

## DESIGN 5

A R C H I T E C T S

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### SYDNEY OPERA HOUSE TIDE PROJECT (Tours Immersive Digital Experience)

#### Heritage Impact Statement

## 1.0 BACKGROUND

Design 5 - Architects have been engaged by the Sydney Opera House Trust (SOHT) to prepare an assessment of the Heritage Impact (HIS) of the new Tours Immersive Digital Experience, referred to in this report as:

- TIDE project (formerly also referred to as White Box)

A more detailed description of the proposal is given below in Section 3 of this report.

This HIS has been prepared by Jenny Snowdon and Anita Krivickas and reviewed by Alan Croker (Director) of Design 5 – Architects. Alan has been advising the Sydney Opera House Trust on heritage related issues since early 2004, and is the author of *Respecting The Vision, Sydney Opera House – a Conservation Management Plan*, Fourth Edition, SOHT July 2017 (referred to below as CMP 4th edition).

## 2.0 BASIS OF ASSESSMENT

This Heritage Impact Statement (HIS) assesses the TIDE project against the following documents:

- *Matters of National Environmental Significance – Significant Impact Guidelines 1.1*, EPBC Act 1999, Department of the Environment 2013
- *Respecting The Vision, Sydney Opera House – a Conservation Management Plan*, by Alan Croker. Fourth Edition, SOHT July 2017 (referred to below as CMP 4th edition)
- *Sydney Opera House, Utzon Design Principles*, SOHT May 2002 (referred to below as the UDP 2002)
- *Sydney Opera House Renewal Interpretation Strategy 2017 (RIS)*

The CMP 4th edition incorporates considerations of all heritage listings (World, National & State).

The *Management Plan for the Sydney Opera House* (prepared in 2005 as part of the bilateral agreement negotiations) references the CMP 3rd edition, (*Sydney Opera House, A Revised Plan for the Conservation*

of the Sydney Opera House and its Site, by James Semple Kerr, third edition 2003) and the *Utzon Design Principles* and provides a framework for protection of the World and National Heritage values of the Sydney Opera House site and gives effect to the CMP. It was endorsed by the Heritage Division, Department of Planning & Environment (formerly the NSW Heritage Office). The Management Plan states that approval of actions in relation to the Sydney Opera House site may only be made in accordance with the Management Plan, which defers to the CMP 3rd edition for an assessment of heritage impact of proposals. Since this Bilateral Agreement was put in place, the CMP 4th edition has been formally endorsed by the Heritage Council of NSW on 2 August 2017, and now replaces the CMP 3rd edition. This heritage impact assessment uses the CMP 4th edition.

## 2.1 Methodology

This Heritage Impact Statement has been prepared in accordance with the principles and processes of the *Australia ICOMOS Burra Charter 2013*. The preparation of this Heritage Impact Statement also follows the process recommended in the NSW Heritage Manual, specifically the NSW Heritage Office guideline *Statements of Heritage Impact* (revised 2002), including consideration of alternative options and their impact.

## 2.2 Naming of spaces

The spaces proposed to be repurposed in this proposal are located on Ground Level +12 and are described in the CMP 4th edition as *Catering, stores and staff facilities*. These spaces are located in the Back-of-House area of the Opera House adjacent the Western Foyers, on the eastern side of the Bennelong Passage.

## 2.3 Documents reviewed

The following documents describing the proposal have been provided by the Sydney Opera House and have been reviewed by the author:

- Proposal description in *Attachment 1: Project Brief for Heritage Consultant – Tours Immersive Digital Experience (TIDE) Project*, Issue Date: 30th May 2019;
- Artists in Motion, *Sydney Opera House, TIDE – July 2019 – Projection*;
- Artists in Motion, *Sydney Opera House, Digital Immersive Experience Tours*;
- Artists in Motion, *Presentation July 2019, Project Brief Renders*
- Artists in Motion, *SOH TIDE Narrative Draft*
- Artists in Motion, *3D animation, SOHO\_ImmersiveTour\_01*
- SOH Meeting Minutes, *Interior Design and Materials Meeting*, 24th May 2019;
- SOH Meeting Minutes, *Content and Design Workshop*, 12th June 2019;
- Architectural Drawings – *SOH Tours Immersive Digital Experience 2019 - DA*, Project No: SOH-1259, Scott Carver, 06/09/2019;  
*Cover Sheet, Drawing No 49-FB-SC029, Sheet DA000, Revision A*  
*Location Plan, Drawing No 49-FB-SC029, Sheet DA002, Revision A*  
*Existing Plan & Section, Drawing No 49-FB-SC029, Sheet DA100, Revision A*  
*Demolition Plan & Section, Drawing No 49-FB-SC029, Sheet DA101, Revision A*  
*Proposed Plan & Section, Drawing No 49-FB-SC029, Sheet DA120, Revision A*  
*Proposed Sections, Drawing No 49-FB-SC029, Sheet DA200, Revision A*  
*Bennelong Passage Elevation, No49-FB-SC029, Sheet DA210, Revision A*  
*Material Board, Drawing No 49-FB-SC029, Sheet DA900, Revision A*
- Consideration of alternative designs and options Scott Carver and Artists in Motion including feedback, *Artists in Motion, Sydney Opera House, Tours Immersive Digital Experience, Phase One Concept Development 2019*
- Email correspondence on design and feedback, Sydney Opera House Design Advisory Panel (SOH DAP) and Artists in Motion

The documents provided include images of the space as proposed.

### 3.0 BRIEF DESCRIPTION OF THE PROPOSAL

The Sydney Opera House is currently undertaking a variety of renewal projects including necessary accessible, venue and key Back-of-House upgrades under an overarching master plan. As part of the renewal master plan, the Concert Hall will be closed from February 2020 for approximately two years.

Sydney Opera House Tours are an important component of the visitor experience of the place and usually provide access to internal areas of the building, such as the Concert Hall, that are generally not accessible to the public during the day.

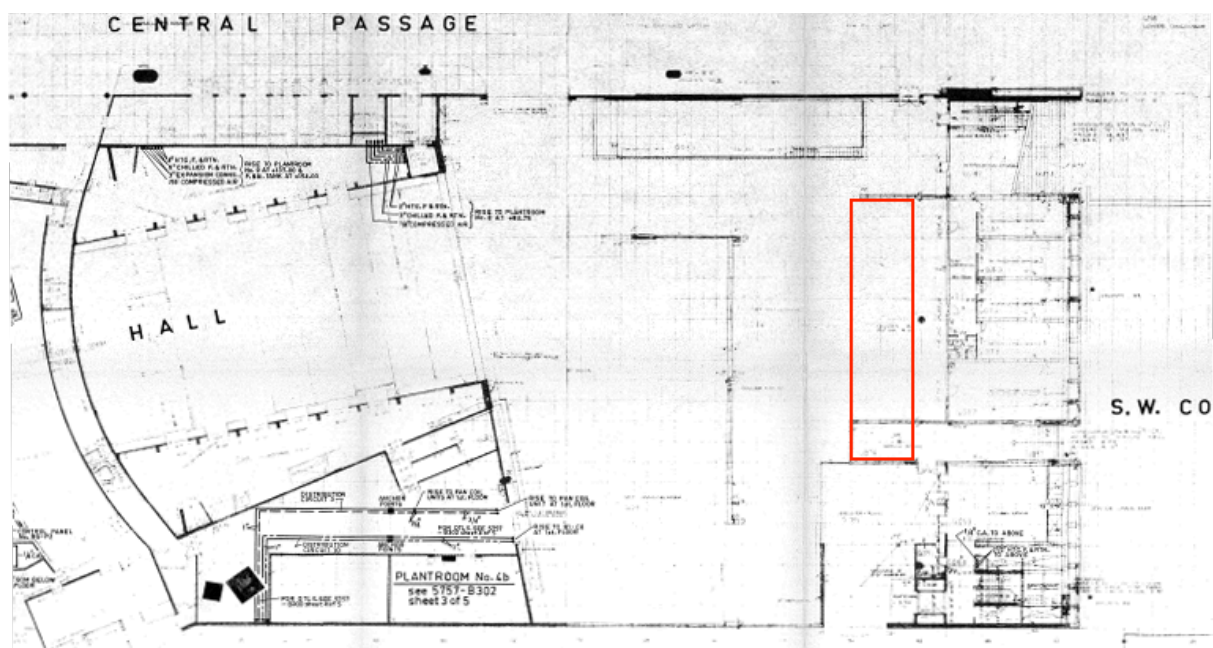
The proposed Tours Immersive Digital Experience (TIDE) project was developed to deliver a high quality visitor experience to mitigate against the closure of the Concert Hall during the renewal works. The experience will provide virtual access to the Concert Hall, including the experience of watching a performance in the space, through an immersive visual and acoustic projection. As an important new interpretive tool, the projection is aiming to convey the inspiration for the design of the building and the significant architectural quality of its spaces.

The existing 115sqm space proposed to be repurposed for this project comprises three adjoining Back-of-House spaces that are currently used as store and staff facilities. It is proposed to combine these three spaces into one large space (as it was configured originally) and insert a 'box', which will house the Digital Immersion Space. The new Digital Immersion Space is divided into two parts, the 'TIDE entry space' and the 'TIDE projection space', which are connected through an oval cut-out in a new sloped ceiling. Visitor access to the new space is provided via a new opening and sliding door off the Bennelong Passage adjacent the southernmost end of the Western Foyer. This opening is through a 1968 concrete podium wall.

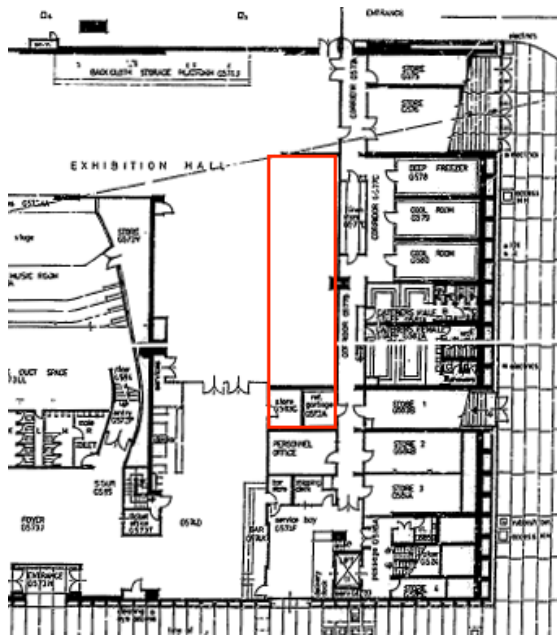
#### Change of Use

The *Catering, stores and staff facilities* space is currently a Back-of-House space and is proposed to be repurposed as a Front-of-House space for the Sydney Opera House Tours as an Immersive Digital Experience space.

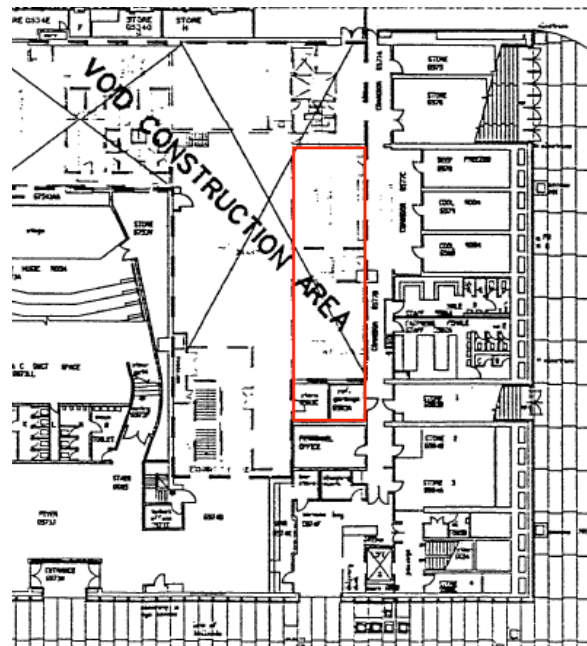
In Utzon's original design and prior to the change of program in 1967, this area was part of the Scene Dock for the Major Hall. At the time of opening in 1973 however, the area formed part of the larger Front-of-House Exhibition Hall. In the early 1990s the area is identified as being under construction, and it is assumed that it was at this time the current BoH store was constructed. The Bennelong Passage adjacent, was created in 2007 in the alignment of the Bennelong Stair, at which time the service rooms below the stair (garbage rooms) were removed.



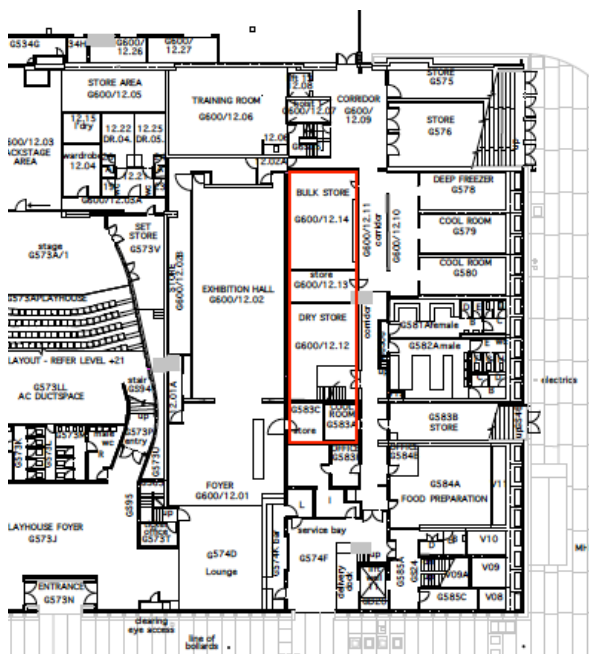
**Figure 1:** Excerpt from the 1966 Utzon studio drawings showing the then proposed Scene Dock for the Major Hall. The area of the current proposal is outlined in red.



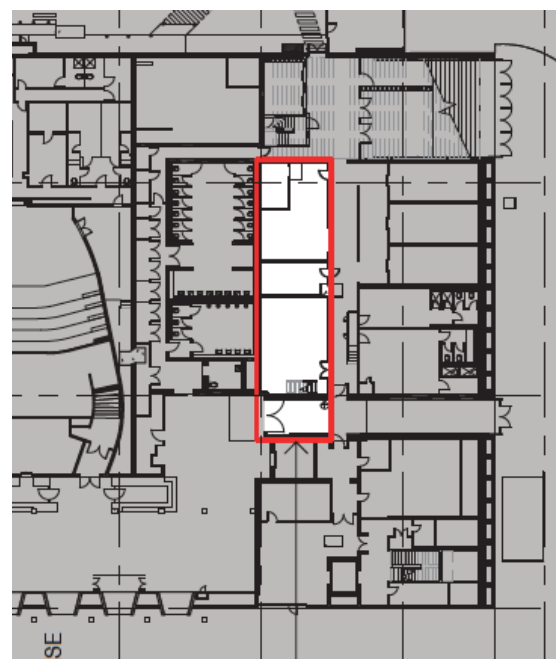
**Figure 2:** At the time of opening the area of the current proposal formed part of the Exhibition Hall, as can be seen in this excerpt from a 1973 Hall, Todd and Littlemore drawing.



**Figure 3:** Excerpt from the c1991 plan showing the area under construction, including the reduction in size of the Exhibition Hall and creation of new Back-of-House spaces.



**Figure 4:** Excerpt from 2002 plan showing the current arrangement of Back-of-House store prior to the construction of the Bennelong Passage.



**Figure 5:** Current arrangement of Back-of-House stores and Bennelong Passage.

## Interpretation & Narrative

The main focus of the digital content of the experience is on interpretation. It is to provide virtual access to the Concert Hall during its closure as well as to meet the conditions of approval outlined in EPBC 2016/7825 (Condition 4.i) to *display information about the evolution of the design and fabric of the building*. A comment on the Renewal Interpretation Strategy 2017 is included in section 11 of this report.

## Architectural Design

The works proposed comprise the following:

- demolition of internal walls between the three spaces (concrete block from later fitout);
- demolition of steel framed mezzanine level in store room including access ladder from later fitout;
- removal of cool room (catering fitout);
- removal of fire door in Bennelong Passage and installation of new concealed fire curtain in its place;
- removal of door to existing western store room off BoH Passage and retention of the opening in its place;
- removal of door, roller shutter and concrete wall (1973) to existing office and eastern store room off BoH Passage and construction of a new wall and double door opening to enlarged Services Zone;
- minor enhancements to the fire services and update to the emergency egress path;
- new walls offset from existing walls to create the 'box' for the new Digital Immersion Space, clad in Brush Box timber slats similar to the Brush Box panelling system in the foyers of the Concert Hall and Joan Sutherland Theatre (in TIDE entry space);
- new sliding door on eastern elevation off Bennelong Passage and associated demolition of a portion of the 1968 concrete podium structure to the north of the granite panelled passage, painted white on the exterior facing the Bennelong Passage and finished with Brush Box to the interior to match the panelling in the new space;
- new egress door to new southern wall of Digital Immersion Space with Brush Box finish internally to match timber panelling and painted to match existing BoH Passage doors externally;
- new double doors to the Services Zone between existing wall and new southern wall of Digital Immersion Space, painted to match existing BoH Passage doors externally;
- new single acoustic door within an existing opening to access the new Racks area;
- new sloping Brush Box floor in Digital Immersion Space in clear finish to match the finish currently in use elsewhere;
- integrated concealed cupboards to new walls on north and south elevation;
- new black painted soffit & plasterboard ceiling with oval cut out (in TIDE entry space), dividing the space into the entry space and projection space;
- new sloping plasterboard ceiling in the TIDE projection space, painted white;
- new sloping back (eastern elevation) and side walls (north and south elevations) in TIDE projection space, painted white;
- new 'warm' edge lighting to be indirect & baffled (in TIDE entry space);
- new bronze hardware (in TIDE entry space);
- all services to be painted black (alarms, VESDA, sprinklers) in TIDE entry space and white in TIDE projection space;
- installation of 9 projectors (Panasonic) for the projection mapping in TIDE projection space;
- installation of concealed speaker system;
- new concealed services for use of space as 'Front-of-House' space;
- new custom designed loose furniture (by Adam Goodrum Studio).

## 4.0 BACKGROUND ON ISSUES & CONSIDERATION OF ALTERNATIVES

The EPBC 2016/7825 Approval Conditions and Interpretation Actions for the Sydney Opera House Building Renewal Program – Safety, Accessibility and Venue Enhancements asked for a Heritage Interpretation Strategy to be submitted, that included *A commitment to display information about the evolution of the design and fabric of the building, including through the building renewal program, in publicly accessible areas* (Approval condition 4) i.). Under this condition, recommendation 5 prescribes to *Provide interactive and immersive interpretive material and experiences to visitors and audiences to explore onsite*. One of the proposed strategies mentioned is to *scope and develop a minimum of one immersive virtual Opera House experience onsite during the Concert Hall Renewal (e.g. 360° projection experience)*. The TIDE project was developed to address this strategy.

New technology and use of space within the Opera House for projects such as TIDE were not anticipated when the Opera House was conceived and built. One of the challenges in accommodating a facility for such a projection experience was to find a suitable space within the Opera House that is readily accessible to the public and adjacent a public thoroughfare, without it eliminating or removing an existing space that supports the primary function of the Opera House as a world-class performing arts centre. Accommodation within the building is always in high demand and increasingly the most efficient use of space is explored.

The proposed space was chosen to be repurposed due to its proximity to the Western Foyer, at the northern end of the Bennelong Passage, offering a space for tour groups to congregate and meet without disrupting access to other parts of the building. The proposed space is currently used as a storage area for catering facilities, a use that is to be relocated closer the new Central Kitchen. The fitout in the existing storage rooms does not comprise of any significant fabric that would be adversely impacted on in the demolition and alteration for the TIDE project.

The Consultant team comprised of architects and designers in collaboration with accessibility consultants, heritage consultants, structural engineers, electrical and mechanical engineers, fire engineers, building surveyors and audio visual consultants, in order to achieve the best possible outcome for the project. As part of the design process for the proposed TIDE project, Scott Carver and Artists in Motion explored a variety of alternative interpretative content for the projection as well as designs and configurations for the space. These were presented to the relevant stakeholders, Opera House Building Renewal team, Sydney Opera House Tours, the Sydney Opera House's Heritage Architect and the Sydney Opera House Design Advisory Panel (DAP) who all provided feedback on issues such as accessibility, safety and circulation, heritage concerns, materiality, technology and digital content. This feedback was incorporated in the final design. (For renders and more detailed feedback on the explored options refer also to document *Artists in Motion, Sydney Opera House, Tours Immersive Digital Experience, Phase One Concept Development 2019*)

Being a Back-of-House space, the existing space is currently defined by the distinct BoH materials and finishes as specified by Peter Hall. With the proposed adaptation to a Front-of-House space, how to treat the new space was debated. Three alternatives were considered: firstly whether the space should retain its BoH identity, secondly whether to adopt the Utzon design language of the Western Foyer, or thirdly whether to adopt the FoH design language by Peter Hall. The latter was considered the most appropriate as the space is intended to relate to the major auditoria and their foyers. As such, finishes include Brush Box panelling, bronze hardware and indirect lighting. The use of timber panelling along the walls of the 'entry space' of the TIDE project not only extends the Sydney Opera House experience but also provides the flexibility required for discrete and organised storage and concealed services in line with other identifiable Front-of-House spaces and the overall design concepts.

## **5.0 HERITAGE LISTINGS & STATUTORY FRAMEWORK**

### **5.1 Listings**

The Sydney Opera House is listed on the following statutory registers:

- *World Heritage List (UNESCO), 2007*
- *National Heritage List (Australian Government), 2005*
- *State Heritage Register (NSW Government), 2003*
- *Sydney Local Environmental Plan 2012 (City of Sydney Council), 2000*

The Sydney Opera House is listed on the following non-statutory heritage registers:

- *National Register of Significant 20th Century Buildings (Australian Institute of Architects), 1990*
- *National Trust of Australia (NSW) Register, 1983*
- *Register of the National Estate (archived list with the Australian Heritage Council), 1980*

### **5.2 Statutory framework**

Given the multiple heritage listings for the Sydney Opera House, the statutory framework for approvals for the Opera House is presently governed by the following legislation:

- Commonwealth: *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*



- State (Planning): *Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (State and Regional Development) 2011 and State Environmental Planning Policy (State Significant Precincts) 2005*
- State (Planning): *Environmental Planning and Assessment Regulation 2000 (Regulation)*
- State (Planning): *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (REP)*
- State (Heritage): *Heritage Act 1977*

Commonwealth: *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*

- Part 3, Division 1, identifies Commonwealth requirements relating to World Heritage properties and National Heritage places. Sydney Opera House is inscribed on the World Heritage List and included on the National Heritage List.
- Approval must be obtained from the Commonwealth Minister for the Environment for actions that are likely to have a significant impact on matters of national environmental significance (including National and World Heritage listed properties and sites) under the EPBC Act. The *Significant Impact Guidelines* definition is important here:  
*A 'significant impact' is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts.*
- Sydney Opera House should undertake a 'self-assessment' process to determine potential impacts of proposed actions and whether or not a referral to the Minister under the EPBC Act is required. The *Significant Impact Guidelines* definition of 'action' is important here:

*'Action' is defined broadly in the EPBC Act and includes: a project, a development, an undertaking, an activity or a series of activities, or an alteration of any of these things.*

*Actions include, but are not limited to: construction, expansion, alteration or demolition of buildings, structures, infrastructure or facilities; [...]*

*Actions encompass site preparation and construction, operation and maintenance, and closure and completion stages of a project, as well as alterations or modifications to existing infrastructure.*

*An action may have both beneficial and adverse impacts on the environment, however only adverse impacts on matters of national environmental significance are relevant when determining whether approval is required under the EPBC Act.*

- The Sydney Opera House site was subject to a bilateral agreement between the Australian Government and the State of New South Wales made in 2005 pursuant to Section 45 of the EPBC Act however this expired in 2010. Under the terms of that agreement (Clause 8.1), an action taken at the Sydney Opera House site would not require the approval of the Commonwealth Minister for the Environment, Heritage and the Arts where:

*the taking of the action has been approved by the State of New South Wales or an agency of New South Wales in accordance with the Management Plan for the Sydney Opera House [...]*

State (Planning): *Environmental Planning and Assessment Act 1979 (EP&A Act) and State Environmental Planning Policy (State and Regional Development) 2011*

- All development on land identified as being within the Sydney Opera House site is designated as State significant development (SSD) (Schedule 2) that requires consent under the EP&A Act.
- The Minister for Planning is the consent authority for SSD.

*State Environmental Planning Policy (State Significant Precincts) 2005*

The Sydney Opera House is addressed in Part 1 of *Schedule 3 State significant precincts* and includes exempt development that is of minimal environmental impact such as 4. *Minor Repairs*, 5. *Minor*

internal alterations and additions, 6. Minor building works related to permanent and temporary security arrangements, 7. Internal works and fitout of shops, restaurants, cafes and offices and others related to public domain works and temporary structures for events and the like. Of these, the relevant section that is applicable to the TIDE project proposal is copied below:

**5 Minor internal alterations and additions**

- (1) Exempt development includes minor internal alterations and additions including:
- (a) minor building works and alterations to the backstage infrastructure and performance venues (such as widening the doors or updating flying systems) for the purpose of improving the operational efficiency,
  - (b) minor works and fitout of new technology for telecommunications and technical purposes,
  - (c) replacement of doors, walls, ceiling or floor linings,
  - (d) renovation of bathrooms, kitchens and storage areas.
- (2) Any such exempt development must comply with the following requirements:
- (a) the development must not adversely affect the heritage significance of the Sydney Opera House,
  - (b) any internal alterations must not affect the load-bearing capacity of any load-bearing component of the building,
  - (c) the development must have no adverse effect on fabric and spaces rated “some”, “considerable” or “exceptional” significance in the CMP.

There is no provision for the proposed change of use of the space from a BoH space to a FoH space for the TIDE project under the State Environmental Planning Policy (State Significant Precincts) 2005. As such, the proposal cannot be considered to be exempt development under the SEPP (State Significant Precincts) 2005.

State (Planning): Environmental Planning and Assessment Regulation 2000 (Regulation)

- Clause 288 of the Regulation requires the consent authority to take into consideration the *Management Plan for the Sydney Opera House* (which was prepared in 2005 as part of the bilateral agreement negotiations) in relation to development on the Sydney Opera House site. The Management Plan references the CMP 3rd edition and the Utzon Design Principles 2002.
- The Management Plan provides a framework for protection of the World and National Heritage values of the Sydney Opera House site and has been endorsed by the Heritage Division, Department of Planning (formerly the NSW Heritage Office).
- The Management Plan states that approval of actions in relation to the Sydney Opera House site may only be made in accordance with the Management Plan, which defers to the CMP 3rd edition for an assessment of heritage impact of proposals.

State (Planning): Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (REP)

- The Opera House site falls within the Sydney Harbour Catchment area designated in the REP. It also is within the Foreshores and Waterways area and is designated as a Strategic Foreshore Site.
- The REP sets out a number of considerations that must be taken into account when submitting a DA (see clauses 13-15; Division 2 of Part 3 and Part 5 of the REP).

State (Heritage): Heritage Act 1977

- An approval from the Heritage Council under section 60 of the Heritage Act is required for development on the Sydney Opera House site. Where the development has been approved as SSD, the approval under section 60 of the Heritage Act cannot be refused by the Heritage Council.



The State Heritage Register listing for the Sydney Opera House includes a number of site specific exemptions. Of these, **Exemption No.8** is relevant to the current proposal and is copied below:

*8. Subject to Sydney Opera House Trust assessment for impact on heritage significance, all improvements to the operational efficiency and all changes to the backstage infrastructure of performance venues (such as widening the loading door or updating flying systems) where these have no adverse effect on fabric rated 'some', 'considerable' or 'exceptional' significance in the CMP and do not obstruct views identified as significant in the CMP.*

Note the reference to fabric rated 'some', 'considerable' or 'exceptional' refers to the CMP 3rd edition which has been replaced by CMP 4th edition since the exemptions were gazetted.

In addition to the above Site Specific Exemptions, there are a suite of Standard Exemptions under Section 57(1) of the Heritage Act that apply to all State Heritage listed sites except where these are modified by the Site Specific Exemption. Relevant Standard Exemptions are copied below:

**STANDARD EXEMPTION 7:** *Minor Activities with little or no adverse impact on Heritage Significance*

1. *Anything which in the opinion of the Director-General is of a minor nature and will have little or no adverse impact on the heritage significance of the item does not require approval under subsection 57(1) of the Act.*
2. *A person proposing to do anything of the kind described in paragraph 1 must write to the Director-General and describe the proposed activity. If the Director-General is satisfied that the proposed activity meets the criteria set out in paragraph 1, the Director-General shall notify the applicant.*

**Guidelines**

*This standard exemption has the potential to relate to a wide range of minor development. In determining whether a proposed development is minor the Director may have regard to the context of the particular heritage item such as its size and setting. For instance a development may be considered to be minor in the context of Prospect Reservoir's 1200ha curtilage whereas a similar proposal affecting an item on a smaller site may not be considered to be minor.*

*In order to assess whether a proposal has an adverse affect on heritage significance it is necessary to submit a clear and concise statement of the item's heritage significance and an assessment of whether a proposal impacts on that significance.*

**STANDARD EXEMPTION 8:** *Non-Significant Fabric*

1. *The following development does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) have been met and the person proposing to undertake the development has received a notice advising that the Director-General is satisfied:*
  - (a) the alteration of a building involving the construction or installation of new fabric or services or the removal of building fabric which will not adversely affect the heritage significance of the item.*
2. *A person proposing to do anything of the kind described in paragraph 1 must write to the Director-General and describe the proposed development. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1(a), the Director-General shall notify the applicant.*

**Guidelines**

*In order to assess the level of significance of fabric it is necessary to submit a clear and concise statement of the item's heritage significance and to grade the fabric of the place in accordance with its association with or impact on that significance. It may not always be concluded that more recent fabric is of less or no heritage significance.*

#### STANDARD EXEMPTION 9: *Change of Use*

1. *The change of use of an item or its curtilage or the commencement of an additional or temporary use does not require approval under subsection 57(1) of the Act, provided that the Director-General is satisfied that the criteria in (a) and (b) have been met and the person proposing to undertake the change of use has received a notice advising that the Director-General is satisfied:*
  - (a) the use does not involve the alteration of the fabric, layout or setting of the item or the carrying out of development other than that permitted by other standard or site specific exemptions; and*
  - (b) the use does not involve the cessation of the primary use for which the building was erected, a later significant use or the loss of significant associations with the item by current users;*
2. *A person proposing to change the use of an item or its curtilage or to commence an additional or temporary use of an item or its curtilage in the manner described in paragraph 1 must write to the Director-General and describe the changes proposed. If the Director-General is satisfied that the proposed development meets the criteria set out in paragraph 1(a) and (b), the Director-General shall notify the applicant.*

#### *Guidelines*

*For the purposes of this standard exemption any change of use which is inconsistent with specific conditions of any previous approval or consent such as hours of operation or nature of conduct of an activity requires approval under section 57(1) or the modification of an approval under section 65A of the Heritage Act.*

#### **Discussion:**

Under the above-mentioned site-specific exemption (No. 8), the demolition of the mezzanine level in the store room, removal of the vendor's cool room and the demolition of the dividing walls between the three spaces as well as the removal of the fire door and new fire curtain could be considered as exempt development as they will have no adverse impact on fabric of 'some', 'considerable' or 'exceptional' significance, and are necessary to improve the operational efficiency for access, maintenance, egress and fire safety.

The creation of the new entrance door from the Bennelong Passage will require the demolition of a portion of the 1968 concrete podium structure. The Bennelong Passage has been identified as of Exceptional significance as part of the Western Foyers. The creation of this doorway is considered to be of minor impact to the overall significance of the Opera House, as it will not affect the adjacent granite panels, or the overall configuration of the Bennelong Passage and approach to the Western Foyers. Similarly the proposed structure for the 'box' housing the Digital Immersion Space sits within the existing space and is removable, and the proposed construction does not involve alteration of significant fabric or layouts.

The area for the Digital Immersion Space was initially a Front-of-House space (as part of the Exhibition Hall) when the Opera House was opened in 1973, and was converted to its present Back-of-House storage use in the early 1990s. The proposed change of use of the area to a new Front-of-House space is considered exempt under *Standard Exemption 9*, as it supports and strengthens the primary use of the Opera House, by providing virtual access to the Concert Hall during its closure, as well as educating visitors on the design and construction of the Opera House through the digital content shown in the projection.

This HIS concludes that the proposed TIDE project will have a minor but acceptable impact, in light of the overall positive impact of continued virtual access to the Concert Hall during its closure and the additional interpretation opportunities. As such, it is considered that the works could be exempt under site specific exemption No. 8, and standard exemptions 7 and 9, however this would need to be confirmed with the NSW Heritage Division.

## 6.0 COMPLIANCE WITH RESPECTING THE VISION – SYDNEY OPERA HOUSE, A CONSERVATION MANAGEMENT PLAN (CMP 4TH EDITION)

The CMP 4th edition, endorsed by the NSW Heritage Council in August 2017, has been used as the basis for the assessment of heritage impacts on the Sydney Opera House, its surroundings and fabric affected by the TIDE project proposal.

The CMP identifies and defines the significant values of the Sydney Opera House and then formulates policies framed to retain these values. The following discussion assesses the impact of the proposal in the same order as the CMP:

- Significant values,
- Overarching policies,
- Significant elements and components of the place, and
- Operational and management considerations.

### 6.1 CMP Section 3.1 STATEMENT OF SIGNIFICANCE Significant values – discussion of impact

The following Statement of Significance from CMP 4th edition summarises the significant values of the place (emphasis in bold type added as it relates to this assessment):

*The Sydney Opera House is a masterpiece of 20th century architecture and a world renowned performing arts centre. It is universally valued for its unparalleled design, form and response to its setting; and its exceptional engineering achievements and technological innovations. It is an internationally recognised landmark, an architectural icon, a symbol of Sydney and Australia, and holds a unique place in the Australian psyche as a focus for national celebrations and events.*

*The design of the Sydney Opera House by Danish architect, Jørn Utzon, represents an extraordinary and inspired response to the peninsular setting in Sydney Harbour and the 1956 competition brief. Its spectacular quality as a monumental sculpture in the round, both by day and night, is enhanced by its relationship to the harbour and the city. The approach and arrival sequence, and the majestic quality of the public spaces, contained by powerful structural forms, provide an exceptional experience for users and visitors. Utzon's vision created a truly remarkable place, a structure that elevates and celebrates the human experience of the performing arts, as well as of the place itself. These attributes are true to the original design and continue to be credibly expressed.*

*The Sydney Opera House is a work of human creative genius; a daring and visionary experiment that has had a seminal and enduring influence on the emergent architecture of the late 20th century. This vision utilised the plastic arts (three-dimensional works or effects from sculpting, modelling and moulding), geometry and technology to create a structure at the leading edge of human endeavour, at the very edge of the possible. Utzon's original design concept, his emphasis on innovation and his unique approach to building, gave impetus to a collective creativity of architects, engineers and builders. He inspired others to strive for and achieve excellence, particularly at this site.*

*The high-quality completion of the work by Sydney architects Hall, Todd & Littlemore, the technical support given by the internationally renowned engineering firm of Ove Arup & Partners, and the inventive contractor M.R. Hornibrook, helped make Utzon's vision a reality. In its construction and fabric, the Sydney Opera House reflects the contemporary philosophy of assembling and creating refined forms from prefabricated components. The Sydney Opera House retains a very high level of authenticity.*

*At national, state and local levels, the site has significant associations with important past events, activities and uses in the site's evolution, including Aboriginal and European contact. Indigenous cultural values associated with the Sydney Opera House site relate to both tangible remains (for example, potential surviving middens or other physical relics) as well as intangible meanings, associations, stories, memories and histories. The site has been used for cultural exchange and performance since at least the 1790s and is associated with a major meeting area and place for ceremony and corroboree at the adjacent Farm Cove. Bennelong Point is a place of early contact between local Aboriginal people and European settlers and takes its name from Bennelong, a Wangal man whose hut was provided by the Europeans and located on the western side of the point. Other significant historical*

*associations include: defence (Governor Arthur Phillip's 1788 redoubt to convict architect Francis Greenway's Fort Macquarie, 1817–1901); picturesque planning (Governor Lachlan Macquarie to Utzon); and marine and urban transport and trade (overseas shipping and local ferry wharves, tram terminal and depot).*

***The Sydney Opera House has an almost mythological status as a cultural icon (then and now) arising from all the above, from the high public interest in its protracted and controversial development, and from its power to attract performers, patrons and visitors on a national and international level. As Australia's pre-eminent performing arts centre, it has the ability to encourage and inspire the pursuit of excellence and innovation in those who use it or are associated with it: all are inspired to achieve an outcome 'worthy of the Sydney Opera House'.***

*The inscription of the Sydney Opera House on the World Heritage List in 2007 recognises its Outstanding Universal Value.*

Those values noted above in bold type are relevant to the proposed TIDE project. Taking each of them separately, the following comments are made:

*The Sydney Opera House is a masterpiece of 20th century architecture and a world renowned performing arts centre. It is universally valued for its unparalleled design, form and response to its setting;*

**Comment:**

The TIDE project retains evidence of the Opera House's 20th century evolution and construction. The presence and character of the fabric, particularly the design language defining Front-of-House spaces in the form of the timber panelling, lighting and bronze hardware have informed the design approach and visually link the repurposed space to the overall experience of the Opera House. The change of use of this Back-of-House space enables a use that supports the primary use of the place as a performing arts centre. The present storage use of this BoH space is to be relocated closer to the new Central Kitchen adjacent to the Yallamundi Rooms. The projection and immersive experience provided to visitors will have a positive impact on the function and status of the Sydney Opera House as an internationally recognised performing arts centre and provide virtual access to the Concert Hall during its closure.

*The approach and arrival sequence, and the majestic quality of the public spaces, contained by powerful structural forms, provide an exceptional experience for users and visitors. Utzon's vision created a truly remarkable place, a structure that elevates and celebrates the human experience of the performing arts, as well as of the place itself.*

**Comment:**

The TIDE project interprets the approach and arrival sequence as well as the experience of the building in its setting through the content of the projection. The story content offers a comprehensive experience to visitors, from arrival to the building, the stage experience, the audience experience, the Concert Hall as an architectural space and the departure from the building and appreciation of the setting.

In keeping with Utzon's approach the Digital Immersion Space provides an 'extension' of the Concert Hall through materiality and content, allowing the celebration of the human experience of the performing arts to continue during the renewal works. The majestic qualities of the Concert Hall are respected and interpreted by providing the virtual experience of the Concert Hall in its existing form, and a glimpse of the Concert Hall after completion of the renewal works.

The creation of a new sliding door into the new Digital Immersion Space off the Bennelong Passage respects and retains Utzon's approach and arrival sequence in the Bennelong Passage and does not impact on access to the Western Foyers from the Covered Concourse and vice versa.

*The high-quality completion of the work by Sydney architects Hall, Todd & Littlemore, the technical support given by the internationally renowned engineering firm of Ove Arup & Partners, and the inventive contractor M.R. Hornibrook, helped make Utzon's vision a reality. In its construction and fabric, the Sydney Opera House reflects the contemporary philosophy of assembling and creating refined forms from prefabricated components.*

**Comment:**

The materials and finishes proposed within the Digital Immersion Space respect and maintain the high quality and standards set by Hall, Todd & Littlemore's original work. The application of Hall's palette of materials and details, i.e. the Brush Box panelling and flooring, bronze hardware and indirect lighting in the TIDE entry space visually link the space to the established Opera House identity. The original configuration, materials, colour and finish of the existing Back-of-House space will be respected in the proposal and remain unaltered, except for the adjustment of the existing openings to improve the operational efficiency of the space and accommodate the new use. Utzon's related design palette in the Western Foyers (opened 2009) will be retained and respected in the proposal.

The proposed timber panelling in the TIDE entry space references the materials and design language used by Peter Hall in completing the building, and continues to make use of prefabricated components and concealed storage solutions.

*The Sydney Opera House has an almost mythological status as a cultural icon (then and now) arising from all the above, from the high public interest in its protracted and controversial development, and from its power to attract performers, patrons and visitors on a national and international level. As Australia's pre-eminent performing arts centre, it has the ability to encourage and inspire the pursuit of excellence and innovation in those who use it or are associated with it: all are inspired to achieve an outcome 'worthy of the Sydney Opera House'.*

**Comment:**

The comments made above about other aspects of the Statement of Significance and impacts on the State Heritage Criteria apply equally here.

The TIDE project will ensure the Opera House maintains its status as a cultural icon, and remains available and accessible to the broader public even during the major renewal works and closure of the Concert Hall. The virtual access and additional interpretation opportunities will enhance its reputation at both a national and international level and *its power to attract artists, patrons and visitors on a national and international level*. The innovative audio and visual technology proposed, and digital content of the projection, aim to provide an immersive experience that reflects the world class standard of the Opera House, and will continue to engage and inspire those who use the site or are associated with it.

## **6.2 Compliance with CMP policies (CMP Section 4)**

It is clear from the Statement of Significance in the CMP 4th edition that the Sydney Opera House derives its significance primarily from its form (design, structure and construction), function and setting. These three components are interdependent and as each of them is crucial to this significance then each must be maintained to the highest level. These are discussed below within the framework of relevant discussion, policies and Tolerance for Change tables from the CMP 4th edition.

## 6.2.1 Overarching policies (CMP Sections 4.1 – 4.4)

### 6.2.1.1 CMP Section 4.1 THE PRIMACY OF JØRN UTZON'S VISION

#### **Policy 1.1 – Protecting Utzon's masterpiece**

*All work on the Sydney Opera House must be carried out within the framework of the Utzon Design Principles published in 2002 and in accordance with this CMP.*

#### **Comment:**

A more detailed assessment of the proposal against the *Utzon Design Principles* is included in section 10 of this report.

In summary, the proposed TIDE project has been designed and will be carried out within the framework of *Utzon's Design Principles* and will not diminish the Utzon character and majesty of the Sydney Opera House.

#### **Policy 1.2 – Utzon concepts** (relevant concepts bolded below)

*The following elements and qualities of the building are essential to Utzon's concept for the place and must be retained in accordance with the Utzon Design Principles and this CMP:*

- a. *the visually free-standing sculptural form of the building in its setting as a counterpoint to the city, unobstructed by adjacent objects or structures;*
- b. *the geometry and configuration of the three groups of shell roof structures and their tiled cladding;*
- c. *the orientation and relationship between the three shell roof groupings, the Podium and platform below;*
- d. *the open and uncluttered relationship between the Forecourt, Monumental Steps, Podium and Broadwalks;*
- e. *the visually open relationship between the Podium and its setting, including the Bennelong Restaurant and foyers encircling the auditoria;*
- f. *the sequence and intended qualities of approach and arrival spaces and experiences;*
- g. ***the natural palette of materials for exterior and related interior spaces;***
- h. *the building's architecture, both externally and internally, formed by the honest expression of structure and materials;*
- i. *the supporting structural systems throughout the building and their integrity as a reinforced concrete structure;*
- j. ***the utilisation of prefabricated components, strictly controlled in regard to geometry and quality, assembled to create structure, elements and spaces of the desired form;***
- k. ***harmony and uniformity resulting from application of a strict geometrical order and consistent forms;***
- l. *containing all the processes of theatre and performance preparation out of public sight and within the Podium;*
- m. ***the interdependence of structure, form and fabric with function, all focused on enhancing the intellectual and emotional response of patrons, performers and visitors;***
- n. ***the primary function of the Sydney Opera House as a cultural venue that inspires and presents work of the highest quality in the performing arts.***

#### **Comment:**

The materials and finishes proposed within the new Digital Immersion Space respect and maintain the high quality and standards set by Hall in completing the internal spaces of the Opera House. The application of Hall's palette of materials and details references those utilised within the major foyer spaces designed by Peter Hall, and visually link the space to the established Opera House identity.

The use of the Brush Box panelling for wall linings and hidden storage cupboards, continues the utilisation of prefabricated components creating a uniform appearance, and therefore conforms with this policy (items j. and k.). This provides a visitor experience that is consistent with other Front-of-House foyer and performance spaces, reinforces the quality and importance of the new Digital Immersion Space in the broader context of the Sydney Opera House, and continues the sequence of materials and forms that underpins Utzon's approach and arrival sequence.



The proposal will enhance the ability of the Opera House to engage with and inspire Sydney Opera House Tours visitors to the place, thus strengthening its connection and educational role with the greater community.

The proposed works are in accordance with Utzon's concepts and this policy.

#### **6.2.1.3 CMP Section 4.3 PROTECTING THE VALUES**

##### ***Policy 3.2 – Primary use as performing arts centre***

*The Sydney Opera House must continue its primary use as a nationally significant performing arts centre and its importance as a tourist attraction be recognised. The building, its site and its setting must not accommodate, or be altered to accommodate, uses or events that will vitiate its significance, character or primary use.*

*A co-ordinated long-term plan for the use of spaces across the whole site must be implemented and periodically reviewed to address the above. This should be in the form of a comprehensive framework, such as the Strategic Building Plan 2001, with sufficient detail to understand the implications for every space.*

##### **Comment:**

The previously approved renewal works will see the Concert Hall closed in early 2020 for the duration of the construction works, which will take approximately two years. Functionally, the Concert Hall will not be able to be used for the performing arts during this time. As a new interpretive space, the new Digital Immersion Space is proposed to offset this loss for visitors to the Opera House. The TIDE projection content will provide virtual access to and interpretation of the Concert Hall and the broader Opera House, and let the visitor attend a portion of a performance in the hall, which they would otherwise not be able to experience. The proposal therefore supports and strengthens the core activities of the Opera House and its primary use as a nationally significant performing arts centre.

The use of the Digital Immersion Space for uses other than a tour experience can be supported provided that these support and do not threaten the primary use of the place as a performing arts centre. As such interpretation related uses (such as talks, presentation or exhibitions) would be considered appropriate, however the privatisation or the use of the space for private functions is not supported. It is important to note that the Bennelong Passage is the primary access for people with mobility issues to the Box Office Foyer and the Bennelong Restaurant, and that clear access for this purpose must be maintained at all times. Any services requirements should also occur through the Back-of-House Passage. As such, any future use of this space should be assessed to ensure that it does not impede on this critical circulation route or result in additional stresses on other adjacent areas (e.g. for the storage of furniture items).

#### **6.2.1.4 CMP Section 4.4 UTZON, HALL & THE APPROACH TO CHANGE**

*"As time passes and needs change, it is natural to modify the building to suit the needs and technique of the day. The changes, however, should be such that the original character of the building is maintained.*

*The Opera House today is of course not my or our building, it is as much a building made by Hall, Todd & Littlemore and it is not something which we can add on or patch up by doing this and that."*<sup>1</sup>

##### **CMP Section 4.4.2 Authenticity and Integrity**

##### ***Policy 4.2 – Respecting Utzon and Hall***

*In order to retain, respect and potentially strengthen the authenticity and integrity of Utzon's work and the contributions made by Hall et al in its completion, all future designers and decision makers must:*

*– comply with Policies 1.1, 1.2, 4.6, 4.7 and 4.8;*

<sup>1</sup> Utzon 2002, *Utzon Design Principles*, p40

- avoid the introduction of their own design language and preconceptions, and defer to the original design regimes of Utzon and Hall, in that order;
- design new work to read as a subtle, respectful and sympathetic addition to the existing; and
- not alter or remove original design regimes or components based solely on contemporary changes in aesthetic taste and fashion.

*Major change or removal of the design regimes of interiors not designed by Utzon are only possible in accordance with Policy 4.5 – Major Change.*

**Comment:**

The consultant team has been guided by regular review and comment from the Sydney Opera House's heritage architect, Tours, staff and Sydney Opera House Design Advisory Panel (DAP). This has helped considerably in achieving compliance with this policy.

None of the original Utzon or Hall design regimes will be removed or substantially changed, nor is the design of the new Digital Immersion Space based on contemporary changes in aesthetics and fashion.

While this project involves a change in use of an existing Back-of-House space to a Front-of-House use, it respects the existing design regimes implemented elsewhere in the house. The adoption of Hall's Front-of-House palette of materials, namely the Brush Box wall and floor panelling, bronze fittings and indirect lighting, visually links the new Digital Immersion Space to the established Opera House identity, and reinforces its quality and importance in the broader context of the Sydney Opera House.

New design elements, such as furniture, are proposed to be designed by Adam Goodrum Studio, a Sydney based industrial designer, who has been approved and appointed to design furniture for other projects at the Sydney Opera House. New furniture should be simple in its design, visually recessive and complement the character, quality and design aesthetic of the Sydney Opera House in accordance with this policy.

The proposal will read as a respectful and sympathetic addition to both the Utzon and Hall designed spaces, retaining and respecting the authenticity and integrity of their work, and hence complies with this policy.

***Policy 4.3 – Cautious approach to change***

*A fundamental principle in any approach to change at Sydney Opera House must be to change 'as much as necessary but as little as possible' (in the words of Article 3 of the Burra Charter). The minimum options must be considered and tested first, and only if these do not work should options that involve greater change be considered or pursued.*

**Comment:**

Many of the physical changes to the building associated with the TIDE project are minimal and do not affect significant fabric or equipment. These works mainly comprise of the strip-out and removal of insignificant infrastructure and equipment related to the current use of the space as storage for one of the catering facilities. The Digital Immersion Space itself has been envisaged as a 'box' which sits inside the existing structure and is similarly removable and reversible.

There will however be minor but acceptable impacts associated with the demolition of a small length of the 1968 concrete podium structure, to create the new access off the Bennelong Passage, and a short length of 1973 wall within the BoH Passage. These impacts are considered acceptable however, given that the overall configuration of the Bennelong Passage and approach to the Western Foyers will remain substantially unaltered, and the new opening will not affect the granite panels adjacent.

During the design phase for the project several workshops with relevant stakeholders were held. The feedback from these has resulted in the current pared back design that complies with this policy.

### **CMP Section 4.4.3      *Acceptable degrees of change***

#### ***Policy 4.4 – Minor change***

*Any proposal for modest functional improvement, including redecoration to Utzon or Hall elements or components, above or within the Podium, must not fragment or diminish the authenticity or integrity of both the Utzon and Hall design regimes in accordance with Policies 4.7 and 4.8, except where such proposal accords with Policy 4.6. Proposals must be developed and executed in accordance with Policy 20.5 Continuity of advice, Policy 20.7 Heritage advice, and Policy 20.18 Statutory approvals.*

#### **Comment:**

The area of the proposed Digital Immersion Space was originally designed as a Back-of-House workshop for the Major Hall (in 1968), however when the Opera House opened in 1973, due to the change in program the area formed part of the larger Exhibition Hall, being a Front-of-House use. It was reconfigured to its present BoH use in the early 1990s as catering storage. Given that the nature of the use of this area below the podium has changed a number of times, the creation of the proposed Digital Immersion Space, as a new Front-of-House space, does not diminish the authenticity or integrity of either the Utzon or Hall regimes or the distribution of BoH and FoH spaces across the Opera House.

As discussed above, the adoption of Hall's palette of materials references those utilised within the major foyer spaces, and visually link the new Digital Immersion Space to the established Opera House identity. Similarly the design regime and concepts of Peter Hall in the adjacent Back-of-House Passage are proposed to be retained and respected in accordance with this policy. Changes to openings in the wall in the wall to the Back-of-House Passage, and to the Bennelong Passage are considered 'minor' in terms of the above policy.

As such, the proposal is considered to comply with this conservation policy.

### **CMP Section 4.4.4      *Utzon spaces and elements***

#### ***Policy 4.6 – Approach to change – Utzon elements***

*In considering modification or change to any external space, Utzon element or internal space completed by Utzon, including infrastructure and furniture, Utzon's concepts and design regime must be retained and respected, and be in accordance with Policies 1.1, 1.2, 4.2 and 20.18.*

#### **Comment:**

The Western Foyers at the northern end of the Bennelong Passage were opened in 2009, designed and executed by Utzon Architects in association with Johnson Pilton Walker. Jørn Utzon was re-engaged in 1999 and the works to the Western Foyers spaces and access upgrades have demonstrated how change can be accommodated within the framework of the UDP. Refer to the detailed discussion of the proposal's compliance with the UDP in the comment to Policy 1.2 above, and in section 10.0 below. The proposal will have no impact on the Western Foyers and will respect and retain Utzon's concept and design regime.

### **CMP Section 4.4.6      *Hall's Interiors***

#### ***Policy 4.8 – Approach to change – Hall elements***

*Any adaptation or modest functional improvement, as described in Policy 4.4, to elements or interiors designed by Hall must retain or recover the character of his original design regimes with their coordinated detailing.*

## Comment:

The existing Back-of-House space with its exposed white painted masonry and exposed colour-coded services remains largely unaltered in the proposal, apart from minor modification of doors and openings within the BoH Passage. The proposed Digital Immersion Space sits within this existing BoH space, however as a new Front-of-House space it deliberately references Hall's design regimes by adopting Hall's palette of materials for the main foyer areas, thereby extending the overall (Front-of-House) Sydney Opera House experience.

The creation of a new opening at the northern end of the Bennelong Passage will require demolition of part of the 1968 concrete podium structure. It is important to note that this wall initially formed one of the enclosing walls of the garbage rooms located below the former Bennelong stair. The partial removal of part of this wall is considered of minor impact and acceptable considering the overall benefit of a dedicated interpretation space to facilitate the virtual access and experience of the Concert Hall during its closure, and the benefits to the significance of the Opera House more broadly. The removal of a small length of 1973 concrete walling to the Back-of-House Passage is similarly considered to be of minor impact.

### ***CMP Section 4.4.12      Significance, tolerance and opportunities for change***

#### ***Policy 4.11 – Significance, tolerance and opportunities for change***

*All elements of the Sydney Opera House are to be maintained, used and managed in accordance with their relative level of significance, defined in Section 3.3 Summary Schedule of Levels of Significance, and the identified tolerance and opportunities for change for their component parts.*

#### ***Policy 4.12 – Levels of Significance – general policy (relevant extract only):***

*The following general policy statements have been formulated to guide changes and works at the place and may be supplemented by more detailed policies for each element, and guidance for change on each component in the Tolerance for Change and Opportunities for Change tables in this CMP. The levels of significance refer to Section 3.3, Summary Schedule of Levels of Significance, and are to be considered as part of this policy.*

#### ***A Exceptional significance***

*Alteration of grade A elements is not permitted unless otherwise mentioned in Section 4 of this CMP. Maintenance, preservation and repair are permitted to ensure their ongoing function and to retain significance.*

*It is essential that the original design intent of the element is retained and respected.*

#### ***C Moderate significance:***

*These elements are of moderate significance and provide support to elements or functions of higher significance. They play a role in supporting the significance of the place, but may be inadequate in their current configuration or use.*

#### ***D Low Significance:***

*These elements are of low significance. They play a minor role in supporting the significance of the place, or may have been compromised by later changes.*

Broadly the elements and areas listed below (following the main headings in the *Summary schedule of levels of significance* in Section 3.3 of the CMP 4th edition) will be potentially affected to varying degrees by the proposed works.

| <b><i>Element</i></b>                                                                                                                                                                                                                                                                                                                               | <b><i>Level of significance</i></b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>Sydney Opera House generally</b>                                                                                                                                                                                                                                                                                                                 | <b>A</b>                            |
| <ul style="list-style-type: none"><li>– Its form and fabric as an iconic architectural sculpture in the round in its harbour and urban setting;</li><li>– Its context and setting;</li><li>– It's function as a world-renowned centre for the performing arts;</li><li>– Original concept of sequential experiences on arrival, entry and</li></ul> |                                     |

circulation;

- Its complete assemblage comprising flat open Forecourt and Broadwalk surrounding a massive pink granite clad podium, with Monumental Steps ascending from Forecourt, supporting 3 groupings of soaring curved, ribbed concrete shells, white ceramic tiled roof shells, and their associated structural systems of unpainted folded, cranked and post-tensioned concrete beams and ribs.
- Planning hierarchy – Front-of-House / Back-of-House / support services – which manifests itself externally, internally, horizontally and vertically.

**Interior – ‘Front-of-House’ spaces within Podium**

- **Stairs and Lift from the Covered Concourse** A
- **Western Foyers** A

**Interior – ‘Back-of-House’ spaces**

- **Back-of-House spaces generally** B-C
- **Service areas** C-D

Significance rankings are taken from the CMP 4th edition and are as follows:

- A – Exceptional significance
- B – High significance
- C – Some significance
- D – Little significance
- Int – Intrusive element

Potential impacts on each element arising from the TIDE project, affect both tangible and intangible aspects / values of the place. They cannot be considered in isolation.

The first sentence in the Statement of Significance in CMP 4th edition sums up the tension between the Opera House’s tangible values that include the fabric of the building, and intangible values, including its original use and purpose, and the human experience of this:

*The Sydney Opera House is a masterpiece of 20th century architecture and a world renowned performing arts centre. Refer to discussion above.*

Potential impacts on both tangible and intangible values are discussed below in the context of the relevant conservation policies contained in CMP 4th edition. At the end of each discussion section the *Tolerance for Change* table from the CMP 4th edition sets out the components of each element with comments on the potential impacts arising from the current proposal. Any issues identified in the Opportunities for Change tables are also discussed.

## **6.2.2 The site & its fabric (CMP Sections 4.5 – 4.15)**

### **6.2.2.1 CMP Section 4.9 CONSERVING THE INTERIOR: ‘FRONT-OF-HOUSE’ SPACES WITHIN THE PODIUM**

#### **CMP Section 4.9.1 STAIRS AND LIFT FROM COVERED CONCOURSE**

*“The stair cases lead to the cloak room level which is paved also in precast concrete elements, white textured plaster and the ceiling a continuation of the same folded beams.”<sup>2</sup>*

#### **Comment:**

The proposed Digital Immersion Space is to be accessed from a new sliding door at the northern end of the Bennelong Passage. The Bennelong Passage was created as part of the refurbishment of the Western Foyers in 2008-2009, and continues the language of the original stairways from the Covered Concourse, in particular the granite wall panels, exposed and unpainted concrete beams and the indirect lighting.

<sup>2</sup> Utzon 1965, *Descriptive Narrative*, p10

While the proposed new doorway will result in minor but acceptable impacts associated with the demolition of a small section of the 1968 podium structure, it will not impact on the significant architectural qualities of the Bennelong Passage, namely the granite wall panels, concrete beams or lighting.

The *Tolerance for Change* table for the *Stairs and Lift from Covered Concourse* from the CMP 4th edition is included below. The added right-hand column provides further assessment of the proposal:

| element:<br><b>Stairs and lift from Covered Concourse</b><br><br>significance ranking <b>A</b><br><br>Stairways and Bennelong Lift as primary undercover access connecting Covered Concourse to Box Office<br><br><b>selected components:</b> | <b>Tolerance for Change</b><br>1 = Low tolerance<br>2 = Moderate tolerance<br>3 = High tolerance |        |          |          | <b>Further Considerations</b>                                                                                                                                     | <b>Assessment / impact of proposal</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------|----------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
|                                                                                                                                                                                                                                               | Form                                                                                             | Fabric | Function | Location |                                                                                                                                                                   |                                        |
| Folded unpainted concrete beams dominating space                                                                                                                                                                                              | 1                                                                                                | 1      | 1        | 1        | Defining character of the spaces and must remain exposed.                                                                                                         | Not affected by proposal.              |
| Uncluttered linear stair ascents flanked by precast granite walling, free of display                                                                                                                                                          | 1                                                                                                | 1      | 1        | 1        | Retain relationship with 'outside' palette of materials. Absence of display material is essential.                                                                | Not affected by proposal.              |
| Concealed lighting of spaces intended to illuminate and emphasis beams                                                                                                                                                                        | 2                                                                                                | 2      | 1        | 2        | Lighting at lower entry and on stairs could be improved, but should remain concealed.                                                                             | Not affected by proposal.              |
| Bronze handrail system with concealed lighting strip                                                                                                                                                                                          | 2                                                                                                | 1      | 1        | 1        | To be considered as part of overall approach to handrails across site – refer to policy 7.19 <i>Bronze railing system</i> . Safe lighting of stairs is essential. | Not affected by proposal.              |
| Exposed off-form concrete walls to Bennelong lift shaft                                                                                                                                                                                       | 2                                                                                                | 2      | 2        | 2        | Shaft is a combination of original and new fabric based on the original. Any alteration should adopt the same principle.                                          | Not affected by proposal.              |
| Bennelong Lift car with bronze trim                                                                                                                                                                                                           | 2                                                                                                | 3      | 1        | 2        | Lift car and doors could be made more transparent if opportunity arises and code allows.                                                                          | Not affected by proposal.              |

#### **CMP Section 4.9.4 WESTERN FOYERS**

##### **Policy 9.3 – Western Foyers**

*All activities in the Western Foyers must be focused on the core functions of the space and its visually open relationship to the Western Broadwalk. Distractions and obstructions in the area defined by the raised ceiling, particularly in front of the deeply recessed windows, must be minimised.*

*Objects associated with activation of the foyers must be carefully designed and placed, and in place for a minimum duration in accordance with Policy 15.3 Promotion and merchandising.*

##### **Policy 9.4 – Western Foyers design regime**

*The Western Foyers must retain the configuration, design regime and palette of materials*

*introduced by Utzon Architects and Johnson Pilton Walker in the 2008-2009 refurbishment. Any changes or fine-tuning of the space or its fittings must retain and respect that regime, as well as the design regime of adjacent spaces.*

*All work must also be carried out in accordance with Policies 4.4 Minor change and 4.6 Approach to change - Utzon elements.*

#### Comment:

The proposed TIDE project will not adversely impact on the core function of the Western Foyers or its visually open relationship to the Western Broadwalk. The only visual change within the space will be the sliding door to the Digital Immersion Space at the northern end of the Bennelong Passage. This sliding door is consistent with the character of Utzon's 2008-2009 refurbished Western Foyer space, and is painted white to match the existing, adjacent walls. The new door will not change the configuration of the Western Foyer space or the Bennelong Passage as a way of approach, and retains and respects the design regime and palette of materials introduced by Utzon Architects and Johnson Pilton Walker.

As a new interpretive space, the Digital Immersion Space is not considered to form part of the Western Foyers. As such, the adoption of the design language of the Western Foyers was considered inappropriate for the TIDE project. As discussed above, the adoption of Hall's Front-of-House design palette is considered appropriate, as it visually connects the Digital Immersion Space to the established Opera House FoH identity, and reinforces its importance in the broader context of the Sydney Opera House.

The *Tolerance for Change* table for the *Western Foyers* from the CMP 4th edition is included below. The added right-hand column provides further assessment of the proposal:

| element:<br><b>Western Foyers</b><br><br>significance ranking <b>A</b><br><br>Continuous amalgamated foyer space (completed 2009), servicing the Playhouse, Studio and Drama Theatre, accessed from the Western Broadwalk and Covered Concourse<br><br>selected components:                                                     | Tolerance for Change<br>1 = Low tolerance<br>2 = Moderate tolerance<br>3 = High tolerance |        |          |          | Further Considerations                                                                                             | Assessment / impact of proposal                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------|----------|----------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                 | Form                                                                                      | Fabric | Function | Location |                                                                                                                    |                                                                                                                                                          |
| Freestanding, unpainted original concrete roof piers                                                                                                                                                                                                                                                                            | 1                                                                                         | 1      | 1        | 1        | Piers should remain free of any decoration or display elements.                                                    | Not affected by proposal.                                                                                                                                |
| Deeply recessed unpainted off-form concrete framed windows overlooking Western Broadwalk                                                                                                                                                                                                                                        | 1                                                                                         | 1      | 1        | 1        | Windows should remain free of any display material, unobstructed and with the sense of wall depth retained.        | Not affected by proposal.                                                                                                                                |
| Palette and configuration of materials - GRC paved floor using pink granite with honed finish, white painted walls with spaced clear-finished vertical battens, row of unpainted concrete columns defining extent of high ceiling area and spaced prefabricated white acoustic ceiling panels with clear-finished timber edging | 1                                                                                         | 1      | 1        | 1        | If replacement or repair is required, materials should match existing, including configuration, colour and finish. | Specific components not affected by proposal. New sliding door in Bennelong Passage will be painted white to match existing fire door and wall adjacent. |



|                                                       |                  |   |   |   |                                                                                                                                                                                                                                                                                          |                           |
|-------------------------------------------------------|------------------|---|---|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Bronze-framed glazed entry lobbies from Broadwalk     | 1                | 1 | 1 | 1 | Bronze material and views through from foyer are both important.                                                                                                                                                                                                                         | Not affected by proposal. |
| White 'corian' and timber fitout and benches          | 1                | 1 | 1 | 1 | Reconfiguration may be possible but must remain clear of main space and within area defined by bulkhead and columns. Material may be changed but must respect design regime.                                                                                                             | Not affected by proposal. |
| Le Corbusier tapestry                                 | 1                | 1 | 1 | 2 | Present location appropriate but could, if required, be relocated to another Utzon foyer space such as the Box Office. <sup>12</sup> Present frame and mounting could be reviewed – less heavy and reduced reflectivity. Proximity to eating area currently obstructs views to tapestry. | Not affected by proposal. |
| Furniture                                             | 2                | 2 | 1 | 2 | Present furniture not selected by Utzon. Modern, simple, fine design and comfort are important. Could be reviewed / replaced if required.                                                                                                                                                | Not affected by proposal. |
| Public lavatory fitout (completed 2009)               | 2                | 2 | 1 | 2 | Re-configuration and / or change of materials are possible in accordance with Policy 9.11, but should be considered in relation to Western Foyers and similar facilities elsewhere in building.                                                                                          | Not affected by proposal. |
| Temporary promotional signage within main foyer space | <b>Intrusive</b> |   |   |   | Minimal temporary signage may be acceptable, but the emphasis should be on fine design quality and consistency, and should be 'minimal' in terms of quantity and clutter. Should not obstruct windows or 'openness' of space.                                                            | Not affected by proposal. |

The Opportunities for Change table for the Western Foyers from the CMP 4th edition is included below. The added right-hand column provides further assessment of the proposal:

| <b>Explore Opportunities – Western Foyers</b>                                                                     | <b>Comment</b>                                                                                                                 | <b>Response of proposal</b>                                                                           |
|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Items listed as intrusive in TfC table above are opportunities for change. Additional opportunities listed below. | Generally, all changes must comply with the Utzon Design Principles and CMP, and may be subject to statutory approval.         |                                                                                                       |
| Connections to adjacent spaces                                                                                    | Potential to connect the possible public uses to north and south, but south wall should have uncluttered focus on the artwork. | Connection to a new Digital Immersion Space is proposed, a new Front-of-House space. Positive impact. |

**6.2.2.2 CMP Section 4.10 CONSERVING THE INTERIOR: 'BACK-OF-HOUSE' PERFORMERS & STAFF AREAS**

**CMP Section 4.10.1 Back-of-House spaces generally**

**Policy 10.1 – Hall design regime for back-of-house**

*In any modifications to the back-of-house areas, the Hall design regime and suite of finishes must be retained or reinstated in accordance with Policies 4.2 and 4.8 and, where appropriate, continued into related new spaces.*

**Comment:**

The existing Back-of-House space with its exposed white painted and unpainted masonry and colour-coded services remains largely unaltered apart from minor modification of doors and openings. The TIDE 'fitout' sits within this existing BoH space and can be removed to expose the original space. It is proposed to reference Hall's design regimes for Front-of-House spaces for the new use, by adopting Hall's palette of materials for the main foyer areas. Hall's design regime and suite of finishes within the BoH Passage will be retained and it is recommended that the new openings and doors facing the BoH Passage match those of the existing Back-of-House service areas.

The *Tolerance for Change* table for the *Back-of-House spaces generally* from the CMP 4th edition is included below. The added right-hand column provides further assessment of the proposal:

| element:<br><b>Back-of-House spaces generally</b><br><br>significance ranking <b>B-C</b><br><br>Signature components of Back-of-House spaces, applied as per Hall's finishes schedules throughout the Podium<br><br><b>selected components:</b> | Tolerance for Change<br>1 = Low tolerance<br>2 = Moderate tolerance<br>3 = High tolerance |        |          |          | Further Considerations                                                                                                                                                                                                                          | Assessment / impact of proposal                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--------|----------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                 | Form                                                                                      | Fabric | Function | Location |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Unpainted off-form concrete ceilings, beams and roof piers                                                                                                                                                                                      | 2                                                                                         | 2      | 1        | 3        | All unpainted areas and surfaces to remain unpainted. Plasterboard or false ceiling systems, other than wobblies, should not be used unless they are found to be original.                                                                      | The proposal involves change of use for the space to new FoH space. Plasterboard to the ceiling of the 'box' is required for projection purposes. The existing finishes will be retained within the space and concealed behind the new fitout. The new structure sits within the existing space and is removable. Permissible with change of use. Positive impact enabling interpretation of the Concert Hall during renewal works. |
| White painted off-form concrete and brick wall surfaces, and white painted off-form concrete ceilings                                                                                                                                           | 2                                                                                         | 3      | 1        | 3        | No rendering or plastering over these surfaces.<br><br>Flat white is preferred unless required by use (e.g. black-out).                                                                                                                         | Refer also to comment above. No rendering or plastering of original BoH surfaces is proposed. The 'box' is a new and removable insertion.                                                                                                                                                                                                                                                                                           |
| White birch veneered moulded plywood wobbly panel system with integrated lighting and sprinklers, fitted below services to conceal them but also allow access.<br><br>Wobbly panel system fitted to walls (without lighting) to conceal         | 2                                                                                         | 2      | 1        | 3        | Lighting and other services can be adjusted to suit requirements but configuration should be retained.<br><br>Hall's system, including its many variations, can be adapted and extended into new areas. System includes associated hardware and | Not affected by proposal but the new design draws from this and has concealed services, storage and integrated low level lighting in Brush Box panelling, aligning with design regime for FoH areas permissible with change of use.                                                                                                                                                                                                 |

|                                                                                                                                                                                                                                                                                                     |                  |   |   |   |                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---|---|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| services, and with hinged wobbly panels to access services                                                                                                                                                                                                                                          |                  |   |   |   | signage, and unmoulded plywood panels in some smaller spaces.                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Precisely aligned and fitted services laid in colour-coded or banded steel conduits, trays and ducts with neat saddle fixings, surface mounted on ceilings and walls                                                                                                                                | 2                | 1 | 1 | 3 | Use of rigid steel conduits, cable trays and ducting is essential to maintain precision of layout and alignment, and minimise fixings.<br><br>Retain existing colour-coding in all work.                                              | Not affected by proposal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Back-of-House floor finishes of chocolate brown carpet in office and performer spaces, and concrete or dark brown or grey sheet vinyl flooring in service areas                                                                                                                                     | 2                | 2 | 1 | 1 | Consistent colour and treatment are essential to maintain unity of Back-of-House spaces.                                                                                                                                              | Not affected by proposal but floor in 'box' is proposed to be Brush Box tongue and grooved floor boards to align with the design regime for Front-of-House areas permissible with change of use.                                                                                                                                                                                                                                                                                                       |
| Clear finish, white birch veneered doors with associated hardware, numbering, lettering and signage to administration, artists' and performers' areas .<br><br>Painted solid core doors with associated hardware, numbering, lettering and signage to service areas, and all spaces below Level +12 | 2                | 2 | 1 | 2 | Original 1973 hardware, numbering and lettering are important.<br><br>Refer to Section 4.11.1 <i>Doors and door furniture</i> .<br><br>Refer to Section 4.15 <i>Signage</i> .<br><br>Painted door colours signify location and level. | The new sliding door to the TIDE space is proposed to be painted white facing the Bennelong Passage and finished in Brush Box to match timber panelling internally with bronze hardware to align with Front-of-House doors and door furniture. New doors and openings in Back-of-House passage corridor are proposed to remain consistent with BoH finishes. Affected doors are to be salvaged for either reinstatement in the same or different location or stored for Sydney Opera House future use. |
| Lighting control and projection room spaces with walls and ceilings lined by perforated ribbed metal sheeting and fire-rated insulation                                                                                                                                                             | 3                | 3 | 1 | 3 | Proper function is essential. Materials and finish of lesser significance.                                                                                                                                                            | Not affected by proposal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Partitions masking roof piers in dressing room corridors under Concert Hall and Joan Sutherland Theatre (Opera Theatre)                                                                                                                                                                             | <b>Intrusive</b> |   |   |   | Partitions should be removed, columns exposed and stripped of paint. Refer to Policy 10.3.                                                                                                                                            | Not affected by proposal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

The Opportunities for Change table for the Back-of-House spaces generally from the CMP 4th edition is included below. The added right-hand column provides further assessment of the proposal:

| <b>Explore Opportunities – Back-of-House spaces generally</b>                                                        | <b>Comment</b>                                                                                                            | <b>Response of proposal</b>                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Items listed as intrusive in TfC table above are opportunities for change.<br>Additional opportunities listed below. | Generally, all changes must comply with the Utzon Design Principles and CMP, and may be subject to statutory approval.    |                                                                                                                                                                                   |
| Design consistency                                                                                                   | Retain and where possible strengthen consistency of Hall's design regime in existing and new work in Back-of-House areas. | Refer also to comments above re Hall's design regime. Proposed materials and finishes use and interpret Hall's original design regime for Front-of-House and Back-of-House areas. |

|                                       |                                                                                        |                                                                                                                                                            |
|---------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Functional and accessibility upgrades | Upgrades possible – must support primary use of the place as a performing arts centre. | Proposal includes removal of fire doors and provision of new concealed fire curtain, and minor accessibility adjustments. Permissible with minimal impact. |
|---------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|

### **CMP Section 4.10.9 Spaces within the western part of the Podium**

*In order to regain some consistency in the identity of these areas and their association with other similar spaces in the Podium, it is important that the Hall design and finishes regime, including consistent signage, is re-applied to these aberrant spaces in accordance with Policies 4.8 and 10.1. If this is not done, fragmentation of the identity of Podium spaces, both original and new, will continue.*

#### **Comment:**

Refer to discussion above. The proposal responds positively to this and complies with the above policy.

### **6.2.2.3 CMP Section 4.11 DOORS, FURNITURE & FITTINGS**

#### **CMP Section 4.11.1 Doors and door furniture**

##### **Policy 11.1 – Door hierarchy**

*The original 1973 design and hierarchy of finishes for doors and door furniture must be retained, respected and extended into all maintenance activities and new work across the site.*

##### **Policy 11.3 – Door numbering and text**

*The door numbering system appropriate to the door location, as instigated under Peter Hall, must be retained. Where the system involves individual letters / numbers, these must be retained and fixed or replaced (as required) with precision using the original Helvetica medium typeface.*

*Fixed plates with engraved letters and numbers may only be considered for areas below Level +12, new areas added since 1973, and for spaces only accessed by service or maintenance personnel. The Helvetica medium typeface must be retained for all door numbering and text.*

#### **Comment:**

The documents indicate that these policies are able to be respected. Door finishes are proposed to match existing finishes of adjacent and related spaces. Door hardware should similarly adopt the established design hierarchy for FoH and BoH spaces: being bronze within the Bennelong Passage and proposed new Digital Immersion Space, and chrome/stainless steel for doors fronting BoH areas. Door frames should be painted steel, (black or bronze) within the Digital Immersion Space, and white within BoH areas – bronze coverings on frames are not acceptable.

The final detail will be checked at tender documentation stage.

#### **CMP Section 4.11.2 Furniture and fittings**

*Furniture and fittings make an important contribution to the setting and aesthetic presentation of the place. For interiors, particularly within the Podium, they may be the only decorative element. While often given less consideration than the building and its finishes, they should be selected to complement the character, quality and design aesthetic of the place and support its significant values. However, this does not necessarily mean they should be of the same period.*

##### **Policy 11.5 – Furniture and fittings – replacement strategy**

*A strategy must be formulated to guide furniture replacement or new purchases based on a set of design selection principles that strengthen both Utzon and Hall's design regimes. This strategy should include consideration of original Utzon designs for the Opera House and / or reinstatement of original Saarinen designs in the more significant Peter Hall spaces.*

**Comment:**

Loose furniture is proposed for the Digital Immersion Space to provide comfort and seating for visitors with mobility and access issues. Being a new space that references the design regimes of Peter Hall, Halls' black leather benches in the foyers were considered for use in the Digital Immersion Space. Their weight however means that they don't provide the level of flexibility required.

Adam Goodrum Studio, a Sydney based industrial designer, has been appointed to design furniture for the Sydney Opera House on other projects, including the Northern Foyers and Yallamundi Rooms. As such, his engagement to produce furniture for the Digital Immersion Space is considered appropriate. It is recommended that the furniture should be simple in its design, visually recessive and complement the character, quality and design aesthetic of the Sydney Opera House in accordance with this policy.

**6.2.2.4 CMP Section 4.13 SERVICES & MACHINERY**

***CMP Section 4.13.1 Repair or alteration of service lines***

***Policy 12.2 – Repair of alteration of service lines***

*The design and installation of new, upgraded or altered services, including those in new areas, must retain and respect the configuration, order, palette of materials, fixing methods and colour-coding used in the original service installations in the particular area concerned. Services with no likely future use could be removed.*

**Comment:**

All works to services at the Opera House are governed by a specific document – the BSSS standard, which complies with this policy. This document should guide all new works.

**6.2.2.5 CMP Section 4.14 LIGHTING**

***Policy 14.1 – Lighting and visitor experience***

*All lighting at the Sydney Opera House, both externally and of public spaces internally, must enhance their sequence and architectural form, in accordance with the Utzon Design Principles. It is also essential that both external and internal spaces are sufficiently lit to allow their safe and proper intended use without distracting glare or interference with views, but this must not diminish the subtlety and drama of the approach and arrival sequence of public spaces or the patron and visitor experience of them.*

***CMP Section 4.14.3 Lighting of interior spaces***

***Policy 14.6 – Internal lighting***

*Lighting internally, including any form of upgrade or redesign, must:*

- utilise indirect, concealed or unobtrusive light sources that reveal and enhance the architectural form and character of important spaces, whether they be front- or back-of-house, and the off-form concrete structural elements which define them;*
- retain the sequence of contrasting effects in accordance with the spatial sequence intended by Utzon to heighten the experience for arriving patrons, culminating in entering the auditorium;*
- maintain reflection-free views of the harbour and setting from the foyers;*
- render the colour of natural materials as accurately as possible;*
- achieve reasonable levels of visual acuity for specific functions and visitor safety, without compromising the above requirements and without the inappropriate location of equipment and conduits;*
- retain those fittings chosen by Utzon in his recent work, unless they require replacement or are no longer available, in which case they must follow the original as closely as possible in form as well as light quality and colour temperature; and*
- follow the Utzon Design Principles, and accord with the Lighting Masterplan.*

**Comment:**

All lighting in this application is proposed to comply with this policy. All fine adjustments will be tested on site. Lighting inside the Digital Immersion Space, apart from the projectors should be indirect and baffled 'warm' edge lighting.

**6.2.2.6 CMP Section 4.15 SIGNAGE**

***Policy 15.1 – Signage***

*The Signage Manual should be reviewed and if necessary revised / updated to ensure it accords with this CMP and the Utzon Design Principles.*

*All signage externally and internally, including for corporate and sponsorship purposes, should:*

- follow the recommendations and details set out in the Sydney Opera House Signage Manual, following its revision;*
- belong to a consistent design 'family' and complement the quality and character of the remaining original 1973 signage, as well as the space for which it is designed;*
- not clutter or detract from the space or element; and*
- be kept to a minimum and, as far as possible, given common design and graphic characteristics.*

**Comment:**

Signage has been identified to the new access door from the Bennelong Passage, being a digital theatre sign adjacent the door, and bronze room signage on the door itself, consistent with that within the Western Foyer. Any additional signage (e.g. hearing loop) will need to comply with the Sydney Opera House signage manual and the policies above. Other temporary or permanent signage (including wayfinding signage) within the Bennelong Passage, associated with a particular use of the Digital Immersion Space, is not considered to be appropriate.

The final detailing for any new signage is to be checked during the detailed design phase.

**6.2.3 Operations & Management (CMP Sections 4.16 – 4.20)**

**6.2.3.1 CMP Section 4.16 INTERPRETATION**

*Significant and powerful places ideally speak for themselves, and in many ways the Sydney Opera House does this eloquently. In this respect lighting plays an important role in interpretation, highlighting or emphasising structural and spatial qualities, without need for signage.*

**Comment:**

Refer also to comment on Policy 14.1 and 14.6 regarding lighting. The main objective of the TIDE project is to interpret the dramatic spatial qualities of the Concert Hall, which will be closed during the renewal works from the beginning of 2020. This will be achieved through immersive high definition projection mapping utilising high quality photos, renders and film of the Concert Hall which has been lit to emphasise its own structural and spatial qualities at the time it was recorded. The Digital Immersion Space itself is proposed to utilise concealed 'warm' edge lighting only, similar to that used within the FoH foyers, which will strengthen the experience of the space and its materiality.

***Policy 16.1 – Interpretation***

*Interpretation of the significant values of Sydney Opera House, including its Outstanding Universal Values, should form a backdrop to, or be part of the use and presentation of the place and enhance rather than hinder the visitor / user experience.*

*Any infrastructure required for interpretation must comply with the policies in this CMP, and be minimal and discreet with no adverse impact on spaces or fabric.*

*To avoid fragmenting the site or trivialising it in any way, there must be an integrated and coordinated approach to interpretation across the whole site, and signs kept to a minimum.*

**Comment:**

The main aim of the proposal is to engage and educate visitors by providing a dedicated space for interpretation of the significant values of the Sydney Opera House, and providing virtual access to the Concert Hall during its closure. The proposed change of use of the existing Back-of-House space as a new public Front-of-House space is considered appropriate and will greatly enhance the visitor / user experience of the building and site. Integration of the space with the existing FoH public spaces will be achieved through the use of Brush Box timber panelling, Brush Box flooring and bronze finishes, referencing Peter Hall's design regime and materials palette. These will form the backdrop to the experience. The equipment used for the projection and audio will be largely concealed or out of view, thus complying with this policy. The design of the space is discreet, reversible and does not adversely impact on significant fabric.

The TIDE project respects and retains the distinctive built form, unparalleled design and construction of the Sydney Opera House, and will potentially enhance its Outstanding Universal Values by improving the appreciation and understanding of the place.

***Policy 16.2 – Interpretation Plan***

*Existing interpretation should be assessed and a comprehensive Interpretation Plan and Implementation Strategy prepared to inform, co-ordinate and direct interpretation initiatives across the site and through its use, activities and communication networks.*

*This Interpretation Plan and Strategy must include an approach to the recognition and interpretation of Aboriginal and Torres Strait Islander peoples' cultural values and Aboriginality associated with the Sydney Opera House. Aboriginal and Torres Strait Islander people are the rightful interpreters of their cultural heritage and any proposed interpretation at the Sydney Opera House must involve relevant stakeholders.*

**Comment:**

The TIDE project responds to the EPBC 2016/7825 Approval Conditions and Interpretation Actions that requested a Heritage Interpretation Strategy is to be submitted. The strategy included A commitment to display information about the evolution of the design and fabric of the building, including through the building renewal program, in publicly accessible areas (Approval condition i.). Recommendation 5 prescribes to Provide interactive and immersive interpretive material and experiences to visitors and audiences to explore onsite. One of the proposed strategies is to scope and develop a minimum of one immersive virtual Opera House experience onsite during the Concert Hall Renewal (e.g. 360° projection experience). The TIDE project addresses this strategy. See also section 11 for a comment on the RIS. The content of the TIDE project should include an approach to the recognition and interpretation of Aboriginal and Torres Strait Islander peoples' cultural values and Aboriginality associated with the Sydney Opera House in accordance with this policy.

***CMP Section 4.16.1 Interpretation – treatment of the fabric***

*In some areas, important evidence of construction techniques remains visible and should not be covered over or removed. One of the finest examples of this is to be found on the unpainted surface of the cranked and folded beams over the Covered Concourse. Here the clear impressions left by chalk marks made on the plywood formwork to indicate the location of the post-stressing cables are a graphic indicator of the construction process and the form of the internal structure.*

**Comment:**

The proposed structure for the Digital Immersion Space sits within an existing Back-of-House structure and is reversible. No removal of any evidence of the construction process and the form of the internal structure is proposed.



#### ***CMP Section 4.16.2 Interpretation – use and activities***

##### ***Policy 16.4 – Interpretation impacts on use***

*Any interpretation or visitor experience program, including tours, must not put at risk or adversely impact on an element, space or significant use, and must respect the day-to-day functioning of the place as a busy performing arts centre.*

#### **Comment:**

New technology and uses of space within the Opera House for projects such as TIDE were not anticipated when the Opera House was conceived and built. One of the challenges in accommodating a facility for such a projection experience was to find a suitable space within the Opera House that is readily accessible to the public and adjacent a public thoroughfare, without it eliminating or removing an existing space that supports the primary function of the Opera House as a world-class performing arts centre.

The proposed space was chosen due to its proximity to the Western Foyer, at the northern end of the Bennelong Passage, offering a space for tour groups to congregate and meet without disrupting access to other parts of the building. The current use of the existing space as a storage area for catering facilities can be easily relocated in order to allow for the repurposing of the space for the TIDE project. The proposed demolition and alteration of the existing store do not include any change to significant fabric.

There should be no disruption to the day-to-day functioning of the place as a busy performing arts centre with the introduction of the TIDE project and associated tours.

#### ***CMP Section 4.16.3 Interpretation – introduced explanatory material***

##### ***Policy 16.5 – Public access to interpretation information***

*Public access to information about the Sydney Opera House, its significance, use, history, current initiatives and relevant publications should be maintained and enhanced by a combination of hard copy publications (not necessarily published by the Sydney Opera House Trust), electronic media and the internet.*

#### **Comment:**

The content of the TIDE projection provides virtual public access to the Concert Hall during its closure as well as interpretative material about the Sydney Opera House's significance, use and history. Public awareness and access to the significance, use and history of the Sydney Opera House is maintained and enhanced in accordance with this policy.

#### **6.2.3.2 CMP Section 4.20      MANAGING THE PROCESS OF CHANGE**

##### ***CMP Section 4.20.1      Use and compatibility***

##### ***Policy 20.1      Change of use of spaces***

*Proposed changes of use of any internal or external space should only be considered where they satisfy the following criteria:*

- *they relate to and support the primary use of the building and site as a performing arts centre;*
- *proposed use and location does not weaken, confuse or threaten original (1973) functional relationships;*
- *changes must have minimal impact on significant fabric and fitout;*
- *change is consistent with coordinated planning for the whole site in accordance with Policy 3.2.*

*A co-ordinated long-term plan for the use of spaces across the whole site should be prepared to guide the above.*

##### ***Policy 20.2      Unacceptable uses***

*Uses are unacceptable if they:*

- *dilute or impede the primary use of the place as a performing arts centre;*

- *impair or invalidate the original concept of the designers of those elements of the place that are assessed as being of exceptional or high significance;*
- *degrade the character and quality of fabric, spaces and relationships;*
- *are likely to cause excessive wear and tear or disfigurement of significant fabric;*
- *encroach on public access routes, or otherwise impede the use, experience and appreciation of public spaces; and*
- *require alterations, additions and facilities that may result in any of the above.*

**Comment:**

It is our conclusion that the TIDE project in this application is appropriate in terms of its proposed use. This is discussed below.

- The TIDE project supports and strengthens the primary use of the site as a performing arts centre. It will provide virtual public access to the Concert Hall, including the opportunity to experience a performance, during its closure for the renewal works.
- The TIDE project is an important interpretative element that will enhance the public's understanding of the Concert Hall, and the broader Sydney Opera House building and site.
- The repurposing of the existing Back-of-House storage area as a new Front-of-House public space will provide new opportunities for interpretation at the Sydney Opera House, and particularly the Concert Hall during its closure. The repurposing of this BoH space does not endanger or diminish the original concepts of either Utzon or Hall for the affected space, or the Opera House generally. Nor do they degrade the character and quality of fabric, spaces and relationships between the affected areas.
- The TIDE project provides a dedicated space for interpretation within the Sydney Opera House that enhances the understanding of the design and visitor experience of the place, in a location that is presently underused and accessible from existing foyer spaces. This is considered a positive outcome for the increased public engagement in the site.
- This project does not weaken or threaten the primary use of the building for the performing arts. It will in fact support it.

The TIDE project has been as a new interpretive space at the Sydney Opera House. The digital projections not only provide virtual access to the Concert Hall during its closure, but also present an opportunity to engage visitors with the broader significance of the Sydney Opera House. It has been designed as a flexible space. Loose furniture will be custom designed for this purpose and use. Sydney Opera House Tours generally operate between 7am and 6pm, and there is an opportunity for the Sydney Opera House to utilise the space for other performance and interpretation related uses (such talks, presentations and exhibitions), when not in use by Sydney Opera House Tours. The use of the space for activities other than a tour experience is supported provided that these support and not threaten the primary use of the place as a performing arts centre. It is important to note that the Bennelong Passage is the primary access for people with mobility issues, and that the retention of clear access for this purpose must be maintained at all times. Any services requirements should occur through the Back-of-House Passage. Uses that would require storage of furniture will have implications on other parts of the Opera House, due to the lack of adjacent storage space, and these issues would need to be addressed. Privatisation or the use of the space for private functions is not supported as this could adversely impact adjacent spaces and facilities and thus potentially diminish or threaten the Sydney Opera House's significance, character and primary use of the place as a performing arts centre.

**CMP Section 4.20.3      *Sequence of heritage advice in developing proposals***

*Policy 20.7 Heritage advice*

*Continuity of relevant and experienced heritage conservation and Conservation Council advice should be provided as part of the process by which temporary or permanent changes to the Sydney Opera House and its setting are developed and executed. The timing of this advice is important. For major projects it should be drawn upon:*

- *initially, at the concept stage;*
- *during the development and refinement, or alteration, of the proposal;*
- *for a formal statement of heritage impact, or its equivalent, in response to the completed development application; and*
- *to keep a watchful eye on work actually underway.*

*Likewise, masterplans, strategies, manuals or guidelines should be developed in close consultation with appropriate and experienced heritage and conservation advice, including the Conservation Council, and be consistent with this CMP, the Utzon Design Principles and the Heritage Risk Management Plan.*

**Comment:**

Heritage conservation advice has been sought and provided throughout the design stages for this project and this HIS assesses the completed development application. It is important that this specialist advice continue through to completion of the project to ensure that the broader as well as detailed conservation objectives are achieved.

**CMP Section 4.20.5      The Burra Charter**

**Policy 20.9 Burra Charter**

*All conservation (including maintenance and repair), future changes and development at the Sydney Opera House should be carried out in accordance with the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Burra Charter) as revised in 2013 or later, including its associated Practice Notes and the Code on the Ethics of Co-existence.*

**Comment:**

All decisions thus far relating to the TIDE project have been in accordance with Burra Charter principles and processes. This should continue to the completion of the project.

**6.3 Conclusion re CMP compliance**

The TIDE project has been developed in response to the interpretation strategy requested in EPBC 2016/7825 Approval Conditions and Interpretation Actions.

The proposed space was chosen due to its proximity to the Western Foyer, at the northern end of the Bennelong Passage, offering a space for tour groups to congregate and meet without disrupting access to other parts of the building. The current use of the space as a BoH storage area for catering facilities is to be relocated in order to allow for the repurposing of the area for the new Digital Immersion Space. Its relocation closer to the new Central Kitchen will also have operational benefits.

The design of the new Digital Immersion Space is discreet and reversible. The TIDE project respects and retains the distinctive built form, unparalleled design and construction of the Sydney Opera House and will potentially enhance its Outstanding Universal Values by providing new opportunities to improve the visitor experience and increase public engagement with the place.

The physical changes to the building are minimal and very little change to significant fabric is proposed. The works are mainly comprised of the strip-out and removal of insignificant infrastructure and equipment related to the current use of the space as storage. There will be a minor but acceptable impact on the fabric of the Sydney Opera House from the new entry door from the Western Foyers and Bennelong Passage as it will require the creation of a new opening in the 1968 concrete podium structure, however there is no impact on the granite wall panels adjacent, or on the overall configuration or architectural language of the Bennelong Passage. Similarly a small length of 1973 concrete walling in the Back-of-House Passage will also be removed. These impacts are considered minor and acceptable considering the overall benefit of a dedicated interpretation space at the Sydney Opera House, and in particular the provision of virtual access and experience of the Concert Hall during its closure.

The new entry to the Digital Immersion Space will not change the configuration or use of the Western Foyer space or the Bennelong Passage as a way of approach. The proposal retains the design regime and palette of materials introduced by Utzon Architects and Johnson Pilton Walker in the Western Foyers and Bennelong Passage untouched. The adoption of Peter Hall's palette of materials for the new Digital Immersion Space references those utilised within the major foyer spaces, and visually links the new Digital Immersion Space to the established Opera House identity.

The documents reviewed in the preparation of this HIS indicate compliance with the CMP policies regarding door finishes, door hardware, signage and lighting are able to be achieved. It is recommended door finishes match existing finishes of adjacent and relating spaces. Door hardware should similarly adopt the established design hierarchy for FoH and BoH spaces: being bronze within the Bennelong Passage and new Digital Immersion Space, and chrome / stainless steel for doors fronting BoH areas. Door frames should be painted steel, (black or bronze) within the Digital Immersion Space, and white within BoH areas – bronze coverings on frames are not acceptable. Signage should be consistent with that in the Western Foyer and will need to comply with the Sydney Opera house signage manual. Lighting inside the Digital Immersion Space, apart from the projectors should be indirect and baffled 'warm' edge lighting. The final detailing is to be checked at tender documentation stage.

Similarly, the loose furniture for the Digital Immersion Space is still in the early design stages. It is recommended that the furniture should be simple in its design, visually recessive and complement the character, quality and design aesthetic of the Sydney Opera House in accordance with the policies in the CMP 4th edition. Input and feedback should be sought from the Sydney Opera House heritage architect.

The change of use of the Back-of-House storage facility to Front-of-House interpretive space is considered appropriate. It is noted that this area was originally part of the larger Exhibition Hall opened in 1973, and so had a Front-of-House use until the early 1990s. The use of the space for activities other than a tour experience is supported, however should not threaten the primary use of the place as a performing arts centre. Clear access through the Bennelong Passage, as the primary access for people with mobility issues, should be maintained for this purpose. Any services requirements should occur through the Back-of-House Passage. Uses that would require storage of furniture will have implications on other parts of the Opera House, due to the lack of adjacent storage space, and these issues would need to be addressed. Privatisation or the use of the space for a supporting functions is not supported as this could adversely impact adjacent spaces and facilities and thus potentially diminish or threaten the Sydney Opera House's significance, character and primary use of the place as a performing arts centre.

The proposal supports and strengthens the core activities of the Opera House and its primary use as a nationally significant performing arts centre during the Concert Hall closure. It will potentially enhance the ability of the Opera House to engage with and inspire Sydney Opera House Tours visitors to the space, thereby strengthening its connections and education role with the greater community. The proposal complies with the policies and guidelines set out in the CMP 4th edition and it is our conclusion that the minor impacts are acceptable in light of the overall positive impact of continued virtual access to the Concert Hall during its closure and improved interpretation opportunities.

## **7.0 IMPACT ON STATE HERITAGE VALUES**

### **7.1 State Heritage Register criteria**

The Sydney Opera House is listed on the SHR for meeting all its listing criteria (a)-(g). The values of the Sydney Opera House that meet the SHR criteria are set out in full in the NSW Heritage Database, available online at:

<http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=5054880>

The extracts from the SHR values, under each of the criteria below, summarise and draw attention to those aspects of significance that are relevant to the assessment of heritage impact of the TIDE project. Design 5's assessment of heritage impact is summarised at the end of this section.

#### **SHR criterion a) Historical significance**

*An item is important in the course, or pattern, of NSW's cultural or natural history.*

Relevant key values from SHR values:

- "... a modern architectural masterpiece, recognised internationally as a symbol of Sydney and Australia, ..."

**Comment:**

The use of the space and fitout for the TIDE project, will not have any adverse visual or functional impacts on the significant architectural qualities of the Opera House or the ability of the Opera House to be recognised as a modern architectural masterpiece.

**SHR criterion b) Associative significance**

*An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history.*

Relevant key values from SHR values:

- "Many significant people are associated with the construction of the Sydney Opera House, including Eugene Goossens, Joe Cahill, Jørn Utzon, Eero Saarinen and Ove Arup."

**Comment:**

The significant associations with Jørn Utzon, Ove Arup, and Peter Hall of Hall, Todd & Littlemore will be strengthened in the TIDE project through interpretation of the UDP and Concert Hall within the content of the projection. The proposal will enhance the Opera House's ability to engage with and inspire visitors through the new immersive experience. These aspects have a direct and positive impact on the standing and reputation of the Opera House as a performing arts venue.

**SHR criterion c) Aesthetic significance**

*An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW.*

Relevant key values from SHR values:

- "Its aesthetic quality was also enhanced by the high-quality completion work by Hall, Todd & Littlemore, by the technical support given throughout by the internationally renowned engineering firm of Ove Arup & partners, and finally by M.R. Hornibrook, the contractor of stages two and three (Kerr, 2003, 32)."

**Comment:**

The change of use of the space requires minor fire and egress updates, which are considered necessary and appropriate. While there will be minor impacts resulting from the new opening for the Digital Immersion Space in the Bennelong Passage, this change retains Utzon and Hall's design regime and palette of materials and finishes, and are considered acceptable and appropriate.

There will be a minor but acceptable impact on the fabric of the Sydney Opera House from the new entry door from the Bennelong Passage arising the creation of a new opening in the 1968 concrete podium structure, however there is no impact on the granite wall panels adjacent, or on the overall configuration or architectural language of the Bennelong Passage. Similarly a small length of 1973 concrete walling in the Back-of-House Passage will also be removed. These impacts are considered minor and acceptable considering the overall benefit of a dedicated interpretation space at the Sydney Opera House, and in particular the provision of virtual access and experience of the Concert Hall during its closure.

The design for the Digital Immersion Space incorporates Hall's palette of materials and finishes for Front-of-House areas, connecting the space to the main venues of the Sydney Opera House.

The interpretative content of the projection allows for Utzon's original design concepts and Peter Hall's contributions (the Concert Hall) to continue to be appreciated by the general public, consistent with the aesthetic values of the Sydney Opera House.

**SHR criterion d) Social significance**

*An item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons.*

Relevant key values from SHR values:

- "... an internationally recognised symbol of Sydney, one of Australia's leading tourist attractions and a focal point for community events. It is also widely admired by Sydneysiders, and can be seen to contribute importantly to the sense of place in the Sydney CBD."
- "As a world-class performing arts centre, the Sydney Opera House has enhanced the cultural vitality of the nation."
- "Of the 85,000 people estimated to visit each week in 2003, about a quarter came for performance-related reasons while the rest came to experience the building and its environment. In offering this remarkable accessibility to a broad public, Sydney Opera House can be seen to be fulfilling Cahill's hope that it would be "a monument to democratic nationhood"."

**Comment:**

As one of Australia's leading tourist attractions and world-class performing arts centre, the closure of the Concert Hall could have a major effect on visitor and tourist numbers. The TIDE project will maintain, support and potentially improve the visitor / tourist experience during the renewal works by providing virtual access and interpretation of the Concert Hall. It presents an opportunity to engage visitors in a new immersive experience that will potentially strengthen their understanding and appreciation of the site and increase interest to visit again to view a performance once the renewal updates are completed.

**SHR criterion e) Research potential**

*An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history.*

Relevant key values from SHR values:

- none relevant

**Comment:**

There are no significant research potential values from the SHR listing impacted by this proposal.

**SHR criterion f) Rarity**

*An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history.*

Relevant key values from SHR values:

- "It is also unique in so far as it has become an internationally recognised symbol of Sydney and Australia, which is also widely admired by local citizens.

**Comment:**

The ability of the Sydney Opera House, to attract locals, performers and visitors from all over the world will continue and may potentially be enhanced with the TIDE project by offering a unique site specific immersive digital experience that interprets the significant values and spaces of the place.

**SHR criterion g) Representativeness**

*An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places; or cultural or natural environments.*

Relevant key values from SHR values:

- "It is outstanding because of its innovative design appropriate both to its entertainment functions and to its harbour-side setting, and because of the esteem in which it is held in Australia and internationally."
- "As an icon of modern architecture it combines an expressive, sculptural freedom of form with the precise technology of the machine age."

**Comment:**

Like the rarity values discussed above, the ability of the Sydney Opera House to attract visitors and performers from all over the world should be enhanced by the TIDE project interpretation and tour experience by increasing public engagement. This offering could potentially enhance the esteem in

which the Sydney Opera House is held nationally and internationally.

## 7.2 Summary assessment of heritage impact on State Heritage values

In summary, the TIDE project will not have a negative impact on the State Heritage values of the Sydney Opera House but will retain and enhance those values by potentially increasing and improving the visitor / tourist experience by providing virtual access and interpretation of the Concert Hall during its closure for the renewal works.

The use of the space and fitout for the TIDE project, will not have any adverse visual or functional impacts on the significant architectural qualities of the Opera House or the ability of the Opera House to be recognised as a modern architectural masterpiece.

While there will be a minor impact to fabric resulting from the new opening for the Digital Immersion Space in the Bennelong Passage, the change retains Utzon and Hall's design regime and palette of materials and finishes, and is considered acceptable and appropriate.

The significant associations with Jørn Utzon, Ove Arup, and Peter Hall of Hall, Todd & Littlemore will be strengthened and better appreciated with the TIDE project interpretation of the UDP and Concert Hall.

As one of Australia's leading tourist attractions and world-class performing arts centre, the closure of the Concert Hall could have a major effect on visitor and tourist numbers. The TIDE project will maintain, support and potentially improve the visitor / tourist experience during the renewal works by providing virtual access and interpretation of the Concert Hall. It presents an opportunity to engage visitors in a new immersive experience that will potentially strengthen their understanding and appreciation of the site and increase interest to visit again to view a performance once the renewal updates are completed. These aspects have a direct and positive impact on the standing and reputation of the Opera House as a performing arts venue.

## 8.0 IMPACT ON NATIONAL HERITAGE VALUES

### 8.1 National Heritage Values – Summary Statement of Significance

The Sydney Opera House was included on the National Heritage List in July 2005 (Listing No. 105738). The National Heritage values of the Sydney Opera House are protected under the Australian Government's Environment Protection and Biodiversity Act 1999.

The following is the Summary Statement of Significance of the National Heritage values of the Sydney Opera House. ***Emphasis added*** on aspects of significance relevant to the assessment of heritage impact of the works in this current application.

*The Sydney Opera House, constructed between 1957 and 1973, is a masterpiece of modern architectural design, engineering and construction technology in Australia. It exhibits the creative genius of its designer, the Danish architect Jørn Utzon and the contributions to its successful completion by the engineering firm Ove Arup and Partners, the building contractors M.R. Hornibrook, and the architects Hall, Todd and Littlemore. It is an exceptional creative and technical achievement in the national history of building design and construction in Australia.*

*Since its completion the Sydney Opera House has attracted world wide acclaim for its distinctive design, enhanced by its prominent location on Bennelong Point within a superb harbour setting. With its soaring white roof shells set above a massive podium, the Sydney Opera House is a monumental urban sculpture, internationally acclaimed as an architectural icon of the twentieth century. Its many national and international awards reflect its pivotal place in the national story of creative and technical achievement in Australia. The challenges involved in executing Utzon's design inspired innovative technical and creative solutions that were groundbreaking in the history of architectural design and building construction in Australia, particularly the roof shells that were based on the geometry of the sphere and demonstrated the extraordinary creative potential of the assembly of prefabricated, repeated components.*

*The interior spaces also reflect the creative genius of Utzon and his successors, Todd, Hall and*



*Littlemore, who completed the building after Utzon's departure from the project in 1966.*

*The Sydney Opera House is the most widely recognised building in Australia, and is cherished as a national icon and world-class performing arts centre. It represents an enduring symbol of modern Sydney and Australia, both nationally and internationally, reflecting changing social attitudes towards Australian cultural life in the decades after World War II. The Sydney Opera House has played a seminal role in the development of Australia's performing arts, enhancing the cultural vitality of the nation. It continually attracts nationally and internationally acclaimed performers, and is a mecca for visitors from around Australia and overseas.*

*The peninsula on which the Sydney Opera House now stands has a special association with Bennelong, an Aboriginal man who became a prominent and influential figure in the early colony and played a significant role in mediating interactions between Aboriginal people and early settlers.*

**Comment:**

The National Heritage values of the Sydney Opera House are primarily related to Jørn Utzon's and Peter Hall's outstanding design of the building and its completion, its recognition as a national icon, and it being a cherished performing arts centre.

The change of use and design of the Digital Immersion Space retains and respects the design regimes of Jørn Utzon and Peter Hall's work for Back-of-House spaces as well as public Front-of-House spaces.

The continued virtual access to the Concert Hall during its closure and the provision of a dedicated interpretation facility within the Sydney Opera House with the Digital Immersion Space, will strengthen the ability of the Opera House to attract performers, patrons and visitors, both nationally and internationally and will help sustain the iconic international standing of this world-class performing-arts venue.

See the more detailed listed values of the place under each of the individual National Heritage criterion below. Design 5's assessment of heritage impact is summarised at the end of that section.

## **8.2 National Heritage criteria**

The Sydney Opera House is registered on the National Heritage List for meeting its listing criteria A, B, E, F, G and H.

The values of the Sydney Opera House that meet the National Heritage criteria are set out in full in Appendix B of the CMP 4th edition and also in the listing of the Sydney Opera House on the National Heritage List, available at <http://www.deh.gov.au/cgi-bin/ahdb/search.pl>

They are summarised below and attention is drawn to those aspects of significance that are relevant to the assessment of heritage impact of the TIDE project. Design 5's assessment of heritage impact is summarised at the end of this section.

### **NHL criterion (a) Events, Processes**

*The place has outstanding heritage value to the nation because of the place's importance in the course, or pattern, of Australia's natural or cultural history.*

*The Sydney Opera House is significant in the course of Australia's cultural history, both for its place in the national history of building design and construction, as well as the history of the performing arts in Australia.*

**Comment:**

The proposed TIDE project will not have any adverse impacts on these values. The space offers an opportunity to further interpret these values through relevant content.

### **NHL criterion (b) Rarity**

*The place has outstanding heritage value to the nation because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history.*

*The Sydney Opera House is a cultural icon that has no counterpart in Australia.*

**Comment:**

The proposed works will not have any adverse impacts on these values and will potentially enhance the visitor experience and the Opera House's recognition as a performing arts centre.

**NHL criterion (e) Aesthetic characteristics**

*The place has outstanding heritage value to the nation because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.*

*The design, form, scale and location of the Opera House make it one of the most significant landmarks in Australia.*

**Comment:**

The proposed TIDE project will not have any adverse impacts on these values. The space offers an opportunity to further interpret these values through relevant content.

**NHL criterion (f) Creative or technical achievement**

*The place has outstanding heritage value to the nation because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period.*

*The Sydney Opera House represents a masterpiece of architectural creativity and technical accomplishment unparalleled in Australia's history. In every respect, it is a structure at the leading edge of endeavour.*

**Comment:**

The TIDE project will retain and respect these values and not have an adverse impact on the sculptural form, materials and colours of the place. The proposal will continue the language of honest expression of natural materials, textures and colours evident on site.

**NHL criterion (g) Social value**

*The place has outstanding heritage value to the nation because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.*

*The Sydney Opera House is an enduring symbol of modern Sydney and Australia, both nationally and internationally.*

**Comment:**

The proposed TIDE project will support the primary function of the Opera House as a nationally significant performing arts centre and provide greater opportunity for public engagement with and appreciation of, its iconic architecture and structure through interpretation.

The immersive tour experience within the proposed space should strengthen the Sydney Opera House's role as a cultural icon, and potentially enhance its ability to attract both national and international visitors and performers even during construction works and the closure of the main Concert Hall.

**NHL criterion (h) Significant people**

*The place has outstanding heritage value to the nation because of the place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history.*

*The Sydney Opera House is directly associated with Jørn Utzon, whose design won an international competition in 1957 and was hailed by the architectural critic Sigfried Giedion as opening a new chapter in contemporary architecture.*

**Comment:**

Although not specifically mentioned under this criteria, Peter Hall played an important role in the completion of public Front-of-House spaces as well as Back-of-House spaces. His work and palette of

materials is retained and respected in this proposal. The works proposed in this application will not adversely affect these associations.

### 8.3 Summary assessment of heritage impact on National Heritage values according to the National Heritage significant impact criteria

The *Significant impact criteria* for a National Heritage place, as stated in the *Significant Impact Guidelines* are as follows:

*An action is likely to have a significant impact on the National Heritage values of a National Heritage place if there is a real chance or possibility that it will cause:*

- *one or more of the National Heritage values to be lost*
- *one or more of the National Heritage values to be degraded or damaged, or*
- *one or more of the National Heritage values to be notably altered, modified, obscured or diminished.*

#### **Comment:**

The above assessment concludes that none of the National Heritage values of the Sydney Opera House will be lost, degraded or damaged through the TIDE project.

None of the National Heritage values will be altered, modified, obscured or diminished.

The proposed TIDE project retains the evidence of the Sydney Opera House's building design and construction and will potentially enhance the ability of the Sydney Opera House to continue to attract patrons, performers and visitors during the renewal of the Concert Hall, and in the future, by offering a unique form of interpretation and immersive experience, thus retaining its status as Australia's pre-eminent performing arts centre, and respecting its National Heritage values.

## 9.0 DISCUSSION OF IMPACT ON WORLD HERITAGE VALUES OF THE SYDNEY OPERA HOUSE

In 2007, the Sydney Opera House was inscribed on UNESCO's World Heritage List (WHL) for its Outstanding Universal Value (OUV) and as a "masterpiece of human creative genius" under criterion (i) of the Operational guidelines for the implementation of the World Heritage Convention.

The World Heritage List inscription for the Sydney Opera House is included below. The highlighted text draws attention to those aspects of significance that are relevant to the assessment of heritage impact for the proposed TIDE project.

### ***Outstanding Universal Values***

*The Sydney Opera House constitutes a masterpiece of 20th century architecture.*

*Its significance is based on its unparalleled design and construction; its exceptional engineering achievements and technological innovation and its position as a world-famous icon of architecture. It is a daring and visionary experiment that has had an enduring influence on the emergent architecture of the late 20th century. Utzon's original design concept and his unique approach to building gave impetus to a collective creativity of architects, engineers and builders. Ove Arup's engineering achievements helped make Utzon's vision a reality. The design represents an extraordinary interpretation and response to the setting in Sydney Harbour. The Sydney Opera House is also of outstanding universal value for its achievements in structural engineering and building technology. The building is a great artistic monument and an icon, accessible to society at large.*

### ***Criterion (i)***

*The Sydney Opera House is a great architectural work of the 20th century. It represents multiple strands of creativity, both in architectural form and structural design, a great urban sculpture carefully set in a remarkable waterscape and a world famous iconic building. All elements necessary to express the values of the Sydney Opera House are included within the boundaries of the nominated area and buffer zone. This ensures the complete representation of its significance as an architectural object of great beauty in its waterscape setting. The Sydney Opera House continues to perform its function as a world-class performing arts centre. The Conservation Plan specifies the need to balance the roles of the building as an architectural monument and as a state of the art performing centre, thus retaining its authenticity of use and function. Attention given to retaining the building's authenticity culminated with the Conservation Plan and the Utzon Design Principles.*

## 9.1 Summary assessment of impact on World Heritage values according to the World Heritage significant impact criteria

The Significant impact criteria stated in the Significant Impact Guidelines are as follows:

*An action is likely to have a significant impact on the World Heritage values of a declared World Heritage property if there is a real chance or possibility that it will cause:*

- *one or more of the World Heritage values to be lost*
- *one or more of the World Heritage values to be degraded or damaged, or*
- *one or more of the World Heritage values to be notably altered, modified, obscured or diminished.*

### Comment:

The TIDE project will not have a negative impact on the World Heritage values of the Sydney Opera House but will retain and potentially enhance those values by providing new opportunities to engage visitors with the broader significance of the place. The works involve reconfiguration of two openings in the Back-of-House passage and creation of a new opening in an original concrete wall to the Bennelong Passage, however these changes are considered to be acceptable, with minimal impact to significant fabric and spaces. The repurposing of the existing BoH space for interpretation of the site, and in particular the Concert Hall, is considered to have a positive impact. The proposal and associated works will respect the work of both Jørn Utzon and Peter Hall, and do not adversely impact Utzon's original design concept.

The TIDE space will enhance the ability of the Sydney Opera House to engage with and educate people within a dedicated digital heritage interpretation facility as part of the experience of the building.

In summary, it is considered that the TIDE project will have a positive impact on the Outstanding Universal Value that enshrines Sydney Opera House on the World Heritage List.

## 10.0 COMPLIANCE WITH THE UTZON DESIGN PRINCIPLES

The *Utzon Design Principles* (UDP 2002) provide important guidance on the intended role of particular spaces and elements and on how they should be treated in the future. Relevant quotes from the UDP are provided and commented on below.

*When you build a building like the Opera House it is like an oil painting by one of the Masters where every time you add a brush stroke it should enhance the total painting, as soon as you put something wrong in this painting, a wrong colour, a wrong shape, then the total image is of a lesser value than it would have been if the same artist had been allowed to complete the picture. (UDP Page 39)*

### Comment:

Utzon and Hall were both of the opinion that modifications or changes are possible to address functional demands if done with caution and careful consideration as well as respect for the character created by the original designers. It becomes clear from the above statement that small incremental changes together can have a negative effect on the quality and integrity of the place. Although the works for the TIDE project are of a relatively minor nature, they need to be viewed in relation to a broader context and managed accordingly. Considering this larger total image, the impacts will be positive.

#### ***Danger in too many functions - building has limited size***

*"But the inherent danger in large buildings, which have become popular, is that there is a tendency to want to fill too many functions and rooms into those buildings."*

*"It is not a good idea to fit more rooms inside the building... more functions than it can hold." (UDP Page 50)*

#### ***Relocate non-essential functions***

*"If more space is needed, I'm sure that there are many functions today, which with the modern*

*technological equipment that we have, might just as easily be placed elsewhere.” (UDP Page 50)*

**Comment:**

New digital projection technology and the provision of a dedicated projection space within the Opera House for projects such as TIDE were not anticipated when the Opera House was conceived and built.

The proposed Digital Immersion Space supports the primary function of the Sydney Opera House as a performing arts venue by offering virtual access to the Concert Hall during its closure through interpretation. The proposed space is currently used as a storage area for catering facilities, a use that is to be relocated closer to the new Central Kitchen adjacent the Yallamundi Rooms. The existing fitout in the BoH store does not comprise of any significant fabric that would be adversely impacted on in the proposed demolition and alteration for the TIDE project.

***Succession of visual and audio stimuli***

*“So going to the Opera House is a succession of visual and audio stimuli, which increase in intensity as you approach the building, as you enter and finally sit down in the halls, culminating with the performance.” (UDP Page 68)*

***Imaginary tour***

*“In order to fully appreciate the outside appearance of the building as well as the materials and the reasons for selecting them, it is proposed to undertake an imaginary tour around the structure as completed.” (UDP Page 68)*

**Comment:**

The proposed projection content for the TIDE project will strengthen the visitor ‘s understanding of the building, its setting, materials and the inspiration behind the design by Utzon and Hall through interpretation with the help of visual and audio stimuli in a dedicated and purpose built facility. The innovative audio and visual technology proposed as well as the digital content aim to provide an immersive reality experience that will continue to engage and inspire those who use the site or are associated with it.

***Expression of elements, produced industrially***

*“The exteriors of the building stand as an expression for something basic in the concept - the idea of dividing the various parts up into equal components, which can be produced industrially and afterwards put together to form a structure of the desired form.” (UDP Page 72)*

***Under control by strict geometry***

*“...the only way to attack the ...major parts of the building would be to bring them under control by a strict geometry and then divide them into uniform components, which can be produced by machine under strict control both as regards dimensions and quality.” (UDP Page 75)*

***Referring to ply corridor lining:***

*“Thus mass manufacturing production of simple elements gives an economical solution providing the required aesthetics and with ease of access for maintenance.” (UDP Page 77)*

***Natural colours and modular***

*“The walls will be covered wholly or in part by modular sized moulded plywood panels, finished in the natural colour of the wood.” (UDP Page 79)*

***Concealed fittings - wall panels***

*Referring to bar and lounge areas:*

*“The walls will be covered wholly or in part by modular sized moulded, plywood panels, finished in the natural colour of the wood. The panels are stopped short of the ceilings and the floors, where they form a continuous fitting for concealed lights.” (UDP Page 83)*

**Comment:**

The proposed Brush Box timber paneling complies with the above principles as it uses standard elements that adopt the existing geometry and materials of the Front-of-House spaces designed by

Hall. These panels are also able to conceal the services, lighting and storage that will be required for the new Digital Immersion Space. The predominant finish of the Digital Immersion Space is the natural colour of the Brush Box.

***Multi-purpose***

*"The hall serves several functions, as a concert hall it will hold 2800 people with the musicians (110) positioned in the fore-stage area and with a plywood sound reflecting shell above. This shell can be dismantled, and stored away when not in use." (UDP Page 84)*

**Comment:**

While only a minor public space, the Digital Immersion Space has been designed with its primary function in mind, which is to provide a space that is capable to immerse and engage visitors through a digital projection with interpretative content on the Concert Hall during its closure as well as the broader significance of the Sydney Opera House. It is a flexible space. Loose furniture will be custom designed for this purpose and use.

Sydney Opera House Tours generally operate between 7am and 6pm, presenting an opportunity for the Sydney Opera House to utilise the space for other uses (such as a lecture theatre) when not in use by Sydney Opera House Tours. The use of the space for activities other than a tour experience is supported provided that these:

- support and not threaten the primary use of the place as a performing arts centre;
- maintain Bennelong Passage as the primary access for people with mobility issues; and
- any services requirements occur through the Back-of-House Passage.

Uses that would require storage of furniture will have implications on other parts of the Opera House, due to the lack of adjacent storage space, and these issues would need to be addressed. Privatisation or the use of the space for private functions is not supported as this could adversely impact adjacent spaces and facilities and thus potentially diminish or threaten the Sydney Opera House's significance, character and primary use of the place as a performing arts centre.

## **11.0 SYDNEY OPERA HOUSE RENEWAL INTERPRETATION STRATEGY 2017 (RIS)**

The Opera House Renewal Interpretation Strategy 2017 (RIS) exists within the broader planning and heritage framework and acts as a planning document to guide the development and delivery of interpretation projects across the Opera House at the implementation and operational level. In particular, the RIS draws on CMP4 and provides guidance on interpretation themes and a summary of existing resources.

The Goals of the RIS are to:

1. *Position, contextualise and communicate the [Sydney Opera House] Renewal Program within the evolution of the Opera House over time.*
2. *Increase opportunities for audiences and visitors to connect and engage with the Opera House through diverse and compelling experiences.*
3. *Evoke people's curiosity and deepen their understanding of the Opera House story, its heritage, history, conservation and renewal.*
4. *Deepen appreciation of the Aboriginal heritage central to the identity and continued evolution of the Opera House today as a place for community, culture and the arts.*
5. *Ensure a comprehensive and consistent approach to interpreting the story and significance of the Opera House's Renewal across visitor and audience touch-points.*
6. *Honour and increase understanding of the design, heritage and conservation principles that underpin and guide the development of the Opera House and the precinct.*

Supporting these goals are common Principles and Interpretation Themes, which underpin the approach to developing and delivering specific interpretation initiatives/projects and content to ensure consistency of approach, quality and outcome.

| <b>Interpretation Principles</b>                                                                                                                                                                                                                                                                                                                                                                           | <b>Interpretation Themes</b>                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• <i>Story-telling to provoke interest and engagement</i></li> <li>• <i>A sense of place and connection to place</i></li> <li>• <i>Grounded and guided by heritage and conservation</i></li> <li>• <i>Creative in design, excellent in execution</i></li> <li>• <i>Multi-media and accessible</i></li> <li>• <i>Operationally viable and sustainable</i></li> </ul> | <ul style="list-style-type: none"> <li>• <i>The magic of place</i></li> <li>• <i>Shaping the sublime</i></li> <li>• <i>Conservation principles at work</i></li> <li>• <i>Cultural evolution</i></li> <li>• <i>An incredible future</i></li> </ul> |

#### **Comment:**

The EPBC 2016/7825 Approval Conditions and Interpretation Actions asked for a Heritage Interpretation Strategy to be submitted, that included *A commitment to display information about the evolution of the design and fabric of the building, including through the building renewal program, in publicly accessible areas* (Approval condition i.). Recommendation 5 prescribes to *Provide interactive and immersive interpretive material and experiences to visitors and audiences to explore onsite*. One of the proposed strategies is to *scope and develop a minimum of one immersive virtual Opera House experience onsite during the Concert Hall Renewal (e.g. 360° projection experience)*. The TIDE project addresses this strategy and the content and design of the TIDE project is required to be developed in accordance with the interpretative themes of the RIS.

## **12.0 CONCLUSION & RECOMMENDATIONS**

The TIDE project has been developed in response to the interpretation strategy requested in EPBC 2016/7825 Approval Conditions and Interpretation Actions and addresses the need for an *immersive virtual Opera House experience onsite during the Concert Hall Renewal*.

The TIDE project has the ability to maintain, support and potentially improve the visitor / tourist experience during the Concert Hall renewal works by providing virtual access and interpretation of the space during its closure. It presents an opportunity to engage visitors in a new immersive experience that will potentially strengthen their understanding and appreciation of the site and increase interest to visit again to view a performance once the renewal updates are completed.

The proposed space for the TIDE project was chosen due to its location at the northern end of the Bennelong Passage, offering a space for tour groups to congregate and meet without disrupting access to other parts of the building. The current use of the space as a BoH storage area for catering facilities is to be relocated closer to the new Central Kitchen adjacent the Yallamundi Rooms, which will have operational benefits for the kitchen.

The projection and immersive experience proposed will have a positive impact on the function and status of the Sydney Opera House as an internationally recognised performing arts centre. The change of use of the Back-of-House storage facility to a new Front-of-House auditorium and dedicated interpretive space is considered appropriate given the benefits to the interpretation of the Sydney Opera House generally, and in particular during the closure of the Concert Hall. The use of the space for activities other than a tour experience is supported provided that these support and not threaten the primary use of the place as a performing arts centre. It is important to note that the Bennelong Passage is the primary access for people with mobility issues, and that the retention of clear access for this purpose must be maintained at all times. Any services requirements should occur through the Back-of-House Passage. Uses that would require storage of furniture will have implications on other parts of the Opera House, due to the lack of adjacent storage space, and these issues would need to be addressed. Privatisation or the use of the space for private functions is not supported as this could adversely impact adjacent spaces and facilities and thus potentially diminish or threaten the Sydney Opera House's significance, character and primary use of the place as a performing arts centre.

The physical change to the building is minimal and very little change to significant fabric is proposed. The removal of the storage facilities will not result in the loss of any significant fabric or equipment. There will be a minor but acceptable impact on the fabric of the Sydney Opera House from the new entry door from the Bennelong Passage arising from the creation of a new opening in the 1968



concrete podium structure, however there is no impact on the granite wall panels adjacent, or on the overall configuration or architectural language of the Bennelong Passage. Similarly a small length of 1973 concrete walling in the Back-of-House Passage will also be removed. These impacts are considered minor and acceptable considering the overall benefit of a dedicated interpretation space at the Sydney Opera House, and in particular the provision of virtual access and experience of the Concert Hall during its closure.

The TIDE project respects and retains the distinctive built form, unparalleled design and construction of the Sydney Opera House, and will potentially enhance its values by providing new and enhanced opportunities for public engagement with the place that will potentially strengthen the understanding of the significance of the site.

The materials and finishes proposed within the Digital Immersion Space respect and maintain the high quality and standards set by Utzon and Hall's original work. The proposed palette of materials and details, i.e. the Brush Box panelling and flooring, bronze detailing and indirect lighting in the TIDE space (as a new Front-of-House space) visually link the space to the established Opera House identity.

The proposal complies with the policies and guidelines set out in the CMP 4th edition and will have a positive impact on the significant values of the Sydney Opera House. The TIDE project will ensure the Opera House maintains its status as a cultural icon, accessible to all. It will potentially enhance the ability of the Sydney Opera House to continue to attract patrons, performers and visitors during the implementation of the renewal projects and into the future, by offering a unique form of interpretation and immersive experience, thereby retaining its status as Australia's pre-eminent performing arts centre, and respecting its World, National and State Heritage values, provided that the following recommendations are followed:

#### **Recommendations:**

- There should be no disruption to the day-to-day functioning of the place as a busy performing arts centre with the introduction of the Digital Immersion Space, and associated tours and operations must be managed accordingly.
- Furniture is to be simple in design, visually recessive and compliment the character, quality and design aesthetic of the Sydney Opera House in accordance with the policies in the CMP 4th edition. Input and feedback during the design stages should be sought from the Sydney Opera House heritage architect.
- Lighting to the TIDE entry space is to be indirect and baffled 'warm' lighting around the edge of the space.
- Door finishes are to match existing finishes of adjacent and related spaces.
- Door hardware should similarly adopt the established design hierarchy for FoH and BoH spaces: being bronze within the Bennelong Passage and proposed new TIDE entry space, and chrome/stainless steel for doors fronting BoH areas. Door frames should be painted steel, (black or bronze) within the TIDE entry space, and white within BoH areas – bronze coverings on frames are not acceptable.
- The BSSS standard should guide any works to service lines that may be required to installed the Digital Immersion Space.
- Additional signage (e.g. hearing loop) will need to comply with the Sydney Opera House signage manual and the conservation policies contained in the CMP 4<sup>th</sup> edition. Other temporary or permanent signage (including wayfinding signage) within the Bennelong Passage, associated with a particular use of the Digital Immersion Space, is not considered to be appropriate.



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