



Powerhouse Ultimo Renewal

Concept Proposal
State Significant Development Assessment SSD-
32927319

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Glossary

Abbreviation	Definition
ACHAR	Aboriginal Cultural Heritage Assessment Report
AHD	Australian Height Datum
BCA	Building Code of Australia
CIV	Capital Investment Value
Council	City of Sydney
Department	Department of Planning and Environment
DES	Design Excellence Strategy
EHG	Environment and Heritage Group
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 2021
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
Heritage	Heritage NSW, Department of Premier and Cabinet
LEP	Local Environmental Plan
Minister	Minister for Planning
RMS	Roads and Maritime Services, TfNSW
Planning Secretary	Secretary of the Department of Planning and Environment
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
SEARs	Planning Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SLEP	Sydney Local Environmental Plan 2012

SSD State Significant Development

TfNSW Transport for NSW

Executive Summary

This report provides an assessment of the State Significant Development (SSD) application number 32927319 seeking Stage 1 concept approval for the the renewal of the Powerhouse Museum, Ultimo within the City of Sydney local government area (LGA).

The Powerhouse Museum at Ultimo would operate alongside and complement the Museum of Applied Arts and Sciences (MAAS) facilities including Powerhouse Parramatta, Powerhouse Castle Hill, the Sydney Observatory and Powerhouse Digital.

The Application seeks consent for:

- conservation and adaptive reuse of local and State heritage-listed buildings on the site
- maximum building envelopes within three proposed development zones (1, 2 and 3) and above the Switch House, which would allow for any new buildings and demolition, alterations or additions to existing buildings within the envelopes (including the Wran Building)
- use of the site as an 'information and education facility' including museum, exhibition and learning spaces and ancillary uses including office, retail and temporary accommodation.

The application being assessed is a 'concept development application' which does not include any Stage 1 development for building or construction works. All future development would be subject to separate applications.

The Concept Development Application has been lodged by Infrastructure NSW (the Applicant). Infrastructure NSW is a public authority and the Minister for Planning is the consent authority pursuant to section 4.5(a) of the Environmental Planning and Assessment Act 1979 (EP&A Act) and section 2.7(1) of the State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP).

Engagement

The Department of Planning and Environment (the Department) publicly exhibited the application between 21 June and 21 July 2022 (31 days) and received 109 unique submissions, comprising a submission (comments) from the City of Sydney Council, 96 objections, six in support of the proposal and six providing comments. Of these, 15 unique submissions were received from community interest groups. The Department also received advice from seven government agencies.

The key issues raised in public submissions relate to the proposed focus of the museum and its exhibits, heritage impacts, the social and economic impacts, the bulk and scale of the proposal, the consultation process and potential impacts to the 1988 alterations and additions including the Wran Building.

Council did not object to the proposal, but it provided comments relating primarily to urban design and heritage impacts. Government agencies provided comments in relation to heritage, Aboriginal cultural heritage, land contamination, transport and traffic, flooding, utilities, services and infrastructure.

In response to the matters raised submissions, the Applicant amended the application by removing the envelopes over the State and locally listed buildings, with the exception of the Switch House which it reduced in size to be the same height as the existing modern rooftop/mezzanine addition. It also reduced the maximum height of the building envelope in the north-eastern corner of the site to sit generally at the same level as the Pier Street viaduct to limit visual impacts from the north.

The Applicant also made revisions to the Design Excellence Strategy and Urban Design Guidelines and Conservation Management Plan to incorporate additional detailed design guidance for future development.

Assessment

The Department has assessed the Application in accordance with section 4.15(1) of the Environmental Planning and Assessment Act 1979 (EP&A Act) and carefully considered the issues raised in submissions and the Applicant's response to those submissions.

The Department considers the Application should be granted development consent for the following reasons:

- it is consistent with the Great Sydney Region Plan and Eastern Harbour City District Plan's vision to increase the global competitiveness of the Harbour CBD and it would contribute to the growth of knowledge-based jobs, innovation and cultural and community activities
- the proposal would provide social and economic benefits within the local area and more broadly, through the refurbishment and expansion of the exhibition and public spaces, transforming Powerhouse Ultimo into an international standard museum and exhibition space
- the proposal is compliant with the height and density controls applying to the site and conditions of consent and future environmental assessment requirements (FEARs) are recommended to ensure the overall gross floor area is limited to 40,000 m² and the maximum height of 30.8 m in zones 1 and 2 is only achievable subject to a future DA achieving design excellence
- the future Stage 2 application will be informed by a Design Excellence Strategy (DES) endorsed by the Government Architect NSW and the Department. The DES, together with the building envelope parameters, urban design guidelines and recommended FEARs, provide a sound framework for the development to ensure the future detailed design achieves design excellence
- the proposal retains the State and locally listed heritage items on the site and FEARs are recommended to ensure any alterations or additions to the fabric of any building within the Heritage Core retain and protect significant heritage fabric, key architectural features and in-situ heritage elements. In addition, any new building elements must be designed to retain and improve the visibility of the external facades of the heritage core
- while the Department appreciates the concerns raised about the potential demolition of the Wran Building it considers the proposal is acceptable for the following reasons:
 - the Wran Building is not State or locally heritage listed and Heritage NSW has confirmed that the National Trust's nomination to list the whole site on the State Heritage Register is not being progressed at this time
 - the potential demolition of the Wran Building would not alter the significance of the history of the site, the significance of the existing heritage listed items or the continued use of the site as a museum
 - it would offer an opportunity to redevelop and expand the Powerhouse while minimising visual and physical impacts of any building form and maximising and enhancing the public domain on and around the site
 - it would offer the opportunity to significantly increase activation and open up views to the significant external facades of the heritage items on the site

- the proposal would create a minimum of 2,200m² of public open space and associated public domain on the site, including one area of at least 1,800m² which will provide a space for gathering, events and museum programming. In recognition of the existing inner-city context of the site and existing levels of hardstand and built up surfaces on the site, FEARs are also recommended to increase deep soil planting to a minimum of 5% of the site and maximise shade tree planting and other greenery of the site
- FEARs are recommended to manage and mitigate impacts in relation to Aboriginal and non-Aboriginal archaeology, traffic, access and servicing, flooding, overshadowing, noise and vibration, wind, contamination and construction
- the proposal would provide significant public benefits including the renewal of the existing museum in an accessible inner-city location, new public open spaces, improved public domain, and creation of approximately 440 direct construction and up to 200 direct on-going operational jobs.

Conclusion

Following its detailed assessment, the Department considers the proposal is acceptable as it is consistent with the strategic planning framework adopted for the site and it would deliver significant social and economic benefits through the renewal of the Powerhouse into an international standard cultural facility.

The issues raised by public authorities, Council and the community have been addressed in the proposal, the Department's assessment report and/or by the recommended conditions of consent.

For the reasons outlined above, the Department is satisfied the proposal is in the public interest and recommends that the SSD application be approved subject to conditions.

Contents

1	Introduction	1
1.1	The site.....	1
1.2	Surrounding area.....	4
2	The Proposed development.....	6
2.1	Proposed development	6
2.2	Applicant’s justification for project	9
2.3	Reference design	10
3	Strategic context.....	12
4	Statutory Context.....	14
4.1	State significant Development.....	14
4.2	Consent Authority.....	14
4.3	Permissibility	14
4.4	Secretary’s Environment Assessment Requirements.....	14
4.5	Biodiversity Development Assessment Report	14
4.6	Mandatory Matters for Consideration.....	15
5	Engagement.....	16
5.1	Department’s engagement.....	16
5.2	Council submission and agency advice	16
5.3	Summary of public submissions.....	20
5.4	Response to submissions	22
5.5	Further public submissions to the RtS	23
6	Assessment	25
6.1	Design Excellence.....	25
6.2	Built form	27
6.2.2	Urban design guidelines.....	29
6.3	Heritage.....	30
6.3.1	Heritage Core	31
6.3.2	Zone 1	33
6.3.3	Zone 2, including the Wran Building	34
6.3.4	Zone 3	36
6.3.5	Conservation Management Plan.....	37
6.4.6	Conclusion.....	39
6.4	Amenity	39
8.6.6	Visual impacts	39
6.4.2	Overshadowing	43
6.5	Public domain.....	45

8.6.6	Open space provision, design and function	45
6.5.2	Pedestrian connectivity	47
6.5.3	Landscaping	49
6.6	Access and transport	51
8.6.6	Travel demand	51
6.6.2	Traffic impacts	51
6.6.3	Servicing.....	52
6.6.4	Car parking.....	52
6.6.5	Bicycle parking	53
6.6.6	Charter bus parking.....	54
6.7	Flooding.....	55
6.8	Other issues	57
7	Evaluation.....	67
8	Recommendation.....	69
9	Determination.....	70
	Appendices	71
	Appendix A – List of referenced documents	71
	Appendix B – Community Views for Draft Notice of Decision	72
	Appendix C – Statutory considerations.....	76
	Appendix D – Recommended Instrument of Consent	86

1 Introduction

1.1 The site

The site is located at 500 Harris Street, Ultimo within the City of Sydney Local Government Area (LGA). The site is at the northern end of The Goods Line from Central Station and is bound by Pier Street to the north, Darling Drive to the east, Mary Ann Street to the south and Harris Street to the west (**Figure 1** and **2**).

Key characteristics of the site and surrounding area are summarised below in **Table 1** and **Figures 1** and **2** below.

Table 1 | Key characteristics of the site

Characteristic	Description
Address	500 Harris Street, Ultimo
Legal description	Lot 1 DP 631345, Lot 1 DP 781732, Lot 3 DP 631345, Lot 37 DP 822345 and Lot 1 DP 770031
Site area	2.437 hectares
Existing development	<p>The project site contains several existing buildings including the Wran Building fronting Harris Street, the Ultimo Power House buildings at Pier Street, the café building to the south of the Power House at the northern end of The Goods Line and the former Ultimo Post Office at the corner of Harris Street and Pier Street (Figure 3).</p> <p>The Harwood Building, which is located on the larger Powerhouse site, does not form part of the proposed development.</p>
Surrounding roads	The project site has frontages to Pier Street to the north, Pyrmont Street to the north-east, Harris Street to the west and Macarthur Street to the south.
Topography	The topography of the site varies by up to 9 m between Harris Street on the west of the site and The Goods Line to the east. Existing buildings step across the site in response to this slope. There is a sharp drop from the eastern edge of the site towards Darling Park.
Existing access	Vehicle access is obtained from Pyrmont Street (underneath the Pier Street overpass), Mary Ann Street and Macarthur Street. Loading and servicing occurs from Macarthur Street.
Public transport	<ul style="list-style-type: none">• The Exhibition Centre light rail stop is located approximately 5 minutes walking distance of the site• Central Station and Town Hall Station are approximately 10 minutes walking distance of the site• Bus services run along Harris Street adjacent to the site. Railway Square bus terminus is also within walking distance via The Goods Line
Heritage	The site contains two heritage listed items, being the Ultimo Power House and the former Ultimo Post Office. Both items are listed in Schedule 5 of the Sydney

Characteristic	Description
	Local Environmental Plan 2012 and on the State Heritage Register under the <i>Heritage Act 1977</i>
Flooding	The site is generally flood free with low flood risk around the development site. Low flood hazard and shallow flood depths are experienced in the external road system
Soil and Water	A Preliminary Site Investigation has been undertaken for the site, which found that across the site, eight metal contaminants were identified in soil and ground water samples above criteria
Easements/covenants	The site is subject to a number of existing easements relating to access and maintenance of buildings to be extinguished/modified as part the Stage 2 of the development. There are no restrictive covenants registered to the site.

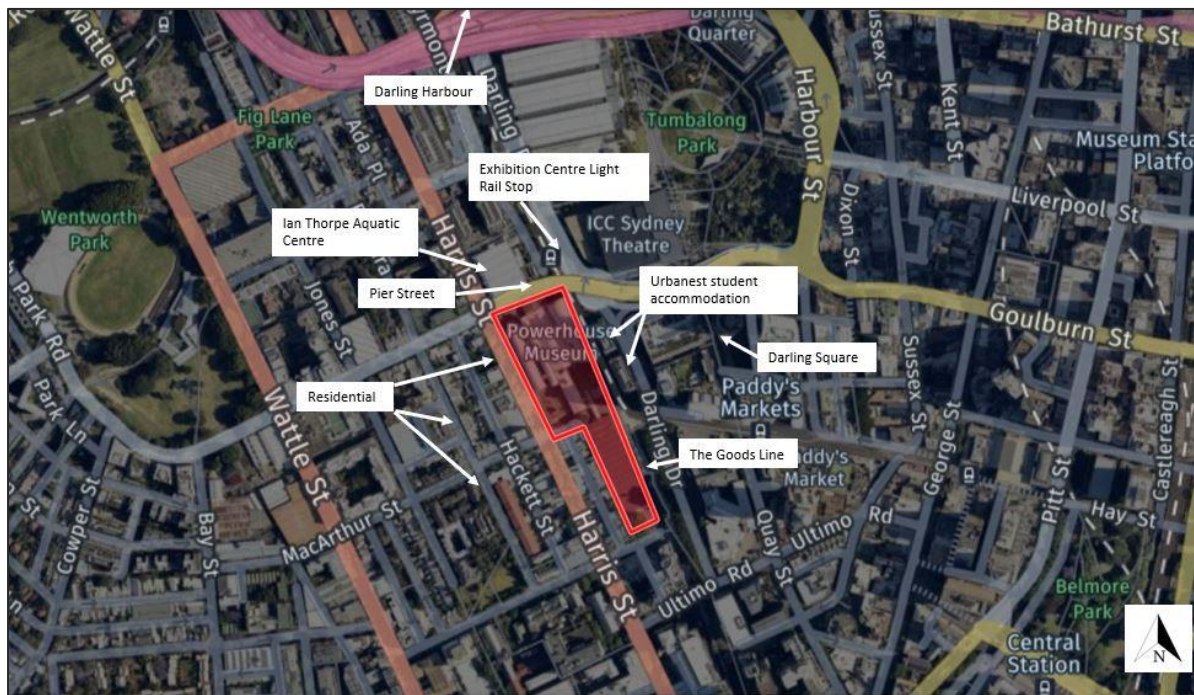


Figure 1 | Site Context Map (Source: Map Base: Nearmap)



Figure 2 | Site plan and key features (Source: EIS)



Figure 3 | Existing buildings on the site including the Wran Building (left), Switch House (right) and heritage core behind (Source: EIS)

1.2 Surrounding area

The site is located in an urban setting, with the surrounding area being characterised by a range of land uses as summarised in **Table 2**.

The site is also located in the vicinity of several locally listed heritage items identified under the Sydney Local Environmental Plan 2012 (SLEP) including the Glasgow Arms Hotel, groups of terrace-houses along Harris Street and Macarthur Street, the former Millinery House building, former National Cash Register building, and the former Technological Museum/Sydney Technical College building in Harris Street. The site also adjoins Harris Street Ultimo Conservation Area. **Figures 4, 5 and 6** show some of the surrounding locally listed heritage items

Table 2 | Key characteristics of the surrounding area

Characteristic	Description
To the north	Pier Street (a four-lane arterial road), Ian Thorpe Aquatic Centre, Tumbalong Park and Darling Harbour
To the east	Urbanest student accommodation and Darling Square, containing high density commercial, retail and residential development
To the south	The Goods Line pedestrianised park and walking track, connecting the Powerhouse, northern Ultimo and Pyrmont with Central Station and the University of Technology Sydney (UTS)
To the west	Medium density residential, educational uses and commercial uses



Figure 4 | Glasgow Arms Hotel (Source: Google Maps)



Figure 5 | Group of terrace houses – Harris Street (Source: Google Maps)



Figure 6 | former Technological Museum/Sydney Technical College building – Harris Street (Source: Google Maps)

2 The Proposed development

2.1 Proposed development

The Stage 1 concept proposal seeks approval for the renewal of the Powerhouse Museum, Ultimo, including:

- conservation and adaptive reuse of local and State heritage-listed buildings on the site
- maximum building envelopes within three proposed development zones (1, 2 and 3) and above the Switch House, which would allow for any new buildings and demolition, alterations or additions to existing buildings within the envelopes (including the Wran Building)
- use of the site as an 'information and education facility' including museum, exhibition and learning spaces and ancillary uses including office, retail and temporary accommodation.

No physical works are proposed as part of the concept proposal. Physical works will be detailed in a separate and future Stage 2 SSD application and informed by a competitive design process.

Table 3 | Main components of Project

Component	Description
Building envelopes	<p>Maximum building envelopes, comprising:</p> <ul style="list-style-type: none"> • Heritage core (Switch House) – maximum height of RL 27.88 AHD • Zones 1 and 2 – maximum height of 28 m above ground level (existing) (plus 10% or up to 30.8m where design excellence is achieved) • Zone 3 – maximum height RL 13.08 AHD
Uses and Gross Floor Area (GFA)	<ul style="list-style-type: none"> • A maximum GFA of 40,000 m² across the site, including existing and new GFA. • Use of the site as an 'information and education facility', comprising the following indicative uses: <ul style="list-style-type: none"> ○ museum exhibition spaces ○ education and learning spaces ○ creative industries studio spaces ○ back of house functional spaces to support museum operations ○ retail food and beverage offerings ○ administrative offices ○ provision for ancillary and related uses contributing to the operation of the Powerhouse, Ultimo.
Public domain	A minimum public domain area of 2,200 m ² within the site.
Design guidelines	<p>Design guidelines to inform the detailed design of the development, comprising objectives and controls relating to:</p> <ul style="list-style-type: none"> • public realm and open space • heritage

- activation
- First Nations
- sustainability
- the zones identified in the Guidelines as:
 - heritage core (Switch House)
 - zones 1, 2 and 3.

Design excellence Competitive Design Excellence Strategy, which includes a competition framework to select a design that is capable of achieving design excellence prior to any future development application.

- Employment**
- 1,710 construction jobs:
 - 440 direct jobs
 - 1,270 indirect jobs
 - 340 operational jobs:
 - 200 direct
 - 140 indirect

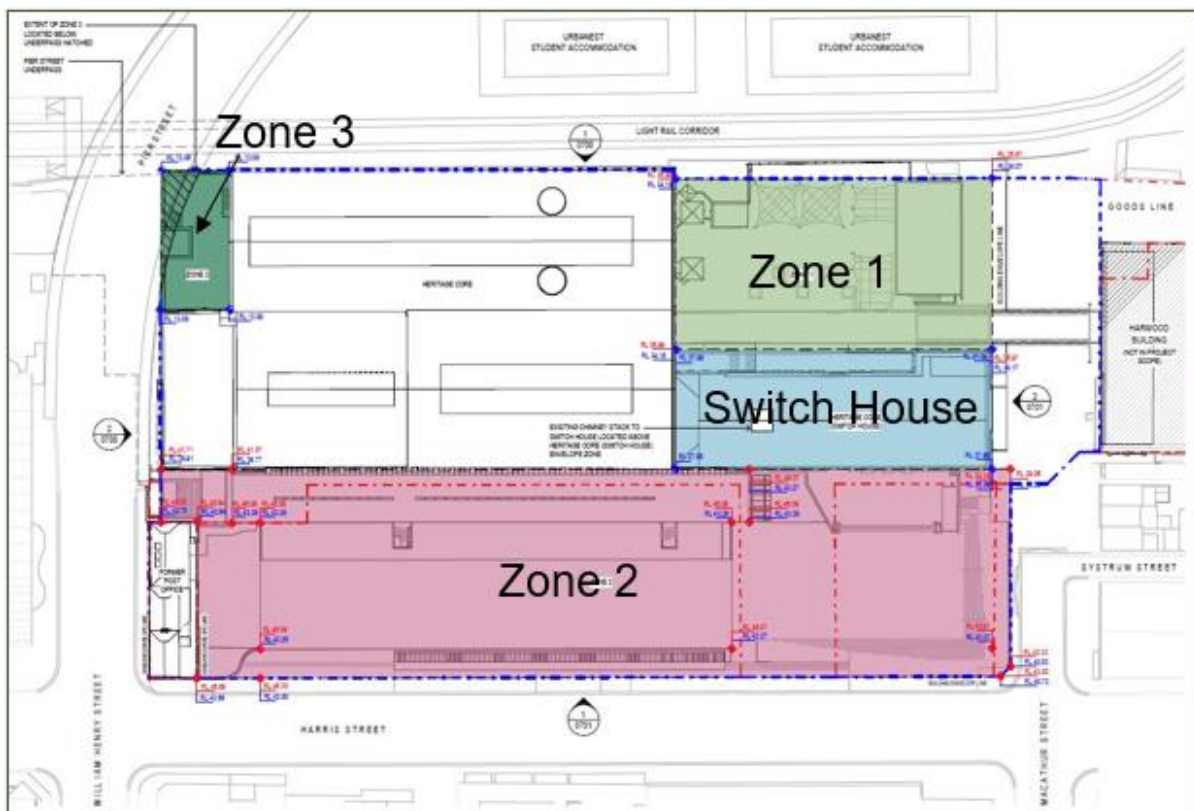


Figure 7 | Building Envelope Plan (Source: Architectural Plans)

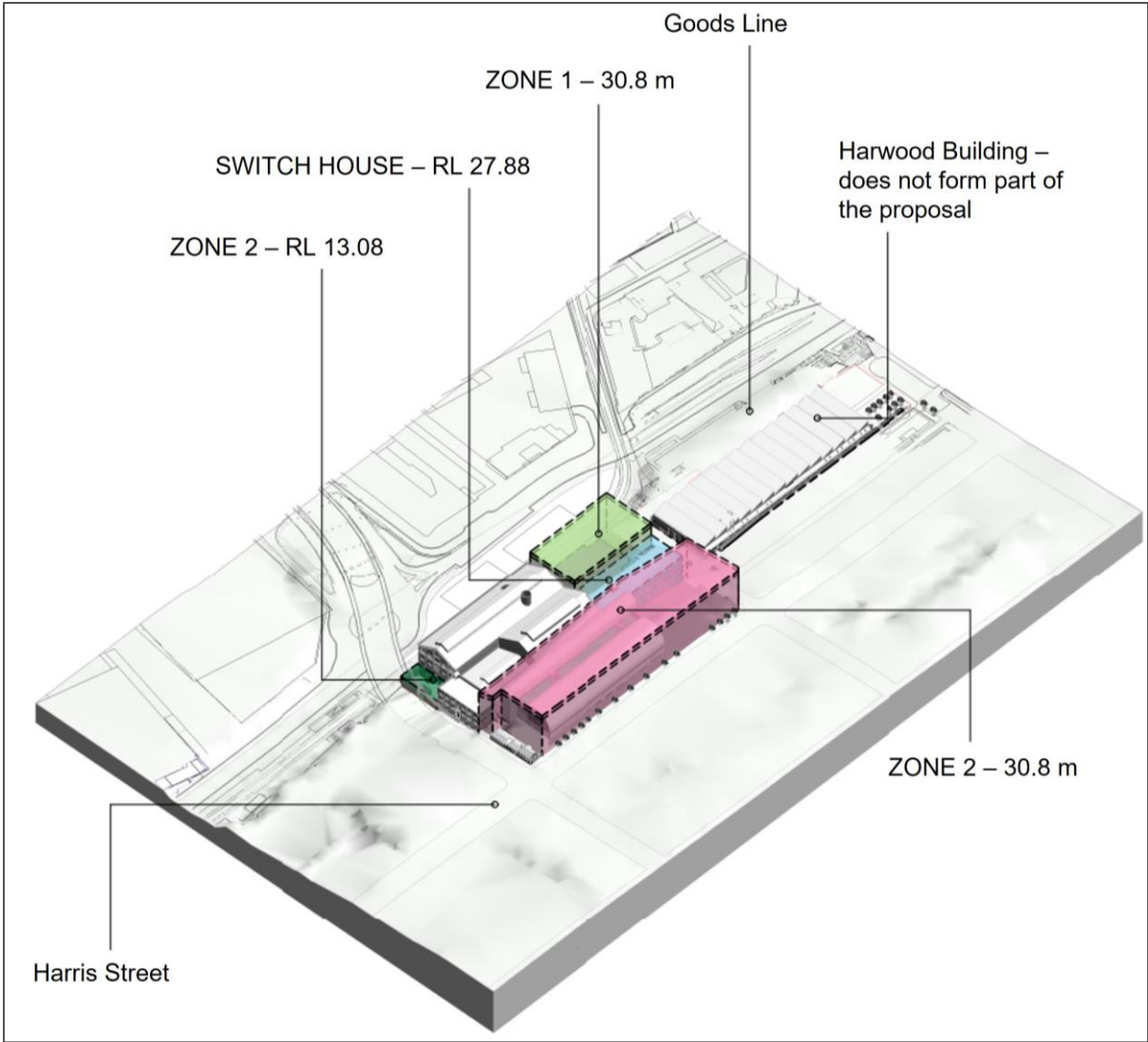


Figure 8 | Illustration of maximum building envelopes (Source: Architectural Plans)

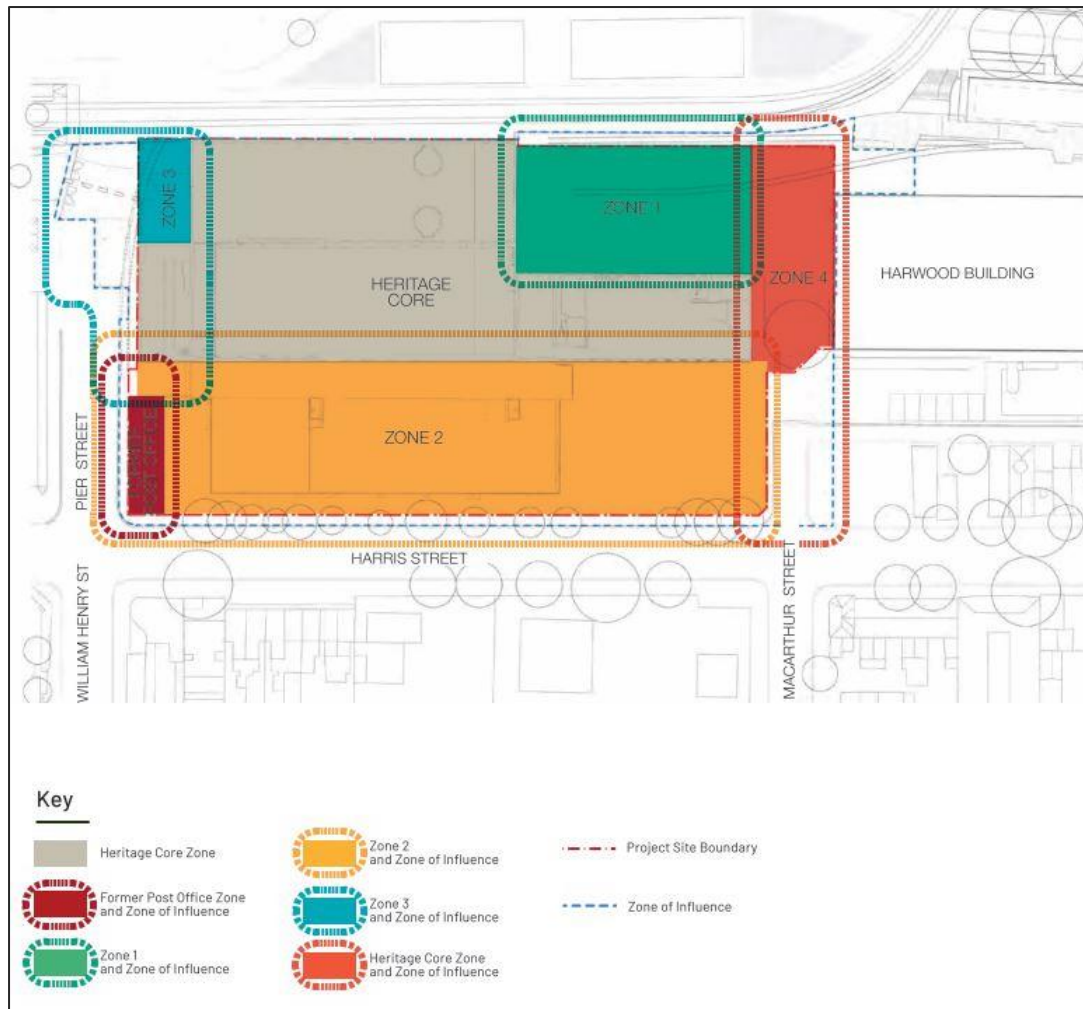


Figure 9 | Zone diagram (Source: Applicant's Urban Design Report & Analysis)

2.2 Applicant's justification for project

On 4 July 2020, the NSW Government announced that Powerhouse Ultimo would be retained and renewed. The renewal of Powerhouse Ultimo will complement the museum flagship Powerhouse Parramatta, expanded collection storage facilities at Castle Hill, and Sydney Observatory.

The Applicant advises the proposal would:

- deliver an international standard museum with new and refurbished spaces for museum operations, exhibitions, programs and associated industry and creative uses that will activate and engage audiences.
- deliver a programming focus on design and fashion, presenting exhibitions that showcase the Powerhouse collection, international exclusive exhibitions and programs that support the creative industries
- support the renewal of the museum spaces for contemporary and flexible use in line with contemporary practice and the cultural needs of NSW.

2.3 Reference design

The Applicant has provided a reference design, which provides one example of how the future development may respond to the proposed building envelopes and parameters and Design Guidelines.

The key elements of the reference design comprise the following:

- conservation and adaptive reuse of the existing heritage core of original Power House buildings, including the Boiler House, Turbine Hall, Engine House, North Annexe, Switch House and the former Ultimo Post Office
- re-orientating the museum entrance towards the Goods Line and the city via a new public square adjacent to the east side of the Switch House providing an opportunity for a retail and food and beverage offering, providing an active edge to the new public square
- a new building on Harris Street to occupy the existing Harris Street forecourt to accommodate additional museum space, presentation and learning spaces
- additional ground level pedestrian connections, providing access from Harris Street and Macarthur Street into the centre of the site. The north end of the Switch House within the Powerhouse buildings is suggested as a possible vertical and east-west connection through the museum.

The Applicant does not seek any approval for the reference design.

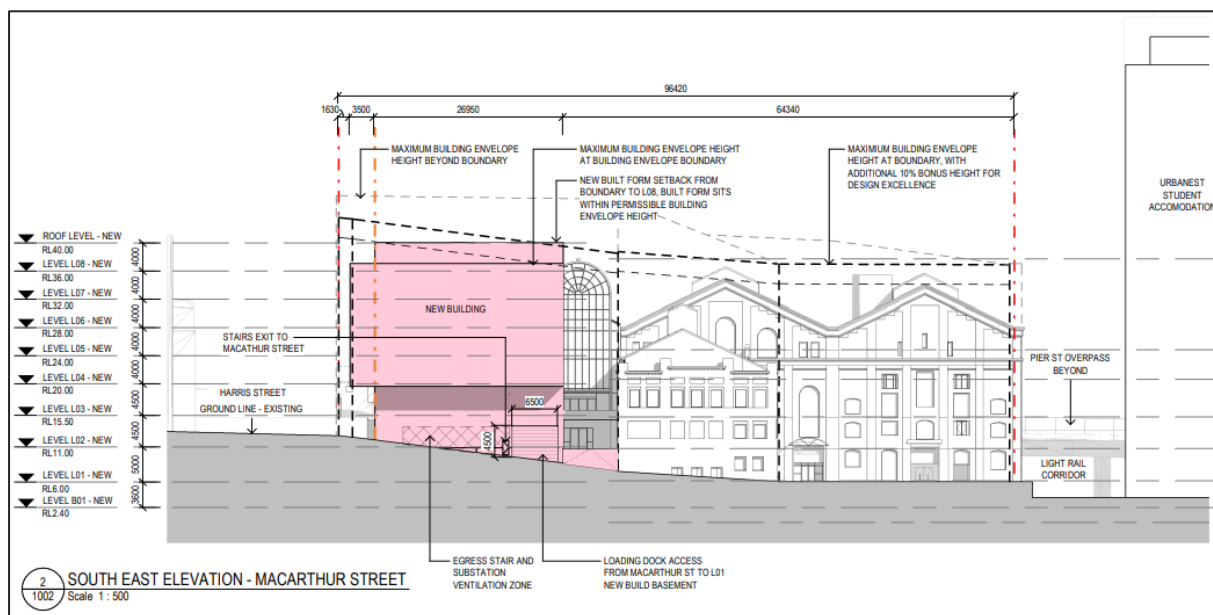


Figure 10 | South East Elevation of the Reference Design showing the indicative new building within the existing Harris Street forecourt (Source: Applicant's Architectural Plans)



Figure 11 | Artist impression of Reference Design showing proposed public open space in foreground (Source: Applicant's Environmental Impact Statement)

3 Strategic context

The Department has considered the proposal against relevant strategic plans as outlined in **Table 4**.

Table 4 | Strategic context

Strategic Plan	Consideration	Consistent
Greater Sydney Region Plan and Eastern City District Plan	<p>The Region Plan outlines how Greater Sydney will be transformed into a metropolis of three cities. The site is located within the Eastern City District.</p> <p>The proposal is consistent with the directions of the Region Plan and Eastern City District Plan as it will:</p> <ul style="list-style-type: none"> positively contribute to the development of the ‘innovation corridor’, which will support the cultural and tourism sectors achieve key sustainability principles, including energy and resource consumption reduction, the design of high quality and resilient public buildings and the protection of the health and water quality of Sydney Harbour. 	Yes
Pymont Peninsula Place Strategy (PPPS)	<p>The PPPS provides a 20-year framework that identifies areas, which can accommodate future growth in the sub-precincts of the Pymont Peninsula, including Ultimo.</p> <p>The PPPS outlines key directions for Pymont and suggests key aspirations around development, public realm, sustainability, community and economy.</p> <p>The site is identified as being capable of change and the Powerhouse is identified as being a significant contributor to the growth of knowledge-based jobs, innovation and cultural and community activities.</p> <p>The project will create and support additional job opportunities and enhance the public realm environment with improved connectivity of the site to its surrounding urban context.</p>	Yes
Ultimo Sub-Precinct Master Plan	<p>The Ultimo Sub-precinct Master Plan sits within the Pymont Peninsula Strategic Framework.</p> <p>The Plan identifies four character areas, including the Powerhouse Ultimo and the Goods Line.</p> <p>The objective of the Powerhouse character area is for future planning and development to build on the industrial heritage of the locality and improve connectivity between the museum and the Goods Line and explore opportunities to improve community access to the museum by reorientating the museum towards the city.</p> <p>The objective of the Goods Line North character area is to extend the Goods Line north into Powerhouse Ultimo site to better integrate and engage Powerhouse Ultimo with the public realm and its surrounds.</p> <p>The proposal supports the objectives of the Master Plan by retaining, and providing opportunities to integrate new built form with, the industrial heritage items on the site creating opportunities for new public space and improved pedestrian</p>	Yes

connections to the external area adjacent to the Goods Line as well as the existing Harris St forecourt.

Cultural Infrastructure Plan 2025+

The Cultural Infrastructure Plan 2025+ guides the planning and delivery of cultural infrastructure across the state. The Plan outlines the importance of cultural infrastructure in contributing to the social, civic and individual wellbeing of the community and the local, night-time and visitor economies. The Plan identifies a number of priorities.

Yes

The proposal is consistent with the priorities of the Plan as the renewal will expand and improve on the existing cultural infrastructure of the Powerhouse Ultimo and the wider Ultimo creative industries precinct. It will provide a more accessible, defined and engaging public realm that can be used for a range of programs and events that activate the city.

Local Strategic Planning Statement – City Plan 2036 (LSPS)

The City of Sydney’s City Plan 2036 is a Local Strategic Planning Statement, which outlines a 20-year vision for land use planning in the city, it identifies the planning priorities and actions required to achieve the vision for a Green, Global and Connected City.

The LSPS identifies a number of planning priorities. The proposal is consistent with these priorities as:

- it will support the role of the ‘innovation corridor’ in delivering knowledge intensive jobs for Sydney’s economy by prioritising space for creative industries
- it will improve walkability within and around the site, better activating Harris Street and supporting the creation of active places
- adaptive reuse and conservation of significant heritage fabric and appropriate articulation of First Nations culture will play an important role in creating a more connected and culturally aware community.

Better Placed

Better Placed seeks to promote good design for the places where we work, live and play. Better Placed defines seven objectives for good design, being better fit, better performance, better for community, better for people, better working, better value and better look and feel.

Yes

The proposal is consistent with these objectives as:

- the design guidelines aim to retain and celebrate the heritage significance of the site, while accommodating contemporary expectations of function
 - it seeks to create improved and engaging connections to the site and its surrounds
 - the future detailed design will be subject to a competitive design process and design integrity review with the aim to achieve design excellence across the built form, landscape and public domain.
-

4 Statutory Context

4.1 State significant Development

The proposal is declared SSD pursuant to section 4.36 (development declared SSD) of the Environmental Planning and Assessment Act 1979 (EP&A Act) as the development is identified in clause 13(1)(d) of Schedule 1 of *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP), being for the purpose of an ‘information and education facility’ and:

- has a capital investment value (CIV) of more than \$30 million
- is not permissible without development consent under Part 4 of the EP&A Act.

4.2 Consent Authority

In accordance with Section 4.5 of the EP&A Act and Clause 2.7 of the Planning Systems SEPP, the Minister for Planning is designated as the consent authority as the application has been made by a public authority.

4.3 Permissibility

The site is zoned B4 Mixed Use under the SLEP.

The Land Use Table for the SLEP provides that development for the purposes of an ‘information and education facility’ is permissible with development consent in the B4 zone.

4.4 Secretary’s Environment Assessment Requirements

On 18 January 2022, the Department notified the Applicant of the Planning Secretary’s Environmental Assessment Requirements (SEARs) that apply to the Application. The Department is satisfied that the Environmental Impact Statement (EIS) and Response to Submissions (RtS) adequately address the requirements of the SEARs to enable the assessment and determination of the application.

4.5 Biodiversity Development Assessment Report

Under Section 7.9(2) of the *Biodiversity Conservation Act 2016* (BC Act), SSD applications are to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.

On 16 May 2022, the Department’s Environment and Heritage Group (EHG) (formerly the Environment, Energy and Science Group) determined that the proposed development would not be likely to have any significant impact on biodiversity values and that a BDAR is not required. The Department supported EHG’s decision and on 24 May 2022 determined that the application is not

required to be accompanied by a BDAR under Section 7.9(2) of the BC Act as the existing site has low biodiversity values.

4.6 Mandatory Matters for Consideration

The Department has considered all relevant matters in its assessment of the project in **Section 6** and **Appendix C** of this report. These relevant matters include:

- the objects of the EP&A Act
- relevant matters specified in Section 4.15 of the EP&A Act, including:
 - the provisions of any environmental planning instruments, draft instruments, planning agreements, draft planning agreement and the EP&A Regulation
 - the likely environmental, social and economic impacts of the development
 - the suitability of the site for the development
 - any submissions
 - the public interest
- principles of ecologically sustainable development (ESD).

5 Engagement

5.1 Department's engagement

The Applicant lodged the SSD application on 10 June 2022.

The Department publicly exhibited the application on the NSW Planning Portal from Tuesday 21 June 2022 until Thursday 21 July 2022 (31 days). The Department notified surrounding landholders in writing and referred the application to relevant government agencies for comment. The Department also published the Applicant's RtS and additional information on its website and notified Council and relevant public authorities of the RtS.

The Department received advice from seven government agencies. A total of 109 unique submissions were received in response to the exhibition, comprising 108 public submissions and one submission (comments) from Council. The key issues raised are summarised below.

A link to agency advice, the public submissions and the Applicant's Response to Submissions (RtS) is provided in **Appendix A**.

5.2 Council submission and agency advice

The key issues raised by Council in its submissions and advice from agencies are summarised in **Table 5** below.

Table 5 | Summary of Council submissions and Government Agency Advice

Council	
	<p>Council supports the renewal of the Powerhouse Museum and investigation of improved pedestrian access to the light rail and activities in Darling Harbour. Council provided the following comments for consideration:</p> <p><i>Design Excellence</i></p> <ul style="list-style-type: none">the heritage items being of local and State significance shall be retained in their current form and any development above their roof is to be avoidedrecommends the planning envelope aligns with the existing street networkrecommends improvements to the Urban Design Report including refining the urban design principles to be more specificnotes some discrepancies between the drawings accompanying the EIS and the City's model
EIS	<p><i>Heritage</i></p> <ul style="list-style-type: none">requests further detail regarding the impact of demolition especially of heritage componentssuggests developing a coordinated set of heritage, urban design and architectural principlesadditional height should not be permitted above heritage listed buildingsprovides recommendations in relation to the draft Conservation Management Plan and Statement of Heritage Impactraises concerns about the lack of detail with the reference design and requests greater clarity on future built form <p><i>Public Domain</i></p> <ul style="list-style-type: none">provides in principle support for the public domain aspects of the development subject to further refinement

- notes that Pier Street is not considered a significant pedestrian and cyclist connection
- suggests additional refinement to the proposed planting under the roadway bridge for maintenance and security

Transport and access

- supports entrance to the Goods Line and suggests improvements to existing infrastructure to support increased pedestrian use of the Goods Line
- notes appropriate frontage and entrance on Harris Street should be maintained
- suggests good quality pedestrian connections should be incorporated early in the design process
- staff and visitor bicycle parking and end of trip facilities should be provided in accordance with the DCP

Landscaping

- notes future development is to provide 10% deep soil and 15% urban canopy controls within the site boundary
- notes the need for greening of the future design
- requests all trees of medium retention value be incorporated into the future design
- suggests the installation of green roofs to meet minimum canopy cover requirements

Public Art

- recommends the preparation of a Public Art Strategy

Council reviewed the RtS and noted some aspects of the proposal respond positively to concerns. Council raised concern that the design competition had begun before the determination of the Concept Proposal and Urban Design guidelines. Council also raised other matters still require resolution as follows:

Urban design

- suggests further analysis is required to determine the form of the building envelopes
- suggests further details should be provided to support the reference design, which is important for demonstrating potential impacts and application of design principles

Heritage

- suggests greater detail is required in relation to gradings of significance, including building sections, elevations and reflected ceiling plans
- notes insufficient justification has been provided for proposing additional height over these parcels of land:
 - the whole of Lot 1, DP 631345 identified in the SLEP Schedule
 - a section of the Harris Street forecourt extending from Harris Street through to the Switch House and the parcel of land extending to Macarthur Street along the entire length of the Switch House
 - Zone 1 being the southeast courtyard and associated Goods Line rail tracks
 - to the northwest of the Boiler House extending to Pier Street and including the Pump House.

RtS

- notes previous submission highlighted the significance of the views from Harris Street to the historic core
- recommends the Guidelines be updated to reference the need for an entry point on Harris Street particularly for groups arriving by buses, coaches and taxis
- suggests the curtilage analysis is insufficient, as it does not take into account the broader visual context of the heritage listed buildings or the Wran Building
- recommends that the Draft Conservation Management Plan be peer reviewed

Landscaping and tree management

- suggests that landscaping within the site, deep soil and canopy coverage is considered unsatisfactory
- the Guidelines do not provide sufficient benchmarks or expectations that assist in guiding a future detailed design application to demonstrate a commitment to creating public realm and open spaces with adequate shade trees planted in deep soil, species selection and layout with civic quality for gathering, wayfinding and use, nor provision of inaccessible and extensive green roofs

Transport and access

- recommends pedestrian connections should be provided concurrently with the Powerhouse renewal project
- recommends that TfNSW and Council be consulted about any new connection adjacent to the Boiler House and/or upgrades to the Goods Line

Public art

- notes that the Preliminary Public Art Strategy does not meet the City's requirements, however, indicates it is broadly supported because it outlines a commitment and plan to include permanent public art.
- recommends a more comprehensive, updated plan be submitted with any detailed design application
- notes that there is no evidence of collaboration with First Nations and diverse communities in the development and implementation of the program.

Heritage NSW – ACH Branch

- | | |
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| EIS | <ul style="list-style-type: none"> • ACH provided the following comments: <ul style="list-style-type: none"> ○ A final ACHAR is required including completion of all consultation with Registered Aboriginal Parties ○ It is strongly recommended that further investigation, including test excavation, is undertaken upfront to inform the design ○ A site specific methodology for test excavations will be required ○ If test excavation does not occur before Stage 2 designs are finalised, measures are to be included to enable avoidance and conservation of significant Aboriginal Cultural heritage values where identified through the assessment. |
| RtS | <ul style="list-style-type: none"> • ACH notes that an ACHAR will be prepared for Stage 2 of the development. • Requests that consultation occur with the Department on the proposed Secretary's Environmental Assessment Requirements for the Detailed Stage 2 SSD at that time. |

EPA

- | | |
|-----|--|
| EIS | <ul style="list-style-type: none"> • EPA noted a detailed site investigation and remediation will likely be required to ensure the site is safe and suitable for the development and recommended consent conditions a detailed site investigation, Remedial Action Plan and appointment of an EPA-accredited site auditor |
| RtS | <ul style="list-style-type: none"> • EPA reiterated that a detailed site investigation is required to support the Stage 2 development and requested the Department consider the previously recommended conditions |

Transport for NSW (TfNSW)

- | | |
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| EIS | <ul style="list-style-type: none"> • TfNSW supports new pedestrian connections to the Exhibition Centre Light Rail Stop and recommends consultation with TfNSW on pedestrian connections in the light rail corridor. • TfNSW requested further information on passenger drop off arrangements, adjusting travel survey forecasts for simultaneous visiting groups from multiple schools, and consideration of the amount and location of charter bus parking required to meet forecasted demand. • TfNSW recommended consent conditions relating to the protection of the Inner West Light Rail infrastructure and operation, preparation of a Freight and Servicing Management Plan and a Green Travel Plan. |
| RtS | <ul style="list-style-type: none"> • TfNSW recommended conditions in relation to protection of Inner West Light Rail infrastructure and operation, freight and servicing and a Green Travel Plan. |

Heritage NSW – Heritage Council of NSW

- | | |
|-----|--|
| EIS | <ul style="list-style-type: none"> • Heritage NSW advised that the Heritage Council has a long-standing interest in the heritage listing, use and on-going development of the Stage heritage listed Ultimo Powerhouse and former Ultimo Post Office buildings. • Heritage NSW advised: <ul style="list-style-type: none"> ○ the maximum building height envelope should be restricted to where new development is envisaged and deleted over heritage buildings ○ only essential amendments and interventions should be made within the listed SHR curtilage ○ it supports the reorientation of the museum to the Goods Lines in principle |
|-----|--|

	<ul style="list-style-type: none"> ○ any development should be scaled and setback and have regard to the legibility of the existing buildings and their heritage values ○ recommends public domain areas remain open to the sky ○ future applications will need to assess visual impacts and demonstrate that impacts are mitigated and how views to the historic core particularly from Harris Street are retained ○ the draft conservation management plan is not endorsed ○ it supports improved heritage interpretation, in particular connections to Country, Aboriginal Cultural Heritage values, the history of the Powerhouse and its evolution.
RtS	<ul style="list-style-type: none"> ● Heritage NSW supported the amendments made by the Applicant to address previous concerns raised. Heritage NSW provided the following additional comments; <ul style="list-style-type: none"> ○ all public domain areas should be open to the sky and enhance existing views and promote public interaction with the historic character of the building complex and its surroundings ○ any future works to the Switch House should be mindful of historic fabric and character of the building and any proposed extensions should be designed to be recessive and represent a clear articulation or transition between the historic core and any contemporary intervention ○ the significance assessment for the Wran Building has not yet been completed by the State Heritage Register Committee (SHRC) and recommend that the Applicant consider the possibility of the Wran Building being of State significance ○ the National Trust has submitted a nomination to list the entire site, including the Wran Building on the State Heritage Register ○ further analysis may be required during the Stage 2 detailed application to determine the extent of change that may be permissible to the 1980's elements of the building complex (including the Wran Building) ○ the CMP has not been endorsed by the Heritage Council of NSW, or its delegate. Any future applications for the site will be assessed on their merits and with consideration to the State Heritage Register listing ○ recommends consideration be given to any potential maritime archaeological resources that may possibly exist at the site given the extent of land reclamation undertaken in the vicinity ○ recommends that Council be consulted about locally listed heritage items.
EHG	
EIS	<ul style="list-style-type: none"> ● EHG recommended the Flood Report should include a Flood Impact and Risk Assessment to address flooding risks, impacts and management measures.
RtS	<ul style="list-style-type: none"> ● EHG considered the flood impact assessment and: <ul style="list-style-type: none"> ○ recommended that the flood impact assessment is updated to show impacts greater than 10mm to accurately show potential impacts of loss of floodplain storage and conveyance and impacts to downstream properties. The existing wall along the eastern boundary should also be factored in the flood model. ○ advised that loss of floodplain storage and conveyance across the south-east portion of the site (Zone 1) may lead to impacts. ○ advised that development of the north-east corner of the site (Zone 3) is predicted to cause unacceptable impacts and consideration should be given to retaining Zone 3 undeveloped or with limited development.
Sydney Water	
EIS	<ul style="list-style-type: none"> ● Sydney Water confirmed that potable water servicing and wastewater servicing should be available via existing infrastructure and notes that adjustments or extensions may be required.
RtS	<ul style="list-style-type: none"> ● Sydney Water advised it has no additional comments.
Sydney Trains	
EIS	<ul style="list-style-type: none"> ● Sydney Trains advised it has no comment on the project, however requested that any RtS is referred to Sydney Trains.

- RtS • Sydney Trains advised it has no additional comments.

5.3 Summary of public submissions

A total of 108 unique submissions were received from the public in response to the exhibition, including:

- 91 individual submissions (85 objections, four providing comments and two in support of the proposal)
- 15 submissions from community interest groups (nine objections, two comments and four in support)
- one submission from Jamie Parker MP objecting to the proposal
- one submission from Alex Greenwich MP objecting to the proposal.

The submissions are available in full in **Appendix A** and key concerns raised are summarised in **Tables 6** and **7**.

Table 6 | Summary of key issues raised in individual public submissions of objection/comments

Public Submission	Percentage of total objections/comments (89)
Change of museum focus and types of exhibits	52%
Inadequate justification for project	47%
Objection to project cost	30%
Heritage impacts	27%
Concerns with consultation process	24%
Concerns with proposed bulk and scale of built form	16%
Impacts on 1988 alterations and additions, including the Wran Building	16%
Issues with Conservation Management Plan	11%
Sustainability and release of embodied carbon	11%
Lack of consistency with previous Government announcements	11%
Comments on other Powerhouse museums (Parramatta and Castle Hill)	10%
Impacts to the Harwood Building	8%
Impacts to public domain	8%
Length of exhibition period	6%

Impacts on Aboriginal cultural heritage
 Visual impacts associated with the new built form
 Overshadowing of private property and public domain
 Impacts to traffic and transport

Less than 5%

Of the two individual submissions supporting the project, one expressed support for the project without further reasoning and one submission expressed support for the project due to community and cultural benefits and its ability to renew the Ultimo site.

Table 7 | Summary of Special Interest Group submissions

Special Interest Groups	Position	Key Issues raised
Save the Powerhouse	Object	Concerns regarding heritage impacts, potential demolition of the Wran Building, length of exhibition period and change of use to fashion and design. Supports modernising exhibition spaces and upgrading the existing Goods Line entrance.
Powerhouse Museum Alliance	Object	Concerns about consultation process, change of exhibits to fashion and design, approach to splitting up the Powerhouse collection across the other museums in Sydney (Parramatta and Castle Hill) and demolition of the Wran Building and Harwood Building. Requests the Harris Street forecourt and entrance remain.
National Trust	Object	Concerns regarding the justification for the project and change in exhibits to fashion and design. Concerns regarding the allowable building envelopes, potential heritage and visual impacts and inadequacy of the CMP.
International Council of Museums	Object	Concerns regarding the future use of the site and future of existing collections as well as potential loss of access to cultural heritage for the community. Requests further consultation regarding the redevelopment.
Ultimo Village Voice	Object	Concerns regarding the change in exhibition focus from science and technology to design and fashion. Concerns regarding the lack of information about the future of the Harwood Building and Wran Building and the reorientation of the entrance away from Harris Street.
Pyrmont Action Inc	Object	Oppose the bulk and scale of the proposed building envelopes and raise concerns regarding heritage impacts, change in use to fashion exhibits and cost of the project. Seeks retention of the Harris Street forecourt and revitalisation of zone 1 as public domain.
Jacksons Landing Community Association	Object	Concerns for future of museum exhibits/artefacts, change of use to fashion and design and consultation process
Hunters Hill Trust	Object	Concerns about the proposed removal of certain exhibits, lack of justification for project cost and lack of alignment between the project and previous government announcements.
Docomomo Australia	Object	Queries the differentiation between the Powerhouse Ultimo exhibits and those in Parramatta and Castle Hill. Concerns with heritage

		impacts including the demolition of 1988 alterations and adequacy of the CMP.
Jamie Parker MP	Object	Concerns regarding a loss of public space, including the Harris Street forecourt, heritage impacts to the Harwood Building, Wran Building and as a result of a change of museum use, concerns the project contradicts previous government commitments
Alex Greenwich MP	Object	Opposes the bulk and scale of the proposal and relocation of entry from Harris Street. Requests an active street frontage on Harris Street, protection of public space, protection of heritage items and fabric and that the Wran Building is retained.
Australian Institute of Architects	Comments	Concerns significance of 1988 alterations have not been recognised, concerns regarding the assessment of the proposal as only a 'loose fit envelope' is provided, concerns with potential visual impacts and requests the preparation of a masterplan for the site.
Pyrmont History Group	Comments	Concerns about the lack of interpretation, impacts on heritage and concern that the existing museum collection will be placed in storage
Australian Museum	Support	Supports heritage focus of the redevelopment and reorientation of the entrance towards the City and acknowledges sustainability initiatives including net-zero operations.
Sydney Living Museums	Support	Considers the project will benefit the visitor and night-time economies and have a positive impact on the creative and cultural sector.
Office of the 24-Hour Economy Commissioner, Investment NSW	Support	Supports the project as a major investment in public/cultural infrastructure and encourages 24-hour economy principles are employed to maximise benefits.
International Convention Centre	Support	Supports the project as it would better connect with the surrounding precinct and public domain and contribute to the night-time economy.

5.4 Response to submissions

On 20 September 2022, the Applicant provided a Response to Submissions (RtS) which included proposed amendments in response to the issues raised in public submissions and government agency advice.

The amendments made to the proposal include the following:

- refinements to the proposed maximum building envelope by:
 - removing the proposed building envelopes from the State heritage items (with the exception of the Switch House)
 - reducing the maximum height of the proposed building envelope above the Switch House by approximately 8.02 m (from 28 m (RL 35.90) to RL 27.88) to be the same height as the existing modern rooftop/mezzanine addition
 - reducing the maximum height of Zone 3 (north-eastern corner) by approximately 20.42 m (from 28 m (RL 35.50) to RL 13.08) to sit generally at the same level as the Pier Street viaduct.

- revisions to the Urban Design Guidelines to incorporate additional detailed guidance for future development and to ensure consistency with the Conservation Management Plan.
- revisions to the Conservation Management Plan, including changes to structure of the document and the assessment of heritage significance.
- revisions to the Design Excellence Strategy, to align with the City of Sydney Competitive Design Policy and the Government Architect NSW Design Excellence Competition Guidelines.

On 16 November 2022, the Applicant provided a further response to the issues raised in public authority advice. The response did not make any further amendments to the proposal, however it provided further clarification in relation to the refinements made in the RtS and provided further information in relation to flooding impacts, in response to feedback provided by EHG.

On 21 November 2022 the Applicant further amended the application to withdraw the Clause 4.6 Variation Request. The Applicant advised that on review of the amended proposal, they are of the view that the proposed building envelopes do not exceed the maximum building height (other than that allowed for by Clause 6.21C(3)(a) of the SLEP).

On 12 December 2022 the Applicant submitted a revised Urban Design Report and Analysis, in response to the Department's request for information, which included minor revisions to the Urban Design Guidelines following a review by the Government Architect NSW.

On 24 January 2023, the Applicant provided further information, in response to the Department's request, to clarify why the Clause 4.6 Variation Request was withdrawn. The Applicant outlined that the request was prepared for an abundance of caution, should the Department form the view that a different approach be taken to the measurement of building height, specifically having regard to the decision of the NSW Land and Environment Court in *Merman Investments Pty Ltd v Woollahra Municipal Council [2021] NSWLEC 1582 (Merman)*. The Applicant advised that on further review of the amended proposal and *Merman* that the characteristics of the site and development considered in *Merman* are clearly distinguishable from the characteristics of the site and development that is the subject of this SSD.

The Department is satisfied that the determination of the ground level (and therefore the measurement of building height) in *Merman* was a result of the facts and circumstances of that development based on the topography and configuration of the site. The Department is satisfied that, in the case of the proposed development, measuring building height from where natural ground level has been disturbed by building and excavation is the appropriate approach.

On 31 January 2023, the Applicant provided additional information in relation to flooding impacts in Zone 1 and 3.

The Department made the RtS and all additional information received available on the NSW Planning Portal. The Department referred the RtS to relevant public authorities and received further advice on the amended proposal from Council, EHG, EPA, Heritage NSW, Sydney Water, Sydney Trains and TfNSW as summarised in **Table 5**.

5.5 Further public submissions to the RtS

The Department received a further submission from the Pymont Action Inc in response to the Applicant's RtS which restated its strong objection to the proposal on the following grounds:

- previous concerns not being addressed
- the proposed focus on fashion and functions
- the project cost
- heritage impacts, including the need to retain and protect the Wran Building and Harwood building
- over the need to retain the Harris Street forecourt and eastern courtyard as public open space
- sustainability and carbon emissions
- information provided in the media by Powerhouse and hoarding erected in front of the Wran Building 9 weeks before the election.

In response to this further submission, the Applicant noted that the matters raised have been previously raised in public submissions and advised that the matters have been considered and addressed as part of the RtS

The Department notes that the Applicant has address the matters raised in the additional public submission, and notes that information provided in the media by Powerhouse and erection of hoarding does not form part of this concept development application.

6 Assessment

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

- design excellence
- built form
- heritage
- amenity
- public domain, landscaping and trees
- transport and access
- flooding

Each of these key issues are discussed in the following sections of this report. The Department's consideration of other issues relating to the application are addressed in **Section 6.8** of this report.

6.1 Design Excellence

Division 4 of the SLEP provides for the delivery of design excellence in the City of Sydney. In particular, it:

- has the objective of delivering the highest standard of architectural, urban and landscape design (clause 6.21)
- prohibits the granting of development consent unless in the consent authority's opinion, the proposed development exhibits design excellence (clause 6.21C(1))
- sets out the considerations that the consent authority must have regard to when forming the view of whether a development exhibits design excellence (clause 6.21C(2))
- requires a competitive design process be undertaken for development which meets certain criteria including development with a CIV of more than \$100 million and development for which a DCP (or Concept Proposal) is required under clause 7.20 (clause 6.21D)

The Applicant prepared a design excellence strategy, in consultation with the Government Architect NSW (GANSW), Council and the Department which provides for a competitive design process in accordance with the City of Sydney Competitive Design Policy (2020) (CoS Policy) and the GANSW Design Excellence Competition Guidelines (Draft 2018).

The Applicant also provided an assessment of the Concept Proposal against the requirements of Clause 6.21C of the SLEP and the objectives for good design in Better Placed (NSW Government Architect, 2017) to demonstrate that the Concept Proposal exhibits design excellence.

The Department also notes the Applicant held the design competition from September 2022 to December 2022, which included:

- the preparation of a DES competition brief endorsed by the Government Architect NSW (GANSW) and Planning Secretary, which was informed by the concept proposal as amended by the Applicant's RtS
- establishment of a Competition Jury, including six members

- five design teams being shortlisted from an initial expressions of interest process which attracted over 100 entrants
- each of the five shortlisted teams undertook an intensive design process to prepare a concept design that responded to the detailed functional and urban design requirements of the brief
- the Competition Jury met in December 2022 to review the Concept designs and in December 2022 a team of Architectus, Durbach Block Jagers Architects, Tyrrell Studio, Youssofzay + Hart, Akira Isogawa, Yerrabingin, Finding Infinity and Arup was confirmed the competition winner (**Figure 12**).



Figure 12 | The winning design by Architectus, Durbach Block Jagers Architects, Tyrrell Studio, Youssofzay + Hart, Akira Isogawa, Yerrabingin, Finding Infinity and Arup

In accordance with the DES, a Design Integrity Panel (DIP), comprising of members of the Competition Jury, will oversee the detailed design as it is developed into the next development application and through to construction.

The Department notes that the Applicant chose to undertake a design competition prior to the determination of the Concept Proposal with the understanding that if the outcome of the design competition was inconsistent with any determination it may not be relied upon. The Department also notes:

- the competition process, including the Jury’s evaluation of the five competitors designs, was observed by Council and Department staff

- the winning design is consistent with the proposed building envelopes and retains the State and locally listed heritage items
- the outcome of the competition does not fetter the discretion of the consent authority in the assessment of this concept development application, any requirements of any Concept Approval which may be granted or the assessment of any future Stage 2 DA.

The Department has had regard to the matters set out in Clause 6.21C(2) in considering whether the proposal exhibits design excellence as set out in **Appendix C**. The Department concludes the proposed development exhibits design excellence in accordance with Clause 6.21C(1) because:

- the proposal will deliver a high standard of architectural design, materials and detailing through the competition, DIP review and Stage 2 detailed DA process
- it will increase the amount and improve the quality of public domain within the site
- it will retain and improve views to and from the State heritage listed items (**Section 6.3**)
- it will retain the existing land use and renew the Powerhouse Museum as a world-class museum
- the envelopes comply with SLEP maximum height and floor space ratio controls (**Section 6.2.1**) and bulk, massing, modulation, street frontage heights, and all other impacts will be assessed in the future Stage 2 detailed DA.

To ensure the future Stage 2 detailed DA achieves design excellence, the Department recommends conditions requiring:

- the detailed design of the development is subject to a Design Excellence Competition carried out in accordance with the DES
- the establishment of a DIP, which must review the detailed design prior to lodgement of any future DA.

The Department concludes that the DES, together with the building envelope parameters (**Section 6.2.1**), urban design guidelines (**Section 6.2.2**) and FEARs, provide a sound framework for the development and will ensure that the future detailed design will achieve design excellence.

6.2 Built form

The proposal seeks concept approval for new building envelopes and urban design guidelines to inform the future development of the site which are considered below.

6.2.1 Building envelopes

The Applicant initially sought approval for a 28 m high building envelope across the site, including over the State heritage listed buildings. This height would comply with the maximum height in the SLEP of 28 m. The Applicant also noted that the height could be increased by 10% (up to 30.8 m) where design excellence is achieved.

The Applicant provided a reference design (**Figure 10**) which included a new building with a maximum height of RL 40 (approx. 7 storeys / 29 m) within the existing Harris Street forecourt and demonstrated how the existing buildings on site could be used for presentation, exhibition, education, and other museum related space. The reference design included the retention of the existing courtyard adjacent to the Goods Line.

The Department, Council, Heritage NSW and public submissions all raised concern with the impact of such extensive envelopes over the site. In addition, concern was raised that the Applicant assessed the impacts of the reference design rather than the envelopes.

In response to concerns raised, the Applicant included a maximum GFA of 40,000 m² (inclusive of existing floor space) and reduced the building envelopes in the Heritage Core and Zone 3 (**Figure 7**) to:

- a building envelope up to a height of RL 27.88 above the Switch House to provide for the retention, adaptive reuse, demolition and/or replacement of the existing rooftop addition with a new building element (a reduction of approximately 8 m)
- a building envelope up to a height of RL 13.08 adjacent to the former Pump House (Zone 3) to enable a potential entrance from Pier Street and connection to the Exhibition Centre light rail stop (a reduction of approximately 20 m).

The Applicant made no changes to the 28 m (up to 30.8 m where design excellence is achieved) building envelopes within the existing south-east courtyard (Zone 1) and the building envelope occupying the existing Harris Street forecourt and the Wran Building (Zone 2).

The Applicant also made no changes to the reference design and notes that it remains consistent with the refined building envelopes.

Council supported the reduction in building envelopes in the Applicant's RtS, however it recommended that further site analysis be undertaken to determine the appropriate form of the envelopes. Council also raised concerns about the reference design lacking detail.

Heritage NSW also supported the reduced building envelopes and made recommendations in relation to heritage which are discussed in **Section 6.3**.

The Department notes the proposed building envelopes are loose fit development zones to allow flexibility for the future design. The Department is satisfied that this approach is appropriate in this case as appropriate safeguards are provided within the Applicant's urban design guidelines and the Department's recommended conditions of consent and FEARs to prevent the envelopes being built-out in their entirety.

The Department is satisfied that the proposed building envelopes are appropriate as:

- no building envelopes are proposed over the State heritage listed buildings, with the exception of the Switch House, which is considered to have acceptable heritage and visual impacts consistent with the existing modern addition as discussed in **Section 6.3**
- the proposed building envelopes in Zones 1, 2 and 3 comply with the maximum SLEP height of 28 m (plus 10% bonus) and will not cause adverse heritage or visual impact subject to the FEARs recommended in **Section 6.3**
- the proposed maximum GFA (floor space ratio (FSR) of 2.4:1) is well below the maximum SLEP FSR of 4:1
- the building envelopes will not result in adverse visual, view loss or overshadowing impacts as discussed in **Section 6.4**.

The Department also recommends conditions of consent and FEARs, including:

- limit the maximum gross floor area to 40,000 m²

- a maximum height of 30.8 m (being the 10% design excellence bonus) in Zones 1 and 2 only, subject to subject to future application(s) demonstrating design excellence in accordance with Clause 6.21D(3)(a) of SLEP
- require a minimum of 2,200 m² of open to the sky public open space (in addition to open space in Zone 4).

The above recommendations, together with the Urban Design Guidelines and FEARs outlined in **Section 6.3**, will ensure that the envelopes are not built out in their entirety and that heritage impacts are managed and mitigated.

6.2.2 Urban design guidelines

The Applicant prepared urban design guidelines, which were amended during the assessment process, to provide overarching and zone-specific guidance for the future built form and public realm.

The overarching design guidelines include:

- Public realm and open space – including the requirement for an overall minimum of 2,200 m² of public open space, with at least one area of no less than 1,800 m²
- Heritage – including revealing heritage fabric and prioritising increased visual and physical access
- Activation – including activated edges, improved amenity, wayfinding and day and night utilisation
- First Nations – including recognition of on-going Aboriginal history on the site and Powerhouse Caring for Country principles
- Sustainability – including a minimum 5-star Green Star rating (with a target for a 6-star rating).

Further specific guidelines are provided for each zone in relation to:

- revealing heritage
- setbacks and built form expression
- public realm and open space
- form massing and scale
- access, movement and transport
- vehicular access and servicing
- street furniture and lighting
- materiality.

Council raised concerns that the design guidelines are too general in nature. Council recommended that all public space requires greater design consideration in plan, section and levels and also raised concern that the guidelines for Zone 2 do not prevent cantilevered building elements.

GANSW also reviewed the design guidelines and recommended the guidelines be strengthened in a number of areas, including built form, public realm and open space, heritage, activation, First Nations and sustainability.

In response to the advice provided by Council and GANSW, the Applicant made a number of changes to the guidelines including strengthening key areas where guidelines must be addressed rather than considered. The Applicant also clarified that the guidelines are supplemented by the EIS and RtS documentation, in particular the heritage, transport, overshadowing, wind and visual impact

assessments and also notes that the development will be subject to further detailed assessment in the future DA.

The Department acknowledges Council's concerns about the guidelines and has also considered the advice provided by GANSW. The Department is satisfied that the guidelines provide an appropriate level of detail to inform the future development as:

- the guidelines provide clear requirements and considerations to guide the preparation of the detailed design in relation to key matters including heritage, open space and activation including:
 - a minimum of 2,200m² of public open space, which exceeds the current open space provision on the site, and clear quantitative and qualitative requirements to ensure high quality, accessible and useable open space which connects to the broader public domain
 - prioritising restoration and revealing of the fabric of the existing State heritage listed buildings, while minimising alterations or additions to significant heritage elements
 - ensuring that future built form enhances views and connections to the State heritage listed buildings and provides for an active and fine grain frontage to Harris Street
 - creating fine grain activation along Harris Street
 - prioritising pedestrian movements and providing clear and legible access through the site.
- the future development will be subject to a future SSD application, including the preparation of an EIS to ensure all environmental impacts are thoroughly assessed.

The Department therefore considers the urban design guidelines are acceptable and recommends additional FEARs in relation to:

- requiring the 2,200 m² of public open space be open to the sky and publicly accessible 24 hours a day 7 days a week
- require the fine grain activation of Harris Street, maximising openness and visual connections to the interior, while having regard to the internal functions of the museum through use of solid facades where required
- ensuring built form within Zones 1, 2 and 3 retains and improves views to heritage items and all other FEARs discussed in detail in **Section 6.3**.

6.3 Heritage

The site contains two locally and State heritage-listed buildings including the Ultimo Power House (Turbine Hall, Engine House, Boiler House, North Annex and Switch House) and the Ultimo Post Office).

The site also contains the Wran Building which was completed in 1988. The Wran Building was an innovative integration of new and existing buildings on the site and was awarded the Sulman Award for architectural merit in 1988.

The Harwood building (former Ultimo Tram Depot), located to the south of the site, is not heritage listed however, it is listed on the non-statutory National Trust Register.

The site is also within proximity of the State heritage-listed Sewerage Pumping Station No 1 and Ultimo Road Railway Underbridge and other locally listed items as outlined in **Section 1.2**.

The proposal initially sought approval for a blanket 28 m building envelope over the entire site, however in response to concerns raised by Council, Heritage NSW and in public submissions, the

Applicant removed building envelopes above the locally and State heritage-listed buildings, with the exception of a rooftop envelope above the Switch House.

The Applicant provided a Heritage Impact Statement (HIS) which assesses the impacts of the revised building envelopes and concludes that the Concept Proposal minimises heritage impacts by:

- avoiding any major physical impacts to the local and State heritage-listed buildings
- locating new floor space where there is a higher tolerance or change
- locating new building envelopes outside of the heritage core (the State listed heritage items), with the exception of a minor element on the rooftop of the Switch House to provide for the retention, adaptive reuse, demolition and/or replacement of the existing rooftop addition with a new building element
- proposing a maximum GFA, minimum public open space and Urban Design Guidelines, which would prevent the building envelopes being used in their entirety and ensure an appropriate design response in relation to the preservation of views to heritage fabric and 'revealing' of heritage fabric.

The Department has considered the key heritage issues below:

- Heritage Core
- Zone 1
- Zone 2, including the Wran Building
- Zone 3
- Conservation Management Plan

6.3.1 Heritage Core

The Applicant's HIS identifies the heritage core as Boiler House, Turbine Hall, Engine House, North Annex, Switch House and Former Ultimo Post Office. The amended proposal only seeks approval for one building envelope in the heritage core, located above the Switch House (up to RL 27.88) to accommodate the retention, adaptive re-use, demolition or replacement of the existing modern mezzanine addition with a new element of similar height and scale.

Council supports the removal of building envelopes over the heritage listed buildings, however, it considers that the curtilage around the buildings has not been adequately considered. It notes the entire parcel of land (Lot 1, DP 631345) is mapped as locally heritage listed and provides important visual curtilage around the heritage buildings. Council noted Lot 1 DP 631345 includes parts of the Harris Street forecourt, the south-east courtyard (Zone 1) and the land to the north of the Boiler House up to Pier Street as shown within the yellow dashed area in **Figure 13**.

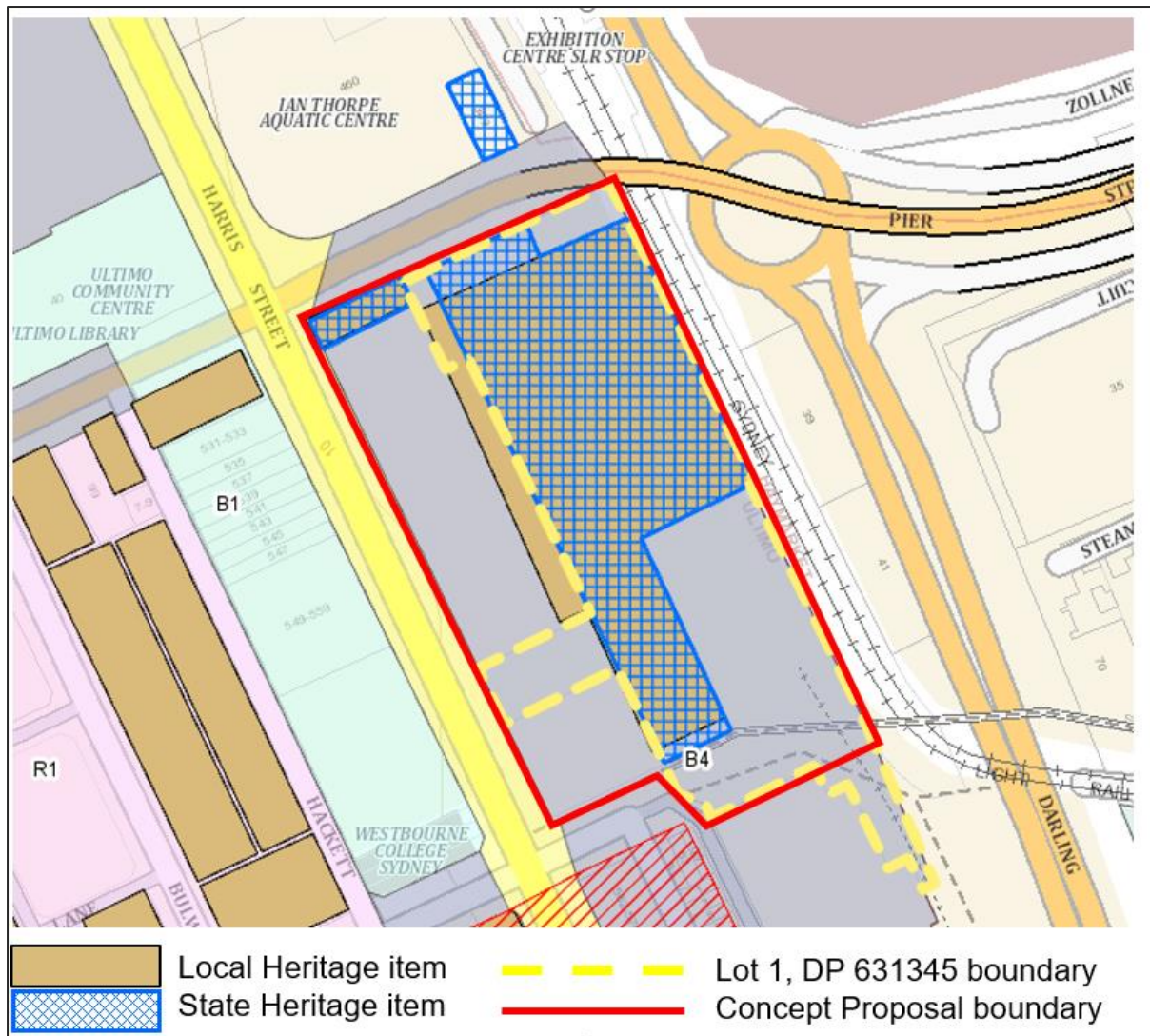


Figure 13 | Local and State heritage items on the site (Base Image Source: NSW ePlanning Spatial viewer)

Heritage NSW also supported the amendments made by the Applicant to address the initial concerns and recommended:

- all public domain areas enhance existing views and promote public interaction with the historic character of the building complex and its surrounds
- public domain areas remain as open-to-sky without any building elements above
- any proposed new works within the heritage core would be subject to detailed assessment in the future Stage 2 DA
- any extension above the Switch House should be recessive and represent a clear articulation or transition between the historic core and any contemporary intervention
- any amendments and possible alterations to fabric within and above the Switch House would require a detailed assessment in the future Stage 2 DA.

The National Trust supports the Powerhouse Museum at Ultimo, however it objected to the originally proposed maximum envelopes over the State-heritage listed buildings.

Other public submissions also raised concerns relating to the extent of the proposed building envelopes.

The Department has considered the amended proposal and concerns raised by Council, the National Trust and in public submissions and the advice provided by Heritage NSW. The Department is satisfied the amended proposal has appropriately responded to the concerns raised and removed building envelopes over the State Heritage buildings. In addition:

- no building envelopes are proposed over the Boiler House, Turbine Hall, Engine House, North Annex, or Former Ultimo Post Office and any proposed new works to these buildings, including demolition, alterations or additions would be subject to detailed in assessment in the future Stage 2 DA
- the proposed envelope above the Switch House would allow a new rooftop addition to replace the existing addition with a more modern, lightweight and sensitive element
- the proposed maximum GFA of 40,000 m², which includes the existing buildings, would prevent the envelopes being built out in their entirety
- the Department recommends FEARs which require:
 - any extension above the Switch House must be recessive and represent a clear articulation or transition between the historic core and any contemporary intervention
 - any alterations or alterations to fabric within any building within the Heritage Core must retain, protect and enable visibility of significant heritage fabric, key architectural features and insitu heritage elements.

6.3.2 Zone 1

The proposal seeks consent for a 28 m (up to 30.8 m subject to design excellence) building envelope within the existing south-east courtyard (Zone 1).

The Applicant's HIS notes that any building in Zone 1 has the potential to impact on the significance of the heritage listed items by obstructing existing views to those items from the Goods Line. Further any built form that abuts the heritage items has the potential to damage the fabric.

However, the HIS, considers the built form could have a neutral or positive impact if it was limited in height, located in a manner to not obstruct key views and/or use transparent, lightweight and reversible materials.

Council recommended that additional height be carefully considered or minimised in Zone 1 to ensure that the legibility of the heritage core is retained. Heritage NSW also recommended any development in this location must have regard to the legibility of the existing buildings and their heritage values.

Some public submissions raised concerns in relation to potential impacts to the Goods Line, as a result of new development within Zone 1.

The Department agrees with Council, Heritage NSW and the recommendations of the Applicant's HIS that any development in Zone 1 must be carefully considered to ensure that views of the heritage items from the Goods Line are protected and potentially enhanced.

The Department also notes (as discussed in **Section 6.5**) that the concept proposal proposes a minimum of 2,200 m² of public domain and the Pyrmont Peninsula – Consolidated Sub-Precinct Master Plan envisages a new civic place, connecting with Macarthur Street and the Goods Line in Zone 1. The reference design locates this space within Zone 1.

The Department therefore recommends that new building elements only be permitted within Zone 1 if they are necessary to either facilitate an entry to the Powerhouse from the Goods Line and/or enhance the public domain.

To ensure any new building in Zone 1 does not result in adverse heritage impact the Department also recommends FEARs that require:

- new building element/s in Zone 1 are only permitted if it contributes to creating an entry from the Powerhouse from the Goods Line and enhances the public domain
- any new building elements in Zone 1 are limited in height and scale, sited and designed to retain and improve upon existing visibility and readability of the external facades of the heritage items
- a civic space must be located within Zone 1 consistent with the Pyrmont Peninsula – Consolidated Sub-Precinct Master Plan
- the 2,200 m² of public domain areas must be open to the sky and located on site to enhance existing views and promote public interaction with the historic character of the building complex and its surrounds.

6.3.3 Zone 2, including the Wran Building

The proposal seeks consent for a 28 m (up to 30.8 m subject to design excellence) building envelope occupying the existing Harris Street forecourt and the 1988 Wran Building (Zone 2). This envelope would allow for the whole or partial demolition of the Wran Building (**Figure 14** and **15**).



Figure 14 | View of the Wran Building, Harris Street forecourt and Switch House behind (Source: Applicant's CMP)



Figure 15 | View of the Wran Building from William Henry Street, behind the heritage listed post office (Source: Applicant's CMP)

The Applicant's HIS identifies that:

- any new building along Harris Street has the potential to impact on existing views from Harris Street to the Switch House
- the Wran Building is representative of post-modernist architectural design of the 1980s and 90s, however its integrity has been reduced through unsympathetic modifications between 2003 and 2015
- the Wran Building is not locally or State heritage listed however has associative significance due to its connections with architect Lionel Glendenning, exhibitions designer Richard Johnson, powerhouse Director Dr Lindsay Sharp and the former NSW Premier Neville Wran.

Council identified the significance of views from Harris Street to the historic core to retain the legibility of the heritage items. Council also considers the Wran Building is significant as an award-winning integration of new and existing buildings on the site.

Heritage NSW advised that:

- the National Trust submitted a nomination (in 2020) to list the entire site (including the Wran Building) on the State Heritage Register
- the significance assessment for the Wran Building has not yet been completed by the State Heritage Register Committee (SHRC)

In January 2023, Heritage NSW provided an update on the National Trust nomination and advised that the SHRC considered the 2020 National Trust Nomination on 6 December 2022 and resolved to defer its preliminary decision, and is not progressing with the nomination at this time.

The National Trust (which nominated to list the entire site on the State Heritage Register), other special interest groups and public submissions consider the significance of the Wran Building is understated and raised concerns about the potential demolition of the building.

The Department has considered the concerns and advice provided by Council and Heritage NSW and the concerns raised by special interest groups and public submissions in relation to potential impacts to the Wran Building.

While the Department acknowledges the significance and architectural merit of the building (in particular being awarded the Sulman award in 1988), the Department considers the proposal is acceptable as it would provide an opportunity to redevelop and expand the Powerhouse into an international standard museum, providing ongoing cultural, social and economic benefits.

The Department also notes the Wran Building is not State or locally heritage listed, and the National Trust's nomination, to State Heritage list the entire site is not being progressed at this time. The potential demolition of the Wran Building is therefore unlikely to alter the significance of the history of the site, the significance of the existing heritage listed items and would not affect the continued use of the site as a museum.

Further, the Department considers that the potential demolition or alteration to the Wran Building is acceptable noting the Wran Building adversely impacts the visibility to and from the heritage listed buildings on the site and also resulted in a poor streetscape experience along Harris Street. The unsympathetic alterations to the Wran Building between 2003 and 2015 also indicate that the building was unable to adapt to growth and change.

Finally, a new or modified building would offer opportunities for an improved urban design and heritage outcome for the site by:

- meeting the needs functional needs of a contemporary museum, which in turn would result in increased visitation and access to the Powerhouse collection
- significantly increasing activation along Harris Street
- opening up views to the existing facades of the heritage items on the site.

To ensure the future development within Zone 2 delivers improved urban design and heritage outcomes, the Department recommends FEARs which require:

- any new building within Zone 2 must improve the visibility and readability of the external facades of the Ultimo Powerhouse, the Post Office Building, and their relationship with one another and the broader precinct, including The Goods Line
- an active street frontage to the entire length of Harris Street.

6.3.4 Zone 3

The proposal seeks consent for a building envelope of up to RL 13.08 in Zone 3 to serve as a connection area and facilitate a new entry from Pier Street. The building envelope is located adjacent to the remains of the former Pump House (**Figure 16**).



Figure 16 | Remains of the former Pump House (Source: Applicant's HIS)

The Applicant's HIS concludes that the introduction of a building envelope up in Zone 3 would have an overall positive heritage impact by allowing opportunities for public access and interpretation of the former Pump House space.

Council recommended that additional height be carefully considered or minimised on the land adjacent to the Pump House (Zone 3) to ensure that the legibility of the heritage core is retained.

The Department has considered the Applicant's HIS and the advice provided by Council and is satisfied that the envelope in Zone 3 is acceptable because:

- the maximum height of RL 13.08 will ensure that any new built form will site at the same level or below the Pier Street viaduct view of the heritage facades from the north are retained
- the envelope would provide the opportunity to enhance the physical and visual connection of Powerhouse to the surrounding area by creating a new entrance from Pier Street and potential connection to the Exhibition Centre light rail stop
- the creation of a new entry to the Powerhouse enables the opportunity for public access and interpretation of the adjacent Pump House
- the Department recommends FEARs to ensure any future building element in this location:
 - is only permitted to allow a new entry to the Powerhouse from Pier Street
 - has a maximum height at or below the height of the existing Pier Street road level at this location
 - must include the retention of existing Pump House fabric including remaining facades, chimney and roof truss
 - must identify opportunities for interpretation of the former Pump House.

6.3.5 Conservation Management Plan

The Applicant prepared the Powerhouse Ultimo Conservation Management Plan (CMP) to guide the daily upkeep, administration and operation of the site. The CMP will also inform on-going conservation of the site and future decision making in relation to the locally and State listed items on the site. The CMP assesses the overall significance of buildings on the site (**Figure 17**) and the provides gradings of individual elements of all listed buildings.



Figure 17 | Gradings of significance (Source: Applicant's CMP)

Council, the National Trust and public submissions raised concerns with the CMP.

Council raised concerns about the structure, and insufficient analysis provided in the CMP. Council recommended the CMP identify the building and its values in three dimensions and the document should be peer reviewed.

The National Trust raised concerns that the CMP does not comprehensively address the needs or values of the precinct.

Some public submissions raised concerns in relation to the content of the CMP and the nature of the community consultation that was undertaken during the preparation of the document.

Heritage NSW does not have a role in reviewing or endorsing CMPs, however it does continue to recommend preparing CMPs as best practice heritage management documents and has published guidance on developing CMPs.

Heritage NSW therefore advised that while the Applicant has indicated that the Stage 2 detailed DA would be consistent with the CMP, it does not endorse the CMP and any future applications for the site will be assessed on their merits with consideration to the State Heritage Register listing.

The Department acknowledges the criticisms and concerns about the structure, content and analysis provided by the CMP. The Department however notes that the intention of the CMP is to guide the daily upkeep, administration and operation of the site, and not the assessment of heritage impacts of the proposal which are assessed through the Heritage Impact Statement.

Noting the Concept Proposal does not seek approval to undertake any physical works to the State or local heritage listed item, and all demolition and construction works will require separate development consent, the Department is satisfied that the heritage impacts can be assessed in detail in the future Stage 2 DA.

The Department recommends a condition of consent be imposed that the CMP has not been endorsed as part of the consent and that a Heritage Impact Statement will be required for future development application(s).

6.3.6 Conclusion

The Department has carefully considered the advice provided by Council and Heritage NSW, community concerns and the Applicant's response. The Department acknowledges the concerns raised about impacts to State and local heritage items and the potential demolition of the Wran Building.

On balance, when weighing up the potential impacts against the significant public benefit the proposal would offer in terms of renewing the existing museum with international standard museum and exhibition space, the Department is satisfied that the heritage impacts of the Concept Proposal are acceptable as:

- the proposed new building envelopes comply with the maximum height control in the SLEP
- the maximum GFA is well below the maximum permitted on the site and, in conjunction with the minimum public open space and Urban Design Guidelines, prevents the building envelopes being used in their entirety and the Department's recommended FEARs provide an appropriate framework to ensure heritage impacts can be managed and mitigated in the future detailed DA
- the potential demolition and/or alteration to the Wran Building is acceptable as the building is not heritage listed and Heritage NSW has confirmed the National Trust nomination is not being progressed at this time. In addition, the existing building adversely affects the visibility of the State heritage-listed buildings on the site. It would provide the opportunity for an improved built form and visual relationship with State heritage-listed buildings on the site and an improved urban design relationship with Harris Street
- the CMP is a non-statutory guiding document, which is not endorsed through the Concept Proposal process
- a detailed heritage impact statement will be required as part of any future DA(s) to assess the physical and visual impacts of any development on the heritage significance of the site and surrounds.

6.4 Amenity

6.4.1 Visual impacts

The application was accompanied by a Visual Impact Assessment (VIA), which considers the potential visual impacts of the concept proposal on public and private views. The assessment considers the proposed maximum building envelope and the reference design.

The VIA describes the visual context of the site, and its surrounds, as consistent with much of inner Sydney, being complex and layered with different architectural periods, styles and scales of development.

The VIA identifies the visual catchment of the site in **Figure 18** and identifies the key features in the surrounding landscape as Harris Street to the west, the Goods Line to the south, the light rail corridor

to the east, the Pier Street viaduct to the north-east and the two student accommodation towers to the east.

The Pyrmont Peninsula Place Strategy identifies the following view corridors and seeks to create new views and maintain existing views along streets and between buildings to support legibility and wayfinding, enhance existing character and visually connect people to the natural setting of the Peninsula:

- north and south along Harris Street
- along the Goods Line
- and south of the site in Mary Ann Street.



Figure 18 | Visual catchment of concept proposal (Source: Applicant's Visual Impact Assessment)

The Department has assessed the visual impact of the proposal from the public domain and private properties.

Public domain

The VIA considers the visual impact of the proposal from six viewpoints in the public domain as shown below in **Figure 19**.

The VIA notes that the proposal will be most visible in the public domain from a small, localised area and in particular adjoining streets being viewed primarily by travellers on road, rail or other transport routes in proximity to the surrounding streets.

For the proposed building envelopes, the significance of the expected impacts to views obtained from the public domain are described as ranging from low at viewpoint 2 to moderate at viewpoints 1, 3, 4, 5 and 6. The greatest impacts are expected to occur at the intersection of Harris Street and Macarthur Street (viewpoint 5) and the Goods Line and Macarthur Street intersection (viewpoint 3).



Figure 19 | Public viewpoints (Source: Applicant's Visual Impact Assessment)

Some public submissions raised concerns in relation to the potential for the proposal to block views towards the heritage listed buildings on the site. Heritage NSW also provided recommendations in relation to enhancing existing views and promoting public interaction with the heritage items as discussed in **Section 6.3**.

Council requested the future Stage 2 DA assess view impacts from:

- the southeast courtyard and Goods line rail tracks to the heritage core
- Harris Street through to the heritage core
- Harris Street and Macarthur Street of the Switch House and the southeast courtyard.

The Applicant contends that as part of the RtS the proposed building envelopes were refined in response to concerns raised in submissions, which has reduced the overall impact to views obtained from the public domain. It also notes the Urban Design Guidelines include the requirement to enhance views to heritage items through Zones 1, 2 and 3.

The Department has considered the visual impacts of the proposal from the public domain and is satisfied that the proposal will result in acceptable and improved visual impacts from the public domain as:

- primary view corridors affecting the site, as identified in the Pyrmont Peninsula Place Strategy, are retained
- the proposed building envelopes are consistent with the maximum height and FSR controls in the SLEP
- the proposal will retain and improve views of the State heritage items from the public domain, subject to the FEARs outlined in **Section 6.3**.

Private view impacts

The VIA considers the visual impact of the proposal from seven private viewpoints as shown below in **Figure 20**.



Figure 20 | Private viewpoints (Source: Base image source: Applicant's Visual Impact Assessment)

The VIA identifies three private properties to the southwest as being the most likely impacted by the concept proposal (**Figure 20**). The properties consist of a group of terraces on Harris Street (viewpoint 7) and some eastern facing apartments in an eight storey (viewpoints 8, 9 and 10) and six storey apartment building (viewpoints 11, 12 and 13) on Bulwara Road.

The VIA describes the existing views obtained at the viewpoints as being primarily towards the north and north-east taking in Pyrmont and the Sydney CBD skyline, with parts of the existing Powerhouse development being visible from the Harris Street terraces and upper levels of the apartment buildings on Bulwara Road. The VIA notes that these views do not contain water, land and water interface or iconic elements or features. All views are obtained from balconies from a standing position.

The VIA notes that views from the Harris Street terraces towards the Powerhouse site are largely obscured by existing street trees on both sides of Harris Street. From all remaining viewpoints, the concept proposal blocks views to parts of Pyrmont in the foreground and the Sydney CBD skyline in the distance.

The VIA concludes that the expected impacts are negligible to minor and despite some view loss, the viewpoints all retain substantial views of the Sydney CBD skyline. It also notes that the expected view loss does not include highly valuable or iconic features.

To ascertain whether the expected private view impacts are acceptable, the Department has followed a four-step assessment consistent with the principles established by *Tenacity Consulting v Warringah Council* (2004) NSWLEC 740. The steps/principles adopted in the decision are:

1. assess the views affected and the qualitative value of those views
2. consider from what part of the property views are obtained
3. assess the extent of the impact (from 'negligible' to 'devastating')
4. assess the reasonableness of the proposal that is causing the impact.

The Department agrees with the Applicant's description of the views that will be affected, the value of these views, where they are obtained from and the extent of the impact.

In terms of reasonableness of the proposal, the Department notes that the proposed building envelopes are consistent with SLEP controls relating to height, scale and bulk.

The Department has considered the Applicant's assessment of visual impacts and is satisfied that the visual impacts of the development on nearby private properties are acceptable as:

- the Applicant's view analysis has demonstrated that the extent of the view impacts will be negligible to minor in nature, with the affected residential properties retaining substantial views over Pyrmont and the Sydney CBD skyline
- the proposed building envelopes are consistent with the maximum height and FSR controls in the SLEP
- the view analysis undertaken shows the maximum worst-case extent of visual impacts caused by the proposed building envelopes, however the actual impacts would be considerably less noting that the maximum GFA will be limited to 40,000 m², a minimum 2,200 m² of public open space is required and other FEARs recommended in **Section 6.3** will prevent the envelopes being filled in their entirety.

6.4.2 Overshadowing

The Applicant provided an analysis of the overshadowing impacts of the proposed building envelopes.

The overshadowing analysis shows that the existing buildings on the site create minimal overshadowing to the site itself. The Turbine Hall, Boiler House and Switch House create partial overshadowing to the south-east courtyard from midday through to the afternoon at most times of the year.

The existing Urbanest student accommodation towers located to the east of the site fully overshadow the south-east courtyard from morning to late afternoon during the winter solstice, and from morning to midday most other times of the year. The existing two storey town houses to the south of Macarthur Street are also overshadowed by the student accommodation towers in winter from early morning to 10am.

The Harris Street forecourt is most impacted by overshadowing in the early morning during the winter, being almost fully overshadowed by the Urbanest towers, Switch House and Wran Building at 9am during the winter solstice. The forecourt is minimally overshadowed by the Switch House from early morning to midday and by the Wran Building from midday to early afternoon, being least impacted throughout the day in spring and summer and most impacted during winter.

The Pyrmont Peninsula Place Strategy requires that solar access to the Goods Line be protected.

Concerns were raised in some public submissions that the development would result in overshadowing of private residences and public open spaces.

In response to concerns raised in public submissions the Applicant undertook further overshadowing analysis for the residential apartment building at 278-284 Systrum Street (82 Mary Anne Street), including the preparation of shadow diagrams that show the additional shadow cast by the proposed building envelopes between 9am and 3pm during the worst case mid winter scenario (21 June) (**Figure 21**) as well as on 21 March, 23 September and 21 December.

The Applicant undertook this additional analysis against the City of Sydney's 'Draft Minimising overshadowing of neighbouring apartments: Documentation guide' (Draft Guide).

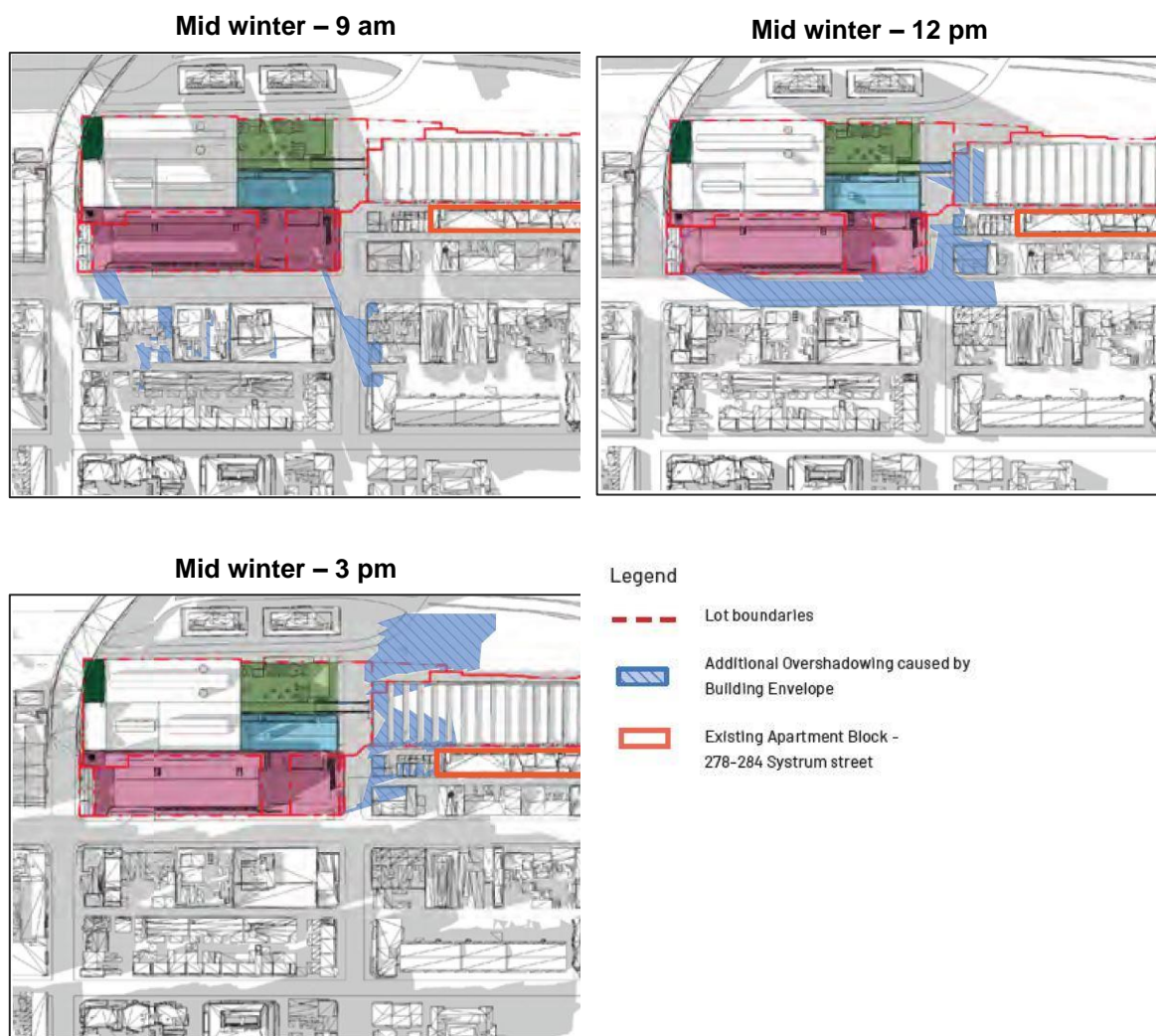


Figure 21 | Shadow diagrams – 21 June – 9am, 12pm and 3pm (Source: Applicant's Urban Design Report & Analysis)

This analysis confirms that the additional overshadowing would affect a small number of apartments, which currently receive between 15 minutes and 2 hours of direct sunlight at mid-winter. Each of these apartments will continue to achieve at least 15 minutes of direct sunlight at mid-winter. As

existing levels of solar access will be maintained, the concept proposal is consistent with the Draft Guide.

The Department is satisfied that the overshadowing analysis undertaken demonstrates that the concept proposal will have acceptable overshadowing impacts as:

- the proposed building envelopes are consistent with the maximum height and FSR controls in the SLEP
- there will be no additional shadow cast to the Goods Line between 12pm and 2pm, consistent with the Pyrmont Peninsula Place Strategy
- the worst-case additional overshadowing impacts to private residences is consistent with the Draft Guide, however the actual impacts are likely to be considerably less noting that the maximum GFA will be limited to 40,000 m², a minimum 2,200 m² of public open space is required and other FEARs recommended in **Section 6.3** will prevent the envelopes being filled in their entirety.
- the Urban Design Guidelines are intended to guide any future development on the site and require consideration of overshadowing in the design and assessment of all future built elements

The Department recommends a FEAR requiring the future DA for the stage 2 development include overshadowing analysis and demonstrate that the overshadowing impact on the neighbouring public open spaces and private residential properties has been minimised.

6.5 Public domain

6.5.1 Open space provision, design and function

The Concept Proposal seeks to provide a minimum of 2,200 m² of public open space. The key elements of the concept public domain strategy are provided for in the urban design guidelines and include:

- at least one significant public space of no less than 1,800m² that is connected at grade to an adjacent public space or pathway to allow gathering for events and programming
- Zone 4 (Macarthur Street) retained as public open space also providing pedestrian, cycle and vehicular access
- prioritising pedestrian movements, improved connections to the broader public domain and clear wayfinding.

The Design Report and Landscape Plan demonstrate, utilising the reference design, how these key elements could be achieved on the site. The indicative public domain design is shown in **Figures 22 and 23**.

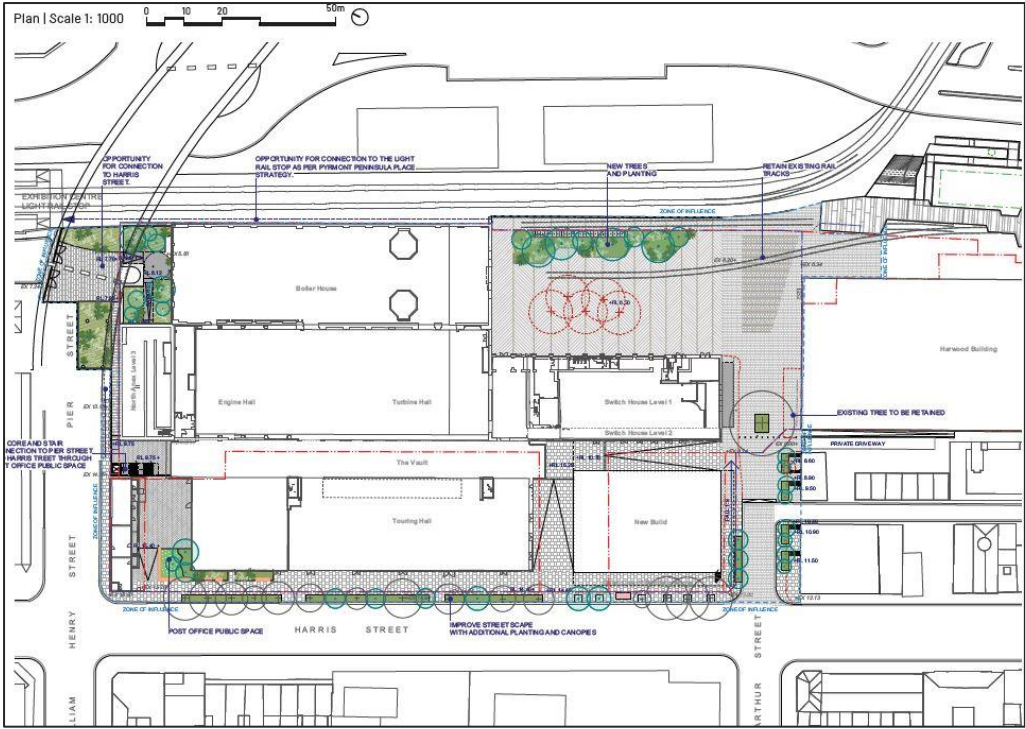


Figure 22 | Indicative public domain plan (Source: Applicant's Urban Design Report)

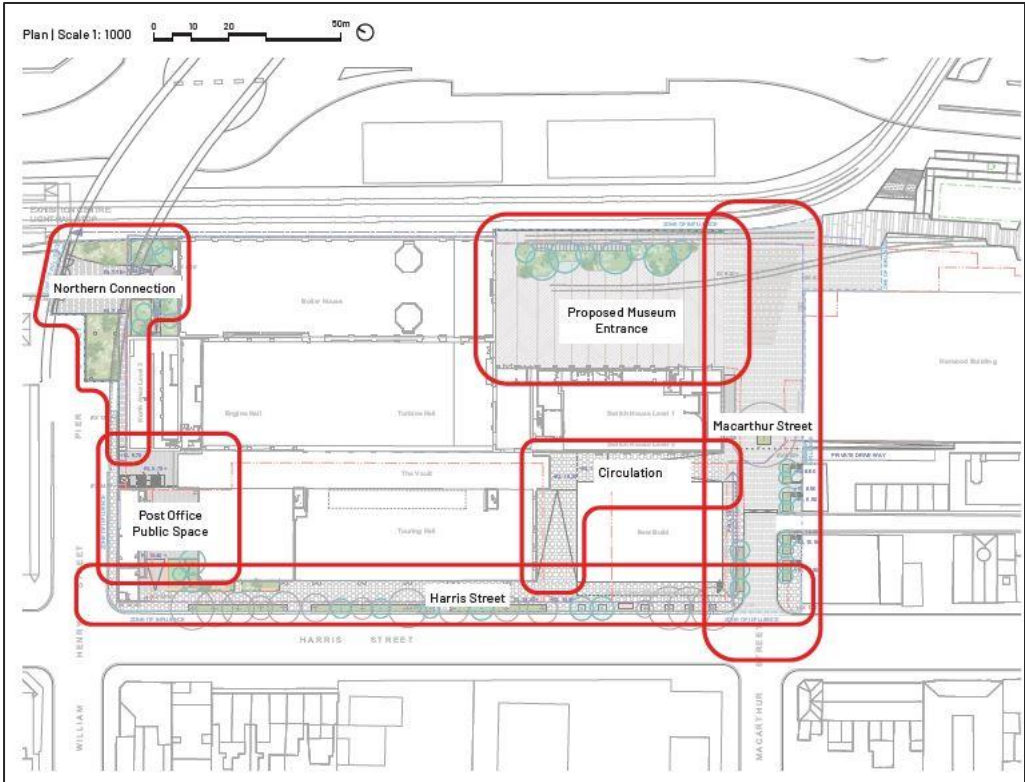


Figure 23 | Public domain – key spaces (Source: Applicant's Urban Design Report)

Public submissions express concerns in relation to the potential loss of the Harris Street forecourt as an existing public domain area that currently provides for local amenity and pedestrian movement.

In response, the Applicant contends that the quantum of publicly accessible open space within the site will be equal or increased as a result of the development. Further, that the urban design guidelines aim to better activate the existing public domain and provide improved community access to the museum's offerings.

Council supports the opportunities to improve the public domain on and around the site. Council noted that the character of surrounding streets should be retained and improved.

The Department has considered the matters raised in public submissions and Council's advice and is satisfied that the concept proposal provides a sound framework in relation to open space provision, design and function as:

- the provision of 2,200 m² will be equal to or greater than the existing open space on the site
- of the 2,200m², at least one space with a minimum area of 1,800 m² will be provided which connects to an adjacent public space or pathway to allow gathering for events and programming
- the urban design guidelines provide appropriate guidance to ensure that the stage 2 detailed design delivers high quality publicly accessible open space
- the reference design which generally retains the existing south-east courtyard (Zone 1) and provides renewed open space around the former post office and
- the reference design provides renewed public domain within the existing south-east courtyard, consistent with Pyrmont Peninsula – Consolidated Sub-Precinct Master Plan which envisages a new civic place, connecting with Macarthur Street and the Goods Line in this location
- while the existing Harris Street forecourt may be altered by the development, there will be no net loss of open space and the urban design guidelines aim to better activate the existing public domain, which would directly benefit current and future users, and surrounding communities of the site.

The Department recommends FEARs to ensure future applications provide:

- a civic space within Zone 1 consistent with the Pyrmont Peninsula – Consolidated Sub-Precinct Master Plan
- a minimum of 2,200 m² of open to the sky public open space (excluding existing public domain within Zone 4)
- at least one area with a minimum area of 1,800 m² that is connected at grade to an adjacent public space or pathway to allow gathering for events and programming
- mechanism(s) to ensure open space is publicly accessible 24 hours-a-day 7 days-a-week.

6.5.2 Pedestrian connectivity

The site is surrounded by a number of pedestrian routes, which provide connections to Darling Harbour, Pyrmont, the Sydney CBD and Central Station.

Current site conditions create particular constraints to north-south pedestrian movement due to the heavily trafficked William Henry and Pier Streets link and the adjacent light rail corridor.

The Ultimo Sub-Precinct Master Plan provides the following objectives for the future planning and development for the Powerhouse Museum site:

- opportunities to improve community access to the museum and connectivity to public transport, facilities and open spaces be considered
- development build on existing through-site links to improve connections between the Goods Line and Pyrmont Street, thereby providing a link to the Exhibition Centre Light Rail Stop.

The proposal seeks to improve pedestrian movement around and through the site by:

- prioritising pedestrian movement
- creating a safe and accessible pedestrian experience
- providing pedestrian connectivity through the site in both east-west and north-south directions
- providing legible connections to public transport
- improving the interface with and activation of the Goods Line
- improving linkages to the Darling Harbour/Darling Square precinct, particularly along an extension of Macarthur Street
- improving the pedestrian experience on Macarthur Street to provide for a more welcoming environment.
- providing the main museum entrance in Zone 1, a secondary entrance/s to the museum from Harris Street and potential managed access from the Exhibition Centre light rail stop (Zone 3).

TfNSW supports the provision of new pedestrian connection to the Exhibition Centre Light Rail Stop, however, notes that any pedestrian connection with the light rail corridor should be undertaken in consultation with TfNSW.

Council recommended that pedestrian connections be provided as part of the future Stage 2 development. Council noted any new connection to the Exhibition Centre light rail stop and/or upgrades to the Goods Line should be informed by consultation with TfNSW and Council.

In response, the Applicant contends that:

- based on the expected number of additional visitors to the site, the proposed development does not generate the need for additional pedestrian connections external to the site to adequately service the development
- while there is potential for new connections to be made to the Exhibition Centre Light Rail stop underneath Pier Street or within the light rail corridor, these works would be subject of a separate development application as they are outside the project boundary
- the rail corridor is designated as a 'heavy rail corridor' which prevents pedestrian access
- the Urban Design Guidelines consider how future connections could be facilitated through the design of the stage 2 development within the site boundaries.

The Department has considered TfNSW and Council's comments and the Applicant's response. The Department acknowledges existing 'heavy rail' designation of the corridor in this location may constrain the ability to provide a connection between the site and the light rail stop. However, noting that TfNSW and Council both support a new connection in this location, the Department recommends that the potential connection to the Exhibition Centre Light Rail Stop be further investigated as part of the Stage 2 development application, having regard to feasibility, design and safety requirements.

The Department recommends FEARs requiring that:

- opportunities to improve community access to the museum and connectivity to public transport, facilities and open spaces be investigated, consistent with the Ultimo Sub-Precinct Master Plan

- future development application(s) must investigate the creation of a pedestrian link between the site and the Exhibition Centre Light Rail Stop, in consultation with Council and TfNSW, having regard to feasibility, design and safety requirements.

6.5.3 Landscaping

Deep soil planting and canopy cover

The Powerhouse Museum site currently accommodates minimal landscaping in the south-east courtyard and Harris Street forecourt. Deep soil planting currently comprises 0.18% of the site area.

The Design Report and Landscape plan show concept details of the proposed landscaping treatment (**Figure 24**). The Applicant proposes to increase deep soil planting from 0.18% to 5% of the site area.

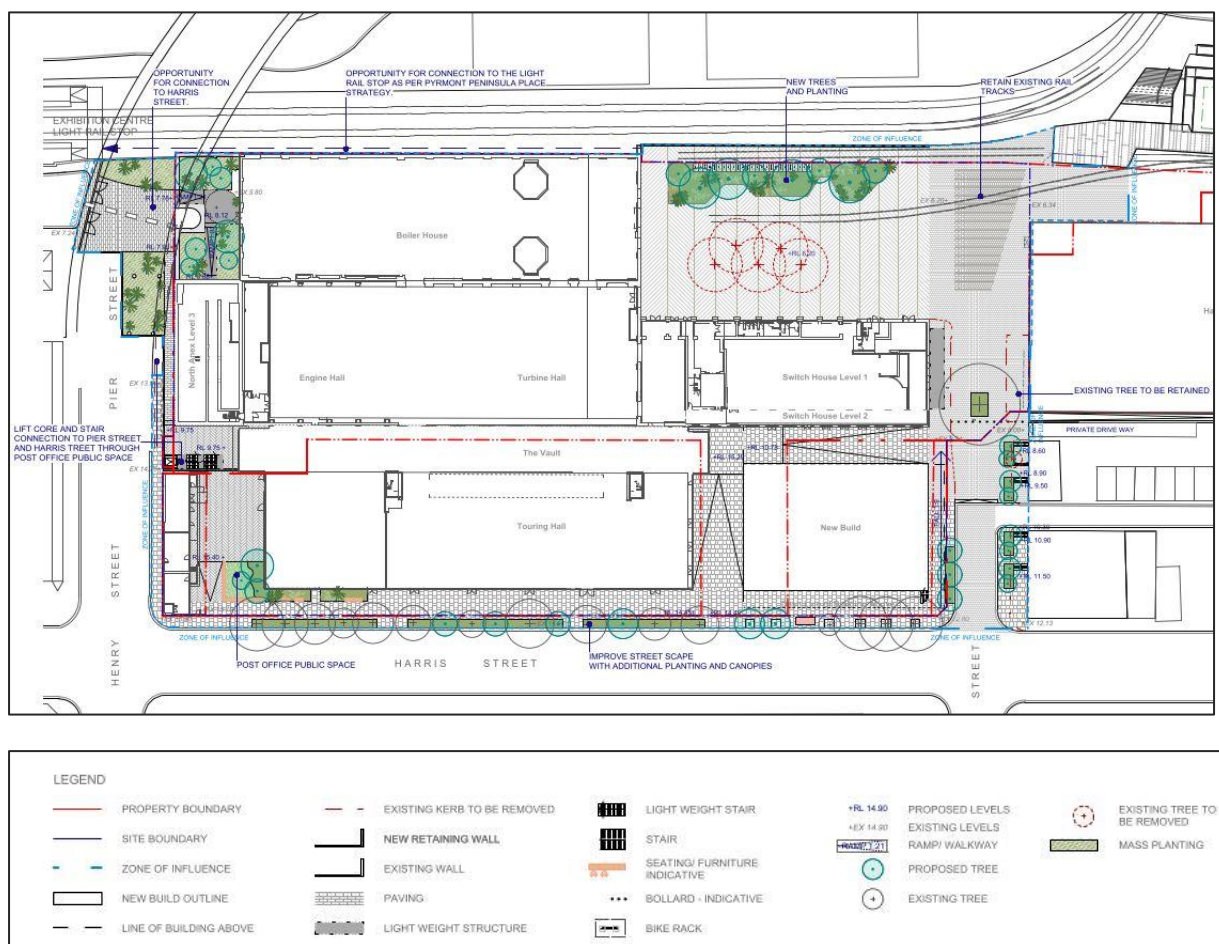


Figure 24 | Concept Landscaping Plan – Reference design (Source: Applicant’s Urban Design Report)

Council raised concerns that the conceptual landscaping treatment relies on street trees and areas outside of the site boundaries for deep soil and canopy cover. Council recommended that any future development provide, at a minimum, 10% of unimpeded deep soil areas and 15% of urban canopy cover within the site boundaries, to be maintained in perpetuity. Council also recommended that any future design encourage the greening of the site through other methods such as green roofs.

In response the Applicant contends that requiring a minimum of 10% of the site area as deep soil planting is not feasible or appropriate as the site:

- is in an inner-city location
- has a primary function as a museum, which requires a large building footprint and trafficable public domain areas for a range of activities, including outdoor events and queuing, to support the museum

Council provided further feedback in response to the Applicant's RtS, advising that their concerns had not been satisfactorily addressed and noted the urban design guidelines do not clearly set out any commitment to planting shade trees to meet urban canopy targets or to provide any greening on the roof of any new addition.

The Department has considered Council's advice and the Applicant's response and notes the importance of site greening and canopy increase, while acknowledging the constraints presented by the site and the nature of the existing and proposed development in achieving this.

The Department considers that the Applicant's proposal to provide for a minimum of 5% deep soil areas is acceptable, as:

- the site accommodates substantial existing above and below ground structures that limit the ability to provide substantial deep soil planting areas
- the proposed 5% deep soil area represents a significant increase to what exists on the site
- the function of museum spaces necessitates large building footprints and supporting hard stand areas within the public domain which limits the areas on the site that can be used for deep soil plantings.

The Department, however, agrees that it is important that the future detailed design maximise opportunities for tree canopy coverage, shade trees within deep soil zones and additional planting on structure, green roofs and other methods to increase greenery for shade and cooling.

To ensure that the site contributes to NSW Government and Council objectives for greenery and canopy coverage, the Department recommends FEARs that future applications:

- provide for a minimum of 5% of the site as unimpeded deep soil areas within the site boundary
- demonstrate that tree canopy coverage is maximised in line with the Premier's priority Greening our City and Greening Sydney Strategy 2021, including appropriate species selection for shade trees within deep soil zones and additional planting on structure, green roofs and other methods to increase greenery for shade and cooling.

Tree Management

The application was accompanied by a preliminary Arboricultural Assessment which assessed the retention value of five existing trees within the site and 17 trees surrounding the site.

The reference design indicatively shows the proposed removal of the five London Plane Trees within the south-east courtyard (Zone 1) and new landscaping. The removal of these trees is to allow for the entrance of the museum to be reorientated towards the Goods Line and City.

Council raised concerns about the proposed removal of these five London Plane Trees and recommended that all trees assessed as having medium retention value be considered for retention and incorporated in the stage 2 detailed design.

In response the Applicant advised that no approval is sought as part of the concept proposal for the removal of trees, which will be considered as part of the assessment of the stage 2 detailed design.

The Department has considered Council's advice and agrees that given the trees located in zone 1 are assessed as being of moderate landscape significance they should be considered for retention.

The Department therefore recommends FEARs requiring:

- the DA for the future stage 2 development include a detailed Arboricultural Assessment,
- all trees identified as having moderate (or higher) retention value be considered for retention and incorporation into the landscape design for the proposal.

6.6 Access and transport

6.6.1 Travel demand

The Traffic Impact Assessment (TIA) forecasts 5,000 to 6,000 people will visit Powerhouse Ultimo on a typical weekday and Saturday/Sunday respectively. This is a net increase in visitation to the site of 3,100 visitors on a typical weekday and 3,720 visitors per day on weekends.

The TIA estimates that over half of visitors to the site will use public transport. The TIA concludes that the supporting transport network has the ability and capacity to accommodate future travel requirements. The additional demand on the train/metro network will be in the order of 100 – 200 passengers per hour, which can be accommodated on the range of rail and metro services to be in place.

TfNSW did not raise any concerns about public transport availability or capacity.

The Department is satisfied that the site has good access to public transport to support visitors to the site and that the TIA has satisfactorily demonstrated that the expected impacts to the transport network are acceptable.

6.6.2 Traffic impacts

The forecast additional traffic movements are 16 in the morning peak and 61 in the afternoon peak. As no on-site car parking is proposed, these additional vehicle trips will be dispersed across a number of public car parking stations in the surrounding area rather than converging on a single location, minimising the road network impacts of the proposal.

Given the small number of vehicles that will be dispersed across a number of different vehicle routes and locations, the impacts to the road network arising from the development are considered negligible.

The Department considers that the TIA has satisfactorily demonstrated that the expected impacts to the transport network are acceptable.

The Department recommends a FEAR requiring that future applications include a detailed Traffic and Transport Impact Assessment, which considers the traffic generation and operational traffic and transport impacts resulting from the detailed design of the development.

6.6.3 Servicing

Vehicular access to the site is currently via Mary Ann Street and Macarthur Street for staff car parking. Loading and servicing is provided via Macarthur Street, with the main loading dock located within the Harwood Building. For large museum deliveries, trucks manoeuvre within the main forecourt area at the eastern end of Macarthur Street and reverse into the loading zone of the eastern building.

The Applicant has not provided detailed on proposed servicing requirements however notes that a number of options exist for the future servicing of the site and that the key parameters for the detailed design of the loading dock for the future Stage 2 development include:

- no direct vehicle access to the site via Harris Street (being a classified State Road)
- site access driveway to be located at least 20 metres east of the Macarthur and Harris streets intersection.

The reference design provides one example of how the future Stage 2 development may be accessed and serviced, including a new vehicle access point off the northern side of Macarthur Street. The Department notes, however, that this is indicative only and access and servicing requirements will be dependent on the detailed design.

TfNSW have recommended that a freight and servicing plan be prepared to ensure that any traffic and safety impacts associated with the loading operations are mitigated.

The Department is satisfied that the concept proposal has demonstrated that the future stage 2 development can provide for access and servicing arrangements, which will meet the needs of the Powerhouse without impacting on the safety or efficiency of the adjacent road network as:

- the Applicant has provided swept path analysis to support the reference design for vehicles likely to access the site. This demonstrates a range of potential servicing arrangements and shows that a Heavy Rigid Vehicle (HRV) and Medium Rigid Vehicle (MRV) could park in the loading dock side by side and enter/exit independently of one another from Macarthur Street
- an access driveway off Macarthur Street, at the location shown in the reference design, will remove the need for vehicles to drive through the public domain and park adjacent to the Harwood Building as currently occurs.

To ensure adequate servicing is provided for the development, the Department recommends FEARs requiring future applications:

- demonstrate that the forecast servicing demand of the development can be accommodated, and potential traffic and safety impacts are managed and mitigated
- demonstrate that no vehicular access is provided from Harris Street and the access on Macarthur Street is at least 20 m from the intersection with Harris Street
- ensure that pedestrian safety is prioritised around the site, including all servicing locations.

6.6.4 Car parking

The site currently provides for 40 staff car parking spaces at the southern end of the site, accessed from Mary Ann Street, and to the east of the Harwood Building accessed from Macarthur Street. The

existing spaces sit outside the project site boundaries. The existing development does not provide for any public car parking spaces.

The proposal does not include the provision of any additional car parking spaces. The existing on-site parking will be retained and unchanged by the proposal.

The SLEP sets a maximum number of car parking spaces that can be provided on a site. Information and education facilities are permitted a maximum number of 1 space for every 200m² of the gross floor area of the building.

Council and TfNSW did not raise any concerns about car parking provision.

The Department considers the provision of no additional car parking for staff or visitors is acceptable as the site has good access to public transport including light rail and bus services adjacent to the site and is walking distance from Central and Town Hall Stations. In addition, the Department is satisfied that sufficient public parking stations are provided nearby the site to accommodate visitors to the site.

6.6.5 Bicycle parking

The Concept proposal does not seek consent for a bicycle parking rates, however the reference design includes a minimum of 15 staff bicycle parking spaces and associated end-of-trip facilities and a minimum of 40 visitor bicycle parking spaces to be included in the public domain and new building.

The SLEP does not provide any requirements relating to bicycle parking for the development. The Sydney Development Control Plan 2012 (SDCP) requires that bicycle parking be provided for museums at the rate of 1 space per 1,000m² of the GFA for staff and 1 space per 200m² of the GFA for visitors. This would generate the need for 40 staff spaces and 200 visitor parking spaces.

Council recommended that bicycle parking and end-of-trip facilities be provided in accordance with the SDCP.

TfNSW recommended that bicycle parking be located in convenient and secured locations and that a Green Travel Plan (GTP) be prepared for the development. They recommended that the GTP include monitoring of bicycle parking and end-of-trip facilities to ensure a sufficient supply to encourage active transport to and from the site.

In response, the Applicant advised that the final number and location of bicycle parking spaces and associated end-of-trip facilities will be determined as part of the detailed design for the future stage 2 development.

The Department considers it critical that sufficient bicycle parking and end-of-trip facilities are provided for staff and visitors to encourage cycling to and from the site. The Department notes the SDCP 2012 does not apply to the site. However, in the absence of guidance on bicycle parking for the site, the Department considers it appropriate to reference the SDRP 2012 as a relevant guide to inform the number of bicycle parking spaces and associated end of trip facilities in the future Stage 2 DA.

To ensure that sufficient bicycle parking facilities are provided, the Department recommends FEARs to require that future application(s):

- assesses the demand for and demonstrate adequate provision of staff and visitor bicycle parking and end of trip facilities, having regard for the rates within SDCP 2012
- include a bicycle strategy demonstrating safe and efficient movement of cyclists and the design and location of proposed bicycle parking infrastructure
- include a Green Travel Plan.

6.6.6 Charter bus parking

The site has an existing short-term coach area on Harris Street immediately adjacent to the site. The zone extends for approximately 75 metres and can accommodate approximately four coaches at any one time. The zone is available for use weekdays between 10am and 3pm and on Saturdays between 9am and 5pm. Once coaches drop off passengers, they typically utilise the nearby coach parking area on Darling Drive prior to returning for pick up.

The concept proposal seeks to retain the existing set down and pick up arrangements for coaches. The development does not include the provision of additional set down, pick up or parking areas for coaches.

TfNSW sought clarification in relation to the provision of charter bus parking (and associated shelters) to support the forecast demand of the development, noting that the assessment should consider school groups and simultaneous visiting groups from multiple schools.

Council recommended the Urban Design Guidelines reference the need for an entry point on Harris Street, particularly for groups arriving by bus, coach and taxi.

In response, the Applicant advised that:

- the site has an existing short-term coach area on Harris Street, immediately adjacent to the site, which can accommodate approximately four coaches at any one time
- the arrival and departure of all group tours to the Powerhouse Museum is currently arranged through a centralised booking system, ensuring that the kerbside space for coaches on Harris Street can be appropriately managed
- the Urban Design Guidelines include the requirement for a secondary entrance from Harris Street and integrated bus and coach drop off/pick up facilities with sufficient pedestrian queuing space on Harris Street as well as path space for pedestrian access.

The Department is satisfied that adequate charter bus drop off/pick up and parking facilities are available to support the proposal, and that the detailed design of the museum and public domain is capable of accommodating groups arriving by bus.

To ensure weather protection is adequately considered in the detailed design, the Department recommends a FEAR requiring that future applications detail the provision of bus shelters (or adequate alternative weather protection (e.g. awnings) on Harris Street for public and charter buses in consultation with TfNSW and Council.

6.7 Flooding

The application was accompanied by a Civil Infrastructure and Flooding Report which provides an assessment of the likely flooding impacts of the Concept Proposal, based upon a worst-case scenario where the proposed building envelopes within Zones 1, 2 and 3 are fully built out.

The flood assessment notes that the site has a low flood hazard and is primarily affected by overland flow or local drainage flooding of depths less than 25 cm in both the 1% annual exceedance probability (AEP) flood event and probable maximum flood (PMF) (Figure 25).

Mainstream flooding and areas of high flood hazard occur adjacent to the site within the light rail corridor and Darling Drive. A further area of high flood hazard is identified at the intersection of Macarthur Street and Harris Street (Figure 26).

The assessment concludes that:

- the proposed development would not cause any significant change to flood behaviour or flood depths upstream or downstream of the development site (Figure 25)
- the proposed development would not result in any change in flood hazard on or surrounding the site (Figure 26)
- localised overland flow (less than 25 cm) within zones 1 and 3 can be satisfactorily managed by stormwater improvements and dedicated overland flow paths.

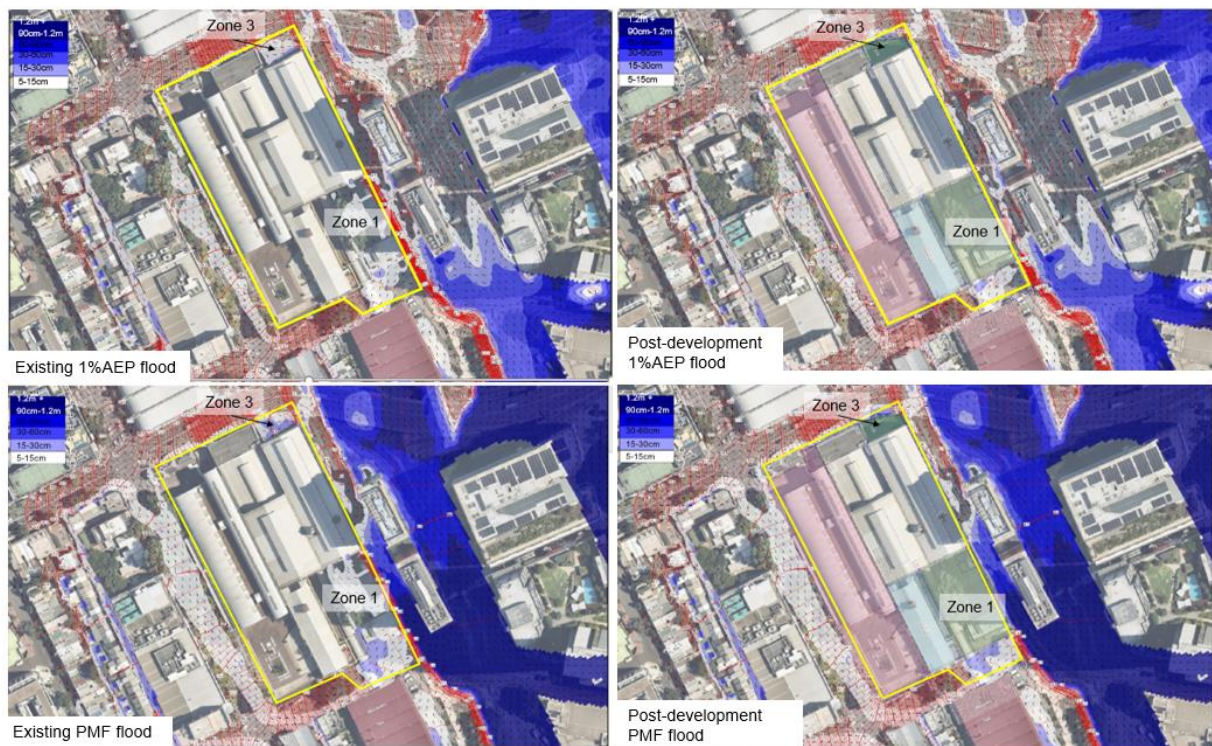


Figure 25 | Existing and Post-development 1%AEP and PMF (Base Image Source: Applicant's Civil Infrastructure and Flooding Report)

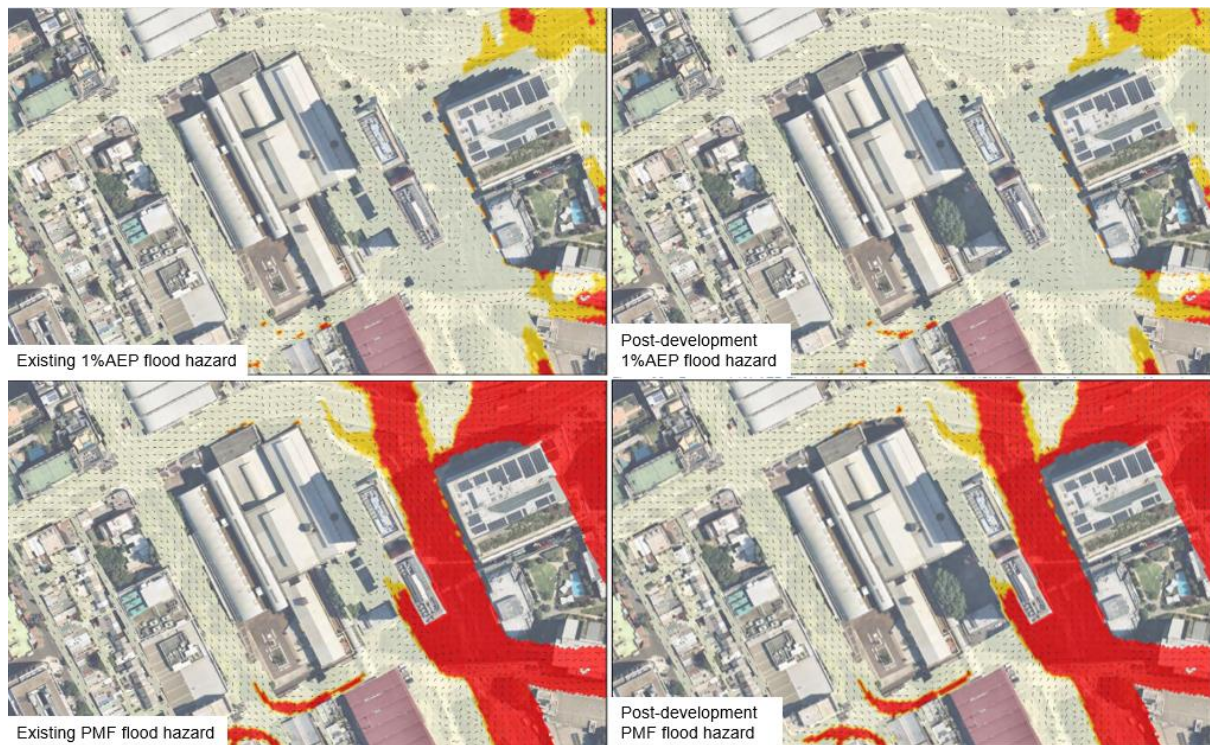


Figure 26 | Existing and Post-development flood hazard in the 1%AEP and PMF (Base Image Source: Applicant’s Civil Infrastructure and Flooding Report)

EHG provided comments in relation to the flood modelling parameters and raised concern about:

- potential impacts caused by the loss of floodplain storage and conveyance across the south-east portion of the site (Zone 1)
- flood impacts on development of the north-eastern corner (Zone 3) and recommend that consideration should be given to retaining this area undeveloped or with limited development.

In response to EHG’s concerns, the Applicant provided updated modelling and confirmed:

- there is no significant impact to flood behaviour outside the development site, due to the loss of floodplain storage in the south-east portion (Zone 1) of the site
- localised flooding in Zone 3 can be satisfactorily managed through appropriate floor levels for the future development and localised stormwater drainage works.

The Department has considered the findings of the Applicant’s Civil Infrastructure and Flooding Report and updated flood modelling and EHG advice in its assessment. The Department concludes that the minor localised flooding impacts can be managed in the future Stage 2 DA for the following reasons:

- the Applicant’s flood modelling has assessed the full extent of the proposed envelopes and provides a worst-case assessment, which is unlikely given the Department’s recommended FEARs in relation to public open space and maximum GFA
- the site has a low flood risk and shallow localised flooding of up to 25 cm in the 1%AEP and PMF can be managed through stormwater infrastructure and setting appropriate floor levels for the future development

- there would be no material flood impact or increase in flood hazard or surrounding land as a result of the proposed development.

To ensure the flood impacts are assessed in detail and that minor flooding conditions are managed in the detailed design, the Department recommends FEARs requiring:

- the preparation of a Flooding Impact Assessment that details the impact of any physical works on flood behaviours and hazard
- provision of appropriate stormwater and drainage infrastructure to manage localised flooding/overland flow
- that floor levels of future development comply with the flood planning level requirements of City of Sydney's Interim Floodplain management Policy
- future development is not to give rise to detrimental increases in the potential flood affectation of neighbouring land
- any building elements within Zone 1 and Zone 3, including any potential entrances to the museum and connection to the light rail stop, must not result in any adverse impacts to floodplain storage and conveyance or flood hazard.

6.8 Other issues

The Department's consideration of other issues is provided at **Table 8**.

Table 8 | Summary of Department's assessment of other issues

Issue	Findings	Recommendations
Powerhouse collection and relationship with Parramatta and Castle Hill	<ul style="list-style-type: none"> • The National Trust consider that Powerhouse Ultimo must remain the flagship of the wider Powerhouse Museums network. The National Trust and other public submissions also raised concern about the approach to splitting up the Powerhouse collection and relocation of the collection to Castle Hill. • The Applicant indicates that one of the objectives of the proposed Powerhouse Museum Ultimo renewal is to deliver an international standard museum that is complimentary to flagship Powerhouse Parramatta, Powerhouse Castle Hill and Sydney Observatory. • The Department has considered the matters raised in submissions, but notes that the concept proposal is consistent with the NSW Government announcement made on 4 July 2020. 	No conditions necessary.
Harwood Building	<ul style="list-style-type: none"> • The National Trust raised concern the Harwood building hasn't been appropriately considered and should be part of the Concept Proposal. • Public submissions also raised concerns in relation to the intentions for the Harwood Building and potential impacts to it. • Council raised concerns that the heritage curtilage analysis completed for the CMP does not include the Harwood Building, which is identified as being of high significance. 	No conditions necessary.

- In response the Applicant confirmed that the Harwood Building is not part of the proposed development.
- The Department has considered the matters raised in public submissions and Council's advice and notes the following:
 - EIS clearly outlines that the Harwood Building is not part of the concept proposal
 - the CMP is a non-statutory guiding document, which is not endorsed through the Concept Proposal process
 - the Harwood Building, while identified as being of high significance is not a heritage listed item.
- The Department is satisfied that the application makes clear that the Harwood Building is located outside of project site boundaries
- In addition, the Applicant's urban design guidelines require that the stage 2 detailed design provide for an appropriate interface to adjoining buildings and precincts, including the Harwood Building.
- The Department therefore concludes that the proposal will not result in any adverse impacts to the Harwood Building, subject to further detailed assessment in future application(s).

Impact on Powerhouse collection and proposed focus on fashion

- Public submissions raised concerns about the proposed focus on design and fashion and considered that the Ultimo site must showcase the full Powerhouse Collection.
- In response the Applicant advised that:
 - while the Powerhouse Ultimo will have a programming focus on fashion and design, there will still be a range of other exhibitions on display
 - the Boulton and Watt steam engine, Locomotive No, 1 and Catalina Flying Boat will remain at Powerhouse Ultimo
 - the renewal will create a range of spaces that will be flexible to enable the showcasing of the Powerhouse Collection
 - no planning approval is sought or required for the programming of Powerhouse Ultimo.
- The Department is satisfied that the Applicant has addressed the concerns raised about the focus on design and fashion and confirmed that significant elements of the collection will remain on display at Ultimo and that a diverse range of programs and exhibitions will be provided.
- The Department is therefore satisfied that the Powerhouse Ultimo will continue to allow for elements the Powerhouse Collection to be displayed, in addition to a broad range of exhibitions and programs.

No conditions necessary.

Community consultation

- Public submissions raised concerns in relation to:
 - duration of the public exhibition of the state significant development application
 - perceived differences between the development proposal and previous NSW Government announcements

No conditions necessary.

- consultation undertaken as part of the preparation of the updated Conservation Management Plan (CMP)
- information provided by the Powerhouse in the media
- In response the Applicant noted that:
 - the exhibition was undertaken by the Department in accordance with the relevant requirements
 - the concept proposal reflects and is consistent with prior commitments by the NSW Government to maintain and renew Powerhouse Ultimo at its existing location
- The Department publicly exhibited the EIS for 31 days between 21 June and 21 July 2022 which exceeds the minimum 28 days statutory requirements of the EP&A Act (**Section 5**). The RtS and additional information provided through the assessment process has also been published on the Department's website.
- The Department acknowledges concerns raised about community consultation as part of the preparation of the CMP, however notes this is a non-statutory guiding document, which is not endorsed through the Concept Proposal process.
- The Department also notes that information provided by Powerhouse in the media has not been submitted as part of this application for consideration.
- The Department is satisfied the community has had sufficient opportunity to comment on the proposal.

Economic and Social impact

- Concerns were raised in public submissions about the business case for the proposal, the need for the development and the potential cost and appropriateness of spending State funds on the proposed museum renewal. No conditions necessary.
 - The proposal was supported by a Social Impact Assessment, which also considers the expected economic benefits associated with the construction and operation phases of the development.
 - Section 4.15(1)(b) of the EP&A Act requires the consideration of the likely social and economic impacts of the development in the locality. The Department considers the proposal would result in positive social and economic outcomes as:
 - it will provide a positive investment in arts and culture for the City of Sydney
 - it is expected to increase demand for entertainment, food and accommodation from visitors
 - it will create new cultural and entertainment opportunities during both day and night, providing a significant positive contribution to the diversification of the local night-time economy
 - it is expected to generate 440 direct and 1,270 indirect jobs during the construction phase and up to 200 direct and 140 indirect jobs upon completion and full occupancy of the development
 - it is estimated that the direct operational jobs will generate a direct value-add to the economy of \$18.6 million per annum.
-

Wind impacts

- The application was accompanied by an Environmental Wind Assessment. The assessment considers the overall massing of the proposed building envelopes. The Applicant's wind assessment concludes that:
 - wind conditions at the majority of locations around the site are classified as suitable for pedestrian standing, with windier conditions around the building corners being classified as suitable for pedestrian walking. These are similar to the existing wind conditions around the site
 - all locations around the proposed envelopes are expected to pass the safety criterion.
- The report notes that to qualify the advice provided in the report detailed modelling of the development would be required as part of the future Stage 2 development.
- The Department has considered the findings of the wind assessment and is satisfied that the proposal is likely to have acceptable wind impacts for pedestrians within and around the development.

The Department recommends a FEAR requiring the future Stage 2 development application demonstrate that the wind conditions for spaces within and around the site are suitable for their intended purpose.

Noise and vibration

- The concept proposal does not include any works and does not seek approval for any operational aspects. Notwithstanding, the application was accompanied by a Noise and Vibration Impact Assessment (NVIA), which gives preliminary consideration to potential construction noise and vibration impacts and operational noise impacts that may be associated with the development.
- The site is surrounded by residential, commercial and educational land uses and the assessment concludes that noise during demolition, earthworks and construction has the potential to exceed the highly noise affected levels at sensitive receiver locations around the site during standard hours.
- The NVIA also identifies the importance of appropriately locating rooftop plant associated with the operational phase of the development.
- The NVIA makes several recommendations to minimise construction and operational noise and vibration impacts.
- The Department is satisfied that noise and vibration impacts for the future Stage 2 development can be identified and effectively mitigated, subject to detailed assessment in future application(s).

The Department recommends a FEAR requiring the preparation of a NVIA for future application(s) which demonstrates how noise impacts during construction and operation can be reasonably minimised and mitigated in accordance with relevant standards and guidelines.

Contamination

- The application was accompanied by a Preliminary Site Investigation Report which concludes:
 - most contaminants tested for were either not detected or found at low concentrations in the soil and groundwater samples
 - elevated concentrations of polycyclic aromatic hydrocarbons (PAH), total recoverable hydrocarbons (TRH), metals and organochlorine pesticides (OCP) were identified in fill samples above adopted assessment criteria
 - an elevated concentration of ammonia in groundwater was encountered at one sample location

The Department recommends a FEAR requiring future application(s) include a DSI and, as necessary, a Remedial Action Plan reviewed and approved by a site auditor accredited under the Contamination Land Management Act 1997.

- remediation or management of contamination will be required to allow for future development of the site
- the extent of remediation or management will likely depend on the extent of future development on the site as well as the results of additional investigations.
- The report recommends that a detailed site investigation (DSI), including soil and groundwater sampling, be undertaken as part of the Stage 2 development.
- The EPA concurs with the recommendation that a detailed site investigations should be undertaken for the site as part of the Stage 2 development and has provided recommended conditions that require detailed investigations and remediation, if required.

Safety and security

- The application was accompanied by a Crime Prevention through environmental design (CPTED) assessment.
- The Applicant's CPTED assessment identified potential security concerns in and around the site including:
 - the location of the site on the fringe of the CBD, where crime rates are typically higher
 - parts of the site currently provide opportunities for concealment.
- The Applicant's CPTED assessment provides recommendations to guide the detailed design of the future Stage 2 development to incorporate crime prevention, safety and security measures, including:
 - maintaining sightlines to and from the development and surrounds
 - ensuring circulation spaces are unobstructed by structures, to remove opportunities for concealment
 - ensuring the design of any active street level uses along Macarthur Street or Harris Street maximises natural surveillance and activation
 - the installation of a CCTV network in publicly accessible areas and within the curtilage of the development
 - installation of a bollard/barrier system at the Macarthur Street terminus to prevent vehicles driving into the site.
- Council also provided advice in relation to maintenance, safety and lighting considerations for any new pedestrian connection in the north of the site to the Exhibition Centre light rail stop.
- The Department has considered the Applicant's CPTED assessment and is satisfied that safety and security can be appropriately managed in the development, subject to the recommendations of the assessment being incorporated in the detailed design of the future Stage 2 development.

The Department recommends a FEAR requiring the preparation of a CPTED assessment for the future Stage 2 development, which also demonstrates how the recommended mitigation measures have been incorporated in the design of the development.

Aboriginal cultural heritage

- The application was accompanied by an Aboriginal Cultural Heritage Assessment Report (ACHAR), which details the process of investigation, Aboriginal

The Department recommends FEARs requiring:

- community consultation and assessment with regards to Aboriginal cultural heritage values.
- The Applicant's ACHAR concludes that:
 - no Aboriginal sites are registered as being located within or directly adjacent to the study area
 - moderate to high levels of disturbance associated with clearing of vegetation and construction of the existing buildings have impacted the original soil profile across much of the study area resulting in the loss of topsoil
 - there is potential for intact archaeological deposits below the upper levels of disturbance
 - despite the disturbance from previous land use practices, natural soil profiles below the disturbed layers retain a moderate-to-high potential for preserving Aboriginal objects
 - the nature, extent and significance of potential Aboriginal archaeological resources within the site remains unknown.
 - The Applicant's ACHAR recommends that:
 - a further ACHAR be prepared for the future Stage 2 development, when ground disturbing impacts are known
 - an Aboriginal archaeological test excavation be undertaken to determine the nature, extent and significance of any sub-surface archaeological resources
 - continued consultation with Aboriginal communities for the life of the project
 - site inductions be undertaken prior to works commencing and an Aboriginal Interpretation Plan be prepared
 - Heritage NSW recommended that test excavations be completed upfront to inform the development, ensuring that design changes can be made if necessary to allow for the management of Aboriginal cultural heritage encountered on the site.
 - However, following consideration of additional information by the Applicant including the constraints presented by the location of existing buildings and likely impacts being limited to piling and service trenching, which has a tolerance to be designed/located to avoid impacts to archaeology, Heritage NSW confirmed it had no further comments, and requested it be consulted on the SEARs for the future Stage 2 application at the time to ensure the matters are adequately addressed.
 - The Department has considered the recommendations of the Applicant's ACHAR and Heritage NSW's advice. The Department agrees that wherever possible test excavations should be completed upfront to inform the design and ensure that impacts to any archaeology can be avoided, rather than managed and mitigated.
 - However, in this instance it is acknowledged that the existing Wran Building and other structures on the site prevent opportunities for testing. In addition, given extensive envelopes proposed across Zones 1, 2 and 3, any test excavation carried out at this stage would be based on assumptions on built form, piling and
 - detailed assessment in an ACHAR including details on how the detailed design enables the avoidance and conservation of significant Aboriginal cultural heritage values, where identified through the assessment and measures to manage and mitigate harm to any Aboriginal cultural heritage values.

service trenching, would not accurately inform the design, and could result in unnecessary disturbance.

- On this basis, the Department considers the recommendations of the Applicant's ACHAR, in particular in relation to preparing a further ACHAR for the Stage 2 detailed design and undertake archaeological test excavations prior to commencement of any ground works, are acceptable.

Non-Aboriginal archaeology

- The application was accompanied by an Historical Archaeological Assessment (HAA), which considers the historical archaeological potential and significance of the subject site.
- The Applicant's HAA concludes that there is moderate to high potential for an archaeological resource of local significance to be present within the site, particularly in areas that have not been impacted via the construction of basements for the Ultimo Power House construction in the early 20th century.
- The Applicant's HAA recommends that further archaeological investigation be undertaken once ground disturbing impacts are known and prior to works commencing.
- Heritage NSW recommended that consideration be given to any potential maritime archaeological resources that may exist at the site, given the extent of land reclamation undertaken in the vicinity.
- The Department has considered the Applicant's HAA and the advice provided by Heritage NSW and recommends that FEARs are imposed to ensure archaeology is appropriately assessed in the future Stage 2 DA.

The Department recommends a FEAR requiring:

- a detailed HAA which assesses impacts to potential historical archaeology and maritime archaeological resources and outlines opportunities to avoid impacts to and conserve archaeology in sit
- an Archaeological Research Design and Excavation Methodology.

Connecting with country

- The GANSW's draft Connecting with Country Framework seeks to develop connections with Country that can inform the planning, design, and delivery of built environment projects in NSW.
- The Applicant's Urban Design Guidelines provide a number of principles and guidelines for future development on the site relating to First Nations. The Applicant has also identified a number of key initiatives to ensure that there is ongoing engagement with First Nations communities for the life of the project.
- The State Design Review Panel (SDRP), as part of their review of the concept proposal, acknowledged the Applicant's efforts to date in engaging with First Nations communities and incorporating indigenous expertise in the design team.
- The SDRP recommended that the guidelines be amended to include:
 - place-based principles and themes informed by consideration of Country
 - the Caring for Country principles developed by Terri Janke and Company for the Sustainability Action Plan.
- As part of the RtS the applicant amended the Urban Design Guidelines to include principles and guidelines, as recommended.
- The Department considers the redevelopment of the site provides a unique opportunity to reinforce the sites connection with its indigenous history in accordance

The Department recommends a FEAR requiring the future Stage 2 development application explore and implement opportunities to connect with Country, in consultation with First Nations communities.

with the GANSW's draft Connecting with Country framework.

- The Department therefore recommends FEARs requiring future DA(s) consider the draft Connecting with Country Framework and explore and implement opportunities to connect with Country in the design and planning of the development, in consultation with First Nations communities.

Sustainability

- The application was accompanied by an Ecologically Sustainable Development (ESD) report.
- The Applicant's ESD report considers the relevant sustainability principles and targets applicable to the site and development. The report outlines the environmental targets that the development aspires to, which includes:
 - minimum 5-star Green Star Rating, targeting 6-Star Green Star
 - exceed the requirements of Section-J of the National Construction Code (NCC) for energy-efficiency in building fabric and building services / systems
 - align with Government Resource Efficiency Policy (GREP)
 - demonstrate good design through early-stage analysis and guidance, in general accordance with the best practice standards such as Green Star
 - implementation of a Net Zero Operational Plan
 - implementation of climate positive, low-carbon and high-performance precinct
 - alignment with Greater Sydney & City of Sydney Strategies and Targets
 - transition Plan to achieve zero carbon performance.
- One public submission raised concerns with carbon emissions released from construction.
- The Department has considered the proposal in relation to ESD principles and is satisfied the proposed sustainability initiatives will encourage ESD by targeting a 6-Star Green Star rating. The Department also notes Powerhouse has a commitment to reach net zero operations by 2025.
- The Department acknowledges the impacts of the construction industry on carbon emissions and notes the ESD report identifies the role that material choice and construction methods plays in reducing the amount of carbon embodied in the development. It also outlines strategies to be considered in the future design stages for low impact construction methods and use of recycled and recyclable materials.
- To ensure the Powerhouse Ultimo project is a leader in sustainability, the Department recommends FEARs requiring the future Stage 2 development achieve the proposed ESD initiatives and sustainability measures and targets and include a detailed assessment of how the construction of the development contributes to ESD through design, construction and operation of the development.

The Department recommends a FEAR requiring the future Stage 2 development:

- demonstrate ESD principles are incorporated into the design, construction and operation of the development
- achieve, or improve upon, the proposed initiatives and sustainability measures and targets in the ESD report.

Utilities and services

- The application was accompanied by an Infrastructure Management Strategy (IMS) report, which addresses the potential impact of the proposal on relevant services, including existing utility infrastructure and assets, and the Inner West Light Rail. The Strategy also considers any infrastructure upgrades required to facilitate the renewal.
- The IMS report concludes:
 - the site is currently serviced by water, sewer, electricity, telecommunications and communications infrastructure which can be augmented if necessary
 - the proposal is not expected to impact the Inner West Light Rail, which immediately adjoins the site.
- Sydney Water and Ausgrid provided advice in relation to the location and nature of existing services and noted that detailed advice and relevant approvals are to be sought for the future Stage 2 development.
- TfNSW advised that Inner West Light Rail operation and assets need to be protected during the construction and operation of the proposed development.
- The Department is satisfied the site is capable of being appropriately serviced by necessary utilities and the detailed design matters relating to utilities, including connection and augmentation, can be addressed as part of the assessment of the future Stage 2 development.
- The Department recommends FEARs requiring the preparation of a Utility Services Infrastructure Assessment, including further consideration of the adjoining Inner West Light Rail.

The Department recommends

FEARs requiring:

- the DA for the future Stage 2 development include a Utility Services Infrastructure Assessment for the development
- documentation which includes consideration of potential construction and operational impacts to the adjoining Light Rail.

Temporary visitor accommodation

- The proposal seeks consent for temporary accommodation on the site, which would be used for visitors to the Powerhouse Museum as part of the Museum's learning outreach programs, including students from regional NSW, interstate and overseas.
- The Department considers the incorporation of ancillary residential accommodation is acceptable as it would support the creative and learning functions of the museum, subject to assessment of the proposed location, internal layout, amenity and operation in future application(s).
- To ensure any temporary accommodation operates in an ancillary nature to the Powerhouse Museum, the Department also recommends a FEAR that future application(s) incorporating temporary visitor accommodation demonstrate that the accommodation is fully integrated into the design and operation of the museum.

The Department recommends a FEAR requiring future application(s):

- Detail the proposed location, internal layout, amenity and operation of temporary accommodation
- demonstrate that the accommodation is fully integrated into the design and operation of the museum.

Public art

- Council recommended that the Applicant prepare a Public Art Strategy to form part of the Design Excellence process, to support First Nations engagement and implement the Connecting with Country framework principles.
- In response, the Applicant submitted a Preliminary Public Art Strategy as part of the RtS, which aims to:

The Department recommends a FEAR requiring the preparation of a Public Art Strategy for the inclusion of public art within the development prepared in consultation with Council that:

- create a precinct identity that expresses the adaptive reuse of the site as a contemporary museum and creative industries precinct
 - support an ambitious commissioning program that includes integrated site-specific works and temporary event-based works that attract the best local, regional, national, and international artist and creative practitioners
 - collaborate with First Nations and diverse communities in the development and implementation of the program.
 - Council provided feedback on the strategy, noting the commitment and plans to include permanent public art in the renewal project. Council recommended that a revised strategy be prepared as part of the Stage 2 detailed design, which is consistent with Council's requirements, in particular that:
 - identifies locations for permanent public art opportunities
 - provides an estimated budget for public art and/or program for the inclusion of artists.
 - The Department considers that the Applicant's Preliminary Public Art Strategy is acceptable as it will ensure that public art is incorporated in the future Stage 2 DA and recommends FEARs accordingly.
 - identifies locations for permanent public art opportunities
 - provides an estimated budget and/or program for the inclusion of artists.
-

7 Evaluation

The Department has reviewed the EIS and RtS and assessed the merits of the proposal, taking into consideration advice from the public authorities and comments made by Council. Issues raised in public submissions have been considered and all environmental issues associated with the proposal have been thoroughly assessed.

The Department considers the proposal is acceptable as:

- it is consistent with the Great Sydney Region Plan and Eastern Harbour City District Plan's vision to increase the global competitiveness of the Harbour CBD and it would contribute to the growth of knowledge-based jobs, innovation and cultural and community activities
- the proposal would provide social and economic benefits within the local area and more broadly, through the refurbishment and expansion of the exhibition and public spaces, transforming Powerhouse Ultimo into an international standard museum and exhibition space
- the proposal is compliant with the height and density controls applying to the site and conditions of consent and future environmental assessment requirements (FEARs) are recommended to ensure the overall gross floor area is limited to 40,000 m² and the maximum height of 30.8 m in zones 1 and 2 is only achievable subject to a future DA achieving design excellence
- the future Stage 2 application will be informed by a Design Excellence Strategy (DES) endorsed by the Government Architect NSW and the Department. The DES, together with the building envelope parameters, urban design guidelines and recommended FEARs, provide a sound framework for the development to ensure the future detailed design would achieve design excellence.
- the proposal retains the State and locally listed heritage items on the site and FEARs are recommended to ensure any alterations or additions to the fabric of any building within the Heritage Core retain and protect significant heritage fabric, key architectural features and in-situ heritage elements. In addition, any new building elements must be designed to retain and improve the visibility and readability of the external facades of the heritage core
- while the Department appreciates the concerns raised about the potential demolition of the Wran Building it considers the proposal is acceptable for the following reasons:
 - the Wran Building is not State or locally heritage listed and Heritage NSW has confirmed that the National Trust's nomination to list the whole site on the State Heritage Register is not being progressed at this time
 - the potential demolition of the Wran Building would not alter the significance of the history of the site, the significance of the existing heritage listed items or the continued use of the site as a museum
 - it would offer an opportunity to redevelop and expand the Powerhouse while minimising visual and physical impacts of any building form and maximising and enhancing the public domain on and around the site
 - it would offer the opportunity to significantly increase activation and open up views to the significant external facades of the heritage items on the site

- the proposal would create a minimum of 2,200m² of public open space and associated public domain on the site, including one area of at least 1,800m² which will provide a space for gathering, events and museum programming. In recognition of the existing inner-city context of the site and existing levels of hardstand and built up surfaces on the site, FEARs are also recommended to increase deep soil planting to a minimum of 5% of the site and maximise shade tree planting and other greenery of the site
- FEARs are recommended to manage and mitigate impacts in relation to Aboriginal and non-Aboriginal archaeology, traffic, access and servicing, flooding, overshadowing, noise and vibration, wind, contamination and construction
- the proposal would provide significant public benefits including the renewal of the existing museum in an accessible inner city location, new public open spaces, improved public domain, and creation of approximately 440 direct construction and up to 200 direct on-going operational jobs.

Consequently, the Department concludes the proposal is in the public interest and should be approved, subject to conditions (**Appendix D**).

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 32927319, subject to the conditions in the attached development consent
- **signs** the attached development consent and recommended conditions of consent (**Appendix D**).

Recommended by:



Amy Watson
Team Leader
Key Sites Assessments


Recommended by:



Anthony Witherdin
Director
Key Sites Assessments

9 Determination

The recommendation is **Adopted** / Not adopted by:

A handwritten signature in blue ink, appearing to read 'Anthony Roberts', is written over the word 'Adopted' in the text above.

The Hon. Anthony Roberts MP

NSW Minister for Planning

Appendices

Appendix A – List of referenced documents

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

<https://www.planningportal.nsw.gov.au/major-projects/projects/powerhouse-ultimo-renewal>

- Environmental Impact Statement
- Agency advice
- Submissions
- Response to Submissions

Appendix B – Community Views for Draft Notice of Decision

A summary of the Department's consideration of the key issues raised in submissions is provided at **Table 9**.

Table 9 | Department's consideration of key issues raised in public submissions

Issue	Consideration
<p>Project justification</p> <ul style="list-style-type: none"> • Objection to project cost • Inadequate justification for the project • Concerns regarding the lack of business case to support project expenditure • Support for expenditure on a reduced project scope or refurbishment of existing buildings 	<p>Assessment:</p> <ul style="list-style-type: none"> • The proposal was supported by a Social Impact Assessment, which also considers the expected economic benefits associated with the construction and operation phases of the development. • Section 4.15(1)(b) of the EP&A Act requires the consideration of the likely social and economic impacts of the development in the locality. The Department considers the proposal would result in positive social and economic outcomes as: <ul style="list-style-type: none"> ○ it will provide a positive investment in arts and culture for the City of Sydney ○ it is expected to increase demand for entertainment, food and accommodation from visitors ○ it will create new cultural and entertainment opportunities during both day and night, providing a significant positive contribution to the diversification of the local night-time economy ○ it is expected to generate 440 direct and 1,270 indirect jobs during the construction phase and up to 200 direct and 140 indirect jobs upon completion and full occupancy of the development ○ it is estimated that the direct operational jobs will generate a direct value-add to the economy of \$18.6 million per annum.
<p>Museum focus/types of exhibits</p> <ul style="list-style-type: none"> • Concerns about museum changing use to an information and education facility • Concerns regarding change in exhibits from science and technology to fashion and design • Concerns existing museum collection will be placed in storage 	<p>Assessment:</p> <ul style="list-style-type: none"> • In response to concerns about the Museum, the Applicant advised that: <ul style="list-style-type: none"> ○ while the Powerhouse Ultimo will have a programming focus on fashion and design, there will still be a range of other exhibitions on display ○ the Boulton and Watt steam engine, Locomotive No, 1 and Catalina Flying Boat will remain at Powerhouse Ultimo ○ the renewal will create a range of spaces that will be flexible to enable the showcasing of the Powerhouse Collection ○ no planning approval is sought or required for the programming of Powerhouse Ultimo. • The Department notes that programming of the museum's collection is not a matter that can be considered as part of the assessment of a development application.
<p>Consultation</p> <ul style="list-style-type: none"> • Concerns regarding length of the exhibition period • Lack of stakeholder consultation • Perceived differences between the project and previous NSW Government announcements 	<p>Assessment:</p> <ul style="list-style-type: none"> • The Department is satisfied that consultation has been undertaken in accordance with the legislative requirements of the Environmental Planning and Assessment Act 1979 • The project was exhibited from 21 June to 21 July 2011 a total of 31 days, which exceeds the minimum 28 days statutory requirements of the EP&A Act for State Significant Development project. • The Department is satisfied the community has had sufficient opportunity to comment on the proposal. • The Applicant indicates that one of the objectives of the proposed Powerhouse Museum Ultimo renewal is to deliver an international standard museum that is complimentary to flagship Powerhouse Parramatta, Powerhouse Castle Hill and Sydney Observatory. The Department notes

that the concept proposal is consistent with the NSW Government announcement made on 4 July 2020.

Heritage impacts

- General concerns about impacts on heritage fabric and to the heritage significance of the site
- Specific concerns regarding potential heritage impacts to the Wran Building, other 1988 additions and Harwood Building and concerns they will be demolished
- Impacts of building envelopes on heritage significance
- Concerns with Conservation Management Plan

Assessment

- The proposal retains the State and locally listed heritage items on the site.
- No building envelopes are proposed over the Boiler House, Turbine Hall, Engine House, North Annex, or Former Ultimo Post Office.
- Any proposed new works to these buildings, including demolition, alterations or additions would be subject to detailed in assessment in the future Stage 2 DA
- The proposed envelope above the Switch House would allow a new rooftop addition to replace the existing addition with a more modern, lightweight and sensitive element
- The Wran Building is not heritage listed and Heritage NSW has confirmed that following a recent resolution of the Heritage Council to defer the preliminary assessment of the National Trust's nomination to list the whole site on the State Heritage Register which means that the nomination will not be progressed at this time.
- The potential demolition or alteration of the Wran Building would not alter the significance of the history of the site, the significance of the existing heritage listed items or the continued use of the site as a museum.
- The potential demolition or alteration of the Wran Building would also offer an opportunity to redevelop and expand the Powerhouse while minimising visual and physical impacts of any building form and maximising and enhancing the public domain on and around the site
- In addition, the proposal could significantly increase activation and open up views to the significant external facades of the heritage items on the site.
- The Harwood Building is not within the proposal and will not be impacted.
- The building envelopes will not be developed in their entirety and the recommended conditions of consent and FEARs, together with the Applicant's Urban Design Guidelines, include requirements to protect the heritage significance of the site by requiring a minimum of 2,200m² of public open space within the site, limiting the height of development in Zone 3 to the same level or below the Pier Street viaduct and ensuring the development in Zone 1 and 2 retain and improve views to/from the heritage core.
- The intention of the CMP is to guide the daily upkeep, administration and operation of the site, and not the assessment of heritage impacts of the proposal which are assessed through the Heritage Impact Statement.
- Noting the Concept Proposal does not seek approval to undertake any physical works to the State or local heritage listed items, and all demolition and construction works will require separate development consent, the Department is satisfied that the heritage impacts can be assessed in detail in the future Stage 2 DA.

Recommended Conditions

- Future application(s) must include a Heritage Impact Statement.
- Any alterations or alterations to fabric within any building within the Heritage Core must retain, protect and enable visibility of significant heritage fabric, key architectural features and in-situ heritage elements.
- The proposed envelope above the Switch House would allow a new rooftop addition to replace the existing addition with a more modern, lightweight and sensitive element
- New building elements within the building envelopes must be designed to retain and improve upon existing visibility and readability of the external facades of the heritage items.
- The Conservation Management Plan is not endorsed as part of the consent

Built form

- objections to bulk and scale of the proposed building envelopes, particularly in relation to the Heritage Core
- objections to the visual impacts associated with new built form
- objections to potential overshadowing of private property and public domain

Assessment

- No building envelopes are proposed over the State heritage listed buildings, with the exception of the Switch House, which is considered to have acceptable heritage and visual impacts consistent with the existing modern addition.
- The proposed building envelopes in Zones 1, 2 and 3 comply with the maximum SLEP height of 28 m (plus 10% bonus).
- The maximum gross floor area (GFA) (floor space ratio (FSR) of 2.4:1) complies with the maximum SLEP FSR of 4:1
- The building envelopes retain primary view corridors affecting the site, as identified in the Pyrmont Peninsula Place Strategy,
- The proposal will retain and improve views of the State heritage items from the public domain.
- The Applicant's overshadowing analysis demonstrates that in the worst-case scenario, there will be no additional shadow cast to the Goods Line between 12pm and 2pm, consistent with the Pyrmont Peninsula Place Strategy
- Worst-case overshadowing impacts to private residences are consistent with the City of Sydney Draft Guide to Minimising Overshadowing of neighbouring apartments.

Recommended Conditions

- Limit the maximum gross floor area to 40,000 m².
- Only permit a 10% design excellence bonus (up to 30.8 m) in Zones 1 and 2, subject to future application(s) demonstrating design excellence in accordance with Clause 6.21D(3)(a) of Sydney Local Environmental Plan 2012.
- New building elements must retain and improve upon existing visibility and readability of the external facades of the heritage items.
- Future application(s) include an overshadowing analysis and demonstrate that the overshadowing impact on the neighbouring public open spaces and private residential properties has been minimised.

Public Domain

- Concerns building envelopes would result in a loss of public space, including the Harris Street forecourt
- Opposition to structures being constructed on the existing Harris Street forecourt

Assessment:

- The existing Harris Street forecourt forms part of Zone 2 and may be altered by the development.
- However, there will be no net loss of open space and the urban design guidelines aim to better activate the existing public domain, which would directly benefit current and future users, and surrounding communities of the site.

Recommended Conditions:

- A civic space be provided within Zone 1 consistent with the Pyrmont Peninsula – Consolidated Sub-Precinct Master Plan.
- Require a minimum of 2,200 m² of open to the sky public open space (excluding existing public domain within Zone 4)
- Require at least one area with a minimum area of 1,800 m² that is connected at grade to an adjacent public space or pathway to allow gathering for events and programming
- Future application(s) must detail mechanism(s) to ensure open space is publicly accessible 24 hours-a-day 7 days-a-week.

Other

- Concerns about differentiation between other Powerhouse museums in Sydney (Parramatta and Castle Hill)

Assessment:

- The Applicant indicates that one of the objectives of the proposed Powerhouse Museum Ultimo renewal is to deliver an international standard museum that is complimentary to flagship Powerhouse Parramatta, Powerhouse Castle Hill and Sydney Observatory. The Department notes that this is consistent with the NSW Government announcement made on 4 July 2020.
- The Applicant has addressed the concerns raised about the Powerhouse collection and confirmed that significant elements of the collection will

- Concerns about splitting collections across powerhouse museums
 - remain on display at Ultimo and that a diverse range of programs and exhibitions will be provided.
 - The Department is therefore satisfied that the Powerhouse Ultimo will continue to allow for elements the Powerhouse Collection to be displayed, in addition to a broad range of exhibitions and programs.
-

Appendix C – Statutory considerations

C1 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects as set out in section 1.3 the Act. The objects of the EP&A Act are the underpinning principles upon which the assessment is conducted. The statutory powers in the EP&A Act (such as the power to grant consent / approval) are to be understood as powers to advance the objects of the legislation, and limits on those powers are set by reference to those objects. Therefore, in making an assessment, the objects should be considered to the extent they are relevant.

The Department has considered the proposal to be satisfactory with regard to the objects of the EP&A Act as detailed in **Table 10**.

Table 10 | Consideration of the objects of the EP&A Act

Objects of the EP&A Act	Summary of consideration
(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 proposal promotes the social and economic welfare of the community as it provides for renewal of the museum and provision of public spaces on public land and in doing so, contributes to the achievement of State and regional planning objectives. As discussed in Section 6, the proposal would have a positive impact on the economic welfare of the community and would not result in impacts on the State's natural or other resources.
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment	The Department has considered the proposal in relation to ESD principles in Section 6 and Appendix C3 .
(c) to promote the orderly and economic use and development of land	The proposal involves the orderly and economic use of land through the efficient renewal of a cultural land use on an existing urban site that is in close proximity to existing services and public transport. The proposed land uses are permissible, and the form of the development has regard to the planning controls that apply and the character of the locality. The merits of the proposal are considered in Section 6 . The development of the site will also provide economic benefits through job creation and infrastructure investment during construction stage.
(d) to promote the delivery and maintenance of affordable housing	Not applicable.
(e) to protect the environment, including the conservation of threatened and other species of	The project involves redevelopment of an existing urban site and will not adversely impact on any native animals and plants, including threatened

	<p>native animals and plants, ecological communities and their habitats</p> <p>species, populations and ecological communities, and their habitats.</p> <p>On 24 May 2022, the Department determined that the application is not required to be accompanied by a BDAR (Section 4.5).</p>
<p>(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)</p>	<p>The proposal retains the State and local heritage items on the site. The Urban Design Guidelines and recommended FEARs will ensure that the proposed development does not adversely impact on, but enhances, views of the significant heritage facades of the building. The significance and impacts to the Wran Building are considered in Section 6. The Department concludes the development's heritage impact is acceptable subject to conditions.</p> <p>The Department has recommended FEARs requiring future DA(s) in relation to Aboriginal and non-Aboriginal archaeological assessments including consultation with the Aboriginal community as part of the future DA(s).</p>
<p>(g) to promote good design and amenity of the built environment</p>	<p>The proposed building envelope, subject to conditions, has acceptable impacts as discussed at Section 6. The design guidelines and Design Excellence Strategy, which includes a design competition, ensure a high standard of design for any future development.</p>
<p>(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants</p>	<p>The application is for concept approval and does not include construction, however, construction impacts of the concept have been taken into consideration in the assessment of the proposal. In addition, future development applications will include detailed report(s) confirming the development is capable of meeting relevant construction standards.</p>
<p>(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State</p>	<p>The Department publicly exhibited the proposed development as outlined in Section 5, which included consultation with Council and other public authorities and consideration of their responses.</p>
<p>(j) to provide increased opportunity for community participation in environmental planning and assessment.</p>	<p>The Department publicly exhibited the proposal as outlined in Section 5, which included notifying adjoining landowners and displaying the proposal on the Department's website. The Department has considered all issues raised in submissions as part of its assessment. The Department also placed the RtS on its website and referred it to Council and relevant agencies.</p>

C2 Section 4.15(1) Matters for consideration

The matters for consideration under section 4.15(1) that apply to SSD in accordance with section 4.40 of the EP&A Act have been addressed in **Table 11**.

Table 11 | Section 4.15(1) Matters for Consideration

Matters for consideration		The Department's assessment
(a)(i)	any environmental planning instrument	The proposed development is consistent with the applicable EPIs. The Department's consideration of relevant EPIs is provided in Appendix C4 .
(a)(ii)	any proposed instrument	Not applicable.
(a)(iii)	any development control plan	Under section 2.10 of the State Environmental Planning Policy (Planning Systems) 2021 Development Control Plans (DCPs) do not apply to SSD.
(a)(iiia)	any planning agreement	The development does not involve a planning agreement.
(a)(iv)	the regulations	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6), public participation procedures for SSD and Schedule 2 relating to EIS.
(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	Section 6 of this report provides a detailed assessment of the impacts associated with the development. The development is not expected to result in unacceptable environmental impacts.
(c)	the suitability of the site for the development	The site is considered suitable for the development, as discussed in Section 6 of this report.
(d)	any submissions	Consideration has been given to the submissions received during the exhibition of the proposal as summarised at Section 5 and considered at Section 6 of this report.
(e)	the public interest	The proposal is in the public interest as discussed at Section 6 of this report.

C3 Ecologically sustainable development

The EP&A Act adopts the definition of ESD found in the Protection of the Environment Administration Act 1991 (POEA Act).

Section 6(2) of the POEA Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- the precautionary principle
- inter-generational equity
- conservation of biological diversity and ecological integrity; and
- improved valuation, pricing, and incentive mechanisms.

The development proposes ESD initiatives and sustainability measures, including targeting minimum sustainability targets:

- minimum 5-star Green Star Rating, targeting 6-Star Green Star
- exceed the requirements of Section-J of the National Construction Code (NCC) for energy-efficiency in building fabric and building services / systems
- align with Government Resource Efficiency Policy (GREP)
- demonstrate good design through early-stage analysis and guidance, in general accordance with the best practice standards such as Green Star
- implementation of a Net Zero Operational Plan
- implementation of climate positive, low-carbon and high-performance precinct
- alignment with Greater Sydney & City of Sydney Strategies and Targets
- transition Plan to achieve zero carbon performance.

The Department has considered the proposal in relation to the ESD principles. The precautionary and inter-generational equity principles have been applied in the decision-making process by a thorough assessment of the environmental impacts of the development. The development is consistent with ESD principles as described in the Applicant's EIS and RtS, which have been prepared in accordance with the requirements of the EP&A Regulation.

The Department is satisfied the proposed sustainability measures incorporated into the proposal are consistent with ESD principles, in accordance with the objects of the EP&A Act.

C4. Environmental Planning Instruments (EPIs)

The following EPIs were considered as part of the assessment of this proposal:

- State Environmental Planning Policy (Planning Systems) 2021
- State Environmental Planning Policy (Resilience and Hazards) 2021
- Sydney Local Environmental Plan 2012

State Environmental Planning Policy (Planning Systems) 2021

The development is declared to be State significant development in accordance with Section 2.6, Schedule 1, Section 13(1)(d) of State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP), as it involves development that has a CIV of more than \$30 million and is and 'information and education facility'.

The Minister for Planning is the consent authority pursuant to section 4.5(a) of the EP&A Act and section 2.7(1) of the Planning Systems SEPP.

State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 4 of the State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP) applies to all land in NSW in relation to the remediation of contaminated land.

Section 4.6 of the Resilience and Hazards SEPP requires the consent authority to be satisfied, before consent is granted for a development, whether the land subject to the development is contaminated and if contaminated, whether the land is suitable in its contaminated state or will be suitable after remediation.

The application was accompanied by a Preliminary Site Investigation Report. Site investigations included soil sampling from 11 designated sampling points and two boreholes designated for groundwater sampling. The report notes that fill was observed to be up to five metres in depth, comprising various soil types and containing anthropogenic materials.

The report concludes that most contaminants tested for were either not detected or found at low concentrations in the soil and groundwater samples. However, elevated concentrations of polycyclic aromatic hydrocarbons (PAH), total recoverable hydrocarbons (TRH), metals and organochlorine pesticides (OCP) were identified in fill samples above adopted assessment criteria. In addition, an elevated concentration of ammonia in groundwater was encountered at one sample location.

The report concludes that remediation or management of contamination will be required to allow for future development of the site. The report notes that the extent of remediation or management will likely depend on the extent of future development on the site as well as the results of additional investigations.

The report recommends that a detailed site investigation (DSI), including soil and groundwater sampling, be undertaken as part of the Stage 2 development. The EPA concurs with the recommendation that a detailed site investigations should be undertaken for the site as part of the Stage 2 development and has provided recommended conditions that require detailed investigations and remediation, if required.

The Department recommends a FEAR requiring future application(s) include a DSI and, as necessary, a Remedial Action Plan reviewed and approved by a site auditor accredited under the Contamination Land Management Act 1997.

The Department is satisfied that, subject to the imposition of conditions, the land is suitable for its intended purpose.

Sydney Local Environmental Plan 2012

The relevant provisions of the SLEP are considered below in **Table 12**.

Table 12 | Compliance Table – Sydney Local Environmental Plan 2012

Assessment Criteria	Comments	Compliance
Part 2 – Permitted or prohibited development		
Clause 2.3 – Zone objectives and Land Use Table		
<p>The consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone</p> <p>The subject land is zoned B4 Mixed Use and the objectives of the zone are to:</p> <ul style="list-style-type: none"> provide a mixture of compatible land uses integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise 	<p>The proposal is consistent with the objectives of the zone as:</p> <ul style="list-style-type: none"> the renewal provides for a range of spaces and functions including museum, education and presentation facilities. This is compatible with surrounding land uses, such as the University of Technology Sydney and tourist facilities within Darling Harbour the site is located in close proximity to various public transport services, 	Yes

Assessment Criteria	Comments	Compliance
<p>public transport patronage and encourage walking and cycling</p> <ul style="list-style-type: none"> ensure uses support the viability of centres. 	<p>including train light rail and numerous bus routes. The adjacent Goods Line also provides pedestrian walkways through to Broadway and Central Station. The design guidelines support continued connections to public transport and encourage walking in the locality</p> <ul style="list-style-type: none"> it supports the viability of the Ultimo, Pyrmont and Darling Square centres, by providing a mix of uses in close proximity to residential, retail, commercial and education uses. 	
Land use table – development permissibility	The Site is zoned B4 Mixed Use and the proposed development is defined as an ‘information and education facility’, which is permissible with development consent in the zone.	Yes
Part 4 – Principal development standards		
Clause 4.3 – Height of buildings		
<p>The height of a building on any land must not exceed the maximum height shown on the Height of Buildings Map (HOB Map).</p> <p>The site is identified as having a maximum building height of 28 m.</p>	<p>The concept proposes maximum building envelopes across part of the site for any new buildings and alterations or additions to existing buildings retained on site. The maximum building envelopes have been broken up into three zones described in Section 2.1.</p> <p>The maximum building heights of the proposed envelopes are as follows:</p> <ul style="list-style-type: none"> Heritage core (Switch House) – maximum height of RL 27.88 AHD Zones 1 and 2 – maximum height of 28 m above ground level (existing) Zone 3 – maximum height RL 13.08 AHD <p>The proposed building envelope for the heritage core and zone 3 is below with the maximum building height. Zones 1 and 2 are 28 m which comply with the maximum height.</p> <p>Refer to Clause 6.21C(3)(a) Below for further consideration of building height and the 10% bonus which is permitted where design excellence is achieved.</p>	Yes
Clause 4.4 – Floor space ratio		
The maximum floor space ratio (FSR) for a building on any land is not to exceed the FSR shown for the land on the FSR Map.	The concept proposal seeks consent for a maximum gross floor area (GFA) limit of 40,000m ² across the Site, including	Yes

Assessment Criteria	Comments	Compliance
The maximum FSR for the site, as shown on the FSR Map, is 4:1.	both existing and new GFA. This represents an FSR of approximately 2.4:1, which complies with the maximum FSR for the site.	
Clause 5.10 – Heritage Conservation		
5(c) The consent authority may, before granting consent to any development on land that is within the vicinity of a heritage item or heritage conservation area require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned	The Applicant provided a Heritage Impact Statement which assesses the impact of the proposal on the local and State heritage listed times on and surrounding the site. The Department assessed heritage impacts in Section 6 .	Yes
Part 5 – Miscellaneous provisions		
Clause 5.21 – Flood planning		
(1) Development consent must not be granted to development on land the consent authority considers to be within the flood planning area unless the consent authority is satisfied the development: <ul style="list-style-type: none"> (a) is compatible with the flood function and behaviour on the land, and (b) will not adversely affect flood behaviour in a way that results in detrimental increases in the potential flood affectation of other development or properties, and (c) will not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes for the surrounding area in the event of a flood, and (d) incorporates appropriate measures to manage risk to life in the event of a flood, and (e) will not adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses. 	The site is located within the flood planning area. The Department is satisfied that the concept proposal demonstrates that the future development can be designed to: <ul style="list-style-type: none"> • be compatible with flood function and behaviour on the land, which is shallow and low hazard during the 1% annual exceedance probability (AEP) flooding event • not adversely affect flood behaviour in a manner that increases flood affectation to other properties • not adversely affect the safe occupation and efficient evacuation of people or exceed the capacity of existing evacuation routes, as safe egress via land that is not flood-affected or of low flood hazard is available from several areas of the site • not give rise to risk to life in the event of a flood by providing safety within future buildings above flood levels • not result in any impacts on river banks or watercourses. 	Yes
Part 6 – Local provisions – height and floor space		
Clause 6.21C – Design excellence		
(1) Development consent must not be granted to development unless, in the opinion of the consent authority, the	The Department has considered the concept proposal and concludes the proposal is capable of delivering a Stage	Yes

Assessment Criteria	Comments	Compliance
proposed development exhibits design excellence	1 design which exhibits design excellence, as discussed at Section 6	
(2) In considering whether development exhibits design excellence, the consent authority must have regard to the following matters:		
(a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,	The future Stage 2 development, through the competition, DIP review and detailed DA process, is capable of will delivering a high standard of architectural design, materials and detailing.	Yes
(b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,	The Department is satisfied that the future Stage 2 development will increase the amount and improve the quality of public domain within the site.	Yes
(c) whether the proposed development detrimentally impacts on view corridors,	The Department has considered visual impacts and heritage impacts in Section 6 and is satisfied the proposed development would not adversely impact view corridors. The Department recommends FEARs to ensure the future Stage 2 development will retain and improve views to and from the State heritage listed items (Section 6.3).	Yes
(d) how the proposed development addresses the following matters: (i) the suitability of the land for development, (ii) the existing and proposed uses and use mix, (iii) any heritage issues and streetscape constraints, (iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers, existing or proposed, on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form, (v) the bulk, massing and modulation of buildings, (vi) street frontage heights, (vii) environmental impacts, such as sustainable design, overshadowing and solar access, visual and acoustic privacy, noise, wind and reflectivity, (viii) the achievement of the principles of ecologically sustainable development, (ix) pedestrian, cycle, vehicular and service access and circulation requirements, including the	<p>The Department has considered the matters listed in (d)(i) to (xiii).</p> <p>The Department considers the concept proposal is suitable for the site as discussed at Section 6.</p> <p>The site accommodates the existing Powerhouse Museum. The concept proposal seeks approval for the renewal of the existing development, involving the use the site as an 'information and education facility' including museum, exhibition and learning spaces and ancillary uses including office, retail and temporary accommodation. The proposed land use is permissible in the B4 Mixed Use zone and is consistent with the existing use of the site.</p> <p>The Department is satisfied that the concept proposal has demonstrated that future Stage 2 development:</p> <ul style="list-style-type: none"> • can appropriately respond to the heritage and streetscape constraints of the site and locality 	Yes

Assessment Criteria	Comments	Compliance
<ul style="list-style-type: none"> permeability of any pedestrian network, (x) the impact on, and any proposed improvements to, the public domain, (xi) the impact on any special character area, (xii) achieving appropriate interfaces at ground level between the building and the public domain, (xiii) excellence and integration of landscape design. 	<ul style="list-style-type: none"> • can provide appropriate built form in terms of bulk, massing and modulation • will have acceptable environmental impacts • can achieve proposed ESD initiatives and targets • can provide appropriate vehicle, cycle and pedestrian access • that the development will improve the quality of the public domain and interfaces with it • can incorporate improved landscaping arrangements. 	
Clause 6.21D – Competitive design process		
<p>(1) Development consent must not be granted to the following development unless a competitive design process has been held in relation to the proposed development:</p> <ul style="list-style-type: none"> (a) development in respect of a building that has, or will have, a height above ground level (existing) greater than <ul style="list-style-type: none"> i. 55 metres on land in Central Sydney, or ii. 25 metres on any other land, (b) development having a capital investment value (CIV) of more than \$100,000,000 (c) development in respect of which a development control plan is required to be prepared under clause 7.20, (d) development for which the applicant has chosen such a process. 	<p>As the proposal has an estimated CIV of more than \$100 million and involves a building envelope that will exceed 25m in height, a competitive design process must be held.</p> <p>As discussed in Section 6.1, the Applicant held a design competition from September 2022 to December 2022 in accordance with the endorsed Design Excellence Strategy, City of Sydney Policy and GANSW Guidelines.</p>	Yes
<p>(2) A competitive design process is not required under subclause (1) if the consent authority is satisfied that such a process would be unreasonable or unnecessary in the circumstances or that the development—</p> <ul style="list-style-type: none"> (a) involves only alterations or additions to an existing building, and (b) does not significantly increase the height or gross floor area of the building, and (c) does not have significant adverse impacts on adjoining buildings and the public domain, and (d) does not significantly alter any aspect of the building when viewed from public places. 	N/A	N/A

Assessment Criteria	Comments	Compliance
<p>(3) A building demonstrating design excellence—</p> <p>(a) may have a building height that exceeds the maximum height shown for the land on the Height of Buildings Map by an amount, to be determined by the consent authority, of up to 10% of the amount shown on the map, or</p> <p>(b) is eligible for an amount of additional floor space, to be determined by the consent authority, of up to 10% of—</p> <p>(i) the amount permitted as a result of the floor space ratio shown for the land on—</p> <p>(A) for a building for which development consent is granted under clause 6.60B—the Alternative Floor Space Ratio Map—Employment Sites or the Alternative Floor Space Ratio Map—Affordable Housing Sites, or</p> <p>(B) otherwise—the Floor Space Ratio Map, and</p> <p>(ii) any accommodation floor space or community infrastructure floor space for which the building is eligible under Division 1 or 2.</p>	<p>The Applicant notes that the maximum height of 28 m may be increased to 30.8m (+10%) subject to design excellence.</p>	<p>Yes. A condition is recommended that the maximum height of 30.8m in zones 1 and 2 is subject to future applications achieving design excellence.</p>

Part 7 – Local provisions – general

Clause 7.9 – Car parking – other land uses

<p>Development consent must not be granted to development that includes car parking spaces in connection with a proposed use of land if the total number of car parking spaces provided on the site would be greater than the maximum set out in Clause 7.9 (1 space per 200m² of the GFA).</p>	<p>The proposal does not seek to provide any parking for visitors. Existing staff parking will be retained and will not be altered by the proposal.</p>	<p>Yes</p>
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Clause 7.14 – Acid sulfate soils

<p>Development consent is required for the carrying out of works described in the clause.</p>	<p>The land is identified as Class 5 potential acid sulfate soils (ASS) on the Acid Sulfate Soils Map.</p> <p>The application was accompanied by a Geotechnical Report that considers ASS.</p> <p>The report concludes that the site contains natural material deposited in the early Holocene era. Additionally, historic fill material may have undergone oxidisation in the past if it was sourced from harbour locations and represents a low / moderate risk of ASS.</p>	<p>Yes</p>
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Assessment Criteria	Comments	Compliance
	<p>The report recommends that prior to the detailed design and construction that an ASS screening investigation be undertaken to confirm the risk of potential or actual ASS.</p> <p>The report further recommends that if actual or potential ASS is identified during the screening investigation, then a detailed ASS Management Plan should be developed to mitigate risk during construction works.</p> <p>The Department has considered the findings and recommendations of the report and is satisfied that ASS can be appropriately managed on the site.</p> <p>The Department recommends FEARs requiring the preparation of an ASS Management Plan.</p>	

Appendix D – Recommended Instrument of Consent

<https://www.planningportal.nsw.gov.au/major-projects/projects/powerhouse-ultimo-renewal>