

Policy	Compliance	Comments by
<i>Wharf 4/5 Conservation Management Plans by Graham Brooks and Associated - 2007</i>	Complies Capable of Complying Does Not Comply	Hassell - Charcoalblue - Tropman Architects
7.3.4 Conservation of Wharf 4/5 wharf, Shore Shedss and wharf structure should be in the form of compatible new uses for the buildings, uses that respect and utilise the current scale, form and configuration of the building, with minimal external changes to the structure.	Complies	No change of use is proposed. The 1998 DA approvals for Walsh Bay and the approval of stage 1 consolidates the use of these relics as cultural facilities. These require some extensive changes to the volumes. The works proposed are to provide better amenity for the existing tenants, all of whom are key to the success of Sydney's cultural scene. STC50 requires more extensive alteration to accommodate upgraded theatres. A new mezzanine level is proposed to provide more office space.
7.4 Principles for Re-use of building		
7.4.1 During preparation of future uses for the buildings, care should be taken to respect the scale and character of the existing interior spaces, external openings and general character of each building.	Complies	This is part of the proposal. Works associated with STC involve a new arrangement of the existing layout. Hassell's comment: The proposed works sensitively conserve and reveal a greater heritage volume, not only for public appreciation but also to enhance the heritage value and narrative of Wharf 4/5. Large workshop spaces are maintained, along with the Theatre Bar at the End of the Wharf and a new mid Wharf Atrium that allows the scale and volume of the original building to be perceived and appreciated. Charcoalblue's comment: The theatres have been designed as boxes inside the outer fabric of the buildings and do not touch the external fabric or affect the external openings. The new volumes enhance the visitor and user experience by further revealing the wharf structure and character on both the east and west internal circulation routes. ARUP's comments: The services systems are integrated into the building to minimise impact on existing structure. Services are distributed to respect the existing trusses and where possible reticulate in a manner so that they do not hide the structure. Existing penetrations and windows are used wherever possible and new roof penetrations only provided where existing cannot be used, locations not visible from the perimeter of the building are favoured through out.

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7.4.2 New uses that are selected for any particular internal space should adopt the principle of “loose fit” whereby the functional and spatial requirements of each use are tailored to suit the available space, in contrast to an approach that alters the building to suit the requirements of the new use.	Complies	The current condition of the building with large scale theatres, workshops areas and rehearsal rooms have negated this notion. This statement was written 30 years after the existing works were undertaken so in that sense the author has chosen to ignore the reality that the repurposing of Wharf 4/5 was accepted as being an appropriate methodology for sustaining the heritage building and ensuring it remains as a viable and useful object. Hassell's comment: The existing linear occupation of the Wharf is maintained in the current proposal. This sequence of manufacture - assemble - finish - rehearse - perform - celebrate' creates a logical approach to spatial planning which enables STC to continue to holistically deliver theatre 'all under one roof. Wherever possible, the internal planning is cognisant of the envelope and works within its limitations. In situation where enhancements are required, such as in the theatre and workshop spaces, the Wharf building remains a resilient structure that can readily accommodate these enhancements. Charcoalblue's comment: The functional and spatial requirements of the theatres have been dictated by the principles set down by the Architects and Heritage Consultants and wherever possible the theatre boxes are designed to fit around and be subservient to the existing fabric. Where the functional needs of the STC tenancy require alteration to the fabric, e.g. roof valley modification and column removal, these have been treated sensitively and respect given to overall aims of the CMP. ARUP's comments: The driving goal has been to overlay the services into the existing structure and envelope without the need to alter the existing.
7.4.3 Installation of any new enclosures within the larger internal volumes of Wharf 4/5 should recognise the tradition that such enclosures are clearly expressed as new, self contained elements.	Complies	The proposal has clearly expressed self contained volumes and the STC50 project has been guided by this philosophy. Hassell's comment: The planning of new spaces as clearly identifiable and separate from the heritage fabric has been a driving principle from the outset of masterplanning. Wherever possible, new spaces pull away from the heritage shell. This is of mutual benefit to the internal program and heritage, allowing the shell to remain unaltered and the internal spaces to be appropriately detailed to perform thermally and acoustically. Inevitably, these insertions will need to connect to the existing structure to transfer loads efficiently. Where junctions with existing roofs and columns are required, these have been carefully

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		considered to preserve the original context of the heritage structure. Charcoalblue's comment: The planning of these new theatres as clearly identifiable volumes and self-contained elements has been a driving force from the beginning of the design process and is demonstrated by their clear definition as boxes within the external shell. Careful consideration of the details required where structure, floors and walls meet the existing building will reinforce this guiding rule.
7.4.4 Location and visual presentation of new services within the building should generally remain subservient and respectful to the scale, dignity and presentation of the existing building.	Complies	New services will remain subservient and respectful to the scale, dignity and presentation of the existing building. Hassell's comment: The western back of house [B01-1] path of travel is both an operational and services corridor. Services are reticulated along its length, and from there distributed to key internal areas. The consolidation of services reticulation to BOH areas is a planning strategy that allows the public Walk to remain as free from services as possible. This enables a heightened experience of the original heritage fabric along the full length of the Walk. Charcoalblue's comment: The strategy for new services integration has been to develop a services corridor along the western back of house path of travel for linear distribution and within the theatres where large volumes of air are required to be supplied and extracted a system of carefully considered ductwork will be designed around the main structure and set out on grids dictated by the existing roof trusses.
7.5 Retention of Visual Curtilage around Building		
7.5.1 The open spaces around Wharf 4/5 should be retained so that the wharf's relationship with the other buildings in the precinct can be identified.	---	This is not part of the scope.

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7.5.2 The design and siting of new works and additions should be sited in such a way that the visual relationship of Wharf 4/5 to the other buildings is not impaired.	---	This is not part of the scope.
7.5.3 Adaptive reuse which respects the integrity of the structure of the building and its curtilage should continue to maintained.	---	This is not part of the scope.
7.6 Retention of Significant Spaces		
7.6.1 There should be no major and permanent partitions introduced on the Upper Deck of Wharf 4/5 that would diminish the building's interpretation as a former commercial goods warehouse.	Capable of complying	The 1983 prize winning and celebrated works have already modified and partitioned the space. This current proposal maintains large areas un-partitioned to comply with this policy. Rehearsal rooms, the theatre and the commercial area maintain the original large space with high ceilings. There is no introduction of permanent partitions. The new space acts as a self contained box detached from the external walls by corridors that 'express the heritage shell to let the envelop breathe'. Hassell's comment: The introduction of a western back of house path of travel pulls key internal spaces away from the heritage facade, exposing the heritage volume along the length of both the eastern and western facades. This approach to spatial planning allows for the theatre and rehearsal spaces to exist separate from the heritage fabric and to be appropriately acoustically and thermally treated without the requirement to upgrade the heritage shell. It also provides new levels of appreciation of the currently inaccessible heritage envelope for both visitors and STC staff. In addition, the new mid wharf atrium exposes the full width of heritage volume in the east-west direction, to coincide with a major pedestrian access point. Charcoalblue's comment: The installation of the new partitions that form the theatres will be set out within the central zone of the original warehouse, set inward of the external timber wharf walls, thereby naturally creating the east and west circulation routes and enhancing the experience of walking the length of the wharf. The clearly expressed and retained structure and floors and walls will preserve the

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		interpretation of the former uses of the building.
7.6.2 There should be no new or permanent development on the wharf apron.	---	It is not part of the scope. The external development is part of WBAP project and it refers to another SSDA. Hassell's comment: While the new stairs, lifts and gantries are under the scope of the Walsh Bay Arts Precinct, they are critical to STC operationally and for accessibility and egress. The new entries are a contemporary interpretation of the heritage gantries that at one point would have moved along the length of the Wharf to facilitate upper level access. The new lifts enable STC to accommodate patrons and staff of varying abilities, and are DDA requirement. They will follow the visual precedent set by the Vivian Fraser refurbishment.
7.7 Conservation of Significant Fabric		
7.7.1 Roof structure Where repairs to the buildings are required, the roof framing including significant roof trusses should be retained where possible.	---	This is not part of the scope. The external development is part of WBAP project and it refers to another SSDA. Hassell's comment: The significant heritage asset that the Wharf structure represents has been carefully balanced against the requirements of a reinvigorated STC. The original structure is retained in full, wherever possible. However, the current height restriction that the existing trusses represent is an operational limitation to STC that restricts its ability to continue to meet its world class aspirations. STC manufactures and assembles sets for the Ros Packer Theatre and Opera House Drama Theatre, which requires the ability to assemble sets at full height (8m). This cannot be accommodated with the current roof structure. Through careful planning, the partial alteration of two roof trusses is required in only one internal location. The portion of truss in the public Walk is retained in situ to maintain the full heritage experience and rhythm along the Walk. Where the roof structure is required to support additional load, the existing timber trusses will be strengthened by flat plate of PFC steel structure on either side, bolted through, in keeping with the precedent set elsewhere in Wharf 4/5 and in other Wharf buildings in the Walsh Bay redevelopment. Charcoalblue's comment: The proposed theatres do not alter or remove the existing roof trusses. Where the functional loading requirements of the STC theatre operation require strengthening of the

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		timber, carefully detailed steel PFC channels are proposed in keeping with the spirit of the traditional existing structural details.
7.7.2 Roof structure Replacement of corrugated roof panels should match existing corrugated roofing material.	---	This is not part of the scope. The external development is part of WBAP project and it refers to another SSDA. Hassell's comment: While this forms part of the Walsh Bay Arts Precinct Scope, the STC technical zone above the Theatres permits a fall of five degrees so that the original roof profile can be matched in the cladding to the roof modification.
7.7.3 Walls - Weatherboard Panelling All identified significant fabric of Wharf 4/5 should continue to undergo regular maintenance. Replacement of weatherboard panelling should match existing panelling. Painted finishes should match existing cladding.	---	This is not part of the scope. The external development is part of WBAP project and it refers to another SSDA.
7.7.4 Walls - Face Brickwork Retain significant unpainted face brickwork on the Hickson Road facades of the Shore Shedss.	Complies	No change is expected.
7.7.5 Flooring Original timber flooring should be retained in any future use or modifications to the building.	Complies	The original timber flooring is retained. The concrete will be removed from the fire tunnel to reveal the original timber. Hassell's comment: The original ironbark flooring is a heritage feature of the building. The current proposal will retain the ironbark flooring in full, and where it cannot be exposed, it will be protected and preserved. The current proposal reveals more of the ironbark flooring, including key public areas and the new atrium at the mid Wharf entry. Where programmatic requirements necessitate a different floor type, such as wet areas, forklift trafficable floor or areas with an acoustic floor build up, the ironbark will be retained and protected prior to the new floor structure being installed.

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7.7.6 Wharf Sub-structure Replacement of timber wharf piles should continue to be part of the cyclical maintenance program arranged in 3 year terms. A detailed pile and structural survey should be undertaken at the commencement of each term to plan the next term of pile and timber replacement due to termite damage and rot above water and teredo damage and erosion below water level.	---	This is not part of the scope. The external development is part of WBAP project and it refers to another SSDA.
7.7.7 Timber Joinery Retain significant timber joinery, including original windows and doors and original internal timber staircase.	Capable of Complying	Significant original timber joinery and the timber staircase are retained. Windows, doors and external elements are part of another SSDA. Hassell's comment: The heritage stair in the STC box office is being retained as a feature of the original building. Facade alterations have been confined to areas of low heritage significance wherever possible, such as to the areas of introduced glazing, however minor alterations to the Northern facade are required to facilitate the internal program. This will follow the rhythm and precedent of the existing facade. The facade modifications fall under the scope of the Walsh Bay Arts Precinct Redevelopment.
7.7.8 Building Services Existing functional fire protection, emergency and electrical lighting should be maintained as part of the regular maintenance program.	Complies	This is part of the scope proposal. Building services are being maintained or upgraded as per the advice of STC's BCA, Fire and Services consultants. ARUP's comments: Where practicable the existing fire sprinklers and lighting systems will be retained and incorporated into the new development.
7.7.9 Wheelchair Access The installation of a wheelchair access lift to the STC Wharf Theatres and Restaurant should respect significant fabric and internal layout of the building. It should be located along the	---	This is not part of the scope. The external development is part of WBAP project and it refers to another SSDA. Note that an existent lift is present along the public access to the STC. Hassell's comment: New lifts are proposed at Mid Wharf and End of Wharf locations to facilitate access to both Level 1 and 2. The lifts fall under the scope of the Walsh Bay Arts Precinct Redevelopment, and will be treated as contemporary insertions that follow the precedent of the existing Vivian Fraser lift, but

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public access to the STC and serve both the main level of the STC and the mezzanine to provide access to all public areas of the STC. It should be designed and treated as a new element, but one that respects the tradition of externally mounted services infrastructure.		pull away from the heritage facade to minimise impact to the heritage fabric, gutter and crane rail.
7.7.10 Air Conditioning The provision of air conditioning units for the Wharf Theatres at roof level should be situated so as to minimise the visual impact from recognised viewpoints such as between the major roof ventilator structures. A visual impact assessment should form part of any proposed works involving the installation of services to the exterior of the building.	Complies	The existing roof contains plant and exhausts at disparate locations along its length. New air conditioning is proposed to update the mechanical systems utilised in the building and to rationalise and consolidate the associated equipment. This involves packaged units, similar to existing and plant-rooms within the new roof modification with consolidated plant platforms located in the northern valley. Hassell's comment: The roof as existing contains plant and exhausts at disparate locations along its length. The new proposal sees the mechanical equipment consolidated and rationalised to the north of the Wharf in its existing valley location, where it is visually screened by the Theatre roof modification and lanterns. ARUP's comments: The refurbishment of the wharf provides an opportunity to consolidate the roof mounted air conditioning equipment into a single considered location rather than many disjoint locations. The consolidation will look to lower the plant as much as possible and centre on the valley to minimise impact.
7.7.11 Environmental Efficiency Proposals to upgrade the environmental efficiency of the services infrastructure should take into account a "whole of building" approach and be considered for their physical or visual impact on the spatial and architectural integrity of the buildings in their own right and as components of Walsh Bay as a whole.	Complies	The roof currently houses a large solar array and STC have a large rainwater reuse tank located under the wharf. A whole of building approach has been adopted for service upgrades which extends across the Walsh Bay Arts Precinct. Hassell's comment: All consultants view the STC50 project holistically, and as part of the broader Walsh Bay Arts Precinct. Coordination has been undertaken between consultants of the WBAP and the STC50 project to identify opportunities for efficiencies. ARUP's comments: The provision of new services systems for heating and cooling affords an opportunity to introduce variable speed drives and high efficiency equipment to lower the building

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		environmental impact.
7.8 Conservation of Equipment and Machinery		
7.8.1 The Goods Lift within Wharf 4/5 should be retained and an adaptive reuse strategy created.	Complies	The goods lift is retained. As it passes between two different tenancies - a commercial tenancy and STC50- it is not possible to use it in the current adaptive reuse. It will however be retained insitu so that it could be used in the future.
7.8.2 Gantry rails on the eastern and western facades should be retained.	---	This is not part of the scope. The external development is part of WBAP project and it refers to another SSDA..
7.9 Principles for Design of new elements		
7.9.1 New or repaired elements should generally adopt the visual characteristics of the surrounding context in order to minimise visual interruption to the original context.	---	This is not part of the scope. The external development is part of WBAP project and it refers to another SSDA.
7.10 Interpretation		
7.10.1 The current and future re-use of the buildings should include a strong program of interpretation to ensure that the heritage characteristics and layered significance of the place are communicated to visitors.	Complies	A strong program of interpretation is present on the site and will be continued in the new works.
7.10.2 An oral history program should be implemented, participants should include individuals who have been involved in the conversion and maintenance of the wharf and the Shore Sheds. Rees McKay, Government	---	This is not part of the scope. Arts NSW currently lease the site from RMS. No known oral history program has been implemented to date, however, is encouraged in the future.

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Architect, who has been responsible for the care and maintenance of Wharf 4/5 through the Department of Commerce is an invaluable source of information regarding the history and use of the site.		
7.11 Appropriate Conservation Skills and Experience		
7.11.1 Appropriate professional and trade skills should be sourced and employed during the implementation of conservation works and in the design and installation of future uses within the buildings.	Complies	Appropriate professional and trade skills will be sourced and employed to undertake the works.
7.12 Signage		
7.12.1 Signage on Heritage Items should be: (i) consistent in design to the architectural form of the building to which it is attached; (ii) of a high standard of materials, construction and graphics; (iii) appropriately located on the Heritage Item and of a Compatible design and style with appropriate lettering.	Complies	New internal signage will be consistent in design with the currently adopted strategy and with the architectural form of the building to which it is attached.
7.13 On-going Maintenance Regime		

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7.13.1 The current maintenance program should be continued and updated as required.	Complies	The current maintenance program is ongoing. This has recently been reviewed on behalf of Arts NSW by Tropman & Tropman.
7.13.2 Funding should be made available on a cyclical basis for the replacement of wharf piles as part of the regular maintenance program.	Complies	Arts NSW have allocated funds for replacement of wharf piles on a cyclical basis as part of their regular maintenance program.

8. Heritage Impact Assessment

8.1 Impact of the Design Proposal

DESIGN PROPOSAL	POSITIVE EFFECT	NEGATIVE EFFECT	RECOMMENDATIONS
8.1.1 GENERAL			
Demolition/construction of separation walls	The new layout creates a more organised and fluid space. These works are in effect a relocation of the insertions and where possible an improvement based on recent experience which more readily reveal the original structure and fabric. See below	We consider there to be nil/minimal negative effect. The Walsh Bay precinct as a whole has undergone massive rejuvenation works over the past 15-20 years. Wharf 4/5 itself underwent major adaptive reuse in 1985. These works respect the heritage significance of the place and will not detrimentally impact upon this significance.	All original and early fabric must be appropriately protected during construction and subsequently maintained.
BOH access exposes the western facade	The western service corridor proposal improves the understanding of the industrial character by revealing the external skin which also allows a degree of permeability and solves the thermal and acoustic problems in one	We consider there to be nil/minimal negative effect.	Minimise fixings where possible.

DESIGN PROPOSAL	POSITIVE EFFECT	NEGATIVE EFFECT	RECOMMENDATIONS
	simple solution. The heritage fabric is both revealed and protected and can be maintained – a major outcome in the building's preservation. Refer Diagram on page 65		
Removal of 9 timber columns	This is required to obtain completely open areas in the theatres and rehearsal rooms. Three of the columns are proposed to be reinstated in other areas which were removed in the earlier works and lost .	This will cause some loss of original elements however the impact is considered to be minimal as reinstatement will occur in other areas.	The removed columns must be securely stored as 3 of them will be reinstated in different areas. The holes in the floors should be outlined with a similar type of floorboards but should not be made to mimic the existing in terms of age and patina in order to allow the clear interpretation of the removed column locations. The new patches should be appropriate and clearly interpreted as new reparations.
Reinstatement of 3 of the removed timber columns (as above)	This will reinstate the original structure and recreate the visual partition of the space. The columns removed from other areas will be adapted.	We consider there to be nil/minimal negative effect.	Ensure removed columns are appropriately tagged and stored for reinstatement.

DESIGN PROPOSAL	POSITIVE EFFECT	NEGATIVE EFFECT	RECOMMENDATIONS
New flooring	The new flooring will be laid down on top of the existing Ironbark floorboards to protect the heritage fabric in areas requiring acoustic treatments or heavy traffic: - In the rehearsal rooms and theatres this is a requirement for soundproofing. - In the western corridor and in the shore sheds is a requirement to protect the timber floor from vehicles. There is no loss of original fabric and this operation is reversible.	We consider there to be nil/minimal negative effect.	Minimise fixings where possible.
Restoring of Ironbark floorboards	The level 1 public access way along the eastern side the building exposes the original heritage significant rough sawn floorboards. Only cleaning, repairing and oiling is part of the scope.	We consider there to be nil/minimal negative effect.	In areas where the gaps between the floorboards exceed 5mm or there are raised edges that exceed 3mm in height then the floorboards shall be repaired to ensure a more even surface for OHS and equitable access requirements.
GROUND LEVEL			
New box office / ticketing area at southern end of wharf and administration / staff areas	This improves the function and flow of the tenancy.	We consider there to be nil/minimal negative effect.	Any works must allow for the maximum retention of heritage fabric.

DESIGN PROPOSAL	POSITIVE EFFECT	NEGATIVE EFFECT	RECOMMENDATIONS
MEZZANINE LEVEL			
Additional offices at southern end of wharf	Insertion of a mezzanine level is a well considered design approach to achieve maximum useable space without detracting from the large volume of the pier.	We consider there to be nil/minimal negative effect.	Locate all new fixings into non significant fabric where possible.
LEVEL 1 & LEVEL 2			
Co-location of Wharf 1 and 2 Theatres to create two distinct performance spaces	The creation of 2 large theatres allows better access and egress through and along the pier as well as improving the visual interpretation of the volume of space.	The removal of heritage timber columns and steel trusses over will have some impact. However we believe this is an acceptable compromise for the reinvigorated use of the space.	Carefully dismantle the structures and salvage and reuse fabric on site. The design must be the most appropriate for the foreseeable future demands of the building.
Upgrade to existing kitchen at northern end of wharf with goods lift	This is a positive outcome in achieving a better use of the space and upgrade the kitchen to a current quality and safety standards.	We consider there to be nil/minimal negative effect.	Locate all new fixing into non significant fabric where possible.
Improved rehearsal and dressing room spaces with shared support spaces and the introduction of more flexible spaces	This provides for the current and foreseeable future demands of the building.	We consider there to be nil/minimal negative effect.	

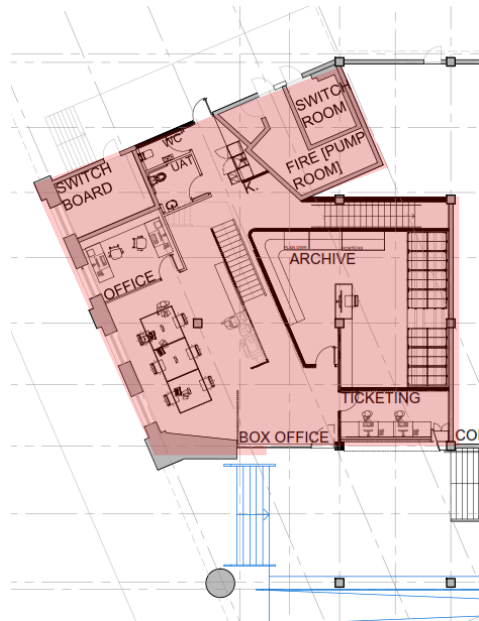
DESIGN PROPOSAL	POSITIVE EFFECT	NEGATIVE EFFECT	RECOMMENDATIONS
Separate back of house circulation to allow efficient and safe transportation of sets to rehearsal and theatres	This creates a safe corridor not open to public for heavy vehicle circulation. New flooring will protect the heritage timber floorboards.	We consider there to be nil/minimal negative effect.	Locate all new fixing into non significant fabric where possible.
Removal of the existing fire tunnel within the building and associated reconfiguration of the space into the new layout as above plus addition of new fire stairs	The demolition of the fire tunnel is a removal of the 1985 works that were a severe design constraint on the site, using up unnecessary space that could be better utilised by the tenancy. The concrete floor in the entire tunnel covering the heritage timber floor will be removed. The walkway floor remains for the public use in his original status.	We consider there to be nil/minimal negative effect.	All original and early fabric must be appropriately protected during construction and subsequently maintained.
Upgrade of services and infrastructures	This is a positive outcome in achieving improved comfort and compliance with BCA regulations.	We consider there to be nil/minimal negative effect.	Wherever possible place all new services in areas of lower significance. Carefully dismantle the structures and salvage and reuse fabric on site.
Restoring of Heritage Items: - Timber lift - Overhead metal travelling	This is a positive outcome in achieving overall conservation goals by restoring existing heritage items. The relocation of the lift and cranes along the same plane is appropriate as	We consider there to be nil/minimal negative effect.	All original and early fabric must be appropriately protected during construction and subsequently maintained.

DESIGN PROPOSAL	POSITIVE EFFECT	NEGATIVE EFFECT	RECOMMENDATIONS
gantries (3) - Timber stairs	their significance is not retained in just one location.		

8.2 Detailed Heritage Impact by Area

Ground Level

Box ticketing, Offices and Utilities.



WORK DESCRIPTION:

New offices layout.

POSITIVE EFFECTS:

The new office layout gains a better use of the space and reveals the Heritage timber staircase that currently is completely hidden.

NEGATIVE EFFECTS:

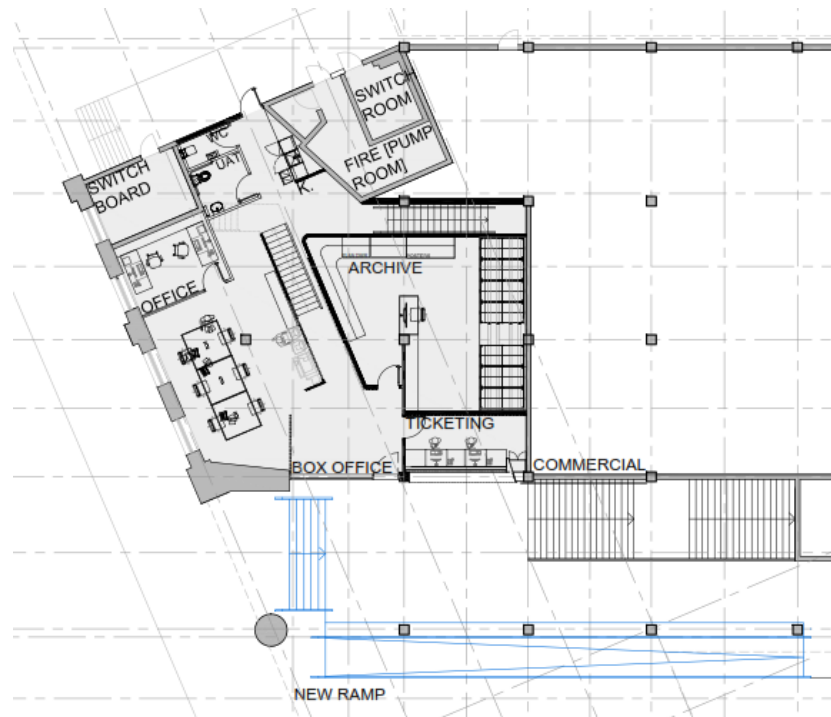
We consider there to be nil/minimal negative effect.



Existing Offices

Ground Level

Entry



WORK DESCRIPTION:

Modification of existing stairs.

POSITIVE EFFECTS:

Improvement of site identification and point of entry.

NEGATIVE EFFECTS:

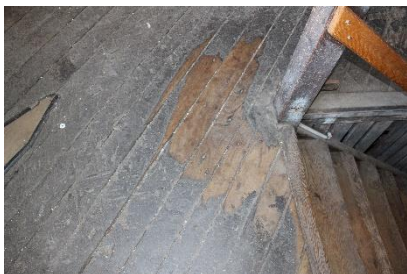
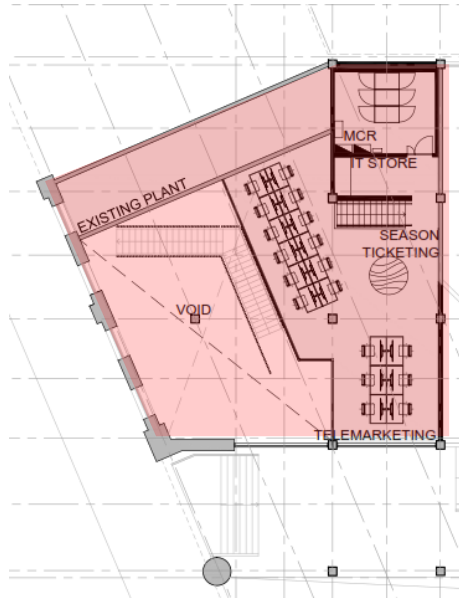
We consider there to be nil/minimal negative effect.



Existing external stairs

Mezzanine

Stairs



Detail of existing patina on floorboards

WORK DESCRIPTION:

New mezzanine floor level.

POSITIVE EFFECTS:

The new mezzanine level improves the area available for offices.

The double height void reveals the Heritage timber staircase that at present is completely hidden.

NEGATIVE EFFECTS:

We consider there to be nil/minimal negative effect.



Existing Heritage timber stair

Level 1

Costumes, Wardrobe and Workshop



WORK DESCRIPTION:

New arrangement and layout for a better use of the space.

POSITIVE EFFECTS:

The new layout will improve the use of the space.

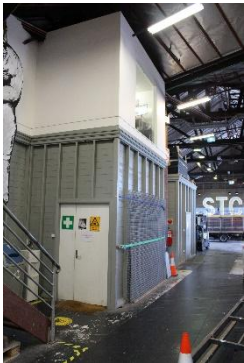
NEGATIVE EFFECTS:

No major changes are proposed.

We consider there to be nil/minimal negative effect.

Level 1

WC and Utilities



Existing structure

WORK DESCRIPTION:

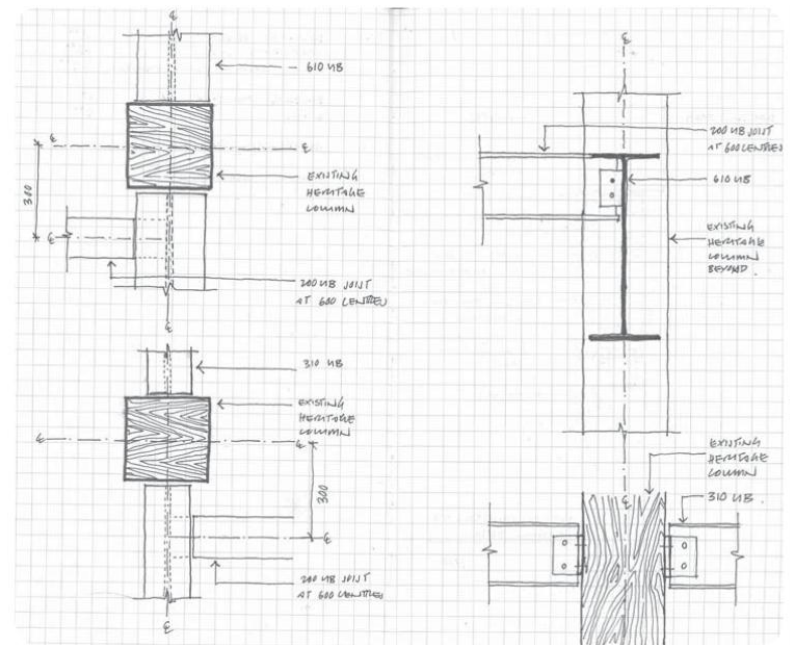
Fit out of existing WC.

POSITIVE EFFECTS:

Improvement WC quality and upgrade to current compliance.

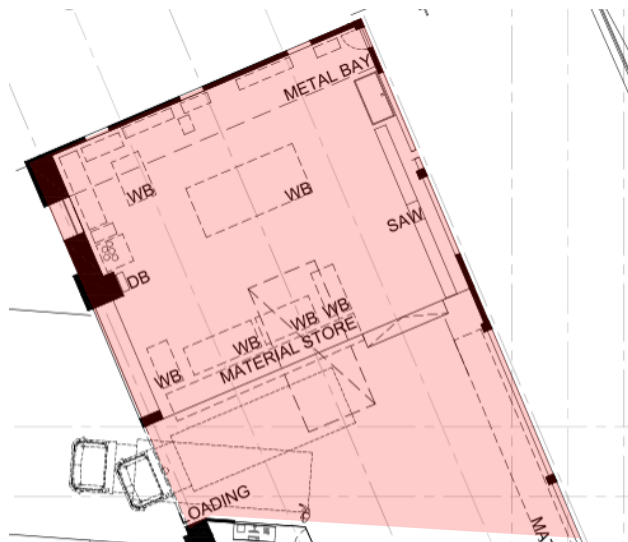
NEGATIVE EFFECTS:

We consider there to be nil/minimal negative effect.



Level 1

Store and Loading



Existing loading area

WORK DESCRIPTION:

Fit out of loading area. No changes in the structure.

POSITIVE EFFECTS:

Improvement of safety.

NEGATIVE EFFECTS:

We consider there to be nil/minimal negative effect.



Existing loading area

Level 1

Walkway



Existing walkway

Existing fire tunnel

WORK DESCRIPTION:

Demolition of fire tunnel.

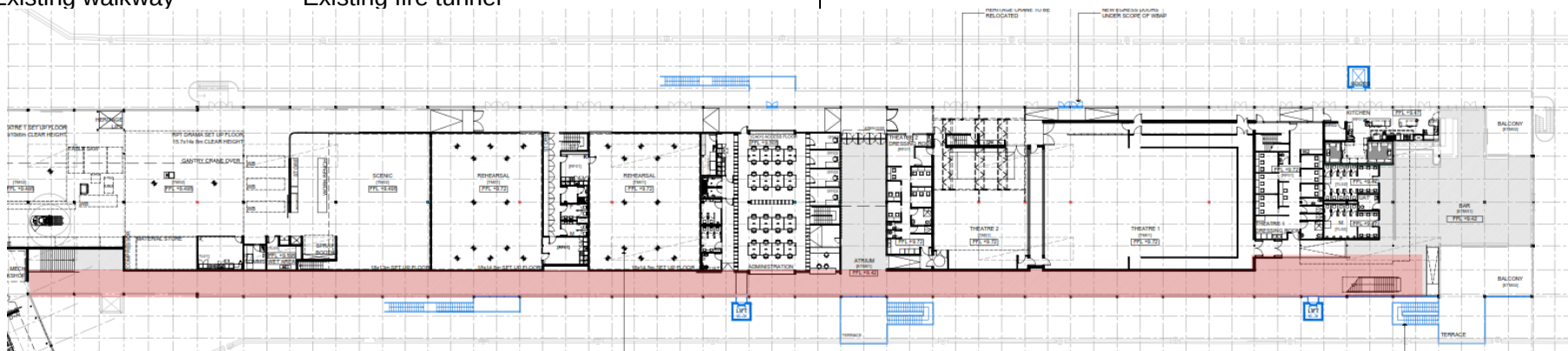
POSITIVE EFFECTS:

The demolition of the fire tunnel reinstates the lost space.

The walkway remains for the public use.

NEGATIVE EFFECTS:

We consider there to be nil/minimal negative effect.



Level 1

Workshop, Store and Utilities



Existing Workshop area

WORK DESCRIPTION:

Fit out of workshop areas.

POSITIVE EFFECTS:

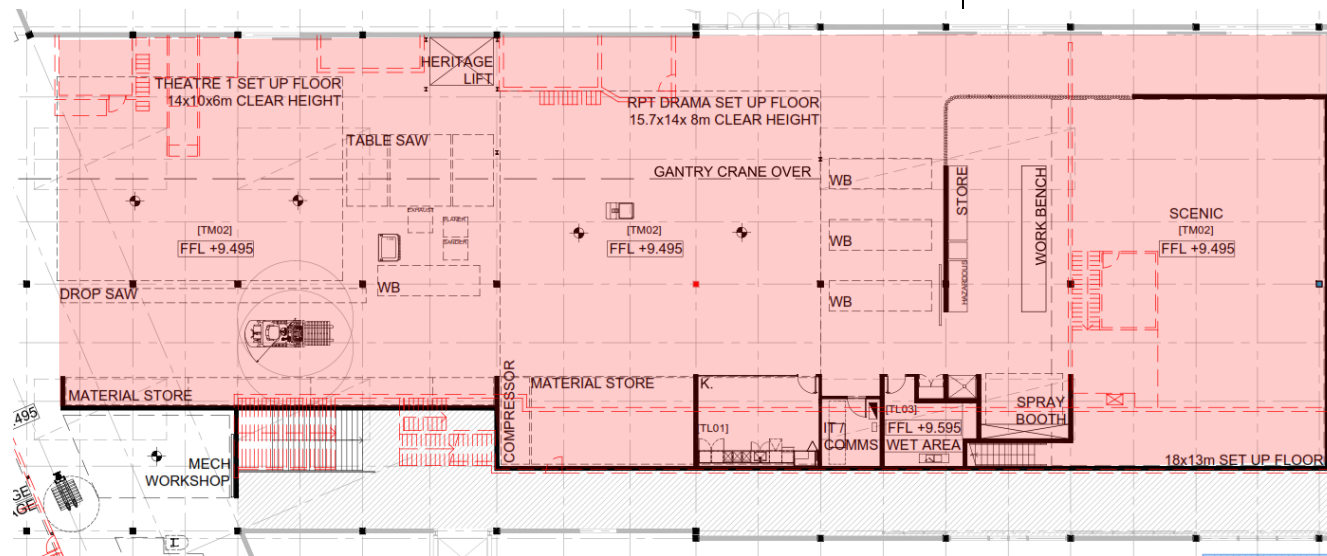
New layout for utility areas and improvement of safety.

The large raw space remains as it is.

Re-positioning of one timber post.

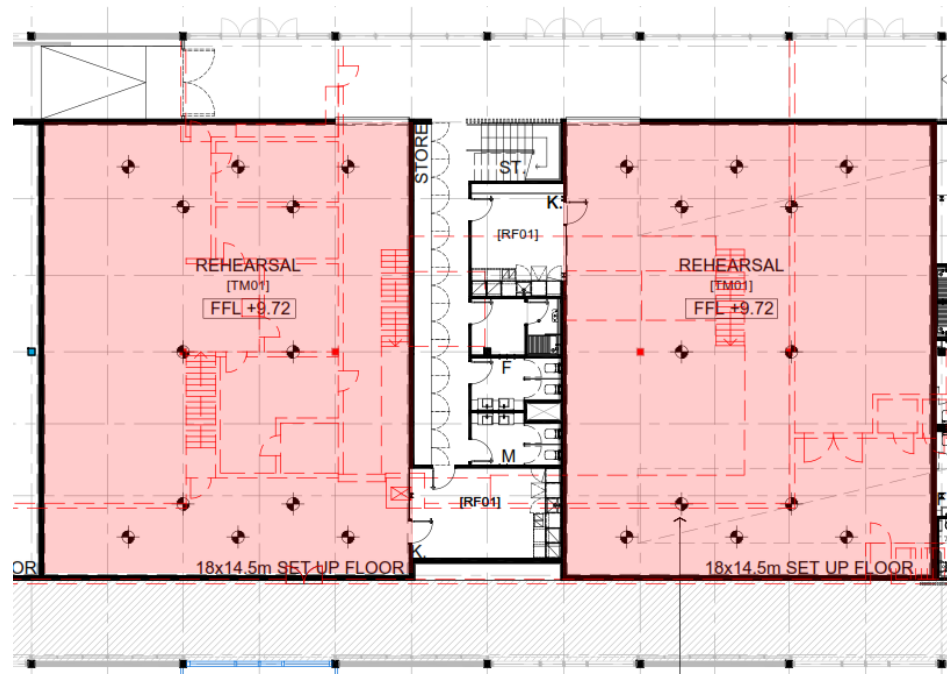
NEGATIVE EFFECTS:

Removal of one timber post mitigated by reuse.



Level 1

Rehearsal Rooms



WORK DESCRIPTION:

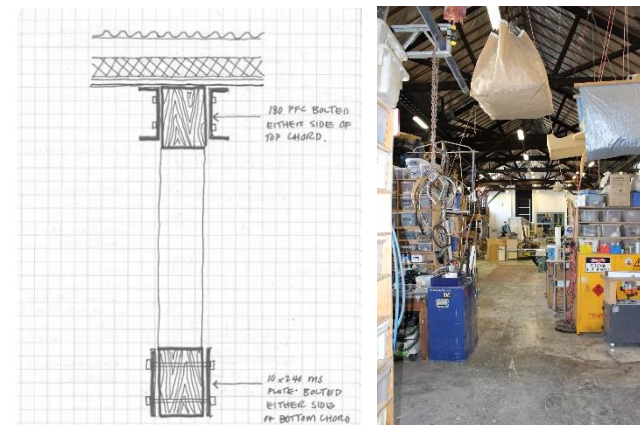
Creation of two Rehearsal rooms

POSITIVE EFFECTS:

The demolition of partition walls reinstates two large raw spaces.

NEGATIVE EFFECTS:

Removal of four timber posts. Mitigated by improved functionality.
Impact is minor.

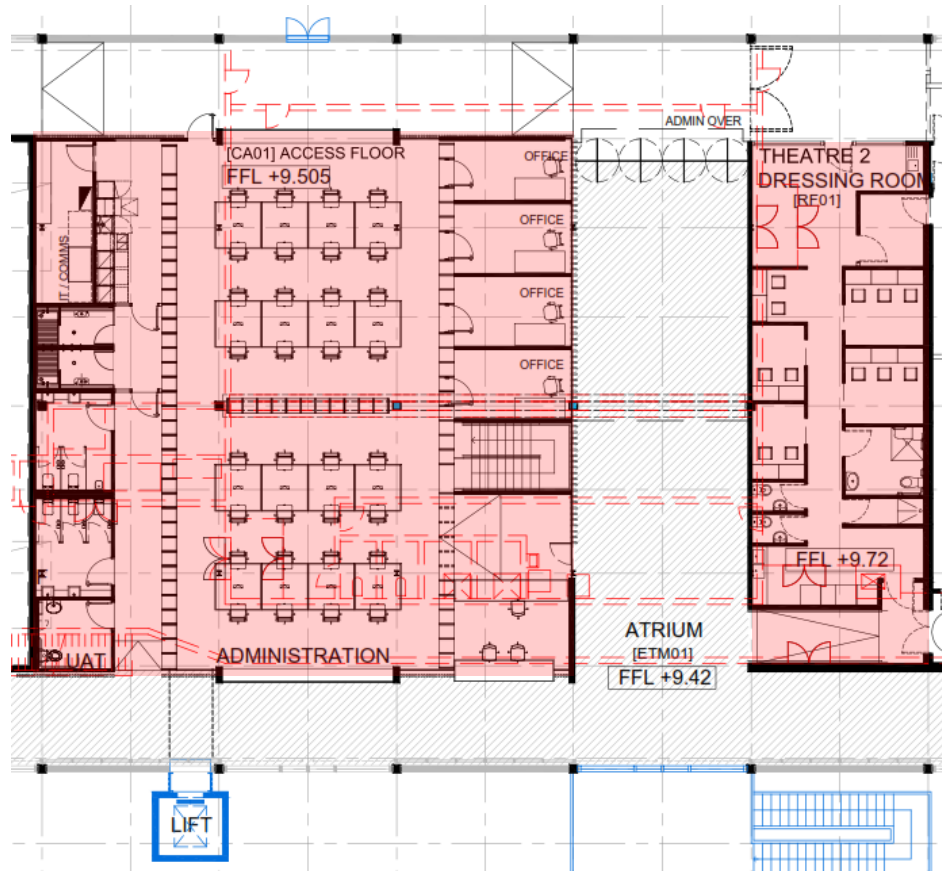


Typical truss strengthening.

Sketch provided by Hassell

Level 1

Offices and WC



WORK DESCRIPTION:

New layout for offices.

POSITIVE EFFECTS:

The offices area is set-back from the Heritage facade, as an internal independent box. This reduces alteration of Heritage fabric and creates a public corridor to appreciate the Heritage fabric as the walls and floor are kept untouched.

Two timber post removed during the previous operation are re-introduced.

The atrium area in the middle is open to public with timber floorboard exposed.

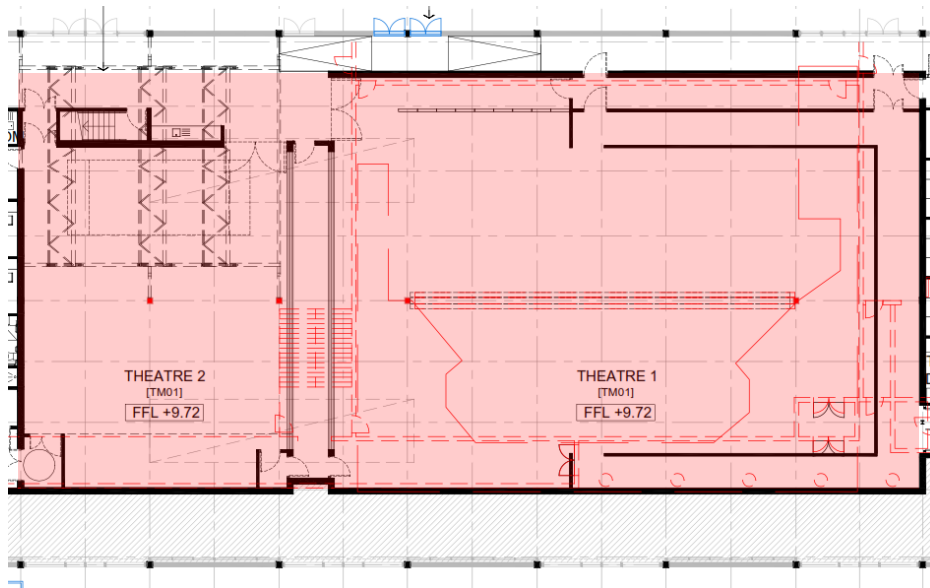
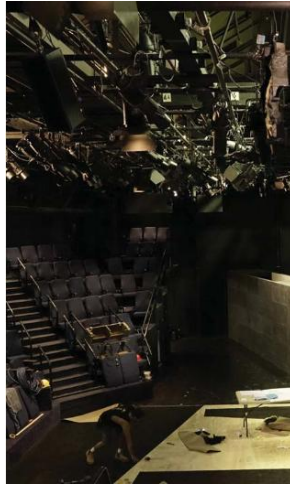
NEGATIVE EFFECTS:

We consider there to be nil/minimal negative effect.

Level 1

Theatre 1 & 2

Existing theatre



WORK DESCRIPTION:

Fit out of existing theatre and creation of a second smaller one.

POSITIVE EFFECTS:

The installation of the new partitions that form the theatres will be set out within the central zone of the original warehouse, set inward of the external timber wharf walls, thereby naturally creating the east and west circulation routes and enhancing the experience of walking the length of the wharf. The clearly expressed and retained structure and floors and walls will preserve the interpretation of the former uses of the building.

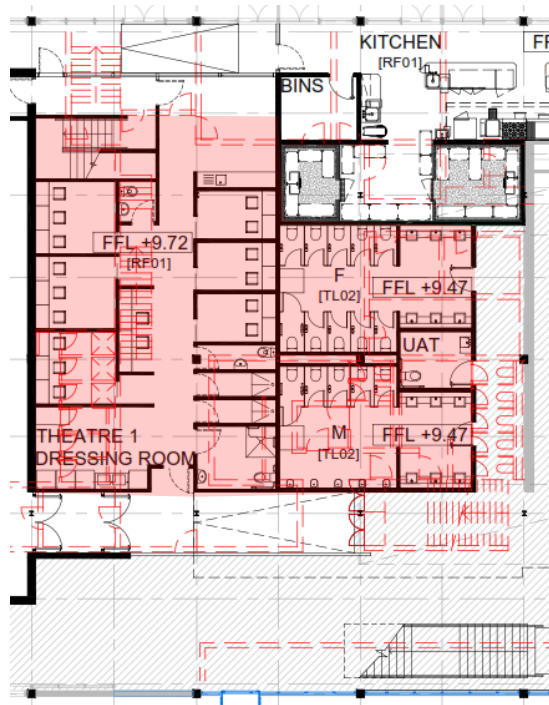
Comment by Charcoalblue

NEGATIVE EFFECTS:

Removal of four timber posts and steel truss over. Mitigated by improved functionality. Impact is minor.

Level 1

Dressing Rooms and WC



WORK DESCRIPTION:

The substantial refurbishment to the Wharf requires an increase of amenities, for both the public and staff, to satisfy not only the BCA but also the visitor's experience.

Public facilities are located at the Mid Wharf and End of Wharf locations to coincide with new arrival points, Theatres and public spaces.

POSITIVE EFFECTS:

The increased provision and better distribution of bathroom facilities, including an increased provision of Universally Accessible Bathrooms, represents an enhanced solution for the Wharf.

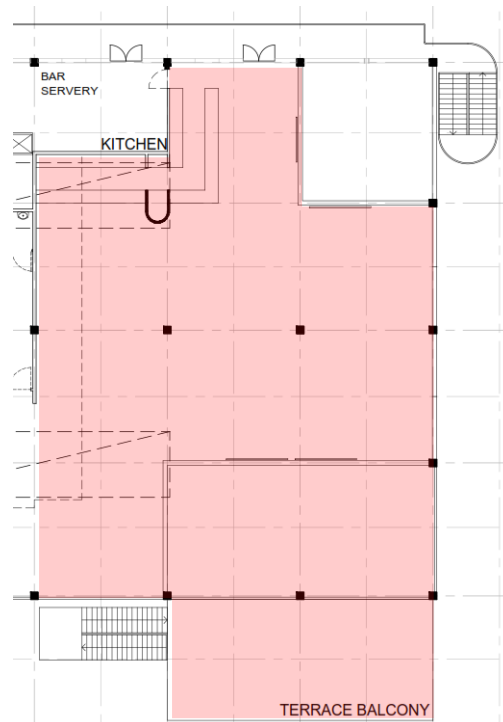
NEGATIVE EFFECTS:

We consider there to be nil/minimal negative effect.

This sketch on the left represents a typical detail of connection between the existing timber columns and the new partition walls.

Level 1

Open Space



WORK DESCRIPTION:

Fit out bar area.

POSITIVE EFFECTS:

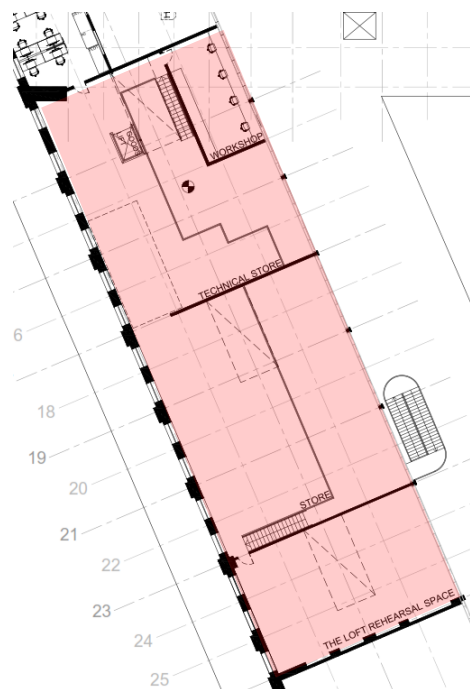
The new spatial strategy and logical planning sequence allows for the appreciation of an increased heritage volume that is naturally ventilated and expressed along the eastern and western facade. It also opens the full width of the wharf both at mid-wharf and The Theatre Bar at the End of the wharf. This also enables the newly configured spaces to be thermally and acoustically treated in a manner appropriate to their program without compromising the heritage envelope.

NEGATIVE EFFECTS:

We consider there to be nil/minimal negative effect.

Level 2

Store



WORK DESCRIPTION:

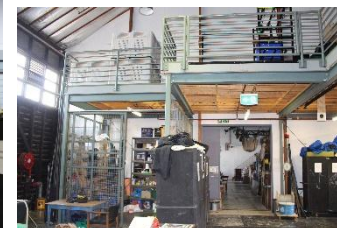
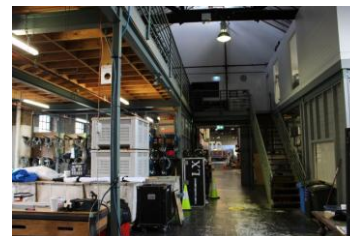
Small changes in the layout.

POSITIVE EFFECTS:

The space remains open.

NEGATIVE EFFECTS:

We consider there to be nil/minimal negative effect.

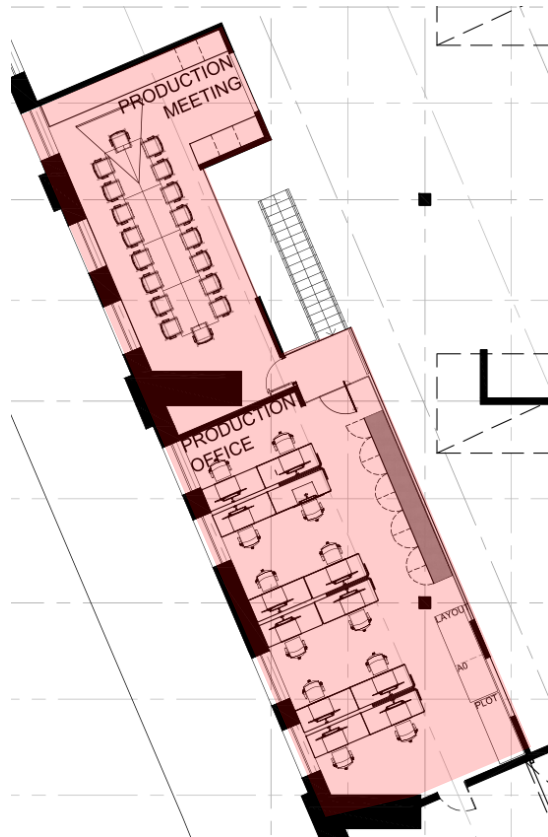


Existent store area



Level 2

Production Offices



WORK DESCRIPTION:

New layout of offices area.

POSITIVE EFFECTS:

The existing small offices and partitions are removed to create two larger areas.

NEGATIVE EFFECTS:

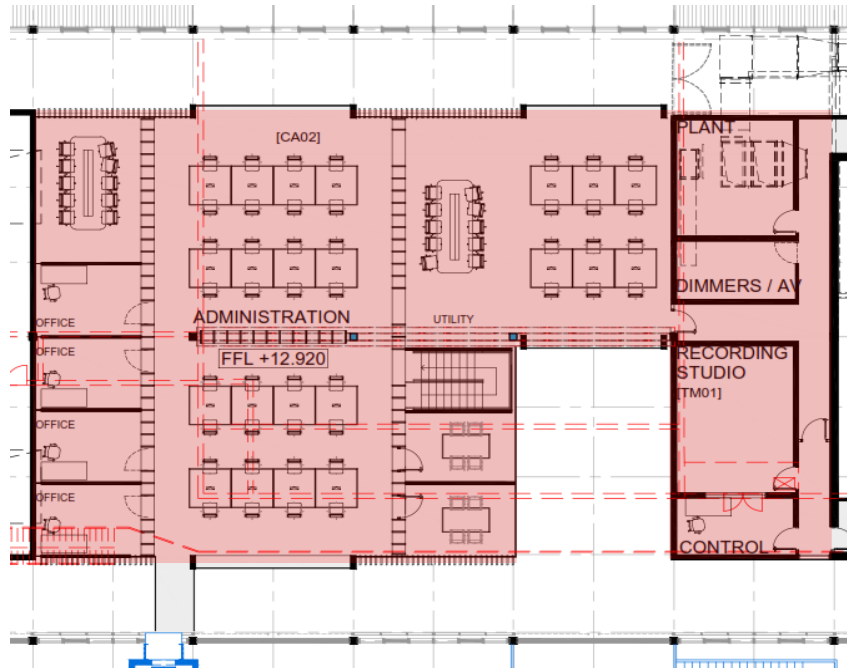
We consider there to be nil/minimal negative effect.



Existing mezzanine

Level 2

Administration



WORK DESCRIPTION:

New layout for administration area.

POSITIVE EFFECTS:

The new insertions need to connect back to the existing structure in a carefully considered manner. Following the precedent that exists in Wharf 4/5 and elsewhere in Walsh Bay, new structure will be readily identifiable as distinct from the heritage fabric. A sensitive approach to detailing will enable the effective transfer of loads, preserve the heritage interpretation of the original elements, and provide a high quality built outcome that enhances the overall character of the project.

Two timber posts removed during last intervention are re-introduced.

NEGATIVE EFFECTS:

We consider there to be nil/minimal negative effect.

8.3 Conclusions of Impact

- 8.3.1 **Architectural responses to the need to identify the historic context in the new design** have been considered using the most direct routes and identifying with an industrial aesthetic.
- 8.3.2 The design has extended the area of **the raised roof section** however it was the conclusion of the Design 5 report that this style of roof was relatively inconspicuous when viewed from key vantage points and vistas.
- 8.3.3 **Roof plant rooms** on the Wharf 4/5 have been historically located to the north between the two pitched roofs.
- 8.3.4 Wharf 4/5 has had an extensive **photovoltaic array installed** on the faces of the roof. This was the subject of a Section 60 approval.
- 8.3.5 **Services interventions** (note the impact in this document) have been designed to be subservient to the structure. The roof plant has been concealed in Pier 2/3 by the low roof design recommended by Design 5.
- 8.3.6 **Fire rating** Where required by law the structural members have been fire rated in accordance with the code and life safety requirements this may in some instances conceal certain members or be at variance with the Historic Aesthetic. In all cases alternatives have been explored with the final proposal considered to be the most appropriate outcome to comply with all requirements.
- 8.3.7 **The Structural solutions** and removal of heritage fabric have been prepared in a similar manner as described in the Design 5 report.
- 8.3.8 **The large scale spans** in the wharf building is treated similarly and there is a unity in the structural solutions. The impact is acknowledged by Croker as being significant to the Exceptional heritage fabric but necessary to achieve the outcomes.
- 8.3.9 **The large performance spaces** have been reviewed for alternative solutions and the structures have been kept and strengthened rather than removed or replaced. In each large space while the impact is of significance the outcomes comply with the policies in that the form and nature of the building is not lost.

- 8.3.10 **No heritage material will leave the site** and all parts will be dismantled carefully and used in interpretive displays or reused as structural elements **where in the case of Wharf 4/5 STC repositioned back where structure was removed**
- 8.3.11 **Architectural responses to the need to identify the historic context in the new design** have been considered using the most direct routes and identifying with an industrial aesthetic.
- 8.3.12 Apron fire escapes and access including lifts have been incorporated to allow adequate access for egress and equitable access under the DDA and BCA and AS1428. These have been designed in **a simple and sympathetic aesthetic language** which is consistent throughout the precinct. The escape concepts were approved in the Walsh Bay redevelopment.
- 8.3.13 **The planning of the interior fitouts** is consistent in both Piers where the exterior walls are kept generally clear of the performance or functional spaces
- 8.3.14 **Tropman and Tropman** as heritage consultants have observed and advised on the techniques which are to be adopted which will ensure that heritage fabric is not lost or obscured and where there has been no alternative but to remove heritage fabric chiefly to allow the approved performance spaces to be adequately designed, the least intrusive technique have been used at TTA instigation. The design teams have in the main acted in accordance with the policies in the endorsed CMPS and the Design 5 report recommendations.

9. Conclusions and Recommendations

The works planned for STC50 must be informed by the relevant controls and legislation and where issues arise these matters should be clearly supported by arguments based on the Australia ICOMOS Burra Charter as well as the recent ICOMOS Charter for THE NIZHNY TAGIL CHARTER FOR THE INDUSTRIAL HERITAGE July 2003 providing best practice for items of industrial heritage.

This report has examined and reported on the information available as a resource for ongoing restoration of the Wharves 4/5. Throughout the documentation a number of policies and constraints have been incorporated and compiled demonstrating the importance of the Place and to ensure that any use and ongoing maintenance complies with the Burra Charter, the standards required under the Heritage Act 1977 and Aboriginal heritage legislation in NSW as amended pertaining to items of State Significance.

The Wharf structure includes a large scale theatre which requires alterations to the roof line as well as services interventions and matters of acoustics and fire egress. There should be a consistency in treatments for all areas within the precinct derived from a well-considered design philosophy which acknowledges the constraints of building within a state significant site.

The various approvals have instructed the way in which the historical, Aboriginal and archaeological research and impacts are to be assessed.

The Concept and developed design for the STC50 and WBAP is generally in accordance with the Tropman and Tropman and Graham Brookes CMPs as well acknowledges the directives in the Design 5 HIS for the external fabric.

The adaptive reuse of any structure by its nature will have significant impact upon the place. The impact on the relics here is, on occasions, significant in the large performance spaces especially, however the language for adaptive reuse of the structure has considered the least interventionist methodology and there has been a striving throughout the precinct to develop the appropriate language in the detailing to allow interpretation of the original fabric and large scale volumes. We believe this has been achieved.

The Wharf 4/5 and shore shed have been altered significantly in the past and while this adaptive reuse has been historically acclaimed, the new proposals have been designed to rectify some of the changes to the original design and reduce the impact of that occupation. Detailing has been devised which better expresses the original structure and surfaces.

The Vivian Fraser “light touch” however has proved to be an excellent basis to take on methodologies for alternative solutions which have the least impact on the buildings.

The current Arts and Cultural uses are profoundly significant as a continuum of the intangible cultural heritage of the place which was in fact the well spring of the saving of the relic and its repurposing into the current cultural icon.

The continued sustainability is reliant on the adaptive reuse while the uses themselves very adequately fulfil two visions for the precinct: the 1998 Masterplan approval for the eastern half of the site to become a heritage **preservation** area and cultural facility, and the 2014 Walsh Bay Arts Precinct vision now approved in principal which seeks to further develop a world class cultural centre in the heart of Sydney.

This project is considered to suitably address the Heritage Impacts as the requirements of both the SSDA conditions and the SEARS requirements for Stage 2 Heritage response.

The design for the STC50 Masterplan has been well considered and designed to provide for the current and foreseeable future demands of the STC tenancy whilst at the same time preserving the heritage and cultural significance of the place.

The WBAP represents the completion of the vision for a unique cultural precinct, described in the 1999 Master Plan for the Walsh Bay Redevelopment, and it is recommended there should be an Arts Precinct Conservation Management Plan prepared which recognises the new era and future uses.

10. References

- *Walsh Bay Masterplan*, APT Peddle Thorp, May 1996
- *Walsh Bay Precinct CMP*, Clive Lucas and Partners, December 1998
- *Wharf 4/5 Walsh Bay CMP*, Graham Brooks and Associates, March 2007
- *Walsh Bay Arts Precinct HIS*, Design 5 Architects, June 2014
- *Heritage Technology CMP Walsh Bay Precinct*, Tropman Architects, May 1999
- *Heritage Asset Condition Assessment External & Internal Fabric & Heritage Technology Pier 4/5*, Tropman Architects, June 2015
- *Archaeological Assessment Wharves 6/7 & 8/9 Walsh Bay*, Wendy Thorp, 1997
- *Appendix A - Phase M Infrastructure Heritage Impact Assessment*, Services Walsh Bay HIS, Tropman Architects 1998
- *Appendix E - Archaeological Assessment of areas associated with the development of Pottinger Street and adjacent areas*, Underground Services Walsh Bay HIS, Tropman Architects 1998
- *Re-development of Pier 2/3 Walsh Bay: Maritime Archaeological Inspection of copper sheathed piles*, Draft February 2002
- *STC50 Heritage Report for Sydney Theatre Company*, Tropman Architects, February 2016
- *Walsh Bay Redevelopment, Maritime Archaeological Assessment of Wharves 6/7 & 8/9*, Coroneos, September 1997
- *Walsh Bay Precinct Conservation Plan - Archaeological Assessment*, Clive Lucas and Partners, August 1997
- *Heritage Study of 19th and Early 20th Century Trading Wharves in Sydney Harbour*, National Trust of Australia, October 1989
- *Various original drawings held by Tropman & Tropman*
- *Archival reports held by Tropman & Tropman*
- *The Mitchell Library collection*
- *The Heritage Branch Archive*
- *Sydney University Library*
- *The National Trust NSW Library and Archive*
- *Australia ICOMOS 2000, Australia ICOMOS Charter for the Conservation of Cultural Significance (The Burra Charter) and Guidelines to the Burra Charter: Cultural Significance, Conservation Policy, and Undertaking Studies and Reports*, Australia ICOMOS, ACT.
- *Converted Industrial Buildings: Where past and present live in formal unity*, Tamara Rogic, 2009
- *The Nizhny Tagil Charter for the Industrial Heritage*, TICCIH, July 2003
- *Heritage Office 2001, Assessing Heritage Significance*, Heritage Office, Sydney.
- *Heritage Office, Statements of Heritage Impact Guideline*, Heritage Office, Sydney

