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Museum of Contemporary Art Redevelopment Project

Environmental Assessment

December 2008



Museum of Contemporary Art

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Redevelopment Project
Environmental Assessment

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Submission of Environmental Assessment

Prepared under the Environmental Planning and Assessment Act 1979, Section 75H

Environmental assessment prepared by:

Name	Monique Roser
Qualifications	Bachelor of Town Planning (Hons 1)
Address	GHD Pty Ltd 10 Bond Street Sydney NSW 2000

In respect of:

Project to which Part 3A applies

Applicant name	Museum of Contemporary Art
Applicant address	140 George Street, The Rocks
Land to be developed	140 George Street, The Rocks Lots 20, 21, 22 and 24 in DP 787906; part of Lot 1 in DP 1052780; part of Lot 25 in DP 773812; and part of the West Circular Quay public domain
Proposed development	Redevelopment and expansion of the Museum of Contemporary Art

Environmental assessment	An environmental assessment is attached
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Certificate

I certify that I have prepared the contents of this document and to the best of my knowledge:

- ▶ It is in accordance with the requirements of Part 3A;
- ▶ It contains all available information that is relevant to the environmental assessment of the development to which it relates; and
- ▶ The information contained in the document is neither false or misleading.

Signature

Name

Monique Roser

Date

4 December 2008



List of Abbreviations

AHD	Australian height datum
AS	Australian Standard
BCA	Building Code of Australia
CBD	Central Business District
CCTV	Closed circuit television
CPTED	Crime Prevention Through Environmental Design
DCP	Development Control Plan
DECC	Department of Environment and Climate Change
DGR	Director General Requirements
DoP	Department of Planning
DP	Deposited Plan
EMP	Environmental Management Plan
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)
ESD	Ecologically sustainable development
GBCA	Green Building Council of Australia
GFA	Gross Floor Area
GHD	GHD Pty Ltd
LEP	Local Environmental Plan
LGA	Local government area
m	Metre
m ²	Square metre
MCA	Museum of Contemporary Art
MSB	Maritime Services Board (former)
REP	Regional Environmental Plan
RL	Reduced level
RTA	Roads and Traffic Authority
SCRA Scheme	Sydney Cove Redevelopment Authority Scheme
SHFA	Sydney Harbour Foreshore Authority
VENM	Virgin excavated natural material



Executive Summary

Overview

The Museum of Contemporary Art (MCA) proposes to redevelop and expand the existing museum, located in The Rocks. The MCA redevelopment involves refurbishment to the existing building and an addition to the northern part of the building, and includes a new entrance, a National Centre for Creative Learning, gallery spaces and cultural uses associated with the museum such as Lecture Theatre, informal café and museum retail shop. The redevelopment would also address the non compliance of the current building in regard to access for all and public safety.

GHD Pty Ltd (GHD) has been engaged by the MCA to prepare documentation to support a project application for the proposed redevelopment of the MCA. The MCA is seeking project approval under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

Background

The MCA is Australia's only museum dedicated exclusively to exhibiting, interpreting and collecting contemporary art from across Australia and around the world. The MCA seeks to make contemporary art accessible and engaging for a broad spectrum of public audiences through stimulating exhibitions, education programs and special events.

The MCA needs to grow to meet the dramatic increase in its popularity and visitor demand. It is the intention of the MCA Board to take the next step towards making the MCA one of the world's great contemporary art museums.

The major issue facing the MCA is that the increase in popularity has exacerbated the physical problems of the building. The confusing circulation, lift only access to Level 4, the absence of passenger lift access to the Level 2 galleries and limitations in disability access and foyer spaces are major constraints. Other fundamental public services such as toilets, in particular disabled toilets, are also proving to be inadequate given the growth in visitor numbers. Recently the issue of access for people with disabilities has become more critical as the MCA has made particular efforts to extend its activities to this audience, for which it has been widely praised. However, the limitations of the current situation are far from adequate and any changes to such a high profile public building must address this issue to provide equitable and compliant access for all.

There is also a lack of basic museum facilities, such as a lecture theatre to accommodate the MCA's public programs and dedicated education spaces. Museum visitors are increasingly sophisticated and expect more information about what is on display. The MCA needs to be able to accommodate new techniques of interpretation, particularly using new technology.

To resolve these issues, the MCA Development Plan was prepared by Architect Marshall Pty Ltd in 2003, which provides a framework to improve the building. The recommendation of the MCA Development Plan, which was approved by both the Sydney Harbour Foreshore Authority (SHFA) and MCA Boards in 2003, was to establish an equitable entrance by building a link



between Circular Quay and George Street and providing new facilities for the Museum, over the car park between the MCA and The Rocks NSW Police building.

Site Location

The MCA occupies the former Maritimes Services Board building, which was opened in 1952. The site is located at 140 George Street in the historic Rocks area of Sydney, to the west of Circular Quay.

The Project Application relates to the following allotments:

- ▶ Lot 20 in Deposited Plan 787906 – existing MCA building;
- ▶ Lot 21 in Deposited Plan 787906 – strip of land to the east of the existing MCA building, which is currently part of the West Circular Quay public domain;
- ▶ Lot 22 in Deposited Plan 787906 – existing MCA car park and loading dock;
- ▶ Lot 24 in Deposited Plan 787906 – small triangular piece of land to the north-east of the existing car park and loading dock;
- ▶ Part of Lot 1 in Deposited Plan 1052780 – south of The Rocks NSW Police building, on which an existing annex to The Rocks NSW Police building, electricity chamber substation and café are located;
- ▶ Part of Lot 25 in Deposited Plan 773812 – part of George Street where Levels 3, 4 and 5 project; and
- ▶ Part of the Circular Quay West public domain.

The land is under the ownership of SHFA.

The Proposed Redevelopment

The MCA redevelopment aims to provide a facility that is functional, compliant and financially viable, while responding to its location and reflecting its use as a world class art gallery exhibiting the latest in contemporary art.

A six level addition is proposed to the north of the existing MCA building on the site where the MCA's open air car park and loading dock is currently located. Rooftop venues spaces are added to the top level of the existing building while its internal spaces are remodelled and the existing terraces on Level 1 are extended to accommodate the enhanced Level 1 restaurant.

The redevelopment provides clear entry from both George Street and Circular Quay to the main building foyer, creating a 'street' between George Street and the Circular Quay concourse and achieving a publicly accessible link between the two that also provides access for mobility-impaired persons. The new additions to the building provide a positive and strong architectural response to the existing building in this prominent site.

The redevelopment will link all floors of the new building to the existing building. It will include the refurbishment of some areas of the existing building to achieve a functional link and to enhance the existing facilities and bring them up to the appropriate standards.



The redevelopment will also provide for new facilities at the MCA, which will incorporate a reconfigured entrance and foyer, international standard gallery and exhibition space including an Outdoor Sculpture Terrace, an education centre (National Centre for Creative Learning), lecture theatre, informal café and function areas with associated back of house facilities, offices, loading and car park area.

In addition to the above works, the proposed redevelopment also involves works on Lot 1 in Deposited Plan 1052780, which contains The Rocks NSW Police Station building. The minor south wing to the building will be demolished as part of the redevelopment of the MCA, and a prisoner run and van dock provided to enable prisoner access to The Rocks NSW Police Station building along its east elevation. This work is part of the Memorandum of Understanding between SHFA, NSW Police and the MCA.

Environmental Assessment

The proposed redevelopment is a project to which Part 3A of the *Environmental Planning and Assessment Act 1979* applies, and the Minister for Planning is the approval authority. An Environmental Assessment (this document) is required to support the application for project approval.

The Environmental Assessment provides:

- A description of the proposed redevelopment;
- An assessment of the environmental impacts of the proposed redevelopment with particular focus on the key assessment requirements as specified in the Director-General's environmental assessment requirements; and
- A draft Statement of Commitments, outlining the proposed mitigation measures to be implemented to minimise any potential impacts of the proposed redevelopment.

A summary of the assessment of the key issues is provided below.

Environmental Planning Instruments

The proposed redevelopment is permissible with consent under the relevant environmental planning instruments. It is consistent with the Metropolitan Strategy and the Draft Sydney City Subregional Strategy.

The proposed redevelopment does not comply with the requirements of the Sydney Cove Redevelopment Authority (SCRA) Scheme. The SCRA Scheme provides a height restriction of Reduced Level (RL) 12 across the MCA site. Both the existing building and the proposed redevelopment exceed the SCRA Scheme height limit of RL 12. The existing building reaches a maximum height of RL 37.44 at the central parapet ridge. It is understood that the SCRA Scheme was based on an earlier intention to demolish the MCA building, which is no longer proposed. The height of the proposed function area roof ridge on Level 7 of the existing building is RL 32.877 and the maximum height of the proposed new building is RL 30.764. The proposed heights are consistent with the height of surrounding buildings and are lower than the highest point of the existing MCA building.



The SCRA Scheme also requires an east-west pedestrian route to be provided between the MCA and The Rocks NSW Police Station located to the north of the MCA. The proposed redevelopment provides for this principle to be adopted and an access route through this part of the site is contemplated internally to the proposed extension. However, this pedestrian access will only be available to the public during the opening hours of the MCA, which is currently 10am to 5pm, seven days per week. The MCA is considering extended opening hours for special events and at other times, subject to operational, security and commercial requirements.

An application to vary the SCRA Scheme to permit the proposed redevelopment is submitted with the project application.

Built Form and Urban Design

The MCA Development Plan prepared by Architect Marshall Pty Ltd in 2003 and approved by the MCA Board and SHFA, tested three possible models for the redevelopment and concluded that the only viable option is the proposed arrangement which utilises the existing site and respects the existing building fabric.

The MCA's brief is broadly divided into circulation, education, venues, back of house and gallery space. These are then subdivided into specific spaces and relationships. To maintain the existing building's block-like nature but in an open, less powerful contemporary expression, functional spaces have been articulated as block like forms with the resultant space between them being glazing for prospect, natural light and ventilation.

The height of the new works to the north of the existing MCA building respects and enhances the stepped form of the existing building, and helps to negotiate the difference in scale between the existing building and the surrounding buildings (in particular The Rocks NSW Police Station).

The new rooftop function areas on Level 7 complement the stepped form of the existing building, with the new walls setback in behind the existing parapet, and the roof reading as a 'floating plane'. The extent of the new roof is symmetrical about the central vertical core to respect the existing building's severe symmetry.

The existing MCA building reads as a building "in the round", and unlike the nearby buildings on the western side of George Street does not contribute to a wall of buildings forming a street edge. The proposed redevelopment recognises and plays on this fact by manipulating building setbacks to enliven the building's exterior and draw attention to the entrances, while at the same time respecting the surrounding urban context. The massing of the new building contributes to the external legibility of its internal activities.

A Design Advisory Panel (DAP) was established in 2007 following MCA Board appointment of the Architect to consider the development of the design in regard to design excellence. The DAP consisted of architects Alec Tzannes, Professor Tom Heneghan, Ken Maher and artist Mikala Dwyer. The DAP process greatly assisted the development of the proposed design. The scheme presented in this application reflects the input of the panel and the resulting development in the design of the architectural language, scale and relationship to the existing building, entrance and alignment, selection of materials, context and relationship to the urban setting and key views.



Public Domain and Landscaping

It is understood that SHFA is planning to initiate the Circular Quay Public Domain Revitalisation project which will encompass West Circular Quay and the MCA Redevelopment project. The MCA will be a key player in this revitalisation project and has joined an informal working group with SHFA to ensure that there is an integrated approach and vision for the landscaping of West Circular Quay to which the redevelopment of the MCA relates. The present proposed landscaping fits in with the envisaged SHFA revitalisation plan.

In the meantime, the physical scope of the landscape component of this Project Application is limited to new terraces to the east of the existing and new buildings and grassed ramps up to such terraces, with hard paving and public seating in front of the new public Circular Quay entrance.

The terrace and bank are paved where major pedestrian movements are anticipated, in particular outside the main public entry, and grassed where passive enjoyment is expected. The gently sloping grassed ramp along with the paved terraces and ramps gives the MCA building a base and front door mat. The grassed area provides a usable surface to relax on and view the promenade and Circular Quay.

The proposed MCA development will contribute to the pleasant environment which currently exists within this area of Circular Quay. Pedestrian movement is constant in the area and this is facilitated through numerous physical and symbolic barriers and facilities including grassed and paved areas. The proposal will contribute to the existing public space, making people feel comfortable and safe. The continuation of this maintained public space will decrease the possibility of crime within this area.

The design of the proposed development is such that it will maintain sightlines to key places and between public and private spaces. Sightlines between public and private spaces will be developed and maintained to avoid blind spots where there is a reduced opportunity to see and be seen. The sightline to the southern portion of the site from George Street and Circular Quay will be maintained by not developing in the area of the sightline. Landscaping in this area will also comprise paved and grassed areas.

External security lighting will be provided to the new building. Motion detectors will trigger local external lights in the spaces between the old and new buildings as a deterrent to acts of crime in these locations.

Traffic and Transport

Access to the site for both loading and parking purposes is currently conducted informally. To improve vehicular access to the MCA, a widened driveway is proposed to be provided from Argyle Street, generally in the location of the existing driveway. This driveway would be widened to the east to better provide for larger service entry and exit. This western driveway will provide access for small rigid trucks which are expected to make the majority of deliveries. A second driveway will be provided near the eastern end of the site and utilised on a limited basis by larger trucks. This will mainly be during periods of exhibition change-overs and vehicles will be required to reverse into the driveway and exit in a forward direction.



The existing access arrangements for bump ins through the southern doors of the Foundation Hall located on the northern edge of First Fleet Park will continue. SHFA and the MCA have agreed to develop an operational plan to manage this.

Pedestrian access and connections to and through the museum will be greatly improved by creating the 'street' linking George Street and Circular Quay at the northern end of the building. Access to the museum its foyer and reception area will be through both frontages and contribute to improved pedestrian connectivity.

The MCA's current on-site car parking provision is approximately fifteen spaces. Under the redevelopment this number will reduce to four formalised parking spaces, along with motorcycle parking and bicycle racks for tenants and staff use. They will provide flexible parking area for visiting VIPs, guests and, to a limited extent, a small number of museum staff. The spaces will be managed by the museum so that appropriate staff will know who is parked in the loading dock at any time. Spaces will not be available for parking by the general public visiting the museum.

In terms of traffic generation, as the parking provisions are not proposed to increase, the museum is likely to generate a similar volume of traffic as currently experienced. Traffic generation of the museum would not have a significant effect on the operation of the surrounding road network and George Street/Argyle Street intersection would continue to operate at its existing good level of service. The road network will be able to cater for the traffic from the proposed redevelopment.

Construction Impact

The current program for procurement and construction anticipates completion of construction documentation and a tendering process to appoint a Contractor in early 2010. Construction works are programmed to run from early 2010 to mid 2011 incorporating both the new building work and refurbishment to the existing MCA building.

The proposed redevelopment is expected to be constructed in one stage. More detailed staging plans for construction of the various elements of the redevelopment would be developed when the construction contractor has been appointed.

Appropriate construction management measures will be implemented, including the following:

- ▶ Provision of a secure site compound for construction activities;
- ▶ Provision of full height temporary hoardings with covered pedestrian walkways on George Street and Argyle Street to maintain pedestrian access at all times;
- ▶ Implementation of appropriate construction traffic management;
- ▶ Implementation of appropriate environmental controls, particularly relating to dust, sediment and noise control.

Ecologically Sustainable Development

The development will incorporate Ecologically Sustainable Development (ESD) principles in the design, construction and ongoing operation phases of the development.



In the development of the ESD brief for this project the design team has used the Green Building Council of Australia (GBCA), Green Star Education tool as a guide to provide a framework from which ESD initiatives can be reviewed and adopted for the project. This ensures the ESD principles are sound and based on an industry standard that encompasses sustainability items across a broad range of disciplines.

One of the key ESD initiatives for the redevelopment is the adoption of a seawater heat exchange system for the building. This system uses seawater for cooling in the air conditioning system. It is a tried and proven technology, removing the need for cooling towers and air-cooled condensers, providing a clean roof form.

In addition to implementing a range of initiatives in design and construction, the MCA and where appropriate, the design team, are working to develop an environmental policy not only for the project but also general MCA operations, including establishing an environmental management system to implement it.

Heritage

The new building is subservient in height, scale and colour to the orange/gold sandstone heritage landmark that is the existing MCA building. Its scale and block massing also relates to that of the adjoining The Rocks NSW Police Station at 132 George Street.

The proposed design allows one to read the existing MCA building as an 'in the round' design while providing a new building which is convenient to its north elevation, yet separated from it and linked to it by an open space with a glazed link including a 'bridge' and stair. The link space is relatively tight due to proximity of The Rocks NSW Police Station. In essence, the extended MCA will read as an historic building with a new wing of contemporary and acceptable character.

The site contains the archaeological remains of two docks with historic plans indicating another one to the southern end of the site. The proposed piling and footings for the new building have been located adjacent to the dock walls. The piling and footings will impact on the work areas around the docks and will introduce structural elements inside the docks. The size of the impacts will be minimised and the areas to be impacted will be recorded beforehand, meaning that the loss of archaeological fabric and knowledge will be minimised. The proposed redevelopment also provides an opportunity to interpret the site and its archaeological remains. In this regards, the redevelopment will contain an interpretation zone which will incorporate an artistic project/s for the interpretation of the site, and the development and history of the place.

Drainage and flooding

Drainage and flooding has been assessed as part of the environmental assessment. The site is not subject to flooding. Stormwater drainage is to be discharged using the existing west Circular Quay drainage system and the MCA redevelopment will implement measures to implement water reuse, sedimentation and erosion control and a stormwater pump-out system.

Contamination

A preliminary site screening and waste classification assessment was undertaken at the site for the proposed redevelopment. The subsurface conditions encountered at the site generally



consist of concrete pavement underlain by fill material. The investigation shows elevated levels of contaminants in fill soil samples. It is expected that the source of the contamination is most likely the ash and slag containing fill used to backfill the site, noting that this is frequently associated with this type of fill material that is commonly encountered in the central and inner suburbs of Sydney.

It is proposed to re-level and cap the site as required, minimising the extent of excavation. The proposed capping will provide an effective barrier between the contamination and the site occupants, thereby rendering the site suitable for the proposed use in accordance with *State Environmental Planning Policy No. 55 – Remediation of Land*.

Utilities

With the redevelopment of the MCA, the existing substation will be retained in its current location, and have appropriate access provided. Negotiation on the details of the substation are ongoing with Energy Australia, the design team and the MCA.

Telephone, water and sewer services will remain as existing and will not be affected by the MCA redevelopment works

Draft Statement of Commitments

The environmental assessment provides the MCA's commitments for environmental mitigation, management and monitoring. The draft Statement of Commitments includes recommended mitigation measures to reduce and avoid identified impacts. The Statement of Commitments will be finalised following exhibition of the Environmental Assessment.

Conclusion

The proposed redevelopment of the MCA will deliver a high quality development, which will significantly improve the functionality of the museum and its associated facilities, and achieve the key stated objectives:

- ▶ Equity of access;
- ▶ Coherent circulation throughout the building;
- ▶ Dedicated education spaces;
- ▶ Flexible gallery spaces;
- ▶ Improved revenue optimisation; and
- ▶ A contemporary signifier.

No significant adverse effects have been identified within this Environmental Assessment or the specialist studies that accompany it. It is therefore recommended that the proposed redevelopment receive approval, subject to any appropriate conditions and the draft Statement of Commitments.



1. Introduction

1.1 Overview

The Museum of Contemporary Art (MCA) proposes to redevelop and expand the museum, located in The Rocks.

The MCA redevelopment involves refurbishment to the existing building and an addition to the northern part of the building, and includes a new entrance, a National Centre for Creative Learning, gallery spaces and cultural uses associated with the museum such as Lecture Theatre, informal café and museum retail shop. The redevelopment would also address the non compliance of the current building in regard to access for all and public safety.

The key objectives for the redevelopment of the MCA are:

- ▶ Equity of access;
- ▶ Coherent circulation throughout the building;
- ▶ Dedicated education spaces;
- ▶ Flexible gallery spaces;
- ▶ Improved revenue optimisation; and
- ▶ A contemporary signifier.

GHD Pty Ltd (GHD) has been engaged by the MCA to prepare documentation to support a project application for the proposed redevelopment of the MCA. The MCA is seeking project approval under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.2 Background to the MCA

The MCA is Australia's only museum dedicated exclusively to exhibiting, interpreting and collecting contemporary art from across Australia and around the world. The MCA seeks to make contemporary art accessible and engaging for a broad spectrum of public audiences through stimulating exhibitions, education programs and special events.

The objectives of the MCA are:

- ▶ To engage people with contemporary art and contemporary ideas;
- ▶ To support and promote the work of Australian artists within an international context;
- ▶ To be a meeting place for artists;
- ▶ To be welcoming and inclusive to all sectors of the community;
- ▶ To educate a new generation about art; and
- ▶ To be locally loved, nationally recognised and internationally respected

The Museum of Contemporary Art was established through the founding bequest of Australian expatriate artist John Power (1881-1943) to the University of Sydney. The building, the former Maritime Services Board Building, was gifted by the NSW State Government. The restoration and refurbishment of the building commenced in 1990 under the direction of Andrew Andersons



of Peddle Thorp & Walker/John Holland Interiors. In November 1991 the Museum of Contemporary Art officially opened to the public.

The MCA's contemporary collection of Australian and international art, dating from the late 1960s, includes extensive collections of indigenous art from Arnhem Land from the 1960s to the present (incorporating the Arnott's collection and large collections from Rammingining and Maningrida), the Contemporary Art Archive comprising collections of material contextualising the work of major Australian artists, the Loti and Victor Smorgon Collection of Contemporary Australian Art (paintings from the 1980s), a collection of international art multiples, as well as numerous individual works by major international and Australian artists. The MCA continues to manage the Power Collection on behalf of the University of Sydney. The collection has around 7,000 artworks.

The University of Sydney's annual funding came to an end in 1999, leading to a period of financial instability, falling attendances and negative press coverage. In 2000, a number of steps were taken to address these issues, not least the inherent financial instability in trying to operate without public sector support. Telstra's support to underwrite free access was instrumental in an immediate increase of 68% in attendances in the first year.

The City of Sydney considered options for re-developing the building to encompass a cinema centre and income generating offices, but these ambitious plans, which proposed fundamental alterations to the building, were met with criticism in the press and public disapproval.

The NSW Government agreed in 2001 to make an ongoing financial contribution to the MCA's core operations. This decision marked a turning point in the history of the MCA, transforming it into a strong business that successfully combines popular exhibition and education programs with sustainable commercial activity. The MCA receives ongoing funding and support from the NSW State Government through the NSW Ministry for Arts and the Commonwealth Government through the Australia Council.

Since the State Government commitment in 2001 and the introduction of free admission the MCA has gone from strength to strength. Attendances have continue to increase from a low of 98,000 in 1999 to over 420,000 in 2007 with figures for 2008 showing a predicted audience of over 500,000 (figures as at 31 October 2008 show MCA visitor attendance at 461,594).

The MCA is now a major attraction in the Rocks area and an ambitious exhibition program of Australian and international artists have attracted critical acclaim both locally and internationally. A comprehensive touring program further supplements this national and international position with over seven touring exhibitions in 2007 alone.

This growth is also reflected in the MCA Public Programs and Education programs with record figures in 2007 and 2008 both in schools visits and event attendees.

1.3 Background to the Proposed Redevelopment

The MCA needs to grow to meet the dramatic increase in its popularity and visitor demand. It is the intention of the MCA Board to take the next step towards making the MCA one of the world's great contemporary art museums.

The major issue facing the MCA is that the increase in popularity has exacerbated the physical problems of the building. The confusing circulation, lift only access to Level 4, the absence of



passenger lift access to the Level 2 galleries and limitations in disability access and foyer spaces are major constraints. Other fundamental public services such as toilets, in particular disabled toilets, are also proving to be inadequate given the growth in visitor numbers. Recently the issue of access for people with disabilities has become more critical as the MCA has made particular efforts to extend its activities to this audience, for which it has been widely praised. However, the current situation is far from adequate and any changes to such a high profile public building must address this issue.

There is also a lack of basic museum facilities, such as a lecture theatre to accommodate the MCA's public programs and dedicated education spaces. Museum visitors are increasingly sophisticated and expect more information about what is on display. The MCA needs to be able to accommodate new techniques of interpretation, particularly using new technology.

The Museum also needs to be able to find other ways to increase its income to keep pace with the rising costs of exhibitions and to develop the full potential of the education and outreach programs.

To resolve these issues, the MCA Development Plan was prepared by Architect Marshall Pty Ltd in 2003, which provides a framework to improve the building. The recommendation of the MCA Development Plan, which was approved by both the Sydney Harbour Foreshore Authority (SHFA) and MCA Boards in 2003, was to establish an equitable entrance by building a link between Circular Quay and George Street and providing new facilities for the Museum, over the car park between the MCA and The Rocks NSW Police buildings.

In 2004 part of the recommendation in the Development Plan was undertaken in the form of internal works to the existing MCA building.

The current proposal for redevelopment of the MCA will provide:

- A new circulation system providing, among other things, full access to people with disabilities for the first time and coherent wayfinding;
- Access from George Street to Circular Quay and a more active presence on the Quay side;
- Dedicated educational facilities, the National Centre for Creative Learning, for schools and colleges, the acclaimed Bella program for young people with special needs and for new programs designed to encourage creativity in everyone;
- Dedicated galleries for the MCA collection, including some of the most significant collections of Aboriginal and Torres Strait Islander Art;
- 120-seat lecture theatre;
- New gallery spaces;
- New venue hire facilities, a larger museum shop and a new informal café for increased revenue generation;
- New environmental standards;
- Compliance with current codes and regulations; and
- Renovation of the existing building.

Both the proposed refurbishment works to the existing building and the proposed new works will be a contemporary and important addition to the MCA. Through the building design and



materials, combined with provision of international standard building technology, the redevelopment will reflect the MCA's purpose as a world class art gallery exhibiting the latest in contemporary art from Australia and internationally.

1.4 The Proponent

The MCA is a non-profit company under the direct control of the MCA Board. The MCA through its project manager, Root Projects Australia Pty Ltd, has engaged GHD Pty Ltd to prepare documentation to support a project application for the proposed MCA redevelopment works.

1.5 Guide to the Approval Requirements and Environmental Assessment

1.5.1 Summary of Approval Requirements

The MCA redevelopment is a project to which Part 3A of the EP&A Act applies. The proposed redevelopment is consistent with the classification of development that has a capital investment value of more than \$5 million on specified land, as identified in Schedule 2 Clause 10 of *State Environmental Planning Policy (Major Projects) 2005*.

The Minister for Planning is the approval authority for the MCA redevelopment, and an Environmental Assessment (this document) is required to support the application for project approval in accordance with the requirements of the EP&A Act.

Further information on the assessment requirements for the proposed redevelopment is provided in Section 4.8.

1.5.2 Purpose and Scope of the Environmental Assessment

The Environmental Assessment supports an application for project approval for the MCA redevelopment from the Minister for Planning under Part 3A of the EP&A Act. It has been prepared in accordance with the EP&A Act and addresses the Director-General's requirements for the proposed redevelopment. The Environmental Assessment provides:

- » Background information, including information on the development of the MCA redevelopment, need and objectives;
- » A description of the MCA redevelopment and proposed management arrangements;
- » An assessment of the potential environmental impacts of the proposed redevelopment; and
- » The proponent's commitments to minimise and manage potential environmental impacts.

1.5.3 Contents of the Environmental Assessment

The Environmental Assessment comprises two volumes.

Volume 1 contains the main Environmental Assessment, which is structured as follows:

- » Section 1: Introduction
- » Section 2: Location and existing environment
- » Section 3: Description of the MCA redevelopment



- » Section 4: Statutory planning framework
- » Section 5: Consultation undertaken for the project
- » Section 6: Assessment of key issues
- » Section 7: Draft Statement of Commitments
- » Section 8: Conclusion
- » Section 9: References

Appendix A (in Volume 1) contains architectural and other associated plans illustrating the proposed redevelopment work.

Volume 2 contains the remainder of the appendices. Appendix B contains the Director-General's requirements and associated correspondence with statutory authorities. Appendices C to P contain specialist studies that have been prepared to support the Project Application:

- » Application for the variation to the Sydney Cove Redevelopment Authority Scheme, prepared by GHD Pty Ltd;
- » Arborist Report, prepared by Australis Tree Management;
- » Built Form and Urban Design Statement, prepared by Architect Marshall Pty Ltd;
- » Crime Prevention Through Environmental Design Assessment, prepared by GHD Pty Ltd;
- » Accessibility Review, prepared by Morris-Goding Accessibility Consulting;
- » Traffic Impact Study, prepared by Colston Budd Hunt and Kafes Pty Ltd;
- » Construction Impact Report, prepared by Root Project Australia Pty Ltd;
- » ESD Report, prepared by Steensen Varming (Australia) Pty Ltd;
- » Heritage Impacts Statement, prepared by Tanner Architects;
- » Heritage Impact Statement (Archaeology), prepared by Casey and Lowe Pty Ltd;
- » Statement on Provision of Site Stormwater Drainage, prepared by Warren Smith and Partners;
- » Preliminary Environmental Site Screening and Waste Classification Assessment, prepared by Environmental Investigation Services;
- » Substation Report, prepared by Haron Robson Pty Ltd; and
- » BCA Compliance Overview Report, prepared by BCA Logic Pty Ltd.



2. Location and Existing Environment

2.1 Context and Positioning

The MCA occupies the former Maritimes Services Board building, which was opened in 1952. The site is located at 140 George Street in the historic Rocks area of Sydney, to the west of Circular Quay (refer to Figure 2.1).

The MCA site is bounded by Circular Quay West, George Street, Argyle Street and First Fleet Park excluding the site of the existing The Rocks NSW Police building on the corner of Argyle and George Street. The Overseas Passenger Terminal is located to the north-east of the existing MCA building, with the West Circular Quay public domain and First Fleet Park to the east and south, and the Circular Quay Ferry Terminal further to the south-east. The Sydney Opera House is located to the north-east of Circular Quay.

The traditional owners of the land and water are the Gadigal people of the Eora nation. The area is known as Tallah-wola-dah. The Rocks and the land to the south of Circular Quay is the site of Australia's first European settlement in 1788 from which point the area developed and underwent significant change, taking it from a convict town to a burgeoning port town by the mid 1880s.

2.2 Legal Description

The Project Application relates to the following allotments, as shown in Figure 2.2:

- ▶ Lot 20 in Deposited Plan 787906 – existing MCA building;
- ▶ Lot 21 in Deposited Plan 787906 – strip of land to the east of the existing MCA building, which is currently part of the West Circular Quay public domain;
- ▶ Lot 22 in Deposited Plan 787906 – existing MCA car park and loading dock;
- ▶ Lot 24 in Deposited Plan 787906 – small triangular piece of land to the north-east of the existing car park and loading dock;
- ▶ Part of Lot 1 in Deposited Plan 1052780 – south of The Rocks NSW Police building, on which an existing annex to The Rocks NSW Police building, electricity chamber substation and café are located;
- ▶ Part of Lot 25 in Deposited Plan 773812 – part of George Street where Levels 3, 4 and 5 project; and
- ▶ Part of the Circular Quay West public domain.

The land is under the ownership of the Sydney Harbour Foreshore Authority (SHFA).



Figure 2.1 Aerial Photograph of the MCA Precinct

Source: NSW Department of Lands

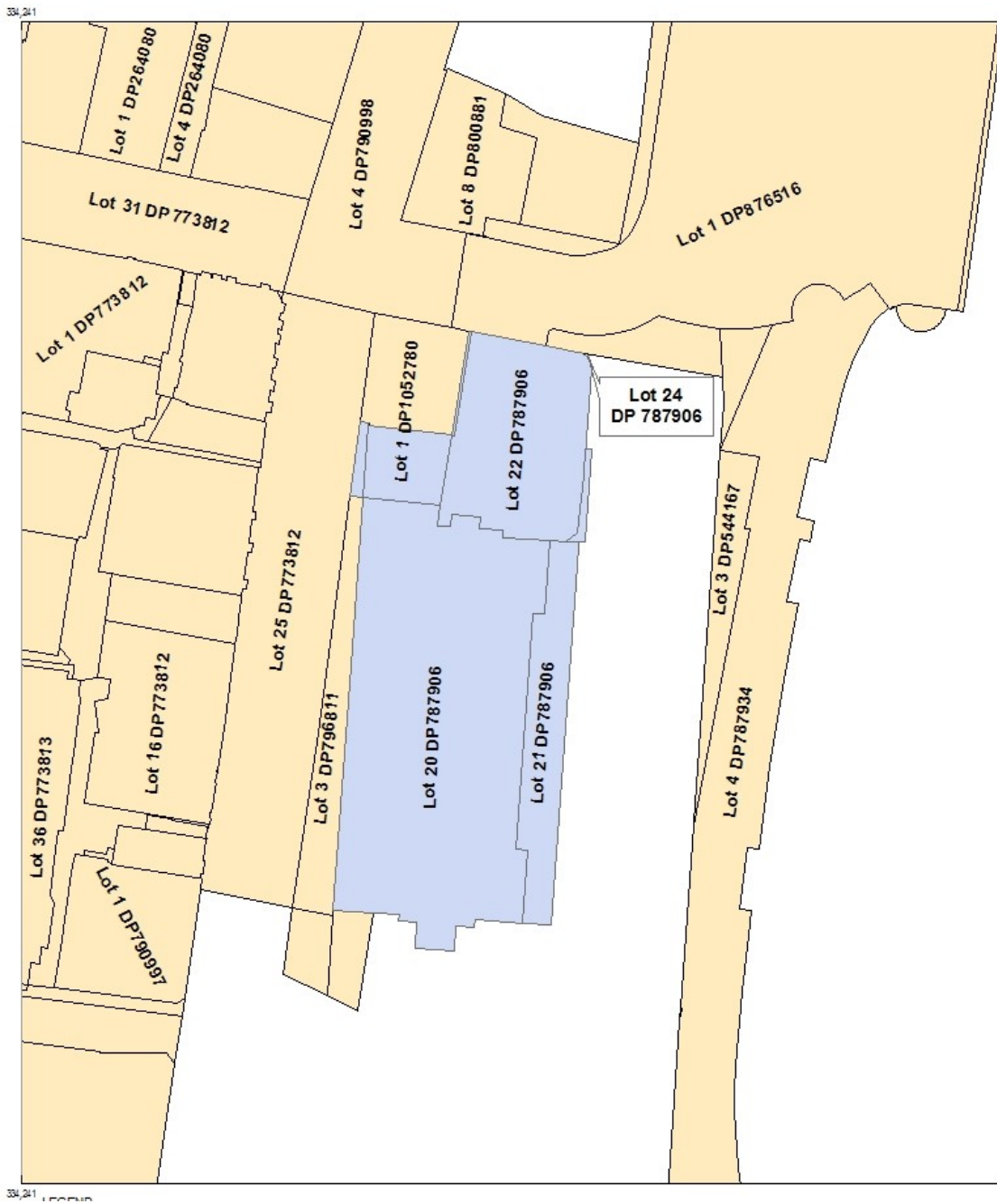


Figure 2.2 Cadastral Plan and Existing Land Titles

Source: NSW Department of Lands



2.3 Existing Environment

2.3.1 Built Form

The majority of the southern portion of the site is covered by the existing MCA building. The northern portion of the site, at the rear of The Rocks NSW Police Station and across from Argyle Street is an open air car park used for loading and off-loading of exhibition, venue and tenant requirements and a limited amount of vehicle parking.

The existing MCA building is a nine-storey building constructed of steel framing, with external brick walls clad in sandstone. The existing interior layout features gallery space, a retail shop, cafe and function space (Foundation Hall) at Level 1 (ground); five (5) retail spaces and gallery space at Level 2; gallery space (including workshop and storage areas) at Levels 3 and 4; office accommodation at Level 5; function space at Level 6; with additional office accommodation at Level 7. Levels 8 and 9 accommodate plant rooms and plant area servicing the building.

The building has a street frontage to George Street (western boundary), and fronts Circular Quay to the east. To the north of the MCA is The Rocks NSW Police Station building, electricity chamber substation outdoor café tenancy and car park, while First Fleet Park and the Cahill Expressway and railway line (above) are located to the south of the site.

2.3.2 Transport and Accessibility

The MCA is located in a well serviced part of the city and has access to several public transport options, is within walking distance from Circular Quay ferry and train terminals as well as Wynyard Station bus and rail interchange.

Pedestrian access to the Museum is from George Street and Circular Quay.

The MCA accesses its vehicular parking and loading via Argyle Street. In the case of large installations in the Foundation Hall, vehicular access is gained via First Fleet Park.

2.3.3 Heritage

The existing MCA building is not listed on any statutory heritage register, however previous studies have identified as being significant from a national, state and local level. The building is a draft item in the Sydney Harbour Foreshore Authority Section 170 Register.

The statement of cultural significance for the MCA, from the draft listing in the Sydney Harbour Foreshore Authority Section 170 Register, follows:

“The Museum of Contemporary Art building and site are of State heritage significance for their historical, aesthetic and scientific cultural values. The site and building are also of State heritage significance for their contribution to The Rocks area which is of State Heritage significance in its own right.”

The car park site that is the subject of this application contains archaeological remains relating to the former Naval Dockyard constructed between 1796 and 1800.

The Rocks NSW Police Station, which adjoins the MCA building to the north at 132 George Street, is included on the Sydney Harbour Foreshore Authority Section 170 Register.



2.3.4 Landform and Topography

The land in the area of the MCA falls to the east towards Circular Quay Harbour with slopes of approximately 5 degrees. The site topography is relatively flat with minor slopes of approximately 1 to 2 degrees falling towards Circular Quay (EIS, 2008).

2.3.5 Geology, Soils and Groundwater

The site is underlain by Hawkesbury Sandstone of the Wianamatta Group, which consists of medium to coarse grained quartz sandstone, with very minor shale and laminate (EIS, 2008).

The only unbuilt area is to the north of the MCA building and is under utilised as it is currently occupied by the MCA's open air car park and loading area, which is paved with asphaltic concrete. A Site Screening study has been undertaken by Environmental Investigation Services (2008) for the study site through obtaining soil samples obtained from test pits at various depths. These soil samples identified the subsurface conditions to consist of concrete pavement underlain by fill material. The fill material consisted of silty sand with inclusions of ash to a range of other materials. The soil analysis identified "a range of contaminants commonly encountered in the Sydney Region with elevated levels of contaminants". The findings of the Environmental Investigation Services report are further discussed in Section 6.8.

The ground water level, influenced by the tide in Sydney Harbour, is relatively high and will be a factor in the design and construction of footings and basement walls below the water level.

2.3.6 Drainage and Flooding

The drainage statement for the MCA (Warren Smith and Partners, October 2008) confirmed that the MCA site is not subject to flooding. This statement confirms that there is an existing stormwater drainage system on west Circular Quay to which the site stormwater drainage will be connected.

2.3.7 Utilities

There is an existing Energy Australia chamber substation located on the northern end of the site near the George Street boundary.

All other utility services are provided to the site.

2.3.8 Existing easements

There is a right-of-way and easement for electricity purposes associated with the substation identified on the existing survey plan. From discussion between the MCA, Energy Australia and SHFA it is understood that this is not registered and does not present any conflict with the MCA redevelopment plans.

3. Description of the Proposed Redevelopment

3.1 Overview

A six level addition is proposed to the north of the existing MCA building on the site where the MCA's open air car park and loading dock is currently located. Rooftop venues spaces are added to the top level of the existing building while its internal spaces are remodelled and the existing terraces on Level 1 are extended to accommodate the enhanced Level 1 restaurant.

The location of the new building is shown in Figure 3.1. The proposed design concept incorporates an east – west pedestrian link through the extension (as shown in yellow) and the retention of the existing car park entry/exit in generally the existing location (shown in blue).



Figure 3.1 General location of new building envelope

The redevelopment provides clear entry from both George Street and Circular Quay to the main building foyer, creating a 'street' between George Street and the Circular Quay concourse and achieving a publicly accessible link between the two that also provides access for mobility-impaired persons. The new additions to the building provide a positive and strong architectural response to the existing building in this prominent site.

Figure 3.2 and Figure 3.3 provide indicative views of the proposed addition when viewed from Circular Quay.

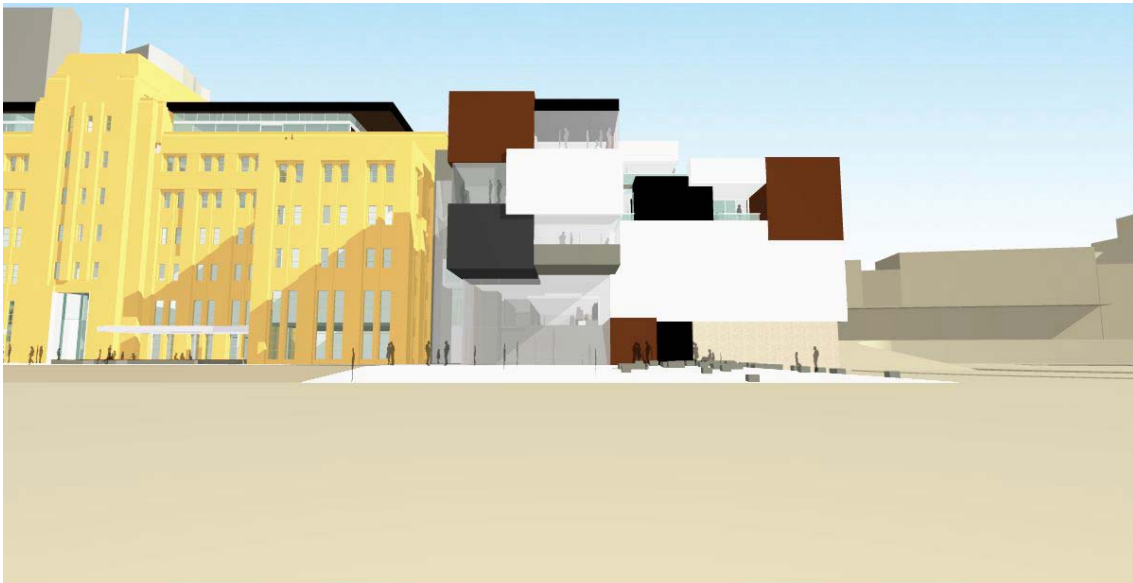


Figure 3.2 Indicative Close View of the Proposed Addition from Circular Quay



Figure 3.3 Indicative Distant View of the Proposed Addition from Circular Quay

Figure 3.4 provides an indicative view of the proposed new George Street entrance.



Figure 3.4 Indicative View of the Proposed New Entry on George Street

Figure 3.5 provides an indicative view of the proposed addition, looking south from the corner of George Street and Argyle Street. This view illustrates the relationship of the proposed addition with the existing The Rocks NSW Police Station building at 132 George Street.

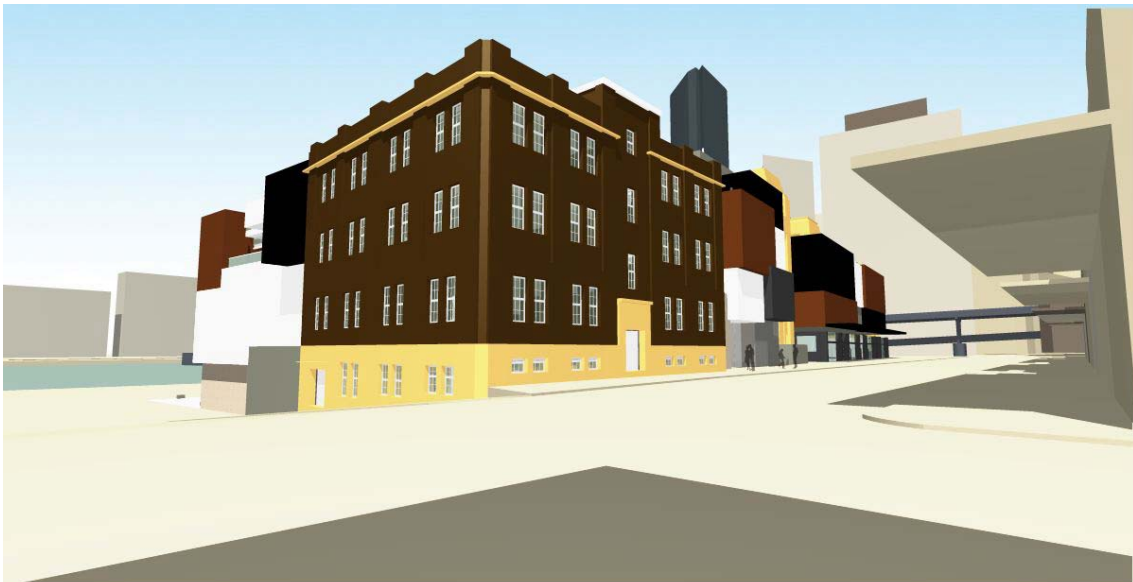


Figure 3.5 Indicative View of the Proposed Addition from the Corner of George and Argyle Streets



The redevelopment will link all floors of the new building to the existing building. It will include the refurbishment of some areas of the existing building to achieve a functional link and to enhance the existing facilities and bring them up to the appropriate standards.

The redevelopment will also provide for new facilities at the MCA, which will incorporate a reconfigured entrance and foyer, international standard gallery and exhibition space including an Outdoor Sculpture Terrace, an education centre (National Centre for Creative Learning), lecture theatre, informal café and function areas with associated back of house facilities, offices, loading and car park area.

Architectural plans of the proposed redevelopment, including a landscape plan and shadow diagrams, are included in Appendix A.

3.2 Design Advisory Panel

A Design Advisory Panel (DAP) was established in 2007 following MCA Board appointment of the Architect to consider the development of the design in regard to design excellence, with particular reference to the urban context, the exterior built form, materials, circulation and the quality of interior spaces. The DAP consisted of architects Alec Tzannes, Professor Tom Heneghan, Ken Maher and artist Mikala Dwyer. Four meetings of the DAP have been held, aligned with key stages of the design process, the first in October 2007 and last in October 2008.

The DAP process greatly assisted the development of the proposed design. The scheme presented in this application reflects the input of the panel and the resulting development in the design of the architectural language, scale and relationship to the existing building, entrance and alignment, selection of materials, context and relationship to the urban setting and key views.

The meetings were of great assistance to the design team and the MCA. The final DAP meeting in October 2008 fully supported the proposed redevelopment as submitted.

3.3 Objectives of the Proposed Redevelopment

The MCA redevelopment aims to provide a facility that is functional, compliant and financially viable, while responding to its location and reflecting its use as a world class art gallery exhibiting the latest in contemporary art.

Specific design objectives include:

- Make contemporary art accessible and engaging for a wide range of audiences;
- Improve identification of and access to the building's public and non-public entrances;
- Provide equitable and compliant access to and within the building;
- Provide international standard gallery spaces;
- Provide leading edge education facilities;
- Provide additional commercial venues to supplement existing income sources;
- Incorporate ecologically sustainable design initiatives;



- ▶ Provide an integrated approach to information technology;
- ▶ Externally reflect and present the MCA's internal activities;
- ▶ Respond to the site's urban context, and heritage and archaeological significance; and
- ▶ Provide a building of high architectural quality appropriate to its significant setting.

Apart from the new addition, much of the proposed works to the existing building are internal. The redevelopment of the MCA is to improve and expand upon the current arrangement of gallery spaces, recognise and address the functional aspirations of these spaces and equipment ensuring they are fit for purpose, represent value for money and support the primary function of the building as an art gallery which incorporates best practice in accordance with international art gallery standards.

The redevelopment is a contemporary approach to design, which recognises and respects the importance of the existing building whilst creating a contemporary statement which reflects the internal activities of the Museum. The proposed design considers the views to the building from a distance and its presence and scale in the locality. The MCA is a forward looking institution and the design and choice of materials reflect this.

The redevelopment contains the best in urban design, addressing views from across Circular Quay, George Street, vistas down from Pitt, George and also from above (Harrington) Street. The proposed design will provide clear view corridors both through to Circular Quay and along George Street and will retain the Suez Canal view corridor.

The redeveloped MCA will include a clearly visible and recognisable point of entry. The design will provide equity of access for all who use the building with coherent circulation.

The finalised redevelopment is a combination of refurbished and revitalised elements of the current Museum, and where required, incorporates extensions to the current facilities.

3.4 Detailed Description of the Redevelopment

3.4.1 Public Entry

Entry points to the MCA for its various user types are currently unclear and confusing – in particular for members of the public. The proposed redevelopment provides a new public foyer to the north of the existing building, which takes the form of an east-west circulation route linking George Street and Circular Quay, which is in essence, a 'street' through the building. This reconciles the level difference between George Street and Circular Quay. Once on this entry 'street', the MCA's reception and easy access to the vertical circulation system of lifts and stair can be found.

The public entry will be open to the public during the operational hours of the MCA, which are 10 am to 5 pm, seven days a week. The MCA will consider extended opening hours for special events and at other times, subject to operational, security and commercial requirements.

MCA staff, tenants, venues' staff including their visitors will enter the level 1 side of the 'street' and will then be directed to the existing non public circulation spine (Lifts 1 and 2) by using the Foundation Hall Corridor.



A discrete exit for MCA staff, tenants and venues' staff is maintained on George Street.

The existing main entrance on the Circular Quay side of the building will be utilised on occasion for specific major functions held in the Foundation Hall or Level 7. Access to the Level 1 restaurant is provided by a ramp from the south to Level 1 Terraces achieving easy access from the CBD.

3.4.2 Circulation

Visitors to the MCA will enter via the 'street' and proceed to either a public or non-public vertical circulation spine. The design effectively separates the public and non public circulation paths.

The proposed plan achieves separation of the public circulation system to the art movement, exhibitions installs and venues operations required by the MCA.

Loading to back of house and venues will be from the loading dock.

Equitable access for all is achieved with the proposed plan, with lift access provided to all levels of the building.

3.4.3 Loading Dock

It is essential for the MCA's operation that trucks are able to load and off load art works undercover and in secure conditions.

The proposed loading dock design solves the significant constraints between the operational requirements and the existing building and site, to achieve undercover, secure loading without making significant changes to the existing building fabric or traversing open space in the public domain. The entrance and exit for 4.5m high trucks accessing the loading dock for exhibition bump in and bump out is at the north-east corner of the site directly off Argyle Street. It is only possible to achieve the required minimum head height of 4.5m in this location.

Daily activities such as MCA venues and restaurant deliveries will continue to operate through the loading dock and car park entrance as per existing conditions but will have the added benefit of being undercover and more secure.

An existing arrangement with SHFA is maintained through the West Circular Quay public domain and First Fleet Park from Argyle Street for delivery of large objects to the southern entry of the Foundation Hall.

3.4.4 Back of House

For easy access to the loading dock and to the vertical movement of artwork and miscellaneous exhibition materials via the existing Goods Lift, back of house facilities have been located in the current exhibition spaces on Level 1 ensuring higher levels of security, climate control and safer working methods.

3.4.5 Galleries

Existing gallery spaces (except that on Level 1) are retained in this proposal. New gallery space is created on Level 2 to provide a critical mass of exhibition on the entry level and a substantial



double height gallery space with international standard controls. Additional gallery space is added on Level 4 to the west of the existing building.

The provision of these additional gallery spaces will allow the MCA an opportunity to display its collection.

3.4.6 Education

Dedicated education spaces are located on Levels 3 and 4 to provide secure premises for school and other groups.

A lecture theatre is located on the western side of Level 3 providing easy access to the entry street level as well as an outdoor breakout space.

The MCA Library and Artists Research Centre is relocated to a more publicly accessible area on the eastern side of Level 3 and will allow artists, academics, researchers and members of the general public access not only to the Library files but also to the MCA artist files presently not publicly available.

A dedicated seminar room on the eastern side of the building provides space for life long adult learning and corporate training opportunities.

3.4.7 Venues

The Foundation Hall on Level 1 will remain 'as is' with minor alterations and restoration of finishes, toilet facilities and enhanced outdoor access to the new terraces on Circular Quay.

Proposed new roof top venues on Level 7 optimise the extensive views available from the site and will provide a highly desirable space for corporate and private hire.

3.4.8 Offices

The MCA offices at the north end of Level 5 are to remain and will be refurbished and extended into the new building extension to the north.

An existing commercial tenancy remains at the south end of Level 5 while Level 6 becomes new commercial tenancies.

3.4.9 Retail

The redevelopment of the MCA includes modifications to Retail 5 tenancy on George Street while the cafe to the north over the substation is removed and a new George Street retail tenancy is provided in the location of the existing MCA George Street entrance.

3.4.10 Food and Beverages

The existing cafe/restaurant in the Foundation Hall will be remodelled as a restaurant with an enlarged and improved outdoor seating area.

An informal/ inexpensive cafe will be provided on Level 5 of the extension, adjacent to the Outdoor Sculpture Terrace to the north utilising the surrounding views. This is part of the MCA's commitment to provide the widest possible access for all visitors.



3.4.11 Landscaping

It is proposed to provide upgraded landscaping to the Circular Quay side of the building. This involves new terraces at Level 1 to the east of the existing building and grassed ramps up to such terraces with hard paving and seating to the east of the main public entrance area. The proposed grassed area provides a usable surface to relax on and view the promenade and Circular Quay.

3.4.12 Summary of Uses

Following the proposed redevelopment, the MCA will have the following uses on each floor:

- ▮ First Floor
Circular Quay entry, restaurant, terraces, Foundation Hall, kitchen, plant rooms, Ambassadors room, conservation, framing, storage, first aid, workshop, car parking, garbage area, loading dock, security, goods lift, amenities, non public bike racks and shower facilities.
- ▮ Second Floor
George Street entry, retail, gallery, MCA shop, reception/information and cloaking, informal meeting space and goods lift.
- ▮ Third Floor
Gallery, lecture theatre, library, seminar, artists resource area, foyer, deck, goods lift, amenities and resources.
- ▮ Fourth Floor
Gallery, National Centre for Creative Learning (multi- media classroom, digital classroom, accessible workshop, breakout space, creativity room, office, storage, preparation), store room, goods lift, amenities and plant room
- ▮ Fifth Floor
Tenancy, MCA staff room, MCA offices, plant room, guides/volunteers and Café (kitchen, café terrace), amenities and Outdoor Sculpture Terrace.
- ▮ Sixth Floor
Tenancy, terraces, plant room and amenities.
- ▮ Seventh Floor
Function space, deck, green room, amenities, storage, foyer and kitchen.
- ▮ Eighth Floor
Plant room.
- ▮ Ninth Floor
Plant Room

There will be an increase in floor space of approximately 40% for the entire MCA site. The following table is a break-down of the existing and proposed development in terms of height and density.



Table 3.1 Height and Density for Existing and Proposed Development

	Existing	New Addition	Total
Footprint	2,211 m ²	920 m ²	3,131 m ²
Height	Existing Central Parapet Ridge is RL 37.440	Level 7 of MCA – Function Area Ridge is RL 32.877	NA
Gross Floor Area	8,333 m ²	4,518 m ²	12,581 m ²
Car Parking	15	-	4

Gross Floor Area has been calculated in accordance with the definition contained in the *Standard Instrument (Local Environmental Plans) Order 2006*.

3.4.13 Operating Hours

The general operational hours for the MCA are 10 am to 5 pm, seven days a week.

The MCA shop will also generally operate 10 am to 5 pm, seven days a week, with late night trading when MCA events, such as openings and public lectures, are held outside of museum hours. These hours are generally 6 pm to 9 pm and the shop would be utilised by MCA guests only.

Operating hours of function venues within the MCA, including the Foundation Hall, Ambassadors room, Level 1 restaurant, lecture theatre, Level 5 café, and Level 7 function spaces, will depend on demand but will generally operate from 6 pm to midnight Monday to Thursday, and from 6 pm to 2 am Friday to Sunday.

3.5 Works on Lot 1 in Deposited Plan 1052780

In addition to the above works, the proposed redevelopment also involves works on Lot 1 in Deposited Plan 1052780, which contains The Rocks NSW Police Station building.

The minor south wing to the building will be demolished as part of the redevelopment of the MCA, and a prisoner run and van dock provided to enable prisoner access to The Rocks NSW Police Station building along its east elevation. This work is part of the Memorandum of Understanding between SHFA, NSW Police and the MCA.

3.6 Proposed Seawater Exchange System

One of the ecologically sustainable development (ESD) initiatives to be implemented for the proposed redevelopment is a seawater heat exchange system, to be used for cooling of the MCA's mechanical plant. The use of seawater for cooling in air conditioning system is a tried and proven technology, removing the need for cooling towers and air-cooled condensers, providing a clean roof form and environmental benefits through reduced energy use.

The proposed MCA seawater exchange system involves piping seawater from Sydney Harbour to the MCA, as shown on the Architectural Plans in Appendix A.

4. Statutory Framework

4.1 Environmental Planning and Assessment Act 1979

All development in NSW is assessed in accordance with the provisions of the EP&A Act and Environmental Planning and Assessment Regulation 2000 (the Regulation). The EP&A Act institutes a system for environmental planning and assessment, including approvals and environmental impact assessment. Implementation of the EP&A Act is the responsibility of the Minister for Planning, statutory authorities and local councils.

The EP&A Act contains three schemes which impose requirements for planning approval:

- ▶ Part 3A provides for control of ‘major projects’ that require approval from the Minister for Planning;
- ▶ Part 4 provides for control of ‘local development’ that requires development consent from the local Council; and
- ▶ Part 5 provides for control of ‘activities’ that do not require approval or development consent under Part 3A or Part 4.

The need or otherwise for development consent is set out in environmental planning instruments – State Environmental Planning Policies (SEPPs), Regional Environmental Plans (REPs) or Local Environmental Plans (LEPs).

Major projects to which Part 3A applies are identified in *State Environmental Planning Policy (Major Projects) 2005*, as well as in declarations made by the Minister for Planning.

In accordance with clause 75B of the EP&A Act, and as outlined in Section 4.2, Part 3A of the Act applies to the MCA redevelopment. As a result, the Minister for Planning is the approval authority for the proposed redevelopment, and an environmental assessment is required to support the application for development approval.

4.2 State Environmental Planning Policies

4.2.1 State Environmental Planning Policy (Major Projects) 2005

Major projects are identified in the *State Environmental Planning Policy (Major Projects) 2005* (SEPP Major Projects), or may be declared by order of the Minister. Clause 6(1) of SEPP Major Projects states that

“Development that, in the opinion of the Minister, is development of a kind:

(a) that is described in Schedule 1 or 2, or

(b) that is described in Schedule 3 as a project to which Part 3A of the Act applies, or

(c) to the extent that it is not otherwise described in Schedules 1-3, that is described in Schedule 5,

is declared to be a project to which Part 3A of the Act applies.”



Schedule 2, Clause 10 Sydney Harbour and Foreshore Sites of the SEPP refers to specified sites and states that:

“(1) Development (with a capital investment value of more than \$5 million) within the area identified on (a) Circular Quay—Map 9 to this Schedule”.

The MCA is located on Map 9—Circular Quay.

As the proposed redevelopment has a capital investment value of more than \$5 million, the MCA redevelopment is considered a major project, and requires the approval of the Minister for Planning under Part 3A of the EP&A Act.

4.2.2 State Environmental Planning Policy 55 – Remediation of Contaminated Sites

State Environmental Planning Policy 55 – Remediation of Contaminated Sites (SEPP 55) applies state-wide planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed. The policy makes remediation permissible across the state, defines when consent is required, requires all remediation to comply with standards, ensures land is investigated if contamination is suspected and requires councils to be notified of all remediation proposals.

The outcome of the site screening and contamination study is discussed in Section 6.8.

4.2.3 State Environmental Planning Policy No. 64 – Advertising and Signage

The aims and objectives of *State Environmental Planning Policy No. 64 – Advertising and Signage* (SEPP 64) as set out in clause 3(1)(a) are:

“(a) to ensure that signage (including advertising):

- (i) is compatible with the desired amenity and visual character of an area, and*
- (ii) provides effective communication in suitable locations, and*
- (iii) is of high quality design and finish, and*
- (b) to regulate signage (but not content) under Part 4 of the Act, and*
- (c) to provide time-limited consents for the display of certain advertisements, and*
- (d) to regulate the display of advertisements in transport corridors, and*
- (e) to ensure that public benefits may be derived from advertising in and adjacent to transport corridors.”*

The existing banner signage on the existing MCA building will be retained in its current form.

The design of the new building identification signage will be developed during the forthcoming design phase and is to be consistent with the language of the MCA redevelopment and the character of The Rocks and Circular Quay. Communication from any MCA signage is intended to be clear with signage to be strategically located in the identified possible future signage zones at the Circular Quay and George Street entrances. Signage design will be of a high quality and finish. Hence, all signage associated with the redevelopment will be consistent with the above aims and objectives.



As part of this project application, approval is sought for possible future signage zones to the Circular Quay and George Street entrances at street level and overhead, as shown on the Architectural Plans in Appendix A. Design details of the proposed signage in these locations have not yet been developed, and separate approval would be sought for the actual signage. A detailed assessment under SEPP 64 would be undertaken at this time.

4.2.4 State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 came into operation on 1 January 2008. One of the aims of the SEPP is to provide for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing.

Clause 104 of SEPP (Infrastructure) relates to traffic generating development, and applies to development of a size or capacity specified in Schedule 3 of the SEPP. Schedule 3 does not specifically include museums or art galleries. However it does include the following (where vehicular access is provided from any road):

- ▶ Commercial premises with a gross floor area of greater than 10,000m²; and
- ▶ Educational establishments that cater to more than 50 students.

The total floor area of the redeveloped MCA will be 16,720m² and the National Centre for Creative Learning may cater to more than 50 students at any time. As such, it is considered that the provisions of Clause 104 apply to the proposed redevelopment.

Under Clause 104(3), before determining the application the Department of Planning must:

- “(a) *give written notice of the application to the RTA within 7 days after the application is made, and*
- (b) *take into consideration:*
 - (i) *any submission that the RTA provides in response to that notice within 21 days after the notice was given (unless, before the 21 days have passed, the RTA advises that it will not be making a submission), and*
 - (ii) *the accessibility of the site concerned, including:*
 - (A) *the efficiency of movement of people and freight to and from the site and the extent of multi-purpose trips, and*
 - (B) *the potential to minimise the need for travel by car and to maximise movement of freight in containers or bulk freight by rail, and*
 - (iii) *any potential traffic safety, road congestion or parking implications of the development.”*



4.3 Regional Environmental Plans

4.3.1 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* (the Harbour REP) provides a planning framework for Sydney Harbour. Within this Plan, Sydney Harbour is identified as being a major natural, cultural, recreational and commercial asset. The REP seeks to continue this role, while also recognising increasing pressures on the harbour and its foreshores.

This Plan has therefore been developed to provide a clear and consistent planning framework to protect and enhance the unique attributes of the Harbour.

The MCA is located within the Foreshores and Waterways Area although it is not zoned for a specific use under the REP.

The specific aims of the plan are as follows:

- “(a) to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected, enhanced and maintained:*
 - (i) as an outstanding natural asset, and*
 - (ii) as a public asset of national and heritage significance, for existing and future generations,*
- (b) to ensure a healthy, sustainable environment on land and water,*
- (c) to achieve a high quality and ecologically sustainable urban environment,*
- (d) to ensure a prosperous working harbour and an effective transport corridor,*
- (e) to encourage a culturally rich and vibrant place for people,*
- (f) to ensure accessibility to and along Sydney Harbour and its foreshores,*
- (g) to ensure the protection, maintenance and rehabilitation of watercourses, wetlands, riparian lands, remnant vegetation and ecological connectivity,*
- (h) to provide a consolidated, simplified and updated legislative framework for future planning.”*

The relevant planning principles for land within the Foreshores and Waterways Area, including the MCA are as follows:

- “(a) development should protect, maintain and enhance the natural assets and unique environmental qualities of Sydney Harbour and its islands and foreshores,*
- (b) public access to and along the foreshore should be increased, maintained and improved, while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation,*
- (c) access to and from the waterways should be increased, maintained and improved for public recreational purposes (such as swimming, fishing and boating), while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation,*



- (d) *development along the foreshore and waterways should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands and foreshores...*

The proposed redevelopment is considered to be consistent with the relevant aims and planning principles of the REP. Specifically, the redevelopment will not affect the ecology of the area and supports a prosperous working harbour. The redevelopment of the MCA will encourage more people to the area while improving the culture and vibrancy of the area. Accessibility to and along Sydney Harbour and its foreshores will remain unaffected.

In terms of planning, the natural assets and environmental qualities will be unaffected by the redevelopment. Public access along the foreshore will be unaffected. The unique visual qualities of Sydney Harbour will be protected. These are confirmed by the photomontages prepared for the proposed development in the Sydney Harbour locality.

The matters for consideration specified in Part 3, Division 2 do not apply to the proposed redevelopment, as the project is subject to Part 3A of the EP&A Act.

Part 4, Division 1 applies to development to be carried out on a strategic foreshore site. The MCA is located on Sheet 1-City Foreshores Area and as such Part 4 Strategic foreshore sites applies. Clause 41 sets out the requirements for the preparation of master plans. However Clause 41(4) states that no master plan is needed for the City Foreshores Area. Since the MCA is located within the City Foreshores Area, no master plan is needed.

Part 5, Division 3A of the REP applies to the Sydney Opera House buffer zone, as defined by the Sydney Opera House Buffer Zone Map. The site of the proposed redevelopment falls outside of the Sydney Opera House buffer zone, and no further consideration under the REP is needed in this regard.

4.4 Local Environmental Plans

The application site is located in the City of Sydney Local Government Area. However the Sydney Local Environmental Plan (LEP) 2005 does not apply to the site. The site is governed by the Sydney Cove Redevelopment Authority (SCRA) Scheme, which is a deemed environmental planning instrument and takes the place of a Local Environmental Plan. The SCRA Scheme is administered by SHFA.

4.4.1 Sydney Cove Redevelopment Authority Scheme

The applicable adopted Environmental Planning Instrument for land that falls within The Rocks is the Sydney Cove Redevelopment Authority (SCRA) Scheme and the Minister for Planning is the consent authority.

The SCRA Scheme was prepared under the former *Sydney Cove Redevelopment Authority Act 1968* and operates under the saving provisions of the EP&A Act and therefore has the same effect as if it were an environmental planning instrument.

Under the SCRA Scheme, there are two applicable drawings which provide the development controls for the MCA land. These specifically relate to Drawing XXXIX-A (1) and XXXIX-B(1).



Drawing XXXIX-A (1) requires an east-west pedestrian route to be provided between the MCA and The Rocks NSW Police Station north of the MCA. The proposed redevelopment provides for this principle to be adopted and an access route through this part of the site is contemplated internally to the proposed extension. However, this pedestrian access would only be available to the public during the opening hours of the MCA, which is currently 10am to 5pm, seven days per week. The MCA is considering extended opening hours for special events and at other times, subject to operational, security and commercial requirements.

Drawing XXXIX-B(1) provides a height restriction of Reduced Level (RL) 12 across the MCA site and a RL 7 to the current pedestrian area of Circular Quay. Both the existing building and the proposed redevelopment exceed the SCRA Scheme height limit of RL 12. The existing building reaches a maximum height of RL 37.44 at the central parapet ridge. It is understood that the SCRA Scheme was based on an earlier intention to demolish the MCA building, which is no longer proposed.

The height of the proposed function area roof ridge on Level 7 of the existing building is RL 32.877 and the maximum height of the proposed new building is RL 30.764. The proposed heights are consistent with the height of surrounding buildings and are lower than the highest point of the existing MCA building.

Since the proposed development does not comply with the SCRA Scheme, an application to SHFA to vary the SCRA Scheme is made under this project application. This process would run concurrently to the Part 3A assessment. A copy of the application to vary the SCRA Scheme is contained in Appendix C.

The proposed variation to the SCRA Scheme has been assessed in accordance with Clause 9(2) of the *Environmental Planning & Assessment (Sydney Cove Redevelopment Authority) Regulation 1999*, and a summary of the assessment is provided below.

Impact on development on adjoining land

The proposed variation to the SCRA Scheme height restriction creates the opportunity for roof level additions on the existing MCA building and the erection of the new building to the north. The proposed variation will only affect the MCA site, to permit the proposed redevelopment.

The proposed functions area on Level 7 of the existing MCA building:

- ▮ Will be setback from the roof edge;
- ▮ Will be a low and unobtrusive scale; and
- ▮ Will maximise unutilised space to the benefit of the patrons to the MCA.

The proposed new building to the north of the existing MCA building will not hinder public access to the foreshore and the existing pedestrian pathway will remain unaffected. The proposed design concept incorporates an east – west pedestrian link through the building (reflecting the Suez Canal corridor) between the George Street and Circular Quay entrances creating a 'street' which will provide improved pedestrian access during MCA opening hours. The public utility will be enhanced by the new uses such as the lecture theatre and café. The site has been considered in the context of its surrounding and the Sydney Harbour.

The proposed roof top plant on Level 6 of the proposed new building:



- ▶ Cannot be viewed from ground level or any other buildings in the nearby vicinity; and
- ▶ Will have no impact on the development of any adjoining land.

As outlined in the SCRA Scheme variation application and below, the proposed redevelopment will not adversely impact on the public domain in terms of overshadowing or views, and heritage impacts will be appropriately managed.

Impact on heritage significance

As detailed in Section 6.6 of this Environmental Assessment, the new building is subservient in height, scale and colour to the orange/gold sandstone heritage landmark that is the existing MCA building. Its scale and block massing also relates to that of the adjoining The Rocks NSW Police Station at 132 George Street.

The proposed design allows one to read the existing MCA building as an 'in the round' design while providing a new building convenient to its north elevation, yet separated from it and linked to it by an open space with a glazed link including a 'bridge' and stair. The link space is relatively tight due to proximity of The Rocks NSW Police Station. In essence, the extended MCA will read as an historic building with a new wing of contemporary and acceptable character.

The site contains the archaeological remains of two docks with historic plans indicating another one to the southern end of the site. The proposed piling and footings for the new building have been located adjacent to the dock walls. The piling and footings will impact on the work areas around the docks and will introduce structural elements inside the docks. The size of the impacts will be minimised and the areas to be impacted will be recorded beforehand, meaning that the loss of archaeological fabric and knowledge will be minimised. The proposed redevelopment also provides an opportunity to interpret the site and its archaeological remains. In this regards, the redevelopment will contain an interpretation zone which will incorporate an artistic project/s for the interpretation of the site, and the development and history of the place.

Impact on the public domain

The quality of the public domain will be strengthened by the proposal since the new works will provide a clearer point of reference for public movement. Pedestrian access between the George Street and Circular Quay will be provided in the proposed redevelopment, during the operational hours of the MCA.

The proposal involves little change to public the public domain on George Street, West Circular Quay and First Fleet Park. Grassed ramps will be provided to extended terraces on Level 1 of the MCA, with hard paving and seating to the east of the main public entrance area.

The proposed development will result in some overshadowing to West Circular Quay, however given the size of this public outdoor space the overall effect will be relatively minor.

Impact on the natural or built environment

The proposed development will not have an adverse impact on the natural environment since no sensitive ecology exists on the entire site. The built environment will be strengthened by the new design and potential negative impacts have been mitigated by the architectural design. The proposed redevelopment works will be compatible with the existing built form in terms of bulk and scale. The surrounding development will benefit from the redevelopment, which will



improve the appearance of the MCA. The new addition over the existing open air car park and loading dock removes an unsightly utility use on Circular Quay and replaces it with an attractive new building, which is integrated with and suitable to the locality.

Social and economic impacts

The redevelopment will strengthen the social character of the area by encouraging more people to visit the MCA. People willing to spend money from the different offerings of the MCA will benefit the economy of the locality. This was a view supported in the MCA's consultation with the Rocks Chamber of Commerce. There will be a minor increase in employment generation for the MCA and the economic spin-offs will benefit the area at large.

4.4.2 Draft SHFA Environmental Planning Instrument

SHFA is currently preparing a draft environmental planning instrument that will eventually supersede the SCRA Scheme. This document is only at the early stages of development and has not been subject to any external consultation.

4.5 Development Control Plans

4.5.1 Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005

The *Sydney Harbour Foreshores and Waterways Area Development Control Plan 2005* (Foreshores and Waterways DCP) applies to the "Foreshores and Waterways Area" as defined in the Sydney Harbour REP, as discussed in Section 4.3.1.

Performance-based criteria and guidelines relating to matters such as foreshore access, visual and natural environments, and recreation uses are established by the DCP, with the aim of protecting ecological communities within the area covered by the Sydney Harbour REP. The DCP also provides siting and design principles for new buildings and waterside structures within the area.

The planning principles for the Foreshores and Waterways Area under the DCP are:

- ▶ *development should protect, maintain and enhance the natural assets and unique environmental qualities of Sydney Harbour and its islands and foreshores,*
- ▶ *public access to and along the foreshore should be increased, maintained and improved, while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation,*
- ▶ *access to and from the waterways should be increased, maintained and improved for public recreational purposes (such as swimming, fishing and boating), while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation,*
- ▶ *development along the foreshore and waterways should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands and foreshores,*
- ▶ *adequate provision should be made for the retention of foreshore land to meet existing and future demand for working harbour uses,*

- ▶ *public access along foreshore land should be provided on land used for industrial or commercial maritime purposes where such access does not interfere with the use of the land for those purposes,*
- ▶ *the use of foreshore land adjacent to land used for industrial or commercial maritime purposes should be compatible with those purposes,*
- ▶ *water-based public transport (such as ferries) should be encouraged to link with land-based public transport (such as buses and trains) at appropriate public spaces along the waterfront,*
- ▶ *the provision and use of public boating facilities along the waterfront should be encouraged.*

Since the proposed new building addition is on an existing open air car park, there will be no impact on the natural assets and unique environmental qualities of Sydney Harbour and its foreshores. The proposed redevelopment will improve the foreshore replacing the existing unsightly open air car park with the new MCA extension. Public access to the foreshore will be improved by the proposed through-flow pedestrian access which will create a 'street' through the building from George Street to Circular Quay and will comply with the requirements of the SCRA Scheme. There is currently no pedestrian access between the MCA and The Rocks NSW Police Station and under the redevelopment it is not proposed to change this. There will be no impact to the public access along the foreshore.

There are no specific controls for the MCA site under this DCP, as the 'Sydney Harbour-Foreshores and Waterways Area Development Control Plan: Ecological Communities and Landscape Characters' Map 8 identifies the site as an "Area not mapped: site specific investigations required".

Notwithstanding this, Section 3.2 refers to the general aims for landscaping, which states:

"All development should aim to:

- ▶ *minimise any significant impact on views and vistas from and to:*
 - *public places,*
 - *landmarks identified on the maps accompanying the DCP, and*
 - *heritage items;*
- ▶ *ensure it complements the scenic character of the area;*
- ▶ *protect the integrity of foreshores with rock outcrops, dramatic topography or distinctive visual features;*
- ▶ *provide a high quality of built and landscape design; and*
- ▶ *contribute to the diverse character of the landscape."*

The proposed development complies with these general aims since the height, width, siting, scale, colour, reflectivity and function of the new building is suitable and consistent with the surrounding development. An assessment of heritage impacts is carried out in Section 6.6 of this report, which identified no impacts to any heritage item in the vicinity of the MCA. The only landmark in the area is the Opera House located across Circular Quay. An assessment of this is also in Section 6.1, which states that there is no competition between these buildings.

The landscape setting will consist of an upgraded landscaping to the Circular Quay side of the building. This involves new terraces at Level 1 to the east of the existing building and grassed



ramps up to these terraces with hard paving and seating to the east of the main public entrance area.

There is minimal degree of change in terms of new landscape works, and the proposed works will not conflict with the existing scenic environment. The landscaping attempts to provide a cohesive urban design setting which is integrated with the new building entrance from Circular Quay and provide an enhanced public amenity. This landscaping is considered to be suitable and is intended to complement the redevelopment of the building.

Siting of Buildings and Structures

Part 5, Section 5.3 Siting of Buildings and Structures requires “*existing native vegetation not to be disturbed, buildings should address the waterways, buildings should not obstruct views and vistas from public places to the waterway, buildings should not obstruct views of landmarks and features identified on the maps of this DCP.*”

The MCA redevelopment will be a contemporary approach to design, which will recognise and respect the importance of the existing building whilst creating a contemporary statement, which reflects the internal activities of the Museum. The proposed design will consider the views to the building from a distance and its presence and scale in the locality. The MCA is a forward-looking institution and the design and choice of materials would reflect this.

The urban design of the redevelopment will optimise its scenic location addressing views from across Circular Quay, George Street, vistas down from Pitt, George and also from above (Harrington Street). The proposed design will provide clear view corridors both through to Circular Quay and along George Street and will retain a view corridor (the Suez Canal View Corridor).

The redeveloped MCA will include a clearly visible and recognisable point of entry. The design will provide equity of access for all who use the building with coherent circulation. The finalised redevelopment would be a combination of refurbished and revitalised elements of the current Museum, and where required, incorporate extensions to the current facilities.

Built Form

Section 5.4 Built Form of the DCP provides design qualitative guidelines for land-based development, as detailed below:

Buildings and other structures should generally be of a sympathetic design to their surroundings; well designed contrasts will be considered where they enhance the scene. Many councils have development controls governing built form and the heights of buildings. The following guidelines are designed to reinforce the local requirements:

- ▶ *where buildings would be of a contrasting scale or design to existing buildings, care will be needed to ensure that this contrast would enhance the setting;*
- ▶ *where undeveloped ridgelines occur, buildings should not break these unless they have a backdrop of trees;*
- ▶ *while no shapes are intrinsically unacceptable, rectangular boxy shapes with flat or skillion roofs usually do not harmonise with their surroundings. It is preferable to break up facades and roof lines into smaller elements and to use pitched roofs;*



- ▶ *walls and fences should be kept low enough to allow views of private gardens from the waterway;*
- ▶ *bright lighting and especially floodlighting which reflects on the water, can cause problems with night navigation and should be avoided. External lights should be directed downward, away from the water. Australian Standards AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting should be observed;*
- ▶ *use of reflective materials is minimised and the relevant provisions of the Building Code of Australia are satisfied;*
- ▶ *colours should be sympathetic with their surrounds and consistent with the colour criteria, where specified, for particular landscape character types in Part 3 of this DCP;*
- ▶ *the cumulative visual impact of a number of built elements on a single lot should be mitigated through bands of vegetation and by articulating walls and using smaller elements; and*
- ▶ *the cumulative impact of development along the foreshore is considered having regard to preserving views of special natural features, landmarks or heritage items."*

As discussed in Section 6.1, the proposed redevelopment has been designed to complement the existing MCA building and surrounding buildings. The height of the new works to the north of the existing MCA building respects and enhances the stepped form of the existing building, and helps to negotiate the difference in scale between the existing building and the surrounding buildings (in particular The Rocks NSW Police Station).

Planting

Section 5.6 Planting states:

"Vegetation in the form of bushland, remnant native species and cultural planting has important ecological and landscape values that require protection and enhancement. The following criteria should be addressed when providing landscaping for developments:

- ▶ *appropriate species from those found in the surrounding landscape should be incorporated;*
- ▶ *endemic native species should be used in areas where native vegetation is present or has the potential to be regenerated;*
- ▶ *exotic species that have the potential to spread into surrounding bushland should be avoided;*
- ▶ *existing mature trees should be retained where possible and incorporated into the design of the new developments;*
- ▶ *vegetation along ridgelines and on hillsides should be retained and supplemented with additional planting to provide a backdrop to the waterway; and*
- ▶ *a landscape plan is to be submitted with any land-based development proposal showing existing and proposed changes in contours, surface and sub-surface drainage, existing trees to be retained and removed, measures to protect vegetation during construction, and proposed planting including species and common names."*

The above provisions generally apply to development located within a bushland context. The proposed redevelopment is located within an urban context.



The proposal involves the removal of a number of existing trees which fall within the building envelope and construction zone on George Street and Circular Quay West. An arboricultural assessment was undertaken and is included in Appendix D. A total of twenty-eight trees located in the vicinity of the site were inspected. The assessment concludes that the trees identified to be removed for the redevelopment have no major environmental or habitat value. The assessment recommends tree protection measures for those trees in the site vicinity that will be retained.

It is proposed to provide upgraded landscaping to the Circular Quay side of the building. This involves new terraces at Level 1 to the east of the existing building and grassed ramps up to such terraces with hard paving and seating to the east of the main public entrance area. The proposed grassed area provides a usable surface to relax on and view the promenade and Circular Quay.

Redevelopment Sites

Section 5.11 Redevelopment sites relates to improving access and enjoyment of the waterfront through redevelopment of waterfront sites. In this regard, redevelopment proposals should:

- ▶ *ensure continuous and inviting public access to the foreshores;*
- ▶ *allow for a mix of uses to further improve the public utility and amenity of the waterfront;*
- ▶ *provide public jetties and wharves for access to vessels where there is a demonstrated demand;*
- ▶ *identify suitable areas that can be conserved and made available to the public;*
- ▶ *provide public road access to the foreshore park where a park is being provided; and*
- ▶ *be designed considering the site in the broader context of the River and the Harbour. Redevelopment sites have the potential to provide a gateway and become a waterside destination for the hinterland.*

The redevelopment will not hinder public access to the foreshore and the existing pedestrian pathway will remain unaffected. The public utility will be enhanced by the new uses such as the lecture theatre and café. The site has been considered in the context of its surroundings and the Sydney Harbour.

The proposed works will not affect the existing maritime or boating industries and recognises these industries as legitimate uses of waterfront land. The proposed works are a significant distance from the waters edge and will not hinder existing pedestrian movement along Circular Quay. The new development will be sensitive to noise, odours, light associated with museums and has been sited and designed to minimise disturbance to its future occupants. The proposed landscape works increase the amenity of the West Circular Quay public domain, providing an open landscaped grassed ramp and seating in front of the MCA.

4.5.2 City of Sydney Signage and Advertising Structures DCP 2005

The City of Sydney Signage and Advertising Structures DCP 2005 supplements the provisions of SEPP 64. The DCP contains objectives and provisions that aim to protect the significant characteristics of buildings, streetscapes, vistas and the city skyline. It also encourages well



designed and well positioned signs that contribute to the vitality and legibility of the City of Sydney and that respect the amenity of residents and pedestrians and the safety of motorists.

As outlined above in Section 4.2.3, the existing banner signage on the existing MCA building will be retained in its current form.

The design of the building identification signage will be developed during the forthcoming design phase and is to be compatible with the amenity and visual character of The Rocks and Circular Quay.

As part of this project application, approval is sought for possible future signage zones to the Circular Quay and George Street entrances at street level and overhead, as shown on the Architectural Plans in Appendix A. Details of the proposed signage in these locations have not yet been developed, and separate approval would be sought for the actual signage. A detailed assessment under The City of Sydney Signage and Advertising Structures DCP 2005 would be undertaken at this time.

4.6 Other Policies and Guidelines

4.6.1 The Rocks Lighting Policy

The Rocks Lighting Policy (SHFA, 2006) document contains the objectives, strategies and standards for the lighting of The Rocks public domain.

The overall objectives of The Lighting Policy are:

- ▶ *to improve the illumination of The Rocks at night to ensure public safety, public enjoyment, architectural appreciation, and night time entertainment;*
- ▶ *to establish a continuity with the city while reinforcing and emphasising the unique quality of The Rocks, its buildings, structures and places with more simple and finer scaled fittings;*
- ▶ *to rationalise and unify the public lighting types throughout The Rocks to establish a coherent identity and to enable efficiencies in planning, implementation, management and maintenance;*
- ▶ *to provide best practice guidelines for exterior lighting design;*
- ▶ *to implement high environmental lighting standards, including the use of sustainable energy where feasible, in order to:*
 - i) prevent an increase in 'sky glow', which affects the clarity of astronomical observations;*
 - and*
 - ii) conserve energy and minimise the unnecessary emission of greenhouse gases.*
- ▶ *to promote a glare free environment for traffic and pedestrians and adjacent residents and building occupants while complying with Australian Standards for horizontal light levels;*
- ▶ *to utilise the latest technology for effective conversion of light into illumination; and*
- ▶ *to create an acceptable aesthetic appearance for night time illumination and lighting infrastructure during daylight hours.*



At present the eastern facade of the existing building is uplit at night with floodlights. The provision of new external façade lighting apart from security lighting is not included in the scope of works for this redevelopment.

External security lighting will be provided to the new building. Motion detectors will trigger local external lights in the spaces between the old and new buildings as a deterrent to acts of crime in these locations.

Internal lighting will be partially visible from the surrounding public spaces and Sydney Harbour, most noticeably through the glazed facade elements of the new building, reinforcing and emphasising the unique quality of The Rocks and the appreciation of the proposed design.

4.6.2 The Rocks Outdoor Seating Policy

The primary aim of this policy is to manage design and operational functions relevant to the provision of commercial outdoor seating in various public areas. The policy aims to ensure that the character and activation of The Rocks and Circular Quay is enhanced by the inclusion of outdoor seating. The objectives of the policy are to ensure:

- ▶ *inviting dining and refreshment places are created that promote 'The Rocks village experience' and the Circular Quay 'retail and entertainment experience',*
- ▶ *outdoor seating areas are used to enliven the promenades, streetscape and back areas of The Rocks and Circular Quay,*
- ▶ *seating areas complement each other, encourage design excellence and with a consistent high standard of presentation,*
- ▶ *outdoor seating areas will be deferential to the heritage of The Rocks, allowing streetscape, buildings and courtyard spaces to remain the dominant visual elements in the landscape.*
- ▶ *safety is promoted through consistent design standards and application.*

The proposed redevelopment involves the provision of outdoor seating at the Level 1 entrance, from Circular Quay. It also provides a roof terrace with outdoor seating that will be publicly accessible during the MCA opening hours. The proposed redevelopment is therefore considered to be consistent with the Outdoor Seating Policy.

4.6.3 The Rocks Signage Policy

This Policy applies to all land in The Rocks for which the Minister for Planning is the consent Authority under the *State Environmental Planning Policy (Major Projects) 2005*.

This document outlines a strategic policy for the ongoing provision of coherent and contemporary signage for The Rocks, which reinforces the heritage significance of the place, permits a clear understanding of layout and destinations and encourages dialogue between commercial operators and patrons of the precinct. The policy is supplemented by separate technical manuals, which outline more detailed provisions for the design and installation of commercial and wayfinding signage.

The aim of the signage policy is to promote a coordinated approach to outdoor signage in The Rocks by providing a framework for the design, delivery and management of outdoor signage in The Rocks, as follows:



- ▶ *to ensure policy requirements that reflect the specific precinct character and brand of The Rocks;*
- ▶ *to conserve existing signs which have cultural significance;*
- ▶ *to promote well designed signs in appropriate locations;*
- ▶ *to keep the number of signs to a minimum;*
- ▶ *to balance the commercial and wayfinding needs of tenants and visitors against the potential impact of signs on the heritage significance of individual buildings and the conservation area generally; and*
- ▶ *to enable consistent and equitable assessment of all signage proposals.*

As part of this project application, approval is sought for possible future signage zones to the Circular Quay and George Street entrances at street level and overhead, as shown on the Architectural Plans in Appendix A. Details of the proposed signage in these locations have not yet been developed, and separate approval would be sought for the actual signage.

4.6.4 The Rocks and Circular Quay Telecommunications Policy

The SHFA Policy for Telecommunications Installations in The Rocks and Circular Quay states that under the *Telecommunications Act 1997*, carriers seeking to implement installations in an area of environmental significance will not be granted a facility installation permit unless “the carrier has made reasonable efforts to negotiate in good faith”. Subject to this Policy, SHFA requires Carriers and Service Providers to make a development application in accordance with this policy, and receive consent in order to satisfy the requirement of the *Telecommunications Act 1997*.

No additional telecommunication facilities are proposed under this application.

4.7 Strategic Plans and Strategies

4.7.1 Sydney Metropolitan Strategy

‘City of Cities’ – *A Plan for Sydney’s Future* (NSW Department of Planning, 2005), better known as the Metropolitan Strategy, is a long-term blueprint to plan for Sydney’s economy and employment, centres and corridors, housing, transport, environment and resources and parks and public places over 25 years.

The metropolitan strategy states that the quality of life in a community is also a function of the cultural activities available to its residents. As such, facilities such as museums and galleries provide vital character and identity to places as they grow and provide a sense of place and belonging. Consequently, with regard to this application, cultural activity and public art are important elements in community life and should be included in planning.

With regard to the assessment of the applicable transport objects of the Metropolitan Strategy, as requested by the Ministry of Transport, this development is located in an area which has easy access to public and private transport for patrons. The redevelopment is not expected to burden the existing transport system and travel choices are available which will encourage more sustainable travel.



4.7.2 Sydney City Draft Subregional Strategy

Subregional strategies are the result of the metropolitan area being too large to resolve all of the planning aims and directions to a detailed local level through one metro strategy. Subregional planning is an intermediate step in translating the Metropolitan Strategy to a local level. The strategy acts as a link between local and State planning issues.

The site is located within the Sydney City Subregion, and a draft Subregional Strategy has been exhibited.

The Subregional Strategy identifies the MCA as one of the over 40 arts organisations of national Significance, many of which are funded by both the State and Federal governments.

The key direction that applies to this application is for the enhancement of the city's prominence as a diverse global cultural centre. The key actions for the City of Sydney subregion applicable to the application site requires:

- ▶ The promotion of key tourist and visitor destinations in the Sydney City Subregion and to identify future visitor accommodation and facility demands;
- ▶ The recognition and enhancement of Sydney's cultural and tourism precincts;
- ▶ The continuous upgrade and access to the foreshore and to upgrade the public domain at iconic places; and
- ▶ The protection and enhancement of the unique attributes of Sydney Harbour.

The proposed redevelopment complies with the above key direction and key actions of the Sydney City Draft Subregional Strategy. The MCA is an award winning tourist destination and this application is for the redevelopment, enhancement and upgrading of the existing MCA building and its surrounds. The unique attributes of Sydney Harbour will be protected and enhanced by the sensitive architectural design and uses proposed.

4.8 The Project Application Process

The application and assessment process for the MCA redevelopment is summarised below.

4.8.1 Director-General's Requirements

Under clause 75F of the EP&A Act, the Director-General is required to prepare and notify the proponent of environmental assessment requirements for the proposed redevelopment .

The Director-General notified the proponent of environmental assessment requirements with respect to the project on 25 August 2008. A copy of the Director-General's requirements is included in Appendix A.

The key issues raised by the Director-General for consideration are outlined in Table 4.1 together with the section of this report that addresses the matter.



Table 4.1 Director-General's Requirements

Key Issues	Section where addressed
1. Relevant environmental planning instruments, policies and guidelines	Section 4
2. Built form and urban design	Section 6.1
3. Safety/public domain/landscaping	Section 6.2
4. Transport and accessibility (construction and operation)	Section 6.3
5. Construction impacts	Section 6.4
6. Ecologically sustainable development (ESD)	Section 6.5
7. Heritage	Section 6.6
8. Land ownership	Section 2.2
9. Staging	Section 6.4
10. Drainage and Flooding	Section 6.7
11. Contamination	Section 6.8
12. Utilities	Section 6.9
13. Consultation	Section 5

4.8.2 Exhibition

If the environmental assessment is considered to meet the Director-General's requirements, the Department of Planning will place the environmental assessment on public exhibition for at least 30 days. During the exhibition period, submissions will be invited from relevant agencies and members of the public.

The Department of Planning may provide the proponent with a copy of any submissions or a summary of the issues raised in the submissions. The proponent may be asked to respond to the issues and may modify the project and the draft statement of commitments to issues raised in the submission.

If the proposal or draft statement of commitments were modified in response to issues raised, a Preferred Project Report would be prepared to describe the scope of the revised project. The Director-General would make this report public.

4.8.3 Assessment and determination

Following the exhibition period, the Department of Planning will, on behalf of the Minister, review the environmental assessment and submissions received and any Preferred Project Report. Once the Department of Planning has completed its assessment, a draft Assessment Report will be prepared for the Director-General by the Department of Planning, which may include recommended conditions of approval.



The recommended conditions will refer to the draft statement of commitments and may modify those commitments and/or add additional provisions.

The Assessment Report will then be submitted to the Minister for determination. The Minister may refuse the project, or approve it with any conditions considered appropriate.

The Minister's determination and the Director-General's Assessment Report will be published on the Department of Planning's web site immediately following determination.

4.9 Commonwealth Legislation

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) prescribes the Commonwealth's role in environmental assessment, biodiversity conservation and the management of protected areas and species, populations and communities and heritage items.

The approval of the Commonwealth Minister of Environment and Heritage is required for:

- ▶ An action which has, will have or is likely to have a significant impact on "matters of National Environmental Significance" (NES matters). The current NES matters include:
 - The World Heritage values of a declared World Heritage property;
 - The National Heritage values of a listed National Heritage place;
 - The ecological character of a declared Ramsar wetland;
 - Listed threatened species and ecological communities;
 - Listed migratory species;
 - The Commonwealth marine environment; and
 - Nuclear actions.
- ▶ An action by the Commonwealth or a Commonwealth agency which has, will have or is likely to have a significant impact on the environment;
- ▶ An action on Commonwealth land which has, will have or is likely to have a significant impact on the environment; or
- ▶ An action which has, will have or is likely to have a significant impact on the environment on Commonwealth land, no matter where it is to be carried out.

The Sydney Opera House, located on the eastern side of Circular Quay, is a declared World Heritage Property and is also a listed National Heritage Place. As discussed in Section 6.6, the MCA redevelopment would not have a significant impact on the heritage values of the Sydney Opera House, or on any other NES matters or on Commonwealth land. As such, the proposed redevelopment is not considered to require a referral to the Commonwealth Minister for Environment under the EPBC Act.



5. Consultation

5.1 Overview

Consultation is an important part of the planning process and consultation has occurred with relevant local and State government agencies and key stakeholders during the Environmental Assessment process.

The MCA has been active in undertaking extensive briefings of the MCA redevelopment for stakeholders affected by the scheme. MCA Director, Elizabeth Ann Macgregor and/or Euan Upston, MCA Chief Operating Officer, have met with and briefed the following groups:

- ▶ State Government:
 - Office of the Premier of New South Wales
 - Department of Premier and Cabinet
 - Office of the Director General, NSW Department of the Arts, Sport and Recreation
 - Minister for the Arts
- ▶ Commonwealth Government:
 - Senior Advisor to Prime Minister
 - Minister for the Environment, Heritage and the Arts
 - Adviser to the Minister for Infrastructure, Transport, Regional Development and Local Government
- ▶ Statutory authorities and State Government departments:
 - Department of Planning
 - Sydney Harbour Foreshore Authority
 - City of Sydney Council
 - Heritage Council
 - Department of State and Regional Development
 - Department of Education and Training
 - Department of the Arts
 - Tourism NSW
 - Events NSW
 - Sydney Ferries
- ▶ Arts groups
 - Australia Council for the Arts
 - Accessible Arts
 - Sydney Opera House
- ▶ Other stakeholders
 - National Trust
 - Tourism and Transport Forum



- The Rocks Chamber of Commerce
- Millers Point Resident Organisation

The MCA is committed to continue this process with the following briefings to be organised after submission of the Project Application:

- Sydney Ports; and
- NSW Maritime.

5.2 Consultation with Key Stakeholders

5.2.1 Sydney Harbour Foreshore Authority

SHFA has been involved with the project since inception, being the client and proponent for the Development Plan. Since then, both the SHFA Board and executive officers have been regularly briefed on the scheme and given the opportunity for comment.

Briefings have consisted of showing and discussing the redevelopment presenting the latest plans, architectural fly-throughs or architectural models. The major concern raised by SHFA relates to the overhang onto George Street, which the MCA has addressed in part by pulling the building back into line with The Rocks NSW Police Station. An easement or such like is still required from SHFA for this to proceed. SHFA has expressed their support the proposal.

5.2.2 NSW Police

As part of the refurbishment of The Rocks NSW Police Station Building at 132 George Street by the NSW Police and SHFA, which is partially on MCA leased land, the MCA took part in a long and exhaustive consultation process. The outcome of this process was a memorandum of understanding between the three parties which related to land ownership, the proposed development of the MCA and access rights for the NSW Police over MCA land. In order for the proposals to proceed the NSW Police agreed to concede to the MCA the area around and including the toilet block annex to the south of 132 George Street, and the MCA agreed to sublease land to the east of 132 George Street back to the Police so that they could construct their van dock and prisoner run. As part of this process the MCA attended all Project Control Group meetings to ensure that communication between the two development proposals was clear and would allow both proposals to be delivered in their entirety. The Rocks NSW Police Station Building refurbishment work was completed in May 2008. It has been specifically indicated to NSW Police that the MCA redevelopment in some areas includes building right up against their building and as a result window drenching has been incorporated within The Rocks NSW Police Station building's refurbishment works.

5.2.3 City of Sydney Council

The MCA gave a full presentation of the proposed redevelopment to the City of Sydney Council in December 2007, and has also briefed senior planning staff on a number of occasions. Subsequently the Council granted the MCA with \$1 million towards the costs of the proposed building development.



5.2.4 Heritage Council

A briefing was provided to the Heritage Council in October 2007. The main concerns raised related to impacts on archaeology and interpretation of the remains of the Naval Docks.

5.2.5 The Rocks Chamber of Commerce

The President of The Rocks Chamber of Commerce was briefed in October 2008. A very positive response was received, particularly in terms of the effect that the new building would have on activating The Rocks and George Street precinct.

5.2.6 Millers Point Action Committee

The Chairperson of the Millers Point Action Committee was briefed in October 2008. The response was positive and as a result closer relations between the MCA and this local community group will be developed. An early initiative is that the MCA has introduced annual curatorial walkthroughs of major exhibitions for the residents of Millers Point.

5.2.7 Sydney Ferries

The CEO of Sydney Ferries was briefed in November 2008 and was supportive of the proposed redevelopment. Further consultation will be undertaken with Sydney Ferries in relation to the proposed seawater exchange and discharge into the harbour.

5.3 Issues Raised by Agencies

Several agencies were requested by the Department of Planning to provide input into the Director-General's Environmental Assessment Requirements. The relevant agency, the issues they raised and the section in which the issue was addressed is provided in Table 5.1.

Table 5.1 Issues Raised by Agencies

Agency	Issues raised	Section in EA
SHFA	Land ownership	Section 2.2
	- Ownership of land subject to the application and extension must be clearly identified. - Landowner consent is required prior to lodgement of the EA.	
	Building height and elevations	Section 6.1 and Appendix A
	- Proposed development should not dominate the existing MCA buildings. - Detailed justification and assessment must be provided for the design of the proposed development including heights, setbacks, building mass, materials and integration into site. - Justification of the proposed relationship between the proposed development and 132 George Street, particularly the George Street and Argyle Street elevations.	
	Amendments to the Sydney Cover Redevelopment Authority (SCRA) Scheme	Section 4.4

Agency	Issues raised	Section in EA
	Building Alignments - Encroachment on First Fleet Park - Encroachment on Argyle Street Footpath - George Street Alignment	Section 6.1 and Appendix A
	Through – site pedestrian link and maintenance of Suez Canal Corridor - Document and justify the proposal and options for providing access from George Street through to Circular Quay. It should address: - Proposed access - Proposals to ensure public access - Hours of access - How building and public security will be maintained.	Section 6.1 and Appendix A
	Access - Provide details as to how the site access will be consolidated to remove the need for access through First Fleet Park. - Demonstrate how adequate arrangements will be made to maintain access to rear prisoner can dock for The Rocks NSW Police Station building at 132 George Street.	Section 6.3
	Heritage Impact Statement - Preparation of new Conservation Management Plan - Preparation of a Heritage Impact Statement in line with the values and policies set out in the Conservation Management Plan	Section 6.6
	Archaeology Detailed assessment of the proposal against the Statement of Significance, conclusion and recommendations of the Archaeological Assessment undertaken in 2000/2001 by Casey and Lowe and Associates.	Section 6.6
	Impact on Public Domain - Clearly identify all impacts on the public domain and detail the extent to which any adverse impacts will be remediated. - Entry into a Voluntary Planning Agreement in accordance with Section 93F of the <i>Environmental Planning and Assessment Act 1979</i>.	Section 6.2
	Clarification of proposed works - Clarification of design features marked “MCA Extension Above” - Detail of proposed uses of development and their socio economic impact on existing business.	Section 3 and Appendix A
	Impact on 132 George Street - Assessment of impacts and how they will be mitigated including solar access and ventilation to the eastern and southern façade. - Detail on maintenance of eastern and southern façade of the existing MCA building following construction	Section 6.1 and Appendix A



Agency	Issues raised	Section in EA
	Sustainable Development	Section 6.5
	- Address requirements of the SHFA's "Sustainable development outcomes Strategy". - Consider how sustainable practices will be integrated into services for the operation of the whole of the MCA building(s).	
	Independent design review process	Section 0
	Existing substation	Section 6.9
	Details of impact on the existing substation, and any proposal to relocate this facility.	
Energy Australia	Consultation with Energy Australia to discuss new loads	Section 6.9
	Substation	Section 6.9
	- Address the entry into the substation, which is restricted by a structure comprising a restaurant and its associated equipment. - Clarification as to whether a second substation is to be established to cater for electrical requirements of development.	
RTA	Development should contribute to the transport objectives of the Metropolitan Strategy and high-level NSW Government strategies.	Section 4.7
	Traffic	Section 6.3
	- Traffic movements generated by the proposed development - Detailed access and parking provisions and compliance with relevant Australian Standards. - Proposed car parking spaces and compliance with parking codes. - Details of service vehicle movements - Implications of proposal on non-car travel modes and the opportunity to implement a location-specific sustainable travel plan.	
	Preparation of Traffic Management Plan for demolition/construction activities.	Section 6.4
City of Sydney Council	Visual impact of the proposal	Section 6.1
	Impact of proposal on existing streetscape and adjacent public domain	Section 6.2
	Preparation of Heritage Impact Statement, Conservation Management Plan and/or Conservation Management Strategy in accordance with NSW Heritage Office's requirements.	Section 6.6
Sydney Water	Preparation of integrated Water Management Plan	Section 6.7
	Assessment of infrastructure	Section 6.7
Ministry of Transport	Car parking	Section 6.3
	Pedestrian and cycle movements	Section 6.3
	Identification of measures and strategies to optimise the opportunity provided by the project site's proximity to public transport including preparation of Travel Access Guide	Section 6.3



Agency	Issues raised	Section in EA
	Mitigation measures to minimise impacts on pedestrians and cyclists during construction.	Section 6.4

6. Assessment of Key Issues

6.1 Built Form and Urban Design

Appendix E contains a Built Form and Urban Design Statement, prepared by Architect Marshall in conjunction with the Government Architects Office. This section provides a summary of the relevant key issues relating to built form and urban design.

6.1.1 Context

In the broadest context, the MCA building is unique in being a stand alone building with extensive clear space around it. To the south the commercial CBD is held back by the Cahill Expressway and City Circle railway. Around the foreshores of Circular Quay is a generous open promenade continuing on from under the Harbour Bridge around Circular Quay, Opera House, Farm Cove and beyond. Residential high-rise defines the built form of East Circular Quay. The land to the east of the Bradfield Highway is characterised as small scale mixed use (mainly commercial) typical of the historic Rocks. The Overseas Passenger Terminal and the MCA building, although technically in the Rocks, fall outside the general character as they are from much more recent times and both have generous space around them.

A pattern of slots occur between the wall of buildings that bound the Circular Quay promenade, as shown in Figure 6.1. From Macquarie, Alfred, George Streets and Hickson Road these slots provide special framed views of the Quay and in most cases pedestrian access through to the promenade.



Figure 6.1 Pattern of Slots Framing Circular Quay



6.1.2 Built Form

A reading of the form of the existing MCA building reveals a strong intent to express the strength of the Maritime Services Board (MSB), which was at the time one of the most powerful government authorities due its control of imports and exports from Australia prior to the proliferation of air travel. This was achieved by bisymmetrically arranging accommodation in 5 storey blocks of accommodation about a central 6 storey block culminating in a central 9 storey block.

The original building is unique in its location as it is fully 'in the round', does not abut any other building and is of an architectural era not found in its immediate context. All the above adds to the building very consciously expressing its independence.

The desire to express such power in an organisation ended when the MSB vacated the building. As the MCA's public image is an open-to-all inclusive one, adding onto the original building does not lend itself to maintaining an expression of power through strong symmetry. On the other hand, to express respect for the original building, it is appropriate that the block-like allocation of accommodation be maintained but without the symmetry, hence expressing the MCA's desire for inclusivity.

The MCA's requirements for extra space has raised the question of how such an addition can be designed to respect the existing building fabric, the historic nature of the Rocks and the monumental scale of Circular Quay and the central business district, while at the same time present the persona of the MCA to the public.

The only space unbuilt upon is to the north of the MCA building – east being the West Circular Quay public domain, south being First Fleet Park and west being the public domain of George Street (and where the building is currently built to the boundary). This space to the north is under utilised as it is currently occupied by the MCA's open air car park.

The MCA Development Plan prepared by Architect Marshall Pty Ltd in 2003 and approved by the MCA Board and SHFA tested three possible models for the redevelopment and concluded that the only viable option is the proposed arrangement which utilises the existing site and respects the existing building fabric.

The MCA's brief is broadly divided into circulation, education, venues, back of house and gallery space. These are then subdivided into specific spaces and relationships. To maintain the existing building's block-like nature but in an open, less powerful contemporary expression, functional spaces have been articulated as block like forms with the resultant space between them being glazing for prospect, natural light and ventilation.

6.1.3 Heights

The height of the new works to the north of the existing MCA building respects and enhances the stepped form of the existing building, and helps to negotiate the difference in scale between the existing building and the surrounding buildings (in particular The Rocks NSW Police Station).

The new rooftop function areas on Level 7 complement the stepped form of the existing building, with the new walls setback in behind the existing parapet, and the roof reading as a 'floating plane'. The extent of the new roof is symmetrical about the central vertical core to



respect the existing building's severe symmetry. The original structural drawings for the building show that an extra level was intended. This is backed up by a review of the original structural drawings carried out by Simpson Design Associates, structural engineers.

The proposed George Street elevation considers the scale of neighbouring buildings, with the facade treatment of any new building work is broken down into a series of panels of varying dimension, alignment, colour and texture.

The height of the redevelopment over the George Street entrance, the height of the George Street Level 4 gallery addition, the top of The Rocks NSW Police Station Building are all within a half level of each other and the four 5 level corner blocks of accommodation of the existing building. This consistency of height, each broken by substantial open space, respects the existing building and The Rocks NSW Police building.

By referencing to the existing MCA building and The Rocks NSW Police buildings' flat roofs, the proposed works terminate with flat roofs, further making this group of buildings as a counterpoint to the historic Rocks precinct on the western side of George Street which is characterised by pitched roofs.

Similarly, broken up box-like forms in response to the box-like existing MCA building and The Rocks NSW Police building has been adopted as the same counterpoint to the built form on the western side of George Street.

6.1.4 Set backs

The existing MCA building reads as a building "in the round", and unlike the nearby buildings on the western side of George Street does not contribute to a wall of buildings forming a street edge. The proposed redevelopment recognises and plays on this fact by manipulating building setbacks to enliven the building's exterior and draw attention to the entrances, while at the same time respecting the surrounding urban context. The massing of the new building contributes to the external legibility of its internal activities.

On the Circular Quay elevation the new building mass projects beyond the existing property boundary to signify the main entrance below. The extent of the projection aligns with the eastern elevation of a substantial group of buildings to the north of the existing MCA building, which are located to the north of the Bethel Steps, namely the former Mariner's Church at 100 George Street and 35-43 Circular Quay West.

On the George Street elevation, the new building remains within the property boundary at street level, while the levels above project over the boundary providing sufficient new area on the levels above to fulfil its educational aspirations by creating space for a lecture theatre and a National Centre for Creative Learning on Levels 3 and 4 respectively in addition to all weather protection over the entry. Given the constraints of the circulation stairs and their forced relationship with the existing building it would not be possible to achieve this without such an overhang.

It is important for a public building such as the MCA to have a noble welcoming entry that is highly visible and one that provides space to stand out of the rain prior to entry. These levels have been designed so as the maximum projection will align with The Rocks NSW Police Building's western boundary and there is a further setback over the main George Street



entrance to the MCA on Level 3 to reveal the south-western corner of The Rocks NSW Police Building. All this maintains the view corridor looking north along George Street from the south.

Existing views looking south down George Street from the north are also maintained. The proposed redevelopment is set back from The Rocks NSW Police building on Levels 3, 4 and 5 to reveal the southern elevation of The Rocks NSW Police building.

The existing galleries on Level 3 designed by Peddle Thorp & Walker in 1991 are built up to the boundary. To provide a clear reading between the new works and existing sandstone building, and because the sandstone of this 1991 facade is showing signs of failing, a new facade in keeping with the new northern addition refaces this 1991 facade, the break up of which makes direct reference to the original MSB building form. The proposed facade for this is setback from the established setback (ie. the 1991 addition on the boundary) in various places to articulate the facade. The resultant Museum as a whole will be read in two architectural languages - as the original MSB building and the new MCA alterations.

6.1.5 Materials

External materials have been selected to satisfy a number of criteria:

- To reflect the MCA's stature as a high profile building open to the public;
- To complement the existing MCA building and neighbouring buildings without resorting to mimicry;
- To draw upon the range of materials and colours in the nearby Rocks and central business district;
- To reflect the MCA's standing as a forward looking institution;
- To satisfy energy efficiency requirements;
- To supplement the architectural approach to the proposed redevelopment's massing; and
- To last at least 30 years without major maintenance, bearing in mind the potentially corrosive marine environment.

The proposed materials are contemporary, distinguishing the building from the environment whilst being sympathetic in regard to scale, articulation, relationship and massing.

The palette of materials includes:

- Off-form concrete to the external walls for one level where the building comes out of the ground;
- Glass reinforced cement as a general cladding panel in a variety of colours and finishes;
- Glazed windows and balustrades;
- Possible future signage zones to denote main entrances on George Street and Circular Quay;
- Ceramic tiles/concrete pavers to terraces, including the Level 1 and Level 7 roofs; and
- Glass reinforced cement paving (similar to the general cladding panels in a variety of colours and finishes) on concrete roofs.

Looking at the Rocks and immediate Central Business District as a whole and in detail reveals an existing range of colours, as shown in Figure 6.2. This colour range has formed the basis for the palette of colours to be used in the MCA redevelopment.



Figure 6.2 Existing Range of Colours in The Rocks and Sydney CBD

6.1.6 Access

Entry points to the MCA for its various user types are currently unclear and confusing, in particular for members of the public. The proposed redevelopment provides a new public foyer to the north of the existing building, which takes the form of an east-west circulation route linking George Street and Circular Quay - in essence, a 'street' through the building, as shown in Figure 6.3. This reconciles the level difference between George Street and Circular Quay.

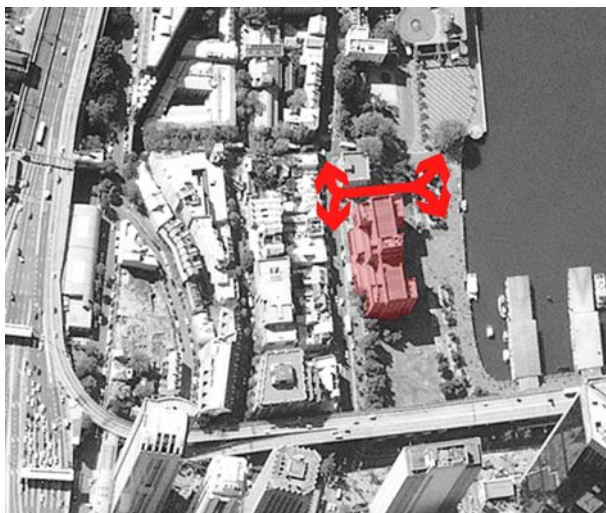


Figure 6.3 Illustration of Proposed Access Arrangements



Accessible to all members of the public, the 'street' is a visual extension of the Suez Canal view corridor, fulfils the SCRA Scheme's desire for a pedestrian link through this part of the site and provides the MCA with highly visible public entrances at both its George Street and Circular Quay frontages. The 'street' runs across the natural contours between two major thoroughfares and provides view corridors to Circular Quay in recognition of the established historic pattern throughout the Rocks and East Circular Quay.

The entrances are designed to attract and inform visitors through the form of the building, and will provide equitable and compliant access for all members of the public. The design of possible future signage (overhead and at street level) will be the subject of another separate application.

6.1.7 Circulation

Internally the proposed development provides coherent, identifiable, accessible to all and clearly separated circulation pathways for both public and non-public users.

The public circulation 'street', linking Circular Quay on Level 1 and George Street on Level 2, is carried vertically through the building and forms a major part of the visitor's experience of the new development. It provides an easily navigable path linking all functions requiring public access. Vertical circulation is available via lifts (Lifts 3 and 4) or the wide public stair (Stair 6), which is open to circulation spaces on each floor. It is anticipated that many MCA exhibition visitors will catch a lift to the Level 5 Café and Outdoor Sculpture Terrace then filter down through the building via Stair 6.

Voids between floors and external views from the public circulation zones orient visitors and enliven their experience of moving through the building. Views are available between the existing and new buildings both to the west (through the public stair) and to the east (through the glazed lift).

Vertical circulation for non-public users is centred on the existing building's existing lift core. On Level 1 this core links with the new wing via the Foundation Hall Corridor and the western Service Corridor leading to the Loading Dock.

The redevelopment of the MCA will provide equitable circulation, which complies with the relevant statutory requirements.

6.1.8 Visual Impacts

With views to and from the site in all directions, including from Harrington Street above, it is appropriate that the MCA redevelopment be considered as a sculptural object 'in the round' with no 'back' facade. This approach has informed the proposed development's three-dimensional quality, as outlined above, and enhances views to the site from buildings in the Central Business District, the Cahill Expressway, City Circle railway and station, the eastern Harbour Bridge walkway and from the all parts of the Circular Quay foreshore, including the Opera House.

The proposed redevelopment's built form preserves views along George Street, and to the existing The Rocks NSW Police Station. Treatment of new building work visible from George



Street is of a scale that is consistent with neighbouring built fabric, particularly that on the western side of George Street.

The design team has endeavoured to achieve as much visibility through the site as possible.

When viewed from Circular Quay and Opera House, the new building work is designed to act as a contemporary signifier for the MCA, and in particular to identify the new main entry. To this end the mass of the new building projects over the entry beyond the property boundary on Circular Quay, as outlined above. The massing of the new building work enhances the stepped form of the original building, culminating in the central clock tower.

The redevelopment being square in form and broken up into smaller elements of different earth colours (in opposition to the huge curved white surfaces of the Opera House) offers no competition for the Opera House and when seen from the Opera House blends into the surrounding CBD and Rocks.

Initial site analysis identified a series of viewing slots between existing buildings that enclose the Circular Quay promenade. The new public foyer between the existing and new buildings maintains one of these slots - the existing Suez Canal view corridor – thereby preserving views from George Street through to Circular Quay. SHFA Planning and Heritage have both been briefed on the design and resolution of the view corridor and are satisfied with the outcomes.

Photomontages illustrating the proposed redevelopment have been prepared, as shown in Figure 6.4, Figure 6.5 and Figure 6.6.



Figure 6.4 View from the Pedestrian Walkway on the Cahill Expressway



Figure 6.5 View from the Western Side of George Street



Figure 6.6 View from the Sydney Opera House



6.1.9 Privacy Impacts

Given the existing public nature of the MCA building and site, the privacy of adjoining properties is not overly affected by the proposed development. The south and east elevations of the existing The Rocks NSW Police Station will be affected in terms of privacy, with proposed facades of the new building in close proximity. The MCA has reduced the impact of this by only taking the southern development up one level on the George Street side and reducing the thrust of the building towards the north on the eastern elevation.

Architectural elevations in Appendix A show that the Level 3 deck on the George St does not compromise privacy issues for The Rocks NSW Police Station.

Further to this, the proximity of the new facades to the existing The Rocks NSW Police Station windows is mitigated by limiting fenestration in the new MCA external walls on the northern elevation.

Discussions with NSW Police have been held throughout design development and the NSW Police are in agreement with the proposed design which forms part of a Memorandum of Understanding between the MCA, NSW Police and SHFA.

6.1.10 Overshadowing

Shadow diagrams are provided in Appendix A.

The proposed development will overshadow part of George Street in the morning and West Circular Quay in the afternoon, however given the size of this public outdoor space the overall effect will be relatively minor.

New building works will block some of the windows in the east elevation of the existing NSW Rocks Police Station. Those that remain to the north on that east elevation will have some overshadowing. NSW Police have been fully informed of the proposed redevelopment and accept its impact. It should be noted that both the eastern and southern walls of the existing NSW Rocks Police station building have been designed to be built hard up against indicated by the lack of detail and brick corbelling.

6.2 Safety, Public Domain and Landscaping

6.2.1 Safety and Security

An assessment of the proposed redevelopment in accordance with *Crime prevention and the assessment of development applications, Guidelines under section 79C of the Environmental Planning and Assessment Act 1979* (Department of Urban Affairs and Planning, 2001) has been undertaken, and is included in Appendix F. A summary of this assessment is provided below.

Surveillance

The proposal meets the surveillance requirements of the guidelines by being located in an area with high passive surveillance. This specifically relates to the activities along George Street and First Fleet Park and The Rocks NSW Police Station. The MCA is adjacent to The Rocks Police Station, which will assist in the deterrence of crime around most of the building.



Additionally there is security provided by the Sydney Harbour Foreshore Authority (SHFA) through its dedicated rangers who patrol the area and closed circuit television coverage both in George Street and off the eastern decks of the MCA which is directly linked back to the Sydney Harbour Foreshore Rangers Security Office.

Further to this the MCA currently has third party contractor security patrols checking the building and its environment on a nightly basis which will continue under the proposed redevelopment.

The area of this development most vulnerable to possible crime is the southern end of the existing MCA building. This area however, has clear sightlines, sufficient lighting and low scale landscaping to deter any possible criminal activity. The proposed extension of the MCA will address this aspect of the Crime Prevention Through Environmental Design (CPTED) principles through a number of design features, as outlined below.

The design of the development is such that it will maintain sightlines to key places and between public and private spaces. Sightlines between public and private spaces will be developed and maintained to avoid blind spots where there is a reduced opportunity to see and be seen. The sightline to the southern portion of the site from George Street and Circular Quay will be maintained by not developing in the area of the sightline. Landscaping in this area will also comprise paved and grassed areas.

External security lighting will be provided to the new building. Motion detectors will trigger local external lights in the spaces between the old and new buildings as a deterrent to acts of crime in these locations.

Access control

Access control for the proposed MCA development will be achieved through implementing a number of measures. Existing landscaping and facilities including grassed areas, benches and formal walkways encourages the movement of people to and within a specific area. Creating this landscape and physical environment which channels and groups pedestrians into target areas limits the possibility for the isolation of individuals and crime.

One of the key intentions of this redevelopment project is to make clear and equitable access to and within the MCA for all who use it. The redevelopment will incorporate and promote the principles of legibility to allow people to select the most appropriate route and remove the possibility for wandering or getting lost. The creation of this legible space will provide people with more confidence and reduce the stress associated with an unfamiliar environment.

The proposed MCA development will contribute to the pleasant environment which currently exists within this area of Circular Quay. Pedestrian movement is constant in the area and this is facilitated through numerous physical and symbolic barriers and facilities including grassed and paved areas. The proposal will contribute to the existing public space, making people feel comfortable and safe. The continuation of this maintained public space will decrease the possibility of crime within this area.

All gallery and exhibition spaces are patrolled by MCA Visitor Service Officers who are equipped with two way radios and have direct contact with MCA Security Personnel. Clear wayfinding through the proposed central circulation spine restricts exhibitions visitors to only the public areas of the Museum. All public areas of the museum are under direct CCTV surveillance and this is expected by visitors to an art museum



Territorial reinforcements

Under the proposed redevelopment, the design of the MCA, its physical appearance and surrounding environment will be such that it will encourage people to gather in an area of public space and consequently provide them with some responsibility for its use and condition. This will be achieved through implementing design principles including quality landscaping which is reflective of the surrounding environment and its function. These design principles will create a pleasant environment and encourage use of the area as an active public space. Further, they will promote the museum as a public building open for visitation by all members of the public.

The MCA design will have clear transitions and boundaries between public and private space. The proposed grassed and paved ramps will clearly form part of the public domain, with the glass entry doors defining the entrance to the private space of the MCA. Notwithstanding this, the intention is to create a public 'street' through the building, with a view corridor provided between the George Street entrance and the Circular Quay concourse. This public 'street' will only be accessible during opening hours of the MCA.

Space management

Management of the area surrounding the MCA will promote the message that both the community and pedestrians respect this environment. The appropriate coordination of the site, maintaining the building and surrounds, repairing vandalism as it occurs and retaining and improving pedestrian facilities including lighting when needed, will ensure that the space is appropriately utilised and well cared for. Developing this respect for the site surrounding the MCA redevelopment will assist in reducing crime.

6.2.2 Accessibility

An Accessibility Report was prepared by Morris-Goding Accessibility Consulting. A copy of this report is attached at Appendix G. The proposed development has been reviewed to ensure that ingress and egress, paths of travel; circulation areas and toilets comply with relevant statutory guidelines.

With regard to ingress and egress, entry from Circular Quay (Level 1) is via automatic sliding doors. Two passenger lifts located nearby the doors provide access to all levels of the MCA. The circulation areas from the entry area to the lifts are accessible and continuous throughout.

There is a new entrance on George Street (Level 2) which is accessed via an automatic sliding doorway. There are two walkways which provide access from the entry doorway landing area through to the gallery reception area and the two passenger lifts, providing access to all levels of the MCA.

The Accessibility Report concludes that the development has accessible paths of travel that are continuous throughout the building and the proposed development has demonstrated an appropriate degree of accessibility. An assessment of the architectural plans indicates that compliance with statutory requirements, pertaining to site access, common area access and accessible sanitary facilities, can be readily achieved. A number of recommendations are made associated with detailed design, which would be addressed prior to construction certificate.



6.2.3 Public Domain and Landscaping

It is understood that SHFA is planning to initiate the Circular Quay Public Domain Revitalisation project which will encompass West Circular Quay and the MCA Redevelopment project. The MCA will be a key player in this revitalisation project and has joined an informal working group with SHFA to ensure that there is an integrated approach and vision for the landscaping of West Circular Quay to which the redevelopment of the MCA relates.

In the meantime, the physical scope of the landscape component of this Project Application is limited to new terraces to the east of the existing and new buildings and grassed ramps up to such terraces, with hard paving and public seating in front of the new public Circular Quay entrance.

A Landscape Plan is provided with the plans of the proposed redevelopment in Appendix A.

The Terrace is raised to match the Level 1 floor height, forming a unified base for the development that establishes an equitable new public entrance and existing entrance to be enjoyed by members of the public as well as visitors using the Foundation Hall. On its three open sides, the terrace is accessed by a gentle grassed bank, facilitating comfortable pedestrian movement from all directions. The bank is supplemented by ramps at the northern and southern ends of the terrace, which provides access to the MCA and the 'street' to George Street by all persons, including mobility-impaired.

The terrace and bank are paved where major pedestrian movements are anticipated, in particular outside the main public entry, and grassed where passive enjoyment is expected. The gently sloping grassed ramp along with the paved terraces and ramps gives the MCA building a base and front door mat. The grassed area provides a usable surface to relax on and view the promenade and Circular Quay.

Outdoor seating is proposed at the Circular Quay entrance, which will contribute positively to the public domain.

6.2.4 Lighting

At present the eastern facade of the existing building is uplit at night with floodlights. The provision of new external façade lighting apart from security lighting is not included in the scope of works for this redevelopment.

While the symmetry and strength of the existing building are expressed by externally lighting the facade, under the redevelopment of the MCA it is intended that the illuminated internal spaces be used as an attractor to the building to show the diversity of internal spaces, their materials and colour, and especially the activities going on inside the building. By lighting the internal 'street', the open nature of this passage will be expressed as an extension of Suez Canal and as a formal gesture of the open, welcoming nature of the MCA. Such an enlivened building and surrounds will attract people which will be a deterrent to crime in the immediate area. External security lighting will be provided to the new building as part of the redevelopment. Motion detectors will trigger local external lights in the spaces between the old and new buildings providing a deterrent to acts of crime in these locations.

The proposed lighting is not expected to have any adverse impact on the surrounding environment, or on the operations of Sydney Harbour. The only additional lighting elements will



be external security lighting to the new building along with internal lighting. While internal lighting will be partially visible from the surrounding public spaces and Sydney Harbour, most noticeably through the glazed facade elements of the new building, this is unlikely to result in impacts on the operations of Sydney Harbour.

6.3 Transport and Accessibility

Colston Budd Hunt and Kafes Pty Ltd has examined the transport implications of the proposed extension of the Museum of Contemporary Art building. A copy of their report is included in Appendix H.

This report outlines the existing conditions within and surrounding the site in relation to traffic flows and parking, intersection operations, road networks, access and public transport. An assessment of the implications of the proposed development on these issues forms part of the report and are summarised below.

6.3.1 Access

Access to the site for both loading and parking purposes is conducted informally. The access point for vehicles is provided from Argyle Street where vehicles are required to pass through a Sydney Ports security point. Mini buses for mobility-impaired persons or students visiting the museum also pass through the Sydney Ports security point to access the disabled ramp at the existing MCA public entrance. There is a turning circle at the northern end of Circular Quay West, which provides for vehicles to turn around, including buses at the terminal. Currently, large delivery vehicles to the MCA are required to reverse into the loading dock and open air car park from Argyle Street, while other vehicles exit in a forward direction. This driveway also provides vehicular access to a loading area servicing The Rocks NSW Police, who occupy the building adjoining the MCA to the north.

To improve vehicular access to the MCA, a widened driveway is proposed to be provided from Argyle Street, generally in the location of the existing driveway. This driveway would be widened to the east to better provide for larger service entry and exit. This western driveway will provide access for small rigid trucks which are expected to make the majority of deliveries.

A second driveway will be provided near the eastern end of the site and utilised on a limited basis by larger trucks. This will mainly be during periods of exhibition change-overs and vehicles will be required to reverse into the driveway and exit in a forward direction.

All driveway grades and transitions will be provided in accordance with the Australian Standard for Parking Facilities (Part 2: Off-street commercial vehicle facilities), AS 2980.2 – 2002.

The existing access arrangements for bump ins through the southern doors of the Foundation Hall located on the northern edge of First Fleet Park will continue. SHFA and the MCA have agreed to develop an operational plan to manage this.

Pedestrian access and connections to and through the museum will be greatly improved by creating the 'street' linking George Street and Circular Quay at the northern end of the building. Access to the museum its foyer and reception area will be through both frontages and contribute to improved pedestrian connectivity.



It is proposed to continue to provide access for mini buses for mobility-impaired persons or students visiting the museum. Mini-buses would pass through the Sydney Ports security point and traverse the proposed external paved area (noted as Terrace 1.4 on the architectural plans), and drop off passengers in front of the new Circular Quay entrance, from where they can access lifts to all levels of the building.

6.3.2 Car Parking

The MCA's current on-site car parking provision is approximately 15 spaces. Under the redevelopment this number will reduce and on site car parking will be designed in a flexible manner to meet the operational loading requirements.

Unlike the current informal parking arrangements on the MCA site, parking is proposed to be formalised within the modified existing loading dock and car park and a total of four parking spaces will be provided, along with motorcycle parking and bicycle racks for tenants and staff use. These spaces will be in accordance with the Australian Standard for Parking Facilities (Part 1: Off-street Car Parking), AS2890.1:2004 and will be sealed and line marked. They will provide flexible parking area for visiting VIPs, guests and, to a limited extent, a small number of museum staff. The spaces will be managed by the museum so that appropriate staff will know who is parked in the loading dock at any time. Spaces will not be available for parking by the general public visiting the museum.

6.3.3 Public Transport

The site currently has good access to regular bus, ferry and rail services servicing the northern end of the CBD. Circular Quay Railway Station is within some 250 metres walking distance and Sydney Buses operates bus services along George Street. Bus routes 308 (Marrickville – Alexandria – City), 339 (Clovelly – Surry Hills – Millers Point), 431 (Glebe Point – Millers Point) and 432, 433 and 434 (Birchgrove/Balmain – Glebe – Millers Point) operate along George Street adjacent to the site.

The Traffic Impact Study revealed that the MCA site has good access to regular public transport services and the proposed redevelopment will continue to be close to these services, which will be readily accessible. Six bicycle parking spaces for employees are proposed in the loading dock.

Pedestrian access to the museum will be emphasised and improved from Circular Quay and George Street, with a through 'street' for pedestrians through the building.

6.3.4 Traffic Generation

Following a study undertaken as part of the Traffic Impact Study using the INTANAL program (which estimates the levels of service for traffic), it was revealed that George/Argyle Street intersection is operating with average delays of less than 15 seconds per vehicles during the afternoon peak period, representing a good level of service.

As the parking provisions are not proposed to increase, the museum is likely to generate a similar volume of traffic as currently experienced. Traffic generation of the museum would not have a significant effect on the operation of the surrounding road network and George



Street/Argyle Street intersection would continue to operate at its existing good level of service. The road network will be able to cater for the traffic from the proposed redevelopment.

Further details on the traffic generated from the construction of the redevelopment will be completed following the development of the overall construction methodology and process. However, indicative peak construction traffic flows have been estimated based on information provided by the study team. The traffic impact study reveals that the surrounding road network will be able to cater for these relatively small movements.

6.3.5 Summary

Colston Budd Hunt and Kafes Pty Ltd has determined that the proposed development is consistent with government policy and the planning principles of:

- ▶ Improving accessibility to employment and services by walking, cycling, and public transport;
- ▶ Improving the choice of transport and reducing dependence solely on cars for travel purposes;
- ▶ Moderating growth in the demand for travel and the distances travelled especially by car; and
- ▶ Supporting the efficient and viable operation of public transport services.

The Traffic Impact Study came to the following conclusions:

- ▶ The proposed extensions would provide new gallery and education space, improved pedestrian access modifications to the loading dock and parking area;
- ▶ The museum would remain readily accessible by good public transport services;
- ▶ The proposed parking provision is considered appropriate;
- ▶ Access, internal circulation and layout are considered appropriate; and
- ▶ The road network will be able to cater for the traffic from the proposed development.

6.4 Construction Impacts

Root Projects Australia Pty Ltd has prepared a Construction Impact Report and an indicative Construction Works Management Plan for the proposed MCA redevelopment, which is contained in Appendix I.

The report sets out the potential impacts of the construction works and the key mitigation measures that would be implemented to reduce these impacts. The report will serve as a guide to the requirements of the Contractors Construction Management Plan and establish the broad principles that will be developed for the building works. A summary of impacts is provided below.

6.4.1 General

The current program for procurement and construction anticipates completion of construction documentation and a tendering process to appoint a Contractor in early 2010. Construction works are programmed to run from early 2010 to mid 2011 incorporating both the new building work and refurbishment to the existing MCA building.



In the absence of contractor input, the detailed overall construction methodology, process and staging are not yet fully resolved.

6.4.2 Staging

The proposed redevelopment is expected to be constructed in one stage. More detailed staging plans for construction of the various elements of the redevelopment would be developed when the construction contractor has been appointed.

6.4.3 Site Compound and Hoardings

A site compound would be established on the eastern side of the existing MCA building, which would be occupied by the contractor for the duration of construction work.

From construction commencement in early 2010, site sheds including first aid, lunch shed, change rooms and toilets will be located along the edge of the contractor's compound at the north / east corner of the site to the east of the new building construction works. It is likely that an internal road will be created within this area to facilitate vehicular access, deliveries and unloading.

Full height temporary hoardings with covered pedestrian walkways would be provided on George Street and Argyle Street. Pedestrian access along George Street and Argyle Street would be maintained at all times.

External painting of sheds and hoardings will be undertaken as required. The MCA may take the opportunity to utilise some areas of the hoarding as a public art project, and/or to provide the public with information about the redevelopment.

6.4.4 Traffic, Access and Parking

Site access for all construction traffic will be from Argyle Street via new gates to be erected by the contractor at the north / eastern corner of the site leading directly to the contractor's compound. An access thoroughfare will be maintained between the contractor's compound and the MCA building to facilitate MCA deliveries and art movements during exhibition change over.

The transport and accessibility consultant's assessment confirms that the surrounding road network will be able to cater for the construction traffic generated by the MCA redevelopment.

Construction vehicles will enter the contractor's compound via the gates on Argyle Street at the north / east corner of the site. Where required, MCA vehicles will also utilise this entrance. Vehicle movements to and from the site will be managed by the Contractor in order to avoid congestion of the site compound and surrounding roads. This system will likely incorporate a vehicle delivery booking system.

An off-site truck waiting area will be agreed in collaboration with the Sydney Harbour Foreshore Authority and / or Sydney Ports to be used on occasions during key construction stage requirements such as concrete pours.

Prior to leaving the site, all trucks and plant will be washed down inside the site.

The contractor will be required to maintain a clean standard of surrounding roads and repair any damage caused to roads as a result of the works.



Dependent on the final arrangement of the contractor's facilities a limited amount of parking may be available on site for vehicles involved in construction activities and site labour. The primary requirement for car parking will be for construction vehicle unloading.

The construction works and vehicle movement will take into account the Sydney Ports cruise schedule requirements.

6.4.5 Cranes

Depending on the requirements of the contractor a tower crane may be erected for the lifting works associated with the project. A large mobile crane may also be utilised. The contractor will provide all appropriate information required and obtain the necessary permits prior to the erection of the any crane on site.

It is the intention that the majority of materials shall be loaded and unloaded within the construction zones on site, separated from any public way.

6.4.6 Waste Management

In accordance with the project environmental strategy the works will incorporate separation of construction waste. The Contractor will submit as part of its specific environmental management plans a waste management plan which addresses the responsibilities, policies, procedures and performance standards of waste minimisation and waste management.

Skip waste disposal bins will be provided within the construction site. On filling the bin, a waste truck will access the site via the Argyle Street entrance and deposit an empty bin within the construction compound.

Loaded trucks leaving the site are to be covered and have wheels cleaned before leaving the site to mitigate dirt being carried onto the road and the potential for loose material to be blown from truck loads.

6.4.7 Environmental Management

A Construction Environmental Management Plan will be prepared by the Contractor, and will include, as a minimum, the following measures:

- ▶ Dust control – during periods of potentially dusty works, watering down of the works will be carried out to reduce the creation of dust;
- ▶ All hoardings will be painted class A or B steel and plywood construction. Hoardings will be erected prior to the commencement of works and relocated as required. Hoardings will be maintained in good condition, clean and secure for the duration of the construction works;
- ▶ All scaffolds will incorporate shade cloth for protection of the external environment from dust;
- ▶ Noise – signage will be erected in the vicinity of any noisy works to alert the public to potential risks. Noise levels for all construction plant and equipment is to comply with Environmental Protection Authority guidelines, SHFA requirements and the Department's Conditions of Consent;



- ▶ Fly rock – Hoardings erected around the work site will prevent rocks hitting people or adjacent structures. Detailed Work Method Plans will be prepared for any activity generating flying debris or rocks;
- ▶ A full dilapidation survey of the existing buildings surrounding the site will be carried out prior to any works commencing;
- ▶ Sediment Control – silt traps and other sediment control devices will be positioned around storm water sumps and material stockpiles. Waste water from the dust control activities will be directed into the sediment control devices;
- ▶ Working hours – the contractor will be required to maintain site working hours to meet the legislative, Authority and MCA requirements;
- ▶ Ground conditions – the contractor will be required to consider the requirements of the environmental site screening and waste assessment and incorporate in the Contractor's site environmental management plan. The contractor will be required to meet the requirements of the Environmental Protection Authority in treatment of excavated material;
- ▶ Dial Before You Dig – The contractor will be required to undertake appropriate investigation to as far as reasonably possible identify the known services before undertaking excavation and demolition works; and

A Safety Management Plan and Safe Works Method Statement will be prepared by the Contractor to the approval of the MCA and SHFA.

6.5 Ecologically Sustainable Development

Steensen Varming (Australia) Pty Ltd has prepared an Ecologically Sustainable Development (ESD) Report to support the Project Application, and outlines how the development will incorporate ESD principles in the design, construction and ongoing development of the project. This report is contained in Appendix J, and is summarised below.

In the development of the ESD brief for this project the design team has used the Green Building Council of Australia (GBCA), Green Star Education tool as a guide to provide a framework from which ESD initiatives can be reviewed and adopted for the project. This ensures the ESD principles are sound and based on an industry standard that encompasses sustainability items across a broad range of disciplines.

It should be noted that the GBCA Education Rating Tool does not directly apply the MCA which is a public building. As yet there is no tool for public buildings so where the application is deemed suitable the intent of the Education Rating Tool will be used to guide and inform the design.

With regard to the new building project, the intention is to achieve energy efficiency and reduce greenhouse gas emissions. The GBCA main categories have been used to provide guidance on a range of issues including Management (Construction techniques, recycling, commissioning etc), Indoor Environmental Quality, Energy, Transport, Water, Materials, Ecology, Emissions and Innovation.

One of the key ESD initiatives for the redevelopment is the adoption of a seawater heat exchange system for the building. This system uses seawater for cooling in the air conditioning



system. It is a tried and proven technology, removing the need for cooling towers and air-cooled condensers, providing a clean roof form.

Table 6.1 provides a comprehensive summary of the key Green Star credits that have been adopted for the project to ensure ESD outcomes for the project from design, construction through to ongoing operation of the building and its services.

Table 6.1 Key Green Star Credits Adopted for the Project

Item	Credits Available	Credits Targeted	Comment
Management			
Sustainability Advice from Green Star accredited Professional	2	2	Advice from Steensen Varming throughout design development
Environmental management	2	2	Normal practice
Waste management	2	2	Waste management in exhibition spaces very difficult to achieve. Office and cafe area waste management achievable.
Indoor Environmental Quality			
Ventilation rates	2	1	Applicable for office, café, meeting and education areas. 50% improvement to AS1668.2 requirements.
Daylight	4	2	30-60% useable floor area difficult to achieve, as galleries have no natural light. Achievable in areas such as café, office, meeting and education areas.
Daylight glare control	1	1	For areas such as the café, office and meeting facilities and education spaces, blinds/internal shading devices are proposed.
External views	1	1	60% useable floor area has direct line of sight through glazing. Not achievable in gallery areas, however achievable in the café, office, meeting and education areas.
Thermal comfort	3	1	Areas that require close control such as galleries will have a very high degree of thermal comfort. Areas such as offices will be mixed mode so will still maintain a relatively high degree of thermal comfort. Areas such as foyers that are transient in nature and have significant external air movement will not achieve as high thermal comfort.
Internal noise levels	2	2	Achievable in new building but problematic in existing building.
Volatile Organic Compounds	4	2	Generally achievable – paint, carpet, adhesives and furniture.



Item	Credits Available	Credits Targeted	Comment
Formaldehyde minimisation	1	1	Low formaldehyde composite timber products to be specified.
Energy			
Energy reduction	15	6 + 3	Seawater cooling system to be implemented.
Stairs	1	1	Major public stair included in design.
Lighting zoning and control	1	1	Dynalight solution to be implemented.
Transport			
Cyclist facilities	4	2 + 2	Staff and tenant bicycle storage allowed for.
Pedestrian routes	1	1	Achievable.
Water			
Occupant amenity potable water	5	3	Water restrictors, waterless urinals etc to be provided. Fixtures and fittings will be water efficient.
Water meters	1	1	Water meters are included for installation on all water supplies.
Landscape irrigation water efficiency	3	3	It is proposed to install a rainwater reuse tank utilising the new roof area catchment only and fire sprinkler test water, with this water being used for irrigation only.
Heat rejection water consumption	4	4	Sea water system to be implemented – mechanical only.
Fire water system consumption	1	1	Providing levels can be achieved, the intention is for test, commissioning and drain down water sprinkler system usage to be put back to the rainwater tank.
Materials			
Recycling water storage	1	1	Area for separation, collection and recycling provided.
Reuse of facade	1	1	Reuse of existing building
Reuse of structure	1	1	Reuse of existing building
Sustainable timber	2	2	To be reviewed in design development – joinery, floors, lining, framing.
Emissions			
Ozone depletion potential	1	1	Included in mechanical design.
Reduced flow to sewer	2	2	Included in hydraulic design.



In addition to implementing the above initiatives in design and construction, the MCA and where appropriate, the design team, are working to develop an environmental policy not only for the project but also general MCA operations, including establishing an environmental management system to implement it. This would focus not only on environmental, but also social and economic impacts, and would aim to make the building sustainable. A stated environmental policy, which is reviewed throughout the design and construction phases, will help to ensure a well designed building with low running costs and resource consumption (in the form of energy, water and materials), which is appropriate for the use intended, and is flexible enough to accommodate changes in use which can be reasonably expected. All of these features are consistent with a more sustainable building.

6.6 Heritage

A Heritage Impacts Statement for the proposed redevelopment has been prepared by Tanner Architects, and is included in Appendix K. In addition, a Heritage Impact Statement (Archaeology) has been prepared by Casey and Lowe Pty Ltd, and is included in Appendix L.

This section of the Environmental Assessment provides a summary of the heritage impacts of the proposed redevelopment, based on these two reports.

6.6.1 European Built Heritage

Impacts to Adjoining Heritage Items

As identified in Section 0, the existing MCA building is not listed on any statutory heritage register, however is considered significant from a national, local and state level. The building is a draft item in the Sydney Harbour Foreshore Authority Section 170 Register.

This statement of cultural significance for the MCA, as extracted from the draft listing in the SHFA Section 170 Register, is as follows:

"The Museum of Contemporary Art building and site are of State heritage significance for their historical, aesthetic and scientific cultural values. The site and building are also of State heritage significance for their contribution to The Rocks area which is of State Heritage significance in its own right.

Occupying an important position on the western foreshore of Circular Quay, the Museum of Contemporary Art is a well-known landmark. Designed in 1939 to accommodate the Maritime Services Board (MSB), but constructed in 1946-52, the building was part of the State government's vision for the redevelopment of the Quay in conjunction with the construction of the new city railway. The building's location reflected the importance of the MSB as the government body controlling the principal form of international trade and travel. The building contrasts strongly with the character of the adjacent Rocks area.

The free-standing monumental Inter-War Stripped Classical building demonstrates a high standard of workmanship in its detailed construction and the fine Art Deco details and finishes. The grand Wharfage Hall, decorative details and artworks emphasise Sydney's relationship with the sea and maritime transport."



The Rocks NSW Police Station, which adjoins the MCA building to the north at 132 George Street, is included on the Sydney Harbour Foreshore Authority Section 170 Register.

A Conservation Plan was prepared for this building in 1999. Built as a utilitarian government office building in the period 1923-1925, it is now a police station and related offices and has been recently refurbished. Its minor south wing will be demolished as part of the redevelopment of the MCA, and a prisoner run and van dock provided to enable prisoner access along its east elevation. This arrangement is the subject of a Memorandum of Understanding between the NSW Police, the MCA and SHFA.

The Conservation Plan includes in its executive summary:

"The building at 132 George Street sits within a former dockyard precinct of national significance; however, the building itself is of lesser significance. The most significant attributes of the place lie more in its location and historic associations than in the configuration and fabric of the building itself. It is clear from this analysis that the interiors of 132 George Street are not of high cultural significance. The exterior elevations to the south and east are also of low cultural significance. The north and west elevations are of higher cultural significance but only at a local level; however, their role in defining the streetscape and their historic alignment is their primary significance. [Therefore], adaption of the north and west elevations is possible. Preferably, they should not be made higher and could, if necessary, be replaced with something of similar or lower scale, as long as they did not lose the definition of the street and the intersection, and respected the need for pedestrians and possibly related activity at the street level. The external and internal spaces and elements of 132 George Street of varying cultural significance have been graded according to their relative significance."

Page 81 of the Conservation Plan states:

"Policy:

As the primary cultural significance of 132 George Street lies more in its siting and historic associations than in its existing above ground fabric, the building could be either conserved or redeveloped in a number of ways. Development options which retain a meaningful part of the existing building in accordance with the options described in Section 5.8 are preferred to those which involve complete removal."

The heritage impact has been evaluated in detail following the NSW Heritage Office's guidelines, as follows.

How is the impact of the new development on the heritage significance of the item or area been minimised?

The new building is subservient in height, scale and colour to the orange/gold sandstone heritage landmark that is the former MSB (now MCA) building. Its scale and block massing also relates to that of the adjoining The Rocks NSW Police Station at 132 George Street. Accordingly the redevelopment of the MCA is of acceptable scale for this side of George Street in the Rocks precinct.



Why is the new development required to be adjacent to a heritage item?

The former MSB/now MCA building has enjoyed its new public role as the Museum of Contemporary Art since 1991. The need for a larger museum with a wider range of facilities has been understood and explored for over a decade, and most proposals have presumed some alterations to the existing building, a subtle addition at its roofline, and a new building to the north connected by a glazed link. It is not logical to locate these facilities anywhere else other than adjoining the present MCA. The Rocks NSW Police Station at 132 George Street is of such minor heritage and social significance, that it should not be allowed to ever inhibit any proposals for the MCA.

How does the curtilage around the heritage item contribute to the retention of its heritage significance?

The former MSB/now MCA building has an established setting to Circular Quay (to the east) and to First Fleet Park (to the south) and an established street presence to George Street (to the west) and these open environs – in effect the building's curtilage – will not change. The building, while designed in the round, has never been able to be enjoyed from the north due to the proximity of the 'brick box' of 132 George Street, and the intrusion of a substation, a fish café, and an open air car park and loading dock. The north elevation is not clearly in the public realm.

The proposed design allows one to read the former MSB/now MCA building as an 'in the round' design while providing a new building convenient to its north elevation, yet separated from it and linked to it by an open space with a glazed link including a 'bridge' and stair. The link space is relatively tight due to proximity of 132 George Street. In essence, the extended MCA will read as an historic building with a new wing of contemporary and acceptable character.

How does the new development affect views to, and from, the heritage item? What has been done to minimise negative effects?

As is described in the following section, the key public views to the former MSB/now MCA building will not alter. The new structure will slightly impede views from the Overseas Passenger Terminal (and thereabouts) to the north-east corner of the sandstone building. As the typical member of the public is probably proceeding south to Circular Quay, this will be a momentary event, with the full view of the building shortly coming into place. The positioning of the new building has minimised any obvious change to public view impacts on the heritage item.

The distant view of the south-west corner of The Rocks NSW Police Station at 132 George Street from the eastern side of George Street looking from the Cahill Expressway will be partially obscured by the projection of the mass of the lecture theatre which is in line with the south-west corner of George Street. As this is a vista that is not identified as having heritage or streetscape significance, it should not be considered an adverse impact. The new MCA entrance should be the key accent in this view, not The Rocks NSW Police Station.

The introduction of the new building to the north of the MCA prevents the establishment of a permanent physical link from George Street to the harbour in the line of the Suez Canal laneway. However, the use of glazing for the link between the extension and the MCA and the creation of pedestrian access or 'street' through the building will enable a link to be achieved.



Is the new development sympathetic to the heritage item. In what way (e.g. form, siting, proportions, design)?

Yes. The form is subservient and follows a cubic massing, like the existing building. It is sited adjoining but separate from the existing building. Given the former MSB/now MCA is a orange/gold colour, the brown, white and charcoal tones of the new building will have a more subdued coloured rendering.

Will the additions visually dominate the heritage item. How has this been minimised?

No. Given the lower scale, and least obtrusive location adjoining the heritage item, the new building, while an individual and contemporary statement, will not dominate the heritage item. The heritage item is visually very robust and can hold its own.

Will the public, and users of the item, still be able to view and appreciate its significance?

Yes. It will continue to dominate Circular Quay and Sydney Cove, and retain its prominent entry, symmetry and logic to both the public and users.

Impacts to Other Heritage Items in the Locality

The Sydney Opera House is listed on the World Heritage List. In addition, there are a number of other heritage items and conservation areas, including The Rocks precinct, Sydney Harbour Bridge and other surrounding heritage items including Cadman's Cottage.

The MCA redevelopment is considered to provide an enhanced experience of the Sydney Harbour, The Rocks, Sydney Opera House, Sydney Harbour Bridge and other surrounding heritage items including Cadman's Cottage.

The proposed extension will enhance the viability and prestige of the MCA, while providing the opportunity for greater public awareness of the harbour and surrounding environs. It will cater for more visitors, and its terraces will encourage users of the MCA to spend time viewing the spectacular site context appreciating the heritage values and cultural significance of the heritage items and their setting, in particular uninterrupted views of the world heritage listed Sydney Opera House.

The proposed building is not considered to have any detrimental physical or visual impacts to surrounding heritage items located in close proximity to the site. Within the immediate vicinity of the subject site Cadman's Cottage and Barney and Bligh Reserve are situated to the north of the site. The cottage is separated from the subject site by Argyle Street (roadway) and Bligh Park to the south of the cottage. The proposed redevelopment will not affect the immediate curtilage or visual quality and scale of this building.

Other heritage items that are in the vicinity include the Sydney Harbour Bridge including approaches and viaducts and the Circular Quay Ferry Wharves. Although both these items are some distance from the subject site the proposed building will encompass some of their visual catchment so it is important to consider their location, siting and context and any potential impact from the proposed redevelopment.

The MCA redevelopment is not considered to adversely or detrimentally affect existing views or vistas from major surrounding vantage points to the Sydney Opera House. The key relevant public vantage points include views enjoyed from First Fleet Park, the lawn to the Museum of



Contemporary Art (MCA), Argyle Street, Overseas Passenger Terminal Forecourt and the Sydney Opera House forecourt, as shown in the photomontages in Section 6.1.

The general public appreciation of the Sydney Harbour Bridge is also not affected.

In making the assessment it is important to consider whether views are obscured or not. West Circular Quay and First Fleet park are important public open spaces. They are popular meeting places, areas where performances occur and are also used as exhibition space. From these spaces direct views to the Sydney Opera House are offered and these views will be maintained and unaffected by the proposal. To the north of these spaces the Overseas Passenger Terminal can be seen however this building at ground level is partially screened by the large Moreton Bay fig tree.

Argyle Street is an historically important roadway and can be considered to be the heart of The Rocks historic precinct. The roadway is relatively steep rising to the west. The subject site can only be seen on approaching the intersection with George Street from the east, with the northwest corner of 132 George Street retaining its prominence. The proposed building will not visually dominate in the immediate skyline when walking along Argyle Street eastward. Importantly the direct view to the Sydney Opera House from the eastern part of Argyle Street will be maintained. One of the most prominent public vantage points along the harbour foreshore is the forecourt of the Sydney Opera House. This area forms an important part of the building's curtilage. From this area most of the harbour foreshore can be seen, the Harbour Bridge and northern foreshore, Circular Quay and the city skyline. A 180 degree view can be captured when standing along its western side facing west. From this viewpoint the extension of the MCA will be partially obscured by the Overseas Passenger Terminal building and the existing mature trees in the forecourt.

The redevelopment of the MCA will be partially visible from many other surrounding public places including the Harbour Bridge, Cahill Expressway, East Circular Quay, Circular Quay Railway Station, Circular Quay, Sydney Harbour and many high rise surrounding commercial, hotel and residential buildings. However, as the new extension is subservient in height, scale and colour to the orange/gold sandstone heritage landmark that is the MCA building, there will be no appreciable impairment of visual amenity or significant view loss from public places as a result of the proposed redevelopment.

6.6.2 Archaeological Heritage

As identified in Section 0, the car park site that is the subject of this application contains archaeological remains relating to the former Naval Dockyard constructed between 1796 and 1800.

The site contains the archaeological remains of two docks with historic plans indicating another one to the southern end of the site. Sections of the docks have been exposed during various testing programs – these indicate that the middle dock has standing sandstone walls on the southern and northern sides while the western end has been cut into bedrock. The upper coursing of the northern dock has been removed, leaving the mortar beds on which the stonework was placed. Intact stone coursing has been found in the northwest corner and northern sides at depth. No remains of the southernmost dock have been found and it may have



been removed by the construction of the MCA building. The entrances to all the docks is in the grassed area to the east of the MCA loading and car park site.

The statement of heritage significance for the dockyards is as follows:

"The study area is part of the original Naval Dockyard established by Governor Hunter in 1797. This was the first official dockyard in Australia. It was used for naval ship repair and construction.

The Dockyard was largely developed and given its final configuration of four docks by 1822 under Governor Macquarie. These docks provided maintenance to the ships that were essential to the running and growth of the colony at a time when water transport was the most efficient and widely used means of trade and supply.

Substantial remains of two of these early stone docks survive within the study area and along with the dock underneath Argyle Street they are the oldest stone docks in Australia.

The docks' remains should be able to supply invaluable details on their construction and function, details which are not available through other sources. These remains have the potential to inform us about past practices in the repair of sailing ships.

The study area has strong links with the colonial past of New South Wales through the role the structures within the study area played in the maintenance of the early colony through the provision of stores and the repair and construction of ships essential to the survival of the colony. This area played an important role in the establishment and development of the early colony.

Other sets of archaeological information would provide evidence of the original topography and how it was altered by European settlement.

The communities of Sydney and New South Wales have an attachment to the colonial history of Sydney and evidence of its maritime history.

The remains of the early docks and associated deposits and features within the study area have state heritage significance. Other archaeological remains within the study area have a lesser degree of significance."

The proposed piling and footings for the new building have been located adjacent to the dock walls. The piling and footings will impact on the work areas around the docks and will introduce structural elements inside the docks. The piles within the docks will impact on the floors of the docks (believed to be bedrock), to a minor extent their fill (believed to be sand and rubbish deposits dating to the 1850s), and to the walls of the docks should lateral displacement occur while the piles are being inserted. The piles and pad footings outside the docks will impact on dockyard work areas. The lift pit will impact on the work surface and any archaeological features that may exist between the docks in this area.

The size of the impacts will be minimised and the areas to be impacted will be recorded beforehand, meaning that the loss of archaeological fabric and knowledge will be minimised. While the optimal size of the piles and footings will be determined in the forthcoming design phase, the majority of the site and its archaeological resource will remain undisturbed by the building above.



The effect of the major subsurface impacts (piles, pad footings, lift pit) can be mitigated to some extent by archaeologically recording their location prior to the works. The location of the docks and other features has been determined by several archaeological site investigations, and this information has been used to determine the locations of major building footings so as to avoid the line of the dock walls. A recent archaeological testing program was undertaken by the MCA at the site over the period from 24–26 September 2008 with the intention to more accurately determine the location of the dock walls, to enable the structural design to be located away from these areas. This was successfully carried out with the findings recorded by Casey & Lowe Pty Ltd and considered in the structural design.

The new building provides an opportunity to interpret the site and its archaeological remains. Up to the present time the existence of the dockyard and the docks has not been interpreted on the site, partly as the site's present usage does not present a ready opportunity to do so.

The redevelopment will contain an interpretation zone which will incorporate an artistic project/s for the interpretation of the site, and the development and history of the place. The interpretation zone is indicated externally to the building at the north-eastern corner of Level 1 on the Architectural Plans contained in Appendix A. The MCA is also interested in making available heritage and archaeological tours which will educate interested members of the community and visitors on the history of the site, including its indigenous histories and archaeological remains.

6.6.3 Aboriginal Heritage

The traditional owners of the land and water are the Gadigal people of the Eora nation. The area is known as Tallah-wola-dah. The Rocks and the land to the south of Circular Quay is the site of Australia's first European settlement in 1788 from which point the area developed and underwent significant change, taking it from a convict town to a burgeoning port town by the mid 1880s.

It is expected that any remains associated with the pre-1788 Aboriginal occupation of the area will have been destroyed or removed by the extensive construction activities and modification of the area since 1788.

6.7 Drainage and Flooding

A Stormwater Drainage Report has been prepared by Warren Smith and Partners, and is included in Appendix M. This report outlines the provision of a stormwater drainage system for the proposed extensions of the MCA. It is proposed to connect the site stormwater drainage to the existing stormwater drainage system on west Circular Quay.

Discussions with the Sydney City Council's Development Engineering Department reflected that:

- ▶ No on-site detention is required;
- ▶ Stormwater can be discharged to the existing West Circular Quay stormwater drainage system;
- ▶ A gross pollutant trap shall be required.



6.7.1 Stormwater drainage

With regard to site stormwater drainage, this was designed to take into consideration the requirements of the City of Sydney Council. Stormwater drainage pipes and pits have been sized for a 1:100/1:20 Average Recurrence Interval Storm Frequency.

As the existing MCA roof catchment area will not be altered, it is proposed that the current stormwater drainage system will remain as it currently exists, however all water will be captured and channelled to the rainwater reuse tank and then discharged to the existing stormwater drainage system. All roof, terrace and deck areas with gutters and rainwater outlets via downpipes to Level 1 will be captured to a rainwater reuse tank and then discharged to the existing stormwater drainage system.

A gross pollutant trap will be installed in the stormwater drainage system.

6.7.2 Rainwater reuse

Water will be collected from the new extensions to the MCA building from the roof, terrace and deck areas. The water will pass through a first flush diverter and then be stored in a 50,000 litre concrete storage tank. The tank is to be located under the Level 1 slab as shown on the stormwater drainage concept plans at Appendix M. Water from the rainwater tanks will be pressurised and pumped to the water closets in the new extension and irrigation areas. An automatic backwash strainer located on the downstream side of the pump will ensure a pre-straining of 100 micros. The tank has been optimised to cater for toilet flushing over the full year. Overflow from the tank shall be drained to the existing stormwater drainage system.

6.7.3 Sediment and Erosion Control

The erosion and sediment control assessment outlines a number of protection measures to inhibit the movement of sediment during the demolition and construction phases. These include:

- ▶ Construction vehicles required to pass over a Temporary Construction Vehicle Entry; and
- ▶ All exposed earth areas susceptible to transporting silt down slope from runoff shall be protected with a sediment and erosion control silt fence, which will be installed in accordance with details provided by the Department of Conservation and Land Management.

6.7.4 Temporary Stormwater Pump-Out System

Where required, a temporary stormwater pump-out system will be implemented to ensure the adequate treatment of stormwater prior to it being pumped to the Council's stormwater system.

6.8 Contamination and Waste

A preliminary site screening and waste classification assessment was undertaken at the site for the redevelopment (currently MCA open air car park and loading dock) by Environmental Investigation Services (EIS), October 2008. A copy of this report is contained in Appendix N. This assessment consisted of a site inspection and immediate surrounds, soil sampling and subsequent analysis of six fill soil samples for a wide range of contaminants.

The subsurface conditions encountered at the site generally consist of concrete pavement underlain by fill material. The fill material typically consists of silty sand or silty gravelly sand



with inclusions of ash, igneous gravel, sandstone gravel, cobbles and boulders, root fibres, glass fragments, asphalt, tile fragments, piping, PVC bags, quartz gravel and concrete gravel.

The investigation shows elevated levels of contaminants in fill soil samples. The report suggests that the source of the contamination is most likely the ash and slag containing fill used to backfill the site noting that this is frequently associated with this type of fill material that is commonly encountered in the central and inner suburbs of Sydney. The pockets of contaminated fill soils are likely to be located across the site and may be encountered with smaller features within the test pits excavated for the purposes of this investigation. Based on the results of the assessment, the fill material is considered to be 'Restricted Solid Waste (non-putrescible)' according to the criteria outlined in *Waste Classification Guidelines Part 1: Classifying Waste DECC NSW 2008*. The report recommends the disposal of the material at a suitably licensed NSW DECC (EPA) landfill. The report further suggests that fill disposal costs could be significantly reduced through additional sampling and analysis of solid waste, which will allow excavated material to be separated into 'General Solid Waste' and 'Restricted Solid Waste'.

An asbestos assessment was undertaken in six soil samples and revealed that no asbestos, neither apparent to the naked eye nor apparent using microscopic techniques was present.

The site is underlain by the archaeological remains of the Naval Dockyard and removal of all the contaminated fill from the site is likely to result in damage to these remains and this should be avoided.

In response to the proposed design approach, which is to re-level and cap the site as required and to minimise the extent of excavation, EIS recommend capping the area to provide an effective barrier between the contamination and the site occupants. EIS recommend the following approach to the capping:

- ▶ Prepare an appropriate health and safety plan for the contaminants encountered at the site;
- ▶ Where necessary, excavate the site to achieve the desired final levels;
- ▶ Where excavated material is to be taken off site, ensure this is disposed off appropriately;
- ▶ Sample the exposed surface and walls of the excavation(s) and analyse samples for lead, PAH and mid to heavy fraction hydrocarbons. This will provide a record of what remains beneath the site;
- ▶ Place a marker membrane over the contaminated fill to alert future excavators to the presence of contaminated fill soil;
- ▶ Only Virgin Excavated Natural Material (VENM) should be imported onto the site for backfilling purposes. Any material imported onto the site should be accompanied by analytical data that demonstrates that the soil is VENM;
- ▶ Pave/cap the area in a manner that restricts access to the underlying soil;
- ▶ Proceed with construction;
- ▶ Prepare and Environmental Management Plan (EMP) for the site that records the presence and concentration of contaminants beneath the site and include a protocol for dealing with contaminated soil in the even of future disturbance (e.g. excavation for services); and



- ▶ Notate the s149 certificate for the site so that the EMP is associated with the land title and future land owners/occupiers are aware of the presence of contamination beneath the site.

The report states that if the above recommendations are adhered to in the management of the identified soil contamination; the site should be suitable for the intended use.

The preliminary environmental site screening and waste classification assessment produced by EIS recommends that construction can proceed, however should be undertaken with monitoring through good engineering site management practice including control of run-off and dust suppression during both earthworks and construction. Further, the report recommends that if any unexpected problems areas are encountered between boreholes they should be inspected immediately by experienced environmental personnel.

6.9 Utilities

With the redevelopment of the MCA the existing substation will be retained in its current location, and have appropriate access provided. Negotiation on the details of the substation are ongoing with Energy Australia, the design team and the MCA.

The substation itself will remain unchanged apart from having a new stair to it from the south through the MCA building which will improve the ease of access from George Street to the substation. At the moment access is only down via ladders through floor hatches. One of the existing ladders will remain and have its hatch raised to suit the new levels.

The access opening for replacement of the transformers will also be raised to suit the new pavement levels and be replaced with a waterproof hatch.

Ventilation to the substation will be modified so exhaust air will be relieved up through the north side of the existing MCA building and intake air will be taken in just west of Stair 6 at the gap between the existing and new building at the south side of the new extension on George Street.

Preliminary investigation of the electrical service requirements for the proposed MCA redevelopment was undertaken by Haron Robson. Their findings are presented in Appendix O. The report presents findings on the impacts of the proposed development on the existing substation capacity and access following several meetings and ongoing discussions with Energy Australia as required under the Director General's Requirements dated August 25 2008. Consultation with Energy Australia concluded that:

- ▶ The existing substation has sufficient capacity to cater for the nominated load; and
- ▶ The development complies with Energy Australia's network standards in particular NS 113.

As the proposed building works impact on access to the existing substation, Haron Robson undertook additional consultation with Energy Australia in order to ensure that development meets Energy Australia requirements. This discussion also assisted in determining how the existing facility may be affected by the proposed redevelopment.

Following an analysis of the Energy Australia requirements, the design team and Haron Robson have developed a design concept and architectural drawings, which have been submitted to Energy Australia and are awaiting approval.

Telephone, water and sewer services will remain as existing and will not be affected by the MCA redevelopment works



6.10 Building Code of Australia

A BCA Compliance Report has been prepared by BCA Logic, and is included in Appendix P.

BCA Logic has been involved in various initiatives associated with the MCA since 2002 and has undertaken an assessment of the existing building's compliance with fire safety systems and the Fire Safety Upgrade Schedule. In their report, BCA Logic suggests that there may be instances where compliance of the existing building with the BCA (Building Code of Australia) will be impractical and/or unreasonable and upgrades will not necessarily be fully compliant with the national code. BCA Logic note Clause 94 of the Environmental Planning and Assessment Regulation 2000, which provides for the Consent Authority to apply discretion with respect to the need for any upgrade and the degree to which any such upgrade complies with the Deemed To Satisfy (DTS) Provisions of the BCA.

Further the report highlights that there are likely to be instances where the existing and new parts of the fire safety systems will not be readily integrated and the upgrade of the system to a newer standard is not appropriate or in some instances achievable.

The report outlines mitigation measures to address the conflict with current strategies and standards including:

- ▶ The fire engineered alternative solution process; and
- ▶ The operation of the new works as a fully stand alone system or a separate system that is interlinked to the controls of the existing system.

In the instance that the existing building does not comply with the BCA, assessment of this will be undertaken on a case by case basis and upgraded following consultation with relevant authorities.

All new works associated with the redevelopment will comply with the Building Code of Australia. Alternative solutions to the new design have been identified with respect to:

- ▶ Exit stairways;
- ▶ Travel distance;
- ▶ Fire isolation of lifts; and
- ▶ Relocation of fire hydrant and sprinkler booster.

The report concludes that the existing building complies with the regulatory controls and technical provisions that were applicable at the time of their design and construction. As a result, no additional upgrading is considered necessary as part of the redevelopment.



7. Draft Statement of Commitments

Section 75F(6) of the EP&A Act states that the 'Director-General may require the proponent to include in an environmental assessment a statement of the commitments the proponent is prepared to make for environmental management and mitigation measures on the site'.

In accordance with this requirement, Table 7.1 provides the Museum of Contemporary Art commitments for environmental mitigation, management and monitoring for the project.

Table 7.1 Draft Statement of Commitments

Issue	Commitments
General	The development will be undertaken generally in accordance with the Environmental Assessment dated November 2008, as prepared by GHD Pty Ltd, accompanying architectural plans prepared by Architect Marshall Pty Ltd in association with the Government Architects Office.
Ecologically sustainable development	The MCA is committed to the principles of sustainability as defined in the Environmental Planning and Assessment Act 1979. A range of ESD initiatives will be incorporated into the proposed redevelopment to minimise the impact of the development on the environment. These initiatives are detailed in the Steensen Varming report dated 28 October 2008. The MCA also commits to developing an environmental policy for both the project and general MCA operations, including establishing an environmental management system to implement it.
Requirements of legislation	All necessary approvals, licences, certificates and authorisations will be obtained prior to the commencement of construction, and as appropriate during the construction period.
Building Code of Australia	All building works will be carried out in accordance with the Building Code of Australia as relevant at the time of lodgement of the Construction Certificate.
Construction management	Prior to the issue of a Construction Certificate, a Construction Management Plan will be submitted to and approved by the Certifying Authority. The Plan will address the following, including making recommendations regarding procedures to be adopted to minimise the impacts of construction activities: • Construction staging; • Traffic and parking management; • Pedestrian management; • Noise and vibration management; • Tree protection; • Dust control; • Erosion and sediment control; • Waste generation and management; • Hazardous materials management.



Issue	Commitments
Landscaping	Prior to the issue of a Construction Certificate, the proponent will submit a final detailed landscaping plan prepared by a suitably qualified landscape architect.
Construction hours	Hours of construction will be limited to 7am to 6pm Monday to Friday and 7am to 4pm on Saturdays, with no work on Sundays or public holidays. Work may be undertaken outside these hours following consultation with SHFA and City of Sydney Council, and for emergency measures.
Contamination	The recommendations of the Preliminary Environmental Site Screening and Waste Classification Assessment (EIS, 2008) will be implemented for capping of the site to provide an effective barrier between the contamination and the site occupants.
Access	The MCA commits to developing an operational plan in conjunction with SHFA to manage access arrangements through the southern doors of the Foundation Hall located on the northern edge of First Fleet Park.
Archaeology	The MCA commits to developing an interpretation zone which will incorporate an artistic project/s for the interpretation of the site, and the development and history of the place.



8. Conclusion

This Environmental Assessment has considered the potential impacts of the proposed redevelopment of the Museum of Contemporary Art. The MCA redevelopment involves refurbishment to the existing building and an addition to the northern part of the building, and includes a new entrance, a National Centre for Creative Learning, gallery spaces and cultural uses associated with the museum such as Lecture Theatre, informal café and museum retail shop. The redevelopment would also address the non compliance of the current building in regard to access for all and public safety.

The Environmental Assessment has been prepared by GHD Pty Ltd on behalf of the MCA and has been prepared in accordance with the provisions of Part 3A of the *Environmental Planning and Assessment Act 1979* and the requirements of the Director-General of the Department of Planning and issues raised by other statutory agencies.

It provides an assessment of the potential environmental impacts of the proposal, considering both the potential positive and negative impacts of the proposal, and recommending management and mitigation measures to protect the environment where required.

The proposed redevelopment of the MCA will deliver a high quality development, which will significantly improve the functionality of the museum and its associated facilities, and achieve the key stated objectives:

- ▶ Equity of access;
- ▶ Coherent circulation throughout the building;
- ▶ Dedicated education spaces;
- ▶ Flexible gallery spaces;
- ▶ Improved revenue optimisation; and
- ▶ A contemporary signifier.

The Environmental Assessment has examined a number of key issues. In terms of built form and urban design, the new addition has been designed to reflect the existing building's block-like nature but in an open less powerful contemporary expression. The proposed redevelopment provides a new public foyer to the north of the existing building, which takes the form of an east-west circulation route linking George Street and Circular Quay, which is in essence, a 'street' through the building and is a visual extension of the Suez Canal corridor.

The built form of the proposed redevelopment preserves views along George Street, and to The Rocks NSW Police Station. Treatment of new building work visible from George Street is of a scale that is consistent with neighbouring built fabric, particularly that on the western side of George Street. When viewed from Circular Quay and Opera House, the new building work is designed to act as a contemporary signifier for the MCA, and in particular to identify the new main entry.

A heritage impact assessment has been undertaken, which concludes that the proposed redevelopment would not have a negative impact on the appreciation of the heritage



significance of the existing MCA building or its precinct and would ensure that the prescribed relationships between various elements within the precinct are established and maintained.

The proponent has committed to a range of measures that would ensure that impacts associated with the proposed redevelopment of the MCA are mitigated to the greatest extent possible.

No significant adverse effects have been identified within this Environmental Assessment or the specialist studies that accompany it. It is therefore recommended that the proposed redevelopment receive approval, subject to any appropriate conditions and the draft Statement of Commitments presented in Chapter 7.



GHD

10 Bond Street Sydney NSW 2000

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T: 2 9239 7100 F: 2 9239 7199 E: sydmail@ghd.com.au

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