened in 2000, and it is not known exactly when the subject building ceased operation. The structure has been vacant for some time and has been subject to the impacts of vandalism and bird infestation.

Description

The control tower is a reinforced concrete structure, with a two-level amenities and Operations Room facility supported by a concrete pylon which passes through the two levels and is capped by a communications mast and 'crows nest'. To the north face of the pylon facing the water, there was a cast metal Port of Melbourne insignia which has since been removed. A concrete stair with landings onto which the lift opens is set behind the pylon and enclosed to the south by a narrow-profile concrete pylon which supports the upper structure and also affords some weather protection. The tower has an applied textured or 'roughcast' cement render finish applied to the pylon and cabin structure. This is in fair condition, with areas of render loss. The base of the tower rises directly from an asphalt apron and there are mechanical services enclosures and a lift shaft access hatch. The base of the tower is presently screened by a security enclosure. The concrete stair has painted metal handrails and the lift is fitted with painted metal doors.

To the top landing, there is a vestibule with flush panel doors to either side of the lift landing which open into two partitioned spaces. These were an office and staff amenities. The spaces have been stripped out, with little evidence of their former use remaining. The windows have been boarded up to the interior, and there is evidence of vandalism (Figure 78). From this level, a ladder-form stair leads to the former Operations Room, which is similarly stripped out apart from some of the acoustic ceiling tiles. The original framing to the sloping windows is extant, and some of the tinted glazing is in-situ. Again, boarding to the interior face of the windows conceals the glazing from inside the cabin. A door in the north elevation opens onto the walkway which encircles the cabin. It has a painted metal handrail. Within the cabin a further access ladder leads to the mast and 'crows nest' (Figure 79). These were not inspected due to safety concerns.

The tower is set at the end of the South Arm, bordering an asphalted car parking area and a seating area clad in cement pavers. A metal handrail to the dock edge encloses this area.

Conclusion

The Shipping Control Tower is a prominent element at the west end of Victoria Dock, which terminates the South Arm of the harbour. While it is largely externally intact, little evidence remains of its interior fittings. Its historical association is also with the broader port area, and not exclusively with Victoria Dock.

Significance

The Shipping Control Tower is of contributory significance.



Figure 76 Control tower, 2006, with berths 1 and 2 adjoining at left, and Bolte Bridge at right.
Source: Lovell Chen



Figure 77 Control tower, from left: view from North Wharf Road showing security enclosure to base; external stair and intermediate lift landing.



Figure 78 From left; entry to the amenities and office level from landing; stair to Operations Room.



Figure 79 From left: the external walkway and angled windows; looking from the Operations Room to the walkway with stair to the mast atop the cabin.



VICTORIA HARBOUR DOCKLANDS

CONSERVATION MANAGEMENT PLAN

VICTORIA HARBOUR

DOCKLANDS

Conservation Management Plan

Prepared for

Places Victoria &
City of Melbourne

June 2012

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1.0 INTRODUCTION

1.1 Background and brief

This conservation management plan (CMP) has been prepared by Lovell Chen Architects & Heritage Consultants with MacLeod Consulting Pty Ltd for Places Victoria and the City of Melbourne. The report addresses the heritage-listed components of Victoria Harbour, being the water body (Victoria Dock), dock edge, berths, perimeter wharf apron, Central Pier, and various sheds including those (such as Sheds 8 and 15) which have been removed from the dock environs and stored off site. The Shipping Control Tower and sheds on the South Arm of Victoria Harbour, while outside the extent of heritage registration, are also addressed.

Victoria Harbour is located in the suburb of Melbourne Docklands (generally referred to in this report as 'Docklands').

Victoria Dock was constructed as an artificial basin by the (then) Melbourne Harbor Trust between 1889 and 1892. It ceased operating as a dock in the 1980s, and the area surrounding it has subsequently been subject to significant redevelopment and renewal for predominantly residential and commercial purposes.

1.2 Melbourne Docklands¹

Docklands comprises approximately 200 hectares of land and water, with the historic Victoria Dock at its centre. The suburb incorporates Etihad Stadium, and various residential and commercial precincts including New Quay, Waterfront City, Central City Studios, Yarra's Edge, Digital Harbour, Village Docklands, Stadium Precinct, Batman's Hill and Central Pier as well as Victoria Harbour. By early 2010, Docklands had 28 completed residential developments with a total of 3,820 apartments, mostly housed in contemporary tower buildings. This had grown from seven buildings in 2002, with 868 apartments. Moreover, as of March 2011, 1,400 new apartments were under construction, and more are due for completion in 2012.²

The area also incorporates community and public spaces, including landscaped spaces and parks, public artworks, and several historic buildings and structures. Southern Cross Station is located to the east of the area, as is Melbourne's CBD. Docklands additionally accommodates the national headquarters for a number of major businesses and government organisations including the National Australia Bank, ANZ, Myer, AXA, Bendigo Bank, Medibank Private and the Bureau of Meteorology.

There are also a number of sites and precincts which historically have been inter-related with the fabric of Victoria Harbour as well as the activities which took place here. The larger dock area takes in the lower reaches of the Yarra River below Queen's bridge, including the partly-reconstructed turning basin and Queen's Wharf, the north and south Yarra wharves including the Duke & Orr Dry Dock. On land, these elements include the dock sheds to both sides of the river including berth no.5 shed to the North Wharf, the Mission to Seafarers, as well as the high brick retaining wall opposite in Flinders Street Extension. This last was a gathering place for waterside workers in the 'boom' years of the docks in the early years of the twentieth century. Railway infrastructure including the No. 2 Goods Shed are also sites and places inextricably linked to the larger Docks area.

1.3 Master planning & development

The approach to development at Docklands, including Victoria Harbour, has been driven by Development Agreements, or binding contracts between developers and Places Victoria. The Agreements specify how the land will be developed, and outlines the design intent and development approach for the contracted land. A component of each Development Agreement is a Master plan. For the precincts/development areas which abut Victoria Dock, the master planning process can potentially impact on the heritage fabric and heritage values. Consideration of the heritage issues is therefore a component of the master planning.

It is also noted that these Master plans may be renegotiated and updated subject to agreement between the State Government, Places Victoria and the developer. Such Master plans may give rise to impacts on the heritage fabric and heritage values of Victoria Harbour.

Preparation of this CMP has not involved a review of previous and current Master plans for Docklands, of which there have been several. In terms of the current situation, the following is a brief overview.

Lend Lease issued a revised Master plan for Victoria Harbour (southern side of Victoria Dock) in 2010. The revised plan addresses the wharf precinct, public realm and open space, activation and community facilities, pedestrian and bicycle access, etc.

For Harbour Esplanade, on the east side of dock, new works commenced in 2010, as part of a revamp and revitalisation of this public area. The works included landscaping, plantings, a new configuration of the tramlines in the centre of the roadway, a new paved tram reserve, and new tram platform stops.

On the north side of the dock are the precincts of New Quay, New Quay West and Waterfront City. MAB lodged a new master plan for planning approval for New Quay Central in 2011, which provided for the development of new residential buildings, an international hotel and a major public park.

1.4 Heritage status

Victoria Harbour is included in the *Victorian Heritage Register*, as H1720. Further detail on this, including the extent of heritage registration, and other relevant heritage listings, is included in Chapter 2.

1.5 Location

The location of Victoria Harbour is illustrated in the map below.

1.6 Methodology

The report broadly follows the format of the Australia ICOMOS (International Council on Monuments and Sites) guidelines for the preparation of conservation plans, and the principles set out in the *Australia ICOMOS Burra Charter*, 1999, adopted by Australia ICOMOS to assist in the conservation of heritage places (see Appendix A). The methodology also reflects that outlined in the Heritage Council of Victoria's publication, *Conservation Management Plans: Managing Heritage Places, A Guide* (2010).³



Figure 1 Map showing the location of Victoria Harbour. North is at top.
Source: Street-directory.com.au.

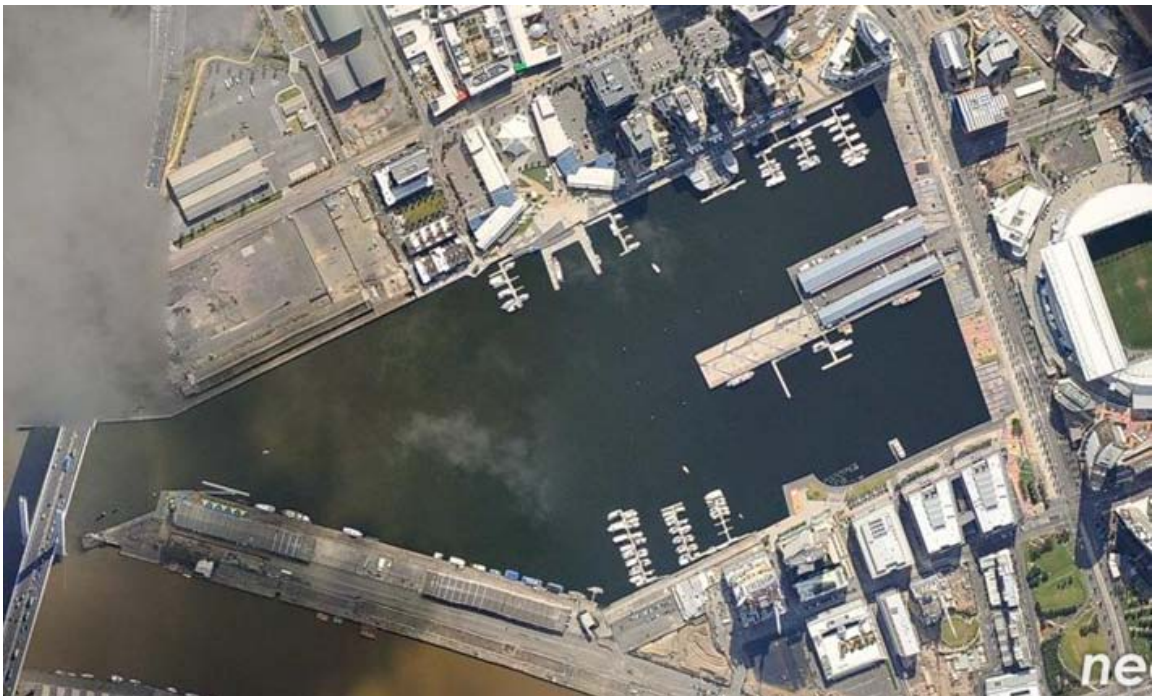


Figure 2 Recent aerial image of Victoria Harbour. North is at top.
Source: Nearmap.

1.7 Report content

The report includes the following.

1.7.1 *Management and development*

Chapter 2 provides an overview of the current roles and responsibilities of the various local and state government agencies associated with Victoria Harbour, chiefly through its Melbourne Docklands context. The chapter also summarises the heritage status, controls and statutory obligations relating to the place.

1.7.2 *Background and contextual history*

Chapter 3 includes a brief history of the Melbourne Docklands area, and Victoria Harbour, examining the latter's construction and use in the context of Melbourne's nineteenth century port and maritime trade needs, and its later evolution. The chapter concludes with an overview of the more recent history of redevelopment and urban renewal of the area including and surrounding Victoria Dock; together with a short chronological summary of change and development through to the 2000s. The history is not intended to be a comprehensive and detailed historical overview; rather the research and analysis is intended to assist in understanding how the historical values of the place are reflected or represented in the existing fabric.

Appendix C also contains a summary history of the development of the broader area of the Port of Melbourne, with graphics illustrating the history of development. This is reproduced from the *Port of Melbourne Heritage Strategy* (Lovell Chen with ERM Australia, May 2009), and is included in this report with the permission of the Port of Melbourne Corporation.

1.7.3 *Physical survey and analysis*

Chapter 4 includes a detailed overview of the physical nature and fabric of Victoria Harbour, including the dock, berths, dock edge, and below dock structure, Central Pier, and the various sheds which remain or have been removed from the site (and stored elsewhere). The chapter can also be read as a brief 'audit' of the historic harbour structure, with particular focus on the berths/wharves as that part of the structure which have been subject to the greatest change and modification. The audit is not a detailed structural survey or condition assessment of the harbour structure, but is more in the way of identifying/clarifying where original fabric remains, and where it has been modified. The survey and analysis also helps establish the relative significance of the individual components of the place.

Note: this chapter in particular reproduces images of Victoria Dock, and individual elements and structures within it, from the Lovell Chen archives. The images have been taken over the last 10 or more years, and are included so as to illustrate these elements prior to more recent works and development.

1.7.4 *Heritage significance*

Chapter 5 addresses heritage significance, including a brief comparative analysis to determine the relative importance of the harbour in the context of related sites. Recommended revisions to the existing Victorian Heritage Register statement of significance are also included. The chapter additionally includes a ranking of the relative significance of Victoria Dock and its individual elements.

1.7.5 Conservation policy and strategy

Chapter 6 contains the conservation policy, which provides guidelines for the future conservation, care, management, use, adaptation and development of Victoria Harbour, as well as specific conservation actions for individual components. The policy also provides guidance on avoiding or limiting impacts on Victoria Harbour, deriving from the experience of previous and current development proposals at and near the harbour. Recommendations are also included which address replacement of components and fabric of the harbour structure.

1.8 Sources

A number of reports and documents have been consulted in the preparation of the report. For a full list of sources, please refer to the bibliography.

- *Docklands Reflections: Living History, an Interpretation Strategy*, (draft May 2002), prepared for the Docklands Authority by Allom Lovell & Associates, with Baron Planning & Projects, and Dr Judith Buckrich.
- Philip Bentley and David Dunstan, *The Hub of Victoria: A History of Melbourne Docklands*, prepared for the Docklands Authority 1996.
- Melbourne Harbour Trust Commissioners, *Jubilee Report 1877-1937*, 1927
- *Docklands Heritage Study*, Ward, Milner, Vines & Greenaway, 1991.
- *Melbourne Docklands Heritage Review*, McDougall & Vines, 1996.
- *Port of Melbourne Heritage Strategy*, Lovell Chen with ERM Australia, May 2009 (a summary development history of the Port of Melbourne, as included in the *Heritage Strategy*, is reproduced at Appendix B).

The structural assessment of the dock structure has been undertaken by MacLeod Consulting and has reviewed and built upon the following reports, provided by Places Victoria:

- *Conditions Survey, Victoria Dock, Berths 8 to 15*, Docklands Authority, Melbourne, Australia, October 1993 (this report contains drawings by Connell Wagner (Vic) Pty Ltd, who are judged the probable authors of this report)
- *Preliminary Report on Central Pier, Existing Wharf and Pile Condition Wharves 9 and 14*, Melbourne Docklands, Robert Bird and Partners, 17 March 2000
- *Durability Plan, Grand Plaza, Victoria Harbour Development*, Arup-Connell Wagner, revision 4, 3 September 2002
- *Durability Plan, NAB Promenade/Grand Plaza Stages 2 & 4, Victoria Harbour Development*, Arup-Connell Wagner, revision 1, 29 April 2003
- *Wharf Assessment, Draft Report, Waterfront City, November 2003* (this report covers Berths 17, 18 and 19 and was prepared by GHD who had been engaged by Meinhardt Pty Ltd)
- *Cursory Structural Assessment of Wharf 20/21, Docklands*, Hyder Consulting Pty Ltd, 16 June 2010.

1.9 Historic images and documents

This report reproduces a number of historic images of Victoria Harbour and the Port of Melbourne, including historic aerial and oblique images; photographs reproduced from the Melbourne Harbour Trust *Jubilee Report 1877-1937*; historic maps and plans; and extracts from historic street directories (such as Melways). Given the quantity of historic graphic material available, some of this material is included in Appendices D, E and F, and some is reproduced in the body of the report. Appendix G contains copies of select original and early drawings of the dock.

2.0 MANAGEMENT

2.1 Introduction

This chapter includes an overview of the current roles and responsibilities of the various local and state government agencies associated with Victoria Harbour, chiefly through its Melbourne Docklands context. The chapter also summarises the heritage status, controls and statutory obligations relating to the place.

2.2 Management responsibilities

2.2.1 Management history

Victoria Dock and its environs were historically the responsibility of the Port of Melbourne, with the Victorian Railways Department responsible for the adjoining railway yards and infrastructure. This changed in the early 1990s, following the *Docklands Authority Act 1991*, and the establishment of the Docklands Authority (Chapter 3 provides further detail on the history of management and use of the area). The latter was charged with responsibility for facilitating the private sector development of Docklands, and for establishing the necessary infrastructure to support development. In 1999, the Docklands Authority was also made responsible for the municipal management of Docklands. VicUrban (now Places Victoria) became the development authority when the Docklands Authority merged with the (then) Urban and Regional Land Corporation in 2003.

The Port of Melbourne remains responsible for the remainder of the operating port area (see Figure 4).

2.2.2 Current management arrangements

In July 2007, municipal management of Docklands was transferred from VicUrban to the City of Melbourne, albeit the former continued its role as the agency responsible for development decisions and planning of Docklands. The City of Melbourne became formally responsible for delivering municipal services to the Docklands area. In 2011, VicUrban was replaced by Places Victoria. The 'shared management' of Docklands is guided by a protocol agreement, which also provides for the Docklands Coordination Committee. The latter has representatives of both the City of Melbourne and Places Victoria, and is the decision-making body in defined developed areas. Parks Victoria also has a role in the management of the waterways.

Victoria Harbour is included in the 'coordination area' of Docklands.⁴ The 'coordination area' includes areas which remain reserved for public purposes. In addition to Victoria Harbour, other elements of the 'coordination area' include:

- waterways
- promenades
- waterfront spaces
- parks
- high profile or high traffic areas

Place management decisions about the 'coordination area' are made by the Docklands Coordination Committee. The plan at Figure 3 illustrates the current management responsibilities, and the elements included in the 'coordination area'.



Figure 3 Plan showing current management responsibilities (as of May 2011).
Source: City of Melbourne

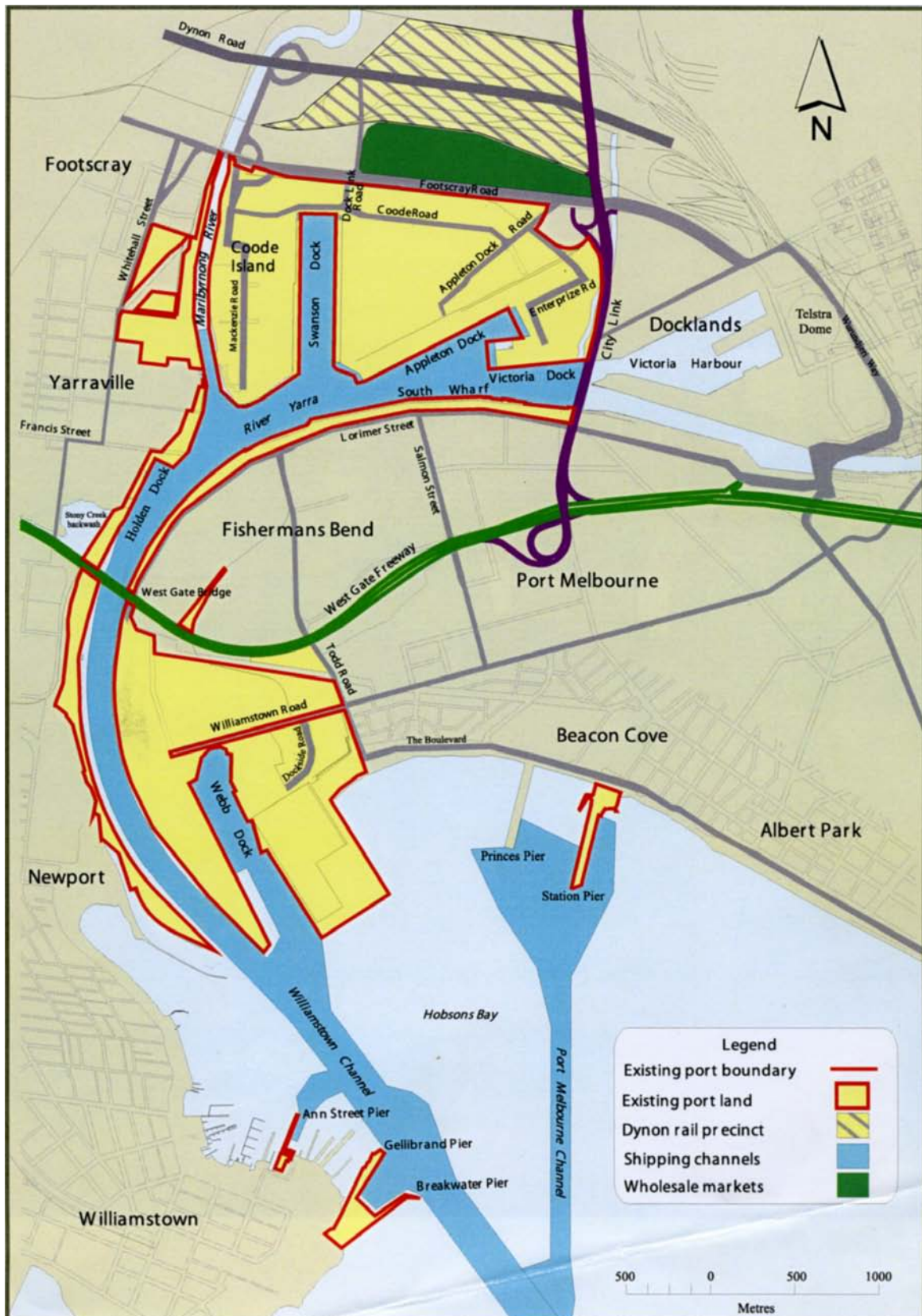


Figure 4 Map of Port of Melbourne, showing current port area in relation to Victoria Harbour (at top right).

Source: Courtesy Port of Melbourne Corporation.

2.3 Heritage controls

2.3.1 *Victorian Heritage Register*

Victoria Harbour is included in the *Victorian Heritage Register*, maintained by the Victorian Heritage Council, as H1720. A copy of the full citation is included at Appendix B. The extent of registration is illustrated at Figure 5 below, and is described in the VHR citation as follows. However, it should be noted that of the buildings and structures listed below not all are in-situ or located as broadly indicated on the accompanying map. Buildings and structures which are not at the time of writing (April 2012) located as indicated include the Berth 8, 15 and 19 Sheds. The Berth 8 and 15 Sheds have been removed and are stored off-site and the Berth 19 Shed has been demolished.

All of the buildings and structures marked B1 to B7 on Diagram 605066 held by the Executive Director comprising:-

- the linear perimeter wharves and central pier with wharf bollards; wharf fittings and railway tracks (B1)
- shed 8 (B2)
- shed 9 (B3)
- shed 14 (B4)
- shed 15 (B5)
- shed 19 together with the adjacent bluestone pitcher paving (B6)
- shed 20-21 together with the adjacent bluestone pitcher paving (B7)
- All of the land marked L1 on Diagram 605066 held by the Executive Director being all of the land beneath the waters of Victoria Dock and its wharves.

The extent of the registered place therefore incorporates the body of water contained within the dock, perimeter wharf area and wharf sheds, bluestone pitched paving, bollards, fittings and rail tracks. While the extent of registration of the perimeter wharf area is unclear, it is understood to include the width of individual sheds where they exist or have existed previously, and otherwise back to the concrete sea wall constructed beneath the wharves.

The Shipping Control Tower is not delineated as a structure on the plan in the extent of registration, and nor is it referred to in the VHR citation. Its location appears to place it immediately outside the registered area, as are the sheds (berths 1 and 2 shed, and berths 3 and 4 shed) on the South Arm. While outside the registered area, these latter elements are still addressed in this report.

The statement of significance included in the VHR citation is reproduced in full in Chapter 5.

2.3.2 *Victorian Heritage Inventory*

At the time of writing (April 2012), no sites within the study area are identified or included in the Victorian Heritage Inventory (inventory of historical archaeological sites). However, several archaeological sites (or sites of archaeological potential) are listed to the south of the dock; these include two sites associated with the former Metropolitan Gasworks, the Australian Wharf, and the site of the Berry Bond & Free Stores.

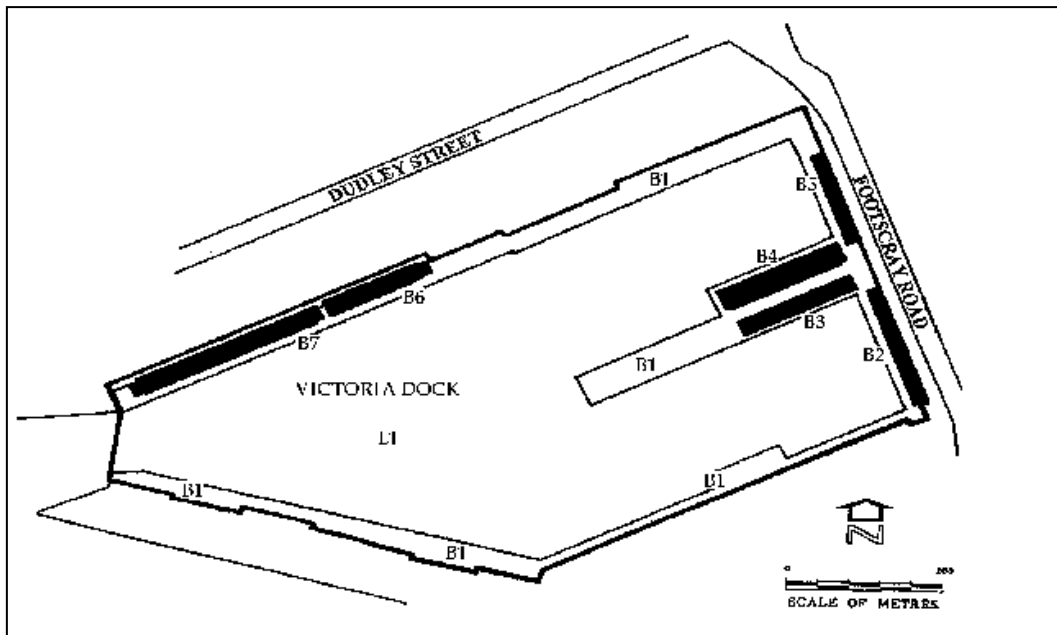


Figure 5 VHR extent of registration. Note that Berth No. 8, 15 and 19 Sheds, annotated as B2, B5 and B6 respectively are not extant.
Source: Victorian Heritage Register.

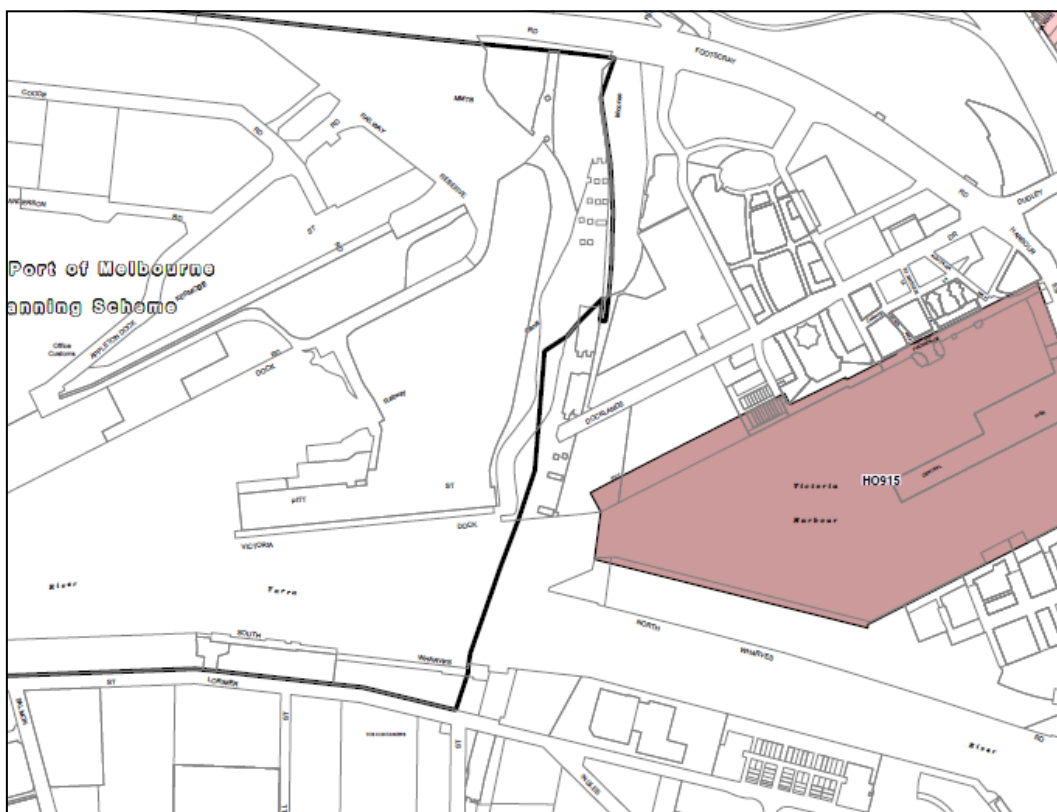


Figure 6 Detail from the Melbourne Planning Scheme map showing the extent of the site-specific heritage overlay HO915.
Source: Melbourne Planning Scheme.

2.3.3 *Melbourne Planning Scheme*

Victoria Harbour is identified as HO915 in the City of Melbourne Schedule to the Heritage Overlay (Figure 6). Note that the mapping excludes the southeast corner of the harbour – the adjoining planning scheme map does not illustrate this section of the harbour. This is considered to be a mapping error rather than a determination that this section of the harbour is not of heritage significance.

2.3.4 *National Trust of Australia (Victoria)*

Victoria Dock is classified by the National Trust of Australia (Victoria) as a place of national significance (File No. B6247). There are no statutory requirements as a consequence of this classification.

2.4 **Heritage approvals & statutory obligations**

The following is an overview of the requirements and protocols that apply to Victoria Harbour under the *Victorian Heritage Act* 1995, and in line with the Victorian Heritage Register inclusion of Victoria Harbour (H1722).

2.4.1 *Where permits are required*

A permit is typically required from Heritage Victoria for any physical intervention, excavation or action to Victoria Harbour that may result in a change to the character, appearance or physical nature of the place. For Victoria Harbour this could include the following:

- Introducing new permanent elements such as pathways, roadways, gates, fencing, seating, signage, play equipment, buildings, shelters, statues, sculptures, art works, telecommunications structures, etc;
- Demolition or relocation of existing buildings, structures and elements including those which are not identified as being of significance;
- Altering or extending the existing buildings, linear wharves and structure of the dock; also pathways and roadways;
- Modifying existing elements such as re-surfacing the linear wharves, pathways, roadways, etc which involves a change in materials;
- Introducing plantings in new locations;
- Construction of, and excavation for, sub-wharf elements; and
- Temporary structures proposed to be in place for greater than four weeks.

Considerations

Under the provisions of the *Heritage Act*, the Executive Director, in determining a permit to undertake works to a registered place, must consider the extent to which the proposal, if approved, would affect the cultural heritage significance of the registered place. In cases where the proposal would have a major adverse affect on the heritage significance of the place, the Executive Director of Heritage Victoria must also, under Section 73(1) (b) of the *Heritage Act*, consider the extent to which the application, if refused, would affect the 'reasonable or economic use' of the registered place, or cause undue financial hardship to the owner in relation to the place.

Heritage Victoria generally acknowledges that many heritage registered places can absorb change without an adverse impact on their heritage significance.

2.4.2 *Permit exemptions and minor works*

The VHR citation for Victoria Harbour (see Appendix B) does not presently include a suite of works which are permit exempt (meaning no permit is required from

Heritage Victoria to undertake these works). Permit exemptions are declared under Section 66 (3) of the *Heritage Act* on the basis that the works proposed will not have an impact on the stated significance of the heritage place.

Exempt works typically cover all normal maintenance and upkeep issues faced by owners of heritage places. A VHR permit is also not normally required when the works involve replacing new for old material on the basis of 'like with like'. For instance, replacing hard surfaces (such as the wharf aprons) with the same materials; and replacing the components of seating, lighting, signage etc with the same materials.

Where there is uncertainty or doubt as to whether works constitute minor repairs or maintenance, which would normally be permit exempt, the advice of a qualified heritage practitioner should be sought. Approval for minor works can also often be obtained from Heritage Victoria via correspondence.

2.4.3 *Heritage Victoria permit process and requirements*

For most permit applications, documents to be lodged/submitted to Heritage Victoria include a completed permit application form signed by the applicant and owner, application fee, three copies of any plans,⁵ and reports or other documentation associated with the application such as:

- Photographs which help to illustrate the existing conditions and reason for the alterations or works
- Existing conditions/survey drawings
- Plans and other drawings, such as elevations or sections (where relevant) which provide detail on the proposed works
- Photomontages if available and of assisting in determining an application
- Heritage Impacts Statement report (prepared by a qualified heritage practitioner, see below)

These documents should also be lodged electronically with Heritage Victoria.

After permit applications are lodged, permits are normally processed within 60 days unless an extension is granted by the Heritage Council. Minor matters can be dealt with in less than 30 days, while more major proposals, or those which the Executive Director of Heritage Victoria believes may have a detrimental effect on the place, require advertising for 14 days to enable interested parties to make submissions. Typically, the advertisements are placed in the public notices section of *The Age* on Wednesdays; a sign (or signs) advertising the application at the site is also usually required. The application documentation is additionally uploaded onto the Heritage Victoria website during the advertising period, for anyone with an interest in the proposal to download and review, and make a submission. Submissions and representations are accepted from interested parties up to 14 days from the date of advertising.

If the Executive Director can determine the matter on the information supplied, a permit is likely to be issued. If the application is contentious and submissions have been received from other parties, the applicant and the other parties may be invited to discuss aspects of the application before a determination is made (this is known as an 'interested parties' meeting). The process of discussion is kept as informal as possible. The permit 'clock' (timing) may also be stopped (put on hold) for an interested parties meeting. After the meeting, Heritage Victoria may also make a request in writing for the issues raised at the meeting (and by the submitters) to be addressed/responded to by the proponent.

2.4.4 *Heritage impacts*⁶

A Heritage Impact Statement (HIS), commissioned by the applicant/proponent of the works, prepared by a heritage practitioner, and lodged with the permit application, assists Heritage Victoria in making an assessment and reaching a decision.

In the case of relatively minor works a brief assessment of the heritage impacts on the registered place should be sufficient. For more major proposals, a more detailed and comprehensive HIS report may be needed, together with (in some instances) other reports which support particular aspects of the proposal, such as planning, engineering, arboricultural assessments or economic feasibility reports.

2.4.5 *Project planning and timing*

Where statutory approvals are required for heritage reasons, provision needs to be made in the initial project planning stages for the time involved in the approvals process.

Prior to lodging the permit application, it is recommended that the advice of a heritage practitioner be sought. This step can assist in determining an appropriate path to lodgement, including advice on consulting all relevant sources and preparing all necessary documentation. The heritage practitioner can also advise on, and participate in, pre-application discussions with Heritage Victoria, which are typically encouraged in the lead up to lodging a permit for works of any substantial nature. Depending on what is proposed, such a meeting could be held on site or in the offices of Heritage Victoria.

The following table provides indicative time provisions for particular approvals processes. Variables affecting the timing of the process include the length of time required pre-application, the complexity of the application itself, and any involvement by third parties. Provision may also need to be made for the fulfilment of permit conditions, once a permit is issued. Such conditions may include a requirement for recording and/or interpretation of the heritage place, or the provision of greater detail in relation to landscaping or new structures. Note that no allowance is made below for any appeals processes in the event these are required.

Type of application	Pre-application phase	Statutory time frame for processing application	Post-application phase
Heritage Victoria request for minor works approval (exempt works)	Allow 2-3 weeks for advice and preparation of documentation.	No statutory period. Allow 3-4 weeks from lodgement.	Generally none.
Heritage Victoria – Victorian Heritage Register permit application (minor permit application)	Allow 3-4 weeks pre-application for advice and preparation of supporting documentation.	Maximum of 60 days plus 1 week for advertising if required. Can be less for minor applications.	Additional time post-approval may be required to satisfy recording, investigation or further detail conditions.
Heritage Victoria – Victorian Heritage	Allow 6-8 weeks pre-application for advice	Minimum 60 days plus 1 week for	Additional time post-approval likely to be

Type of application	Pre-application phase	Statutory time frame for processing application	Post-application phase
Register permit application (major/complex permit application)	and preparation of supporting documentation.	advertising. Potential up to 120 days in the case of very complex or contentious applications, with periods of 'stopping the clock' to provide additional information.	required to satisfy recording, investigation or further detail conditions.

What happens when the permit is obtained?

Once the permit is obtained, i.e. issued by the Executive Director, Heritage Victoria, the first step is to review the conditions attached to the permit, which can include multiple conditions, and where feasible initiate action to meet the conditions. Conditions are also often tied to timeframes which may prove difficult to meet. In many instances, minor aspects of the conditions can be modified through correspondence with Heritage Victoria (such as having a timeframe for completion of work extended from two to three years). In other instances, where the conditions are considered unacceptable, the proponent has up to 60 days (after issue of the permit) to lodge an appeal to the Heritage Council (see below).

2.4.6 Appeals

In the event the permit application is refused, the applicant can appeal against the refusal and the appeal request must be lodged within 60 days of the refusal of the permit. The appeal is made to the Heritage Council. Note there are no appeal rights (third party or otherwise) against a decision by the Executive Director to grant a permit.

The Heritage Council must determine an appeal within 60 days. Other parties (submitters) to the permit application including the National Trust do not have the power to trigger a hearing but could request to be heard in the event a hearing was conducted.

The Heritage Council has the power to:

- Grant the permit with or without conditions; or
- Confirm the decision of the Executive Director of Heritage Victoria; or
- Vary the conditions on the permit.

Once an appeal has been lodged but before it has been determined by the Heritage Council, the Minister for Planning has the power to call in the appeal and determine it himself. Alternatively, subject to certain requirements, he also has the power to refer the appeal to the Victorian Civil and Administrative Tribunal for determination. However, the latter situations are unusual and rarely occur.

The argument put before the Heritage Council for a hearing must focus on the impacts of the proposal on the heritage significance of the place and the extent to which the refusal would affect the 'reasonable or economic' use of the place, or cause undue hardship to the owner.

3.0 HISTORY

3.1 Introduction

This chapter includes a brief history of the Melbourne Docklands area, and Victoria Harbour, examining the latter's construction and use in the context of Melbourne's nineteenth century port and maritime trade needs, and its later evolution. The chapter concludes with an overview of the more recent history of redevelopment and urban renewal of the area in and around Victoria Dock; plus a short chronological summary of change and development through to the 2000s.

A summary development history of the Port of Melbourne, as included in the *Port of Melbourne Heritage Strategy* (Lovell Chen with ERM Australia, May 2009) is also reproduced at Appendix C. Appendices D, E and F contain, respectively, historic images, historic maps and plans, and aerial images. Appendix G contains original or early drawings of the dock. Chapter 4 additionally contains historical information relating to Victoria Dock and its individual components, including construction and materials.

3.2 Pre-contact history 1

Melbourne Docklands is located in an area known as the Lower Yarra Delta, through which the Yarra River historically found a path to Port Phillip Bay across low-lying land south and west of the current city.

The area around Port Phillip has been populated for up to 40,000 years, in effect 1,600 generations of Aboriginal people. However, the present landscape of Melbourne was only formed in the last 5,000 years, including Port Phillip Bay. The Yarra and Maribyrnong rivers formed a much larger river some 18,000 years ago, which ran along the eastern side of the depression that later became Port Phillip Bay. This huge river flowed past what is now the Mornington Peninsula and out through the Heads.

In geological terms, the Lower Yarra Delta is a low lying area of Quaternary sedimentation which spreads seawards from Princes Bridge. It covers much of South Melbourne and takes in the former West Melbourne Swamp (now largely occupied by Melbourne Docklands), Fishermen's Bend and the Port Melbourne area. The low-lying areas of the delta, including the former West Melbourne Swamp, were inundated in wet seasons, with an abundance of water plants, fish and birdlife, which sustained the Aboriginal groups living in the area, including the local Wurundjeri-Willam people. On higher ground, including Batman's Hill, eucalypts, she-oaks and wattles predominated.

3.3 Early European occupation

In 1803, the *Cumberland*, under the command of Lt Charles Robbins, entered Port Phillip Bay. This venture brought about the discovery, by Europeans, of the Yarra River. A party from the boat rowed up the river, following its course to the branch of what would later be known as the Saltwater River (now the Maribyrnong River).

There was little further European interest in Port Phillip Bay, and even less in the Yarra River, until 1835 when John Batman and John Pascoe Fawkner founded their illegal settlement. In 1835, Batman also took up residence on the hill on the western edge of the new settlement, where he erected a house and outbuildings (with materials brought over from Tasmania). John Pascoe Fawkner had also temporarily occupied the hill.² Batman's Hill is shown on Robert Hoddle's survey map of 28 March 1839.³ Originally a small rise approximately 60 feet high, and known also as the 'She-oak Hill', the site provided some relief in a generally

flat landscape on the north side of the Yarra River, and in the area of the current Docklands. Batman's buildings were situated on the south side of the hill, almost on alignment with the current extension of Flinders Street, on the west side of Spencer Street. Batman also cultivated a parcel of land (approximately 20 acres) reaching down to the river, which was known as Batman's Paddock and where he reputedly planted numerous fruit trees before his health deteriorated in the late 1830s.⁴ The Government took possession of Batman's Paddock in 1841, and between 1842 and 1846, Batman's former residence was used as the first Government offices in Melbourne.

As noted above, the area of today's Docklands was associated with the West Melbourne Swamp by Melbourne's early European settlers, who largely ignored the area in the early decades of settlement. There were, however, periodic suggestions that the area be drained and reclaimed, in order to make it more productive and to extend the area of settlement further west. Industry and activity also began to increase in this period along the Yarra and Maribyrnong rivers, including noxious trades such as tanners, curers, wool washers, soap and candle manufacturers, abattoirs and boiling down works.⁵

3.4 Early Melbourne shipping and port activity⁶

The Yarra River, in the early days of European settlement, was difficult to navigate, only eight feet deep in places, with obstructions preventing anything but small boats travelling upriver to the fledgling town. Larger ships anchored in Hobson's Bay, with their freight transferred to lighters and then brought up the river. Wharves, including private wharves, were built along the river's northern edge; Cole's Wharf, Queen's Wharf and the P&O Company Wharf were among them. Goods brought upriver were placed on these wharves or at Flinders Street. A government dock was also erected, located on the river to the immediate south of Batman's Hill. Ships were repaired on the south side of the river. The first pier was built at Sandridge (later Port Melbourne) in the early 1840s, and a road was constructed through to the town. This was followed, in the mid-1850s, by the first railway line in Australia, again connecting Sandridge to the (by then) booming settlement of Melbourne.

The early 1850s was an extraordinarily busy period in Melbourne's development given the recent discovery of gold in Victoria and the onset of the gold rushes. The Chamber of Commerce was formed in this period, and immediately began campaigning for a Harbour Trust to take responsibility for development of the wharves and the management of traffic on the river.

The first Melbourne Gas Works was also established in the area of today's Docklands in 1855-56 (demolished in the 1970s, but still visible in the aerial images from the 1960s and 1970s as reproduced below, see Figure 13, Figure 15 & Figure 16). The site comprised a retort house, purifying house, and tall brick chimney, which remained a highly visible structure in the Docklands context for decades. The gas works also required a wet dock to be constructed on the Yarra River, of over 250 feet long, which allowed for the unloading of coal from ships for direct transferral to the retort house.⁷

In the 1860s, there were 36 berths on the river wharves, and 43 berths at the piers at Williamstown and Sandridge. Passenger steamers used the busy Australian Wharf on the Yarra River, as did coal and timber ships until the 1880s.⁸ The wharves were both publicly and privately owned, but lacked rail connections; they were also subject to the sometimes violent flooding of the river, which caused damage including undermining the piles and impacting on the wharf structures.⁹

By the time the Melbourne Harbour Trust was eventually formed in 1877, comprising mercantile and municipal interests, the river ports were increasingly intensively used. A graving dock had been built at Williamstown, and the dredging and widening of the Yarra River had become a constant labour.¹⁰ It has been noted that by 1872, over one million cubic yards of silt had been removed from the river, but despite this only small vessels could navigate the Yarra, and berth at the river wharves.¹¹ Cargo on the wharves also remained subject to pilfering.

The Trust went on to extend the river wharves further west, taking up extensive river frontage.¹² The Trust was also initially met with hostility by both the Colonial government as well as by neighbouring Williamstown who saw efforts to deepen and alter the course of the Yarra River to improve shipping a threat to its own facilities.¹³

Sir John Coode, a renowned English maritime engineer, was brought out in February 1878 to advise the Trust on harbour and ports development, and was paid the very considerable sum of £5,000. The then inadequate port facilities of Melbourne, and the narrow and winding Yarra River, were a hindrance to larger ships and hampering economic development. Coode prepared an exhaustive report on the Yarra River and Hobson's Bay, and made recommendations on improving navigation and dock accommodation. He proposed widening and dredging of the Yarra River to facilitate traffic flow, the removal of the Yarra Falls, and the cutting of a canal which would effectively shorten and change the course of the river near its intersection with the Maribyrnong River.¹⁴ Ideas for the improvement of shipping and navigation at Melbourne, up until that time, had included digging a channel direct from Port Melbourne to the city wharves. But this approach was not supported by Coode on the grounds that the channel would require constant upkeep in the form of dredging and widening.¹⁵

By mid-1879 the Trust was ready to begin cutting across Fisherman's Bend, to take out the huge loop in the Yarra River, and to provide a more direct river route between the city wharves and the entrance to Hobson's Bay. This 'manipulation' of the river came from a long international tradition of changing and altering the course of rivers and natural waterways, for economic and other benefits. Moreover, Coode was trained in a profession with a long history of shortening and straightening rivers, and building canals.¹⁶

It has also been noted that Coode's proposal for the river was more in the way of a trained and controlled 'canalised river', than a true canal, using training walls to harness the natural scouring power of the river and alleviate the need for constant dredging.¹⁷

Coode (1816-1892), is regarded as one of the most distinguished harbour engineers of the nineteenth century, with an involvement in many significant international engineering projects. Aside from his involvement in the Port of Melbourne, Coode was also retained by the Victorian Government to advise on other harbours and ports, including Portland, Geelong, Warrnambool, Port Fairy and Lakes Entrance. In South Australia Coode reported on navigation of the Murray River mouth; and after returning to Australia in 1885 he examined harbours and river mouths from Fremantle through to the Gulf of Carpentaria, and later advised on rivers and river entrances in New South Wales and Queensland.¹⁸

Digging for what became known as the Coode Canal began in 1880. The soil taken out was recycled and used to reclaim low-lying land adjacent to the river banks. Coode Canal was officially opened on 11 September 1886.

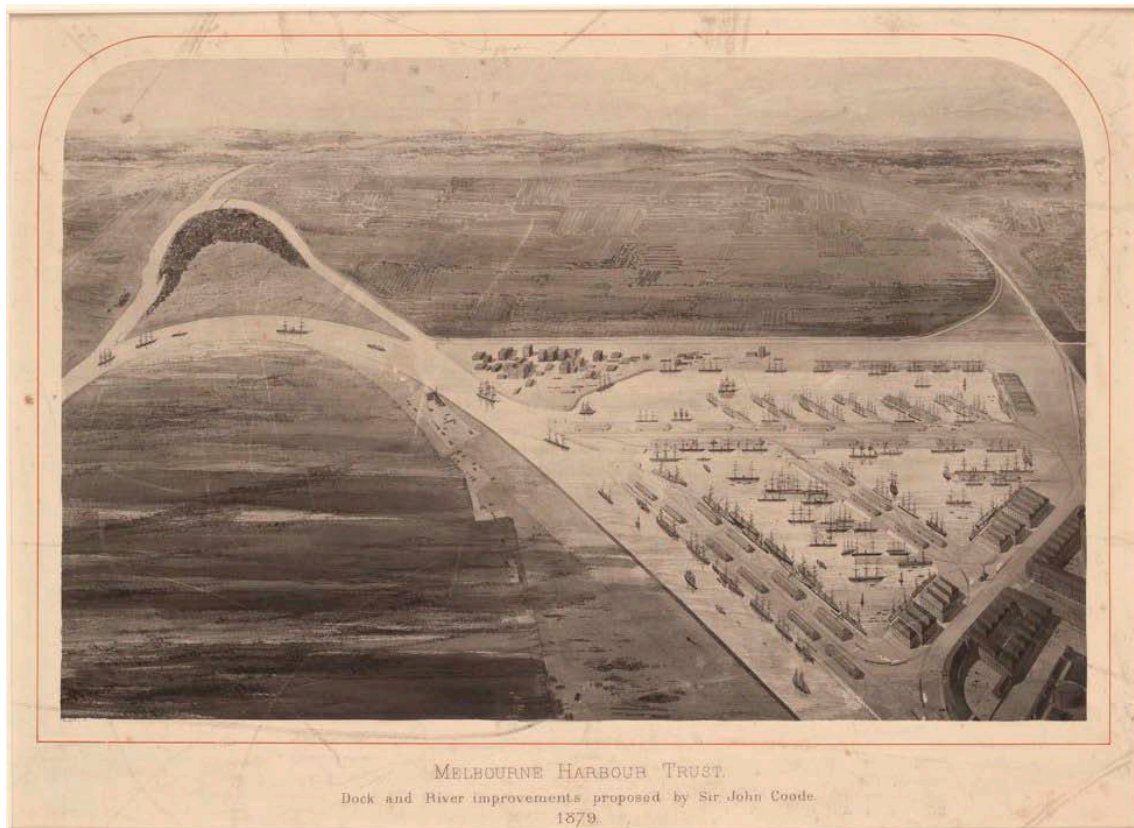


Figure 7 Coode's 1879 scheme for the West Melbourne Dock, in his report to the Melbourne Harbour Trust.

Source: State Library of Victoria

Coode had also proposed that the wasteland located to the south-west of the developing railway yards (see below), be excavated for a major dock facility. Construction of the West Melbourne Dock, or Victoria Dock, also began in this period, with the major works occurring between 1889 and 1892 (see below).

3.5 Railways development and expansion

From the early 1850s, the area around Batman's Hill (and today's Docklands) was also developed for railway purposes, including as a terminus; it would in fact evolve into the administrative centre of the State rail system. In 1859 the Batman's Hill Railway Station (later Spencer Street Railway Station, and more recently Southern Cross Station) was opened.¹⁹ Other early development included offices for the fledgling Victorian Railways Department, and goods sheds in the later 1850s.²⁰ This development coincided with Victoria's booming economic conditions and exploding population.

In 1862 a new central passenger terminal was proposed for Spencer Street Station, to house both passenger and goods traffic.²¹ Batman's Hill was seen as an obstruction to the development of the railways, and some of the hill area was required for the immediate expansion of station accommodation. The hill passed from City of Melbourne control to the Railways Department in December 1862,²² and part of the hill was levelled by mid-1865.²³ Swamp reclamation works, on the lower lying areas to the west, were also undertaken.

By the late 1860s, the station buildings at Spencer Street had grown to include the passenger station, with arrival and departure platforms; offices; carriage shed; engine shed; and several goods sheds. In the 1870s and 1880s new goods sheds were constructed,

including the iron framed No1 Goods Shed of 1872, measuring approximately 35 metres in width and 263 metres long (with an additional 200 metres of external platforms). In 1889-90, the (surviving) No 2 Goods Shed was also built. The huge scale and grand style of the building dramatically reflected the booming economic conditions in Victoria in this period, as well as the volume of traffic in products and goods. The massive Victorian Railways Administration Building was also constructed on Spencer Street in this period, being completed in 1893.

Around this time (in 1890), the Retaining Wall to Flinders Street was constructed in association with the works being implemented by the Melbourne Harbour Trust. A main road was needed to connect the city to the river wharves hence the extension of Flinders Street and the need for a wall to 'retain' what was left of Batman's Hill, being the remnant southern slope.

3.6 Victoria Dock

3.6.1 *Planning the dock*

Sir John Coode's original design and concept (Figure 7) was not in fact implemented. He originally proposed construction of three small docks with wharfs, supported by concrete and masonry pilings. However, local Melbourne Harbor Trust engineer, Joseph Brady, who was largely responsible for the development of the Port of Melbourne in the later nineteenth century, recommended modifications, including opting for one large dock and the use of durable Australian hardwood timbers, for pilings.²⁴ Suggested timbers, on which Brady reputedly experimented,²⁵ included jarrah, red gum, turpentine, Sydney and Victorian iron barks, yellow box, stringy bark, messmate, spotted gum and blue gum, and totara (from New Zealand).²⁶

The Harbour Trust supported Brady, who had greater knowledge of Australian timbers and maritime conditions. The timber docks (and pilings) subsequently proved to be extremely resilient, although some sections were eventually replaced with concrete.

Brady (1828-1908) was born in Ireland, and came out to Sydney in 1850. In 1851 he worked on Melbourne's new Yan Yean water scheme, before returning to Sydney to work for the Sydney Railway Company. By 1858 he was back in Victoria, as engineer to the Sandhurst (Bendigo) waterworks; he was also later responsible for the survey and design of the Coliban River water supply system. By the time of his appointment in 1877 as the engineer to the new Melbourne Harbor Trust, Brady had left his mark on many important civil engineering works in Victoria and Queensland, including railway and water supply projects, and works to harbours and rivers.²⁷ It has been noted that:

..Brady's changes [to Coode's scheme] saved much expenditure at a time when finance for the new port was difficult, reduced the time of construction by several years at a time when harbour accommodation was inadequate and, what proved of greatest value, made the port structures more readily adaptable to changing shipping patterns...The changes that had these marked effects were the building of Victoria Dock as one large dock instead of as three small ones and the substitution of durable Australian hardwood for masonry construction.²⁸

The Harbour Trust Committee adopted the plans and specifications as modified by Brady at its meeting in March 1889.²⁹

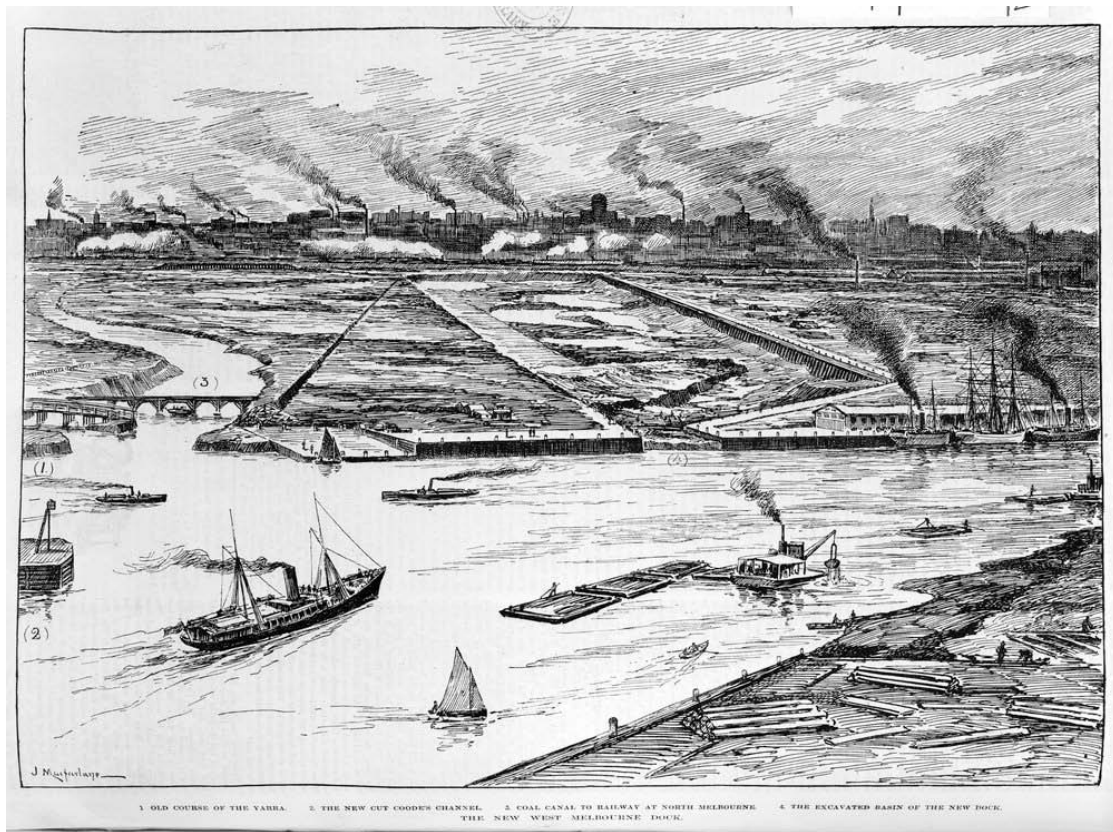


Figure 8 Engraving of the West Melbourne Dock under construction, 1892, by David Syme & Co.

Source: State Library of Victoria.

3.6.2 Constructing the dock

Excavation was the first major task in the construction of Victoria Dock. A T Robb and Co were awarded the contract for £117,000, and by mid-1889 74,000 cubic yards had been excavated by 150 men employed at the site.³⁰

Two years later over 2,000,000 cubic yards of soil had reputedly been removed, which was used to raise and complete the reclamation works in the low-lying land adjoining the dock.³¹

This was also consistent with other Harbour Trust port and river improvement works in Melbourne, whereby the excavated soil and other material was reused. In the Docklands area, recycled soil was also used to raise the site of the proposed new road to Footscray. The Harbour Trust encountered some controversy when it emerged in the press that a contract for £30,000 for the works had been awarded without it first going to tender.³² The contract for the supply of timber was worth £200,000, which was brought in from Western Australia and New South Wales. At the dock's completion a total of 3,114,808 cubic yards had been excavated from the site.³³

An engraving of 1892 printed in the *Illustrated Australian News* shows the scale of development (Figure 8). The excavation of the dock basin is well underway, with the line of the dock edge and entranceway as constructed also visible. The notes under the image explain the works: '1. Old course of the Yarra, 2. The new cut Coode's Channel, 3. Coal canal to railway at North Melbourne, 4. The excavated basin of the new dock'.³⁴

3.6.3 *West Melbourne Dock opens*

On 22 March 1892, the Governor of Victoria, the Earl of Hopetoun, formally opened the West Melbourne Dock, as it was then known, by allowing the Yarra River water to flow into the new basin. The process of filling the dock took about six days and by the end of it 96 acres had been covered with water. The first ship to enter and berth was the Lund Line's SS *Lubuck*, on 20 February 1893. It was also at this time that the dock changed its name from West Melbourne Dock to Victoria Dock.³⁵

The depressed economic conditions of the early 1890s meant that some sheds and linear wharves associated with the dock were not completed for some time after, with the final section of wharf on the north-west side not connected until 1903. Central Pier was also constructed later, in 1916/17.

As originally constructed, the dock was originally between 8.5 and 9.5 metres deep, and bordered on its four sides by the linear wharfage. The wharves initially provided 21 berths, with associated travelling cranes. The dock entrance was at the western end, where the narrow mouth or entrance was 160 feet (approximately 48.76 metres) wide.³⁶ The south-west arm of the dock angled to the north, narrowing the entrance at the west end.

When completed, newspaper reports declared Victoria Dock to be the second largest single dock in the world, after Cavendish Dock, Barrow-in-Furness, Cumbria, England³⁷. It was regarded as an engineering triumph and testament to Melbourne's stature as an international city. It was also the first artificial basin constructed in Victoria, and challenged the British tradition of small dock design. The simple linear wharfage at Victoria Dock was additionally revolutionary, pre-empting similar British designs by at least two decades.³⁸ Through its scale, Victoria Dock could accommodate the (then) largest ships of the day, reinforcing Melbourne's economic importance. The location of such a modern port on the edge of the metropolis, and adjacent to the rail network, enabled the large vessels to be handled closer to Melbourne, with goods more efficiently delivered to city merchants and regional agents. This combination of factors effectively turned Melbourne into a significant port.

The construction of Victoria Dock had other impacts, including negative impacts on other ports and wharves in Melbourne. Williamstown declined in importance, and the long piers at Sandridge (Port Melbourne) adopted a passenger/liner focus. The use of lighters, to convey goods to and from the old river wharves declined. Around this time – i.e. in the decades to either side of 1900 – there was also a gradual change from sail to steam-powered ships, and a consequent huge increase in the amount of cargo carried. This in turn led to an increase in the numbers of 'wharfies' working on the docks, albeit the economic depression of the 1890s affected these workers terribly.³⁹

By today's standards, the creation of Victoria Dock would be regarded as a major piece of environmental meddling, massively impacting on and altering a natural wetlands area and riverine ecosystem. A vast new area of productive land was however created out of the works, whereby the former wetlands were reclaimed and provided new land in West Melbourne for industrial use.⁴⁰

3.6.4 *The dock in operation*⁴¹

By 1908, Victoria Dock was handling ninety per cent of Victoria's imports, and within a few years the bulk of Australia's goods were being handled there and in the associated railway yards. Expansion was soon required, with the widening of wharves on the northern edge and along Cowper Street in 1914, and the construction of Central Pier in 1916-17.⁴² Six

cargo sheds, portal cranes and other goods handling facilities were built along the edges of the new pier over the next three decades. The first two sheds were contracted for construction in 1916, while the construction of the remaining sheds was delayed due to the 'very high cost of iron and steel'.⁴³

With rapidly increasing tonnage figures in the interwar period, further works and development were undertaken to Victoria Dock and its environs, at a time when the Melbourne Harbour Trust oversaw the general expansion of the Port of Melbourne. The composition of the Trust also changed as a result, with municipal representatives giving way to commercial, agricultural and trade interests, as well as shipping owners. This reflected the important economic contribution that the Port made to the wealth of the state. The landmark Port of Melbourne Authority Building, completed in 1931, was also a physical manifestation of this prominence.⁴⁴

Facilities and operations introduced or expanded in and around Victoria Dock during this period, when the dock was Melbourne's principal overseas cargo terminal, included cool stores, bond stores, transport companies, stevedores and shipping agencies. The Missions to Seamen, founded in 1905 by the Anglican Church to provide amenities and religious services, moved into a new building on the Flinders Street Extension in 1917. The entrance to the dock was widened in the mid-1920s.⁴⁵ These works altered the angle of the entrance, and increased the narrowest part of the mouth from 160 feet to 180 feet (approximately 54.8 metres).⁴⁶



Figure 9 Aerial view of Victoria Dock in 1927 following the widening of the entrance, with the 1916 Central Pier in operation.

Source: Public Records Office Victoria.



Figure 10 1927 image of the Cowper Street gateway entrance to Victoria Dock.

Source: Melbourne Harbour Trust *Jubilee Report 1877-1937*

In 1925, Victoria Dock also famously hosted the United States Naval Fleet which was on a two-week visit to Australia and New Zealand. This is still understood to be the largest single contingent of foreign naval vessels ever received in Australia, and included 57 vessels carrying some 25,000 officers and crew, albeit the fleet divided into two contingents that headed to Melbourne and Sydney respectively. Melbourne, which was the temporary seat of Federal Parliament, received the larger contingent of 43 vessels, including the flagship *USS Seattle*, three battleships, four light cruisers, 29 destroyers and six support ships.⁴⁷

An image from the Melbourne Harbour Trust *Jubilee Report 1877-1937*, reproduced at Figure 9 and Figure 10 shows the entrance to Victoria Dock in 1927, which was near the corner of Cowper and Piggot streets (south-west of the dock). The entrance is marked by what appears to have been a large rendered masonry structure, with a prominent pedimented parapet and two wide vehicle (truck) openings. The image citation in the *Jubilee Report* describes this as 'Customs Gates'. The entrance was used by the Harbour Trust to monitor and control access to the dock, including the movement of goods. Fences were also erected around the dock, to enhance the increased security measures, in no small part a reaction to the ongoing theft of goods from the dock wharves and sheds.⁴⁸

In the 1940s, Victoria Dock – as with most Australian ports – was used by war ships; foodstuffs were also exported to overseas destinations. In the immediate post-war period, there was a decline in passenger and cargo trade, although traffic increased rapidly during the economic boom of the 1950s. Australian exports of flour, wool, frozen meat, dried fruits and dairy products were much sought-after in the recovering European countries.



Figure 11 c. 1930-40 aerial view. Note sheds around perimeter of dock and along each side of Central Pier. The chamfered form at the mouth of the dock follows the widening of the entrance.
Source: Charles Pratt, SLV



Figure 12 1945 aerial view of Victoria Dock.
Source: Lands Victoria, Laverton

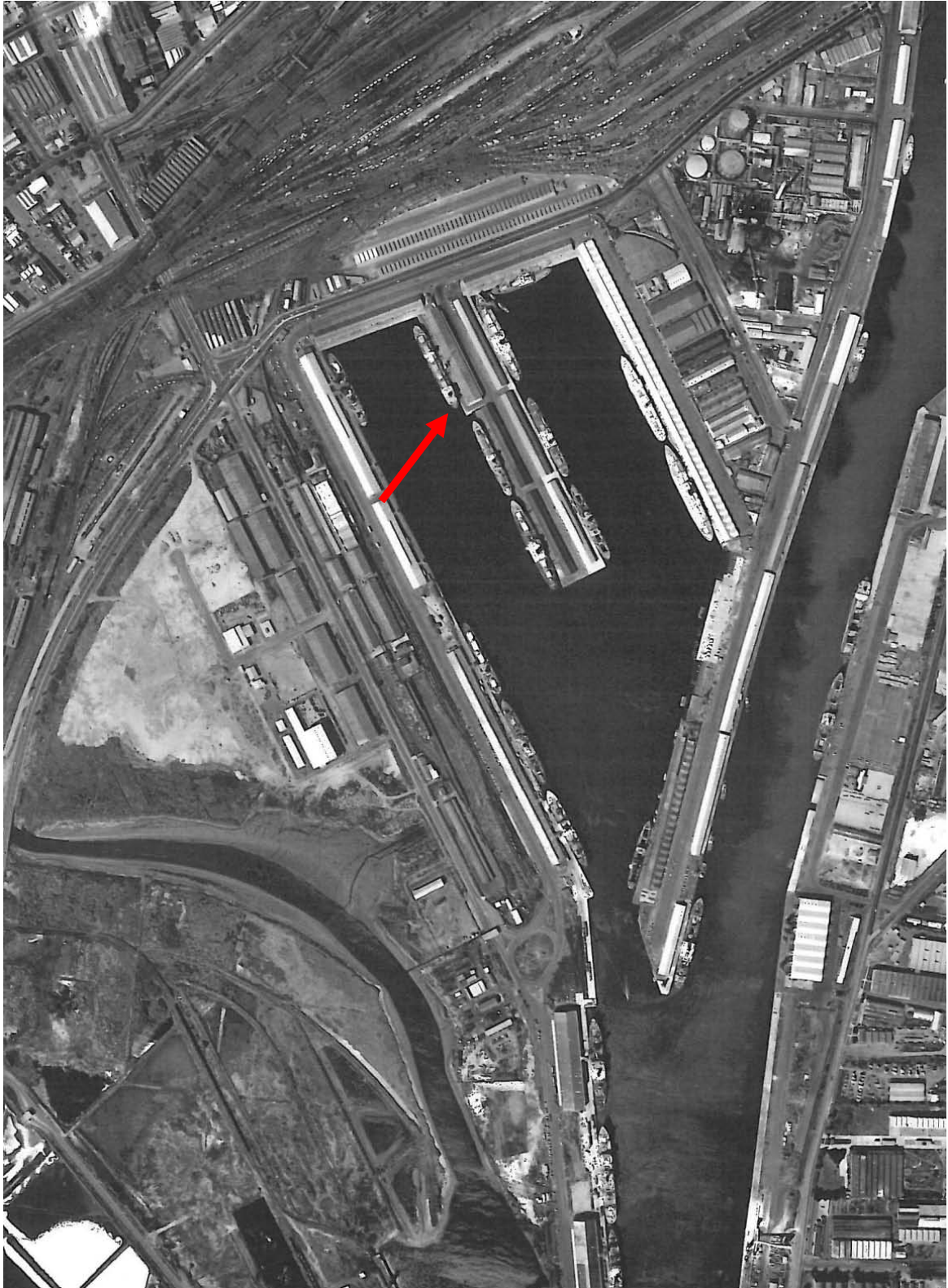


Figure 13 1963 aerial view of Victoria Dock. This shows that Central Pier has been widened at the top end (see arrow). The south side of the dock, bending into the South Arm, appears to have a structure or some modification to the form of the wharf edge. The gas works site is visible at top right.
Source: Lands Victoria, Laverton



Figure 14 Shipping control tower, with Port of Melbourne hostesses, c. 1966
Source: National Archives of Australia

Melbourne also boasted in this period that its port was the 'most mechanised' in the Commonwealth, with more cranes and lift trucks (cargo handling equipment) acquired to support port operations.⁴⁹ By this time, Victoria Dock was handling over two millions tons of cargo annually;⁵⁰ it remained Melbourne's most used dock until the 1960s.

3.6.5 *Shipping Control Tower*

In 1962, a joint conference was held between Trust officers, shipowners and others to discuss the establishment of a central control station for the port. It was agreed that an observation tower would be constructed, and manned by five control officers 24 hours a day, to co-ordinate movements of shipping in the port, including towage pilots and emergency services.⁵¹

The Shipping Control Tower, which replaced an earlier timber octagonal watch tower of 1934, was designed by architect C J Smith.⁵² It was constructed of reinforced concrete, with a lift and stairs, and comprised two decks – one for observation duties containing radar and communication equipment, the other being for amenities for its 24-hour a day operation.⁵³ The control centre also provided an automated telephone service providing shipping information to the public, a service that proved immensely popular with 116,995 calls taken in the first year. The tower was officially opened in April 1966 by the Governor of Victoria, Sir Rohan Delacombe.⁵⁴ The tower was (and remains) located at the end point of the narrow south-west arm of Victoria Dock, near the dock entrance.



Figure 15 1967 aerial view of Victoria Dock. The then new Shipping Control Tower is indicated.

Source: State Library of Victoria

3.7 Decline & redevelopment

3.7.1 *The shift downstream and advent of containerisation*

It was also in the 1960s that Victor Swanson (then Chairman of the Melbourne Harbour Trust) introduced deep water containerisation facilities to the Port of Melbourne, the first Australian port to do so. In 1965, Swanson noted that many ports around the world were changing their facilities for handling shipping and cargo. He continued:

It must be accepted, and preparation made, that "general cargo" will gradually be stowed, handled, shipped and transported on land at both ends as unit cargo and containerised cargo...The traditional facilities provided by ports for general cargo over the past 50 years will be radically changed and to provide the new type of port facilities will require a major revision in sources of port revenue.⁵⁵

Containers were used for every kind of cargo including coal and steel, wood, animals, wool and wheat. Containerised cargo required different storage, handling and berths to those provided by the long sheds and wharves lining Victoria Dock. Larger expanses of land were also needed for the storage and movement of containers, and for associated terminal and depot use. This brought about the building of Swanson Dock, the port's major container terminal, further downstream of Victoria Dock, along with other facilities.⁵⁶

The shift in Melbourne's port activity further downstream had in fact preceded the building of Swanson Dock. Appleton Dock, which was built on the site of the old course of the Yarra River, was planned as early as the 1930s but was not completed until 1956. Webb Dock, at the mouth of the Yarra River, also provided roll-on-roll-off capacity from 1960.⁵⁷ New swinging basins were additionally created downstream, to cope with the larger ships; and old port areas were consolidated.

In the early 1960s, a project commenced to upgrade Victoria Dock to cater for the larger ships arriving and the need for a larger number of rail berths. The work was to cost £1,780,000 and included a new wharf platform of reinforced concrete and a wider wharf apron.⁵⁸ It was also intended to construct new berths capable for container trade.⁵⁹ The need for such improvements was clear in the Chairman's annual review of 1963, with the observation that the volume of trade through the Port of Melbourne had increased, exceeding 10 million tons for the first time.⁶⁰ Due to a shortage of cargo storage accommodation, two purpose built, pre-fabricated steel cargo sheds were also constructed in 1968-9 at Berths 2 and 4 at a cost of \$124,650. Rail facilities were laid in front and behind the two specially built sheds, designed to accommodate containerised cargo.⁶¹ Despite the significant impact of containerisation, the Melbourne Harbour Trust reported in 1970 that the numbers of 'conventional' ships arriving at the port remained virtually steady, albeit Victoria Dock was used exclusively for such arrivals.⁶²

The nearby railway yard facilities and operations were additionally changing in this period. The move from coal-powered to diesel-powered trains meant that the docks were not required for coal storage, and also that large steam locomotive sheds were no longer needed.⁶³ Other later works to the dock included widening the entrance again in 1979-80; and converting berths 6 and 7 to a roll-on roll-off facility. Berths 1, 2, 3, 4, 16 and 17 were converted into container facilities, and the outer section of Central Pier was demolished.⁶⁴ Some berths, however, retained their pre-containerisation form and character, including (in 1991) berths 8, 9, 10, 14, 15, 19, 20, 21, 22 and 24.⁶⁵

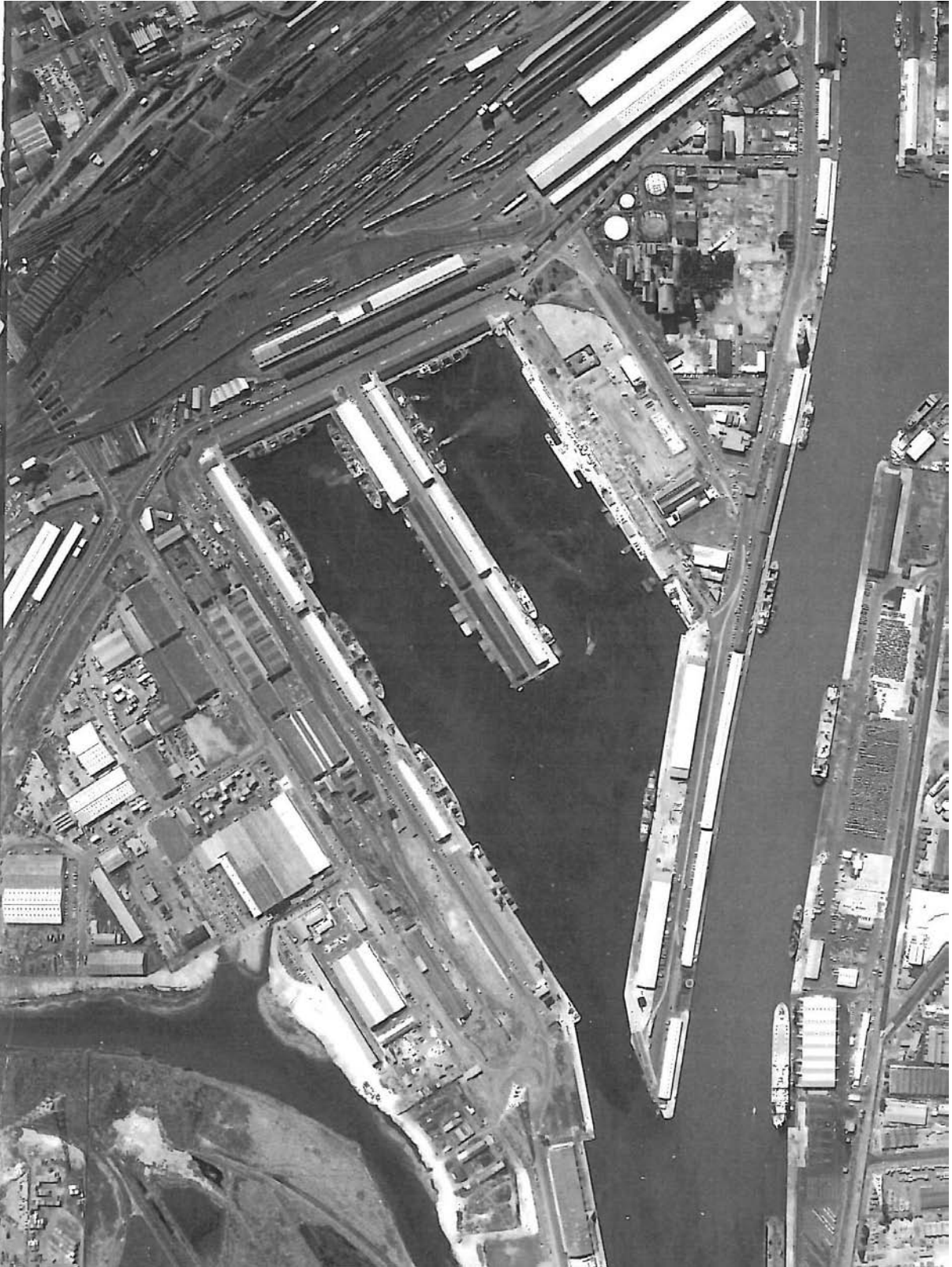


Figure 16 1974 aerial view of Victoria Dock. The gas works site is still visible at top right.
Source: Lands Victoria, Laverton

The building of the Charles Grimes Bridge and Bolte Bridge in 1975 and the late-1990s respectively, and the increasing size of container ships visiting the Port of Melbourne, further hastened the demise of Victoria Dock, as well as the other wharves on the north and south sides of the Yarra River. The approaches to the dock and wharves had become too narrow for the larger ships; and little major shipping has occurred there since the mid-1980s.

In 1978 the Melbourne Harbour Trust was reconstituted as the Port of Melbourne Authority, and after further restructuring, as the Melbourne Port Corporation in 1997. At this time the Corporation took on berthing responsibilities, while the Victorian Channel Authority was established to manage the shipping channels. In July 2003, the Port of Melbourne Corporation was formed absorbing the Melbourne Port Corporation and, in November that year also the Victorian Channel Authority.⁶⁶

In this period there was also a growing awareness in Melbourne of the value and potential of the Victoria Dock water body, and of this now redundant area on the edge of the Melbourne CBD. In the 1980s and 1990s, attention was focused on the former wharves and industrialised areas of the Yarra River, including through the redevelopment of Southbank and the construction of the Casino and Melbourne Convention and Exhibition Centre. There were also, increasingly, calls to revitalise the neglected dock and environs adjoining the western end of the CBD. Victoria Dock and the land around it were even identified as the site of the Olympic Village, in the city's failed attempt to have Melbourne hold the 1996 Olympic Games.⁶⁷

3.7.2 *A new 'Melbourne Docklands'*

In May 1990 the Committee for Melbourne produced a publication entitled 'Melbourne Docklands', which outlined a vision for the area. Victoria Dock was regarded as the centrepiece of Melbourne Docklands, around which different precincts or character areas were identified, with differing uses and development objectives. An outcome of the Committee for Melbourne report was the establishment in 1990 of the Docklands Taskforce which ultimately led to the formation of the Docklands Authority under the provisions of the *Docklands Authority Act 1991*.⁶⁸ The Authority was responsible for facilitating private sector development of the area; it was also given responsibility for establishing the infrastructure to support development and attract investment, such as roads, bridges, tramlines and wharves.⁶⁹

On the eve of this renewal and transformation of the area, Docklands comprised a vast landscape of railway goods yards, historic goods sheds, a two kilometre stretch of the Yarra River extending from Spencer Street to the west, a former gas works site, Melbourne City Council depot, and Victoria Dock with its associated wharves, sheds and remaining infrastructure. The gas works buildings and infrastructure had long gone (the chimney was demolished in 1974)⁷⁰, and pleasure craft largely occupied the berths along the river. While occasional cargo vessels still docked and local interstate traders berthed at the roll-on roll-off facility, the dock was increasingly deserted.

In 1991 it was noted that the travelling cranes had been removed, and sections of the crane gantry had been taken down. The railway tracks along the south-west side of the dock, and the sidings on the north-west side had also been removed.⁷¹

The built heritage had also already greatly diminished from that which existed in the pre-containerisation period. The surviving wharf sheds had ceased to function for shipping purposes and were either abandoned or occupied by a range of alternative uses including

ships chandlers, furniture makers, artists and the like. The core heritage fabric which did however survive was that located around Central Pier at Victoria Dock. Central Pier retained its original wharf sheds (nos 8 and 15) which flanked the entry to the pier; and on the pier a range of modified sheds which reflected an evolving shed form as cargo handling and crane technology changed over the decades.⁷²

Other elements which remained in the area at this time included an old stables complex (buildings and yard) dating from 1913/1914, and known as the (City of) Melbourne Corporation Stables (Figure 19); and a shed that formerly belonged to Patrick's Stevedoring.⁷³ The stables complex was part of the Melbourne City Council depot, associated with the collection and disposal of nightsoil and other rubbish from properties within the city, originally dating back to the 1880s. The depot was bordered by Pigott Street to the north and North Wharf Road to the south.

The Docklands Authority parcelled up this area into separate development precincts, which were released to the market in 1996 for a staged development programme. The precincts varied in size from 7 to 36 ha, and were identified with a range of preferred uses including residential, leisure, commercial, education and recreation. The area in and around Victoria Dock was known as 'Victoria Harbour'. By 1997, Mirvac had signed up for the Yarra's Edge precinct; and MAB Corporation for New Quay precinct. Lend Lease signed on for the Victoria Harbour precinct in 2001, including Central Pier.⁷⁴

The vision for the area was nothing short of total transformation of the former docks. It was then, and remains, Australia's largest construction project and partnership between the government and private sectors; it was also a major urban renewal project by world standards. It was intended to be a waterfront area, combining residential accommodation (in mostly apartment towers), with office blocks, recreational areas, public promenades, restaurants, bars, shops, galleries, and the new Docklands Stadium (to be used predominantly for AFL football).

The development of Docklands has subsequently involved demolition and removal of many former docks buildings and structures; decontamination of land areas; introduction of berths for recreational boats and luxury yachts; and the construction of new roads, streets, bridges and overpasses including the extension of the traditional east-west running CBD streets (including Collins, Bourke and La Trobe streets) across the rail yards. For the first time since the Hoddle Grid was drawn up in the 1830s, central Melbourne was pushed west of Spencer Street, although the extension of Collins Street, involving partial demolition of one of the most important historic buildings in the area, Goods Shed No. 2, was controversial.

Construction of Docklands Stadium (now Etihad Stadium) commenced in 1997, being the first of the major urban renewal works in the area. In 1999, the Docklands Authority was also made responsible for the municipal management of Docklands. VicUrban (now Places Victoria) later became the development authority when the Docklands Authority merged with the Urban and Regional Land Corporation (URLC) in 2003.

In 2000 Docklands Stadium opened, as did several of the new transport links and extensions into the area, including Bourke Street, La Trobe Street and Wurundjeri Way. Two years later the first residents moved into the New Quay precinct, and since that time other developments have come on line, including in the area surrounding and abutting Victoria Harbour.



Figure 17 1984 aerial image. Image shows that entrance to dock has again been modified; a crane is located on the north edge of the dock (see arrows). Source: Lands Victoria

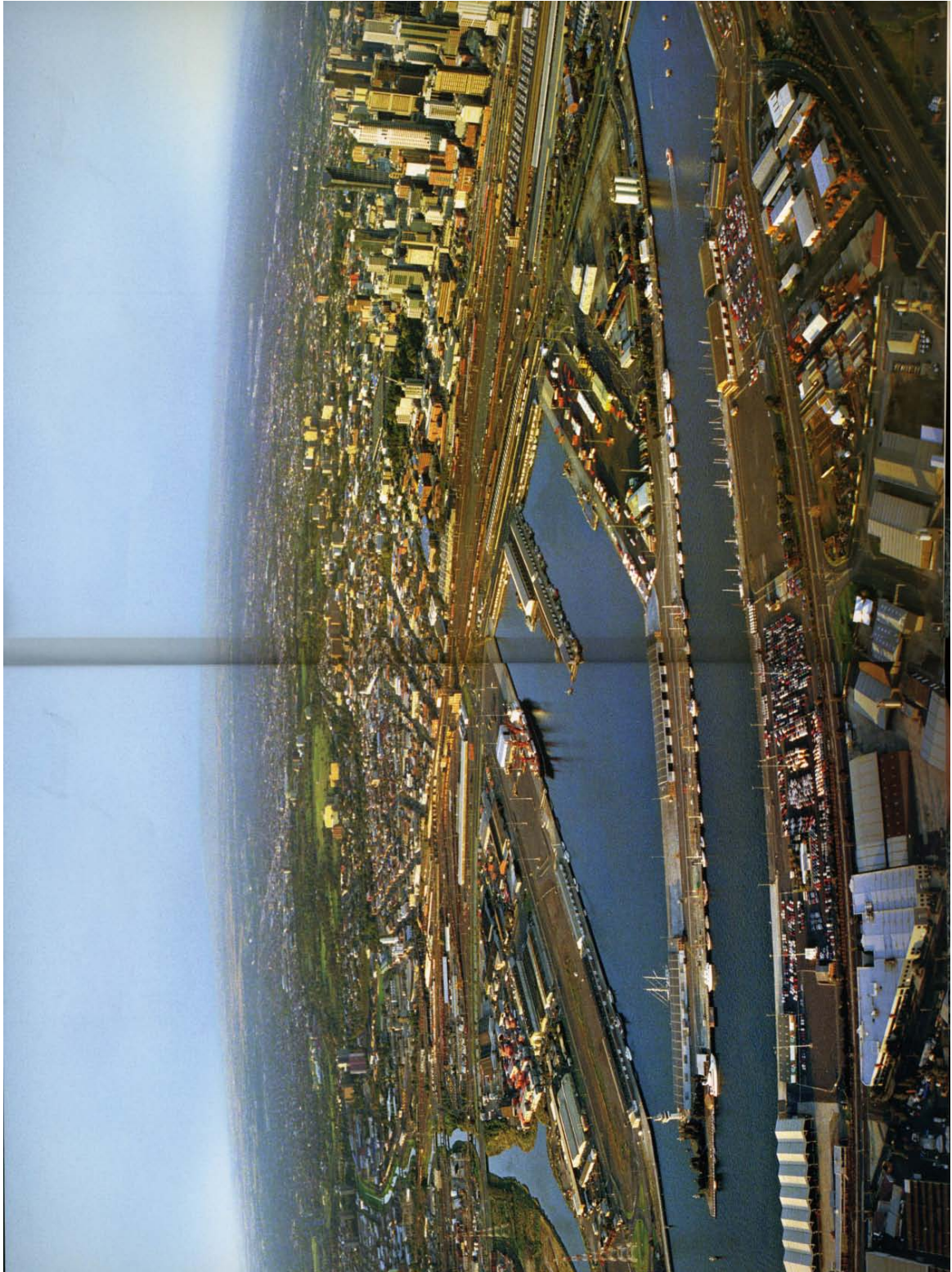


Figure 18 c. 1997 aerial view of Victoria Dock, prior to the start of construction of the Docklands Stadium.
Source: Lovell Chen archive



Figure 19 MCC stables building, 2005 (since demolished).
Source: Lovell Chen

3.8 Summary of development

This chapter has described and outlined some of the changes that have occurred to Victoria Dock and its environs, since the dock opened in the 1890s. Chapter 4 also includes information on, and descriptions of, changes to the structures, fabric and elements of the place. Further, Appendices E and F in particular, include (in largely chronological order) historic maps, plans and aerial images which illustrate and document changes to the heritage place.

The following is a summary of the main changes/developments which have occurred:

- | | |
|---------|---|
| 1889 | Melbourne Harbour Trust begins the construction of the West Melbourne Dock with the excavation of the West Melbourne Swamp. |
| 1892 | West Melbourne Dock officially opened with letting in of water. |
| 1910s | Alterations include widening of wharves on both Cowper Street and Mountain Street sides of the dock. |
| 1913 | Sheds at berths 8 and 15 constructed. |
| 1916-17 | Central Pier constructed with six berth sheds completed by 1920 (includes sheds 9 and 14). |
| 1920s | Amenities constructed at the dock for female passengers, and four buildings for meals for wharf workers constructed on Mountain, Cowper and Pitt Streets. |
| 1924 | Entrance to Victoria Dock widened by 20 feet, with the edge of the dock mouth having a chamfered form. |
| 1926 | Sheds at berths 19-21 constructed. |

- 1930s Two semi-portal electric cranes erected at numbers 19-21 berths.
- 1960s Construction of Shipping Control Tower at the end of the southern arm of the dock in 1966.
- 'Roll-on roll-off' facility constructed on south side of dock in the mid-1960s.
- Brick amenities blocks built for wharf workers on both the south and north arms of the dock.
- Containerisation of the cargo shipping industry increases from the mid-1960s.
- Two pre-fabricated sheds (berths 1, 2, 3 and 4) constructed on the south arm to cope with the rise in demand for storage.
- 1979-80 Entrance to the dock widened/modified again.
- Reconstructed roll-on roll-off facility at number 16 berth opened to shipping.
- Berths 1, 2, 3, 4, 16 and 17 converted into container facilities.
- Outer section of Central Pier demolished.
- 1991 Travelling cranes had been removed, and sections of the crane gantry had been taken down.
- Railway tracks on south-west side of the dock, and the sidings on the north-west side had also been removed.
- Late 1990s Docklands precincts identified for development.
- Development commences with construction of Docklands Stadium.
- c. 2000 Sheds 8 and 15 removed.
- 2000s Development of Melbourne Docklands continues, including in and around Victoria Dock.

4.0 PHYSICAL SURVEY & ANALYSIS

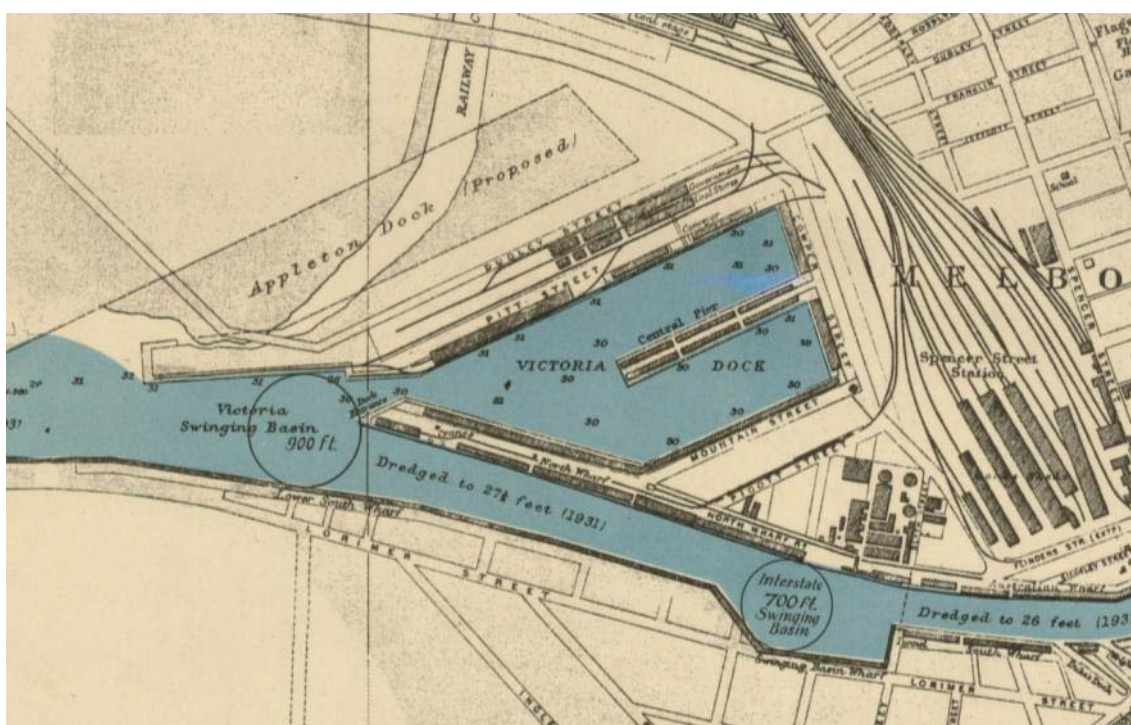


Figure 20 Detail from the Melbourne Harbour Trust Commissioners General Plan of the Port of Melbourne c. 1931 showing the dock layout and streets which enclosed the study area. Note the 'swinging basin' near the Victoria Dock entrance. The depth of the Harbour at this date is approximately 30 feet (9.1 metres). Source: Melbourne Harbour Trust Commissioners.

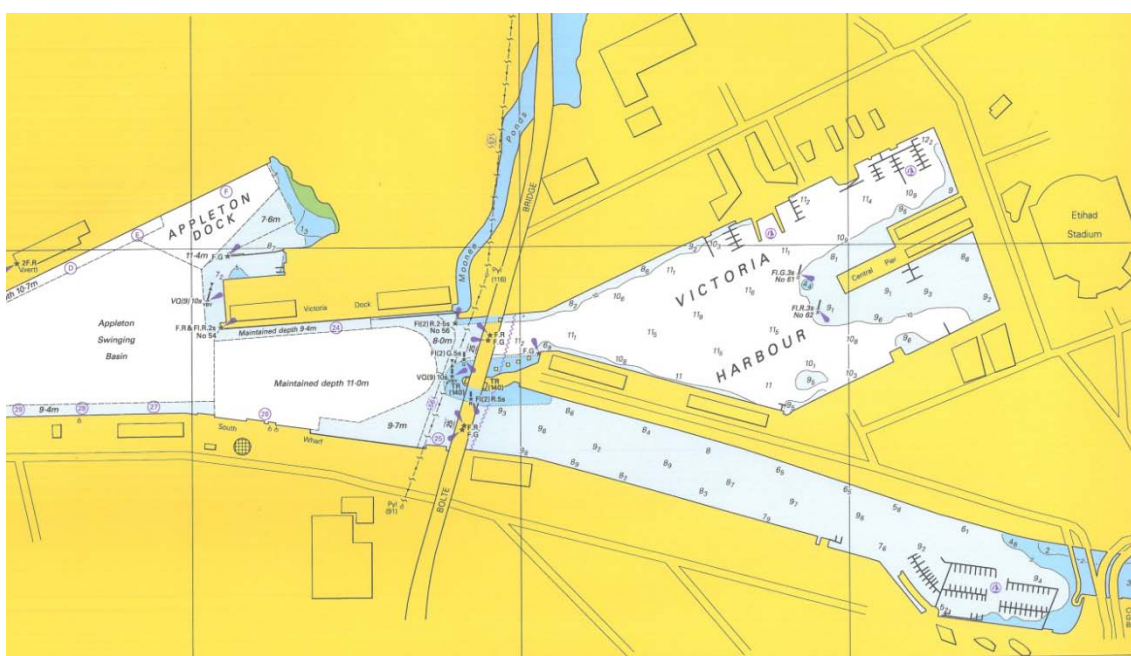


Figure 21 Detail from Admiralty Chart 154, edition 8, 2010, showing the depth of Victoria Harbour.



Figure 22 1990 map, indicating the numbered berths at Victoria Dock.

Source: 1990 Melways Street Directory.

4.1 Introduction

This physical survey and analysis represents the results of a site survey of Victoria Harbour, including the Victorian Heritage Register extent of registration. A physical survey of the structures and elements located on and associated with the dock (above deck) was undertaken on 9 February 2012; a survey/structural assessment of the dock underberth area and the water body was undertaken on 14 February 2012. The chapter comprises two parts:

Description and structural assessment of the dock and berths undertaken by consultant engineers MacLeod Consulting (see Sections 4.3 and 4.4), with a conclusion regarding heritage significance.

Description and assessment of the above deck structures and elements including landscape and context/setting undertaken by Lovell Chen (Sections 4.5 to 4.10), including a brief history of the elements and conclusions regarding the relative levels of significance of the elements.

Note: the physical survey and analysis does not include detailed reference to contemporary buildings and elements associated with, or adjoining, the heritage registered area, with the exception of the Shipping Control Tower and Berths 1, 2, 3 and 4 sheds, as detailed in Chapter 2.

4.2 Victoria Harbour and Dock

Today Victoria Harbour comprises 93 acres (37.6 hectares) of water body, with an overall depth of 11 metres decreasing to between 8 and ten metres close to Central Pier (Figure 21). The entrance at the western end is now approximately 90 metres wide, having been substantially widened over time from its initial width of approximately 48 metres.

Wharves line all sides of the dock, and originally provided 21 berths, varying in length from approximately 140 metres to 187 metres. The wharves are mostly constructed on timber piling, with timber and reinforced concrete beams. The wharf aprons are variously of concrete slab, asphalt over timber, and timber over concrete slab. As part of the phased redevelopment of the Victoria Harbour surrounds, sections of the dock have been renewed and replaced in recent years.

Central Pier, which was originally 497 metres long, 76 metres wide and provided six berths of between 161 metres and 174 metres long and was modified in 2005-6 with the demolition of the deteriorating wharf structure to its west end – namely berths 10, 11 and 13.81

4.3 Structural assessment - dock fabric and structure

4.3.1 Scope of Structural Assessment

MacLeod Consulting was retained in January 2012 to contribute to the structural condition assessment, and an assessment of the engineering significance of the dock and berths. The berths considered are as follows:

- Berths 2 to 6, South Arm;
- Berth 8, Harbour Esplanade;
- Berths 9 and 10, Central Pier;
- Berth 15, Harbour Esplanade;
- Berths 16 and 17, 19 to 21, North Arm.

Structural assessments of the various wharf structures was based upon a visual inspection of the accessible portions available on the day of inspection, recorded with photographs of the typical conditions. The assessments are based on experience and judgment, with no materials testing and geotechnical investigations being undertaken.

Six previous structural engineers' reports and structural assessments were made available for review (see below). These have been used as the primary source data for the actual structural condition of the berths, as some of these previous assessments have utilised detailed physical surveys and site testing/analyses of the various components of the berths.

The inspection undertaken on 14 February 2012 was conducted from the water, and access for viewing the underside of berths was only available at berths 4, 8, 9, 10; the underside of berths 5, 6, 11, 14 was viewed from the face of each berth; berths 19, 20 and 22 were too deteriorated to approach more closely than about 3 metres.

4.3.2 Methodology and tasks

This structural assessment included the following:

- Review of existing engineers' reports and structural assessments;
- Survey and analysis of the existing conditions/fabric/structure of the dock;
- Provision of an abbreviated 'audit' of the dock elements, to identify/clarify where there is original fabric, and where it has been modified;
- Description of the berths, including:
 - original construction
 - current situation
 - main changes/modifications
- Assessment of the significance of the dock in terms of its importance in engineering terms, technological significance, etc.

Table 2 and Table 3 below include the survey of observed berths, as well as the assessment of the fabric and condition of the berths.

In addition to the above, the following recommendations/policies are included in Chapter 6 of this CMP:

- Maintenance and repairs
- Replacement of materials
- Means of modifying the dock structure in future works, if required
- Compliance and safety issues/risk management

4.3.3 Review of existing Structural Assessments

The following structural engineers' reports and structural assessments were reviewed:

Conditions Survey, Victoria Dock, Berths 8 to 15, Docklands Authority, Melbourne, Australia, October 1993 (this report contains drawings by Connell Wagner (Vic) Pty Ltd, who are judged the probable authors of this report)

Preliminary Report on Central Pier, Existing Wharf and Pile Condition Wharves 9 and 14, Melbourne Docklands, Robert Bird and Partners, 17 March 2000

Durability Plan, Grand Plaza, Victoria Harbour Development, Arup-Connell Wagner, revision 4, 3 September 2002

Durability Plan, NAB Promenade/Grand Plaza Stages 2 & 4, Victoria Harbour Development, Arup-Connell Wagner, revision 1, 29 April 2003

Wharf Assessment, Draft Report, Waterfront City, November 2003 (this report covers Berths 17, 18 and 19 and was prepared by GHD who had been engaged by Meinhardt Pty Ltd)

Cursory Structural Assessment of Wharf 20/21, Docklands, Hyder Consulting Pty Ltd, 16 June 2010.

The findings of these reports are summarised below in Table 1.

Report, author, date	Berths	Brief content of report	Recommendations of report	Comments
Conditions Survey, Connell Wagner, October 1993	8 - 15	Visual inspections of berth structures including 4705 piles for general condition assessment	Refer comments	<p>Berths 8 & 9 in moderate condition.</p> <p>Berths 10 & 11 in moderate to sound condition.</p> <p>Berths 12 & 13 in poor condition.</p> <p>Berth 14 in moderate to sound condition.</p> <p>Berth 15 in moderate condition</p> <p>Central roadway in poor condition</p>

Report, author, date	Berths	Brief content of report	Recommendations of report	Comments
Central Pier Wharves 9 and 14, Robert Bird and Partners, March 2000	9 and 14	Visual survey and testing of structure referenced, extent and estimated costs of remediation outlined	Berth 10, 11 and 13 expressly not included in brief	Berth 9 in average condition requiring major remediation before re-use. Central roadway in poor condition requiring major remediation and new concrete deck. Berth 14 in good condition requiring minor remediation before re-use
Durability Plan, Grand Plaza, Arup-Connell Wagner, September 2002	Not Stated	Details responses by Connell Wagner to Maunsell Australia structural design queries, 3 July 2002 and durability review comments 4 July 2002, relating to new concrete wharf construction of Grand Plaza.	Fender details included as sketches	New construction with intended 50 year lifespan
Durability Plan, NAB Promenade/Grand Plaza Stages 2&4, Arup-Connell Wagner, April 2003	5, 6 and 8	Details actions to be undertaken in design, construction and operation stages to ensure these areas achieve a 50 year lifespan. Describes the extant structures as well as the new portions	Identifies the following loading limits: Occupancy loads (primarily pedestrian uses) mooring and berthing Identifies critical structural elements	Berth 5 in good condition Berth 6 in good condition Berth 8 in poor condition

Report, author, date	Berths	Brief content of report	Recommendations of report	Comments
Wharf Assessment, Draft, GHD, November 2003	17, 18 and 19	Detailed engineering assessment of berths 17, 18 and 19 based on divers inspections and visual inspections focuses on the condition of piles	Berth 17 requires pile and deck soffit remedial actions for re-use Berths 18 & 19 to be fenced off due to unsound state	Berth 17 in good condition Berths 18 & 19 piles highly degraded
Wharf 20/21, Hyder Consulting, June 2010	20 & 21	Cursory assessment only of this highly dilapidated structure	Structure not to be used or loaded in any manner. No surcharges to be imposed on sheet pile retaining wall	Failure of the wharf structure and the warehouse occurring/highly likely. Sheet pile retaining wall not assessed, but appeared stable

Table 1 Summary of previous engineering reports and structural assessments.
Source: MacLeod Consulting.

4.4 Description - dock fabric and berths

4.4.1 Original construction

The original construction of berths 3, 4, 5, 6, 8, 9 to 11, 14, 15 and 19 to 21 of Victoria Dock used timber hardwood piles with structural timber framing, generally consisting of corbels (in places), bearers, joists and planking with concrete overlays for the decking (Figure 23, Figure 24 and Figure 26).

Berth 2 has a steel sheet piled facing wall with concrete capping beams (with presumed tie backs anchors), and backfilled accessible level behind the facing wall. It is surmised that the current steel sheet piling is a replacement for original timber sheet piling, which may have encapsulated the junction of the dock and the river course, as originally installed to prevent scour of the junction.

Berths 8 and 15 have a concrete retaining wall to Cowper Street (east abutment) which is visible under the berths. Remnant diagonal timber bracing was noted under berth 8 for the first three bents from the west face of this retaining wall (Figure 26). It is assumed that similar construction occurs under berth 15.

Berths 9 to 14 do not have visible diagonal bracing – refer to Figure 27, Figure 28 and Figure 24. It is expected that these berths relied on the large number of piles to share the mooring and berthing forces. These forces may also have been limited by the slow pace of the berthing vessels, with the surrounding land reducing the wind velocity on vessels at berth, as well as reducing wave creation.



Figure 23 Wharf face, berth 3, showing exposed reinforcement of wharf beam.



Figure 24 Underside of concrete slab deck, berth 10, showing corroded metal formwork, corroded reinforcement, and impacts of water penetration to timber structure level from deck.



Figure 25 Detail of wharf face, berth 15, with fender pile in foreground.



Figure 26 Retaining wall to Cowper Street, under berth 8, showing diagonal cross-bracing.



Figure 27 General under deck view to north with berth 13 beyond. Note there is no diagonal bracing; new galvanised beams on left hand side.



Figure 28 View to north, berth 10. Note deterioration of piles at water level and end grain decay in beams.

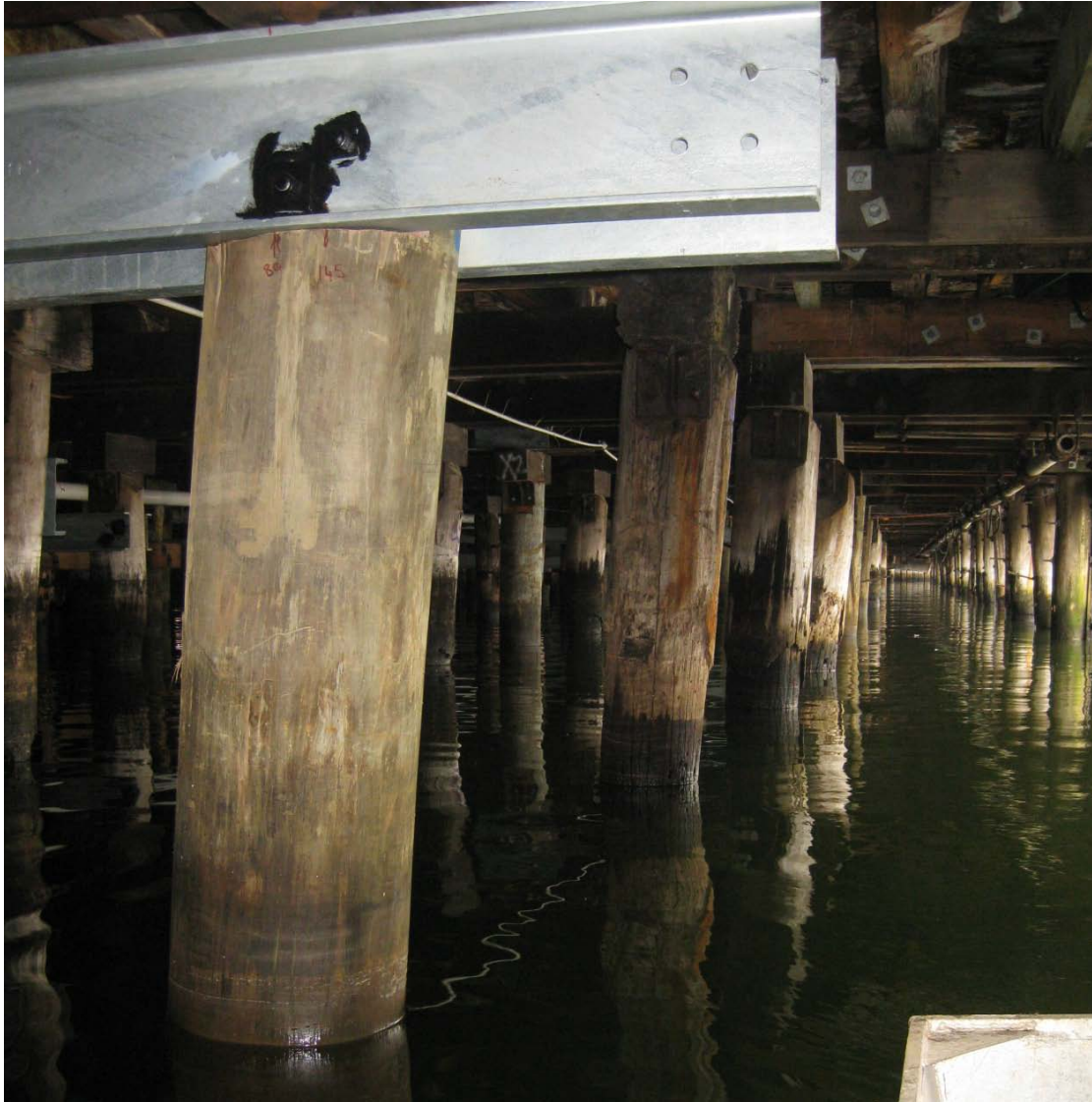


Figure 29 Under deck view to east, berth 10. Note new piles and galvanised channel beams (transfer beams) in foreground; and new timber beams with galvanised bolts in upper middle ground.



Figure 30 Wharf face, berth 5, showing wrapping of timber pile, concrete deck in good order and renewed modern timber fender arrangement.



Figure 31 Under deck view, berth 6, NAB Promenade showing Denso wrapped steel piles, timber beams, joints and decking over.

Berths 16/17 (circa 1975) were constructed with reinforced concrete piles, beams and deck slab. A steel sheet pile retaining wall with concrete capping beam integrated into the deck structure is restrained with concrete raker piles. The construction documentation for berth 17 prepared by the then Port of Melbourne Authority (PMA) is included in the report titled *Wharf Assessment Draft Report, Waterfront City, November 2003* (see above).

In summary, the types of concrete deck and concrete overlays vary across the differing berths, depending on their period of construction and/or re-construction.

4.4.2 Changes and modifications

Generally, repaired and replaced portions of the individual berths follow the same typology as the original construction. For example, repairs to deteriorated piles have been made with additional adjacent piles or transfer beams to effectively allow for the applied loadings to bypass the defective pile – refer to Figure 29. A visible example of the replacement of earlier wharf structure is the lower promenade and deck of berths 5 and 6. These recent constructions are located in front of existing concrete wharf structures (not observed due to limited access but now forming the upper promenade), and have used existing timber piles, wrapped at the tidal zone to increase their lifespan, with added timber or concrete beams – refer here to Figure 30 and Figure 31.

Changes and remedial works appear to all have been driven by the materials deterioration that occurs in these marine environment structures. Typically, it can be expected that wharf structures might have a serviceable life of 25 to 30 years, before the first significant remedial works are required. Thereafter, increasing frequent repairs are needed, as more structural elements exhibit deterioration. Complete reconstruction of a wharf is to be expected every 50 years or so (examples at Victoria Dock are berths 16 and 17 as well as possibly berth 2).

In reconstructing a wharf, an opportunity for the replacement structure to cater for additional deck/traffic loading is possible, which a largely repaired structure may not be able to sustain. As commercial vehicle gross loadings have been increased from time to time, reconstruction of a wharf structure that requires extensive repair becomes more financially prudent. A detailed exposition of possible deterioration mechanisms that wharf structures may be subject to is contained in the report titled *Durability Plan, NAB Promenade/Grand Plaza Stages 2 & 4, Victoria Harbour Development*, Arup-Connell Wagner, revision 1, 29 April 2003 (see above).

Changes and modifications are also identified in Table 2 and Table 3.

4.4.3 Description of berths

The following description of the berths, as observed, also includes the dates (where known) of construction or substantial reconstruction of the berths, and modifications to the berths.

Berth	Date	Typology	Date of modifications	Changes to typology
2	1960s	Steel sheet pile facing with concrete capping beam at face of berth with presumed tie back anchors to the sheet piles. Filled ground behind wharf face.	N/A	N/A

Berth	Date	Typology	Date of modifications	Changes to typology
3	1940s	Concrete beams and deck supported on timber piles.	Concrete deck structures estimated c. 1960	N/A
4	1940s	Concrete beams and precast planks supported on timber piles. Earth batter at southern edge under deck.	Concrete decking structure estimated c. 1970	Concrete deck structure
5	1940s	Concrete beams and precast planks supported on timber piles.	2003/5: Recent concrete deck constructed over existing timber piles, abutting existing concrete wharf structure	Concrete deck structure Pile remedial works Fender system
6	1940s	Concrete beams, timber joists and decking supported on timber piles	2003/5: Recent concrete deck constructed over existing timber piles, abutting existing concrete wharf structure. Concrete wharf structure behind estimated c. 1970s	Concrete beam and timber deck structure Pile remedial works
8	c. 1900	Timber decking, joist and beams supported on timber piles. Timber diagonal bracing at landward side. Concrete retaining wall	c. 2003: Part reconstructed as Grand Plaza	N/A
9	c. 1920	Timber decking, joist and beams supported on timber piles. Concrete decking overlay.	Various periods of repairs, latest in 1950s	N/A
10	c. 1920	Timber piles, concrete and timber decking and timber sub-structure.	Various periods of repairs, latest estimated 2005; defective piles repaired/replaced or substituted with transfer beams; general beams and	N/A

Berth	Date	Typology	Date of modifications	Changes to typology
			pile corbel repairs for re-use	
11	c. 1920	Timber piles, concrete and timber decking and timber sub-structure.	Substantially demolished 1975; defective piles repaired/replaced or substituted with transfer beams; general beams and pile corbel repairs for re-use c. 2005	N/A
14	c. 1920	Timber piles, concrete and timber decking and timber sub-structure.	Various periods of repairs, latest estimated c. 1940-1950; defective piles repaired/replaced or substituted with transfer beams; general beams and pile corbel repairs for re-use	N/A
15	Estimated c. 1897; widened 1913	Timber piles, concrete and timber decking and timber sub-structure.	Roll on/roll off portion estimated 1970s. Recent partial rebuild area estimated 2005	N/A
16	1982(?) similar Berth 17	Not accessible for inspection		Not observed
17	1982	Concrete deck on metal formwork supported on reinforced concrete beams and piles. Steel sheet pile retaining wall with concrete capping beam and concrete raker piles	N/A	N/A
18	?	Boundary to Berth 19 not discernable		

Berth	Date	Typology	Date of modifications	Changes to typology
19	1950s	Timber piles, concrete and timber decking and timber sub-structure.	N/A	N/A
20	1950s	Timber piles, concrete and timber decking and timber sub-structure.	N/A	N/A

Table 2 Description/typology of Berths.

4.4.4 Assessment of the fabric and condition of the berths

The following summary of the berths, as observed, includes previous and current assessments of condition.

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
2		Steel sheet pile facing corroded. Parts of concrete beams at face of berth with corroding reinforcement exposed.	Steel sheet piling with concrete deck structure	Steel sheet piling and concrete deck (1960s)
3		Concrete beams at face of berth with corroding reinforcement exposed. Concrete beams and deck under berth in apparent acceptable condition (chloride ion penetration not known)	Concrete deck structures estimated c. 1960	Timber piles (1940s)
4		Timber pile deterioration in tidal zone. Concrete beams at face of berth with corroding reinforcement exposed. Concrete	Concrete decking structure estimated c. 1970	Timber piles (1940s)

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
		beams and precast planks under berth in apparent good condition (chloride ion penetration not known)		
5	2003: Recent concrete deck constructed over existing timber piles, abutting existing concrete wharf structure	Timber piles wrapped in tidal zone, concrete decking in apparent satisfactory order but some deterioration of bitumen soffit coating	Pile wrapping Concrete deck structure Timber fender system	Timber piles (1940s)
6	2003: New timber decking constructed over existing timber piles, abutting existing concrete wharf structure	Timber piles wrapped in tidal zone, sub-structure framing and underside of decking in good order. Remnant piles of demolished section remain as feature	New lower promenade timber decking and sub-structure (concrete wharf structure estimated 1970s)	Timber piles (1940s)
8	1993: 10% piles severely deteriorated. Overall moderate condition	Significant deterioration of timber piles at tidal zone (structural capacity appears sufficient for pedestrian loading only), loss of diagonal bracing in part, joists and bearers in reasonable condition, timber decking acceptable for pedestrian loadings. Fender timbers in poor order. Grand Plaza 2 concrete structure in	Part reconstructed as Grand Plaza works, c. 2003	Timber piles, decking and sub-structure. Retaining wall (estimated c. 1900)

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
		good condition		
9	1993: 18% piles severely deteriorated. Overall moderate condition	Some timber piles have marine borer damage and loss of section in tidal zone; some new piles and repaired/replaced piles in parts (c. 2005?); joists, bearers and timber decking in good condition	Defective piles repaired/replaced or substituted with transfer beams; general beams and pile corbel repairs for re-use	Timber piles, decking and sub-structure (c. 1920 and later repairs prior to recent works)
10	1993: 12% piles severely deteriorated. Overall moderate condition	Some timber piles have marine borer damage and loss of section in tidal zone; some new piles and repaired/replaced piles in parts (c. 2005?); joists, bearers and timber decking in good condition with the recent addition of galvanised steel transfer beams and deck beams in places. Concrete decking metal formworks corroded and exposed corroding reinforcement visible in places	Defective piles repaired/replaced or substituted with transfer beams; general beams and pile corbel repairs for re-use	Timber piles, concrete and timber decking and timber sub-structure (c. 1920 and later repairs prior to recent works)
11	1993: 10% piles severely deteriorated. Overall moderate condition 1975: Mostly	Some timber piles have marine borer damage and loss of section in tidal zone; some new piles and repaired/replaced piles in parts (c.	Berth 11 mostly demolished in 1975. Defective piles repaired/replaced or substituted with transfer beams; general beams and	Timber piles, concrete and timber decking and timber sub-structure (estimated c. 1920 and later

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
	demolished.	2005?); joists, bearers and timber decking in good condition with the recent addition of galvanised steel transfer beams and deck beam corbels in places. Concrete decking metal formworks corroded and exposed corroding reinforcement visible in places	pile corbel repairs for re-use in conjunction with berth 10	repairs prior to recent works)
14	1993: 2% piles moderately deteriorated. Overall moderate condition	Some timber piles have loss of section in tidal zone. Timber beams and sub-structure aged and partly deteriorated condition. Concrete beams and deck in apparent acceptable condition (chloride ion penetration not tested). Fender timber deteriorating	Concrete deck overlay 1952-1953 when shed built	Timber piles, concrete and timber decking and timber sub-structure (repairs of original piling c. 1940-50)
15	1993: 27% piles severely deteriorated. Overall moderate condition	Significant deterioration of timber piles at tidal zone (structural capacity appears sufficient for pedestrian loading only), loss of diagonal bracing in part, joists and bearers in reasonable condition,	Roll on/roll off portion 1970s. Recent partial rebuild area estimated c. 2005	Timber decking and sub-structure, some diagonal bracing. Retaining wall (c. 1900)

Berth	Previously reported structural condition	Observed structural condition (February 2012)	Areas of greatest modification observed	Early extant fabric and period of construction
		timber decking acceptable for pedestrian loadings. Fender timbers in poor order. Roll on/roll off concrete decking appears in reasonable order Recent concrete structure in good condition		
16		Recent reconstruction of decking and fender system. Piles not accessed for observation	Decking, fenders, pile repairs/replacement (?)	Not observed
17		Recent reconstruction of decking and fender system. Piles not accessed for observation	Decking, fenders, pile repairs/replacement (?)	Not observed
18		Boundary to berth 19 not discernable		
19		Dilapidated and unsafe; derelict structure	Not assessed due to dangerous condition	Timber piles, decking and sub-structure (c. 1900)
20		Dilapidated and unsafe; derelict structure	Not assessed due to dangerous condition	Timber piles, decking and sub-structure (c. 1900)
21		Dilapidated and unsafe; derelict structure	Not assessed due to dangerous condition	Timber piles, decking and sub-structure (c. 1900)

Table 3 Summary of observed conditions, 2012.

4.4.5 *Conclusion regarding significance*

The plan and form of Victoria Dock, including the water body and overall structure incorporating the North Arm, South Arm and Central Pier, is of primary significance. It is of architectural significance for its design, which provided great lengths of wharf space to accommodate the largely manual handling of cargoes at the time of the construction of the dock. It also represents a formal response to the manoeuvring of berthing vessels.

In terms of technological significance, the scale and form of Victoria Dock is considered remarkable. The extent of excavation required to create the dock is of engineering significance, involving over 3,000,000 cubic yards of spoil removal. These excavations followed the construction of Coode Canal, which further highlights the scale and breadth of the public works undertaken in the Port of Melbourne in the last decades of the nineteenth century.

While part of the overall dock structure, the individual berths vary in terms of their date of construction and/or reconstruction, or extent of modification and intactness. They are also generally straightforward pile and beam structures, unremarkable examples of wharf structures, and typical of wharf structures in Australia and elsewhere. Accepting this character, and their varying dates of construction and levels of intactness, the berth structures at Victoria Dock are of contributory significance.

4.5 Above deck structures and elements

This description commences with an introductory outline of the above deck elements, followed by an overview of the Victoria Harbour landscape and context/setting. Structures sited on the dock, from north to south are also described. Brief historical overviews and conclusions regarding relative levels of significance are also included.

The dock area comprises the North Arm, abutting and running parallel to Docklands Drive - formerly Dudley Street. The north edge is bordered by New Quay Promenade, a public waterfront pedestrian link. This is lined from east to west by the New Quay residential and commercial precinct, comprising the Conder, Boyd, Nolan, Palladio and Arkley apartment towers; Waterfront City residential and commercial precinct; and a further low-height New Quay residential development. At this point, and at the present time, the pedestrian link terminates here.

From this point North Arm is bordered by an at-grade construction site, formerly the site of the berth 19 shed, demolished in 2004-5, and the conjoined berths 20 and 21 sheds. An internal dock road with inset rail lines known as Pitt Street which ran parallel to Dudley Street bordered the north elevation of these sheds. Part of the adjoining loading apron - referred to as Telford bluestone pitchers in the Heritage Victoria statement of significance - is still in evidence along the north alignment of berths 20 and 21.

Central Pier extends from the west side of Harbour Esplanade, formerly Cowper Street and Footscray Road.⁸² Berth 9 and 14 sheds are located on Central Pier, and there is a large parking apron to the west of berth 9, a truncated section of the pier which was formerly the site of berth 10 and 11 sheds, demolished in 2005-6. Harbour Esplanade dock edge was formerly the site of berth 8 and 15 sheds, removed in c.2000. These berths framed the roadway to the Central Pier. At the present time (March 2012) the sheds are dismantled with the components stored in a depot on the South Wharf (note not all of the components survive).

South Arm abuts and runs parallel to Bourke Street and North Wharf Road. Today the dock's south edge is bordered by Victoria Harbour Promenade, a public waterfront pedestrian link. It is lined from east to west by the National Australia Bank (NAB) headquarters, Ericsson headquarters, Dock 5 retail and residential development, and the Concesso Concavo retail and residential development, presently under construction. At this point the Promenade adjoins the extant dock structure and wharf apron, open to pedestrians the full length of the South Arm.

This walkway borders a car parking area and a Lend Lease site office and display suite; berth 3 and 4 sheds, occupied by Open Channel (Berth 4) and Boatschool.com.au (Berth 3); a temporary Metropolitan Fire Brigade (MFB) depot; berth 1 and 2 sheds, occupied by Docklands Yacht Club Inc., Melbourne Outrigger Canoe Club Inc, Melbourne Dragon Boat, Wooden Boat Centre and a Places Victoria maintenance depot tenancy (Berth 1) and the Alma Doepel/Docklands Ocean Education Centre (Berth 2); and the former Port of Melbourne Shipping Control Tower (also known as the Harbor Control Tower) at the end of the South Arm.

North Wharf Road runs along the south boundary of the South Arm, and previously also delineated the boundary of the adjoining North Wharf berths of the Yarra River. This area is presently fenced off.

4.6 Landscape and context/setting

The historic Victoria Dock context and setting has undergone significant change in recent years, largely associated with the phased redevelopment of the former dock precinct, albeit one with pedestrian promenades and marinas which form interfaces with the harbour and its setting.

Central Pier, the Harbour Esplanade dock edge, the dock area south of Docklands Drive (the North Arm) and the corresponding section of the dock north of Bourke Street and North Wharf Road are being progressively redeveloped, with development moving westwards as further former dock areas are incorporated into the new suburb of Docklands.

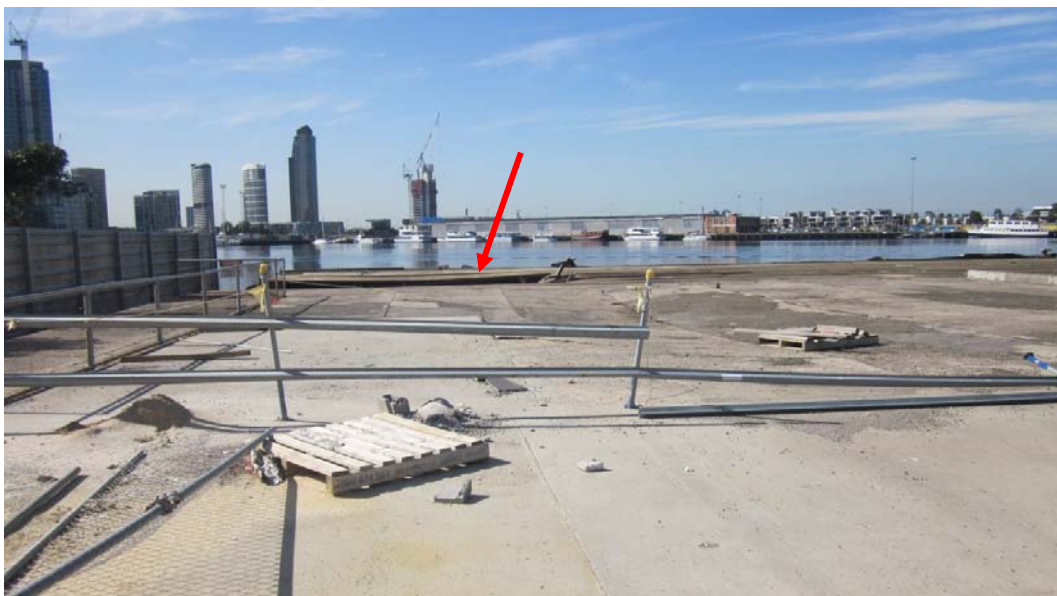


Figure 32 Site of the berth 19 shed, now cordoned off due to safety concerns. Note the collapsed wharf apron (indicated). The New Quay development is visible at left.

Three distinct phases of development are currently apparent:

- areas which are presently fenced off and dormant – this applies to the section of the North arm south of Docklands Drive in the vicinity of berths 19-21;
- areas in a transitional state – this applies to the Harbour Esplanade frontage, Central Pier and berth 9 and 14 sheds as well as the South Arm in the vicinity of Berths 1-4 and the Shipping Control Tower; and
- areas that have been redeveloped – this applies to the New Quay and Waterfront City precincts to the North arm adjoining New Quay Promenade; and residential and commercial developments bordering the South Arm, adjoining Victoria Harbour Promenade and the D’Albora Marinas.

The North Arm adjoins berths 19-21 and extends to the end of Docklands Drive under the Bolte Bridge. This last is a fenced cleared area, outside of the extent of Heritage Victoria registration. Adjoining berth 20 and 21 sheds, areas of bluestone pitcher paving are extant, formerly part of a loading area to Pitt Street. However, in alignment with the east end of berth 20 shed, these have been lifted and stockpiled, and the dilapidated wharf and site of former berth 19 shed fenced off, precluding close inspection (o the new suburb of Docklands. Figure 32). A timber paling fence encloses the adjoining New Quay apartments. East of this fence, the dock edge has been redeveloped as New Quay Promenade with pedestrian access from Harbour Esplanade. While the original alignment of the dock edge has generally been maintained, the landscape treatment here is wholly new – the promenade is formed of smooth concrete and terrazzo composite pavers and inset smooth sawn timbers, with a raised border of sawn bluestone blocks with cast metal bollards. These last are thought to be pre-existing elements reused in the new dock edge treatment (Figure 33).

To the west end – the most recent area of the North Arm to be developed - the promenade deck treatment materials are concrete and areas of granitic sand. The original dock alignment has been modified by the incursion of the Waterfront City Marina, the New Quay Marina and public moorings, as well as various gangways which lead down to these facilities from the dock itself. Towards the east (city end) of the promenade, the two-storey Livebait and Mecca restaurant buildings project south into the dock proper, framing a public plaza area which extends down to a water taxi berth below. A small café kiosk, primarily clad in coloured glazing – the Fish Bar – and the Limoncello gelateria pavilion, clad in zinc panels also project out over the water body, concealing the dock edge (Figure 35).

City of Melbourne street furniture including metal litter bins, custom-designed lamp standards and timber bench form seating is wholly new. The New Quay Promenade also incorporates the artwork *Silence* (2003) by Adrian Mauricks, installed on a plaza outside the two restaurant pavilions. To Waterfront City the Promenade widens into a piazza area to the north before narrowing again and continuing westward, terminating at the temporary fence, where the former berth 19 site adjoins.

The Cowper Street roadway and the adjoining former Footscray Road alignment, now combined, today form Harbour Esplanade, a divided roadway which interconnects Footscray Road (Docklands Highway) with Collins Street. Harbour Esplanade also supports a tramline, pedestrian and cycle pathways. These last pathways utilise part of the former rail alignment embedded into the Cowper Street roadway (Figure 34). Sections of the in-situ concrete plinth and timber buffer rail or fender to the base of berths 8 and 15 sheds are still visible, as are areas of bluestone pitchers which originally adjoined the Cowper Street roadway (Figure 34). The site of the berth sheds is rendered in coloured concrete, as ‘building footprints’ that

also frame the entry to Central Pier. The original level of the wharf apron along Harbour Esplanade has been altered with the central sections of the former berth shed sites lowered.

The wharf edge treatment adopted to these sections –smooth timber with timber uprights - contrasts with the aged timber fenders and cast iron bollards of the extant areas of the original dock edge (Figure 36). Shallow flights of timber steps, bordered with steel post and tensile cable handrails are used to interconnect the different levels of the wharf apron. To the north-east corner, adjoining the corner of the North Arm, there is a concrete loading ramp to the dock edge. Along Harbour Esplanade, City of Melbourne design street furniture including metal and timber bench seats, litter bins and custom-designed lighting have been installed.

Public art works – components of the Docklands Public Art Walk - have also been installed on the Harbour Esplanade wharf apron. These include John Kelly's *Cow up a Tree* (1999) and Cat Macleod and Michael Bellemo's *Shoal Fly By* (2003), set between the Central Pier and the South and the North Arm. Most recently, *Sealight Pavilion* (2011) has been installed opposite the intersection with La Trobe Street. A services facility, screened in a powder-coated perforated metal enclosure is sited in front of berth 9 shed, and there is a smaller facility that terminates the Central Pier roadway (Figure 39).

The Central Pier roadway and ramped access to the south promenade to berth 9 and the north promenade to berth 14 cross Harbour Esplanade and slope upwards to the original wharf apron level. The roadway is asphalt over a concrete deck, supported on timber piles. Service access to the tenancies in the berth sheds and to the car parking area beyond is via this roadway (Figure 39).

In addition, to either side of the berth sheds a ramped roadway runs off the west side of Harbour Esplanade formerly providing vehicle access to the wharf apron. The wharf apron to berth 14 shed retains its inset crane rail, timber fender and bollards to the dock edge (Figure 38). The wharf apron to berth 9 shed similarly retains timber fenders and bollards. To the South Arm, the wharf edge adjoining the Victoria Harbour Promenade – known as Dock 5 precinct - has been reconstructed at a lower level than the original.

Formerly the site of berths 5 and 6, and the roll-on roll-off wharf facility, the wharf apron has been reconfigured and is today clad in broad timber planking, with an elevated timber fender and new cast metal bollards to the water's edge. The promenade proper is a paved landscaped walkway onto which tenancies open, related to the buildings facing Bourke Street behind. Typically these are food and beverage tenancies with outdoor seating. The wharf edge is broken by a ramped access to a lower-level 'water stage' with seating. This portion of the waterfront was for a time known as the Grand Plaza.

Adjoining this stage area and within the water body are timber piles relating to the roll-on roll-off car wharf, recast as a public artwork. Further west, the D'Albora Marinas are also set off the dock edge.

To the west of this redeveloped area, the original concrete wharf apron and inset rail lines are apparent, opposite the Concesso Concavo development (Figure 40). From this point elements of the original dock landscape – berth sheds, concrete wharf apron and in-situ rail lines – are still extant (Figure 40). This has been augmented by City of Melbourne street furniture including stainless steel litter bins and lighting, encouraging pedestrian exploration of the precinct. Cast metal bollards are set along the wharf edge and are in use for boat moorings. Lightweight metal moorings, gangways and a small marina are set off the dock

edge. This last element is towards the west end, in line with berth 1 shed. The west end of the South Arm ends at a gravel car parking area, at the end of North Wharf Road which borders the south side of the berths 1-4 sheds. Previously a landscaped garden area – known for a time as the Osaka Oriental Garden – occupied the extreme end of the South Arm.⁸³ Surrounding the base of the Shipping Control Tower, the dock is paved with cement pavers and there are painted slatted timber benches and a metal handrail.

Within the water body proper are a number of floating navigational beacons, located off the end of the Central Pier (Figure 41). In addition, off the end of the South Arm there is a channel marker affixed to one of a row of five evenly-spaced timber pile clusters. While their date of construction and purpose is not known, it is thought that these were positioned to function as fenders protecting the end of the South Arm (Figure 42). There are several other pile clusters located on the opposite side of the Harbour, opposite berth 22, outside of the Heritage Victoria registered extent of Victoria Dock.

4.6.1 *Conclusion and significance*

In general, original or early fabric and elements associated with the landscape of Victoria Dock, albeit generally of a minor nature, are of contributory significance. These include extant bluestone pitch paving and areas of early concrete deck surface; old timber fenders and cast iron bollards associated with the original dock edge; crane rails; and remnant inset rail lines. Recent public artworks are of contemporary value, and are not assessed here for their heritage value. Recent buildings and structures which occupy, at least in part, the deck/wharf apron, or extend into the water body, are not of heritage value. Similarly, more recent landscaping items and elements are not of heritage value.



Figure 33 New Quay Promenade looking west from near Harbour Esplanade showing contemporary wharf finishes. Note the café structures, moorings and marinas in the water body at left.



Figure 34 From left: Harbour Esplanade, showing original wharf edge and surface to the former Cowper Street alignment; rail lines embedded in the former Cowper Street road surface.



Figure 35 New Quay plaza flanked by restaurant buildings, looking south.



Figure 36 Wharf edge, 2001, after removal of berth 8 and 15 sheds, but before the lowering of sections of the wharf apron and installation of public art.
Source: Lovell Chen.



Figure 37 From left: plant enclosure to Harbour Esplanade with berth 9 shed behind;
Central Pier roadway looking west.



Figure 38 From left: roadway access to wharf apron to berth 9 shed; wharf apron to berth 14 shed showing remnant crane rail embedded in wharf apron.



Figure 39 From left: landscape treatment to Victoria Harbour Promenade, looking west; landscape treatment to South Arm. The piles are thought to relate to the now removed former roll-on roll-off facility.



Figure 40 From left: extent of the Victoria Harbour Promenade landscape treatment, showing the progressive overlaying of the original concrete deck and rail line; South Arm looking east showing the wharf apron and rail lines. Berth 3 and 4 sheds are in the middle distance. Note the bollards and moorings at left.



Figure 41 Floating navigational beacons, moored off the end of the Central Pier.



Figure 42 Pile clusters and channel marker off end of South Arm.

4.7 North Arm structures

4.7.1 Berth 19 - 21 Sheds (1926)

Historical outline

The sheds at berths 20 and 21, along with the demolished berth 19 shed were constructed in 1926 as a single 396.2 metre long (1300 foot) and 24.5 metre wide (80 foot) cargo shed. The shed was reputedly the longest shed structure of the port (Figure 43).⁸⁴ To the north side of the sheds, rail lines embedded in the surface of the adjoining Pitt Street ran across the adjoining apron onto the wharf and connected the berths with the railway Goods Yards. No trace of the rail lines or of Pitt Street itself – beyond limited evidence of its alignment – remains today. In 1931, two three-ton Babcock & Wilcox semi-portal cranes, powered by an electric rail which ran along the top of the fascia dockside, were installed. These cranes, supplemented by further 3 ton Stothert & Pitt cranes installed progressively from 1940, were dismantled in 1981. In 1967-68, the shed structure was divided into three discrete cargo sheds intersticed by newly-constructed two-storey amenities bays.

The amenities bay at the west end, servicing berth 21 shed, is the sole extant block (Figure 46). Berth 19 shed and its accompanying amenities bay and the amenities bay adjoining the east end of the berth 20 shed were demolished in 2004-5, and the exposed end wall of the berth 20 shed reclad in corrugated steel (Figure 47). The Telford bluestone pitcher apron which adjoined the former Pitt Street, which ran parallel to berths 16-24 is largely still extant in the vicinity of the sheds, with the exception of the pitchers east of berth 20 shed which have been lifted and stacked.

Description

At the time of inspection the wharf apron was not accessible due to safety concerns and while the crane rail to the fascia is still in evidence, the presence or otherwise of the deck level crane rail and the rail lines atop the wharf apron could not be determined – a photograph taken in 2004 is included for reference (Figure 45). Berth 20 and 21 sheds are both in an advanced dilapidated state, with berth 21 shed abandoned and heavily vandalised and berth 20 shed occupied by a tenant and in use as a salvage store.⁸⁵

As originally constructed, berth 20 and 21 sheds were a steel portal-framed, gable-roofed structure, carried on steel lattice-form columns and horizontal and diagonal cross-bracing. The shed was clad in corrugated iron, above a dado of horizontal timber members, with approximately 80% of the side elevations comprising retractable metal roller doors. The shed or sheds, as they are today, are elevated above ground level on the wharf apron, formed of in-situ concrete, visible below the wharf level viewed from the north. A timber buffer rail or fascia borders the edge of the apron from the north. To the exterior of the sheds the timber dado has in places been replaced by corrugated metal sheeting, with more of the timber dado extant to the south (apron) elevation, although this was not able to be inspected from the exterior.

The sheds have a floor of reinforced concrete, with asphalt over, and rails set flush to its surface. Sections of this flooring are in a deteriorated condition with a large hole to the west end of berth 20 shed, and evidence of subsidence (Figure 50). To the west end of berth 21 shed there is a double-height wall of varnished timber boarding, and an open tread concrete stair which interconnects the shed proper with the 1968 bay addition. These spaces, divided by partition walls comprising plasterboard over stud, were previously offices, shower and toilet facilities.

Ceilings here are of plasterboard with inset fluorescent luminaires. Windows are timber-framed fixed glazing with awning sashes and wired glass louvers to the amenities. The whole is in a dilapidated and vandalised condition. The ceiling of the shed proper is clad in corrugated asbestos sheet, carried on trusses with knee braces. A clerestory infilled with wired glass provides toplighting to the interior. The north and south elevations are divided into bays by steel lattice columns comprising twenty-five retractable metal roller shutters, with infill panels of corrugated metal over a dado variously of timber or horizontal corrugated metal. Berth 20 and 21 sheds are divided by a full-height non-original corrugated metal partition, and there are twelve roller doors to either side of berth 20 shed and thirteen roller doors to either side of berth 21 shed. There are evenly-spaced pendant light fittings to both sheds.

Conclusion

The present-shed structure comprises approximately 70% of the extent of the original single shed which serviced berths 19-21. The structure was divided by a partition wall in c.1968,

with two-level amenities bays, clad in corrugated metal over a timber dado, appended to either end. It is also apparent that the number of openings to either side has been increased and that the roller shutters are not original. An examination of a c. 1940s photograph at Figure 50 shows bays with pairs of sliding timber doors alternating with panels of the present timber and corrugated metal cladding and, to at least one bay, pairs of elongated timber framed sash windows. Given that there are twenty-five bays to either side which comprise non-original roller doors, out of a total of approximately thirty-six bays, it is apparent that the original intactness of the shed structures has diminished over time. In addition neither the west or east elevations of the shed are as originally constructed.

Significance

Berths 20 and 21 sheds are elements of contributory significance.

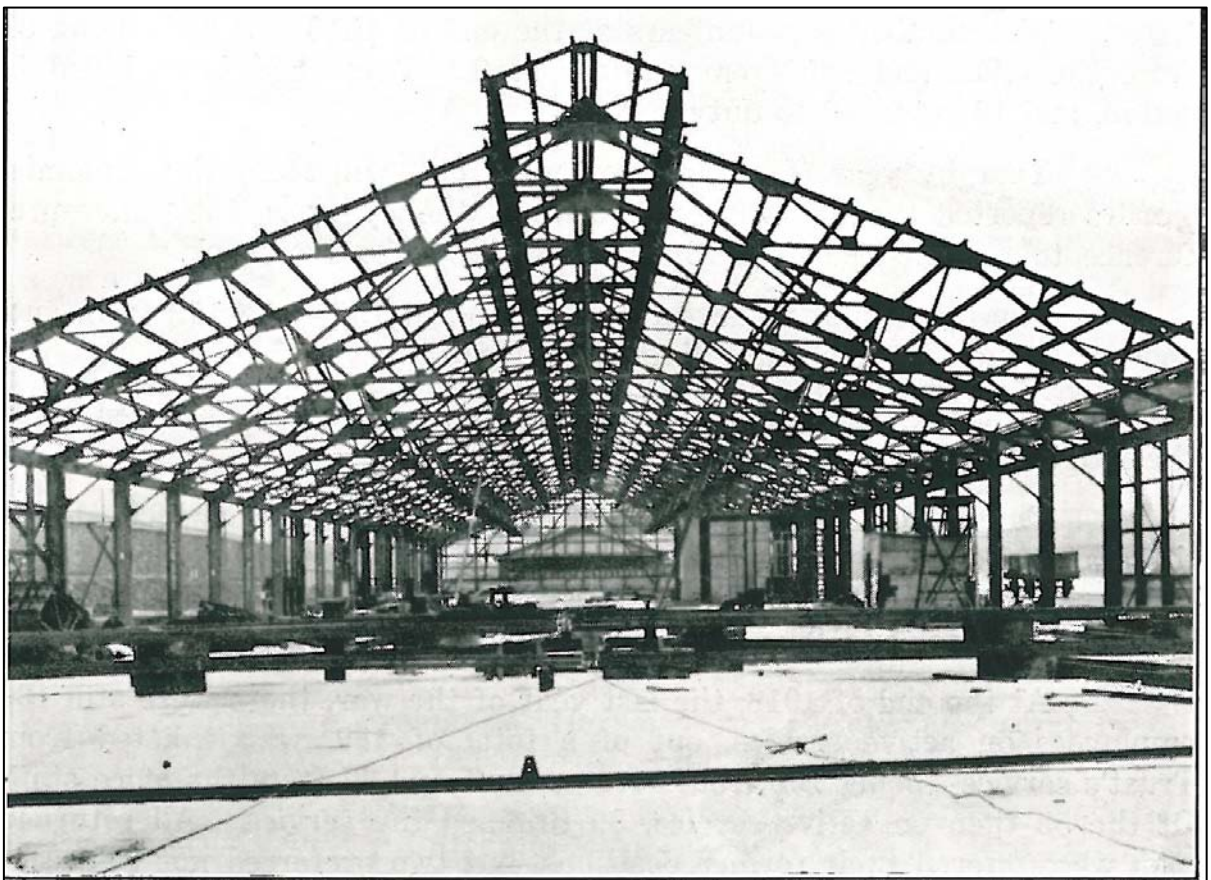


Figure 43 Shed at berths 19-21 under construction, c. 1926.

Source: Melbourne Harbor Trust Commissioners Jubilee Report 1927.



Figure 44 Berth 20 and 21 shed, showing the south elevation, from Victoria Harbour. The 1968 amenities block is visible at the left side. Note the altered pattern of openings and some of the impacts of deterioration and vandalism.



Figure 45 Berth 20 and 21 sheds, showing the rail tracks and wharf edge, looking west, 2004. The now demolished amenities bay to berth 20 shed is shown at right. Source: Lovell Chen



Figure 46 From left: Amenities bay constructed in 1968, to the west end of berth 21 shed; berth 20 shed, looking west. Note the deteriorated wharf structure and missing timber buffer rail at left.



Figure 47 From left; reclad east end of berth 20 shed, after the removal of the 1968 amenities bay; North elevation of berth 21 shed, looking east. The bluestone pitcher apron borders the former alignment of Pitt Street.



Figure 48 From left: interior of berth 21 shed, looking east and west. The two-level amenities addition is at centre. Note the rail track embedded into the shed flooring.



Figure 49 From left: south elevation, berth 21 shed showing wall framing and cladding, flanked by roller doors. Note the evidence of subsidence; interior of the berth 20 shed, looking east.

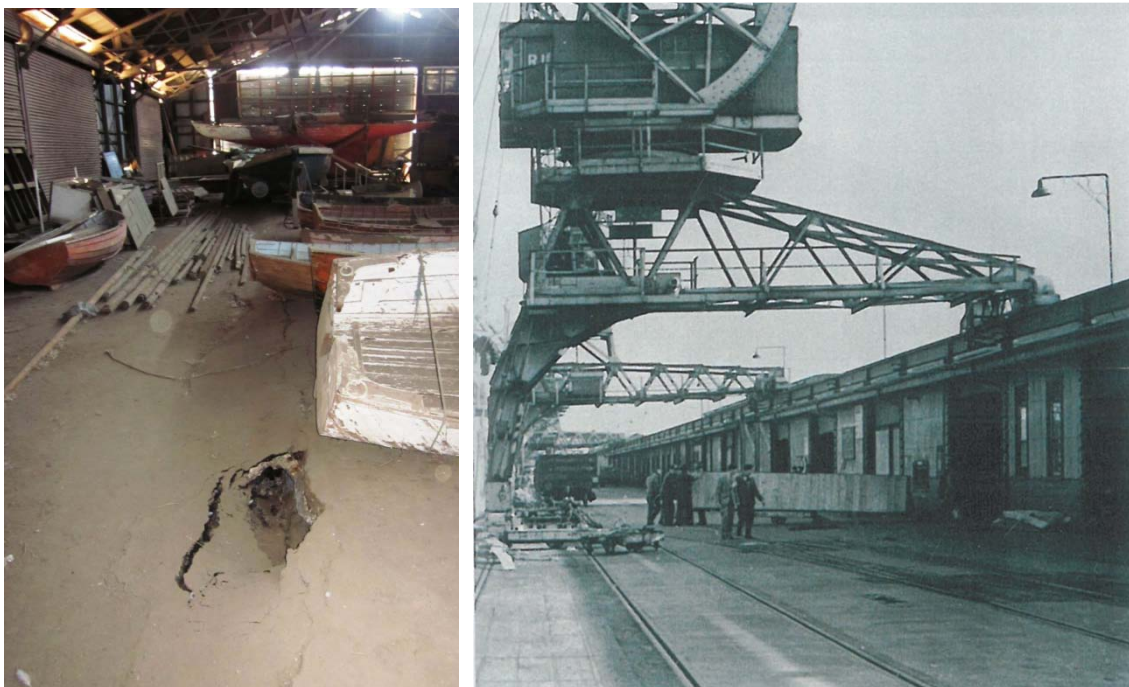


Figure 50 From left: slumped flooring to the north side of berth 20; historic view of the sheds to berths 20 and 21 showing original form of and rhythm of openings.

4.8 Harbour Esplanade structures

4.8.1 *Berths 8 and 15 Sheds (1913)*



Figure 51 Berth 8 shed, showing elevation to Harbour Esplanade, prior to removal in c.2000.

Source: Lovell Chen



Figure 52 Berth 15 shed, showing elevation to Victoria Harbour. Note the ramp – still extant today – in the distance at left, prior to removal in c.2000.

Source: Lovell Chen

Historical outline

Harbour Esplanade, formed from the dock roadway of Cowper Street and the former Footscray Road alignment, previously abutted berths 8 and 15, to either side of the Central Pier. Berths 8 and 15 sheds, originally constructed in 1913, were dismantled in 2000 and stored off site (note not all of the original materials/components survive). The wharf apron, although modified with sections lowered to a new dock level, is largely intact including the fenders to the former Cowper Street roadway – refer to Figure 34.

Description

Prior to their removal, it is understood that these two sheds were the most intact of the surviving sheds at Victoria Dock (Figure 51, Figure 52). As originally constructed, berth shed 8 was 183 metres long and 18 metres wide. It comprised an enclosed central section flanked by open-sided but roofed ends to the north and south. Berth shed 15 was of similar dimensions, and layout. The sheds were steel framed, with Fink trusses, roofs of corrugated iron, and a central clerestory. Sets of double painted timber ledged and braced sliding doors were set along all four elevations. The walls were formed of corrugated iron over a timber dado (Figure 53). When the shed ends were enclosed, a concrete dado rather than timber was constructed, but with a timber fender to the exterior. Smaller sets of timber sliding doors were installed to the previously open shed ends, thus making the original extent of the central (original) enclosed section readily discernible from the exterior. The sheds have been dismantled and stored in a fenced compound under cover at South Wharf. Elements such as the timber doors, iron columns, and walling are generally located together, awaiting reconstruction or integration with extant Victoria Harbour structures. The elements were inspected in late 2011.

Conclusion

Although dismantled and stored off site, berths 8 and 15 sheds have the potential for reconstruction and reinstatement at Victoria Dock, at least in part (this is addressed in Chapter 6, see Section 6.4.4). They are also the oldest of the sheds associated with the dock, and prior to their removal were the most intact of the surviving sheds at the dock.

Significance

Berths 8 and 15 sheds are of primary significance.



Figure 53 Interior views, berth shed 8, c. 2005.
Source: Lovell Chen

4.9 Central Pier structures

Historical outline

Central Pier was constructed in 1916-17 to increase the cargo handling capacity of the dock. Originally 497 metres long and 76 metres wide, Central Pier provided six berths of between 161 metres and 174 metres long, divided by the Central Pier roadway. In the WW2 period the pier was extensively rebuilt, due to the deterioration of the wharf timbers.⁸⁶ The two extant sheds to berths 9 and 14 were also rebuilt between 1946 and 1950.⁸⁷ In 2005, demolition of the deteriorating wharf structure to its west end, namely berths 10, 11 and 13, and the wharf structure beneath berth 13, took place. The roadway was also truncated, and now continues to the south, utilising part of the wharf apron where berth 10 and 11 sheds were previously sited, as a self and valet car parking area. Today the pier comprises berths 9 and 14, their corresponding cargo sheds and the central roadway.

4.9.1 *Berth 9 Shed (1916-17 rebuilt post-WW2)*



Figure 54 From left: north elevation, photographed in April 2004; north elevation today, viewed from the central roadway.

Source: Lovell Chen



Figure 55 North elevation from left: perforated screening and modern timber stairs providing secondary access to tenancies; north west corner showing relocated signage from berth 10 shed and retractable canopy to west end.



Figure 56 From left: west end of the berth 9 shed, photographed in 2004; and in 2012, showing adaptation and alterations including glazed walling associated with the Alumbra tenancy.
Source: Lovell Chen



Figure 57 From left: south elevation, berth 9 shed looking west, prior to the installation of the artwork panels; 2012, showing contemporary glazing and openings, infilling the original doorways. Note retained signage and artwork panels.



Figure 58 From left: Berth 9 shed, east end and part of north elevation, April 2004; and in 2012, showing the Woolshed Pub tenancy, facing to Harbour Esplanade.
Source: Lovell Chen

Historical outline

Berth 9 shed was originally constructed in 1916-17 and extensively rebuilt in the post WW2 period – between 1946 and 1950. Works apparently involved the raising the roofline by 1.3 metres, fitting new columns and the installation of pairs of 4.25 metre high doors to the north and south elevations.⁸⁸ In 2000 works were scoped to rebuild the shed to its pre-1946 form using components salvaged from other shed buildings, but these works did not eventuate. In the mid-2000s, a series of framed banners were installed to the shed exterior, commemorating key events and celebrating aspects of Docklands history. These were also associated with refurbishment works to the shed, undertaken ahead of an international boating event in 2006. These are still extant, along the south elevation of the shed. In 2007 the Atlantic Group, a catering, venue and event management company, extensively refitted the berth 9 and 14 sheds as restaurant, café and function venues. Atlantic Group offices are located in the berth 9 shed.

Description

Berth 9 shed is a steel portal-framed gable-roofed structure, and as reconstructed in the post-WW2 era, comprised twenty-five bays consisting of twelve pairs of painted ledged and braced timber sliding doors flanked by walling of cream brick to dado height and with the upper wall surface clad in painted corrugated iron. To the north (roadway elevation), the shed is set above the central roadway, and a timber buffer rail ran along the bottom of the building which sat upon timber piles and walers, with an in-situ concrete plinth to the east end. A band of fixed timber-framed highlight glazing extends along the north and south elevations, above the openings and atop the walling, lighting the interior of the shed.

At the east end, the brickwork rises to the roof line, enclosing the corners of the building and returning to the Cowper Street end wall. This section of the building comprised a bay of integrated amenities for dock workers as well as offices, set at mezzanine level with access provided from within the shed proper. The shed has a roof of crimped metal roofing (span deck); the gable ends are infilled with painted corrugated metal. To the eastern end of the north and south elevations, a painted three-dimensional metal numeral '9' is fixed to the brickwork.

The west end wall was originally of cream brick with corrugated metal almost to the full height apart from the highlight glazing which continued from the north and south elevations. The internal flooring was of reinforced concrete over timber decking.

Since 2006-7, a number of alterations have occurred through adaptation of the building as a commercially tenanted facility. While these have altered the fabric and footprint of the building, they are generally in the form of insertions and pop-outs which clearly read as new fabric or alterations to earlier fabric, and are characterised by a degree of reversibility. To the north elevation adjoining the roadway, a number of the original openings, previously infilled with paired painted timber sliding doors, have been infilled with steel-framed clear glazing and/or contemporary glazed doors. Shallow timber steps have been constructed to manage the change in levels between the roadway and the floor of the shed. A powder-coated steel perforated screen, set back from the structure and incorporating openable panels to permit egress, screens much of the lower portion of the north elevation, concealing service yards loading bays and the like (Figure 55). The west elevation has also been altered with panels of steel-framed glazing inserted into the steel-clad walling. The brick dado has been cut down and the glazing extends from the deck level to the band of fixed glazing running above.

An outdoor seating area enclosed by glazed half-height screening adjoins the west end of the building (Figure 56).

The south elevation similarly has had original door openings infilled with steel framed glazing and contemporary glazed doors to the café tenancies which open onto the wharf apron, now a public promenade (Figure 57). A projecting steel-framed glazed entry 'pod' extends out from the infilled opening to the Alumbra nightclub tenancy at the west end. A number of painted timber-framed panels celebrating aspects of Docklands history have been fixed to some of the walling between the openings to the south elevation.

The east end of berth 9 shed facing Harbour Esplanade has been opened out to both the ground and first floor levels to incorporate an extensive glazed outdoor dining area to the ground floor and a projecting balcony to the first floor level associated with the Woolshed Pub tenancy. The ground floor area is set on an elevated platform above the original dock height and is divided from the public domain by glazing and a row of timber planter boxes. The first floor glazing has been modified and adapted to provide access to the balcony. Both the ground floor outdoor dining area and the balcony return along the south elevation (Figure 58).

Internally the shed has been divided from north-to south into several discrete tenancies. From east to west these are: the Woolshed pub, the Altantic Group offices, the Va Bene pizzeria, vacant commercial premises in the process of being fitted out as a bakery at the time of inspection, and the Alumbra nightclub. Internally, the double height space, roof framing and the original concrete flooring are to varying degrees expressed within each of the tenancies (Figure 59). The flooring to the Alumbra nightclub has been modified by the insertion of an underlit glazed dance floor area.

Conclusion

While berth 9 shed has been adapted to commercial uses, the works associated with the adaptation have generally been carried out in a manner which enables them to clearly read as new fabric, and as insertions to or adaptations of original fabric. The works are also characterised by a degree of reversibility. Accepting this, the overall form of the shed remains evident, and it still reads as cargo shed.

Significance

Berth 9 shed is of contributory significance.



Figure 59 Berth 9 shed tenancies from left: Alumbra nightclub; Va Bene Pizzeria.

4.9.2 *Berth 14 Shed (1916-17 rebuilt post-WW2)*

Historical outline

Berth 14 shed was originally constructed in 1916-17 and extensively rebuilt in the post WW2 period – between 1946 and 1950. Works apparently involved the raising the roofline by 1.3 metres, fitting new columns and the installation of pairs of 4.25 metre high doors to the north and south elevations.⁸⁹ In the mid-2000s, a series of framed banners were installed to the shed exterior, commemorating key events and celebrating aspects of Docklands history. These were also associated with refurbishment works to the shed, undertaken ahead of an international boating event in 2006. These are still extant, along the north elevation of the shed. In 2007 the Atlantic Group, a catering, venue and event management company, extensively refitted berth 9 and 14 sheds as restaurant, café and function venues. Four function venues – from east to west these are Peninsula, Maia, Sumac and Sketch - have been installed within the former open cargo shed space.

Description

Berth 14 shed is a steel portal-framed gable-roofed structure, and as reconstructed in the post-WW2 era, comprised twenty-five bays consisting of twelve pairs of painted ledged and braced timber sliding doors flanked by walling of cream brick to dado height and with the upper wall surface clad in painted corrugated iron. To the south (roadway elevation), the shed is set above the central roadway, and a timber buffer rail ran along the bottom of the building which sat upon timber piles and walers, with an in-situ concrete plinth to the east end. A band of fixed timber-framed highlight glazing extends along the north and south elevations, above the openings and atop the walling, lighting the interior of the shed. The banded glazing here is of a greater width than that to Shed 9 – compare Figure 57 with Figure 60.

At the east end, the brickwork rose to the roof line, enclosing the corners of the building and returned to the Cowper Street end wall. This section of the building comprised a bay of integrated amenities for Port workers as well as offices, set at mezzanine level with access provided from within the shed proper. Berth 14 shed has a roof of crimped metal roofing (span deck). The gable ends are infilled with painted corrugated metal. To the eastern end of the north and south elevations, painted three-dimensional metal numerals '14' are fixed to the brickwork. The west end wall was originally of cream brick with corrugated metal above the brick dado almost to the full height apart from the highlight glazing which continued from the north and south elevations. The internal flooring was of reinforced concrete over timber decking. The metal crane rail to the north elevation is still in-situ, as is the corresponding metal rail inset into the north side wharf apron.

Since 2006-7, a number of alterations have occurred through adaptation of the building as a commercially tenanted facility. While these have altered the fabric and footprint of the building, they are generally in the form of insertions and pop-outs which clearly read as new fabric or alterations to earlier fabric, and are characterised by a degree of reversibility. To the south elevation adjoining the roadway, the original openings, previously infilled with paired painted timber sliding doors, have been infilled with steel-framed clear glazing and/or contemporary glazed doors. There is a cantilever verandah which runs along this elevation and portions of the undercroft have been enclosed by steel-framed glazed entrance lobbies to the function venues within. Similarly to berth 9 shed, plant, service areas and loading bays are part-concealed by powder-coated steel perforated screening. Similarly to berth 9 shed, the west elevation has also been altered with panels of steel-framed glazing inserted

into the former steel-clad walling. The brick dado has also been cut down and the glazing extends from the deck to the double-width band of fixed highlight glazing. Part of the in-situ concrete plinth and timber fender is visible at the south-west corner (Figure 60).

The north elevation has had the original door openings infilled with steel framed glazing illuminating the function venues behind. Pop out glazed entry pods to the four function venues border the public walkway along the waterfront (Figure 61). Some of the bays between the entry pods have been part enclosed by retractable plastic blinds, providing undercover smoking areas. A number of painted timber-framed panels celebrating aspects of Docklands history have been fixed to some of the walling between the modified openings to the north elevation. The crane rail is in-situ above the high-level timber-framed glazing. In contrast to the east end of berth 9 shed facing Harbour Esplanade, the brick end wall of berth 14 shed remains comparatively intact. The band of timber-framed glazing at first floor level has been infilled with painted metal louvers associated with air services to the building interior (Figure 61).

Internally the space has been divided from north-to south into four discrete function venues. Internally, the double height space, roof framing and the original concrete flooring are to varying degrees expressed within each. The largest space is the Peninsula, which can be divided by a movable wall. Within this space the original sliding timber doors to the openings in the north and south walls have been fixed to the internal face of these walls (Figure 62). There is a large commercial kitchen between the Peninsula and Maia venues, and there are mezzanine level amenities including toilets and 'green rooms' to Peninsula, Maia and Sumac (Figure 63).

Conclusion

As with berth 9 shed, shed 14 has also been adapted to commercial uses, and works associated with the adaptation have generally been carried out in a manner which enables them to clearly read as new fabric, and as insertions to or adaptations of original fabric. The works are also characterised by a degree of reversibility. Accepting this, the overall form of the shed remains evident, and it still reads as cargo shed.

Significance

Berth 14 shed is of contributory significance.



Figure 60 From left: north elevation, Berth 14 shed. Note the broad band of glazing above the infilled openings; west end showing modern glazing.



Figure 61 From left: modern glazed entry 'pod' along the north elevation, Berth 14 shed; east elevation – the glazing has been removed and infilled with venting.



Figure 62 Peninsula venue, looking north-east. The original sliding timber doors are fixed to the walls between the openings, at left.



Figure 63 From left: mezzanine level amenities, Peninsula; Sketch venue – the west end glazing is behind the curtaining.

4.10 South Arm structures

4.10.1 Lend Lease Display Suite (contemporary)



Figure 64 From left: view from the east along the wharf edge; view from the south-west from car parking area.

Description

The Lend Lease display suite is a two-level contemporary structure, with the lower level constructed of concrete blockwork with stone cladding. It is sited to the immediate west of the 'Convesso Concavo' development, presently under construction. The first floor level is steel-framed, incorporating lightweight cladding materials including opaque glazing, timber slats and clear glazing. It draws reference from the framing and bracing of nearby shed structures. A fixed sailcloth canopy provides shading to the outdoor deck which faces east, south and west. Originally constructed in c. 2000, it has been refitted to market the 'Convesso Concavo' development.

Conclusion and significance

The Lend Lease display facility is of little or no significance.

4.10.2 *Berths 3 and 4 Shed (1969)*



Figure 65 From left: berth 3 shed amenities bay which retains its original finishes; berth 4 shed amenities bay showing over-painting and alterations.



Figure 66 North elevation (at left) looking west. Note moorings at right.



Figure 67 Interior looking west showing steel portal framing.



Figure 68 From left: interior looking east. The office 'pod' is visible in the background to the left side of image; Open Channel offices, first floor.

Historical outline

In 1968 tenders were invited for the construction of two basic prefabricated steel sheds for the newly-reconstructed berths 1 and 2 (see below) berths 3 and 4. Concurrently steel-framed, brick clad two level amenities bays comprising facilities for dock workers on the ground floor, and offices on the first floor, were also under construction. Here however, the bays directly adjoined the shed, with a facility at each end, giving the enclosed prefabricated shed a more permanent appearance or presence than the structure to the berth 1 and 2 shed. Berths 3 and 4 shed and the amenities bays to the east and west ends were complete and operational by August 1969.⁹⁰

Description

Berths 3 and 4 shed is sited on the South Arm, and adjoins a two-level Lend Lease display suite, sited to its east. A Metropolitan Fire brigade facility is set between it and berths 1 and 2 shed, further west along the wharf. To the north is the wharf edge to Victoria Harbour, formed of concrete with four rail lines and shunting points embedded in its surface. There are a number of single boat moorings along the dock edge. To the south side, North Wharf Road borders the structure, and a timber construction barrier screens the adjoining former north wharf berths from view. At the east end, North Wharf Road becomes a divided roadway and traverses an at-grade gravel car parking area presently in use for construction vehicles.

Berths 3 and 4 shed is a prefabricated steel portal-framed structure, with the frame clad in corrugated metal sheeting. It has a shallow gabled roof profile, clad in corrugated metal. To both ends there are two-level brick and concrete amenities bays. To the berth 4 end this has been over-painted and modified, providing an entry in the east end to the Open Channel reception area. The first bay of the shed proper in the north elevation has also been modified and infilled with a double-height office suite, set behind a recessed glazed screen. There are additional entry doors and an outdoor seating area, all able to be secured by a retractable roller door (Figure 65). The amenities bay is of over-painted brick and pebbledash concrete.

A large painted moulded metal '4' is fixed to the east elevation at first floor level. The roof of the amenities bays has a flat profile, clad in span deck. To the berth 3 shed the amenities bay retains its unpainted brick and 'pebble dash' concrete finish. Its size and form is similar to that which adjoins berth 2 shed opposite. The shed structure has 'windows' of panels of laserlite set into the side walls and there are also laserlite skylighting inset into the roof (Figure 67). There are sliding corrugated steel panel doors to either side which are thought to be original to the date of construction. There is a fascia of 'span deck' to both the north and south elevations, set forward of the walling, and floodlights are spaced along its length.

Berth 4 shed amenities bay and the shed space proper is utilised by Open Channel; while the berth 3 shed amenities bay is occupied by boatschool.com.au, a licence training facility which utilises the office spaces only. The interior has a floor of painted concrete, and is unlined with the frame and roof trusses exposed and lined externally with metal cladding. The lightweight construction which is the office 'pod' to the north-east corner of the shed is visible within the shed space (Figure 68). The brick end wall of the amenities block, visible within the Open Channel tenancy retains its unpainted cream brick finish. An open tread concrete stair with a painted metal handrail provides access to the upper floor spaces from the shed floor. The shed is lit by suspended pendant form industrial luminaires.

The amenities block exhibits typical finishes of the late 1960s period which include vinyl flooring, lightweight plasterboard partitioning, over-painted brickwork, plasterboard ceilings with flush-mounted fluorescent luminaires and flush panel doors. Windows are a combination of metal-framed fixed glazing with regularly spaced double-hung sashes.

Conclusion

Berths 3 and 4 shed is a prefabricated shed structure, constructed in the later 1960s as part of the last phase of development at Victoria Dock, and in response to a shortage of shed accommodation at the wharves after reconstruction of the berths proper. Its planning and construction is that of a typical large span shed structure. The two-level amenities bays to

the east and west ends are indicative of the post-war period of dock development where there was a focus on improving amenities for dock workers. Berths 22 and 24 sheds (c. 1952-56) incorporated similar facilities to one end, although these are integrated brick and corrugated metal constructions. This post-war phase also saw the construction of two level amenities bays to the berth 19-21 sheds in 1968, and the renovation of Berth 9 and 14 sheds (c. 1938-54), incorporating similar facilities into the (east) Cowper Street ends.

Significance

As with berths 1 and 2 shed, with which it is contemporary, berths 3 and 4 shed is a typical utilitarian post-WWII prefabricated dock shed and amenities building. It is of little or no heritage significance.

4.10.3 Metropolitan Fire Brigade Facility (contemporary)

Description



Description

The MFB facility is a comparatively recent addition to the South Arm and appears to be temporarily housed, ahead of the construction of a permanent facility with a dedicated boat mooring for a fire brigade waterborne vehicle. This facility is set between the berths 1 and 2 and berths 3 and 4 sheds and comprises a portable site shed building set on the concrete wharf apron and enclosed by a high cyclone wire fence. The enclosure also includes two shipping containers. It adjoins a secured yard for MFB vehicles, fenced in late 2010, with gated access from the north, and which opens directly onto the wharf apron.

Conclusion and significance

The MFB facility is of little or no heritage significance.

4.10.4 Berths 1 and 2 shed (1969)

Historical outline

Berths 1 and 2, including the piling and wharf apron were reconstructed in concrete between 1961 and 1966, to facilitate container-offloading. This was rapidly superseded by the dedicated container dock at Swanson Dock in 1969, which became the busiest dock in the port.⁹¹ Subsequently, in response to concerns regarding a shortage of shed accommodation at the wharves, tenders were invited for the construction of two basic prefabricated steel sheds atop the newly-reconstructed berths. George Wimpey and Co were the successful tenderers for the two sheds, with dimensions of 155.4 metres in length (510') and 27.4 metres in width (90'). Sets of sliding doors to either side opened to a width of 9 metres (30'). The tender value was \$124,950.00. By December 1968 the construction works were well advanced. At this time a steel-framed, brick clad free-standing two level amenities block comprising facilities for dock workers on the ground floor and offices on the first floor reached lock-up stage – refer to Figure 69. The tender for these works was awarded to W J Cody & Quinn Pty Ltd. Initially this was set off the east end of the shed, but on completion, works were undertaken to infill the gap between the two structures with walling and roofing.⁹² The berths and amenities bays were complete and operational by August 1969.

Description

Berths 1 and 2 shed is sited at the west end of the South Arm, adjoining the Shipping Control Tower. To the north is the wharf edge to Victoria Harbour, formed of concrete with four rail lines and shunting points embedded in its surface. To the south side, North Wharf Road borders the structure, and a timber construction barrier screens the adjoining north wharf berths from view. The roadway terminates in an informal gravel parking area adjoining the control tower. A number of modern metal City of Melbourne benches and litter bins have been installed at intervals along the north elevation and sail-form sunshades extend out from the north elevation to the wharf edge at the western end of the shed.

Berths 1 and 2 shed is a prefabricated steel portal-framed structure, with the frame clad in crimped steel sheeting (span deck). The eastern section is clad in over-painted corrugated metal sheeting. It has a shallow gabled roof profile, clad in corrugated metal. To the east end there is a two-level brick and concrete amenities bay. To the exterior, this bay has over-painted brick piers alternating with metal-framed fixed and sash form windows with over-painted 'pebble-dash' concrete spandrel panels. To the east end wall two open tread concrete stairs with painted metal handrails provide external access to the first floor offices. In its size and overall form it is similar to the west end amenities bay to the berth 3 shed opposite. A large painted moulded metal 'Z' is fixed to both the north and south elevations at first floor level. The roof of the amenities bay is a flat profile, clad in span deck. A painted corrugated metal 'link' connects it to the main gable-roofed shed beyond. The shed has 'windows' of panels of laserlite set into the side walls and there are also laserlite skylighting inset into the roof. There are both retractable metal roller doors of varying heights to both the north and south elevations, as well as sliding corrugated steel panel doors which are thought to be original to the date of construction. There are also standard size door openings, fitted with flush panel doors, and a public toilet facility accessible from the north and the west elevations. This is thought to have been a former dock use facility, later adapted by the City of Melbourne for use by tenants and wharf visitors. These provide basic amenities including showers. There is a fascia of 'spandek' to both the north and south elevations, set forward of the walling, and floodlights are spaced along its length.

Berths 1 and 2 shed is utilised by a number of tenants who have formally divided by the space into two with a number of sub-tenants more informally dividing the western end of the structure. The east (berth 2) shed is occupied by the Alma Doepel Restoration tenancy and adjoins the Docklands Ocean Education Centre, who occupy the two-level former amenities component. The west (berth 1) shed is occupied by the Melbourne Dragon Boat, which adjoins the public toilets, the Docklands Yacht Club Inc., the Wooden Boat Centre, and a Places Victoria maintenance depot facility. These last tenancies are divided by painted timber 2.0 metre partitions.

The interior has a floor of concrete, painted to the Alma Doepel tenancy and unpainted to the other tenancies. The shed interior is unlined with the frame and roof trusses exposed and lined externally with metal cladding. The brick end wall of the amenities bay, visible within the Alma Doepel tenancy retains its unpainted cream brick finish. An open tread concrete stair with a painted metal handrail provides access to the upper floor spaces of the former amenities block from the shed floor. The shed is lit by suspended pendant form industrial luminaires.

Conclusion

Berths 1 and 2 shed is a prefabricated shed structure, constructed in the later 1960s as part of the last phase of development at Victoria Dock, and in response to a shortage of shed accommodation at the wharves after reconstruction of the berths proper. Its planning and construction is that of a typical large span shed structure. The two-level amenities bay to the eastern end is indicative of the post-war period of dock development where there was a focus on improving amenities for dock workers. Berth 22 and 24 sheds (c. 1952-56) incorporated similar facilities to one end, although these were integrated brick and corrugated metal constructions, rather than a free-standing building, as original conceived here. This post-war phase also saw the construction of two level amenities bays or annexes to the sheds to berths 16-21 in 1968/93, and the renovation of the berth 9 and 14 sheds (c. 1938-54), incorporating similar facilities into the (east) Cowper Street ends.

Significance

Berths 1 and 2 shed is a typical utilitarian post-WWII prefabricated dock shed and amenities building. It is of little or no heritage significance.



Figure 69 Former amenities bay, to the east end of berths 1 and 2 shed, looking west.



Figure 70 From left: brick amenities bay and 'link' connecting it to shed – at right; north elevation showing extent of berth 2 component of the shed (painted) occupied by Docklands Ocean Education Centre and the Alma Doepel restoration tenancy.



Figure 71 From left: west end of north elevation. The single doorways provide access to the public toilets; west end showing termination point of North Wharf Road at right. The Shipping Control Tower is partly visible at left.



Figure 72 From left: south elevation looking east along the North Wharf Road alignment; original sliding metal doors looking from the North Wharf Road side into the berth 2 Alma Doepel tenancy



Figure 73 From left: interior of the berth 2 shed showing Alma Doepel tenancy. The end wall of the amenities bay is at left; typical low-height partitioning to berth 1 shed tenancies.

4.10.5 *Shipping Control Tower (1966)*



Figure 74 The Shipping Control Tower, 1966.
Source: National Archives of Australia.



Figure 75 Inside the Operations Room, 1968.

Source: National Archives of Australia.

Historical outline

The Shipping Control Tower, which is believed to have been known originally as the Harbor Control Tower, is located at the far west end of the south arm of Victoria Dock, with a vehicular approach from North Wharf Road. Pedestrian access is along the dock edge in front of berths 1-4. The present tower was designed by C J Smith, and it replaced an octagonal two-level timber tower constructed in 1938.

It came into operation in April 1966.⁹⁴ Unusually it comprised two levels – services and amenities were located on the lower of the two levels, and there was an Operations Room, fully glazed to all four sides, with an external walkway which encircled the cabin on the upper level. Similarly to an air traffic control tower, the glazing to the cabin was angled to minimise glare. The facility also contained radar equipment, a VHF radio facility to communicate directly with ships, pilots and tugs, and a two-way radio facility to communicate with all Port Authority vehicles and floating plant and emergency services. It operated 24 hours a day.⁹⁵ While the control tower managed shipping movements in Victoria Dock, it also controlled shipping outside the dock, including on the Yarra River to the south, and the port area to the west of present day Bolte Bridge. Its construction came about as part of the shift downstream that occurred with increasing containerisation in the later post-WWII period.

The tower has been superseded by the Victoria Channel Authority control tower, sited further west of the Bolte Bridge. This new facility opened in 2000, and it is not known exactly when the subject building ceased operation. The structure has been vacant for some time and has been subject to the impacts of vandalism and bird infestation.

Description

The control tower is a reinforced concrete structure, with a two-level amenities and Operations Room facility supported by a concrete pylon which passes through the two levels and is capped by a communications mast and 'crows nest'. To the north face of the pylon facing the water, there was a cast metal Port of Melbourne insignia which has since been removed. A concrete stair with landings onto which the lift opens is set behind the pylon and enclosed to the south by a narrow-profile concrete pylon which supports the upper structure and also affords some weather protection. The tower has an applied textured or 'roughcast' cement render finish applied to the pylon and cabin structure. This is in fair condition, with areas of render loss. The base of the tower rises directly from an asphalt apron and there are mechanical services enclosures and a lift shaft access hatch. The base of the tower is presently screened by a security enclosure. The concrete stair has painted metal handrails and the lift is fitted with painted metal doors.

To the top landing, there is a vestibule with flush panel doors to either side of the lift landing which open into two partitioned spaces. These were an office and staff amenities. The spaces have been stripped out, with little evidence of their former use remaining. The windows have been boarded up to the interior, and there is evidence of vandalism (Figure 78). From this level, a ladder-form stair leads to the former Operations Room, which is similarly stripped out apart from some of the acoustic ceiling tiles. The original framing to the sloping windows is extant, and some of the tinted glazing is in-situ. Again, boarding to the interior face of the windows conceals the glazing from inside the cabin. A door in the north elevation opens onto the walkway which encircles the cabin. It has a painted metal handrail. Within the cabin a further access ladder leads to the mast and 'crows nest' (Figure 79). These were not inspected due to safety concerns.

The tower is set at the end of the South Arm, bordering an asphalted car parking area and a seating area clad in cement pavers. A metal handrail to the dock edge encloses this area.

Conclusion

The Shipping Control Tower is a prominent element at the west end of Victoria Dock, which terminates the South Arm of the harbour. While it is largely externally intact, little evidence remains of its interior fittings. Its historical association is also with the broader port area, and not exclusively with Victoria Dock.

Significance

The Shipping Control Tower is of contributory significance.



Figure 76 Control tower, 2006, with berths 1 and 2 adjoining at left, and Bolte Bridge at right.
Source: Lovell Chen



Figure 77 Control tower, from left: view from North Wharf Road showing security enclosure to base; external stair and intermediate lift landing.



Figure 78 From left; entry to the amenities and office level from landing; stair to Operations Room.



Figure 79 From left: the external walkway and angled windows; looking from the Operations Room to the walkway with stair to the mast atop the cabin.

