



Sydney Modern

*State Significant
Development Application
(SSD 6471)*





Glossary

Abbreviation	Definition
AIA	Arboricultural Impact Assessment
ACHAR	Aboriginal Cultural Heritage Assessment Report
AGNSW	Art Gallery of NSW
AHD	Australian Height Datum
AQA	Air Quality Assessment
CBD	Central Business District
CIV	Capital Investment Value
CPTED	Crime Prevention Through Environmental Design
CPTMP	Construction Pedestrian and Traffic Management Plan
Consent	Development Consent
Council	City of Sydney Council
CSDCP	Central Sydney Development Contributions Plan 2013
Department	Department of Planning and Environment
DCP	Development Control Plan
DSR	Drainage and Stormwater Report
DPI	Department of Industry
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
GFA	Gross Floor Area
GSC	Greater Sydney Commission
HIS	Heritage Impact Statement
HRVs	Heavy rigid vehicles
ISEPP	State Environmental Planning Policy (Infrastructure) 2007
LEP	Local Environmental Plan
MAA	Maritime Archaeology Assessment
Minister	Minister for Planning
MRVs	Medium rigid vehicles
OEH	NSW Heritage Council/Office of Environment and Heritage
ONVMP	Operational Noise and Vibration Management Plan
RAP	Remedial Action Plan

RBG	Royal Botanic Gardens
RBGDT	Royal Botanic Gardens and Domain Trust
RMS	Roads and Maritime Services
RTS	Response to Submissions
RTSAR	Response to Submissions Addendum Reports, prepared by Architectus, dated 8 August 2018 and 16 August 2018
SAR	Site Audit Report
SEARs	Secretary's Environmental Assessment Requirements
Secretary	Secretary of the Department of Planning and Environment
SEPP	State Environmental Planning Policy
SEPP 55	State Environmental Planning Policy No 55 - Remediation of Land
SDCP 2012	Sydney Development Control Plan 2012
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SREP 2005	Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
SSD	State Significant Development
SWHES	Seawater Heat Exchange System
TfNSW	Transport for NSW
TIA	Traffic Impact Assessment
TWT	The Wharf Terraces (10 Lincoln Crescent, Woolloomooloo)
VIA	Visual Impact Assessment
WFW	Woolloomooloo Finger Wharf

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Cover photo

Photomontage of proposed development looking south-east along Art Gallery Road (Source: Applicant's RTSAR)

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Executive Summary

This report provides an assessment of a State Significant Development (SSD) application for a major expansion to the Art Gallery of NSW (AGNSW) (SSD 6471). The site is located to the north-east of the existing AGNSW building, adjacent to Art Gallery Road, The Domain. The Applicant is the AGNSW Trust and the proposal is located within the City of Sydney local government area.

The proposal seeks approval for a new stand-alone building, known as the Sydney Modern, including the adaptive re-use of a former World War II Navy fuel bunker (the fuel bunker). The five-level building would contain eight gallery spaces, an entry plaza canopy and entry pavilion, multi-purpose and educational spaces, gift shop and café, and back-of-house facilities. The proposal also includes a seawater heat exchange system and subdivision.

Design Development

The proposed design has been subject to ongoing review and enhancement since it was first envisaged.

The expansion of the AGNSW was subject to a design excellence process which involved an international design competition held in 2014. The competition was facilitated by an Architects Advisory Panel and the competition determined by a Competition Jury. The Panel, which included the NSW Government Architect, and the Jury comprised a range of eminent practitioners and industry representatives.

SANAA was unanimously selected as the competition winner in May 2015.

The SSD application was lodged in November 2017 and comprised a design reduced in scale compared to the winning 2015 competition design due to funding changes and design refinements in response to stakeholder consultation and feedback. Key changes included:

- removal of physical links to the existing gallery building providing greater separation between the existing and proposed buildings
- provision of a central art garden and entry plaza and associated canopy on the land bridge between the existing and proposed buildings
- redesign of the roof gardens and terrace areas to allow greater public access
- increase of overlapping building elements to reduce the overall building footprint and increase landscaping and retention of trees
- deletion of dedicated function centre facilities.

The application was publicly exhibited in late 2017 and a range of public and government submissions were received. In response to those submissions, the Department of Planning and Environment (the Department) required the Applicant to address relevant concerns and make further changes to their proposal. This process occurred throughout 2018 and involved a number of design enhancements, including:

- changing the design and orientation of the entry plaza canopy to reduce its visual impact
- increasing setbacks to Art Gallery Road and the existing gallery building to provide improved visibility of the northern elevation of the existing gallery building

- lowering the gallery 2 roof by 2.16 m to reduce its visual impact when viewed from Art Gallery Road
- retaining 16 more trees (including the Joseph Beuys tree) with 8 more trees to be planted
- increasing the area of proposed roof terraces
- provision of a new publicly accessible lift from Lincoln Crescent.

Further design enhancements, requiring the provision of a revised design for the entry plaza canopy, a green roof to gallery 1 and greening of the fuel bunker wall are recommended by condition.

Engagement

The application was publicly exhibited between 16 November and 15 December 2017. The Department received a total of 292 submissions. These include a submission from City of Sydney Council (Council), eight from government agencies and 283 from the public, of which 202 objected, 70 were in support and 11 provided comments.

An additional submission from Council, seven submissions from government agencies and 10 submissions from the public were received in response to the Applicant's Response to Submissions (RTS). Following the submission of two subsequent RTS Addendum Reports (RTSAR), a further submission from Council, five submissions from government agencies and five submissions from the public were received.

Council did not object to the proposal but provided comments relating to building design, function, pedestrian access, bicycle parking, sustainability and contributions. The NSW Heritage Council/Office of Environment and Heritage (OEH) did not object to the proposal but recommended revisions to the design noting aspects would have the potential to adversely affect the significance of the existing gallery building and the Royal Botanic Gardens and Domain.

Following submission of the amended plans with the RTSAR, OEH consider the issues raised have been addressed, particularly by increasing the setback of the entry plaza canopy from Art Gallery Road. Council primarily reiterated concerns regarding the integration of the proposed design with the surrounding landscape setting and advised they do not support the Applicant's request for development contributions to be waived.

Key issues raised in public submissions related to possible alternative locations for the development, loss of public open space, loss of trees, building design and adverse visual impact, heritage impacts, and traffic/parking. Public submissions also supported the proposal, noting it would allow for a greater proportion of the gallery's art collection to be displayed, allow the gallery to be more competitive with other galleries, and would improve the cultural vibrancy of Sydney.

Assessment

The key assessment issues for the proposed development are alternative locations, design excellence, built form and visual impacts, use of public open space, public domain including tree removal, heritage, transport, traffic and car parking.

Locations and design excellence

The Department has considered the community concerns regarding the location and design of the proposed building and its visual relationship to the existing gallery building and the Domain. The proposed development has been subject to a design excellence process and the proposed building

represents the winning design of an international design competition. The proposed design is suitably located and exhibits design excellence and is also supported by the then NSW Government Architect, Peter Poulet, who considered it to be a strong and elegant piece of architecture that does not overwhelm the original sandstone gallery building and would be a positive, contemporary contribution to the gallery and to the architecture of Sydney.

Built form

The Department considers the proposed design and built form, as revised through the assessment process, would be attractive and visually appealing and would sit suitably within the landscaped and heritage setting of the Domain and complement the existing art gallery building. To ensure the final development achieves design excellence and consistency with the winning design, the Department recommends a condition requiring the design development and construction documentation be subject to a design integrity process.

While it is agreed the proposed building would have a strong visual presence from Art Gallery Road, the existing art gallery building also has a strong visual presence. The proposed development's features, which include a low-scale design, appropriate setbacks and orientation, landscaping and creation of a stone-paved plaza, all ensure the visual character of the Art Gallery Road streetscape, while being altered, would not be detrimentally affected.

Views

The Department considers the design of the proposed entry plaza canopy could be further rationalised to ensure it further improves sightlines between the existing gallery building and the Woolloomooloo Gate within the Royal Botanic Gardens, and further improves and enhances its built form interface with its landscape setting. A condition is therefore recommended requiring the submission of a revised entry plaza canopy design that reconsiders the extent of the canopy, its street alignment and orientation and its setbacks from Art Gallery Road so it fits within the natural landscape. The architectural detail of the design must also demonstrate it achieves a light-weight built form character.

Although the proposed development would result in impacts to some public views, it would provide new public view opportunities, particularly towards the eastern part of Sydney Harbour. The Department finds the public view impacts would be outweighed by the significant public benefits of the proposal.

Land bridge

The entry plaza canopy, entry pavilion and gallery 1 are sited wholly or partially above the existing land bridge. These structures have been designed to ensure the existing land bridge can accommodate the works without the need for any strengthening works.

The structures sited above the land bridge have been required to be designed so that the land bridge provides vertical support only and the building structures are completely separated from the land bridge by isolation bearings. The Applicant has demonstrated that alternate solutions can be employed to replace the vertical support provided by the land bridge should it be required in the future. A

recommended condition would ensure any structure located over the land bridge would be capable of being supported by alternate means if the land bridge is removed or altered.

Use of public open space

The Department acknowledges the site is within an area of public open space forming part of the Domain and that this open space provides a valuable green connection between the Domain and Woolloomooloo. However, 72% of the open space required for the development would be located over existing man-made structures (fuel bunker and land bridge) which have insufficient soil depth to support significant landscaping and contain limited shelter or wind protection. The rest of the site predominantly comprises a steep, landscaped embankment which provides limited opportunities for public use. Although these areas contribute to the amenity of the Domain and provide harbour views in some locations, they do not relate to the historic and landscaped quality of the Domain and, with the exception of the land bridge, are poorly connected.

Public domain

The proposed building would be publicly accessible during operating hours, including external roof terraces and courtyards, and includes further public open space benefits in the form of a new covered entry plaza, a new plaza within the forecourt of the existing gallery building, a new art garden on the existing land bridge and significant landscape planting within and around the site. The development also incorporates landscaped roof areas and a green roof that would not be publicly accessible.

Although the proposed development would alter the existing public domain and open space, it would create a series of new and diverse public spaces, providing gathering points, undercover areas, and locations for new public views which would benefit visitors to the gallery and the wider Domain and RBG.

Tree removal

The Department acknowledges community concerns regarding the proposed removal of trees required for the proposed building. The proposal has been modified to retain additional trees including the significant Joseph Beuys tree. The proposed replacement of 124 trees with 273 new trees would result in an increased tree canopy in the longer term, including more native species, that would create a new Sydney Sandstone Woodland ecological community. The use of locally indigenous species is supported by OEH.

The Department considers the proposed tree planting and landscaping scheme would result in improved public domain outcomes and would complement the character of the surrounding Domain and adjacent RBG.

To further improve the relationship of the building with the surrounding landscape and public domain setting, conditions are recommended requiring a green roof to gallery 1 (650 m²) and greening of the fuel bunker wall on Lincoln Crescent. The re-design of the entry plaza canopy may also provide additional public domain benefits.

Heritage

The Department's assessment of potential heritage impacts has found there would be minimal impact on the heritage significance of the existing gallery building, the Domain and RBG. The development would also result in a desirable environmental heritage outcome due to the proposed adaptive re-use and associated conservation and maintenance works to the fuel bunker, allowing the public to appreciate this space which has never been publicly accessible before. The adaptive re-use of the fuel bunker is supported by OEH.

Transport, traffic and car parking

The Department considers the site to be appropriately located within the Sydney Central Business District and in close proximity to various modes of public transport. The local road network has sufficient capacity to accommodate additional traffic movements generated by the development. On-site visitor car parking is not required due to existing available capacity within the adjacent Domain car park and the site's CBD location and proximity to public transport.

Summary

Overall, the Department considers the site suitable for the project as it has been designed to integrate into the landscape character of the Domain and exhibits design excellence. The Department accepts outcomes established by the design competition and refined through the assessment process, and accepts the advice provided by the then NSW Government Architect. A recommended condition would ensure the design integrity of the final development is consistent with the design objectives of the winning design of the international design competition and that design excellence is achieved. A condition requiring re-design of the entry plaza canopy would ensure the proposal further improves and enhances its built form interface with its landscape setting.

The Department considers the proposal would deliver on the NSW Government's vision for an expanded AGNSW contributing to Sydney's art and cultural ribbon. It would also contribute significantly to the growth of Sydney as an international arts and cultural destination at significant social, economic and environmental benefit to the State.

The Department is satisfied the proposal is consistent with the strategic objectives for the area, as outlined in the Greater Sydney Region Plan and the Eastern City District Plan and is consistent with the requirements of relevant environmental planning instruments and policies.

The Department concludes the proposal is in the public interest and recommends the application be approved, subject to the recommended conditions.



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1. Introduction

1.1 Preamble

The Art Gallery of NSW Trust (the Applicant) proposes a major expansion to the Art Gallery of NSW (AGNSW) in the Domain, within the Sydney local government area. The expansion comprises a new, stand-alone building to the north-east of the existing gallery building. The new building is known as the Sydney Modern. The proposed development also includes the adaptive re-use of a former World War II Navy fuel bunker (the fuel bunker).

1.2 Project setting

The site is located within the Domain, adjacent to the existing gallery building at 2B Art Gallery Road (**Figure 1**). The site is situated within the eastern portion of Domain (Crescent and Yurong Precincts) and adjacent to the south-east corner of the Middle Gardens Precinct of the Royal Botanic Gardens (RBG). The Domain and RBG are managed by the Royal Botanic Gardens and Domain Trust (RBGDT).

The site has a total area of 23,045 m² comprising seven lots. Services/works required to support the development (including sea water pipes, cabling, water supply, sewer upgrades and stormwater) would affect additional lots and roads owned by the RBGDT, Roads and Maritime Services (RMS), City of Sydney Council (Council) and the Marine Ministerial Holding Corporation. Land title details are provided in **Table 1**.

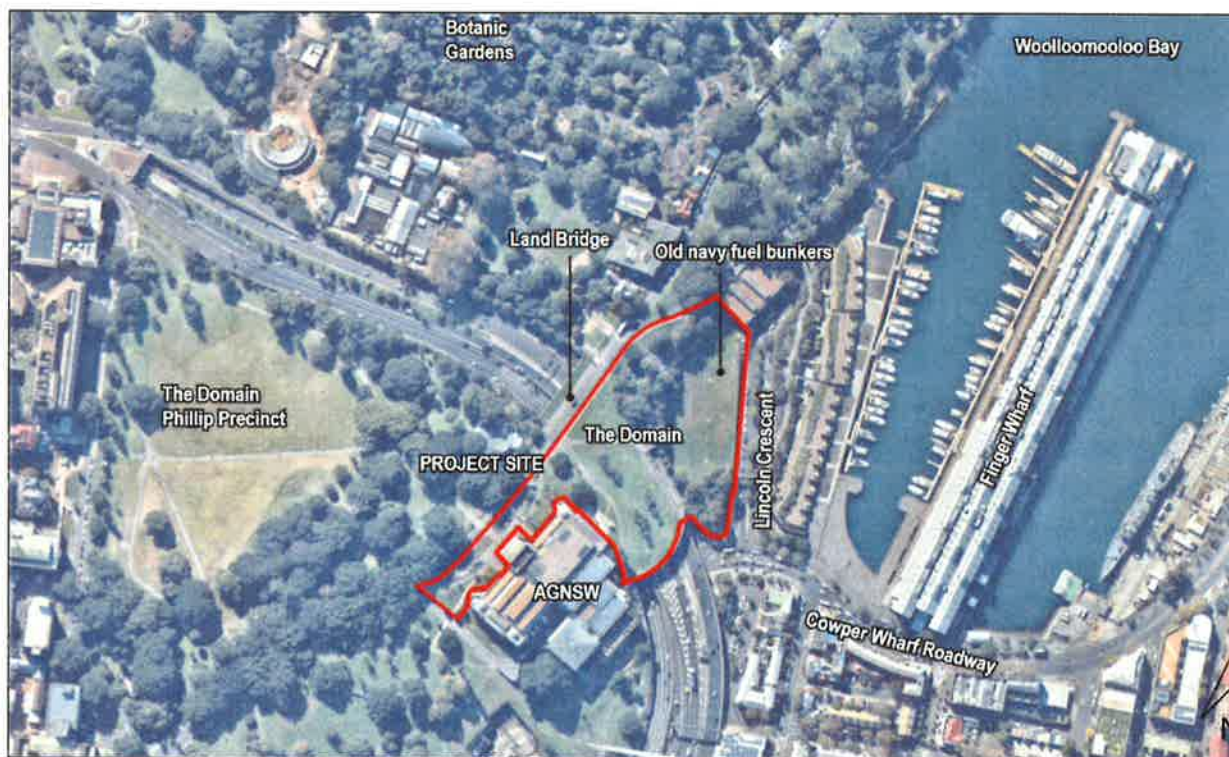


Figure 1 | Site location (highlighted in red) (Source: Applicant's RTS)

The site excludes the existing gallery building but includes the following:

- the area of the land bridge over the Eastern Distributor to the north-east of the existing gallery building. The land bridge was constructed in the late 1990s to provide a landscaped connection to the Domain and the RBG and is owned by Roads and Maritime Services (RMS)
- parts of the Domain to the north-east of the land bridge, including the area above the fuel bunker and the fuel bunker itself
- the forecourt of the existing gallery building fronting Art Gallery Road.

Table 1 | Land title details

Registered proprietor	Lot	DP	Site/Services
AGNSW Trust	102	854472	Site (AGNSW)
RBGDT (formally part of Lot 101 DP 854472)	1013	1199151	Site (AGNSW forecourt)
RBGDT	34	39586	Site (Domain north-east of land bridge)
RBGDT	51	47732	Piping
RBGDT	35	39586	Piping
RBGDT	Art Gallery Road (Lot 1013)	1199151	Cabling and water supply
RBGDT	Mrs Macquaries Road	N/A	Cabling
RMS	107, 108 and 115	1105308	Site (land bridge)
RMS	4	259027	Site (land bridge)
RMS	113	1105308	Cabling
RMS	Art Gallery Road (Lots 107, 108 and 115)	1105308	Cabling and water supply
Marine Ministerial Holding Corporation	9	1007565	Piping
Council	Lincoln Crescent	N/A	Cabling, stormwater and sewer
Council	Cowper Wharf Road	N/A	Cabling

The proposal also involves works outside of the site area, predominantly to part of the Woolloomooloo foreshore, north of Lincoln Crescent. This area relates to the proposed seawater heat exchange system (SWHES). Works are also proposed to Lincoln Crescent and Cowper Wharf Road road reserves and the western side of Art Gallery Road.

The southern portion of the site is generally level but the north-eastern portion steps down over 21 m from Art Gallery Road (RL 24) to Lincoln Crescent (RL 2.9), including a 15 m fall from Art Gallery Road to the top of the fuel bunker.

Pedestrian footpaths link the AGNSW and the site to the Domain, the RBG and the Sydney Central Business District (CBD). Footpath links to Woolloomooloo are also located at either end of the fuel bunker, including a footbridge connection at the southern end, over Lincoln Crescent.

Figure 2 identifies the existing gallery building and areas within the site. Photographs of the site are provided at **Figures 3 to 6**.

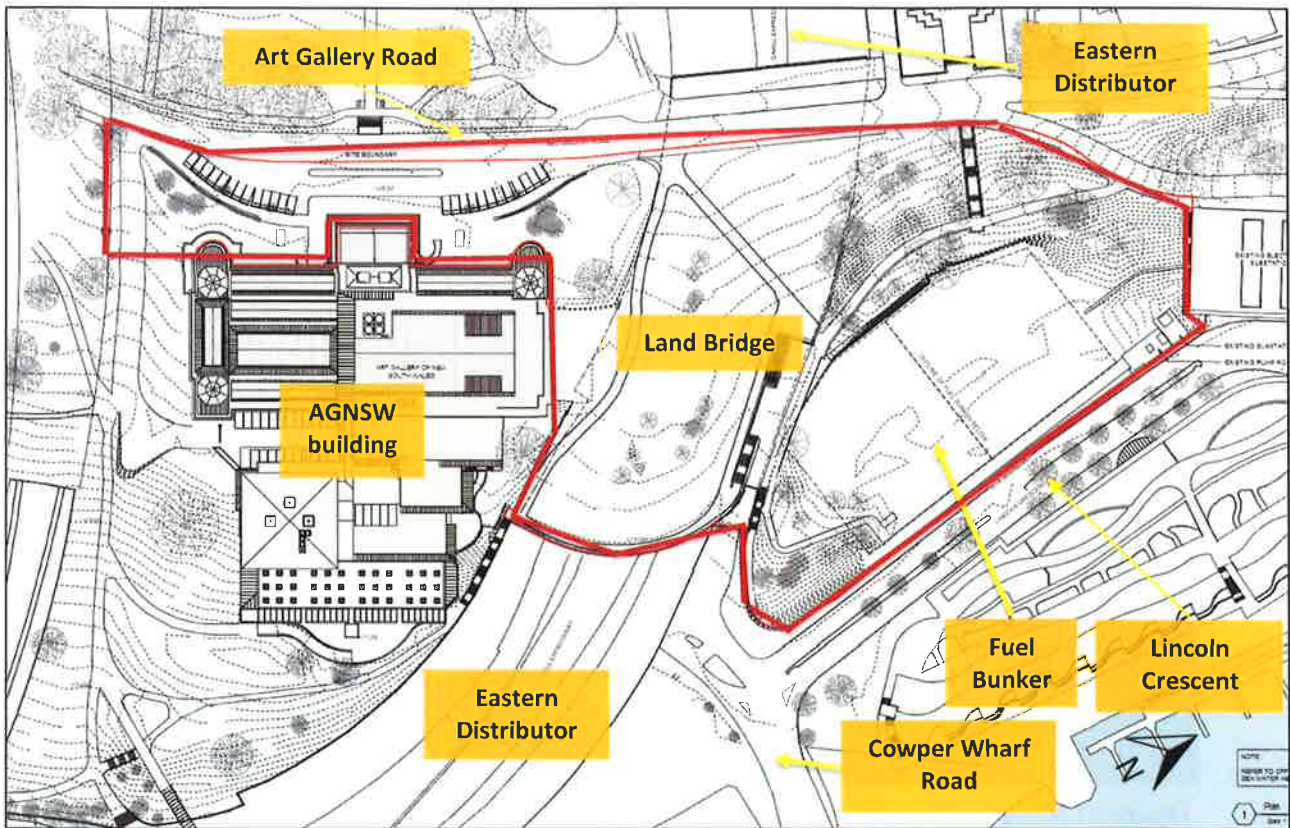


Figure 2 | The site shown outlined in red (Base source: Applicant’s EIS)



Figure 3 | Art Gallery Road and existing gallery building looking south-east (Source: Department’s photograph)



Figure 4 | Art Gallery Road and existing gallery building looking north (Source: Department's photograph)



Figure 5 | The land bridge looking east from Art Gallery Road (Source: Department's photograph)



Figure 6 | The grassed roof of the fuel bunker looking south-east (Source: Department's photograph)

1.3 Site surroundings

The site forms part of the 34-hectare Domain which is located to the east of the CBD. The site and its surrounds are illustrated in **Figures 7 to 9**.

The surrounding area is characterised by a mix of open spaces, buildings and uses, including:

- the existing AGNSW building to the south-west
- the Eastern Distributor extending from the south-east to the north-west, including the associated land bridge directly to the north-east
- the RBG to the north, north-west and west
- Circular Quay to the north-west
- the CBD to the west beyond The Domain
- St Marys Cathedral to the south-west
- the Domain to the west, south-west and south
- the Eastern Suburbs railway line to the south and south-east
- the suburbs of Woolloomooloo to the south-east and Potts Point to the east
- Woolloomooloo Bay to the east and north-east.

The site is directly serviced by buses with stops located on Art Gallery Road in front of the existing gallery building. Further bus stops serviced by a broader range of routes are located at Elizabeth Street, 660 m to the west. Martin Place Railway Station and St James Railway Station are located 550 m and 780 m to the west and south-west respectively. The Circular Quay Railway Station and ferry terminal are also located 900 m to the north-west. The privately-operated Domain public car park is located 360 m to the south.

Several key walking routes also surround the site with connections to the CBD (including Martin Place and St James Railway Stations), the RBG, Domain car park and Woolloomooloo. A key pedestrian route includes the Woolloomooloo Gate located on the northern side of the land bridge, which connects via a pedestrian crossing over Art Gallery Road, to a footpath through the site.

Although primarily surrounded by parkland and the existing gallery building, residential properties are located to the east of the site. The closest is The Wharf Terraces (TWT), 10 Lincoln Crescent, a three-storey residential building located on the eastern side of Lincoln Crescent (**Figures 8 and 9**). The apartments are orientated towards Woolloomooloo Bay with pedestrian and vehicular access provided from Lincoln Crescent. A publicly accessible rooftop terrace/footpath exists above the western building, linked to the subject site via a footbridge. The Woolloomooloo Finger Wharf (WFW) is further to the east with views available from residential apartments and restaurants, westwards towards the subject site.

An Ausgrid substation adjoins the north-eastern boundary of the site. The National Herbarium and the RBGDT offices are located on the western side of Mrs Macquaries Road, close to the north-western boundary of the site.



Figure 7 | Site location plan (site shaded red) (Base source: Nearmap)



Figure 8 | Aerial view of the site looking north (site outlined in red) (Base source: Nearmap)



Figure 9 | Aerial view of the site looking west (Base source: Applicant's EIS)

2. Project

2.1 Description of proposal

A design competition for the expansion of the AGNSW was held in 2014 with SANAA selected as the winner by the Competition Jury in May 2015. As a result of funding changes and design refinements in response to stakeholder consultation and feedback, the design of the winning scheme was subsequently altered, which resulted in a reduced development (see **Section 6.4.2**). The revised design formed part of the Environmental Impact Statement (EIS) as exhibited by the Department in November 2017 (see **Section 5.1**).

The proposed development was further modified through the Response to Submissions (RTS) process and addendum reports. The key amendments to the proposal as exhibited in the EIS include changing the design and setbacks of the entry plaza canopy, lowering the gallery 2 roof by 2.16 m, retention of 16 more trees (including the Joseph Beuys tree) and eight more trees to be planted, the area of publicly accessible and landscaped roof terraces increased, and provision of a new publicly accessible lift from Lincoln Crescent.

The application has also been amended to include land subdivision to reflect the proposed development and includes land within the Domain owned by the RBGDT, and the RMS owned land bridge.

The key components and features of the project, as refined in the RTS, are provided in **Table 2** below and are shown in **Figures 10 to 16**.

Table 2 | Key components of the Project

Aspect	Description
Site preparation	• Demolition of former substation, pump station, part of the fuel bunker, part of road surfaces, pedestrian crossings, retaining walls and stairs. • Excavation, predominantly to the northern and north-western sides of the fuel bunker. • Site earthworks, including tree removal (124 trees).
Remediation and adaptive re-use	• Remediation and conversion of the fuel bunker for use as a gallery space, creative learning rooms, back-of-house areas and loading dock.
Built form	• Construction of a new, stand-alone art gallery building extending over five levels (incorporating two levels within the converted fuel bunker) containing: ○ entry pavilion ○ art gallery spaces (total of eight galleries) ○ shop and café ○ back-of-house, multi-purpose and education spaces. • Construction of a new entry canopy structure fronting Art Gallery Road over new public plaza.
Landscaping and public domain	• Tree planting (273 trees). • One green roof and three publicly accessible roof terraces.

	- Enhancement of open space on the land bridge, including new pathways and a landscaped art garden. - New pathways, pedestrian bridge and public lifts extending between Lincoln Crescent/Cowper Wharf Road and the land bridge. - New public plaza within the forecourt of the existing gallery building replacing existing car parking. - Landscaping to roof terraces.
Access	- New loading dock access from Lincoln Crescent. - Upgrade works to Art Gallery Road, including a relocated bus stop, coach and taxi parking, visitor drop-off and loading area. - Upgrade works to Lincoln Crescent, including the intersection with Cowper Wharf Road and new pedestrian refuge. - New pedestrian ramp to replace stairs on the western side of Art Gallery Road adjacent to existing pedestrian crossing.
Seawater heat exchange system (SWHES)	- Installation of a SWHES adjacent to and within Woolloomooloo Bay, to act as a cooling system for the proposed building. The works include: - a plant room within the fuel bunker - an underground plant room with an above ground element adjacent to the existing rock face at the northern end of Lincoln Crescent - underground intake and outflow pipes extending into Woolloomooloo Bay.
Gross Floor Area (GFA)	- Proposed total GFA of 12,112 m², comprising: - galleries/exhibition spaces: 7,461 m² - visitor circulation spaces: 2,538 m² - back-of-house areas: 1,131 m² - retail/café areas: 449 m² - visitor amenities: 370 m² - staff areas: 163 m²
Subdivision	- Land subdivision comprising three stages: - Stage 1: subdivision of the Sydney Modern building footprint and fuel bunker land from the RBGDT to AGNSW - Stage 2: subdivision to excise the surface of the land bridge from the RMS road tunnel below - Stage 3: subdivision of proposed land bridge Lot into two lots comprising the footprint of the Sydney Modern building (to the AGNSW) and the remnant open space (to the RBGDT).
Capital Investment Value (CIV)/Jobs	- CIV of \$275,387,633 million 321 construction jobs 75 operational jobs (in addition to 200 existing full time operational jobs)



Figure 10 | Model of the proposed development viewed from the east (Base source: Applicant's RTS)

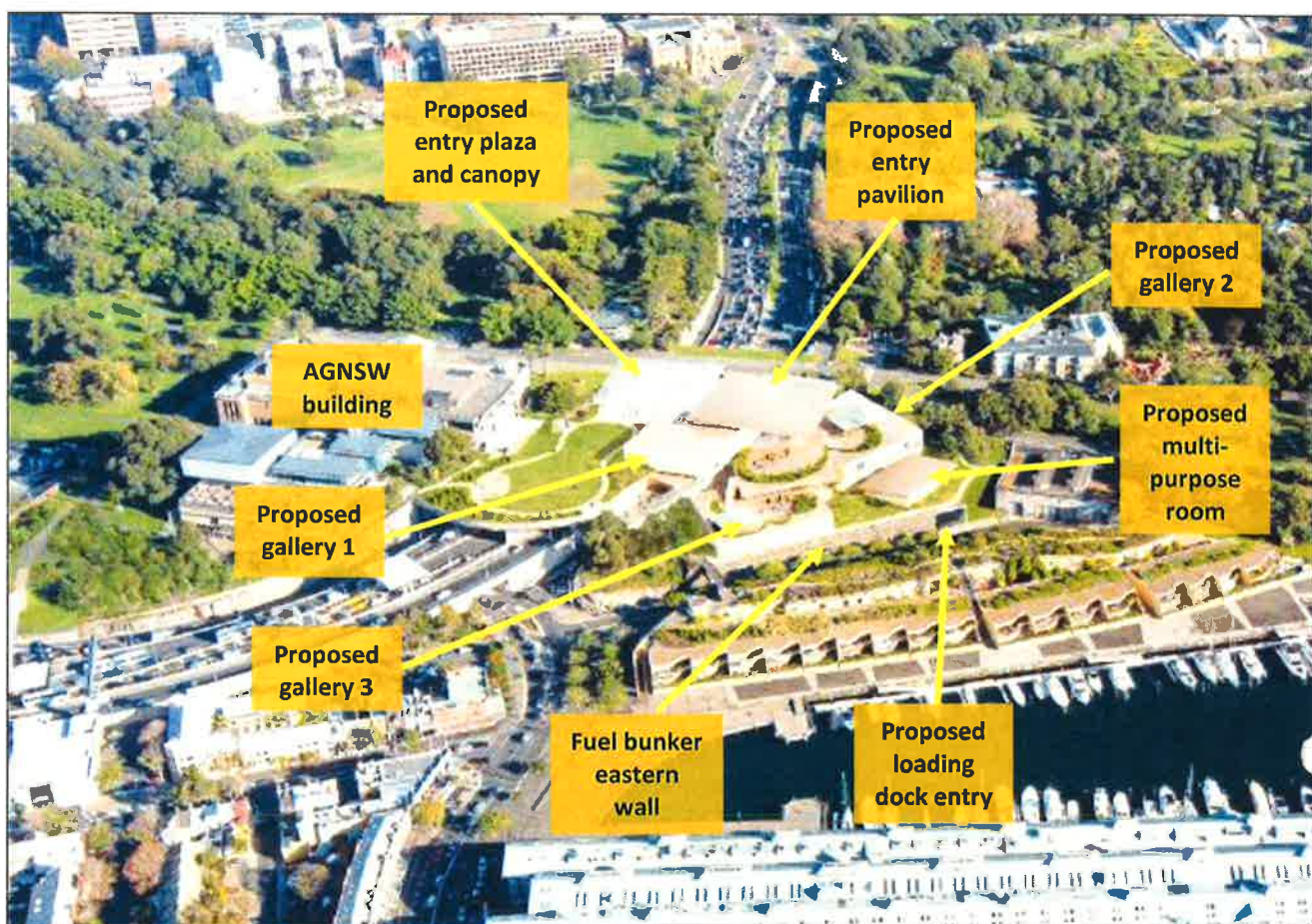


Figure 11 | Aerial photomontage of the proposed development looking west (Base source: Applicant's EIS)



Figure 12 | Photomontage of the proposed development viewed from Art Gallery Road looking north-east
(Source: Applicant's RTSAR)



Figure 13 | Photomontage of the proposed development viewed from Art Gallery Road looking south-east
(Source: Applicant's RTSAR)



Figure 14 | Photomontage of proposed development viewed further north from Art Gallery Road looking south-east (Source: Applicant's RTSAR)



Figure 15 | Photomontage of the proposed development viewed from the rooftop footpath of TWT looking west (Source: Applicant's RTSAR)

Figure 16 illustrates how the proposed building steps down the site from Art Gallery Road to Lincoln Crescent/Woolloomooloo Bay.

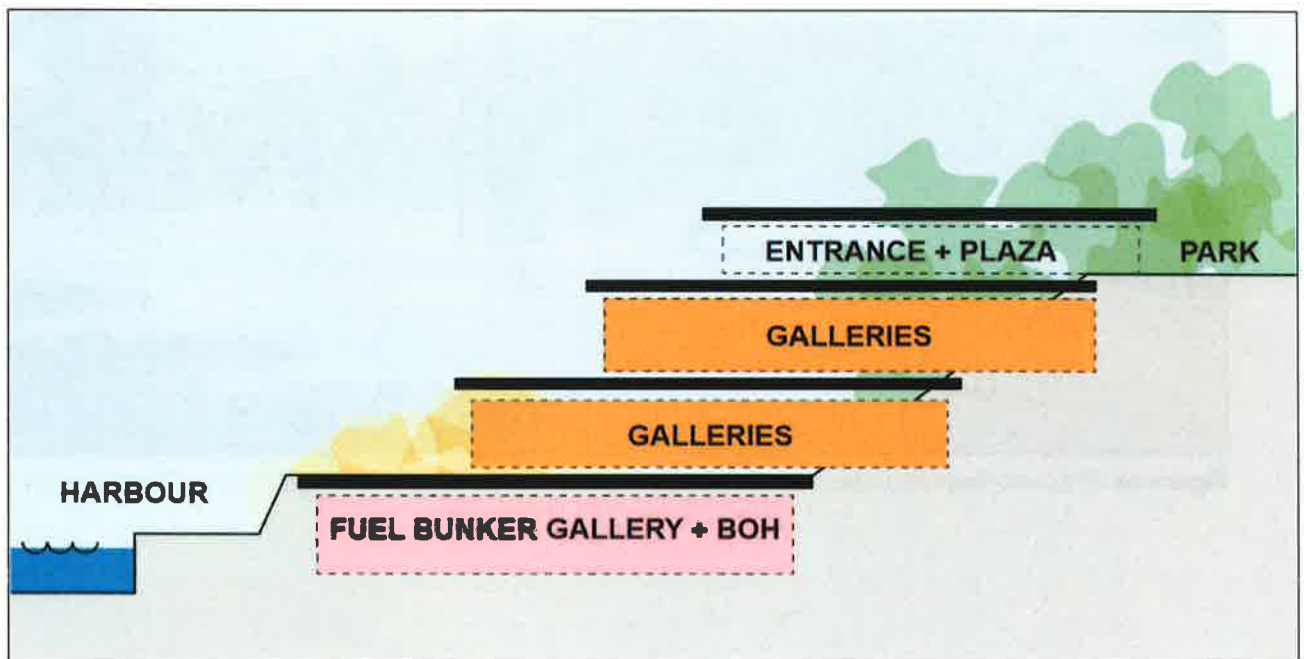


Figure 16 | Indicative section illustrating the design response to the site topography (Source: Applicant's RTS),



3. Strategic Context

3.1 Greater Sydney Region Plan and Eastern City District Plan

The Greater Sydney Commission's (GSC) role is to coordinate and align planning to shape the future of Metropolitan Sydney. In March 2018, the GSC published the Greater Sydney Region Plan (the Region Plan) and associated District Plans.

The Region Plan outlines how Greater Sydney will manage growth and change and guide infrastructure delivery. It sets the vision and strategy for Greater Sydney, to be implemented at a local level through District Plans.

The Region Plan's overriding vision for Greater Sydney is to rebalance Sydney into a metropolis of three unique but connected cities; an Eastern Harbour City, the Western Parkland City (west of the M7) and the Central River City (with Greater Parramatta at its heart).

The proposal is consistent with the Greater Sydney Region Plan by achieving four of the 10 directions established in the plan being 'a city for people', 'a city of great places', 'jobs and skills for the city', and 'a city in its landscape'.

The site is located within the Eastern City District area. The proposal is consistent with the objectives of the Eastern City District Plan, as it would:

- provide services and social infrastructure (Planning Priority E3)
- foster healthy, creative, culturally rich and socially connected communities (Planning Priority E4)
- contribute to a stronger and more competitive Harbour CBD (Planning Priority E7)
- provide public and private open spaces and increase the urban tree canopy (Planning Priorities E17 and E18).

3.2 Future Transport Strategy 2056

The Future Transport Strategy 2056 is an update to the NSW Long Term Transport Master Plan 2012 and outlines a planned and coordinated set of actions to address challenges faced by the NSW transport system to support the State's economic and social performance over the next 40 years.

The proposed development is consistent with the six key outcomes of the Plan as:

- the site is located within walking distance to a number of public transport services
- it provides active transport travel options by providing bicycle parking spaces
- it does not include on-site public car parking spaces which will encourage the use of public transport.

3.3 Sustainable Sydney 2030

Sustainable Sydney 2030 sets out the City of Sydney's vision to make Sydney a more global, green and connected metropolis by 2030.

The proposal would contribute to several strategic directions in Sustainable Sydney 2030, as it would:

- increase interstate competition by attracting major international exhibitions
- be a leading environmental performer by targeting a 6-star Green Star rating
- contribute towards a lively and engaging city centre
- include public open spaces, cultural uses and gathering spaces and therefore contribute to a cultural and creative city
- provide a high quality and sustainable urban design.

3.4 Other Strategies and Plans

The proposed expansion of the AGNSW through the Sydney Modern project has been a consistent part of Government strategic planning policy for a number of years. Specifically, the Department considers the proposal is consistent with the objectives of the following State strategies and plans:

- State Infrastructure Strategy 2018–2038 which recognises that arts and cultural investments that are integrated with broader development achieve the best outcomes. The proposal meets this objective by improving access to the RBG and the Domain through enhanced and more accessible pedestrian links
- State Infrastructure Strategy Update 2014 through the enhancement of the State's cultural infrastructure, driving growth in the visitor economy and providing economic and social benefits as a result
- NSW Cultural Infrastructure Strategy 2016 and 2018 update: The Strategy provides that the Sydney Modern project is a committed and funded government project
- Industry Action Plan – NSW Creative Industries through strengthening arts and cultural investment in NSW. The AGNSW is mentioned specifically in this plan
- Create in NSW: The NSW Arts and Cultural Policy Framework as the proposal satisfies the plan's aims of enhancing arts and cultural facilities in NSW
- Cultural Venues Plan which identifies the expansion of the AGNSW as one of four priorities of highest value for developing a cultural ribbon around the CBD.

3.5 Project need and justification

The AGNSW is a significant arts and cultural facility within the Sydney CBD that enables the people of NSW and visitors to access the State's art collection (valued at \$1.3 billion). As the State's art gallery, the AGNSW is an essential cultural institution providing a location for artistic creation and presentation as well as supporting significant educational outcomes.

The Applicant advised that in 2007, the gallery was the most visited art gallery in Australia and the 28th most visited globally. Since 2007, the gallery has experienced a significant decline in visitation numbers, in part due to considerable investment and expansion of art galleries in other states. Due to inadequate exhibition space and constrained ceiling heights, the gallery is no longer competitive in attracting major international exhibitions. In addition, much of the gallery's art collection cannot be displayed, including the nation's most significant collection of Aboriginal and Torres Strait Islander art.

The Applicant further advised the existing gallery building layout is complex resulting from various ad-hoc extensions and reconfigurations. The building is at capacity with no further room for expansion within its current footprint. Furthermore, the existing building was designed for the display of 19th and

20th century art and is unable to accommodate new and evolving art forms and contemporary art practice.

In March 2013, the AGNSW announced its strategic vision and masterplan. One of the main components was the Sydney Modern expansion project. The proposed development seeks to continue the gallery's historic association with the Domain while providing a modern, significantly increased exhibition space capable of hosting major international exhibitions. It would also create a prominent showcase for Aboriginal and Torres Strait Islander art and promote cultural and education benefits through encouraging increased visitation and use of the gallery.

The Applicant estimates the expansion would allow the AGNSW to increase visitation numbers from 1.1 million to over 2 million per year providing significant associated benefits to the cultural heritage of the people of NSW and the NSW and Australian tourist economy.

3.6 Alternative locations

A range of siting options were explored by the Applicant as part of the strategic planning process to expand the AGNSW. The proposed location for the expansion is consistent with State and local government strategic planning policy. However, given the visual and heritage significance of locating the expansion within the Domain, the issue of potential alternative locations has been considered in detail in **Section 6.2**.



4. Statutory Context

4.1 State Significant Development

The proposal is classified as State significant development under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). This is because it triggers the criteria in clause 13 of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) as it is development for a cultural facility (art gallery) with a CIV of more than \$30 million.

Consequently, the Minister for Planning is the consent authority for the project. As the application has been lodged by a public authority and more than 25 objections have been received, the application is unable to be determined under delegation. The application can therefore be determined by the Minister.

4.2 Permissibility

The site is identified as being within the RE1 Public Recreation and SP2 Infrastructure (Classified Road) zones under the Sydney Local Environmental Plan 2012 (SLEP 2012) (**Figure 17**). Minor landscaping works are also proposed within the B8 Metropolitan Centre zone. The B8 zone predominantly represents the location of the existing gallery building.

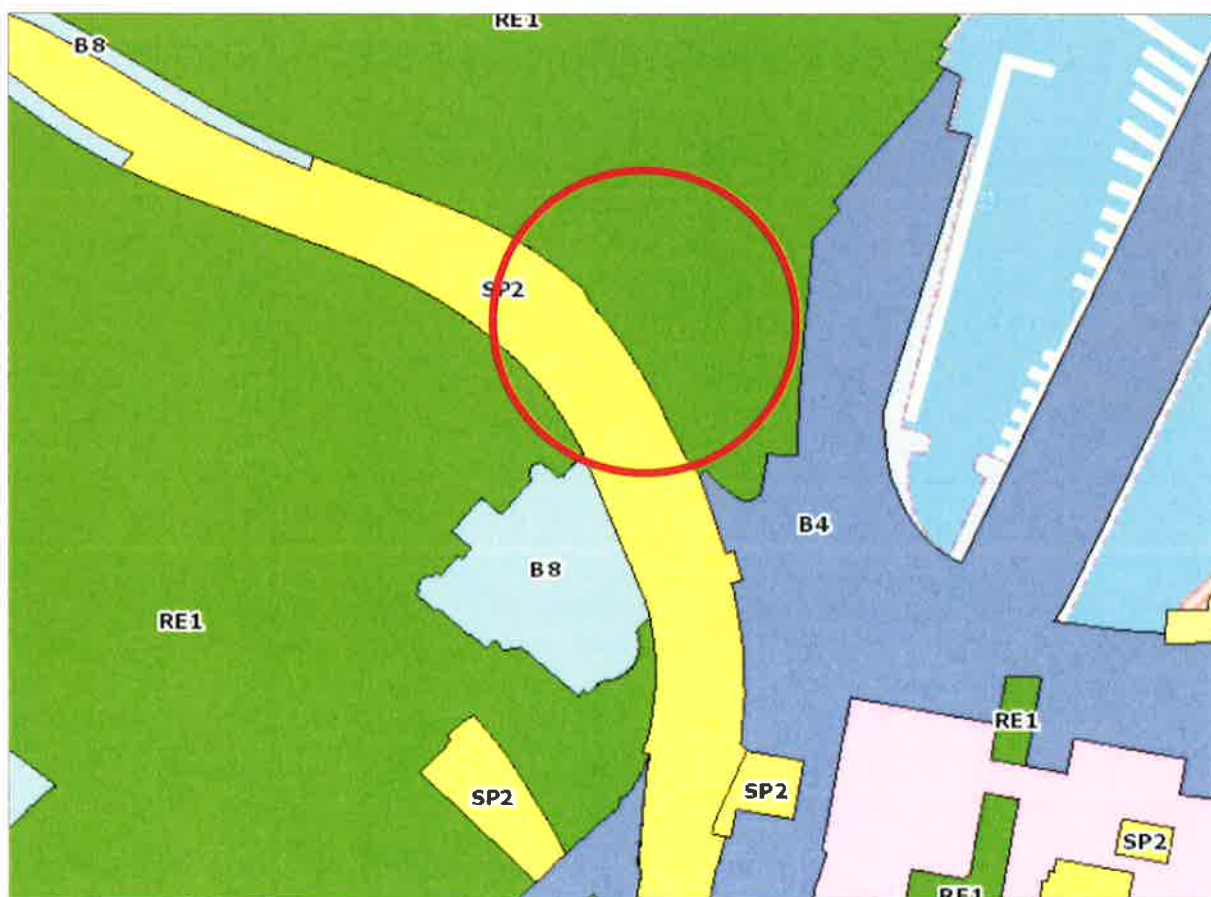


Figure 17 | Land zoning map. Approximate site location circled red (Base source: SLEP 2012)

Under the provisions of SLEP 2012, the proposed art gallery expansion comprises an 'information and education facility' which is a permissible land use in the RE1 and B8 zones. However, it is a prohibited land use in the SP2 zone.

Section 4.38(3) of the EP&A Act allows development consent to be granted for SSD applications where the development is partly prohibited. Given the proposed development is permissible within the RE1 and B8 portions of the site, consent can be granted for the portion of the development located within the SP2 zone.

The Department is satisfied the development is compatible with the SP2 zone as this portion of the site is located on the land bridge over the Eastern Distributor (see **Figure 2**). This allows for the proposed development to occur within the SP2 zone and not detract from the continued and unobstructed use of the roadway/infrastructure below. The Department therefore considers the proposed works to be consistent with the objectives of the SP2 zone.

Other proposed uses such as offices, café and shop are ancillary to, and support, the dominant use of the site as an information and education facility. The Department concludes the proposed use is permitted with consent.

Clause 7.20(2) of SLEP 2012 states the consent authority cannot grant consent for the development (due to the size of the site within the CBD) unless a development control plan has been prepared as part of a staged SSD.

In June 2016, the then Minister for Planning agreed to waive this requirement as all relevant matters to be addressed in a development control plan would be adequately covered by other planning policies and procedures, including the SEARs and the design excellence process (see **Section 6.4**).

4.3 Royal Botanic Garden and Domain Trust Act 1980

The site is located within the Domain and is subject to the provisions of the *Royal Botanic Garden and Domain Trust Act 1980* (RBGDT Act). The principle objects of the RBGDT Act are to maintain and improve the Trust lands, to increase and disseminate knowledge of the plant life of Australia and NSW, and to encourage the use and enjoyment of the Trust lands by the public by promoting and increasing the educational, historical, cultural and recreational value of those lands.

Public submissions raised concerns about whether the proposed development is consistent with the objectives of the RBGDT Act.

The Applicant contended the proposed development is consistent with the objectives of the RBGDT Act as the development will create a contemporary environment integrating architecture, art and landscape which are of public benefit and are complementary and compatible uses with the RBGDT Act. In particular, the current landscape design, amenity and planting palette is poor, and is dominated by exotic grassed monoculture which provides limited habitat for native fauna species.

The Applicant also contended use of the grassed roof of the fuel bunker is limited as it does not have good public access and the central location of access hatches inhibits recreational use.

The Department considers the proposed development is consistent with the principle objects of the RBGDT Act because:

- the site forms part of a cultural precinct on the eastern edge of the Domain and is appropriately located within Trust lands.
- the expanded AGNSW would improve the cultural and educational value of the site
- much of the site would remain publicly accessible
- the proposed works would provide improved access to and within the Domain allowing for improved use and enjoyment of Trust land (see **Section 6.5**)
- although 124 trees would be removed, the majority are of low or medium amenity value and provide limited foraging opportunities for native fauna. The proposed landscape works would result in 273 new trees providing a greater habitat for native fauna species in the future (see **Section 6.5**)
- the development would improve the heritage value of the land by allowing public access to the State heritage listed fuel bunker.

4.4 Mandatory Matters for Consideration

Section 4.15 of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. These matters could be summarised as:

- the provisions of environmental planning instruments (including draft instruments), development controls plans, planning agreements, and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation)
- the environmental, social and economic impacts of the development
- the suitability of the site
- any submissions, and
- the public interest, including the objects in the EP&A Act and the encouragement of ecologically sustainable development (ESD).

The Department has considered all of these matters in its assessment of the project, as well as the Applicant's consideration of environmental planning instruments in its EIS, as summarised in **Section 6** of this report. The Department has also given consideration to the relevant provisions of the EP&A Act, including environmental planning instruments in **Appendix D**.

5. Engagement

5.1 Department's engagement

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the application from 16 November to 15 December 2017 (30 days). The application was made publicly available on the Department's website and exhibited at the Department's Information Centre, at Council and at the AGNSW.

The Department placed a public exhibition notice in the Sydney Morning Herald and The Daily Telegraph on Wednesday 15 November 2017, and notified adjoining landholders, Council and relevant government agencies in writing.

The Department has considered the comments raised in Council, government agencies and public submissions during the assessment of the applications (**Section 6** and **Appendix C**) and by recommended conditions in the consent at **Appendix E**.

5.2 Summary of submissions

The Department received a total of 292 submissions, comprising a submission from Council, eight submissions from government agencies, and 283 submissions (202 objections) from the general public. These included submissions from Alex Greenwich, Member for Sydney and the Foundation and Friends of the Botanic Gardens.

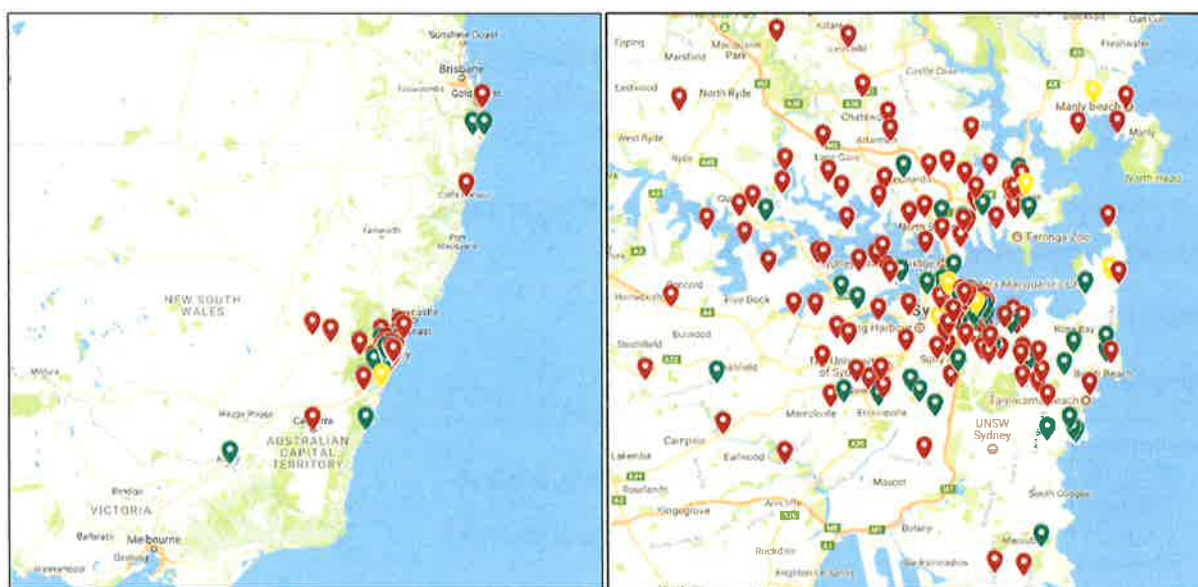
A summary of issues raised in the submissions is provided at **Tables 3, 4** and **Figure 18** below and a link to all submissions is provided at **Appendix B**.

Table 3 | Summary of Submissions

Submitters	Number	Position
Government Agencies	8	
• NSW Heritage Council/Office of Environment and Heritage (OEH) – Heritage Division	✓	
• Office of Environment and Heritage (OEH) – Planning and Aboriginal Heritage	✓	
• Transport for NSW (TfNSW)	✓	
• Road and Maritime Services (RMS)	✓	Comment
• Department of Industry (DPI)	✓	
• Environmental Project Authority (EPA)	✓	
• Ausgrid	✓	
• Sydney Water	✓	

Table 4 | Summary of Council, Community Submissions

Submitters	Number	Position
City of Sydney Council (Council)	✓	Comment
Community	283	
• < 1 km	40	Object
	23	Do not object
• 1 – 5 km	69	Object
	26	Do not object
• > 5 km	88	Object
	30	Do not object
• Interstate/overseas	1	Object
	2	Do not object
	4	Object
• Unknown	0	Do not object
TOTAL	284	

**Figure 18** | Location of public submissions object (red), support (green), comment (yellow) from the south-east coast of Australia and central Sydney (Base Source: Google Maps)

5.3 Key Issues – Government Agencies

A total of eight government agency submissions were received in response to the exhibition of the application, all of which provided comments. The key issues raised in submissions are summarised in **Table 5**.

Table 5 | Government agency submissions

Office of Environment and Heritage (OEH) – Heritage Division (on behalf of the NSW Heritage Council)

OEH (Heritage Division) recommended amendments and conditions to minimise/mitigate potential adverse heritage impacts. The key recommendations related to:

- more landscaped roofs should be freely accessible by the community
- reducing the visibility of the entry plaza canopy
- reducing the extent of works to the fuel bunker
- revising the external colours and materials.

Office of Environment and Heritage (OEH) – Planning and Aboriginal Heritage

OEH (Planning and Aboriginal Heritage) requested further consideration of matters relating to biodiversity offsets and submission of a detailed Aboriginal Archaeological Cultural and Heritage Assessment (ACHAR).

TfNSW

TfNSW provided recommendations regarding:

- retention of the existing bus stop location to minimise walking distance for bus customers to the gallery
- coach parking be relocated to minimise conflicts with other road users and pedestrians
- retention of the existing pedestrian crossing in front of the gallery
- further justification be provided for the relocation of accessible parking, public drop-off bay and taxi rank within the gallery forecourt; and for the deletion of the 'no parking' zone on the western side of Art Gallery Road.

Roads and Maritime Services (RMS)

RMS recommended conditions including a requirement for an Interface Access Agreement to be developed between the Applicant and RMS.

Environment Protection Authority (EPA)

EPA requested further information regarding potential operational noise impacts on neighbouring residents, particularly from the proposed café terrace and loading dock. Conditions were also recommended in relation to contamination, construction and waste management.

Ausgrid

Ausgrid requested further information regarding potential impacts on the adjacent zone substation.

Sydney Water

Sydney Water provided standard recommended conditions relating to building plan approval and the requirement for a Section 73 Compliance Certificate.

5.4 Key Issues – Council / Community

5.4.1 Council key issues

Council did not object but raised the following key issues:

- the existing and proposed gallery buildings would present a confusing arrangement for visitors at arrival
- there should be better connection between the existing and proposed buildings
- consideration should be given to the sequences of spaces in approach to, arrival, and navigation throughout the gallery. This includes pedestrian improvements and relocation of vehicle parking and drop-off in front of the gallery
- the existing pedestrian crossing in front of the gallery should be retained and new crossings realigned with primary walking paths
- the roof should be further integrated into the parkland setting noting the omission of planted roof terraces would not provide maximum integration of the built form which is a departure from the original winning competition design
- visitor and staff bicycle parking should be relocated
- the environmental performance of the building should be maximised
- justification is required for the request for an exemption for contributions under the Central Sydney Contributions Plan.

5.4.2 Community issues

The Department received 283 public submissions during the exhibition of the application, with 202 objecting to the development, 70 supporting the development and 11 which provided comments. Alex Greenwich, Member for Sydney did not object to the proposal but raised concerns with:

- use of green open space
- size of the proposed entry plaza and canopy
- loss of trees
- building design
- impacts on residents from use of the proposed loading dock at night.

A community group, Foundation and Friends of the Botanic Gardens objected to the proposal on the basis of:

- loss of green space
- location of the building
- bulk and scale
- loss of trees
- loss of car parking.

Submissions were received from a wide variety of locations as detailed in **Table 4** and **Figure 18**.

Of the 202 objections, 40 (20%) were received from people located within 1 km of the site while 88 (44%) were received from people located over 5 km from the site. The key issues raised in the public submission objections are summarised in **Table 6**.

Table 6 | Summary of key issues raised in public submissions objecting to the EIS exhibition

Issue	% of objections
Loss of public open space within the Domain/RBG	82% (165)
Negative visual impact on surrounding views and vistas	43% (86)
The Art Gallery extension should be located elsewhere in Sydney	39% (78)
Tree removal and loss of biodiversity	38% (76)
Poor architecture and urban design	36% (72)
Adverse impact on the heritage of the Art Gallery and the RBG	26.5% (53)
Insufficient parking and loss of existing parking and revenue from parking meters	23% (46)
Large size/bulk and scale of the new building	21% (42)
Increased traffic	19% (38)
Insufficient public transport services and pedestrian links	18.5% (37)
Lack of community consultation, stakeholder engagement and transparency	15.5% (31)
Impacts of construction including noise, vibration, dust and disruption to the gardens	13.5% (27)
Insufficient landscaping	12.5% (25)
Adverse impacts from the SWHES including disruption of the RBG and Woolloomooloo Bay	10% (20)
High cost and inappropriate use of government funding	9.5% (19)
Insufficient justification for the project	8.5% (17)
Concerns for potential future use as a function centre	8.5% (17)
Proximity of new building to Art Gallery Road	8.5% (17)
New roundabout outside Woolloomooloo gates	7% (14)
Poor pedestrian accessibility to support increased numbers of pedestrians	7% (14)
Safety and visual impact of reflective materials	6.5% (13)
Poor disability access	4.5% (9)
Existing stormwater system is not sufficient to accommodate the development	4% (8)
Not compliant with relevant legislation, including the <i>Royal Botanic Gardens and Domain Trust Act 1980</i>	4% (8)
Impact of exterior lighting	4% (8)

Operational noise impacts	3% (6)
Loss of privacy	2.5% (5)

Eleven public submissions did not object to the proposal but made comments with regards to the development including, loss of trees and public open space, design, built form, visual and heritage impacts.

Seventy public submissions were received in support of the application. The submissions made the following key comments regarding the proposed development:

- it would allow for a greater proportion of the galleries art collection to be displayed including larger exhibitions
- it would allow the AGNSW to be more competitive with other national and international galleries
- it would contribute to improving the cultural vibrancy of Sydney and NSW
- it includes the creative transformation of the former fuel bunker
- it incorporates improved public facilities.

5.5 Response to Submissions

Following exhibition of the application, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised in the submissions.

On 23 April 2018, the Applicant lodged an RTS to the issues raised during the exhibition of the EIS. The RTS responded to the issues raised and included amended architectural and landscape plans, a revised architectural design report, a revised visual impact assessment, and a revised heritage impact statement.

In particular, the amended architectural plans included the following amendments:

- rotating the entry plaza canopy design further to the south-east with increased setbacks to Art Gallery Road to reduce its potential visual impact on the existing gallery building
- lowering the gallery 2 roof by 2.16 m to reduce the size of the building as viewed from the RBG
- the retention of 16 more trees (including the Joseph Beuys tree) and eight more trees to be planted
- the area of publicly accessible and landscaped roof terraces increased
- provision of a new publicly accessible lift from Lincoln Crescent.

The RTS documentation was made publicly visible on the Department's website and was referred to the relevant government agencies.

An additional submission was received from Council and seven submissions were received from government agencies, including OEH and the EPA. Ten further submissions were received from the public, nine objecting or raising significant concerns, and one supporting the development. A summary of issues raised in the government agency and Council RTS submissions is provided at **Tables 7 and 8** below and a link to all submissions is provided at **Appendix B**.

Table 7 | Summary of government agency submissions to the RTS

Office of Environment and Heritage (OEH) – Heritage Division (on behalf of the NSW Heritage Council)

OEH (Heritage Division) recommended increasing the setback of the proposed entry plaza canopy to Art Gallery Road and provided further recommended conditions.

Office of Environment and Heritage (OEH) – Planning and Aboriginal Heritage

OEH (Planning and Aboriginal Heritage) confirmed that the RTS suitably addressed issues related to biodiversity subject to a specific condition regarding replacement tree species. It was also acknowledged that a detailed Aboriginal Archaeological Cultural and Heritage Assessment would be submitted for review prior to determination.

TfNSW

TfNSW provided in-principle support for the proposed changes on Art Gallery Road including the proposed bus stop location.

Roads and Maritime Services (RMS)

RMS provided no further comments or recommended conditions.

Environment Protection Authority (EPA)

EPA did not object but requested a revised assessment regarding the predicted impact of the SWHES on the receiving waters of Sydney Harbour. Conditions were also recommended regarding anti-foulant use, out-of-hours works and operational noise from the proposed café terrace.

Ausgrid

Ausgrid recommended the conditions of consent include a requirement for the Applicant to consult with Ausgrid to identify and mitigate impacts of the proposed development on the adjacent substation

DPI

DPI did not object and provided further recommendations regarding groundwater and construction works related to the SWHES.

Table 8 | Summary of Council submission to the RTS

Council

Council confirmed the RTS addressed some aspects of its original submission and are generally supportive of the project. However, Council reiterated that the design should be more integrated in its landscape setting and provided further comments in relation to:

- building materials should be high quality, preferably Australian stone
- class 2 staff bicycle parking should be provided
- use of outdoor areas associated with functions and the café should cease after 10 pm each night
- impacts on the road network from construction and delivery vehicles should be subject to further consultation between Council and RMS

- if the Joseph Beuys tree is to be transplanted, it should be relocated to a culturally significant location.

Of the ten further public submissions received, these predominantly reiterated issues raised during the EIS exhibition. However, five of the submissions specifically objected to the proposed design not demonstrating design excellence and that the design should be peer reviewed. Four submissions also requested the visual impact of the east facing walls should be mitigated and three objected to the potential increased use of the TWT lift.

In response to submissions to the RTS and the Department's request for additional information regarding the entry plaza canopy design, trees and public lift access, the Applicant provided RTS Addendum Reports (RTSAR) and revised plans on 9 August and 17 August 2018 which included the following amendments:

- further rotation of the entry plaza and associated canopy to the south-east providing an increased setback from Art Gallery Road and retention of the Joseph Beuys tree
- provision of a new public lift at ground level on the western side of Lincoln Crescent
- revisions to the location of bus, taxi and coach parking on Art Gallery Road
- inclusion of land subdivision as part of the proposal.

The RTSAR and associated documentation were made publicly available on the Department's website and referred to Council and relevant government agencies. An additional submission was received from Council and five further submissions were received from government agencies, including OEH and the EPA. These submissions raised no objection and in particular, OEH supported the proposed revisions to the entry plaza canopy (see **Section 6.6**).

Council primarily reiterated concerns regarding the integration of the proposed design with the surrounding landscape setting, provided further comments in relation to stormwater management, and advised they do not support the Applicant's request for development contributions to be waived (see **Section 6.9**).

Five further submissions were received from the public, three objected, and two provided further comments. New issues raised related to the perceived loss of public stairs between Lincoln Crescent and the Domain (stair access is retained) and the location of the proposed SWHES pump room and above ground chamber.

An ACHAR was received in late August 2018 and was also made publicly visible on the Department's website. The ACHAR was referred to OEH who confirmed the ACHAR is acceptable and satisfies their requirements.



6. Assessment

6.1 Key assessment issues

The Department has considered the application, issues raised in submissions, and the Applicant's RTS and RTSAR in its assessment of the proposed development. The Department considers the key planning issues associated with the proposed development are:

- alternative locations
- use of public open space
- design excellence, built form and visual impact
- public domain, including loss of trees
- heritage
- transport, traffic, car parking and servicing
- the seawater heat exchange system (SWHES).

Each of the key issues is discussed in the following sections of this report. Other issues were taken into consideration during assessment of the proposed development and are discussed in **Section 6.9**.

6.2 Alternative locations

A large proportion of public submissions (39%) raised concerns regarding the proposed location of the development to the north-east of the existing gallery building. Many submissions suggested alternative locations for the gallery expansion should be considered, including Barangaroo, Parramatta, the Balmain Power Station and the southern or eastern sides of the existing gallery building.

A range of siting options were explored by the Applicant as part of the strategic planning process to expand the AGNSW. The siting options were tested against a range of key criteria to determine the most appropriate option for expansion.

Details of the Applicant's various built form expansion options and analysis of the advantages and disadvantages of each assessed location are provided within the EIS and RTS at **Appendix B**. The Applicant advised the key stated advantages of the proposed location, compared to other locations, are:

- the ability to create an iconic building
- strengthening the identity of AGNSW within the city
- strong connections to the city and harbour
- opportunity to create international quality contemporary exhibition spaces and visitor services.

The stated disadvantages of the subject location were a more complex construction approach and a more prominent structure when viewed from eastern approaches.

The advantages of alternative sites within Sydney were the benefit of a potential landmark location and ability to create a new quality building to meet exhibition requirements. For sites in the CBD, the advantages also included excellent connections to the city and harbour. However, the stated disadvantages for alternative sites within Sydney include:

- difficulty in maintaining the identity of a single institution operating across two major sites
- major operational and curatorial challenges in existing AGNSW not addressed
- duplication of services, operating systems and public programming costs
- significant capital cost in new facility.

The RTS also included an independent assessment of the business case implications of the proposed development compared to an alternate CBD or regional location. The assessment notes the material differences in visitation numbers, operating cost and private funding/art philanthropy between the two options and concludes there would be a significantly reduced cost-benefit ratio for the State from an alternative site. Combined with the other disadvantages with an alternative site listed above, the Applicant contends this would significantly lower the financial viability for the project.

The Applicant further contended that unless a taller, more visually dominant building were constructed, potential sites to the south, south-east or south-west of the existing gallery building do not have the ability to cater for the required minimum gross floor area (GFA) and minimum 5.5 m high floor to ceiling heights due to various constraints.

These include major disruptions to public spaces such as the playing fields over the Domain car park, demolition of the Domain car park due to structural capacity constraints, heritage impacts, operational difficulties, and a significantly taller built form than currently proposed due to a smaller and more level site.

The Department agrees the proposed location for the expansion of the AGNSW is consistent with State and local government strategic planning policy (see **Section 3**) and considers the development to be logically located close to the existing gallery. The Department considers this location represents the best outcome in terms of strengthening the CBD cultural ribbon and reinforcing the cultural and heritage association of the AGNSW within the Domain.

The proposed location would also allow for the required expansion gallery without creating the significant ongoing operational difficulties and costs, duplication of services and identity issues represented by creating an annex site elsewhere in Sydney.

The Department considers other locations around the existing gallery are unlikely to be feasible given the loss of the highly utilised Domain playing fields if developed to the south, greater visual prominence, adverse visual impact on the historic south-western elevation of the gallery building, and inability to include the adaptive re-use the fuel bunker.

The Department concludes the proposed site represents the optimum location for the proposed expansion of the AGNSW compared to other potential site locations resulting in maximum cultural, educational and economic/tourism benefits to the residents of Sydney and NSW.

6.3 Use of public open space

The proposed new building would be located within the Domain on existing public open space comprising part of the landscaped land bridge, the area above the grassed fuel bunker roof and the vegetated embankment between the fuel bunker and Art Gallery Road/Mrs Macquarie Road. This open space provides a valuable green connection between the Domain and Woolloomooloo. **Figure 19** identifies the location of the proposed building site area (in blue) in relation to areas of existing open space, including areas above the land bridge and fuel bunker (shaded red). Photographs in **Figures 20** and **21** (see also **Figures 5** and **6**) illustrate the areas of existing open space.

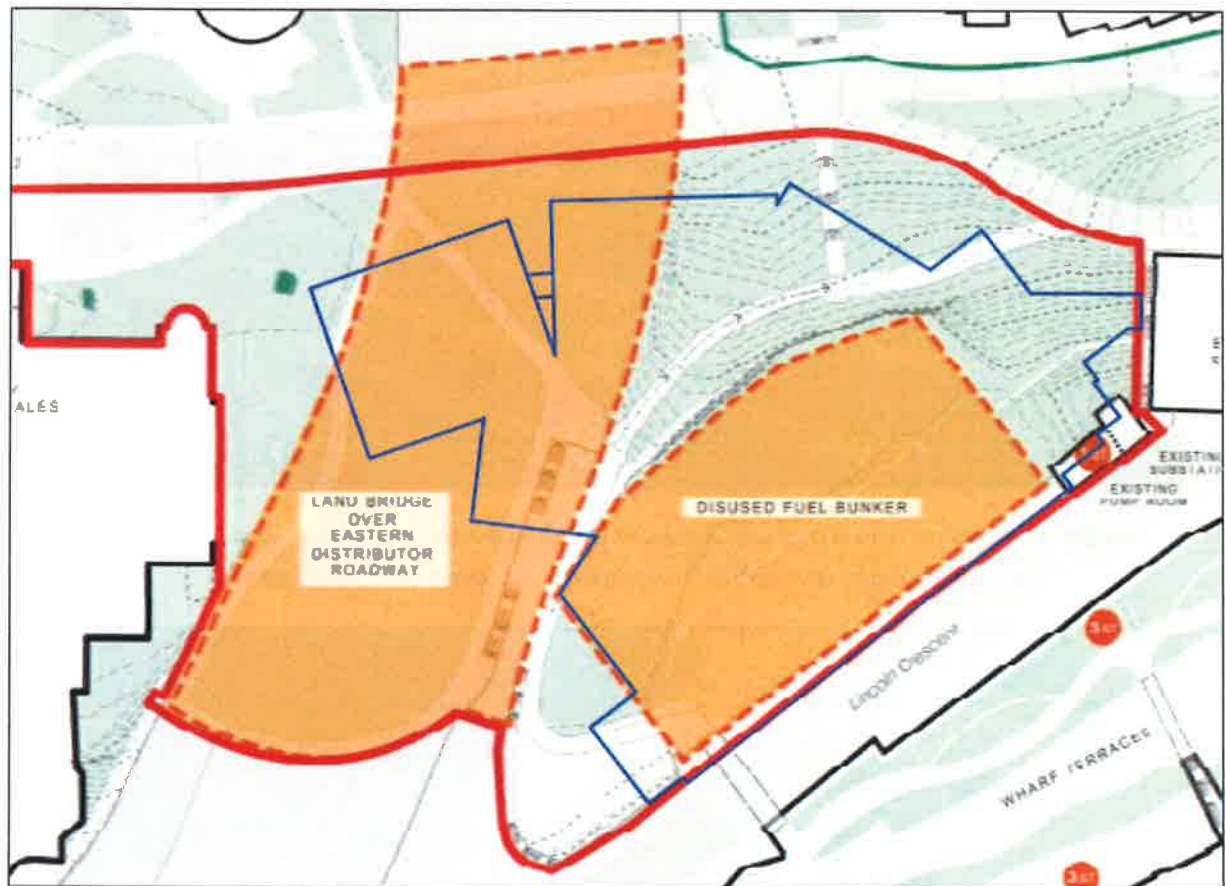


Figure 19 | Existing areas of public open space, including areas above existing structures (Base source: Architectural Plans)



Figure 20 | Grassed fuel bunker roof with vegetated embankment behind looking north-west from TWT pedestrian bridge over Lincoln Crescent (Source: Department's photograph)



Figure 21 | Grassed Land bridge looking north (Source: Department's photograph)

A significant proportion of public submissions (82%) objected to the proposed use of public open space for the proposed development. Particular concerns included the loss of green open space/parkland within the Domain, adverse impact on the amenity of the Domain, encroachment of the development on the RBG and the erosion of threatened green space in the CBD.

The Applicant contended that construction of a new building on existing public open space would be reasonable because:

- the existing green space is not of high quality, does not comprise part of the botanical collection of the RBGDT, and is of a fragmented arrangement
- 72% of the proposed building footprint would be built over existing structures, being the land bridge and the fuel bunker (**Figure 19**)
- public access to the building, including roof terraces would be maintained during AGNSW opening hours (10 am to 5 pm every day of the year, excluding Christmas Day and Good Friday, extending to 10 pm on Wednesday evenings)
- proposed new and enhanced publicly accessible landscaped areas at ground level (24 hours-per-day/seven days-per-week) and improved pedestrian and accessibility links (see **Section 6.5**)
- the proposed number of replacement trees (273) compared to the number of trees to be removed (124) (see **Section 6.5**). This includes reinstatement of an endemic ecological community (Sydney Sandstone Woodland).

The overall site area (outlined in red in **Figures 19** and **22**) measures 23,045 m². The site area is larger than the area of the proposed new building (outlined in blue in **Figures 19** and **22**) as it includes the front setback of the existing gallery building and the entire land bridge.

The proposed building site area measures 10,958 m². The proposed building area comprises the footprint of the proposed new building, plus areas of excavation and areas above the fuel bunker that are outside the actual building footprint.

The footprint of the proposed building (including the entry plaza canopy), measures 7,716 m². This would be entirely located over areas of existing public open space. Of this, 5,531 m² (72%) would be constructed over existing built structures (the land bridge and the fuel bunker).

The proposed development provides 7,684 m² of open space and landscaped roof areas/green roof. The proposed areas of open space and landscaped areas comprise publicly accessible open space 24 hours-per-day, seven days per week (entry plaza and forecourt plaza), publicly accessible space during gallery opening hours (roof terraces and courtyards), and landscaped roof areas/green roof. **Table 9** provides a numerical overview of the proposed footprint of the development and proposed areas of open space. **Table 10** provides a further numerical breakdown of the proposed areas of open space and landscaped areas.

Figure 22 illustrates the proposed site, building site and building footprint areas. **Figure 23** illustrates the proposed areas of open space and landscaped areas.

Table 9 | Numerical overview of proposed building in relation to proposed open space and landscaped areas

Location	Area
Existing open space	
Proposed building footprint (including entry plaza canopy)	7,716 m² (70% of the building site area)
Proposed open space and landscaped areas	
Total proposed open space (including publicly accessible space and landscaped roof areas/green roof)	7,684 m² (99.6% of proposed building footprint) comprising: - o 1,856 m² (roof terraces) - o 1,547 m² (courtyards) - o 1,513 m² (entry plaza) - o 852 m² (forecourt plaza) - o 1,916 m² (landscaped roof areas/green roof)
Difference between existing and proposed open space and landscaped areas	$7,7716 - 7,684 =$ difference of 32 m ²

Table 10 | Numerical overview of proposed areas of open space

Location	Area
Publicly Accessible Open Space	
Proposed publicly accessible open space (24 hours-per-day, seven days-per-week)	2,365 m² (31% of the building footprint) comprising: - o 1,513 m² (entry plaza) - o 852 m² (forecourt plaza, converted from roadway/car parking)
Proposed publicly accessible space (during gallery opening hours)	3,403 m² (44% of building footprint) comprising: - o 1,856 m² (roof terraces) - o 1,547 m² (courtyards)
Subtotal	5,768 m² (75% of building footprint)
Landscaped Areas	
Landscaped roof areas and green roof (non-publicly accessible)	1,916 m²
Total	$5,768 + 1,916 = 7,684 \text{ m}^2$

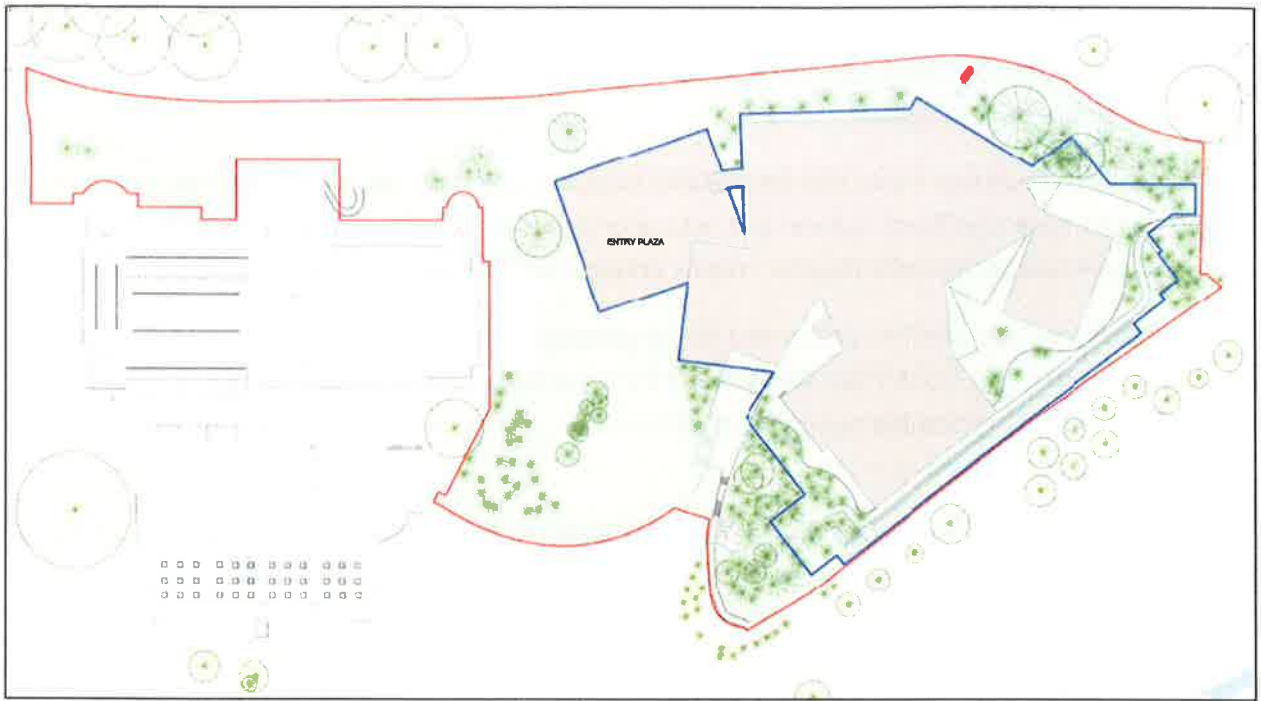


Figure 22 | Proposed site area (outlined in red), proposed building site area (outlined in blue), and proposed building footprint (shown grey) (Source: Architectural Plans)

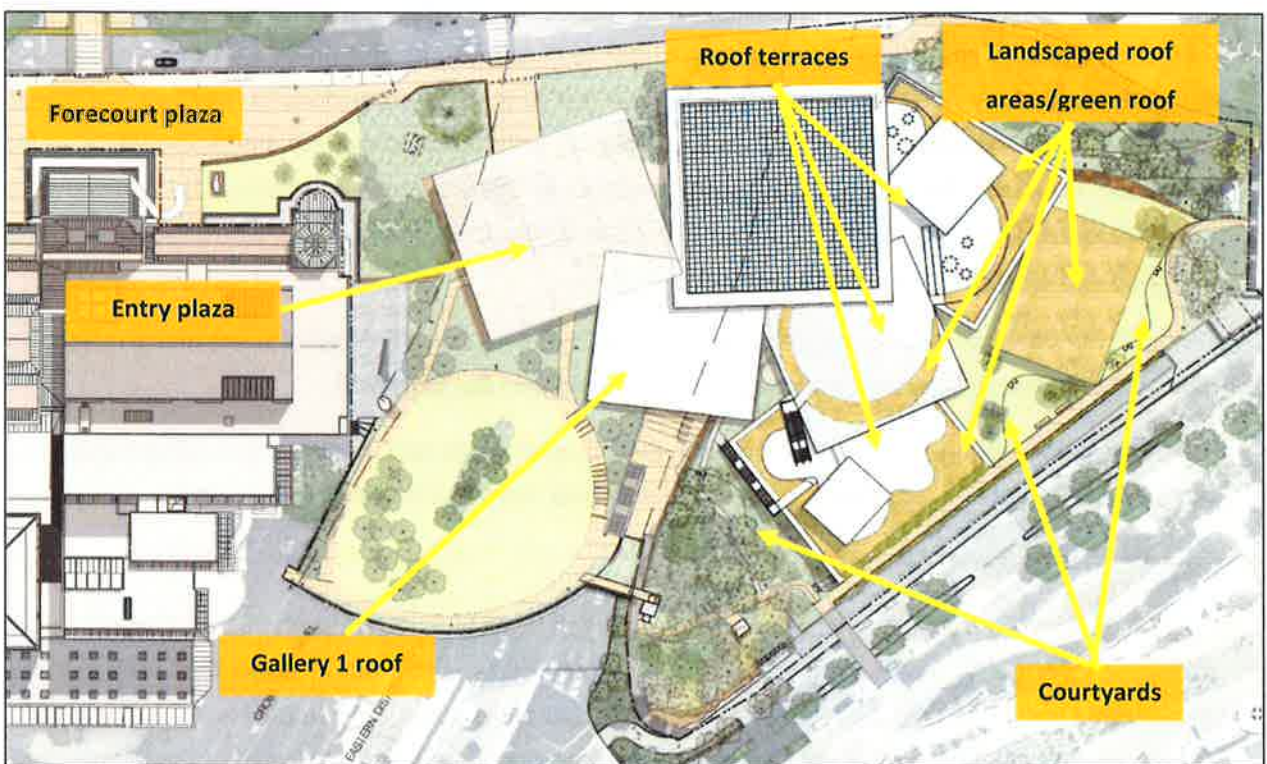


Figure 23 | Proposed areas of open space and landscaped areas (Source: Architectural Plans)

The proposed use is permissible and the AGNSW is historically associated with the Domain. The Department accepts the use of public open space for public cultural institutions is relatively common, with examples including within the existing Domain and RBG, the Melbourne Museum and Melbourne Royal Exhibition Building, and the Metropolitan Museum of Art in New York.

The Department therefore considers the proposed use of public land for a public building and its associated public benefit is reasonable, subject to associated impacts from the development being justified and suitably mitigated.

The proposed building would also be available for public use at no cost during gallery opening hours and would have significant cultural and educational public benefits. The development would also contribute towards strengthening the 'cultural ribbon' concept within the CBD (see **Section 3**).

The Department accepts the total amount of open space proposed (7,684 m²) equates to the proposed building footprint (7,716 m²) (see **Table 9**). Of the proposed 7,684 m² of open space, 5,768 m² (75%) would be publicly accessible open space. Of this area, 2,365 m² would be publicly accessible outside of gallery opening hours.

However, although the area of proposed spaces equates to the footprint of the proposed building, the composition, appearance and useability of the proposed series of spaces is different to that of the existing open space. These matters are considered below.

Existing open space

The majority of the proposed building footprint (72%) would be located over the existing land bridge and fuel bunker structures. The existing green roofs of these structures have insufficient soil depth to support significant landscaping, contain limited shelter or wind protection, and are unsuitable for formal recreation activities due to the slope/shape of the land bridge and the presence of access hatches above the fuel bunker (see **Figures 5 and 6**). The rest of the site predominantly comprises a steep, landscaped embankment containing stairs and retaining walls which provides limited opportunities for public use. Although these areas contribute to the amenity of the Domain and provide harbour views in some locations, they do not relate to the historic and landscaped quality of the Domain and, with the exception of the land bridge, are poorly connected.

Although the site and immediate surrounds contains 220 trees, only 38 trees (17%) are of high retention value and of these, only six are proposed to be removed (see **Section 6.5**).

Therefore, although the site is currently entirely public open space and is utilised to varying degrees by the public, much of it is not easily accessed and is limited in terms of function and useability.

Proposed design approach

The proposal involves a multi-functional design approach to open space through the creation of a series of diverse new public spaces, including the forecourt plaza, entry plaza, three roof terraces and landscaped courtyards. These spaces would provide gathering points, undercover areas and locations for public views providing excellent connectivity and the opportunity for a range of potential uses (see **Section 6.5**). A green roof (not publicly accessible) is also proposed over the multi-purpose room.

Landscaping

In addition to the 1,916 m² of landscaped roof areas/green roof, the proposal incorporates significant landscape works and replacement tree planting (see **Section 6.5**) including 1,758 m² of landscape improvements outside the site area, predominantly to the south-east of the existing gallery building.

New trees (total of 273), with maximum heights ranging from 5 m to over 30 m, are proposed. In replacing the 124 trees to be removed, the new trees would improve the urban ecology of the site by increasing the tree canopy in the longer term and creating a new Sydney Sandstone Woodland ecological community. The increased tree canopy would make a positive contribution to the precinct through increased shade cover and would provide enhanced visual amenity and visual compatibility with the surrounding parkland setting.

Accessibility and connectivity

The proposed development maintains and improves public access and connectivity to, and within, the Domain (see **Section 6.5**). An interconnected network of public spaces would be established within the site area, including the provision of an equitable access path and new public lifts to improve access to the site, and the wider Domain, from Woolloomooloo.

Heritage

Impacts on the heritage value of the existing gallery building and the Domain have been minimised through design refinements and amendments to the proposed development since exhibition. At the same time, the proposed development would also create public access to the historic fuel bunker (see **Section 6.6.3**). The proposed development also includes the proposed conversion of the parking area within the forecourt of the existing gallery building to an 852 m² public plaza which would improve the visual setting and arrival experience of the existing gallery building.

Conclusion

The Department considers the proposed areas of open space, (including the 1,916 m² of landscaped roof areas/green roof), is approximately the same as the existing area of open space to be occupied by the proposed development. However, the Department considers the amount of green landscaping should be further increased to better integrate the building into its parkland setting. The Department therefore recommends a condition requiring the conversion of the roof of gallery 1 (650 m²) to a green roof (see **Figure 23**). This area would not be publicly accessible due to design restrictions. This outcome is consistent with the original design competition winning entry (see **Section 6.4.2**) which included green roofs to most building elements.

The Department notes that the roof of the entry pavilion has been designed to be lightweight and contains a large number of solar panels. In addition, the roof of the entry plaza is a glazed, lightweight structure. The Department therefore considers these roofs are not suitable to be converted to green roofs.

The Department considers that although the proposed development would alter the use of some existing areas of public open space, the design includes a series of integrated, multi-functional areas of public open space at ground level and the provision of publicly accessible roof terraces within the building. These new multifunctional spaces would provide benefits and passive recreation opportunities, including gathering spaces, covered spaces, an art garden and seating areas. These types of spaces would complement the needs of a range of existing and potential future users of the AGNSW, the Domain and the RBG.

The proposed development incorporates an acceptable balance between the recreational and functional requirements of the Domain and RBG precinct. Connectivity is also maintained and improved, providing accessible, useable public spaces.

The quality and quantity of landscape planting would be significantly improved, tree canopy cover would increase in the longer term, and a desirable Sydney Sandstone Woodland ecological community would be created.

The refinements to the open space would establish more appropriate ecology (and increased ecological value as the new planting matures) and diverse spaces and places, allowing for the successful integration of the expanded arts offering into the existing Domain and RBG precinct. On balance and in combination with the accessible public use of the building and associated significant public and social benefits, and subject to the proposed conditions, the Department concludes the proposed development represents a justified and acceptable use of public open space.

6.4 Design excellence, built form and visual impact

The design of the proposed building and in particular, how it responds to its parkland setting, its relationship to the existing gallery building, including the design and setbacks of the proposed entry plaza canopy, and its potential impacts on existing public view corridors, are significant issues in the Department's assessment of the proposed development.

Eighty-six submissions (43%) objected to the perceived negative visual impact of the proposed development on surrounding views and the character of the Domain and RBG, while 72 (36%) objected to the design of the proposed building.

As originally exhibited, Council raised concerns regarding the omission of planted roof terraces from the design which would limit the visual integration of the proposed building into the parkland setting.

OEH also raised concerns regarding the extent of publicly accessible landscaped roofs, the height and setbacks of the proposed entry canopy, and use of reflective surfaces and large areas of glass and bright white finishes should be avoided.

In response, the Applicant amended plans which incorporated the key design and built form changes as described in **Section 2.1**.

The Applicant contended the revised scheme responds suitably to the concerns raised with the original design and would result in a sympathetic and compatible built form to the existing AGNSW building and the RBG and Domain, and minimises visual impacts as much as possible.

OEH are satisfied the changes to the proposed works, including the entry plaza canopy, are acceptable.

The Department has considered the proposed built form and design issues raised in submissions and considers the key issues relate to design excellence, bulk and scale, and the visual impacts of the proposed building. Design excellence is considered in **Section 6.4.2** and the built form of the proposed building is considered in **Section 6.4.3**. The visual impact of the proposed building in the context of the Domain, the RBG and surrounding area is considered in **Section 6.4.4**.

6.4.1 Design excellence

The proposed expansion of the AGNSW was subject to a design excellence process in accordance with SLEP 2012 requirements. An international design competition was held in 2014, consistent with Council's Competitive Design Policy. An Architects Advisory Panel (AAP) was established to facilitate the design competition. Members of the AAP comprised:

- Paul Berkemeier (Chair), National President, Australian Institute of Architects
- Peter Poulet, NSW Government Architect
- Graham Jahn, Director, City Planning, City of Sydney Council
- Eleonora Triguboff, Trustee, AGNSW
- Anne Flanagan, Deputy Director, AGNSW

The competition model involved the Competition Jury selecting 12 architectural practices from the list prepared by the AAP. The Jury comprised:

- Dr Michael Brand, Director AGNSW
- Kathryn Gustafson, Architect, Gustafson Guthrie Nichol
- Michael Lynch CBE AM, CEO West Kowloon Cultural District Authority
- Professor Toshiko Mori, Practice of Architecture, Harvard Graduate School of Design
- Professor Glenn Murcutt AO, Architect
- Professor Juhani Pallasmaa, Architect
- Hetti Perkins, Member of the Eastern Arrente and Kalkadoon Aboriginal communities, curator, filmmaker and author.

In January 2015, the Competition Jury decided on the following five architects to submit final design entries:

- Kazuyo Sejima and Ryue Nishizawa/SANAA (Tokyo)
- Kengo Kuma and Associates (Tokyo and Paris)
- Kerry Hill Architects (Singapore and Perth)
- RMA Architects (Mumbai and Boston)
- Sean Godsell Architects (Melbourne)

SANAA's scheme was unanimously selected by the Competition Jury as the winning design in May 2015 (**Figure 24**). Previous projects by SANAA include:

- 21st Century Museum of Art, Kanazawa
- Glass Pavilion, Toledo Museum of Art, USA
- Towada Art Musum, Towada
- New National Gallery, Hungary.

Public submissions have questioned the adequacy of the design excellence process and the subsequent design quality of the proposed development. The Department sought comments from the NSW Government Architect in regard to these issues.

The then NSW Government Architect, Peter Poulet, was a member of the Architects Advisory Panel for the Competition Jury. Mr Poulet has advised that through the international design competition process and the Competition Jury comprising eminent practitioners and industry representatives, SANAA, an internationally acclaimed architect, was selected to undertake the design work for the project.

The Architects Advisory Panel stressed to the Competition Jury the importance of the landscape setting of Sydney Modern and this resulted in a scheme being chosen which fragmented and descaled what is a large area and volume of building. In August 2018, Mr Poulet advised the Department that the proposed design is a strong and elegant piece of architecture that does not overwhelm the original sandstone gallery building and would be a positive, contemporary contribution to the gallery and to the architecture of Sydney. Mr Poulet commended the design as a fitting addition to the built environment of Sydney.

As a result of funding changes and design refinements in response to stakeholder consultation and feedback, the design of the winning scheme was subsequently altered by SANAA prior to lodgement of the SSD (**Figure 25**). The key changes were:

- removal of physical links to the existing gallery building providing greater separation between the existing and proposed buildings
- provision of a central art garden and entry plaza and associated canopy on the land bridge between the existing and proposed buildings
- redesign of the roof gardens and terrace areas to allow greater public access
- increase of overlapping building elements to reduce the overall building footprint and increase landscaping and retention of trees
- deletion of dedicated function facilities
- increase in the area of the fuel bunker to be adaptively re-used as gallery space.

Given the evolution of the design and in accordance with the competitive design process, a Competition Jury Design Integrity Assessment (DIA), unanimously endorsed by the original Jury, was included with the EIS. The DIA demonstrates how the proposed design maintains the integrity of the winning design. In its review, the Competition Jury made no recommendations for changes to the proposed revised design.

Clause 6.21 of SLEP 2012 also relates to design excellence, noting development consent must not be granted unless, in the opinion of the consent authority, the development exhibits design excellence. With regard to the matters for consideration, the Department notes:

- the land is suitable for the proposed development and use
- a high standard of architectural design, materials and detailing would be achieved
- the form and external appearance of the proposed development would improve the quality and amenity of the public domain (see **Section 6.5**)

- the proposed development would not unreasonably impact view corridors (see **Section 6.4.4**)
- the proposal is acceptable with regard to heritage impacts, streetscape, building bulk and mass, environmental impacts, landscape design and ESD
- suitable interfaces at ground level are proposed between the building and the public domain
- acceptable pedestrian, cycle, vehicular and service access would be achieved.

Given the endorsement of the proposed design by the Competition Jury, the Department is satisfied the proposed development is substantially the same and retains the design excellence exhibited in the winning design.

To ensure the final development achieves design excellence and consistency with the winning design, the Department recommends a condition requiring the design development and construction documentation be subject to a design integrity process.



Figure 24 | Original design competition winning entry (Source: Applicant's EIS)



Figure 25 | EIS proposed design (Source: Applicant's EIS). Note: The subsequent design enhancements are minor from this perspective and did not necessitate an updated image

6.4.2 Built form

The proposed Sydney Modern building is divided into a series of pavilions/galleries with landscaped terraces and roofs that step down from Art Gallery Road towards the east, following the sloping topography of the site. A cross-section of the proposed development is included as **Figure 26**.

Table 11 provides a comparison of the footprint, GFA and height of the existing gallery building and the proposed building. A 1,513 m² glazed canopy is also proposed over a new entry plaza adjacent to the southern side of the building.

Table 11 | Numerical overview of proposed building and existing AGNSW building

Location	Area
Existing and proposed building footprint	
Existing AGNSW building footprint	9,726 m ²
Proposed Sydney Modern building footprint (excluding entry plaza canopy)	6,203 m ² (64% of existing building footprint)
Existing and proposed GFA	
Existing AGNSW building GFA	19,679 m ²
Proposed Sydney Modern building GFA	12,112 m ² (3,544m ² within existing fuel bunker)

Existing and Proposed Building Height

Existing AGNSW building height	19 m / RL 40.2 (to roof) 14.7 m / RL 35.85 (to top of sandstone façade)
Proposed Sydney Modern building height	9.5 m / RL 31.65 (to top of Entry Pavilion roof from Art Gallery Road) 13.6 m / RL 16.3 (to top of gallery 3 from Lincoln Crescent) (Art Gallery Road: RL: 22.2) (Lincoln Crescent: RL2.69)

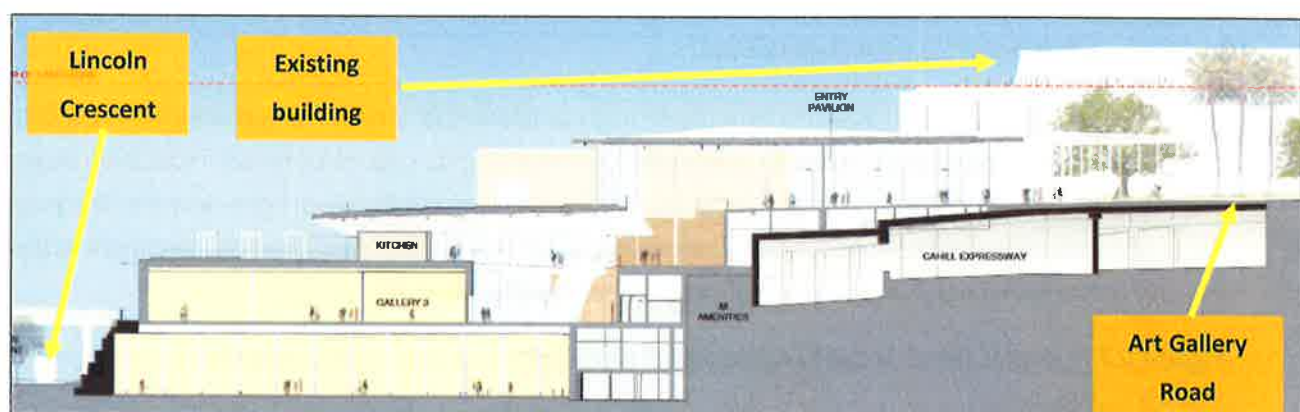


Figure 26 | Cross-section of the proposed development (Base source: Architectural Plans)

All exterior walls are proposed to be either glass or warm tone limestone. Roofs are concrete with four roofs containing a total of 1,916 m² of landscaping. The roof of the entry pavilion would also contain 1,536 m² of photovoltaic panels. The proposed entry plaza canopy is made of glass and aluminium panels formed into a random wave rhythm.

Public submissions raised concerns regarding poor architecture, urban design, bulk and scale, and the proposed materials. Council also raised concerns that the design is not suitably integrated with the surrounding landscape setting.

The Applicant contended the following:

- the design concept is low profile and responds to the topography of the site, consistent with the design competition winning design
- the height of the entry plaza roof and canopy would not exceed the height of the existing gallery building Vernon façade cornice which would preserve the integrity of the existing building
- the design achieves a diversity of large, flexible gallery spaces that can display a wide range of art works that require various conditions and environments
- the proposed use of natural stone (limestone) would be compatible with the building's surroundings

- landscaping, including landscaped roof terraces, would ameliorate the visual impact of the built form and would enable the building to sit comfortably in its landscaped setting.

The main building element visible from Art Gallery Road, the RBG and Domain would be the predominantly glazed entry pavilion which has a street frontage of 41 m, a maximum street wall height of 6.5 m and a setback ranging from 12 m to 15 m to Art Gallery Road. This includes a 7 m to 8 m wide landscaped setback containing new 12 trees with mature heights between 15 m and 20 m. The Department considers the proposed design and setbacks of the entry pavilion would therefore be compatible with the surrounding context.

Gallery 2, adjoining the north side of the entry pavilion, would have a roof height 6 m below the roof height of the entry pavilion. In combination with a setback of 11 m to 23 m to Art Gallery Road/Mrs Macquaries Road and existing and proposed landscaping on the north-western side of gallery 2, the Department considers this element of the proposed building would appear significantly subservient to the proposed entry pavilion and with an appropriate reduction in the apparent bulk and scale of the building when viewed from Art Gallery Road.

The entry plaza canopy is proposed to be an open and transparent structure. The setbacks of the canopy to Art Gallery Road have been revised to between 13 m and 22 m to reduce potential impacts on views to the existing gallery building from Art Gallery Road. The Department however considers the design of the canopy could be further enhanced to improve the relationship of the proposed development to the existing gallery building and reduce visual impacts (see **Section 6.4.4**).

Figure 27 illustrates the proposed setbacks of the entry plaza canopy, entry plaza pavilion and gallery 2 to Art Gallery Road.

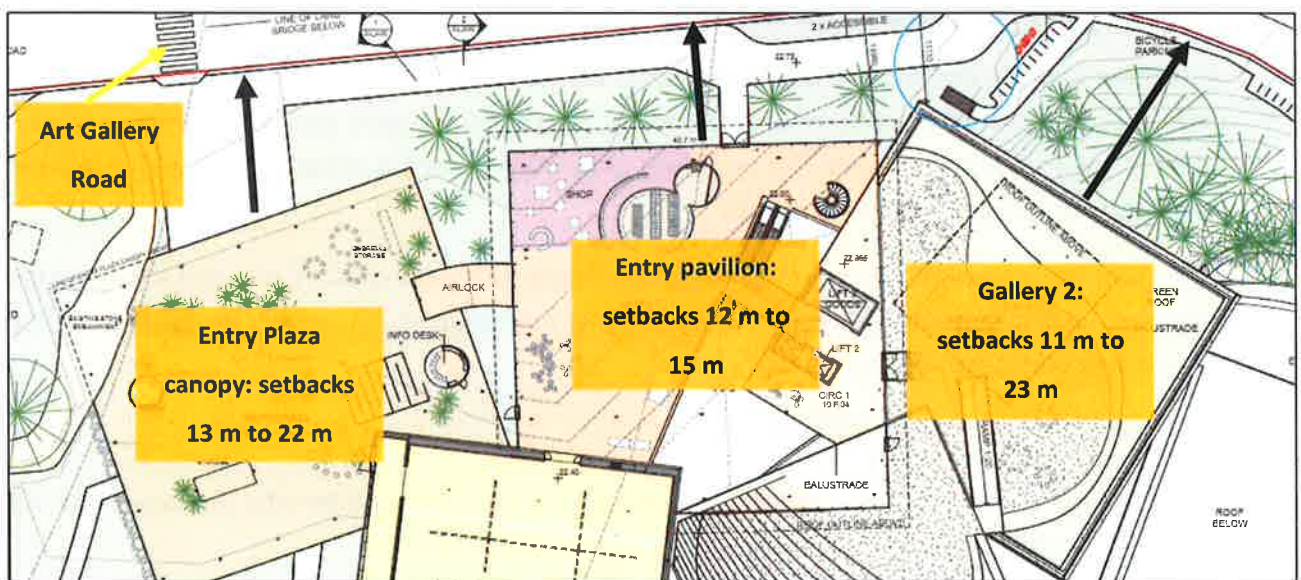


Figure 27 | Proposed entry plaza canopy, entry pavilion and gallery 2 setbacks to Art Gallery Road (Base source: Architectural Plans)

The Department considers the design of the building, excluding the entry plaza canopy, when viewed from the north, west and south would be acceptable with the perceived bulk and scale of the building

minimised through the stepping down of the connected building elements from Art Gallery Road and landscaped setbacks.

From the east, the three levels of the building above the fuel bunker would be visible. However, the Department considers the stepped and angled variations of each level, together with proposed landscaping and landscaped roof terraces (see **Section 6.4.4**), mean the eastern elevation would be visually fragmented and avoids the greater bulk and scale that would result from a more consolidated, singular built form. As such, the Department considers the design and built form when viewed from the east to be acceptable and sympathetic to the surrounding landscape setting.

Overshadowing

Shadow diagrams included in the EIS demonstrate the relatively low building height combined with a design that steps down the site and which follows the existing landform would result in minor levels of overshadowing to the land bridge and the proposed landscaped area to the south-east of gallery 3 between 9 am and 3 pm in midwinter (see **Figure 28**). Although the majority of additional overshadowing would be contained within the site, the proposed forecourt plaza would not be overshadowed and the majority of the proposed landscaped lawn/art garden would not be overshadowed in midwinter. No residential properties would be impacted by increased overshadowing. The Department considers the level of overshadowing from the proposed development to be acceptable.

Privacy

Public submissions were received from residents of TWT objecting to potential overlooking/loss of privacy. Although the proposed design includes east facing roof terraces and some glazed east facing elevations, the Department considers no adverse visual privacy impacts would occur from the proposed development for the following reasons:

- distances to the nearest residential properties within TWT exceed 40 m
- properties within the TWT predominantly face east and are screened by a separate two-storey building containing an entry lobby, communal spaces and commercial tenancies
- glazed elevations are orientated to the north-east with no windows proposed in the eastern elevation of gallery 3
- trafficable areas of the café terrace above gallery 3 are setback a minimum of 4 m from the eastern elevation of the gallery
- landscaping on the eastern side of the proposed building would further reduce available views to the east.

View Loss

The proposed building would not result in loss of view from units within TWT as they face east towards Woolloomooloo Bay, with the exception of some secondary windows located at the northern end which face north-west. Although the development would be visible from units within the WFW and other more distant residential properties, the issue relates to the visual impact of the development as opposed to loss of views as a result of the development. Visual impact is considered in **Section 6.4.4**.

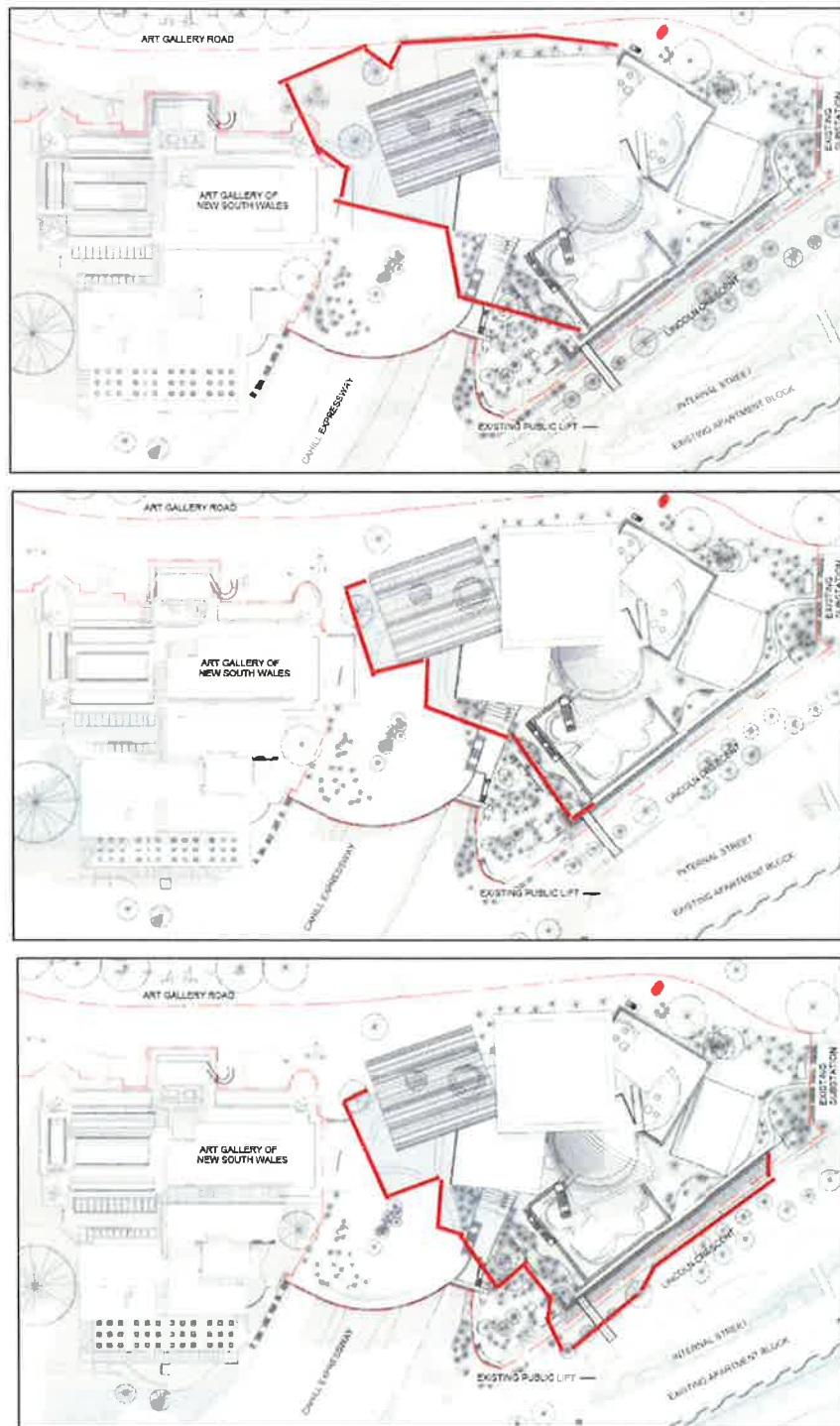


Figure 28 | Midwinter shadow diagrams: 9am (top), midday (middle) and 3pm (bottom). Extent of additional overshadowing outlined in red (Base Source: Architectural Plans)

Light glare/reflectivity

Public submissions raised concerns regarding light glare/reflectivity, specifically potential impacts on residents and businesses with views towards the eastern elevation of the proposed development.

The RTS included a supplemental Reflectivity Report which contained a glare analysis from seven locations including TWT and WFW. The report concludes there would be no or very limited reflectivity impacts, with the exception of the exit of TWT resident car park from the north-eastern glazed wall of the multi-purpose hall.

The Department is satisfied the development can achieve acceptable reflectivity impacts subject to a condition requiring the reflectivity of the proposed external materials and glazing to be low glare and that the design of the north-eastern glazed wall of the multi-purpose room should be revised as recommended in the supplemental Reflectivity Report.

The Department considers the proposed built form would have no other amenity impacts.

Conclusion

The Department supports the proposed built form and considers it responds sympathetically to its context. The building would have negligible amenity impacts in relation to overshadowing, privacy, view loss and amenity. The specific visual impacts of the proposed building are considered in **Section 6.4.4**.

6.4.3 Visual impact

The proposed development would be visible from various locations including the Domain and RBG, Woolloomooloo and Sydney Harbour (Woolloomooloo Bay).

Public submissions raised concerns regarding the negative impact of the proposed development on views and vistas both towards and from the Domain, and from the existing gallery.

A Visual Impact Assessment (VIA) was submitted with the EIS that considered the potential view impacts from these locations. An updated VIA was provided in the RTS.

The VIA provided a view analysis from 31 locations, including the nine locations specifically nominated in the Department's SEARs including from the RBG, Cahill Expressway, Art Gallery Road, Mrs Macquaries Road, Lincoln Crescent and Woolloomooloo Bay. **Figure 29** identifies the location of analysed viewpoints within 200 m of the site. The VIA includes an overall view impact rating for each location based on an analysis of viewer sensitivity, openness of the view, distance of view, length of exposure to the view and the extent of change to the view.

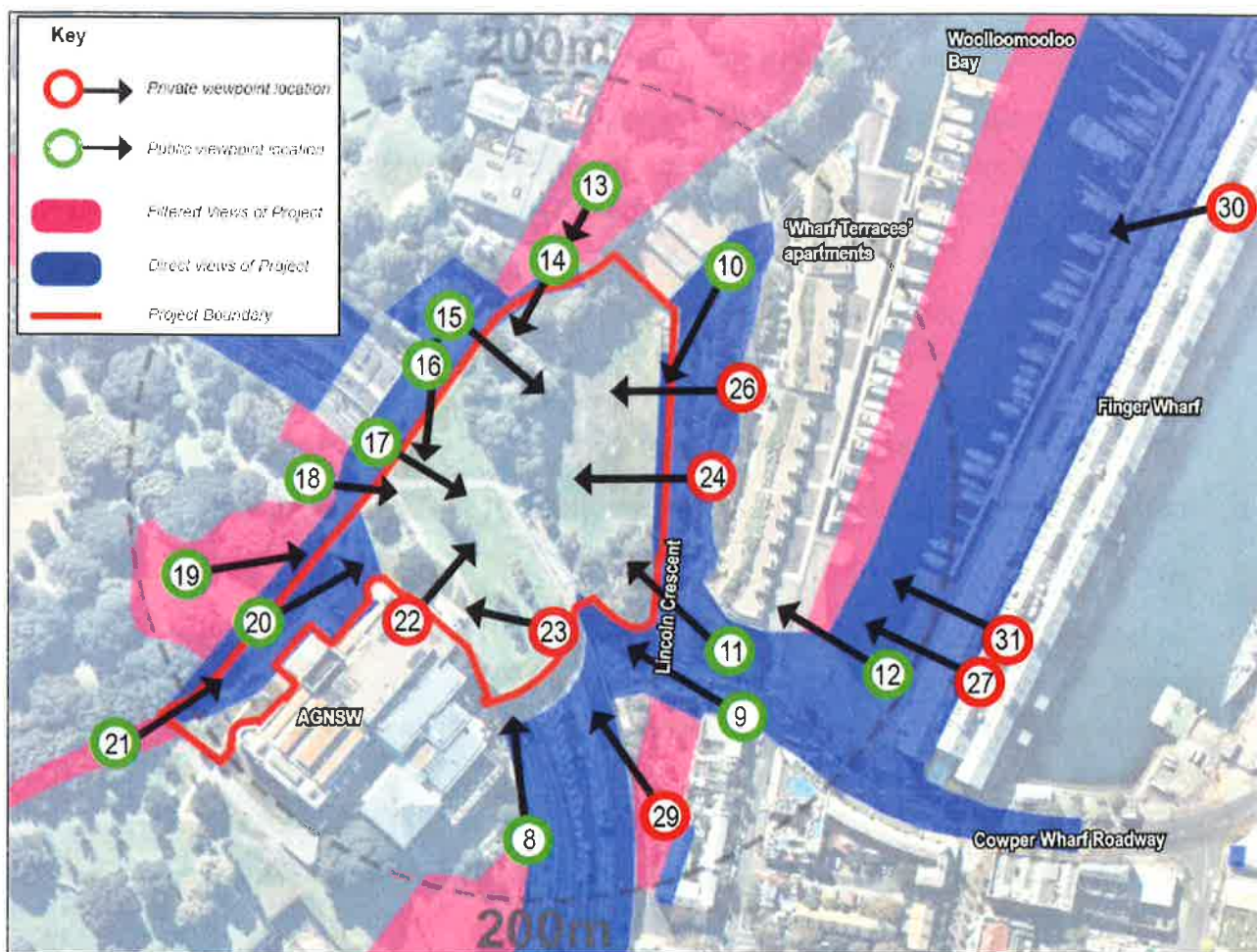


Figure 29 | Viewpoint location map (Source: Applicant's RTS)

The VIA concluded the visual impact would be high from one location (viewpoint 17 looking east from the land bridge) as the proposed development would become the dominant feature and significantly affect the visual character of the land bridge. The impact would be moderate/high from six further locations (viewpoints 15, 16, 20, 21, 27 and 30) as the development would become a discernible feature leading to moderately high impacts on visual character. The VIA concludes the visual impact from the other 24 locations to be moderate (11 locations) or moderate/low, low or negligible (13 locations).

Figures 30 to 39 illustrate existing and proposed views from key viewpoint locations 15, 16, 17, 20 and 30. **Figures 12, 13, 14 and 17** in **Section 2** also provide visual images of the proposed development viewed from Art Gallery Road and TWT.

The Applicant contended the proposed visual impacts are acceptable as the low-lying character of the proposed built form and stepping down of the building with the topography of the site means the proposal would generally have a low to moderate impact from most vantage points. Where greater visual impacts occur, these are justified due to:

- the proposed public domain improvements in these locations
- the sympathetic relationship of the proposed building to the existing gallery building
- the open nature of the proposed entry plaza allowing the retention of some views across the land bridge

- new public viewing opportunities would be created from proposed areas of public open space and the proposed roof terraces
- the visual and scenic impacts would be moderately mitigated by new landscape planting around the building.

The Department has reviewed the VIA and viewed the site from various locations. The Department considers the proposed visual impact of the proposed built form must be considered in the visual context of views from the Domain, the RBG, locations to the east and the existing gallery building. These visual relationships are considered below.

The Domain

- Art Gallery Road looking north-east (viewpoint 20) (**Figures 30 and 31**): When approaching the site from the southern end of Art Gallery Road, the existing gallery building would dominate the foreground with the proposed building and entry plaza canopy located behind it. The proposed building would replace an existing view of the land bridge with a line of trees behind.

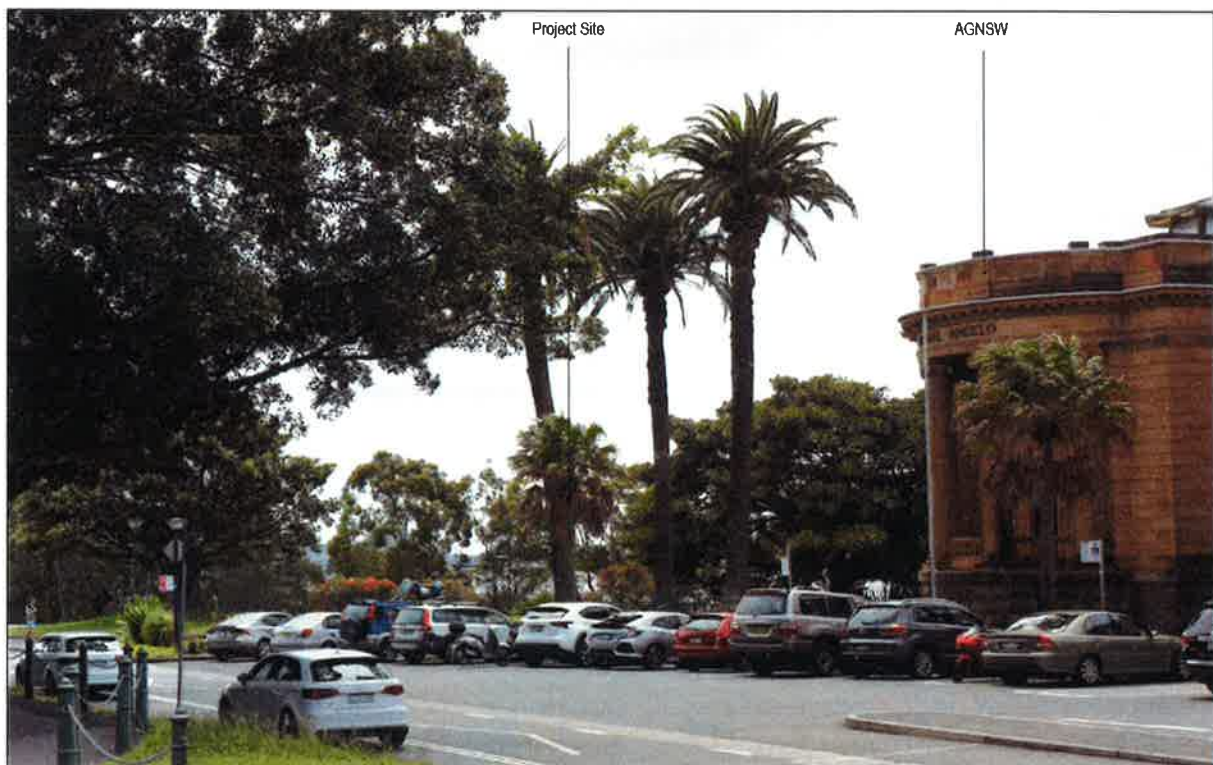


Figure 30 | Existing view from Art Gallery Road looking north-east (Source: Applicant's RTS)



Figure 31 | Proposed development viewed from Art Gallery Road looking north-east (viewpoint 20) (Source: Applicant's RTSAR)

Given the relatively low scale of the proposed building when viewed from this direction, combined with the proposed separation between the existing and proposed buildings, the Department considers the view impacts generally acceptable, as the prominence of the existing gallery building would be retained. Although changes to the design and orientation of the entry plaza canopy have resulted in an improved visual relationship between the canopy and the existing gallery building, the Department considers the design of the canopy could be revised to further improve this relationship (see also consideration of views from the RBG below). In addition, the Department notes the conversion of the forecourt of the existing gallery building from a car park to a stone-paved plaza (not included in the visual image), would have a positive visual outcome for the gallery when viewed from Art Gallery Road.

- Land bridge looking east (viewpoint 17) (**Figures 32 and 33**): The proposed building would dominate views from this location as it would replace existing views to the ridgeline of Potts Point and Kings Cross. Some partial views would be retained through the entry plaza.



Figure 32 | Existing view from the land bridge looking east (Source: Applicant's RTS)



Figure 33 | Proposed development viewed from the land bridge looking east (viewpoint 17) (Source: Applicant's RTSAR)

Given the proximity of the viewpoint to the proposed building and entry plaza canopy, the Department considers view impacts to be unavoidable and the proposed development would have a strong visual presence when viewed from the land bridge looking east. The Department notes the majority of the proposed building is below ground level when viewed from Art Gallery Road and the design has sought to minimise the size of the building viewed from this direction.

However, the Department considers the design of the entry plaza canopy, given its important location between the existing and proposed gallery buildings, could be further revised to reduce potential view impacts from the land bridge (see also consideration of views from the RBG below). The Department also notes new viewing opportunities would also be created from proposed areas of public open space around the building and the proposed roof terraces. These viewpoints would be similar in nature to those currently available from the land bridge. For these reasons and subject to development of a revised design for the entry plaza canopy, the Department considers the proposed view impact to be reasonable.

- Land bridge looking west: The proposed building and entry plaza canopy would be dominant in the foreground of views from the land bridge towards the CBD. Partial views through and to the southern side of the canopy would still be available. The Department considers the existing view is not a key view within the site and the visual impact of the proposal would be acceptable.
- Due to the larger distances involved and the stepped nature of the proposed building down to the east, more distant views from the CBD and Eastern Distributor to the west of the Domain would not be adversely impacted.

The Royal Botanic Gardens

- Woolloomooloo Gate looking east (viewpoint 15) (**Figures 34** and **35**): The view from the Woolloomooloo Gate is identified in the Domain Plan of Management as a view corridor to be protected. The existing view of trees on the eastern side of Art Gallery Road and narrow view corridor to Potts Point would be replaced by the gallery 2 portion of the proposed building.



Figure 34 | Existing view from Woolloomooloo Gate looking east (viewpoint 15) (Source: Applicant's RTS)



Figure 35 | Proposed development viewed from Woolloomooloo Gate looking east (viewpoint 17) (Source: Applicant's RTS)

- Although some landscaping is proposed within the setback between Art Gallery Road and the proposed building, the Department considers the level of visual impact would be significant. However, the loss of view to the existing trees and narrow view corridor would not be overly detrimental to the visual quality of the Domain given the proposed building setbacks, proposed landscaping, and proposed new view corridors.
- Art Gallery Road adjacent to the Woolloomooloo Gate looking south-east (viewpoint 16) (**Figures 36 and 37**): The proposed entry pavilion and entry plaza canopy would be visually prominent and would dominate the foreground with views to the northern façade of the existing gallery building reduced. The RTSAR increased the setback of the canopy from Art Gallery Road and rotated the position of the canopy further to the south-east to increase views of the existing gallery building when viewed from the RBG to the north. This has resulted in a minimum setback of 18.5 m between the canopy and the existing gallery building and a setback of 13m to 22 m between the canopy and Art Gallery Road.



Figure 36 | Existing view from Art Gallery Road looking south-east (Source: Applicant's RTSAR)



Figure 37 | Proposed development viewed from Art Gallery Road looking south-east (viewpoint 16) (Source: Applicant's RTSAR)

The Department considers the visual impact of the proposed entry pavilion to be reasonable given its maximum wall height of 6.5 m, setbacks of 12 m to 15 m to Art Gallery Road and proposed landscape screening.

The amended entry plaza canopy design reduces the visual impact of the proposed development and retains views to the existing gallery building. However, as noted previously, the sensitivity of its location on the land bridge and between the existing and proposed gallery buildings, the Department considers the visual impact of the canopy should be further minimised. A condition is therefore recommended requiring submission of a revised design for the canopy that seeks to further improve views to the existing gallery building from Art Gallery Road and enhance the interface of the proposed built form with the surrounding landscape setting.

The Department also considers the proposed entry plaza canopy acceptable noting the proposed setbacks would not detrimentally diminish views of the existing gallery building. In addition, its size and location would not visually dominate the existing gallery building. OEH has raised no objection to the revised entry canopy design (see **Section 6.6**). The proposed changes would also allow the retention of the existing Joseph Beuys fig tree in-situ (see **Section 6.5**).

- Due to the significant distance involved and intervening tree canopy, the proposed development would have no impact on views to, or from, the Sydney Opera House. Although the development would be clearly visible from Woolloomooloo Bay to the north-east of the RBG, given the distance involved and extent of proposed landscape planting and proposed stepped design, views from this location would not be impacted.

The East

- WFW looking west (viewpoint 30) (**Figures 38 and 39**): The design concept of the building provides a series of smaller built elements that step down the site when viewed from the east. The Department considers the design would reduce the apparent scale of the development when viewed from the east through keeping the building relatively low and integrated with the surrounding landform.
- Substantial removal of the existing tree line would nevertheless have a negative visual impact due to the loss of a natural backdrop. To further improve the integration of the proposed development with the surrounding parkland setting, the Department recommends a condition requiring the roof of gallery 1 to be converted to a green roof.



Figure 38 | Existing view from WFW apartment looking west (Source: Applicant's RTS)



Figure 39 | Proposed development viewed from WFW apartment looking west (viewpoint 30) (Source: Applicant's RTSAR)

- The Department considers the proposed use of varied heights, setbacks and angles, replacement tree planting and landscaping (see **Section 6.5**), non-reflective materials (see **Section 6.4.3**) and partial landscaping of the eastern wall of gallery 3 (using a native climber mix) would suitably mitigate the visual impact of the proposed development when viewed from the WFW.

- Lincoln Crescent looking west: Lincoln Crescent is located at the base of the existing 6 m high fuel bunker wall at the eastern side of the site (see **Figure 11**). **Figures 15** and **40** illustrate the proposed development viewed from the publicly accessible rooftop footpath above TWT and from Lincoln Crescent respectively. The main visual impact of the proposed development when viewed from Lincoln Crescent and the TWT is the 6.7 m high (268 m²) eastern wall of gallery 3 which would be setback 3 m from the top of the fuel bunker wall.



Figure 40 | Proposed view of development from Lincoln Crescent (Source: Applicant's RTS) Note: Gallery 3 east elevation obscured by street tree

- The visual impact of the eastern wall of gallery 3 has been revised through the proposed use of limestone materials and the addition of landscaping at both the base and top of the wall. The Department notes there would be no visual impact on the main living areas of TWT apartments which face predominantly east with views of the proposed building limited to the ground floor entry lobby and meeting rooms, first floor communal gym and the publicly accessible rooftop footpath. The Department considers the amendments would satisfactorily soften the visual appearance of the wall, when viewed both from Lincoln Crescent, the TWT including the publicly accessible roof terrace, and the WFW.
- A condition is also recommended to allow for sympathetic greening of the fuel bunker wall which would assist in softening the visual character of the fuel bunker and development above when viewed from Lincoln Crescent.
- Corner of Cowper Wharf Road and Lincoln Crescent: Existing and new tree planting within the site on the corner of Lincoln Crescent and Cowper Wharf Road would provide significant visual screening of the development viewed from this location. The Department considers the visual impact of the proposal from this location to be minor.
- More distant views of the site from the suburbs of Potts Point and Woolloomooloo would not be adversely impacted due to the larger distances involved and subsequent greater visual blending of the proposed building into the surrounding landscape.

Existing Gallery Building

- Existing gallery window looking north-east: A large, north-east facing picture window on the second floor of the existing gallery building provides views of Woolloomooloo Bay and the WFW. The proposed building (gallery 1) would result in reduced views to Woolloomooloo Bay from this window. However, the Department considers the proposed development would provide suitable compensation through the provision alternative view opportunities to the north-east, notably from a similar picture window in the north-east elevation of gallery 1, from the proposed glazed north-eastern elevation of gallery 2, and the three proposed public roof terraces.

6.4.4 Conclusion

The Department concludes the proposed contemporary building demonstrates design excellence and would be visually compatible with the existing gallery building. The proposal generally provides an open landscape setting appropriate and positive site-specific design response to the landscaped, heritage and topographical context and constraints of the site.

Although there would be some visual impacts to existing viewpoints, a degree of impact is inevitable with the development of a new building in an open landscape setting. Subject to a revised design for the entry plaza canopy, the Department considers the impacts are reasonable and would be suitably mitigated by:

- the stepped, angled and fragmented design of the proposed building which avoids a dominant built form
- the proposed setbacks of the entry pavilion and gallery 2 from Art Gallery Road
- existing and proposed landscaping throughout the site and around the proposed building
- the provision of new public views from publicly accessible roof terraces
- the proposed use of appropriate and sympathetic materials
- landscaping to the eastern elevation of gallery 3.

To ensure an appropriate visual outcome, the Department recommends conditions requiring:

- submission of a revised design for the entry plaza canopy
- the provision of a green roof to gallery 1
- greening of the fuel bunker wall
- external materials to be submitted to OEH for review and endorsement
- avoidance of reflective materials
- the construction period documentation be subject to a design integrity process.

6.5 Public domain

The proposed development includes the following key public domain works and benefits:

- new public plaza in the forecourt of the existing gallery building
- new entry plaza area adjacent to proposed gallery
- enhanced landscaped lawn space/art garden on the land bridge
- improved through-site links, including new public lift
- landscaping works

- publicly accessible roof terraces
- tree removal and replanting.

Public submissions objected to a lack of proposed landscaping and to poor pedestrian accessibility including increased reliance on the TWT lift which includes an easement for public access to the lands owned by the RBGDT. Council also commented that the roof terraces should include more landscaping and there should be a design for a future link between the existing and proposed buildings. Issues regarding the use of public open space for the proposed development are considered in **Section 6.3**.

Figure 41 illustrates the location of the proposed key public domain works/benefits. An assessment of each element is provided below.

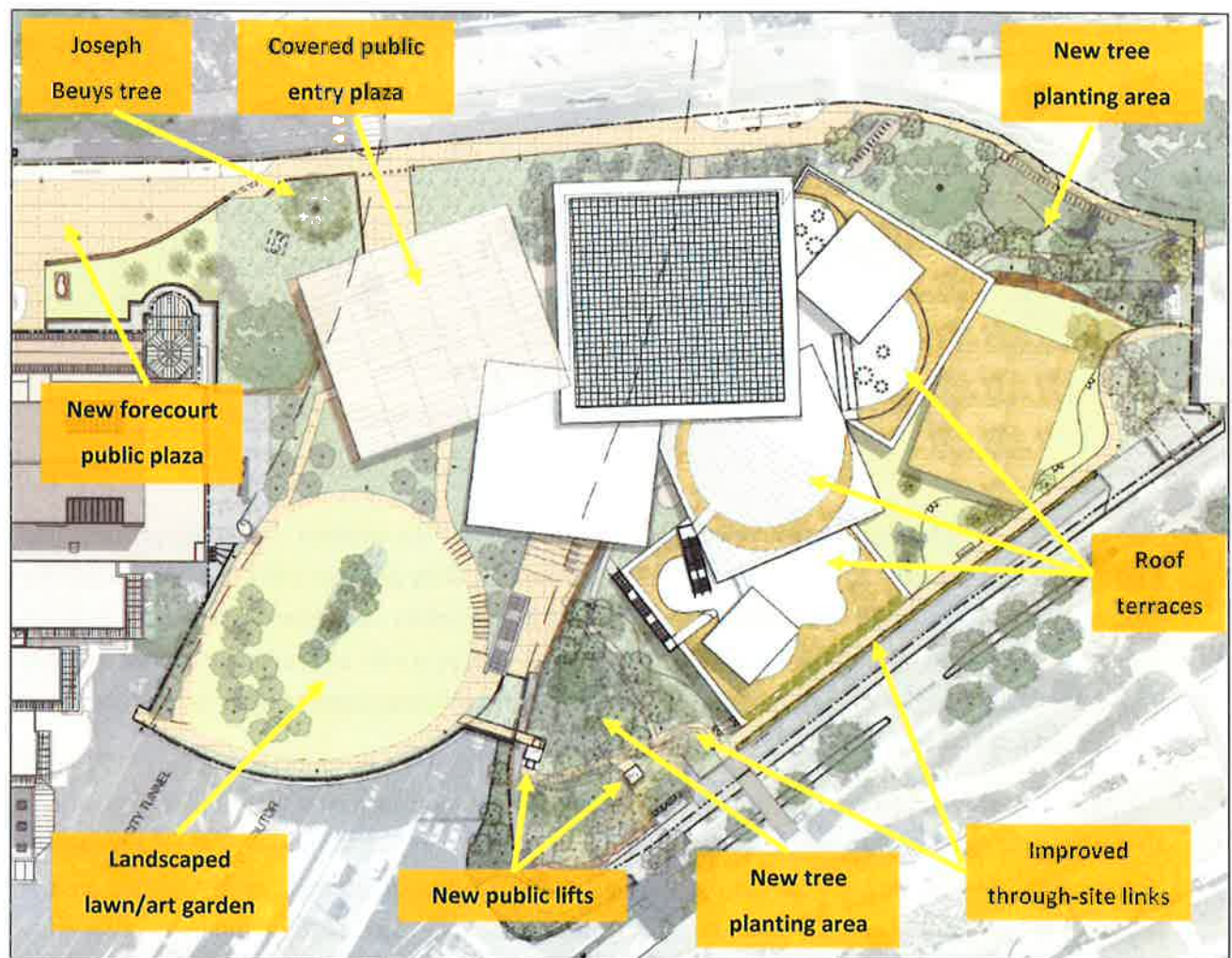


Figure 41 | Location of proposed public domain works/benefits (Base source: Landscape Plans)

Forecourt public plaza

The proposal seeks to create a new public plaza within the forecourt of the existing gallery building. The stone paved plaza would comprise an area of 852 m² and would replace an existing car parking area (see **Figure 42** and **Section 6.7.2**). The plaza is intended to entirely open to allow for the gathering of large groups and to provide an improved visual relationship to the existing gallery entrance.

Council support the proposed forecourt plaza to improve the arrival experience at the gallery. OEH have raised no concerns.

The Department considers the proposed forecourt plaza would significantly improve the appearance of the existing gallery building and streetscape and would provide a functional open space area for visitors to the gallery and the Domain.

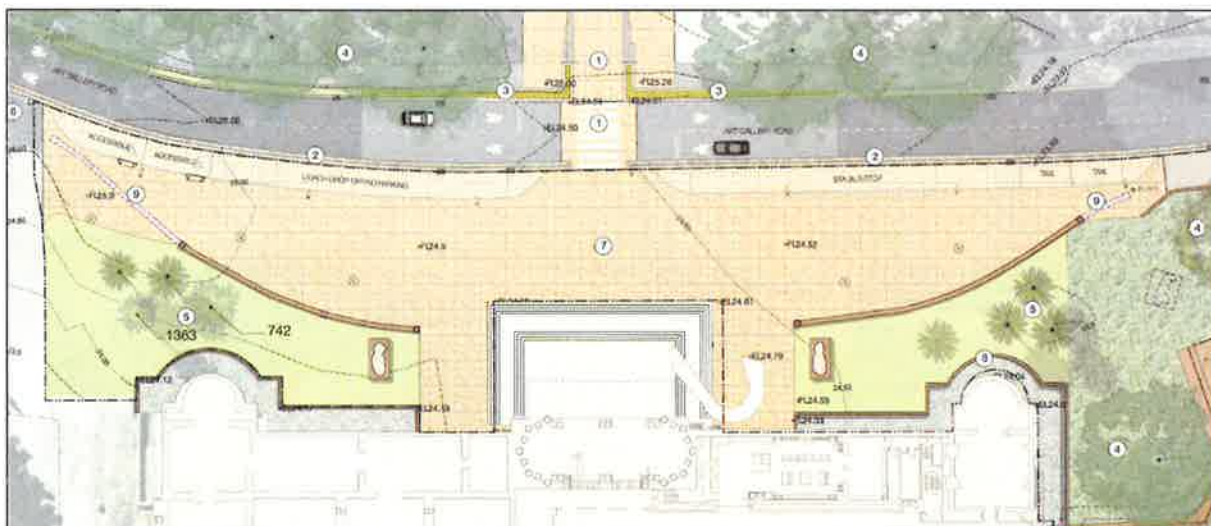


Figure 42 | Proposed forecourt public plaza (Source: Applicant's RTSAR)

Entry plaza

The proposed 1,513 m² paved entry plaza would be located on the western side of the grassed land bridge, directly adjoining the southern side of the proposed entry pavilion and located between the existing and proposed gallery buildings (see **Figure 22**). The plaza would be publicly accessible 24 hours-per-day/seven days-per-week and would be sheltered by a new aluminium and glass canopy. The visual impact of the proposed entry plaza canopy and the requirement for a revised design is considered in **Section 6.4.4**.

The Applicant contended there is currently no sheltered gathering space for visitors and school groups to the existing gallery with people seeking shelter forced to congregate around the small covered Vernon entry. The proposed covered plaza would therefore provide an important sheltered area of open space for visitors to the gallery and the Domain and would form a civic forecourt to the main entry of the proposed building.

The Department considers the proposed plaza would assist in connecting both the existing and proposed gallery buildings and Art Gallery Road and the proposed landscaped lawn/art garden, and could also provide a desirable sheltered gathering area for visitors. The plaza would also benefit from desirable view lines to the east. A small café kiosk together with an information desk and schoolbag lockers are proposed within the plaza. These elements are minor and would not reduce the open and transparent appearance of the plaza.

While Council has suggested a plan be prepared for a future link between the existing and proposed buildings, the Department does not consider this to be a key requirement and any future link proposal would need to be considered on its merits.

The Department concludes the proposed entry plaza could deliver a significant improvement to the amenity of the public domain and would be a desirable public benefit. However, given the sensitivity of its location on the land bridge and between the existing and proposed gallery buildings, the Department considers the visual impact of the canopy should be further minimised and a condition requiring a revised design is recommended.

Enhanced landscaped lawn/art garden

The existing grassed area above the land bridge to the east of the proposed entry plaza would be enhanced through additional landscape planting and accessible footpaths (**Figure 43**). Nine existing trees within the centre of the lawn would be retained with 16 new trees (Sydney Red Gums) to be planted on the south-eastern side (see **Section 6.5**).



Figure 43 | Proposed landscaped lawn/art garden looking north-west (Source: Applicant's RTS)

The Applicant contended the area would provide a flexible space for events and functions and would provide greater opportunities for art in the landscape.

The Department considers the proposed enhanced landscape lawn/art garden to be a positive public domain outcome.

Improved through-site links and public lift access

Existing stairs and pathways provide pedestrian access through the site from Lincoln Crescent to Art Gallery Road and the top of the land bridge. A publicly accessible lift is located within the TWT which provides access to the existing footbridge over Lincoln Crescent (see **Figures 8 and 9**). However, there is no existing lift access within the site, the eastern portion of which is dominated by stairs. Given the extent of level changes across the site, this significantly restricts equitable access from the east to the existing and proposed gallery buildings and the wider Domain and RBG.

The proposal would retain pedestrian stair/pathway access between Lincoln Crescent and the Domain but reconfigure the footpaths to provide a DDA compliant east/west pathway through the site and to

provide new pathways to allow people to walk around the new building. A new pedestrian route would also be provided from the existing Lincoln Crescent footbridge, northwards towards the RBG and Mrs Macquaries Road.

The proposal originally included a single new public lift extending from the fuel bunker roof level to the new landscaped lawn and Art Gallery Road. However, public submissions from residents of the TWT raised specific concerns regarding increased reliance on use of the publicly accessible lift within the TWT to service the proposed development, given existing security and maintenance issues associated with public use of the existing lift.

In response, the proposal was refined to include a new public lift, extending from Lincoln Crescent to the roof level of the fuel bunker. The proposed arrangement would enable pedestrians to access a lift at Lincoln Crescent which would take them to the roof level of the fuel bunker. A new pedestrian pathway would connect the lift with the entry to a second lift which would provide access to the land bridge/Art Gallery Road. The revised proposal also retains the existing pedestrian crossing in front of the existing gallery building as recommended by Council.

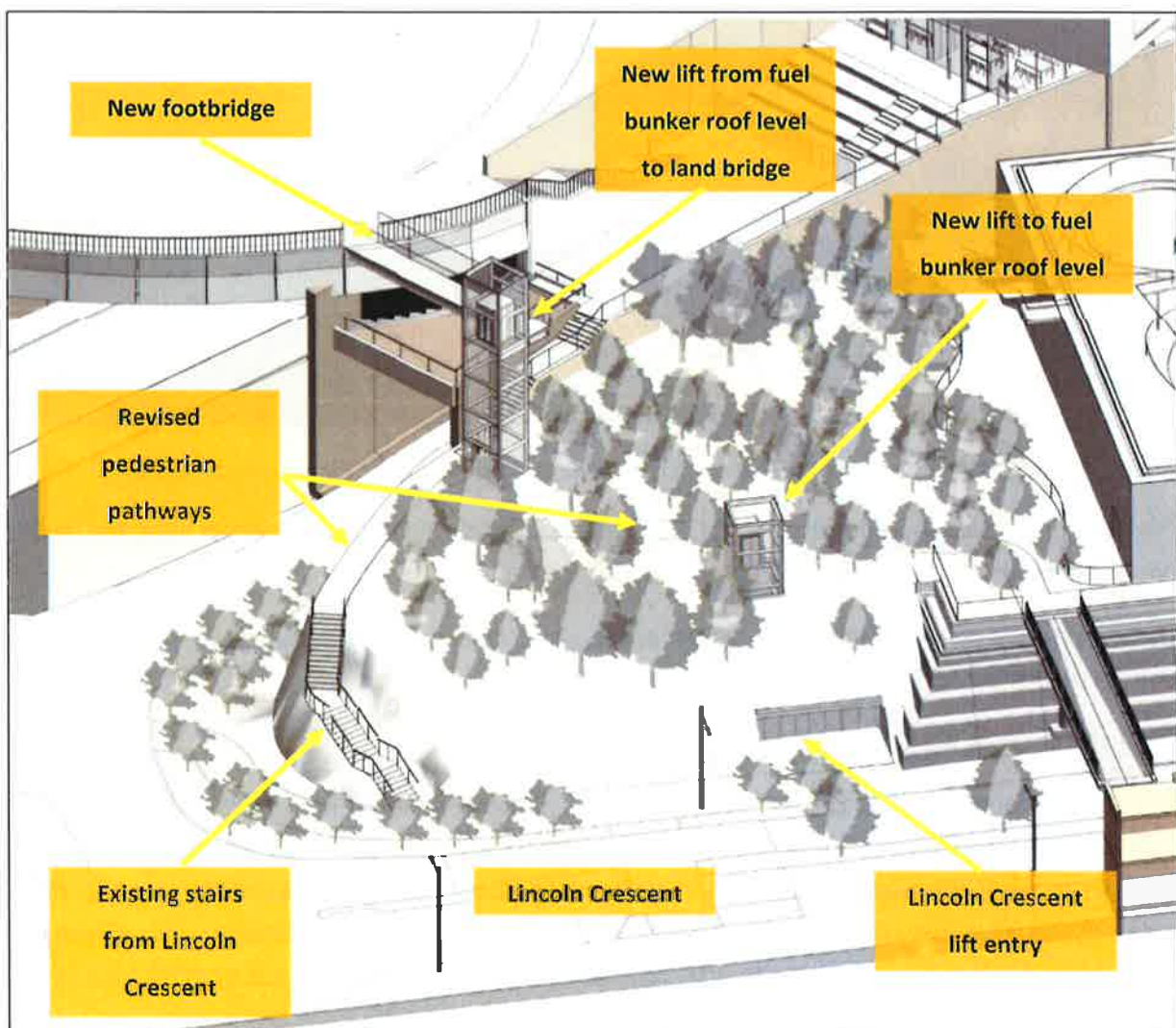


Figure 44 | Location of proposed lifts and pedestrian routes adjacent to Lincoln Crescent and Cowper Wharf Road (Base source: Landscape Plans)

The proposed Lincoln Crescent lift would operate between 7 am and 6 pm (10 pm on Wednesdays) which incorporates the operating hours of the gallery. In addition, the lift would be required to remain in operation a minimum of 30 minutes from the end of any functions or events within the AGNSW that conclude outside the standard operating hours for the lift.

Outside of these operating hours, the TWT public lift would continue to provide equitable access to the Lincoln Crescent footbridge and the new proposed public lift to the land bridge which would operate 24/7. The Department notes a pedestrian ramp in this location is not feasible due to the extensive length of ramping, associated excavation works and additional tree removal.

The Applicant contended the proposed works would enhance key access paths to and within the site and would provide universal access between Woolloomooloo and Art Gallery Road.

The Department considers the proposed works would improve pedestrian accessibility within and through the site including the provision of an equitable access link between Lincoln Crescent and Art Gallery Road.

Although the revised pathway network would increase the walking distance by 50 m for those traversing the site from east/west, this equates to an estimated 42 second increase in walking time and is not considered significant. The proposal would therefore result in an improved access network for visitors to the gallery and the Domain and for commuters traversing the site.

The Department considers the proposed development would incorporate extensive, high quality landscaping that would be suitably integrated with the surrounding Domain and adjacent RBG.

Landscaping works

Proposed landscape works include the planting of 273 new trees and substantial areas of lawn and shrubs/groundcovers. Proposed trees would range from 5 m to over 30 m in height. Proposed shrub planting would be below 1 m in height to maintain sight lines and allow natural surveillance. Tree removal and tree planting are considered below.

In addition to the landscaped lawn/art garden on the land bridge and roof gardens, garden and woodland areas are also proposed around the proposed development (see **Figure 41**). These areas would provide a mix of public spaces, each with an individual landscaped character and relationship with the surrounding Domain.

Lighting would comprise a series of light poles for street and pathway lighting, with landscape feature lighting comprising tree up-lighting and integrated lighting within landscape elements.

Paving would consist of stone, bluestone pavers, crushed sandstone and colour concrete. Outdoor furniture would be provided within the entry plaza.

Roof terraces

The proposed building includes three publicly accessible roof terraces (total area of 1,856 m²) above galleries 2 and 3 and the central foyer (see **Figure 45**). The terraces would provide views over Woolloomooloo Bay and to the east and would be accessible to the public during the opening hours of

the gallery. 1,916 m² of landscaped green roofs are also proposed, including areas of the three roof terraces.



Figure 45 | Proposed publicly accessible roof terrace over gallery 2 (Source: Applicant's RTS)

The Department's recommendation that the roof of gallery 1 is also landscaped would increase the area of green roofs to over 2,500 m².

The Department considers the proposed roof terraces would provide attractive and useable areas of publicly accessible space. Although access to the terraces would be limited to the opening hours of the gallery, this is acceptable given the opening hours are extensive and the combination of the terraces with the variety of other public spaces proposed around the site.

Tree removal and replanting

The site and immediate surrounds currently contain 220 trees. Of these, 124 are proposed to be removed, predominantly due to their location within the proposed building footprint. 88 trees are to be retained in-situ with a further eight trees to be relocated within the site (96 in total retained onsite).

Public submissions received objected to the proposed loss of trees. OEH also initially raised concerns regarding the potential biodiversity impact of the proposed tree removal and whether the proposed replacement tree planting represented an adequate offset for the tree removal.

The EIS included an Arboricultural Impact Assessment (AIA) which examined the 220 trees and nominated retention values to these trees. The retention values for the trees are:

- High: trees are in good health and condition and make a positive contribution to the amenity of the site

- Moderate: trees are not significant but are in good health and condition and make a fair contribution to the amenity of the site
- Low/very low: trees are not significant or worthy of preservation.

Table 12 lists the number of trees proposed to be removed within the three retention values described in the AIA.

Table 12 | AIA retention values of trees to be removed

Retention value	Existing number of trees	Trees to be removed	Trees to be transplanted
High	38	6 (16%)	4 (11%)
Moderate	128	79 (62%)	4 (11%)
Low and very low	54	39 (72%)	0
Total	220	124 (56%)	8 (4%)

None of the trees proposed to be removed were assessed by the AIA to be of any special ecological or heritage significance.

Figure 46 illustrates the location of the majority of trees to be retained, removed or transplanted and lists their retention values. The largest area of trees to be removed are located within the footprint of the proposed entry pavilion and gallery 2 opposite Woolloomooloo Gate (shown circled red in **Figure 45**).

Figures 3, 20, 21, 47 and 48 provide photographs of existing trees on the site.

Of the eight trees proposed to be relocated, four are of high retention value. Three are located within the footprint of the proposed building or area of excavation. However, one Morton Bay Fig tree (T1228) (**Figures 46 and 48**) is located adjacent to Art Gallery Road with part of the canopy/root zone located within the footprint of gallery 2. The other four trees are palm trees of medium retention value that are located within the forecourt of the existing gallery building and are to be relocated to allow the construction of the new forecourt public plaza.

The proposal includes planting 273 new trees to supplement the 94 trees being retained/transplanted (**Figure 49**) resulting in 369 trees on the site. The replacement trees would have an initial planting height of 4 m to 8 m and range in maximum height from 5 m to over 30 m. The majority of new tree planting is proposed to the south-east of the proposed building (close to the corner of Lincoln Crescent and Cowper Wharf Road), to the north-west of the proposed building, and to the south-east of the existing gallery building (areas shown circled green in **Figure 49**). Additional tree planting is also proposed on the land bridge.

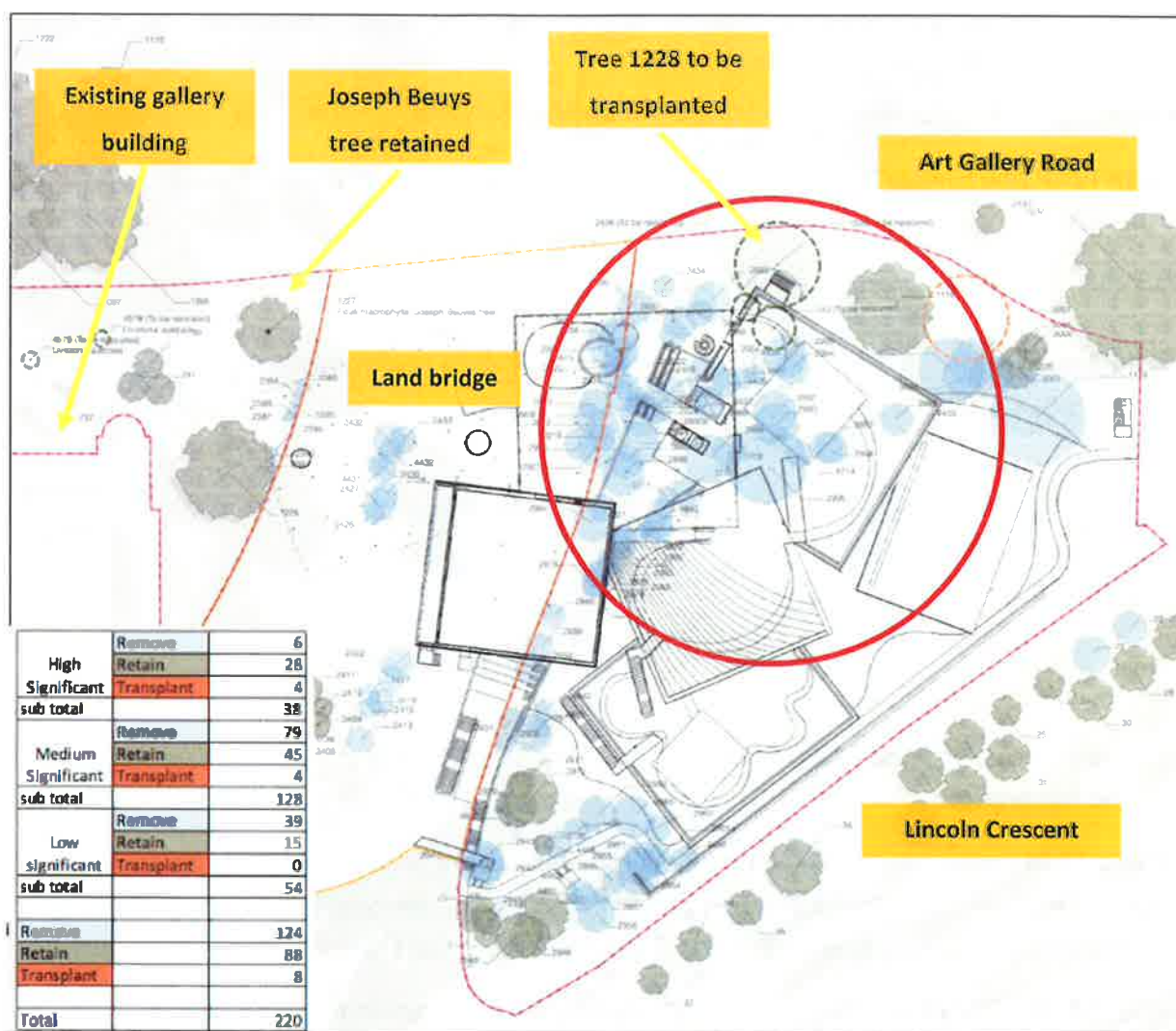


Figure 46 | Existing trees to be removed (Base source: Landscape plans)

The Applicant contended the proposed design has sought to retain as many trees as possible. However, as a result of the topography and landscape, the retention of all trees is not possible particularly where they are located within the building envelope or in areas required for excavation and construction. Where possible, significant trees are proposed to be transplanted and the proposed landscape design has been prepared in close consultation with the RBGDT to ensure integration with the site and surrounds and enhance the ecology of the site.

Table 13 provides a comparison between the exhibited EIS and the RTS. Notably, the RTS included the retention of 16 additional trees with an additional 8 trees to be planted. Furthermore, one additional high retention value tree would be transplanted rather than removed. The proposed development has since been further refined to retain the Joseph Beuys tree in-situ. The retention of the Joseph Beuys tree also responds to concerns expressed by Council regarding its proposed relocation.

Table 13 | EIS/RTS Tree Comparison

	EIS	RTS/RTSAR
Trees within/close to site	220	220
Trees removed	140 (7 high retention value)	124 (6 high retention value)
Trees retained	72	88
Trees transplanted	8 (3 high retention value)	8 (4 high retention value)
Trees proposed	265	273
Total proposed trees within/close to site	345 (72+8+265)	369 (88+8+273)
Total additional trees	+125	+149

Noting key issues relating to the proposed tree removal, tree transplantation and proposed replacement planting scheme, the Department engaged an arboricultural consultant to provide independent, expert advice. This advice confirmed no additional trees, with the exception of the Joseph Beuys tree (which is now retained in the revised scheme), can be retained due to their location within the footprint of the proposed development/area of bulk excavation. However, further investigation was recommended in relation to a significant Port Jackson fig tree to be retained (T1118) due to potential impacts from the proximity of the proposed works.

The expert's report noted replacement trees would be significantly smaller and younger and would not provide the immediate landscape value of the existing trees to be removed. However, the expert's report further stated the proposed replacement planting, using Sydney Sandstone Woodland species would provide a positive outcome with regard to preserving and consolidating landscape character, natural heritage and the wildlife habitat of the area. The report also confirmed the tree species proposed to be transplanted are suitable for transplantation.



Figure 47 | Area of trees to be removed located on the northern side of the land bridge looking north-west
(Source: Department's photograph)



Figure 48 | Morton Bay Fig (T1228) to be transplanted (Source: Department's photograph)



Figure 49 | Proposed tree planting (Base source: Landscape plans)

The Department considers the proposed building is located in an appropriate location in proximity to the existing gallery and notes this location is consistent with the winning design competition entry. Although it is inevitable that some loss of trees would occur from development in this location, the Department notes the following key mitigating aspects of the proposal:

- the design retains 96 trees within the site (including eight trees to be transplanted) and planting 273 new trees. Significant levels of shrub planting are also proposed
- of the 38 high significance trees on the site, 28 (74%) would be retained with a further four (11%) transplanted
- the site would contain a total of 149 additional trees
- the proposed replacement trees comprise predominantly native species which would create an endemic ecological community (Sydney Sandstone Woodland), more consistent with the original tree cover of the area
- the replacement trees would have advanced planting heights and would gradually replace the amenity of the trees to be removed with a greater overall amenity outcome achieved over time
- revisions to the location of pathways and bicycle parking ensure the Port Jackson fig tree (T1118) is unlikely to be adversely impacted by the proposed development.

The Department further notes that OEH consider the proposal is acceptable in relation to biodiversity subject to planting replacement trees, including some locally indigenous species. The Department agrees with OEH and notes this is consistent with the proposed tree planting scheme.

The Department accepts that seeking to allow additional trees to be retained needs to be balanced against the requirements of the building to meet minimum gallery size requirements that underpin the project. The Department supports the proposed tree removal and tree replacement scheme as the

longer term public domain and landscape benefits would outweigh the short-term impacts of the proposed tree removal.

Conclusion

The Department concludes the proposed public domain works and outcomes are acceptable as they would:

- provide significant public benefits through provision of various, integrated multi-functional public spaces that would achieve an acceptable balance between the recreational and functional requirements of the Domain and RBG precinct
- improve the quality and quantity of landscape planting, increasing tree canopy in the longer term and creating a desirable Sydney Sandstone Woodland ecological community
- include an improved appearance of the existing AGNSW building through replacement of existing car parking within the forecourt with a new public plaza
- include a new covered entry plaza to provide shelter and protected gathering area for visitors
- provide improved accessibility within and throughout the site including provision of an equitable access path including new public lifts
- retain attractive public domain views towards Woolloomooloo Bay from the proposed roof terraces
- complement and contribute to the overall attractiveness of the site and the wider Domain.

The Department recommends conditions requiring:

- the planting of 273 new trees consistent with the approved landscape plans
- protection of trees to be retained and engagement of a level 5 arborist to ensure adequate tree protection methods are put in place
- provision of a green roof to gallery 1.

6.6 Heritage

The Applicant's EIS included a Heritage Impact Statement (HIS) which provides a detailed assessment of the potential heritage impacts of the development on the site and surrounding heritage context.

Public submissions were received objecting to potential adverse heritage impacts on the existing gallery building and the surrounding Domain and RBG.

OEH raised some initial concerns regarding potential adverse visual impacts of the proposed building on the heritage significance of the AGNSW building and the Domain and RBG. The extent of internal works to the fuel bunker was also raised.

The RTS included a revised HIS and OEH have subsequently raised no objection to the proposal subject to conditions.

Consideration of heritage issues in relation to the existing AGNSW building, the Domain/RBG and the proposed works to the fuel bunker are considered below.

6.6.1 Existing AGNSW building

The AGNSW building is listed as an item of local heritage significance in SLEP 2012. No works are proposed to the existing gallery building. However, heritage impacts relate to changes to the visual setting and prominence of the existing building from the proposed building and potential changes to the function of the existing building.

The HIS concluded the proposed building would have a moderate adverse heritage impact on the existing gallery from the net loss of open space and alterations of significant views. However, it contended the proposed sensitive design and site planning, including maintenance of the existing main public entry within the existing gallery building, would limit heritage impacts as much as possible and the proposal would have an overall acceptable impact on the existing gallery building.

OEH considered the revised design and orientation of the entry plaza canopy would not compete visually with the existing gallery building portico and entry and therefore would not reduce the historical dominance of the existing gallery building.

Due to its location on the northern side of the land bridge, the Department considers the proposed building would likely have some impact on the setting of the existing gallery building, particularly when viewed from the north with the proposed building located in the foreground of the existing gallery building.

However, the Department notes the proposed entry pavilion extends to a height of 7 m above the ground level of Art Gallery Road which would be visually subservient to the 11 m wall height of the existing gallery building. The proposed separation between the existing and proposed buildings, which ranges from 37 m to 67 m (excluding the entry plaza canopy) and comprises an entry plaza and lawn space above the land bridge, would also significantly assist in preserving the setting of the existing building. While the entry plaza canopy would extend closer than the entry pavilion, the Department considers the design has been suitably revised to ensure it would not adversely impact on the heritage significance of the existing gallery building.

Advice provided by OEH stated sufficient setbacks are proposed between the proposed development, Art Gallery Road, and the existing gallery building.

The Department concludes the proposed development and its setbacks would not diminish the heritage value of the existing gallery building.

6.6.2 The Domain and RBG

The Domain and RBG are listed as a combined item on the State Heritage Register. The proposed works involve removal of trees, use of public open space and interruptions to significant views.

The Applicant contended that although the proposed works would have a moderate adverse heritage impact on the Domain and RBG, the proposal will result in direct improvements to an underutilised area within the Domain, incorporates high quality landscape elements and planting within new activated spaces, and would provide an important public cultural function within the Domain.

OEH did not raise concerns regarding potential impacts to the heritage significance of the Domain and RBG, noting the extent of publicly accessible terraces provided within the development would mitigate

the loss of open space. Similarly, no concerns have been raised to the proposed public domain works subject to conditions i.e. design details of the proposed access ramp on the western side of Art Gallery Road. OEH also recommend conditions regarding approval of all external materials and minimising high reflective external surfaces/using subdued colours.

Issues regarding use of public open space, visual impacts and removal of trees are considered in **Sections 6.3, 6.4 and 6.5** respectively.

The Department notes a substantial area of the proposed building footprint involves the 1990s land bridge and the roof of the fuel bunker (**Figure 20**), an area both visually and accessibly divorced from the main landscaped components of the Domain and RBG. The Department further considers the proposed design and landscape works seek to mitigate the potential impacts through stepping down with the topography of the site, retaining high significance trees where possible, and proposed replacement tree planting.

The Department concludes that although there would be some impact on the heritage values of the Domain and RBG from the proposed development, given the location of the site and design of the proposed development and associated landscape works, these heritage impacts are acceptable and would not diminish the overall heritage character or setting of the Domain and RBG.

6.6.3 Fuel bunker

The fuel bunker is listed on the State Heritage Register. It was constructed in the 1940s to supply fuel oil for naval ships. The fuel bunker was decommissioned in 1984 and was emptied in 1992.

The fuel bunker is constructed of concrete with pre-cast concrete columns in a regular 4 m grid, set into the sandstone excavation (**Figure 50**). A central wall divides the structure into a northern and southern bunker, each measuring 40 m by 50 m (2,000 m²). A 6 m high stepped retaining wall forms the eastern edge of the fuel bunker, visible from Lincoln Crescent (**Figure 51**).

The roof of the fuel bunker is currently covered with fill and turf and includes several access hatches (**Figures 6 and 20**). The grassed area forms part of the Domain and is publicly accessible.

It is proposed to retrofit the northern fuel bunker to accommodate administration, storage and plant rooms. This involves removal of the roof slab and columns.

Excavation is also proposed to north side of the fuel bunker to create a new loading dock area, accessible via Lincoln Crescent. Excavation is also proposed to the north-western side of the fuel bunker to create a new lift core, back-of-house areas and learning studios. The excavation works include the removal of the northern wall of the fuel bunker and part of the western wall. The height of the excavation extends up to 20 m in the north-western corner reducing to 8 m adjacent to the zone substation. A total of 28,500 m³ would be excavated.

The southern fuel bunker would be converted into a 2,000 m² gallery with a 6.7 m high ceiling height. Walls, floor, ceilings and columns would be retained as existing with some minor alterations to allow access via a new curved staircase and to the proposed main lift core. The HIS concludes the conversion of the southern tank to a publicly accessible gallery space represents a positive heritage outcome.



Figure 50 | The southern fuel bunker (Source: Department's photograph)



Figure 51 | Fuel bunker eastern wall viewed from Lincoln Crescent (Source: Department's photograph)

OEH raised no objection to the proposed works to the northern fuel bunker or to the conversion of the southern fuel bunker. OEH have recommended the submission of design details for the conversion work for review and endorsement. The Department agrees and has recommended this condition.

The Department supports the proposed adaptive re-use of the fuel bunker and associated works because:

- the works would allow public use of a unique heritage building, the southern portion of which would remain almost unaltered from its original form
- although substantial works are required to the northern portion of the fuel bunker, these works are justified as they would allow for the virtually unaltered adaptation of the southern portion
- public use of part of the structure for gallery use is a desirable outcome compared to no public use of the entire structure
- the proposed gallery use is appropriate for the building
- the works are predominantly internal and would have no adverse impact on the character of the surrounding area.

In response to public requests for the landscaping to be added to the east facing fuel bunker wall to improve the overall visual appearance of the development when viewed from Lincoln Crescent, OEH advised it was a matter for the Applicant to resolve.

Given its height and length and prominence in the streetscape, the Department agrees that sympathetic landscaping of the wall would be of visual benefit and would assist in improving the amenity of the streetscape. A condition is recommended requiring a landscape plan, endorsed by OEH, be submitted to the Department for approval prior to commencement of use.

6.6.4 Aboriginal heritage

The HIS included an assessment of potential for Aboriginal objects within the site area. The assessment identified there is nil to low potential for Aboriginal objects to be found on the site due to the naturally shallow, erosion prone natural soils combined with extensive site disturbance which has occurred in the past i.e. excavation for the fuel bunker and Eastern Distributor. Based on these conclusions, the HIS did not recommend any further archaeological investigations be undertaken but did recommend a number of mitigation and conservation measures including an unexpected finds procedure.

The findings and conclusions of the HIS have been confirmed by the ACHAR. OEH has reviewed the HIS and ACHAR and confirmed they are acceptable. The Department supports the findings of the HIS and ACHAR and concludes the development would have no likely impact on Aboriginal heritage.

6.6.5 Historic and maritime archaeology

The HIS assessed the site as possessing low to moderate archaeological potential with there being no potential within the footprint of the fuel bunker and land bridge. OEH raised no archaeological concerns subject to recommended conditions, including engagement of an historical archaeologist to monitor all sub-surface works within areas of archaeological potential, and an unexpected finds protocol for Aboriginal and non-Aboriginal objects.

A Stage 2 Maritime Archaeology Assessment (MAA) was prepared following a dive survey and submitted as part of the RTSAR. The MAA concluded there are no potential impacts to marine archaeological deposits from the proposed SWHES works. OEH reviewed the MAA and provided recommended conditions which include an unexpected finds protocol for maritime objects, conservation and storage of any items recovered during trenching works, and a site-specific induction for all construction personnel engaged in maritime works.

The Department supports the OEH recommendations and has incorporated these in the conditions. The Department concludes the proposal would be unlikely to have any historic or maritime archaeology impacts.

6.7 Transport, traffic, car parking and servicing

The Applicant submitted a Traffic Impact Assessment (TIA) with the EIS and a supplementary statement with the RTS which assessed potential traffic impacts, public transport access, the provision of car parking and bicycle parking on the site, and servicing of the proposed loading dock.

6.7.1 Transport

The site is serviced by bus route 441 (Birchgrove to the City and Art Gallery) with a bus stop located on Art Gallery Road in front of the existing AGNSW building. Bus stops serviced by a wider range of routes are also located on Elizabeth Street 660 m to the west. Martin Place Railway Station and St James Railway Station are located 550 m and 780 m to the east and south-east respectively. The Circular Quay Railway Station and ferry terminal are also located 900 m to the north-west. The future Sydney Metro and light rail systems will also increase public transport capacity within the CBD.

Public submissions included objections to the lack of public transport servicing the site.

The TIA estimated the proposed development would generate up to 444 and 639 additional peak hour public transport trips on weekdays and weekends respectively. Given the proximity of the site to various public transport modes and the frequency of services, the Department considers the site to be well serviced by various public transport modes and the increased demand would have a negligible impact on the operation of the public transport system.

6.7.2 Traffic impacts

The TIA calculated use of private vehicle travel currently accounts for 24% of the mode of travel to the gallery with the other predominant travel modes being train (35%), bus (17%), walking (16%) and cycling (6%).

Public submissions included objections regarding increased traffic generated by the proposed development, including within Lincoln Crescent.

Based on an average of two people per car, the TIA estimated the proposed development would generate an additional 99 private vehicle trips per hour in the morning peak and an additional 142 private vehicle trips per hour in the evening peak. However, the busiest additional demand is expected on a Sunday, during a major exhibition, which would result in an additional 142 private vehicle trips per hour throughout the day.

The TIA assumed a 50% split between vehicles parking within the Domain car park and Art Gallery Road with an even split of drivers arriving from each direction.

This equates to 49 and 50 additional vehicle movements per hour on Art Gallery Road during the respective AM and PM weekday peaks and an additional 71 additional vehicle movements per hour on a Sunday. Currently there are between 2,300 and 4,000 vehicle movements per day on Art Gallery Road. The proposal would therefore result in increases of between 1.2% to 3% over current levels of traffic movements. The Department considers these increases to be minor and concludes the additional movements would not result in any unreasonable impact on the operation of Art Gallery Road. Vehicle movements associated with the loading dock are considered in **Section 6.7.6**.

The TIA detailed increased traffic movements to other roads and intersections in the locality would be relatively minor and does not anticipate the development would compromise the safety or function of neighbouring streets or local traffic access.

The Department notes TfNSW, RMS and Council have not raised any concerns with the proposal regarding traffic generation. The Department concludes the proposed development would not cause adverse traffic impacts on surrounding streets.

6.7.3 Car parking

The site is located at the eastern edge of the CBD and can rely upon existing access to bus, rail and ferry public transport services. Aside from 32 public car parking spaces located in the forecourt, the existing AGNSW provides no public car parking, instead predominantly relying on the adjacent Domain car park which contains 1,115 car parking spaces. The car park operates seven days-per-week, closing at midnight. Lifts and stairs at the northern end of the car park provide access to the Domain in close proximity to the gallery. The Domain car park provides special discount parking rates for AGNSW patrons.

A further public car park is located on Lincoln Crescent and contains 89 spaces. However, given its relatively higher cost compared to the Domain car park and lower capacity, the TIA assumes visitors would more likely utilise the Domain car park.

Car parking rates contained in SLEP 2012 indicate the proposed level of additional gallery floorspace equates to a maximum car parking requirement of 160 spaces (one space per 200 m² of GFA).

The TIA identified the Domain car park currently has a typical unused capacity of 200 car spaces on weekdays and over 750 car spaces on weekends. Although this reduces to 150 spaces in the evenings during major events in the CBD, this is outside the AGNSW standard operating hours. The peak additional car parking demand generated by the proposed development is estimated to be 198 spaces on weekdays and 284 spaces on weekends (**Table 14**). The TIA concluded the Domain car park contains sufficient capacity to cater for the proposed development and the proposal therefore does not include any visitor car parking.

Table 14 | Existing Domain car park capacity and proposed increased visitor parking demand

	Available capacity	Additional demand	Sufficient capacity
Weekdays	200	198	Yes
Weekends	750	284	Yes

The Department considers there is existing capacity available within the Domain car park to cater for the increased parking demand arising from the proposed development. Notably, sufficient capacity exists even in the unlikely event that all additional visitors arriving by private car choose to park in the Domain car park rather than any other location. The Department further considers sufficient capacity exists to allow removal of the existing spaces within the forecourt to create a new public plaza (see below).

Furthermore, given the site is located within the CBD and is well served by public transport, the Department considers car parking for new developments should be rationalised and private vehicle dependency reduced.

RMS, TfNSW and Council raised no issues in relation to the proposed visitor car parking arrangements.

The Department concludes visitor car parking is not required to be provided as part of the proposed development. The Department recommends the preparation and implementation of a Green Travel Plan which outlines all measures proposed to increase the mode share of walking and cycling to the site. The condition also includes a monitoring and implementation requirement.

Staff car parking

The AGNSW employs 200 full-time operational staff. The proposed development would provide a further 75 full-time operational jobs.

Thirteen existing operational and staff car parking spaces would be retained within the existing gallery building loading dock. Four additional staff car parking spaces are proposed as part of the proposed development. The TIA contended the LEP staff car parking rate of 1 space per 200 m² of GFA (62 spaces) is a maximum rate and that the proposed total of 17 staff parking spaces is reasonable because:

- staff would continue to utilise alternative forms of transport to access the gallery
- the objective of the maximum parking rate is to minimise the amount of vehicular traffic generated.

The site is located within the CBD with good access to public transport modes and walking/cycling routes. Noting proposed improvements to staff bicycle parking and end-of-trip facilities (see **Section 6.7.4**) and a recommended condition requiring the implementation of a Green Travel Plan, the Department considers existing arrangements whereby on-site car parking is not provided for most staff should also reasonably apply to new staff resulting from the proposed development.

The Department concludes the proposed limited number of staff car parking spaces is therefore acceptable for the proposed development.

Removal of existing car parking spaces adjacent to Art Gallery Road

To allow conversion of the existing gallery building forecourt adjacent to Art Gallery Road to a public plaza, the proposed development includes the removal of 22 metered car parking spaces located within the forecourt. Two further accessible car parking spaces within the forecourt would be replaced by four accessible car parking spaces on Art Gallery Road to the west of the existing gallery building.

Council and OEH support the removal of car parking from the gallery forecourt to improve the arrival experience at the gallery.

The existing metered car parking spaces are operated by the RBGDT. Issues pertaining to the financial implications of the removal of the spaces are subject to separate arrangements between the AGNSW and the RBGDT and is not a relevant to the assessment of the proposed development.

The Department considers the proposed removal of car parking and replacement with a public plaza would result in visual and heritage benefits to the existing gallery building and the wider Domain. Given there is existing parking capacity within the Domain car park and the proximity of various other on-street and off-street car parking locations within walking distance of the site, the proposed removal would result in negligible impacts on car parking in the area.

The Department concludes the proposed removal of car parking within the forecourt is acceptable.

6.7.4 Bicycle parking

The proposal includes 12 staff bicycle parking spaces located adjacent to the proposed loading dock. End-of-trip facilities are proposed on the same level. This satisfies SDCP 2012 staff bicycle parking rate requirements and would be in addition to the existing 10 staff bicycle spaces located within the existing gallery building loading dock.

The proposal also includes the provision of 33 publicly accessible bicycle rails with a capacity for 66 bicycles located on the eastern side of Art Gallery Road to the north of the proposed building. This represents 50% of the SDCP 2012 visitor bicycle parking rate for a development with the proposed amount of public accessible space. The Department agrees providing 128 visitor bicycle parking spaces, consistent with SDCP 2012 rates, for the proposed development would be excessive given the existing mode share of cycling is 6%. The Department further notes there is sufficient room for expansion of visitor bicycle parking in the future if required. Council have raised no concerns regarding the proposed number of visitor bicycle parking spaces and are satisfied the proposed revised location setback from Art Gallery Road resolves previous concerns.

The Department is satisfied the proposal provides appropriate visitor bicycle parking spaces and suitable staff bicycle parking spaces and end-of-trip facilities. In order to increase the mode share of walking and cycling to the site, the Department recommends a condition requiring the preparation of a Green Travel Plan for the expanded AGNSW.

6.7.5 Works to Art Gallery Road and Lincoln Crescent

As revised in the RTS, proposed upgrade and reconfiguration works to the eastern side of Art Gallery Road include new indented bus, coach and taxi parking bays and visitor drop-off area. The works also

include installation of a new pedestrian crossing adjacent to the proposed entry plaza to the north of the existing crossing in front of the existing gallery building.

The proposed bus bay in Art Gallery Road has been relocated to meet TfNSW requirements for access by a 14.5 m standard bus. TfNSW and RMS have raised no objection to the proposed works and associated revised bus, coach and car parking arrangements.

The Department considers the proposed works to Art Gallery Road would improve the safety of pedestrians and visitors to the AGNSW through the proposed reconfiguration of parking and new pedestrian crossings and pathways in the immediate vicinity of the existing and proposed gallery buildings. In particular, coach parking would be retained to the front of the existing gallery building.

In Lincoln Crescent, it is proposed to remove six on-street parking spaces, remove a 12 m long section of the central road island, provide a new pedestrian refuge at the southern end and provide a widened footpath on the western side. Council has raised no objection to these works.

Public submissions included a request to restrict truck/tow truck car parking in Lincoln Crescent. However, the Department considers future parking restrictions in Lincoln Crescent is a matter for consideration by Council.

The Department further considers the proposed works to Lincoln Crescent are reasonable and would result in negligible impacts given their relatively minor nature. Although six on-street car parking spaces would be removed, an off-street public car park with existing capacity is located on Lincoln Crescent.

The Department recommends conditions requiring a Road Occupancy Licence be obtained from the relevant road authority for any works that may impact the operation of Lincoln Crescent and Cowper Wharf Road (noting Art Gallery Road is a private road). A condition is also recommended requiring approval from Council's Pedestrian Cycling and Traffic Calming Committee for any changes to on-street parking restrictions for the proposed works.

6.7.6 Servicing

Vehicular access to the site would continue to occur via Art Gallery Road which contains bus and coach parking, taxi bays, accessible parking spaces and drop-off spaces. Access to the proposed loading dock would occur via Lincoln Crescent.

The proposed loading dock would be utilised by up to 10 to 15 vehicles per comprising delivery vans, garbage and recycling trucks, and delivery trucks ranging from 8.8 m long medium rigid vehicles (MRVs) to 12.5 m long heavy rigid vehicles (HRVs).

The loading dock would be able to service two HRVs simultaneously and also contains four service vehicle parking bays (including one accessible space). Reversing of large vehicles can be accommodated within the internal loading dock area. The loading dock is proposed to operate 24 hours per day, including Sundays.

Public submissions have been received objecting to proposed operational impacts of the loading dock in relation to increased noise and increased traffic in Lincoln Crescent and at the Lincoln Crescent/Cowper Wharf Road intersection. A submission from TWT included an acoustic report and traffic report to further expand on these concerns.

The Applicant contended noise and traffic impacts from operation of the loading dock would be minor and the RTS included supplemental acoustic and traffic reports to this effect.

The TIA stated the total number of forecast trips on Lincoln Crescent, including traffic servicing the proposed loading dock, would be between 740 and 1,280 vehicle movements per day. Given the road has a capacity of up to 3,000 movements per day, the Department considers the traffic impact to Lincoln Crescent and the Lincoln Crescent/Cowper Wharf Road intersection to be within acceptable limits.

The TIA demonstrated HRVs will be able to access the loading dock (subject to minor works to the Lincoln Crescent and the removal of two on-street parking spaces).

The TIA stated vehicles utilising the loading dock would be spread over the day with the busiest activity occurring in the middle of the day outside peak hours when traffic conditions are good and less queuing occurs. Furthermore, reduced loading dock activity during peak hours could be managed through timed delivery and pre-booked delivery systems.

In response to concerns raised in public submissions regarding the potential for westbound HRV's exiting Lincoln Crescent to potentially block eastbound traffic when waiting at the central reservation and noting advice received from RMS that traffic signals at this intersection would not be supported, the Department recommends a condition is imposed restricting right turns from Lincoln Crescent to vehicles under 6 m in length only. The Applicant has agreed to this restriction as part of discussions with residents of TWT. This restriction would also resolve Council's concern regarding large construction and delivery vehicles utilising Lincoln Crescent and potential impacts on the existing road network.

The Applicant has advised that loading dock activities would be undertaken with the roller door shut and that their Acoustic Report confirms there would be a low risk of noise impacts, including at night and early morning, subject to conditions pertaining to management of the loading dock including restricted hours for use of vehicle reversing alarms. To further reduce potential noise impacts, the revised plans include a 17 m setback between the loading dock roller shutter door and Lincoln Crescent.

The Department considers the proposed servicing arrangements of the proposed development and use of Lincoln Crescent would be acceptable in relation to traffic and noise impacts subject to imposition of a condition requiring approval of a Loading Dock and Vehicle Management Plan (LDVMP). The LDVMP would include matters such as hours of operation, maximum size and number of vehicles per day, use of reversing alarms and details of delivery time procedures. The LDVMP requires endorsement by Council, RMS and TfNSW prior to submission to the Certifying Authority. This would ensure vehicles utilising the loading dock do not impact adversely on the operation of the Lincoln Crescent/Cowper Wharf Road intersection and noise impacts to neighbouring residents are minimised, particularly at sensitive times.

6.8 Seawater Heat Exchange System (SWHES)

A SWHES is proposed to provide cooling to the proposed building, negating the need to provide rooftop cooling towers. The system incorporates a plant room within the northern portion of the fuel bunker, an underground plant room (with smaller above ground chamber) at the north-western end of Lincoln Crescent, and twin inlet pipes (1.2 m diameter) and twin outlet pipes (400 mm diameter) extending into Woolloomooloo Bay (**Figures 52 and 53**). Two 400 mm pipes would connect the

underground plant room with the site. The proposed underground plant room is proposed in order to reduce the length of seawater pipe work, reducing excavation and cleaning/chemical requirements.

Notable examples of this technology currently operating in Sydney Harbour include the Sydney Opera House, the Museum of Contemporary Art, the Sydney Convention and Exhibition Centre, and at Barangaroo.

A SWHES Report and Marine Impact Assessment were provided as part of the EIS. The HIS and Acoustic Report also considered potential impacts of the proposed system. Additional information, including a revised SWHES Report, revised HIS and a Maritime Archaeological Assessment, have also been provided as part of the Applicant's RTS and in the RTSAR in response to comments from the EPA.

Public submissions raised the potential environmental impacts of the system on Sydney Harbour and the lack of detailed information provided. In addition, some residents of TWT have raised concerns about potential acoustic and visual impacts.

In response, the Applicant contended the proposed system would be a less visually intrusive than rooftop cooling towers, would reduce water usage, energy usage and emissions, would reduce the risk of legionnaires disease, and would be less noisy than a traditional cooling system. The Applicant further contended potential environmental, acoustic and visual impacts would be minimal. The Department's consideration of the relevant issues is provided below.

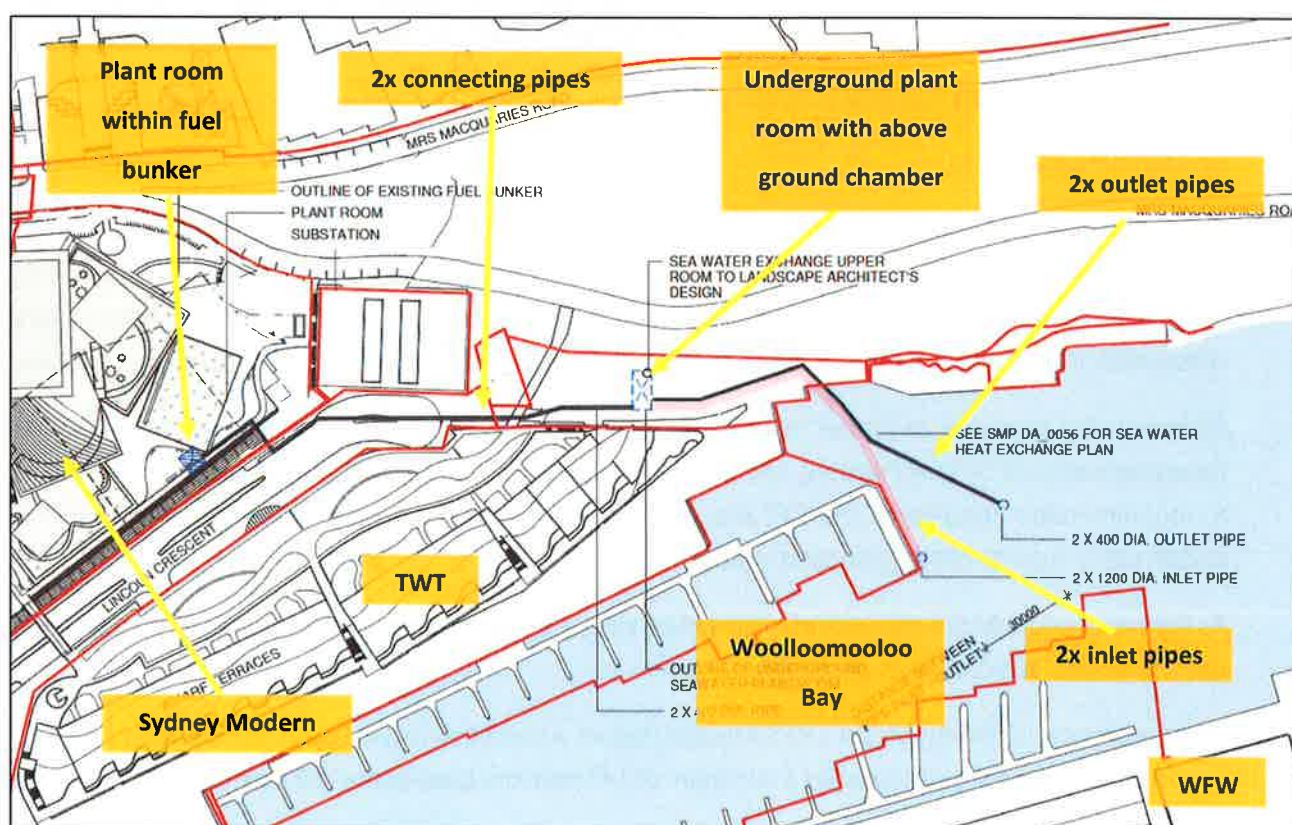


Figure 52 | Location of proposed SWHES (Base source: Architectural Plans)



Figure 53 | Location of proposed SWHES (Base source: Department's photograph)

Environmental impacts

The Department understands the proposed anti-foulant product and chemical dosing methods comply with regulatory requirements and are consistent with other seawater heat exchange systems operating in Sydney Harbour. In addition, by ensuring the proposed system achieves a water temperature differential of less than two degrees at the pipe locations, it would comply with water quality regulations.

Following the provision of further information relating to the impact of the proposed system of the receiving waters of Sydney Harbour, the EPA have raised no concerns to the proposed system subject to recommended conditions. The DPI also recommended conditions relating to managing potential construction impacts of the proposed system.

As the proposed SWHES may disturb acid sulfate soils, a detailed Acid Sulfate Soil Management Plan is recommended as a condition of consent.

In accordance with the Applicant's RTS Arborist Report, a condition is also recommended requiring the proposed plant room to be located a minimum of 1 m from the base of the cliff face in order to protect the roots of adjacent trees.

With the recommended conditions in place, the Department is satisfied the environmental impacts of the SWHES would be minor and acceptable.

Visual impacts

The only above ground element of the proposed system would be a 950 mm high, 2.5 m diameter upper chamber above the underground plant room. The structure would be located on an existing level grass area at the base of a sandstone cliff and would be timber clad with a removable bronze lid and maintenance access hatch (**Figure 54**).

Although the structure would be visible within the public domain and from neighbouring bedroom windows in TWT, the Department considers the visual impact would be negligible given its small size, location close to the adjacent rock face and proposed appropriate materials.



Figure 54 | Proposed SWHES upper room (Source: Landscape Plans)

Acoustic impacts

Public submissions raised concerns regarding the potential acoustic impact of the proposed system and underground plant room on neighbouring bedroom windows within TWT located approximately 15 m from the above ground element of the plant room (**Figures 53** and **54**). It was also suggested the plant room be relocated further south away from the TWT bedrooms windows.

The Department acknowledges the proposed SWHES is quieter than many conventional alternatives for building cooling such as cooling towers and air-cooled condensers. Additional acoustic testing has been undertaken by the Applicant in response to concerns raised by residents of TWT, which confirms the operation of the proposed system would comply with the NSW Industrial Noise Policy and would not result in any unreasonable noise impacts. A further Acoustic Report, prepared by PKA Acoustic Consulting on behalf of a resident of TWT, also concludes the SWHES noise impact complies with the

NSW Industrial Noise Policy night-time criteria by a significant margin, measured from the closest TWT receiver.

The Department notes the seawater cooling plant would be located internally within an underground plant room and that appropriate measures, as recommended in the Applicant's Acoustic Reports, can be conditioned to mitigate any potential noise impacts. This has been further confirmed by the Department's technical specialist. The Department further notes the EPA have reviewed the RTS and RTSAR acoustic reports and have raised no concerns regarding operational noise impacts from the proposed SWHES.

The Department recommends conditions requiring preparation of an Operational Noise and Vibration Management Plan and the implementation of operational noise limits and monitoring which would ensure noise impacts from the SWHES would be within NSW Industrial Noise Policy limits.

Heritage impacts

OEH have recommended a marine heritage condition in relation to unexpected finds during construction. The Department agrees and has included this as a recommended condition (see **Section 6.5**).

Relocation of pump room further south

A public submission requests the plant room and above ground chamber be relocated further south towards the fuel bunker in order to protect the adjacent rock face and reduce visual and acoustic impacts.

The Applicant contends:

- the proposed location is not visually significant and the proposed upper chamber visually insignificant
- the location would not adversely impact the heritage value of the adjacent rockface
- acoustic impacts are minimal
- relocating the pump room further south would extend the length of seawater pipes thereby increasing costs and the amount of cleaning and associated chemicals required.

The Department considers the location of the proposed plant room and above ground chamber would be unobtrusive, would not impact the adjacent rockface and would have minimal acoustic impacts. The Department therefore does not consider relocation of the plant room and above ground chamber justified.

Conclusion

The Department concludes the proposed SWHES is acceptable, noting the energy conservation and aesthetic benefits and the potential insignificant environmental impacts. Recommended conditions would further minimise potential impacts and ensure acceptable environmental outcomes in accordance with advice received from the EPA, DPI and OEH, the Department's technical specialist, and relevant expert reports.

6.9 Other Issues

Other relevant issues for consideration are addressed in **Table 15**.

Table 15 Summary of other issues raised

Issue	Findings	Recommended Condition
Biodiversity	- SEARs for the proposed development were issued prior to commencement of the <i>Biodiversity Conservation Act 2016</i> on 25 August 2017 and required an ecological impact assessment be prepared. - The Terrestrial Biodiversity Impact Assessment submitted with the EIS satisfies the SEARs requirements and concluded the proposal is acceptable regarding biodiversity impacts. - The Department notes the existence of built structures under a large part of the site and the lack of intact remnant native vegetation within the site. - The Department considers the biodiversity impacts of the proposal to be minor and the proposal would not result in any significant impact on any threatened species, populations, ecological communities or their habitats (subject to recommended replacement tree planting (see Section 6.5).	Minimum 273 trees between 600L to 1000L must be planted consistent with Landscape Drawing LD_DA_30-05 prepared by McGregor Coxall.
Wind	- The EIS included a Wind Assessment which concludes wind conditions at ground level around the development would be similar to existing conditions and can be classified as suitable for pedestrians standing or walking. - A supplemental Wind Assessment submitted with the RTSAR confirmed the majority of the space under the entry canopy would be suitable for pedestrians walking with more protected areas closer to the building entrance suitable for standing/sitting. - The Wind Assessment further confirmed the development would have a negligible impact on the wind amenity of the Domain. - The Department is satisfied the proposal would not have any adverse wind impacts to the local area and suitable wind protection would be afforded to users of the proposed entry plaza.	Include in Drawing Schedule.
Reflectivity (safety)	- The EIS included a Reflectivity Report which concluded the development would not cause an unacceptable risk to drivers or pedestrians from reflectivity/glare. This analysis related to safety where viewers cannot avert their direction of view. - The Department is satisfied the development can achieve acceptable reflectivity impacts.	External materials and glazing to be low glare.

Lighting	- Public submissions raised concerns regarding potential amenity impacts from exterior lighting. - The EIS included an Exterior Lighting Report. The report confirmed lighting would comply with relevant guidelines including Council's Lighting Masterplan, AS1158 Lighting for Roads and Public Spaces and AS4282 Control of obtrusive effects of outdoor lighting. - Lighting would comprise a series of light poles for street and pathway lighting, with integrated lighting for landscaped elements including up-lighting for trees. - Lighting would be timed and adjustable with tree up-lighting switched off at a nominated time to protect fauna and reduce energy consumption. - The Department is satisfied the proposed exterior lighting scheme will provide appropriate and sensitive lighting of the site.	Exterior lighting to comply with Exterior Lighting Report and Australian Standards and Guidelines.
CPTED	- The EIS included a Crime Prevention Through Environmental Design (CPTED) Report which concludes the proposed design provides very good CPTED measures/characteristics, particularly in regard to natural surveillance and high permeability between spaces. - The report includes a number of recommendations to further enhance the security aspects of the project. - The RTS included an addendum CPTED Report which addresses security of the proposed external 24-hour public lift and various hidden areas around the proposed building which may attract anti-social behaviour. - The Department considers the proposed development suitably incorporates necessary CPTED measures.	Implement recommendations of CPTED report.
Operational Noise	- Public submissions and Council raised concerns regarding potential adverse impacts from operational noise in relation to the proposed café, multi-purpose room and associated outdoor spaces, SWHES and plant equipment. - The Acoustic Report recommends a number of design treatments to ensure compliance within applicable standards. These will ensure minimisation of any noise impacts to the Domain/RBG and TWT to the east. - The café is proposed to accommodate a day-to-day capacity of 250 persons with an indoor capacity of 150 and an outdoor terrace capacity of 100. However, during events, the capacity of the terrace may be increased to allow for up to 500 persons. These events may occur between 7 am to 10 pm, which is outside standard gallery operating hours.	- Limit noise emissions for mechanical plant, including the SWHES. - Prepare Operational Noise and Vibration Management Plan and Loading Dock Management Plan. - Hours of operation of café terrace limited to 7 am to 10 pm - No amplified sound equipment to be located on the café terrace. - Maximum capacity of 500 persons for the café terrace. - No use of terrace outside the multi-purpose room for events or activities.

- The Acoustic Report concludes noise impacts to the nearest residential property (over 40 m to the closest habitable spaces of the TWT) would be negligible during the day and evening time.
- The Acoustic Report further considers noise levels, at times of maximum capacity, would not exceed normal conversational levels and, given the large distance between the gallery and TWT, concludes there unlikely to be any adverse amenity impacts from noise levels arising from a crowd on such occasions.
- The report however recommends use of the terrace should cease at 10 pm and that amplified sound not be permitted on the terrace at any time. This is also consistent with EPA and Council's recommendations.
- The Applicant has confirmed it is not proposed to utilise the terrace space outside the multi-purpose room for events or activities.
- A supplemental Acoustic Report was submitted by the Applicant which confirms compliance with applicable noise compliance criteria and concludes additional acoustic treatments are therefore not required. However, the report recommends a noise management plan for the café be prepared.
- The Department's technical specialist considers the operational noise would not adversely impact the TWT subject to use of the café ceasing from 10 pm, no amplified music on the terrace, and the capacity of the terrace being restricted to 500.
- Potential noise impacts from operation of the proposed loading dock would be minimal and suitably mitigated by a LDVMP (see **Section 6.7**).
- Potential noise impacts from operation of the SWHES would also be minimal and suitably mitigated by recommended conditions (see **Section 6.8**).

Event Management

- Public submissions raised concerns regarding the possible use of the Sydney Modern as a function centre.
- The AGNSW currently hosts a wide variety of programs and events as part of its day to day operations. The EIS states the proposed expansion would enable the gallery to deliver a range of events linked to its exhibition program, including exhibition openings and associated events.
- The proposed multi-purpose room would include event facilities with a seated dinner capacity of 300 persons and a standing capacity of 510 persons. The café and associated terrace would also be capable of hosting events.
- The proposed use of the café and multi-purpose room for events held by schools,
- Prepare Operational Plan of Management.

corporate members and stakeholders is consistent with current gallery operations.

- However, given the proposed size of the proposed Sydney Modern and associated multi-purpose room, café and external public areas, an Operational Plan of Management for the gallery is recommended.

Development
Contributions

- The Central Sydney Development Contributions Plan 2013 (CSDCP) applies to the development. At 1% of the CIV, the levy would amount to \$2.75 m.
- The Applicant has requested all contributions be waived under section 7.12 of the EP&A Act due to the material public benefit of the proposal including:
 - Provision of a cultural public building that would significantly increase the amount of space available to display the State's public art collection
 - a minimum expenditure of \$3.5 million on landscaping and art installations within the proposed Art Garden
 - public domain improvements
 - the adaptive re-use of the heritage listed fuel bunker for public use
 - provision of Australia's first 5-star green star rated public art gallery
 - enhanced through-site links including new public lifts providing equitable access from Lincoln Crescent to Art Gallery Road.
- The Applicant contends the proposed works-in-kind satisfy the definition of 'material public benefit'.
- Council does not support the Applicant's request to waive the development contributions because:
 - the art garden is not a public benefit over and above what would reasonably be expected of the State's art gallery and Council would have no involvement in its implementation nor own the art at completion
 - public domain improvements to the site frontage do not exceed what would reasonably be expected of a development of this scale
 - the works include demolition of 50% of the existing fuel bunker for use as support services and therefore does not involve development for the sole purpose of adaptive reuse of a heritage item
 - the proposal involves enhancements to existing through-site links, not the provision of new through-site links.
- The Department considers the proposed development includes substantial public benefit in excess of the \$2.75 m contribution required under the CSDCP.
- Although not consistent with the CSDCP definition of material public benefit, the Department considers the proposed public
- No condition recommended.

benefits significantly exceed the benefits that would normally be required for a major expansion to an art gallery, in particular, the provision of the proposed art garden. The Department considers the provision of this garden alone, at an expenditure exceeding the total contribution required under the CSDCP levy, justifies waiving the levy.

- The proposed enhanced through-site link improvements, particularly equitable access within the site from Lincoln Crescent, are significant (see **Section 6.5**).
- Without the proposed development, no part of the fuel bunker would be available for public use. Given the significance of the southern half of the bunker (2,000 m²) to be adaptively reused, the Department considers this to represent a significant public benefit.
- The Department recommends the payment of development contributions for the proposed works is waived.

Land Subdivision

- Land subdivision is proposed in three stages as described in Table 3 in Section 2.1.
- The subdivision relates to the future leasing arrangements between the existing landowners (RMS and the RBGDT) and the AGNSW.
- No impacts occur from the proposed subdivision and no objection has been received from government agencies or Council.
- Include subdivision plans in Drawing Schedule.

Contamination

- The fuel bunker was remediated in the late 1990s. A Site Audit of the fuel bunker undertaken in 1999 concluded the site was suitable for commercial/industrial use subject to ongoing groundwater monitoring.
- The EIS included a Stage 1 Preliminary Environmental Site Assessment (PESA). The PESA found some contamination in two locations and fill materials of unknown origin were also detected.
- The PESA concludes that the site can be made suitable for the proposed development through remediation and validation in accordance with the submitted Remedial Action Plan (RAP).
- The remediation proposed in the RAP comprises excavation and removal of the contamination soils, offsite disposal to a licensed facility and validation sampling/analysis.
- The required remediation would involve approximately 50 truckloads of excavated material over a one-week period.
- A Site Audit Report (SAR) confirms the site can be made suitable for the proposed use subject to remediation in accordance with the RAP.
- Obtain Section A Site Audit Statement at the completion of the remediation works, certifying the works have been undertaken consistent with the RAP and the site is suitable for the development.
- An unexpected finds procedure to enable management of any unexpected contamination finds.

Structural & Geotechnical	• The EIS included a Structural Report and Geotechnical Report. • The Structural Report confirms the extent of new works above, and adjacent to, the Eastern Distributor can be accommodated by the existing land bridge without requiring strengthening works. • Where demolition of existing columns is proposed in the northern portion of the fuel bunker, further testing is required to establish whether the roof slab would require any strengthening or require replacement. • The Geotechnical Report considers the proposed works to be feasible with a low risk to surrounding structures provided appropriate additional site investigation, design assessments and construction monitoring are carried out. • RMS have recommended conditions including a Works Authorisation Deed for the proposed works above and adjacent to the Eastern Distributor.	• Interface Access Agreement to be entered into between RMS and Applicant. • Further geotechnical investigation and construction monitoring as recommended by the Geotechnical Report.
Stormwater/ Flooding	• Eight public submissions were received regarding stormwater management concerns. • The EIS included a Drainage and Stormwater Report (DSR) and Concept Stormwater Plan. • Runoff from the site currently flows to Lincoln Crescent where two separate stormwater networks are located. It is proposed to match the existing catchment distribution. • On-site stormwater detention is proposed which is sized to achieve a neutral or beneficial impact compared with existing discharge. • 77% of rainwater falling on the building roof area would be reused on-site. Gross pollutant traps are proposed throughout the site to capture litter and suspended pollutants. Any additional treatments to meet SDCP 2012 standards will be achieved through other passive treatment measures, including potential use of raingardens and bio-detention, if required. • Part of the site on Lincoln Crescent adjacent to the zone substation may be affected by flooding. The design of the proposed loading dock and the lower level of the fuel bunker have been designed to prevent flooding. • Given the small area of the site potentially flood affected and existing flow paths would be maintained, the DSR concludes the proposed development will have a negligible flood impact.	• Prepare and implement a detailed Water Management Plan.
Waste Management	• The EIS included a Waste Management Plan which outlines provisions and procedures for construction and operational waste.	• Waste Management Plan to be implemented.

	The Department is satisfied the Waste Management Plan would appropriately manage the handling of waste on the site.	
Construction Noise/Vibration	- Construction works are expected to take 28 months, commencing in 2019 and completed in 2021. 27 public submissions raised concerns with potential construction impacts including noise and disruption to the Domain and RBG. - All construction works are proposed to comply with the DECCW Interim Construction Noise Guidelines (DECCW Guidelines) including the proposed construction hours of: 7 am to 6 pm Monday to Friday 8 am to 1 pm on Saturdays - No work on Sundays or Public Holidays. - Council's standard construction hours are: 7.30 am to 5.30 pm Monday to Friday 7.30 am to 3.30 pm Saturdays - No work on Sundays or Public Holidays. - The EIS included an Acoustic Report, which provides a detailed assessment and recommendations for managing/mitigating noise impacts and vibration impacts during construction, noting the existing gallery would be particularly sensitive to noise and vibration impacts. - The predicted noise levels for neighbouring residential properties would also comply with the DECCW Guidelines subject to appropriate noise mitigation measures, including acoustic screening and mufflers. - The Acoustic Report further concludes there is unlikely to be any construction vibration impacts subject to detailed vibration monitoring at neighbouring properties. If exceedances occur, noise/vibration control measures, together with construction best practice, would minimise any impact and ensure compliance with relevant standards. - The Department acknowledges the works would be temporary and impacts can be reasonably mitigated through recommended conditions.	- Prepare a Construction Environmental Management Plan, Noise and Vibration Management Plan and Air Quality and Odour Management Plan. - Prepare a Community Consultation Strategy. - Undertake environmental monitoring. - Construction hours restricted to: 7 am to 6 pm Monday to Friday 8 am to 3.30 pm on Saturdays - No work on Sundays or Public Holidays.
Construction Air Quality	- Public submissions raised concerns regarding construction impacts included air quality and odour concerns. - The EIS included an Air Quality Assessment (AQA) which considers potential air quality and odour impacts from excavation, remediation and construction works. - Various air quality controls are proposed including application of odour and dust suppressants as required and covering of all stockpiles and truckloads. - Ambient air within the fuel bunker has been previously tested with low levels of	Prepare and implement an Air Quality and Odour Management Plan.

	contamination. The potential for residual vapours is minor. • The AQA recommends preparation and implementation of an Air Quality and Odour Management Plan. • The Department is satisfied potential air quality and odour issues can be suitably managed during development.	
Construction Traffic	• Public submissions raised concerns regarding adverse impacts from construction traffic. • The EIS included a Preliminary Construction Management Plan which states an average of 50 trucks per day would access the site from Lincoln Crescent for a five-month period during the excavation/demolition phase. This could increase to 70 trucks per day on peak days. These would be spread over the day. • An average of 40 trucks per day would access the site during concrete pouring, reducing to 10 trucks per day during the construction phase. These trucks would predominantly utilise Art Gallery Road. • Gates on Art Gallery Road would provide access for construction staff. Loading areas would be located on Art Gallery Road with two gates provided for vehicles and the estimated 540 construction staff. Smaller deliveries will utilise the existing AGNSW southern access road. • The main construction route would be via the State road network with trips from the west mainly utilising the Eastern Distributor and Cowper Wharf Road, and trips from the east mainly utilising William Street and College Street. The TIA raises no concerns regarding potential impacts from construction vehicles. • Due to the proximity of public transport, construction workers would be required, through the Construction Pedestrian and Traffic Management Plan (CPTMP) to take public transport to work. Additionally, the TIA notes construction workers typically start and finish work outside commuter peak periods. • TfNSW have recommended a condition requiring a CPTMP be prepared. • The Department considers the proposed development acceptable in relation to construction traffic movements.	• Prepare and implement a Construction Traffic and Pedestrian Management Plan in consultation with the Sydney Coordination office of TfNSW.
Eastern Distributor & Land Bridge	• The proposed entry plaza canopy and a portion of the entry pavilion and gallery 1 sit on the land bridge above the Eastern Distributor. • Part of the entry pavilion and gallery 1 rest on the land bridge via bearing pads for vertical support only. The main structure of the new building is anchored to the north of the land bridge outside of the carriageway of the Eastern Distributor and is founded on	• The structures must be designed so that they are capable of being vertically supported by alternate means in the event the land bridge is removed or altered. • If significant works to, or removal of, the land bridge is proposed in the future, and if directed by the Secretary, the Applicant must prepare and submit to the Secretary's satisfaction, updated

sandstone bedrock. It is separated from the land bridge by isolation bearings.

- The Applicant has advised that if the land bridge was removed in the future, the vertical support currently provided by the land bridge could be replaced or modified by a re-engineered design.
- The Department is satisfied the engineering design of any structures sited on the land bridge provides sufficient certainty that they could be re-engineered to allow for the removal of the land bridge in the future, if required. The recommended re-design of the entry plaza canopy would need to incorporate this requirement.
- engineering plans for any structures sited on the land bridge, demonstrating the structures can be vertically supported by alternate means.
- A separate application shall be lodged with the relevant consent authority for the updated engineering plans and associated works.

7. Evaluation

The Department has reviewed the EIS, RTS, and all additional information including the RTSAR, and assessed the merits of the proposal, taking into consideration advice from Council and government agencies. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been thoroughly addressed.

The Department has considered all relevant matters under section 4.15 of the EP&A Act, the objects of the EP&A Act and the principles of ecologically sustainable development.

Given the proposed design is fundamentally consistent with the winning design of a design excellence process which involved an international design competition, the Department is satisfied the proposed development demonstrates design excellence. To ensure the final development achieves design excellence and consistency with the winning design, the Department recommends a condition requiring the design development and construction documentation be subject to a design integrity process.

The Department considers the design of the proposed development, as enhanced through the assessment process, would sit comfortably within the surrounding landscaped and heritage context of the site and would provide an attractive, contemporary landmark building that is sympathetic to the overall character of the Domain, the RBG and the surrounding area.

However, the Department considers the design of the proposed entry plaza canopy could be further rationalised to ensure it further improves sightlines between the existing gallery building and the Woolloomooloo Gate, and further improves and enhances its built form interface with its landscape setting. A condition is therefore recommended requiring the submission of a revised entry plaza canopy design that reconsiders the extent of the canopy, its street alignment and orientation and its setbacks from Art Gallery Road and its fit within the natural landscape. The architectural detail of the design must also demonstrate it achieves a light-weight built form character.

Although the proposed development would result in impacts to some public views, it would provide new public view opportunities, particularly towards the eastern part of Sydney Harbour. The Department finds the public view impacts would be outweighed by the significant public benefits of the proposal.

Although the proposed development would occupy existing public open space, it is for public use and would be publicly accessible, at no cost, during gallery operating hours. Of the open space required for the proposed development (including the current entry plaza canopy design), 72% is located above man-made structures (fuel bunker and land bridge) which have limited soil depth for significant landscaping, contain limited shelter or wind protection, and are unsuitable for formal recreation activities. The rest of the site predominantly comprises a steep, landscaped embankment which provides limited opportunities for public use. Although these areas contribute to the amenity of the

Domain and provide harbour views in some locations, they do not relate to the historic and landscaped quality of the Domain and, with the exception of the land bridge, are poorly connected.

The proposed development would create a series of diverse, multi-functional and interconnected public spaces, including the forecourt plaza, entry plaza, and roof terraces which would provide new gathering points, undercover areas, seating areas and locations for new public views. The Department considers the proposed areas of open space, including the 1,916 m² of landscaped roof terraces and green roof, is approximately the same as the existing area of open space to be occupied by the proposed development. Although not all areas of proposed open space would be publicly accessible, this would be counterbalanced by the proposed quality and variety of public spaces. The Department considers the proposed development and public use represents an acceptable and reasonable use of public land.

The Department is satisfied the engineering design of any structures sited on the land bridge have been designed so that the land bridge provides vertical support only and the new building is completely separated from the land bridge by isolation bearings. The Applicant has demonstrated that alternate solutions can be employed to replace the vertical support provided by the land bridge should it be required in the future. A recommended condition would ensure any structure located over the land bridge would be capable of being supported by alternate means if the land bridge is removed or altered.

The proposed development would also involve high quality landscape works with the 124 trees to be removed replaced by 273 new trees. This would result in an increased tree canopy in the longer term, including more native species that would create a new Sydney Sandstone Woodland ecological community. The proposed landscaping would complement the character of the surrounding Domain and adjacent RBG. The Department considers this to be an acceptable outcome.

The proposed development would also result in a positive environmental heritage outcome due to the proposed adaptive re-use of the fuel bunker. Where environmental impacts have been identified, the Department considers these can be appropriately mitigated through the implementation of the recommended conditions of consent.

The Department considers existing unused parking capacity exists in the adjacent Domain car park to cater for the proposed development. In addition, the local road network has sufficient capacity to accommodate traffic movements generated by the proposed development. A restriction on trucks over 6 m turning right from Lincoln Crescent into Cowper Wharf Road is however required to enable safe operation of the intersection.

The proposed development also incorporates significant public benefit outcomes, including:

- improvements to the curtilage and setting of the existing AGNSW building through the removal of car parking from the forecourt and creation of a new cultural plaza
- incorporation of publicly accessible roof terraces within the development
- a new public plaza between the existing and proposed gallery buildings
- improved through-site links together with new public lifts
- improvements to the bus stop, accessible parking, coach and visitor drop-off and bicycle parking locations in Art Gallery Road.

The Department is satisfied the recommended conditions and implementation of measures detailed in the Applicant's EIS and RTS report and as recommended by agencies would adequately mitigate the residual environmental impacts of the proposed development.

The Department acknowledges the proposed development is of significant interest to the wider NSW community given it involves an extension to the AGNSW and would allow greater public access to the State's significant art collection, including significant indigenous art, and would likely attract large-scale international exhibitions. The Department considers the proposed adaptive re-use of the fuel bunker as part of the proposed development would also create a highly unique and iconic gallery space.

The Applicant estimates the expansion would allow the AGNSW to increase visitation numbers from 1.1 million to over 2 million per year. The Department considers this would have significant associated benefits to the cultural heritage of the people of NSW and Australia's tourist economy.

The Department concludes the proposed development is consistent with the strategic objectives for the area, as outlined in NSW 2021, the Greater Sydney Region Plan and the Eastern City District Plan. The proposed development would result in a wide range of positive social, economic and environmental benefits, including creation of an enhanced arts and cultural precinct, increased tourism and visitor numbers, increased employment opportunities, improved ecological outcomes, and desirable public domain outcomes.

On balance, the Department considers the proposed development is in the public interest and should be approved, subject to the recommended conditions of consent.



8. Recommendation

It is recommended that the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant consent to the application;
- **agrees** with the key reasons for approval listed in the notice of decision;
- **grants** consent for the application in respect of SSD 6471; and
- **signs** the attached development consent and recommended conditions of consent (see **Appendix E**).

Recommended by:

Andy Nixey

Principal Planning Officer
Key Sites Assessments

Recommended by:

Anthea Sargeant 19/11/10

Executive Director
Key Sites & Industry Assessments



9. Determination

The recommendation is: **Adopted by:**

Anthony Roberts

Minister for Planning

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Appendices

Appendix A – List of documents

Appendix B – Relevant supporting information

Appendix C – Community views for Draft Notice of Decision

Appendix D – Statutory considerations

Appendix E – Recommended instrument of consent

Appendix A – List of Documents

List of key documents relied on by the Department in its assessment:

- Art Gallery Expansion Project – Sydney Modern - State Significant DA SSD 6471 – Environmental Impact Statement, prepared by Architectus Group Pty Ltd, dated 3 November 2017
- Response to Submissions - Art Gallery of NSW Expansion Project – Sydney Modern, prepared by Architectus Group Pty Ltd, dated 20 April 2018
- Response to Submissions Addendum - Art Gallery of NSW Expansion Project – Sydney Modern, prepared by Architectus Group Pty Ltd, dated 8 August 2018
- Response to Submissions Addendum 2 - Art Gallery of NSW Expansion Project – Sydney Modern, prepared by Architectus Group Pty Ltd, dated 16 August 2018

Appendix B – Relevant supporting information

The following supporting documents and supporting information to this assessment report can be found on the Department's website as follows.

1. Environmental Impact Statement

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6471

2. Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6471

3. Response to Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6471

4. Supplementary information and amendments

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6471

Appendix C – Community views for Draft Notice of Decision

Issue	Consideration
Use of public open space	- Much of the open space required for the development is located above man-made structures (fuel bunker and land bridge) with limited soil depth for significant landscaping. The rest of the site predominantly comprises a steep, landscaped embankment which provides limited opportunities for public use. Although these areas contribute to the amenity of the Domain and provide harbour views in some locations, they do not relate to the historic and landscaped quality of the Domain and, with the exception of the land bridge, are poorly connected. - The total amount of open space proposed (7,684 m²) equates to the proposed building footprint (7,716 m²). Overall, 5,768 m² of publicly accessible open space is proposed (75% of the proposed building footprint). Of this, 2,365 m² would be accessible 24 hours-per-day, seven days-per-week with the remaining 3,403 m² of roof terraces and courtyards publicly accessible available during gallery opening hours. - The proposed development would create a series of diverse, multi-functional and interconnected public spaces, including the forecourt plaza, entry plaza, and roof terraces which would provide new gathering points, undercover areas, seating areas and locations for new public views. Although not all areas of proposed open space would be publicly accessible, this would be counterbalanced by the proposed quality and variety of public spaces. - Given the proposed public domain and landscape works, and that the proposed building would be available for free public use and would have significant cultural and educational public benefits, the Department considers the proposed use of public open space to be justified and acceptable. - This issue is considered in Section 6.3. <i>Recommended Conditions/Response</i> Conditions include: - Convert the roof of gallery 1 to a green roof.
- Adverse visual impact - Loss of public views	- The Department considers the revised VIA submitted with the RTS accurately identifies the visual impacts of the proposal, including views from the Domain, RBG, TWT, Lincoln Crescent and the WFW. - The Department considers the visual impact of the proposed development to be moderate to minor from many of the vantage points assessed in the VIA. - Where more significant visual impacts have been identified, the Department considers these impacts would be reasonably mitigated by the proposed building design which avoids a dominant built form and steps down with the site topography, proposed setbacks and landscaping, use of appropriate materials provision, and the provision of new public view opportunities.

- However, the Department considers the design of the proposed entry plaza canopy could be further rationalised to ensure it improves sightlines between the existing gallery building and the Woolloomooloo Gate and enhances its built form interface with its landscape setting.
- These issues are considered in **Section 6.4**.

Recommended Conditions/Response

Conditions include:

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| <ul style="list-style-type: none"> • The extension should be located elsewhere in Sydney • The extension should be located elsewhere around the existing gallery building | <ul style="list-style-type: none"> • Submission of a revised design for the entry plaza canopy that reconsiders its extent, its street alignment and orientation, and its setbacks to Art Gallery Road. • Convert the roof of gallery 1 to a green roof. • External materials to be endorsed by OEH. • Landscape plan for greening of the fuel bunker wall to be endorsed by OEH. |
| <ul style="list-style-type: none"> • Tree removal and loss of biodiversity • Lack of landscaping | <ul style="list-style-type: none"> • The proposed expansion of the AGNSW adjacent to the existing gallery building is consistent with a significant number of strategic planning strategies and policies. • The Department notes there are significant impediments, including appropriate site location, costs and organisational difficulties associated with locating an extension of the gallery at a separate location within Sydney. • The Department considers the proposed location of the extension to the north-eastern side of the gallery would provide the required space for the expansion and would allow for the adaptive re-use of the fuel bunker while minimising environmental and heritage impacts. Expansion to the rear (south-east) of the existing building is prohibited by lack of space while the location of the Eastern Suburbs railway line/tunnel, significant trees, the Domain playing fields and greater heritage impacts on the existing gallery building reasonably preclude expansion to the south-west side of the gallery. • The Department concludes the benefits of locating the proposed extension adjacent to the location of the existing gallery outweigh the disbenefits and that the proposed location is underpinned by sound locational and logistical justification. • These issues are considered in Section 6.2. • 124 trees are proposed to be removed with six of these evaluated as being of high value with the remaining 118 evaluated as being of either moderate, low or very low value. A further eight trees are to be relocated. • The Department engaged an arboricultural consultant to provide expert advice in relation to the proposed tree removal, tree transplantation and replacement tree planting scheme. • The Department considers the proposed development is located in the most appropriate location in proximity to the existing gallery and that some loss of trees is unavoidable. However, the design retains 88 trees within the site and the proposal includes the planting of 273 new trees. |

- The replacement trees would have an initial planting height of 4 m to 8 m and will range in maximum height from 5 m to over 30 m. The replacement trees will gradually replace the amenity of the trees to be removed with a greater overall amenity outcome achieved over time.
- OEH consider the proposal is acceptable in relation to biodiversity subject to replacement trees including some locally indigenous species (included as part of the approved landscape plans).
- Consistent with advice received by the Department's arboricultural expert, the Department concludes the proposed tree removal and tree replacement scheme are acceptable and the development includes works that would form part of an overall improved public domain outcome.
- These issues are considered in **Section 6.5**.

Recommended Conditions/Response

Conditions include:

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| <ul style="list-style-type: none"> • Poor architecture and urban design • Large size/bulk and scale of the building • Proximity of the building to Art Gallery Road | <ul style="list-style-type: none"> • Planting of a minimum 273 replacement trees, in accordance with the approved landscape plans. • Protection of trees to be retained and engagement of a level 5 arborist to ensure adequate tree protection methods are put in place. • The proposed building was the winning design of a design excellence competition. Noting opinions of building design are subjective, the Department considers the design excellence process was sound and considers the proposed design represents quality architecture, resulting in appropriate urban design outcomes. Comments provided by the NSW Government Architect are consistent with this view. • The Department considers the proposed development would sympathetically integrate with the existing gallery building and the surrounding character of the Domain. • The proposed entry pavilion would be setback between 12 m and 15 m from Art Gallery Road, including a 7 m to 8 m wide landscaped setback. A landscaped setback between 11 m and 23 m is proposed between gallery 2 and Art Gallery Road. The Department considers the proposed setbacks and landscaping are acceptable and would ensure the proposed entry pavilion and gallery 2 would not be overly dominant when viewed from Art Gallery Road. • The entry plaza canopy is orientated away from Art Gallery Road with setbacks ranging between 13 m and 22 m. The Department however considers the design of the proposed entry plaza canopy could be further rationalised to ensure it improves sightlines between the existing gallery building and the Woolloomooloo Gate and enhances its built form interface with its landscape setting. • Minimal overshadowing of public open space would occur. • The proposal incorporates significant public benefits such as improved through-site links and two public plazas. • These issues are considered in Section 6.4. |
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Recommended Conditions/Response

Conditions include:

- Submission of a revised design for the entry plaza canopy.
- Convert the roof of gallery 1 to a green roof.
- External materials to be endorsed by OEH.
- Greening of the fuel bunker wall.
- The design development and construction documentation to be subject to a design integrity process.

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| <ul style="list-style-type: none">• Adverse impact on the heritage of the Art Gallery and the RBG | <ul style="list-style-type: none">• The Department notes OEH are satisfied the proposed building would not diminish the heritage significance of the existing gallery building. In particular, the existing gallery building would remain as the main entry with the Sydney Modern providing a secondary role. Furthermore, an appropriate balance of uses would occur within the existing and proposed buildings.• OEH have accepted the proposed entry plaza canopy design. However, the Department considers the design of the proposed entry plaza canopy could be further rationalised to ensure it improves sightlines between the existing gallery building and the Woolloomooloo Gate.• Subject to a revised design for the entry plaza canopy, the Department considers the visual impact of the proposal on the heritage significance of the existing gallery building and the RBG and Domain would be minor.• These issues are considered in Section 6.6. |
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Recommended Conditions/Response

Conditions include:

- Submission of a revised design for the entry plaza canopy.
- External materials to be endorsed by OEH.
- Detailed design of internal works to the fuel bunker to be endorsed by OEH.
- Interpretation Strategy to be endorsed by OEH.
- Engagement of a historical archaeologist during construction.

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| <ul style="list-style-type: none">• Insufficient parking• Loss of existing parking• Increased traffic• Impacts from vehicles using proposed loading dock | <ul style="list-style-type: none">• The proposed works include the removal of 24 car parking spaces from the forecourt of the existing gallery building. No replacement or additional car parking is proposed as the nearby underground Domain car park contains sufficient capacity to cater for the anticipated increased demand for car parking.• The submitted TIA concludes increased traffic movements would have a negligible impact on the surrounding road network.• Due to the location of the proposed loading dock, increased traffic movements would occur on Lincoln Crescent. The increased movements however are relatively minor and would be unlikely to result in any adverse traffic impacts. In addition, subject to a condition requiring preparation and implementation of a Loading Dock Vehicular Management Plan (LDVMP), any |
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adverse impacts arising from operation of the loading dock would be minimised.

- These issues are considered in **Section 6.7**.

Recommended Conditions/Response

Conditions include:

- Prepare a LDVMP to be endorsed by TfNSW, RMS and Council.
- Erection of signage preventing right turn movements from Lincoln Crescent into Cowper Wharf Road.
- Provide 66 public bicycle parking spaces.
- Prepare a Green Travel Plan.
- The Applicant undertook community consultation prior to lodgement of the application (Appendix K of the EIS).
- The application was exhibited in accordance with statutory requirements from 16 November to 15 December 2017.
- All documents and submissions relevant to the proposal have been made publicly available throughout the assessment process.
- The Department's engagement is considered in **Section 5**.

- Lack of community consultation
- Construction noise and disruption
- Construction works are expected to take 28 months, commencing in 2019 and completed in 2021.
- Construction works would comply with DECCW Interim Construction Noise Guidelines subject to appropriate noise mitigation measures, including acoustic screening and mufflers.
- The construction works would be temporary and the noise and disruption impacts can be reasonably mitigated by conditions.
- These issues are considered in **Section 6.9**.

Recommended Conditions/Response

Conditions include:

- Prepare a Construction Environmental Management Plan, Construction Pedestrian Traffic Management Plan, Noise and Vibration Management Plan, and Air Quality and Odour Management Plan.
- Prepare a Community Consultation Strategy.
- Undertake environmental monitoring.
- Restriction of construction hours to 7 am to 6 pm Monday to Friday and 8 am to 3.30 pm Saturdays.
- Impacts from the sea water heat exchange system (SWHES)
- The proposed SWHES is similar to other systems operating in Sydney Harbour, including Sydney Opera House and Barangaroo.
- A Marine Impact Assessment submitted with the EIS and revised in the RTS, concludes the SWHES would not adversely impact the receiving waters of Sydney Harbour and would comply with water quality regulations. The EPA have raised no objections subject to recommended conditions.

- The only above ground element of the SWHES is a 950 mm high, 2.5 m diameter upper chamber located close to a cliff face to the north of Lincoln Crescent. The visual impact of the chamber would be negligible.
- Plant associated with the SWHES would be located internally within an underground plant room. Appropriate measures, as recommended in the Applicant's acoustic reports, can be conditioned to mitigate any potential noise impacts. This has been confirmed by the Department's technical specialist.
- A Maritime Archaeology Assessment Report, submitted as part of the RTSAR, concluded there are no potential impacts to marine archaeological deposits from the proposed SWHES works. OEHL have raised no objections subject to recommended conditions.
- This issue is considered in **Section 6.8**.

Recommended Conditions/Response

Conditions include:

• High cost of development • Appropriate use of government funding	• The detailed SWHES design to comply with the preliminary design details. • Prepare an Operational Noise and Vibration Management Plan. • Operational background noise limits. • Undertake environmental monitoring. • SWHES cleaning and waste disposal requirements. • Maritime Archaeology unexpected finds protocol. • The construction cost and funding of the development are not planning issues and therefore are not matters relevant to the Department's assessment.
• Insufficient justification for the development	• Due to inadequate exhibition space and constrained ceiling heights, the AGNSW is no longer competitive in attracting major exhibitions and has experienced a significant decline in visitation numbers since 2007. • The existing building is at capacity with no room for expansion within its current footprint. • The proposed development would provide a modern, significantly increased exhibition space capable of hosting major international exhibitions and would provide a prominent showcase for Aboriginal and Torres Strait Islander art. • This issue is considered in Section 3.5.
• Potential use of the building as a function centre	• The proposed development does not include any dedicated function facilities. The proposed 450 m² multi-purpose room (3.7% of the proposed GFA) would complement auditorium facilities in the existing gallery building and would provide a flexible space that can accommodate a diverse range of activities in events. The space would be available events held by schools, corporate members, benefactors and other stakeholders.

Recommended Conditions/Response

Conditions include:

- Multi-purpose room hours of operation restricted to 7 am to 10 pm with no use of outdoor areas at any time.
- Multi-purpose room maximum capacity of 510 persons.

• Impacts of reflective materials

- The RTS included a supplemental Reflectivity Report which contained a glare analysis from seven locations including TWT and WFW. The report concludes there would be no or very limited reflectivity impacts, with the exception of the exit of TWT resident car park from the north-eastern glazed wall of the multi-purpose hall.

- This issue is considered in **Section 6.4**.

Recommended Conditions/Response

Conditions include:

- The visible light reflectivity of the proposed external building materials must not exceed 20% and be designed to minimise glare.
- External colours to be subdued. Large areas of unshaded glass are to be avoided.
- The design of the north-eastern glazed wall of the multi-purpose room must be revised as recommended in the supplemental Reflectivity Report.

• Poor disability access

- The proposed building, sanitary facilities, plazas, pathways, courtyards and lifts would comply with BCA requirements.

Recommended Conditions/Response

Conditions include:

- Access and facilities for people with disabilities must be designed to comply with the BCA.

• Impacts on neighbouring properties from stormwater runoff

- A Drainage and Stormwater Report and Concept Stormwater Plan, were submitted with the EIS.
- Of rainwater falling on the building roof area, 77% would be reused on-site. On-site detention is proposed which is sized to achieve a neutral or beneficial impact compared with existing stormwater discharge from the site.
- The design of the proposed loading dock and lower level of the proposed fuel bunker have been designed to prevent flooding.
- This issue is considered in **Section 6.9**.

Recommended Conditions/Response

Conditions include:

- Prepare a Water and Stormwater Management Plan to be endorsed by Council.

• Proposal does not comply with the *Royal Botanic Gardens and*

- The Department considers the proposed development is consistent with the principle objects of the RBGDT Act because:

- the site forms part of a cultural precinct on the eastern edge of the Domain and is appropriately located within Trust lands
- the expanded AGNSW would improve the cultural and educational value of the site
- much of the site would remain publicly accessible
- the proposed works would provide improved access to and within the Domain allowing for improved use and enjoyment of Trust land
- although 124 trees would be removed, the majority are of low or medium amenity value and provide limited foraging opportunities for native fauna. The proposed landscape works would result in 273 new trees providing a greater habitat for native fauna species in the future
- the development would improve the heritage value of the land by allowing public access to the State heritage listed fuel bunker.

- This issue is considered in **Section 4.3.**

• Impacts from external lighting

- An Exterior Lighting Report, submitted with the EIS, confirms the proposed lighting would comply with relevant guidelines, including Council's Lighting Masterplan, AS1158 Lighting for Roads and Public Spaces, and AS4282 Control of obtrusive effects of outdoor lighting.

- This issue is considered in **Section 6.9.**

Recommended Conditions/Response

Conditions include:

- All external lighting to comply with the recommendations of the Exterior Lighting Report.

• Operational noise impacts

- An Acoustic Report, submitted with the EIS, recommends design treatments to ensure compliance with applicable noise compliance criteria.
- The Department's technical specialist considers operational noise would not impact residents of the nearest residential property (the TWT) subject to conditions.

- Potential noise impacts from operation of the loading dock and SWHES would be minimal and suitably mitigated by conditions.

- This issue is considered in **Section 6.9.**

Recommended Conditions/Response

Conditions include:

- Prepare an Operational Noise and Vibration Management Plan.
- Operational background noise limits. Undertake environmental monitoring.
- Maximum hours of operation, including the multi-purpose room (7 am to 10 pm), café (7 am to midnight) and external terraces (7 am to 10 pm).
- Maximum capacity restrictions for the multi-purpose room (510 persons), café (150 persons) and café terrace (500 persons).
- Doors and windows of the café and multi-purpose room to be closed after 10 pm.

- No amplified music to be played outdoors. Indoor amplified music not to be directed towards the public domain or outdoor areas.
 - Prepare a Loading Dock Vehicular Management Plan to be endorsed by TfNSW, RMS and Council.
-
- Privacy impacts
 - Although the proposed development includes east facing roof terraces and some glazed elevations, the Department considers no adverse privacy impacts would occur, predominantly due to:
 - the distance to the TWT exceeds 40 m
 - properties within the TWT predominantly face east and are screened by a separate two-storey building containing a lobby, communal spaces and commercial tenancies
 - the multi-purpose room is orientated to the north-east and no windows are proposed in the eastern elevation of gallery 3.
 - This issue is considered in **Section 6.4**.

Appendix D – Statutory considerations

In line with the requirements of section 4.15 of the EP&A Act, the Department's assessment of the project has provided a detailed consideration to a number of statutory requirements. These include:

- the objects found in section 1.3 of the EP&A Act; and
- the matters listed under section 4.15(1) of the EP&A Act, including applicable environmental planning instruments and regulations.

The Department has considered all of these matters in its assessment of the project and has provided a summary of this assessment below.

Objects of the EP&A Act	Summary
(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	The proposed expansion of the AGNSW is for a public purpose and would promote the social and economic welfare of the community through enhancement of an existing state significant cultural institution and associated visitor and tourism growth. The proposal further establishes the Domain as a cultural destination and forms a key component of the CBD cultural ribbon. In addition, there would be improved community facilities through improved through-site links, accessibility and public domain outcomes. Environmental impacts would be balanced by ecologically sensitive design, replacement tree planting and landscaping works.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment	The principles of ecologically sustainable development are considered below.
(c) to promote the orderly and economic use and development of land	With the exception of the works over the land bridge, the proposed land uses are permissible (see Section 4.2). The merits of the proposal are considered in Section 6 of this report.
(d) to promote the delivery and maintenance of affordable housing	The provision/maintenance of affordable housing is not relevant to the proposal.
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	The proposed development, in conjunction with the Department's recommended conditions, would not have adverse impacts to threatened and other species of native animals and plants, ecological communities and their habitats. None of the proposed 124 trees to be removed have been found to have any special ecological significance. Suitable offsets, including the planting of 273 predominantly native trees, are proposed.

(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)	OEH have been consulted on the proposed development and have raised no objection to the revised proposal subject to conditions (see Section 6.4). Heritage issues are considered in Section 6.6 .
(g) to promote good design and amenity of the built environment	The proposed expansion of the AGNSW was subject to a design excellence process and the proposed winning design is considered by the Department to promote good design. The proposed design and amenity impacts on the surrounding environment are considered in Section 6 .
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants	Recommended conditions would ensure the proposed development would be constructed in compliance with all relevant building codes and health and safety requirements.
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State	The proposal is SSD and therefore the Minister is the consent authority. The Department consulted with Council and other relevant agencies on the proposal.
(j) to provide increased opportunity for community participation in environmental planning and assessment.	Section 5 of this report sets out details of the Department's public exhibition of the proposal.

Section 4.15(1) Evaluation

Summary

(a)(i) any environmental planning instrument	The proposed development is partly permissible under the provisions of SLEP2012 (see Section 4.2). The Department's consideration of other relevant EPIs is provided below.
(a)(ii) any proposed instrument	See below.
(a)(iii) any development control plan	Under clause 11 of the SRD SEPP, development control plans (DCPs) do not apply to SSD. Notwithstanding, consideration has been given to the Sydney Development Control Plan 2012 (SDCP 2012) where relevant.
(a)(iia) any planning agreement	Not applicable.
(a)(iv) the regulations <i>Refer Division 8 of the EP&A Regulation</i>	The application satisfactorily meets the relevant requirements of the Regulation, including the procedures relating to applications (Part 6 of the EP&A Regulation), public participation procedures for SSD and Schedule 2 of the EP&A Regulation relating to EIS.
(a)(v) any coastal zone management plan	Not applicable.

(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	Appropriately mitigated or conditioned - refer to Section 6 of this report.
(c) the suitability of the site for the development	The site is suitable for the development as discussed in Sections 4 and 6 of this report.
(d) any submissions	Consideration has been given to the submissions received during and after the EIS exhibition period and following lodgement of the RTS. See Sections 5 and 6 of this report.
(e) the public interest	Refer to Section 6 of this report.
Biodiversity values exempt if:	Not applicable.
(a) On biodiversity certified land	
(b) Biobanking Statement exists	

Environmental Planning Instruments

State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP)

The proposed development constitutes State significant development under clause 6 of Schedule 2 of the SRD SEPP as it is development for a cultural facility (art gallery) with a CIV in excess of \$30 million.

State Environmental Planning Policy (Infrastructure) 2007

The ISEPP aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency, identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and providing for consultation with relevant public authorities about certain development during the assessment process.

Relevant clauses applying to the proposed development are:

- Clause 101 - Development with frontage to a classified road: The site has frontage to the Eastern Distributor as it is partially located on the land bridge above. However, the proposed development does not rely on access from the Eastern Distributor and the development will not compromise the ongoing operation of the Eastern Distributor. Furthermore, the land bridge has been found to be structurally capable of accommodating the development.
- Clause 103 - Excavation in or immediately adjacent to corridors: Referral to Roads and Maritime Services (RMS) is required for excavation of a depth of at least 3 m on land forming part of the Eastern Distributor road corridor. Although the soil depth of the land bridge is unknown and may not exceed a depth of 3 m, the application was referred to RMS for comment.
- Clause 104 - Traffic-generating development: As identified in Schedule 3 of the ISEPP, the proposal constitutes a traffic generating development as it would generate over 200 vehicle movements. The application was referred to RMS for comment.

The site is located at the eastern edge of the CBD and can rely upon existing access to bus, rail and ferry public transport services. The existing AGNSW provides no public car parking, instead predominantly relying on the adjacent Domain car park. Although the proposed development does not include any car parking, the Traffic Impact Assessment (TIA) demonstrates there is existing capacity available within the Domain car park to cater for the increased parking demand arising from the proposed development.

The proposal was referred to RMS and Transport for NSW (TfNSW) for comment and their comments are summarised in **Section 5** of this report. The Department considers the proposal to be consistent with the ISEPP given the consultation and consideration of the issues raised by RMS and TfNSW has been undertaken in the Department's assessment in **Section 6** of this report.

State Environmental Planning Policy No. 55 - Remediation of Land

SEPP 55 aims to ensure that potential contamination issues are considered in the determination of a development application. SEPP 55 requires the consent authority to consider whether the land is contaminated, and if so, whether the land is suitable for the purpose for the proposed development.

With the exception of the fuel bunker, the development site has a history of use for open space purposes. The fuel bunker was remediated in the late 1990s and a subsequent Site Audit concluded the fuel bunker was suitable for commercial/industrial use subject to ongoing groundwater monitoring. Recent air and groundwater sampling of the fuel bunker did not identify any contamination that would present a risk to future users.

A Stage 1 Preliminary Environmental Study was included with the EIS. The Assessment confirms the site is suitable for the proposed art gallery development, subject to remediation and validation in accordance with the Remedial Action Plan (RAP).

The Department is satisfied the site is suitable with regard to the provisions of SEPP 55 for the proposed art gallery use subject to a condition requiring compliance with the recommendations of the RAP.

Draft Remediation of Land State Environmental Planning Policy

The Department is reviewing all State Environmental Planning Policies to ensure they remain effective and relevant and SEPP 55 has been reviewed as part of that program. The Department recently published the draft Remediation of Land State Environmental Planning Policy (Remediation SEPP), which was exhibited until April 2018.

Once adopted, the Remediation SEPP will retain elements of SEPP 55, and add the following provisions to establish a modern approach to the management of contaminated land:

- require all remediation work that is to be carried out without development consent, to be reviewed and certified by a certified contaminated land consultant
- categorise remediation work based on the scale, risk and complexity of the work
- require environmental management plans relating to post-remediation management or ongoing management of on-site to be provided to Council.

The new SEPP will not include any strategic planning objectives or provisions. Strategic planning matters will instead be dealt with through a direction under section 117 of the EP&A Act.

The Department considers the development is consistent with the draft Remediation SEPP subject to a condition requiring compliance with the recommendations of the RAP.

State Environmental Planning Policy (Coastal Management) 2018 (Coastal SEPP)

The Coastal SEPP commenced on 3 April 2018. The Coastal SEPP consolidates and replaces SEPP 14 (Coastal Wetlands), SEPP 26 (Littoral Rainforests) and SEPP 71 (Coastal Protection).

The Coastal Management SEPP gives effect to the objectives of the *Coastal Management Act 2016* (NSW) from a land use planning perspective. It defines four coastal management areas and provides assessment criteria tailored for each coastal management area. The consent authority must apply those criteria when assessing proposals for development that fall within one or more of the mapped areas.

The Coastal SEPP identifies the site as being partly located within the Coastal environment area and Coastal use area. Land within these areas are subject to clause 13 and 14, however as the site is located on land within the Foreshores and Waterways Area of the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005, clauses 13 and 14 of the Coastal SEPP do not apply.

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP 2005)

SREP 2005 provides planning principles for development within the Sydney Harbour catchment. The site is located within the Sydney Harbour Catchment area. The proposal is consistent with the relevant Planning Principles of SREP 2005 and would not have any significant adverse impact on the Sydney Harbour Catchment as considered in the table below.

Table 1 | Department's consideration of the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (SREP 2005)

Criteria	Department's consideration	Compliance
Clause 2 Aims of the Plan This clause sets out the aims with respect to the Sydney Harbour Catchment and establishes the principles for the purpose of enabling these aims to be achieved.	The proposal is considered to be consistent with the aims of the Plan for the following reasons: • The catchment, foreshores and waterways will not be adversely affected by the proposal • The proposed development will sufficiently manage its impact on the natural environment subject to conditions of consent • The proposal will contribute to the culture and vibrancy of the area • The use of a seawater heat exchange system, in lieu of traditional cooling	Yes

towers, will assist in achieving a high quality visual outcome. Environmental impacts from the seawater heat exchange system would be negligible (see **Section 6.8**).

Clause 3 Land to which plan applies Within the Sydney Harbour Catchment, particular provisions of this plan apply to the Foreshores and Waterways Area.	The site is located within the Foreshores and Waterways Area as identified in the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 zoning map.	Yes
Clause 13 Sydney Harbour Catchment Provides a set of planning principles for land within the Sydney Harbour Catchment.	The proposal is consistent with the planning principles for the Sydney Harbour Catchment for the following reasons: • A Stormwater Report included in the EIS proposes a suite of water quality improvement measures for the site which would benefit the catchment. • The development would sufficiently manage its impact on the environment during construction subject to recommended conditions of consent. • A Marine Impact Assessment, included in the EIS and supplemented in the RTS, confirms no adverse ecological and hydrological impacts would occur • It would protect hydrological processes and natural drainage systems subject to recommended conditions of consent. • The development would maintain the visual qualities of Sydney Harbour. • The development would minimise disturbance of acid sulfate soils if uncovered during construction. • The cumulative impacts of the development on the catchment would be minimal.	Yes
Clause 14 Foreshores and Waterways Area Provides a set of planning principles for land within the Foreshores and Waterways Area.	The site is located within the Foreshores and Waterways Area and is consistent with the planning principles for the following reasons:	Yes

	• The proposal would result in an acceptable visual outcome when viewed from the foreshore. • The proposal will not limit public access to and along the foreshore.	
Clause 15 Heritage conservation Provides a set of planning principles for heritage conservation	The site is located within the Domain and adjacent to the Royal Botanic Gardens (RBG), both State Heritage listed items. OEH have raised no objection to the proposal. The proposal is consistent with the heritage planning principles for the following reasons: • The heritage significance of the Domain and RBG will be recognised and conserved. • The proposal will maintain the cultural qualities of the Foreshores and Waterways Area. • Although impacts might arise from the proposed trenching works, underground plant room and new opening in the foreshore retaining wall, these can be mitigated by recommended conditions of consent. • The fabric, settings, relics associated with the heritage significance of the heritage items will be protected subject to recommended conditions of consent.	Yes
Clause 16 Zones indicated on Zoning Map Land is zoned in accordance with the zoning map.	The seawater heat exchange system (SWHES) extends into Woolloomooloo Bay and is subject to zone W6 – Scenic Water Active Use. The land portion of the site is not subject to a zone under the SREP 2005 zoning map.	Yes
Clause 17 Zoning objectives The objectives of the W1 – Maritime Waters Zone are as follows:	The proposed SWHES is consistent with these objective as it would: • Not alienate waters from public use or cause navigational conflicts. • Does not involve a structure over water. • The Marine Impact Assessment concludes no adverse impacts would occur to natural features or aquatic habitat and would not impair public access.	Yes

and efficient movement of, commercial shipping, public water transport and maritime industry operations to promote equitable use of the waterway, including use by passive recreation craft.

- Would not impact adversely on views to and from waters or the scenic values of the locality.

Clause 18 Development control in the waterways

Provides controls for various development types in the waterways

The SWHES and gallery are not defined uses within the land use table. An assessment is therefore required with the objectives of the zone. The assessment concludes the proposed works are consistent with the objectives of the W6 zone and may be carried out with consent.

Clause 20 General

The matters referred to in Division 3 must be considered by the consent authority.

The Department has considered the relevant matters below.

Yes

Clause 21 Biodiversity, ecology & environmental protection

The consent authority must take into consideration the matters listed in the clause in relation to biodiversity, ecology and environmental protection.

The proposal would have some adverse impact on the biodiversity or ecology of the area due to the removal of 124 trees. However, the proposed planting of 273 replacement trees and creation of an endemic Sydney Sandstone Woodland ecological community would provide an acceptable biodiversity outcome. OEH have raised no objection to the proposed biodiversity outcomes.

Yes

Clause 22 Public access to, and use of, foreshore and waterways

The consent authority must take into consideration the matters listed in this clause in relation to public access to, and use of, the foreshores and waterways.

The proposal would maintain public access along the foreshore without adversely impacting on watercourses, wetlands, riparian lands or remnant vegetation.

Yes

Clause 23 Maintenance of a working harbour

The consent authority must take into consideration the matters listed in relation to the maintenance of a working harbour.

The proposal would not reduce the capacity of the Sydney Harbour to function as a working harbour.

Yes

Clause 24 Interrelationship of waterway and foreshore uses

The consent authority must take into consideration the matters listed in this clause in relation to the interrelationship of waterway and foreshore uses.

The proposal would not have any adverse impacts on the use of the waterway.

Yes

Clause 25 Foreshore and waterways scenic quality The consent authority must take into consideration the matters listed in relation to the maintenance, protection and enhancement of the scenic quality of foreshores and waterways.	The visual impact of the proposed building would have no adverse impact on the scenic quality of the foreshore and waterway.	Yes
Clause 26 Maintenance, protection and enhancement of views The consent authority must take into consideration the matters listed in relation to the maintenance, protection and enhancement of views.	The location, height and bulk of the proposed building is acceptable. View impacts of the proposal have been discussed in Section 6.4.	Yes
Clause 29 Consultation required for certain development applications A consent authority must not grant consent to a DA unless it has referred and considered the views of the Advisory Committee.	The proposal was not of a nature requiring referral to the Advisory Committee.	Yes
Clause 53 Objectives The relevant objectives of this plan in relation to heritage are: • To conserve the environmental heritage of the land • To conserve the heritage significance of existing significant fabric, relics, settings and views associated with the heritage significance of heritage items • To ensure that archaeological sites and place of Aboriginal heritage significance are conserved	The Domain and RBG are listed as State Heritage listed items. The existing gallery building is listed as a local heritage item. The Department considers the proposal is consistent with the heritage objectives as considered in Section 6.6. No sites of Aboriginal heritage significance have been identified. OEH have confirmed the proposal is acceptable in relation to Aboriginal heritage	Yes
Clause 54 Land to which Part applies This Part applies in respect of the land shown on the Heritage Map and to the heritage items identified on that map	The proposed SWHES is not proposed in the vicinity of a nominated heritage item, the closest being the former Robinson Baths to the north of the proposed works.	Yes
Clause 55 Protection of heritage items Development consent is required for the altering of a heritage item by making structural or non-structural changes to its exterior, including changes to its detail, fabric, finish or appearance.	The proposal would not have an adverse impact on any heritage item listed under SREP 2005.	Yes

Clause 58A Land to which Division applies	The majority of the site is located within the Sydney Opera House buffer zone.	Yes

Clause 59B Protection of world heritage value of Sydney Opera House

The consent authority must take into consideration the matters listed in relation to protection of the world heritage value of the Sydney Opera House

The dense planting of the RBG and Domain screen any views of the proposed development from the north.

The proposed development would therefore not reduce the visual prominence or obstruct or diminish views/vistas of the Sydney Opera House.

Clause 59 Development in vicinity of heritage items

The consent authority must assess the impact of the proposed development on the heritage significance of heritage items within the vicinity of the development.

The proposed development would not have an adverse impact on any heritage item listed under SREP 2005 within the vicinity of the site.

Yes

Clause 61 Objectives

The objectives in relation to wetlands are as follows:

- To preserve, protect and encourage the restoration and rehabilitation of wetlands
- To maintain and restore the health and viability of wetlands
- To prevent the fragmentation of wetlands
- To preserve the scenic qualities of wetlands
- To ensure the wetlands continue to perform their natural ecological functions

Although part of the proposed SWHES falls within a Wetlands Protection Area, the Marine Impact Assessment found there is no evidence of wetlands within the vicinity of the proposed works.

Yes

Clause 63 Matters for consideration

The consent authority must take into consideration the matters listed in relation to the wetlands protection.

As confirmed by the Marine Impact Assessment, there is no evidence of wetlands within the vicinity of the proposed works

Yes

Draft State Environmental Planning Policy Environment (Environment SEPP)

The provisions of SREP 2005 are proposed to be included in the Environment SEPP, which is currently in draft form.

The relevant matters for consideration and general heritage provisions are proposed to remain as per those in the current SREP 2005 and therefore the proposed development would be consistent with the intended effect of this section of the draft SEPP.

The Sydney Harbour Foreshores and Waterway Area DCP 2005 is also proposed to be transitioned into one or more guidelines that would cover the current content and provide updated guidance to consent authorities based on design principles and landscape character. However, these guidelines are currently not in draft form.

Sydney Harbour Foreshores and Waterway Area DCP 2005 (DCP)

The Sydney Harbour Foreshore and Waterways Area Development Control Plan (the DCP) complements SREP 2005 and provides more detailed design parameters for development within the foreshore area of Sydney Harbour.

The site is within the defined Foreshores and Waterways Area and is therefore subject to the controls in the DCP. The DCP includes aims and performance criteria in relation to ecological assessment, landscape assessment and design guidelines for development within the area.

The DCP requires new buildings to not obstruct views and vistas from public places to the waterway and should not obstruct views of landmarks (located within 3 km of the site) which include the RBG and the Woolloomooloo Finger Wharf. The DCP also requires consideration of built form including the contrast between existing and proposed buildings and the need to enhance the setting of the existing building. Issues regarding built form and visual impacts are considered in **Section 6.4**.

The location of the proposed Sydney Modern building is not affected by any ecological or specific landscape character area and is separated from the water's edge by over 70 m with a residential apartment building located between the development and the foreshore. As such, it would not result in any impacts to the harbour foreshore.

The Department considers the proposed SWHES satisfies the objectives of the DCP. Issues in relation to the SWHES have been considered in **Section 6.8**.

The Department considers the proposed development to be generally consistent with the DCP regarding siting of buildings, built form, landscaping, and access to waterways.

Sydney Local Environmental Plan (SLEP) 2012

The SLEP 2012 aims to support the City of Sydney as an important location for education and cultural activities and tourism. It also aims to conserve the environmental heritage of the LGA and to protect and enhance the enjoyment of its natural environment, harbour setting and recreation areas.

The Department considers the proposed development satisfied the relevant provisions of SLEP 2012 as it would:

- attract visitors to Central Sydney and the Domain
- support the City of Sydney as an important location for educational, cultural and tourism activities
- promote Ecologically Sustainable Development through use of best practice initiatives
- encourage economic growth through increased tourism and jobs

- be located within walking distance of public transport and improves pedestrian and bicycling accessibility
- provide free public access and associated public benefits
- achieve design excellence through the provision of a building that was selected as the winning design of an international design competition
- mitigate potential adverse impacts on the heritage significance of the RBG, Domain and the existing gallery building
- enhance the natural environment of the Domain in the longer term through increased tree planting and improved horticultural outcomes.

The Department has consulted with Council throughout the assessment process and has considered all relevant provisions of the SLEP 2012 and those matters raised by Council in its assessment of the development (refer to Section 6). The proposed is partly prohibited which is discussed in **Section 4.2**.

Clause 7.20(2) of SLEP 2012 states the consent authority cannot grant consent for the development (due to the size of the site within the CBD) unless a development control plan has been prepared as part of a staged SSD. In June 2016, the then Minister for Planning agreed to waive this requirement. This is discussed in **Section 4.2**.

The Department concludes the development is consistent with the relevant aims and provisions of the SLEP 2012.

Ecologically Sustainable Development

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 1.3(b) of that Act states that ESD requires the effective integration of economic, environmental and social considerations in decision-making processes and that ESD can be achieved through the implementation of:

- (a) the precautionary principle
- (b) inter-generational equity
- (c) conservation of biological diversity and ecological integrity
- (d) improved valuation, pricing and incentive mechanisms.

The Department has assessed the proposed development in relation to the ESD principles and has made the following conclusions:

- **Precautionary Principle** - the site has been appropriately planned for development and would not result in any serious or irreversible environmental damage.
- **Inter-Generational Equity** - the proposal would not have adverse impacts on the environment for future generations.
- **Biodiversity Principle** – although the proposal involves the removal of trees, there would be no significant flora, fauna or biodiversity impacts. Replacement tree planting would mitigate the proposed removal of trees and would result in an improved biodiversity outcome in the longer term.

- **Valuation Principle** – the project is the first art gallery to target a 6-Star Green Star Rating and the proposal includes a number of energy, water and waste reducing measures to reduce the ongoing cost, resource and energy requirements of the development. These include green roofs, water efficiency and harvesting, photovoltaic arrays, the SWHES, and high efficiency smart ventilation with heat recovery.

Appendix E – Recommended instrument of consent

The recommended conditions of consent for SSD 6471 can be found on the Department's website at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6471