Treatment

Item Name

Goods Lift

Item Reference 82

Overall Significance Regional

Condition

Excellent

Schedule of Sites

6 Pier 4/5

Level

Level G - 2

Policies

Managed by others

Cost

Managed by others

Schedule of Works

Check for termites & fumigate if required

Dry clean timber

Inspect & repair as necessary the mountings for the motor

Treatment Proposal

Treatment Record Number & Date

Date printed: 19/11/1999

Policy

Item Name

Deadhouse

Item Reference 52

Overall Significance Local

Executive Policy Summary

This item is of local significance and is to be conserved and adapted into the new interior format.

Statement of Significance

The deadhouse represents an integral part of the goods handling and Custom's practice on the wharves. It links the importing of items with the Bond Stores located on Hickson Road.

Item Conservation Management Type

Type 4- Structural

Conservation Policy Statement

To be conserved and adapted into the new interior format.

Schedule of Sites

8 Pier 2/3

Level

Ground

Approved Building Proposal

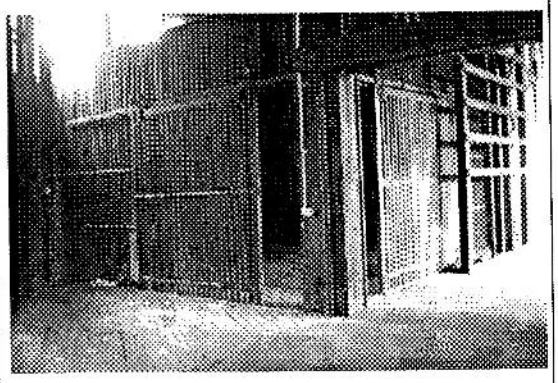
To be conserved and adapted for new interior structure.

Item Proposal

Retain in situ

Action Policy

5A - Conservation of Industrial Fabric



O.H.M. Consultants

Reference

Current Ownership

Date printed: 19/11/1999

Walsh Bay Heritage Technology Conservation Management Plan

Assessment

Item Name

Deadhouse

Item Reference 52

Overall Significance Local

Statement of Significance

The deadhouse represents an integral part of the goods handling and Custom's practice on the wharves. It links the importing of items with the Bond Stores located on Hickson Road.

Description

A timber batten walled room forming a secure space to store bonded goods. The room has two sliding doors to the shed and a large internal shelf to two sides (east and south walls).

History

The rooms are part of the original design concept of Walsh Bay Wharves where the design was to streamline stevedoring practices by have bonded import conveniences located near to the ship for easy handling.

Function and Operation

A temporary secure storage room for imported items that required excise to payed to Custom's. The items would later be moved to the Bond & Free Stores located on Hickson Road.

Rarity

Only five deadhouses are in the Walsh Bay precinct three of these are located on WB 8/9 the others on WB 2/3

Associated Items

Individual	☐
Assemblage	☐
Collection	☐
System	☒
Operational Group	☐

State Themes

People	☐
Technology	☐
Industry	☒
Utilities	☐
Transport	☒
Movable	☐
Industrial Relic	☒
Events	☐

Date printed: 1911/1999

Action

Item Name

Deadhouse

Item Reference 52

Schedule of Sites 8 Pier 2/3

Condition

The dead house is in a structurally sound condition, some of the wall battens require replacement.

Schedule of Works

Dry clean timber
Repair and/or replace defective timberwork and metalwork.
Check for termites & fumigate if required

Conservation Issues

Interpretation Action

Interpretated as a component of the goods handling system.
This item should be included in an Interpretation Strategy for the wharves as a whole.
Oral history item
To be included in site tour

Treatment

Item Name

Deadhouse

Item Reference 52

Overall Significance Local

Condition

The dead house is in a structurally sound condition, some of the wall battens require replacement.

Schedule of Sites

8 Pier 2/3

Level

Ground

Policies

5A - Conservation of Industrial Fabric

Cost

Schedule of Works

Dry clean timber

Repair and/or replace defective timberwork and metalwork.

Check for termites & fumigate if required

Treatment Proposal

Treatment Record Number & Date

Date printed: 19/11/1999

Policy

Item Name

Travelling Gantries

Item Reference 54

Overall Significance N/A

Executive Policy Summary

Removed

Statement of Significance

Removed.

Item Conservation Management Type

Conservation Policy Statement

Schedule of Sites

8 Pier 2/3

Level

Approved Building Proposal

Item Proposal

No Action.

Action Policy

Current Ownership

Owned by NSW Government

Reference

Godden Mackay Pty Ltd

Date printed: 19/11/1999

Assessment

Item Name

Travelling Gantries

Item Reference 54

Overall Significance N/A

Statement of Significance

Removed.

Description

The gantries have been removed. There were originally eight gantries, four on either wharf.. They were constructed of riveted mild steel and timber and had a concrete deck at first floor level. In 1989, the underside lifting gear was missing and the original manual drive mechanism had been converted to electricity. They did not appear operable at that time.

History

Installed in association with the construction of the Shore Shed for Wharf 2/3, completed by 1922.

Function and Operation

The gantries moved on two rails along the length of the apron, one rail near the outer edge of the apron, the other mounted at first floor level on the facade of the jetty shed. Their main purpose was as a loading platform for the first floor level but they were also originally fitted with lifting gear on their underside enabling them to be used to move cargo along the wharf apron.

Rarity

Associated Items

- **Individual** ☐
- **Assemblage** ☐
- **Collection** ☐
- **System** ☐
- **Operational Group** ☐

State Themes

- **People** ☐
- **Technology** ☐
- **Industry** ☐
- **Utilities** ☐
- **Transport** ☐
- **Movable** ☐
- **Industrial Relic** ☐
- **Events** ☐

Date printed: 1911/1999

Action

Item Name

Travelling Gantries

Item Reference 54

Schedule of Sites 8 Pier 2/3

Condition

Removed

Schedule of Works

Item removed, not applicable.

Conservation Issues

Location of the items. The possibility of reinstating the items should be explored.

Interpretation Action

Treatment

Item Name

Travelling Gantries

Item Reference 54

Overall Significance N/A

Condition

Removed

Schedule of Sites

8 Pier 2/3

Level

Policies

Cost

Schedule of Works

Item removed, not applicable.

Treatment Proposal

Treatment Record Number & Date

Date printed: 19/11/1999

Appendix E

Heritage Council of New South Wales

Level 6, 10 Valentine Avenue
Parramatta NSW 2150

Locked Bag 5020
Parramatta NSW 2124
DX 8225 PARRAMATTA

Telephone: 61 2 9873 8500
Facsimile: 61 2 9873 8599

heritage@heritage.nsw.gov.au
www.heritage.nsw.gov.au

Our File No: SF16/25882
Our Ref: DOC16/277074
Your ref: SSD 7689

Cameron Sargent
Team Leader – Key Site Assessments
Department of Planning & Environment
23-33 Bridge Street
SYDNEY NSW 2000

Sent by e-mail to: Michele Nettlefold <michele.nettlefold@planning.nsw.gov.au>

Dear Mr Sargent

Request for Secretary's Environmental Assessment Requirements (SEARs) for The Walsh Bay Arts Precinct Stage 2 Development Application, The Walsh Bay Wharves Precinct. (SSD 7689)

Reference is made to your correspondence received on 7 June 2016 requesting SEARs input from the Heritage Council of NSW (the Heritage Council) for the above proposal.

It is noted that the proposed State Significant Development (SSD 7689) is located within The Walsh Bay Wharves Precinct, a place of state heritage value and potential maritime heritage significance, listed on the State Heritage Register (SHR no. 559).

The approved Stage 1 development application for the Walsh Bay Arts Precinct (SSD 6069) comprises the following:

- A new waterfront public square between Pier 2/3 and Wharf 4/5;
- A series of new stairs and balconies on Pier 2/3 and Wharf 4/5 and modification to the roof of Pier 2/3;
- The inclusion of flexible and adaptive spaces in Pier 2/3 and Wharf 4/5 for arts and cultural activities; and,
- The use of the precinct for arts festivals, events and pop-ups and associated uses, including restaurants, cafes and bars.

This application (SSD 7689) is for the Stage 2 detailed design of the project. It also includes external alterations and additions to Wharf 4/5, and new commercial and event uses in the precinct.

It should be noted that the Heritage Council provided comments and recommended conditions of approval for the Stage 1 DA (SSD 6069) on 16 September 2016. A copy is attached for your reference.

The Development Consent for SSD 6069, approved by the Department of Planning on 15 May 2015, generally reflects the recommendations of the Heritage Council. Conditions A11, and B2 – B7 require all future development applications to be accompanied by an Interpretation Plan for Movable Heritage, a Heritage Impact Statement, a comprehensive Archival Recording, and Archaeological Assessment and Management Plan.

It is therefore recommended that the following SEARs are adopted for SSD 7689.

The EIS must be accompanied by a Heritage Impact Assessment that:

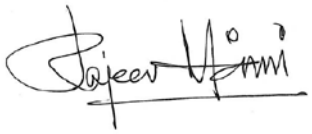
- describes the heritage significance of all heritage items on the site (including external, internal and moveable heritage features) and those surrounding the site including submerged maritime heritage and all archaeology;
- describes the potential impact of the proposal on the significance of the site, its components and values;
- assesses potential impacts of the proposal on Aboriginal cultural heritage values, and where Aboriginal cultural heritage values are identified, includes measures to avoid, conserve or mitigate against the impact and consult with the Aboriginal people to identify the significance of the cultural heritage values;
- includes measures to mitigate any impacts;
- addresses the proposal against the policies of the endorsed Conservation Management Plans for the Wharves Precinct and specific buildings, addressing the proposed adaptive reuse measures to minimise impacts on the buildings, moveable heritage items, and any archaeology;
- addresses consistency with the Heritage Council's recommended conditions of consent for SSD 6069 dated 16 September 2016 and B2 – B7 of the Development Consent for SSD 6069 dated 15 May 2015; and
- proposes opportunities to interpret the site's heritage significance, and archaeology, maritime and historical association.
- includes a framework to manage and fund the maintenance of public domain/common areas through a committee of owners to maintain a consistent visual character throughout the Walsh Bay Precinct.

An Archaeological Assessment and Management Plan that:

- is carried out by suitably qualified and experienced historical, maritime and aboriginal archaeologists; and
- discusses the likelihood of significant historical, maritime and aboriginal archaeology on the site, how this may be impacted by the project; and
- includes measures to mitigate any impacts.

If you have any questions regarding the above matter, please contact Nina Pollock, Heritage Assets Officer, at the Heritage Division, Office of Environment and Heritage on (02) 9873 8520 or nina.pollock@environment.nsw.gov.au.

Yours sincerely



Rajeev Maini
Acting Manager Conservation
Heritage Division
Office of Environment & Heritage
As Delegate of the Heritage Council of NSW
23 June 2016

Attached: Heritage Council comments and recommended conditions of approval for SSD 6069, dated 16 September 2016.

Heritage Council of New South Wales

3 Marist Place
Parramatta NSW 2150

Locked Bag 5020
Parramatta NSW 2124
DX 8225 PARRAMATTA

Telephone: 61 2 9873 8500
Facsimile: 61 2 9873 8599

heritage@heritage.nsw.gov.au
www.heritage.nsw.gov.au

Contact: Lily Chu
Phone: (02) 9873 8595
Email: lily.chu@environment.nsw.gov.au
Job no. DOC14/136241
File no. SF14/25218
Your ref. SSD 6069

Ms Sara Roach
Senior Planning Officer
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Roach

State Significant Development Application (SSD 6069)
Walsh Bay Arts Precinct – Notice of Exhibition

Thank you for your letter dated 10 July 2014 inviting comments and seeking advice on recommended conditions of approval for the Walsh Bay Arts Precinct Stage 1 concept proposal.

The Walsh Bay Arts Precinct concept proposal includes the following key elements:

- A new waterfront public square between Pier 2/3 and Wharf 4/5, with a stage and shade structure.
- Adaptive reuse of Pier 2/3 and refurbishment of Wharf 4/5.
- The use of the precinct for arts festivals, events, pop-up and associated uses.

On 10 September 2014, the Heritage Council of NSW (the Heritage Council) considered the State Significant Development Application for the Walsh Bay Arts Precinct Stage 1 concept proposal. The Heritage Council resolved to delegate the responsibility of responding to your request to me as the Director, Heritage Division. The following comments are recommended conditions to the Department of Planning and Environment:

1. **In-principle approval is provided for the proposed Walsh Bay Arts Precinct concept proposal as outlined in:**
    a. **the Concept Design Report prepared by Bates Smart dated June 2014, and**
    b. **the works outlined in drawings A01.001(A) and A01.002(A) prepared by Bates Smart dated 2 June 2014.**

EXCEPT AS AMENDED by the following:

2. **Heritage Impact Assessment**

    The recommendations outlined in the Heritage Impact Assessment prepared by Design 5 Architects dated 23 June 2014 shall be implemented.

3. **Waterfront square, stage and public roof**

   Maintain lightness in the design of the waterfront square and public roof in contrast to the existing industrial buildings.

   The stage, including the roof and any base platform, are to be designed to be temporary so that if removed will not impact on the waterfront square.

4. **Public space strategy**

   A strategy shall be developed to ensure that the private and public spaces are cohesive and controlled in a manner whereby:

   (a) Public spaces are retained for public use.

   (b) Privately leased areas on the aprons adjacent to commercial tenancies do not intrude into the new public space.

   (c) Guidelines are prepared to ensure that there will not be a proliferation of furniture and structures in the new public space and adjacent aprons.

   (d) Any awnings and furniture along the aprons and public square must be designed having regard to an overall awning and furniture strategy for the Walsh Bay Wharves.

   The strategy shall be submitted with any future application that is related to the new waterfront square or use of the existing public spaces.

5. **Balconies and external stairs**

   (a) All new external stairs must be open and lightweight; not solid as shown in the photomontages.

   (b) Ensure that stairs do not impinge on openings and that they are lightweight and appear to hang off the gantries (straight or dogleg stairs).

   (c) Not all stairs and balconies appear to be necessary as some do not lead to public spaces i.e. the Bell's rehearsal room.

   (d) The large balcony on the western elevation of Pier 2/3 may not be appropriate as there were no gantries on this side.

   (e) No additional marquees, shade structures or enclosures should be fitted on the balconies in the future. These structures and enclosures will not be supported and would diminish the intactness and appearance of the wharf buildings.

6. **Retention of significant fabric**

   All elements proposed to be removed or altered must be reviewed by a heritage professional to assess if the significance of the element has changed and to ensure that significant fabric is not inadvertently removed.

7. **Archaeology**

   The appropriate maritime archaeological assessments must be carried out to inform the detailed design of the project and ensure that there is minimal disturbance to the early wharf fabric.

Should you wish to discuss any of the matters raised, please contact Lily Chu, Heritage Officer, Office of Environment & Heritage, by email at lily.chu@environment.nsw.gov.au or on (02) 9873 8595.

Yours sincerely

Dr Tracey Avery
Director
Heritage Division
Office of Environment & Heritage

As Delegate of the Heritage Council of NSW
16 September 2014

Appendix F

Walsh Bay Arts Precinct

Conservation Management Action Plan

February 2017

REF: 1613:CMAP

Issue 01

Conservation Management Action Plan Summary

No.	Title	Status
01	Demolition methodology	**Included**
02	Salvage and storage of timber cladding and joinery during demolition	**Included**
03	Salvage and storage of structural timber during demolition	**Included**
04	Salvage and storage of metalwork during demolition	**Included**
05	Salvage and reuse of industrial technology	**Included**
06	Salvage and storage of timber piles	**Included**
07	Excavation methodology	**Included**
08	Demolition of seawall methodology	**Included**
09	Underpinning of Hickson Road facade methodology	**Included**
10	Repair and replacement of wharf substructure and piles	**Included**
11	Repair of wharf superstructure including structural timbers, metalwork, cladding and roof excluding brickwork	**Included**
12	Repairs to masonry walls including bridge abutments	**Included**
--	Disposal Record Sheet	**Included**

ACTION PLAN 1

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**1**
Title	:	**DEMOLITION AND METHODOLOGY**
Revision No	:	1
Date of Revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This Action Plan applies to all areas of Wharves 2/3 & 4/5 and has regard for adjacent areas.
This Action Plan also covers any subsequent areas that may require all or part demolition.

OBJECTIVES

This Action Plan is intended to:

- Protect from damage & stabilise where necessary adjacent retained elements on adjoining sites.
- Maximise the amount of significant fabric conserved and retained in-situ.
- Stipulate the methods by which appropriate removal will best be achieved. Also to ensure the recording, labelling, storage, and conservation of any fabric which may be revealed during demolition.
- Maximise salvage of any heritage items and technology.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The report is broken down into the principal elements and fabric. Also listed are specific areas or items to be demolished, and the proposed demolition procedure.

GENERIC METHODOLOGY

Demolition refers to items that are being removed permanently from the site.

Work which includes care and protection of fabric and review of methods and approach is to be carried out to the satisfaction of and with approval and/or as instructed by the Heritage Conservation Architect (HCA) and the Design Architect (DA).

STRATEGY

1. Demolition is to be completed in a manner which will minimise damage to retained material on this site and adjacent sites
2. Hickson Road façade needs particular attention with regard to stabilising through the duration of the works.
3. The method of demolition is to be prepared in conjunction with the proposed demolisher and submitted to the HCA prior to demolition.
4. Where parts of adjoining structures become exposed during the works, and are subject to weather damage, these parts are to be suitably protected for the duration of the works.
5. Adjoining structures and fabric are to be retained in-situ and are to be fully protected at all times during the works.
6. Stripping of lead-based paint for environmental reasons is permitted.
7. In the completed works all external elements are to be suitably protected from the weather and other damage in ways consistent with their original appearance and normal building practice.
8. During the refurbishment process, all elements salvaged are to be handled and treated to prevent any further mechanical, water, termite or fungal damage.
9. All material is to be salvaged in accordance with this action plan.
10. Structural and architectural elements are to be disconnected, handled and recovered in a manner suitable for their reuse in the project.
11. Where existing fabric is to be used as a working platform it must be suitably protected throughout the works

BUILDING ELEMENTS

NO.	ELEMENT	LOCATION OF ELEMENT	ACTION
01	Historical Recording	All areas; all conditions	Record with photographs & drawings before and during demolition. Create approved archival system to facilitate labelling of demolished parts.
02	Hazardous materials	All areas, refer to Hazardous Materials Survey and relevant Scope of Works report all conditions	Remove all hazardous materials in the manner described in the Hazardous Materials Survey and prior to the commencement of demolition Discard appropriately.
03	Structure	Posts, Roof & Floor Framing, Structural Steel, Floorboards, Masonry	Retain all structurally sound members. Where elements lack structural integrity they are to be rectified for the duration of the works, with the aim of retaining as much existing fabric as possible. Structural experts should be consulted. Ensure that Hickson Road Façade & all other structural and retained elements are fully supported and protected throughout the works.
04	Sheet Roofing and Roof Lanterns	All conditions	Discard sheeting where necessary and replace with similar. See Action Plan 4 for salvage & storage guidelines, & Action Plans 16 & 17 for repair guidelines. Discard asbestos roofing as per the Hazardous materials survey.
05	Industrial Heritage Technology Items	All conditions	See Action Plans 5, 5A, 5B, 5C
06	Amenities blocks	All conditions	After recording by HCA, demolish and remove from site in easily manageable sections with care ensuring no damage to heritage fabric.
07	Asphalt to decking	All conditions	Remove carefully ensuring planking, boarding and adjacent items remain intact; conserve all floor openings such as hatches
08	Cladding and Joinery	All conditions	Retain all items as per guidelines in Action Plan 2 - Salvage and storage of timber cladding and joinery during demolition and Action Plan15 – Repair of cladding & joinery
09	Metalwork	All areas	Retain all items as per guidelines in Action Plan 4 – Salvage and storage of metalwork during demolition and Action Plan 16 – Repair of metalwork

Received and Checked by:
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

ACTION PLAN 2

Walsh Bay Redevelopment
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**2**
Title	:	**SALVAGE AND STORAGE OF TIMBER CLADDING AND JOINERY DURING DEMOLITION**
Revision No	:	1
Date of Revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This Action Plan applies to timber cladding and joinery elements at Wharf 2/3 & 4/5 that require salvage as a result of rectification and proposed development interventions.

OBJECTIVES

This Action Plan is intended to:

- Maximise the amount of significant timber conserved and retained in situ.
- Protect adjacent retained elements from damage.
- Facilitate, where appropriate, the documenting, labelling, removal, storage, conservation, and re-installation of significant fabric.
- Stipulate the methods by which appropriate documenting, labelling, removal, storage, and conservation of the fabric will best be achieved.
- Maximise recycling of salvaged heritage materials.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The timber cladding and joinery is tabulated in terms of its principal elements. These have been grouped according to the nature of actions required to salvage and store them.

INVESTIGATION OF EXISTING FABRIC

Where the extent of damage may not be immediately obvious (such as termite damage), the elements in question should be thoroughly investigated by an appropriate testing method, prior to the scheduling of work. A summary of damaged, unsound or missing heritage fabric is to be carried out prior to removal from site.

GENERIC METHODOLOGY

Work which includes care and protection of fabric, review of methods and approach, is to be carried out to the satisfaction of and with approval and/or as instructed by the Heritage Conservation Architect (HCA) and the Design Architect (DA).

All removed and / or relocated fabric is to be minimal and is to be identified and carefully salvaged for reuse, storage or removal as instructed by and to the satisfaction and approval of the HCA and the DA.

Conserve all early signage and identification as approved and directed by the HCA and DA.

STRATEGY

PROTECTION OF ADJOINING FABRIC

- Where parts of adjoining structures are exposed during the works and are subject to weather or other damage, these parts are to be suitably protected at all times during the works.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.

SALVAGED ITEMS

1. All sound material is to be salvaged in accordance with the action plan.
2. All elements salvaged are to be handled and treated during the process with care, to prevent any further mechanical, water, termite or fungal damage.
3. Stripping of lead based paint for environmental reasons is permitted.
4. Salvage is to be completed in a manner to minimise damage to salvaged material.
5. The methods of salvage are to be prepared in conjunction with the proposed demolisher and submitted prior to commencement of the works.
6. Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
7. Where the existing fabric is to be reused in situ or in another location and is to be used as a working platform, the fabric is to be protected during the works.

DOCUMENTATION

1. Items must have a Treatment Proposal, in accordance with the Conservation Management Plan, prepared before removal and storage can take place.
2. If items are to be stored off site the storage facility must be approved by the HCA.
3. Items or parts of items identified for storage must be fully documented before removal and the information entered into the CMS (Conservation Management System).
4. All items are to be labelled with the following information:
    - the number of the item
    - the name of the item
    - the site of origin
    - the location within the site of origin
    - the date of removal

STORAGE

The place of storage must be inspected by the HCA prior to transportation of items. Optimum storage conditions must be guaranteed for items in storage:

- The areas must be under cover and offer dry conditions and not be kept in direct sunlight.
- All items should be covered with cover sheets that allow free movement of air.
- Pest controls should be in place.
- All items should be supported off the floor.
- Paper and textile items require specialist storage facilities.
- Items are to be stored for their own safety and care.
- Appropriate security measures must be provided for all storage areas used for the storage of items identified in the CMS.
- A regular inspection of each item should take place with the conditions entered into the CMS database and the Item Tracking List.

TRANSPORTATION

1. Transportation to storage facilities is to be completed in a manner which will minimise damage to salvaged material.
2. The HCA is to be notified of the method and day of transportation.
3. All items are to be suitably packaged and protected for transportation.
4. Items should not be considered for removal before approval is gained from the HCA.

BUILDING ELEMENTS

NO.	ELEMENT	CONDITION/LOCATION OF ELEMENT	ACTION
01	Historical Recording	All areas; all conditions	Record with photographs and drawings before and during salvage or removal
02	Hazardous materials	All areas, refer to Hazardous Materials Survey; all conditions	Remove all the hazardous materials in the manner described in the Hazardous Materials Survey and prior to commencement of demolition. Ensure all heritage fabric remains intact.
03	Weatherboards, skirtings, fascias, sills, thresholds, moldings, floorboards, stairs, balustrades, cabinets, screens, shelves, bargeboards	All areas in sound condition	Retain in situ wherever possible
		Some of the element (to be determined on site) has termite, fungal or mechanical damage	Repair in situ where possible (see Action Plan 15), or if off site repairs are necessary, complete documentation, label, remove Re-install in original location.
		Most of the element (to be determined on site) has termite, fungal or mechanical damage	Reconstruct where suitable. Discard, or conserve for patching other items (see Action Plan 15).
04	Window and Door frames including: jambs, sills, heads, transoms, mullions,	Sound	Retain in-situ wherever possible. Where removal is imperative: label, store, and re-install.
		Some of the element (to be determined on site) has termite, fungal or mechanical damage	Restore in situ where possible. Where removal is imperative for repairs (see Action Plan 15), label, store and re-install.
		Most of the element (to be determined on site) has termite, fungal or mechanical damage	Reconstruct where suitable. Discard or conserve (including glass) for patching other items. For repairs see Action Plan 15
05	Door, Window & joinery hardware, eg: steel tracks and guides, wheels, hasps, stays, stoppers, counterweights, locks, handles, straps	Sound	Keep hardware attached to door wherever possible. Items fixed to other fabric to be retained in-situ where possible. Apply rust prevention measures. Label door hardware to correspond to its door of origin. Where removal is necessary label, store and re-install .
		Unsound or unrepairable – where unique or rare example of its type	Salvage label & store, remove to and rust treat. Prepare for interpretation. Use as template for re-construction of new components
		Unsound or unrepairable – where common	Discard
06	Components of Heritage Technology Items	All conditions	Refer Heritage Technology Action Plans 5, 5A, 5B and 5C

Received and Checked By: ……
Signature: …… Date:…….
Company: **Tropman & Tropman Architects**

ACTION PLAN 3

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**3**
Title	:	**SALVAGE AND STORAGE OF STRUCTURAL TIMBER DURING DEMOLITION**
Revision No	:	1
Date of Revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This Action Plan applies to all areas of Wharves 2/3 & 4/5 and has regard for adjacent areas.
This Action Plan also covers any subsequent areas that may require all or part demolition.

OBJECTIVES

This Action Plan is intended to:
- Maximise the amount of significant timber conserved and retained in situ.
- Protect adjacent retained elements from damage.
- Facilitate, where appropriate, the documenting, labelling, removal, storage, conservation, and re-installation of significant fabric.
- Stipulate the methods by which appropriate documenting, labelling, removal, storage, and conservation of the fabric will best be achieved.
- Maximise recycling of salvaged heritage materials.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The structural timber is tabulated in terms of its principal elements. These have been grouped according to the nature of actions required to salvage and store them.

INVESTIGATION OF EXISTING FABRIC

Where the extent of damage may not be immediately obvious (such as termite damage), the elements in question should be thoroughly investigated by an appropriate testing method, prior to the scheduling of work. A summary of damaged, unsound or missing heritage fabric is to be carried out prior to removal from site.

GENERIC METHODOLOGY

Work which includes care and protection of fabric, a review of methods and approach, is to be carried out to the satisfaction of and with approval and/or as instructed by the Heritage Conservation Architect (HCA) and the Design Architect (DA).

All removed and / or relocated fabric is to be minimal and is to be identified and carefully salvaged for reuse, storage or removal as instructed by and to the satisfaction and approval of the HCA and the DA.

Conserve all early signage and identification as approved and directed by the HCA and DA.

STRATEGY

PROTECTION OF ADJOINING FABRIC

- Where parts of adjoining structures are exposed during the works and are subject to weather or other damage, these parts are to be suitably protected at all times during the works.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.

SALVAGED ITEMS

1. All sound material is to be salvaged in accordance with the action plan.
2. All elements salvaged are to be handled and treated during the process with care, to prevent any further mechanical, water, termite or fungal damage.
3. Stripping of lead based paint for environmental reasons is permitted.
4. Salvage is to be completed in a manner to minimise damage to salvaged material.
5. The methods of salvage are to be prepared in conjunction with the proposed demolisher and submitted prior to commencement of the works.
6. Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
7. Where the existing fabric is to be reused in situ or in another location and is to be used as a working platform, the fabric is to be protected during the works.

DOCUMENTATION

1. Items must have a Treatment Proposal, in accordance with the Conservation Management Plan, prepared before removal and storage can take place.
2. If items are to be stored off site the storage facility must be approved by the HCA
3. Items or parts of items identified for storage must be fully documented before removal and the information entered into the CMS (Conservation Management System).
4. All items are to be labelled with the following information:
    - the number of the item
    - the name of the item
    - the site of origin
    - the location within the site of origin
    - the date of removal

STORAGE

The place of storage must be inspected by the HCA prior to transportation of items. Optimum storage conditions must be guaranteed for items in storage:

- The areas must be under cover and offer dry conditions and not be kept in direct sunlight.
- All items should be covered with cover sheets that allow free movement of air.
- Pest controls should be in place.
- All items should be supported off the floor.
- Paper and textile items require specialist storage facilities.
- Items are to be stored for their own safety and care.
- Appropriate security measures must be provided for all storage areas used for the storage of items identified in the CMS.
- A regular inspection of each item should take place with the conditions entered into the CMS database and the Item Tracking List.

TRANSPORTATION

1. Transportation to storage facilities is to be completed in a manner which will minimise damage to salvaged material.
2. The HCA is to be notified of the method and day of transportation.
3. All items are to be suitably packaged and protected for transportation
4. Items should not be considered for removal before approval is gained from the HCA.

BUILDING ELEMENTS

NO.	ELEMENT	CONDITION / LOCATION OF ELEMENT	ACTION
01	Historical Recording	All areas; all conditions	Record with photographs and drawings before and during salvage or removal
02	Posts, beams, trusses, floor framing, roof framing, wall framing, bracing & blocking.	All areas in sound condition	Retain in situ or reuse where adaptive works require removal.
		Some of the element (to be determined on site) has termite, fungal or mechanical damage and deemed unsound	Stabilise, patch and restore in situ where possible, or off site where necessary & re-install. Aim to maximise retained fabric
		Most of the element (to be determined on site) has termite, fungal or mechanical damage	Reconstruct where suitable. Either conserve for interpretation or patching of other items, or discard.
		Unsound or unrepairable where unique or rare example of its type	Salvage label & store. Prepare for interpretation. Use as template for re-construction of new components
		Unsound or unrepairable – where common	Discard

Received and Checked By ……
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

ACTION PLAN 4

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**4**
Title	:	**SALVAGE AND STORAGE OF METALWORK DURING DEMOLITION**
Revision No	:	1
Date of Revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This Action Plan applies to all areas of Wharves 2/3 & 4/5 and has regard for adjacent areas.
This Action Plan also covers any subsequent areas that may require all or part demolition.

OBJECTIVES

This Action Plan is intended to:
- Maximise the amount of significant metal conserved and retained in situ.
- Protect adjacent retained elements from damage.
- Facilitate, where appropriate, the documenting, labelling, removal, storage, conservation, and re-installation of significant fabric.
- Stipulate the methods by which appropriate documenting, labelling, removal, storage, and conservation of the fabric will best be achieved.
- Maximise recycling of salvaged heritage materials.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The structural metal is tabulated in terms of its principal elements. These have been grouped according to the nature of actions required to salvage and store them.

INVESTIGATION OF EXISTING FABRIC

Where the extent of damage may not be immediately obvious, the elements in question should be thoroughly investigated by an appropriate testing method, prior to the scheduling of work. A summary of damaged, unsound or missing heritage fabric is to be carried out prior to removal from site.

GENERIC METHODOLOGY

Work which includes care and protection of fabric and review of methods and approach is to be carried out to the satisfaction of and with approval and/or as instructed by the Heritage Conservation Architect (HCA) and the Design Architect (DA).

All removed and / or relocated fabric is to be minimal and is to be identified and carefully salvaged for reuse, storage or removal as instructed by and to the satisfaction and approval of the HCA and the DA.

Conserve all early signage and identification as approved and directed by the HCA and DA.

STRATEGY

PROTECTION OF ADJOINING FABRIC

- Where parts of adjoining structures are exposed during the works and are subject to weather or other damage, these parts are to be suitably protected at all times during the works.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.

SALVAGED ITEMS

1. All sound material is to be salvaged in accordance with the action plan.
2. All elements salvaged are to be handled and treated during the process with care, to prevent any further mechanical, water, termite or fungal damage.
3. Stripping of lead based paint for environmental reasons is permitted.
4. Salvage is to be completed in a manner to minimise damage to salvaged material.
5. The methods of salvage are to be prepared in conjunction with the proposed demolisher and submitted prior to commencement of the works.
6. Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
7. Where the existing fabric is to be reused in situ or in another location and is to be used as a working platform, the fabric is to be protected during the works.

DOCUMENTATION

1. Items must have a Treatment Proposal, in accordance with the Conservation Management Plan, prepared before removal and storage can take place.
2. If items are to be stored off site the storage facility must be approved by the HCA.
3. Items or parts of items identified for storage must be fully documented before removal and the information entered into the CMS (Conservation Management System).
4. All items are to be labelled with the following information:
    - the number of the item
    - the name of the item
    - the site of origin
    - the location within the site of origin
    - the date of removal

STORAGE

The place of storage must be inspected by the HCA prior to transportation of items. Optimum storage conditions must be guaranteed for items in storage:

- The areas must be under cover and offer dry conditions and not be kept in direct sunlight.
- All items should be covered with cover sheets that allow free movement of air.
- Pest controls should be in place.
- All items should be supported off the floor.
- Paper and textile items require specialist storage facilities.
- Items are to be stored for their own safety and care.
- Appropriate security measures must be provided for all storage areas used for the storage of items identified in the CMS.
- A regular inspection of each item should take place with the conditions entered into the CMS database and the Item Tracking List.

TRANSPORTATION

1. Transportation to storage facilities is to be completed in a manner which will minimise damage to salvaged material.
2. The HCA is to be notified of the method and day of transportation.
3. All items are to be suitably packaged and protected for transportation.
4. Items should not be considered for removal before approval is gained from the HCA.

BUILDING ELEMENTS

NO.	ELEMENT	CONDITION/LOCATION OF ELEMENT	ACTION
01	Historical Recording	All areas; all conditions	Record with photographs and drawings before and during demolition
02	Industrial Archaeology		Refer to Action Plans 5, 5A, 5B, 5C
03	Ironmongery: including iron spikes, straps, non structural fixings, ladders, staples, chains, hooks, eyes, bolts	All conditions	If substrate is to be retained, and is sound, retain in-situ. If substrate is unsound & to be replaced, refix item to new substrate. Keep several good examples of each item for future interpretation and for fabrication of new similar elements.
04	Structural Ironmongery: gussets, brackets, bracing, tension rods, trusses, cables, stiffeners, beams & columns, ladders	All conditions	Retain in-situ if sound. To be incorporated into the new design proposal. Rectify any unsound material subtly. Make every attempt to retain items in a structural capacity. Only remove where necessary for repair or adaptation of structure for use.
		All salvaged elements and components with surface rust damage	Retain in-situ where possible. Remove where necessary, rectify & reinstall.
		Insufficient strength to suit the same purpose but a unique or rare example of its type within the precinct	Retain in-situ and rectify to enable structural capability. If structural capability is not possible salvage label and retain on site for interpretive purposes, treat for rust.
		Insufficient strength but a commonly found example of its type and with no potential use, interpretive or decorative function	Discard
07	Corrugated Metal Cladding	Sound and original	Rust treat, reshape and repaint where possible. Where roof cladding allow for new cladding system retain samples for interpretation.
		Damaged	Discard or Remove for repair where possible, as per Action Plan 16 & 17, and reinstate.
09	Gutters, box gutters, rainwater sumps and brackets, downpipes	All conditions	Retain in-situ or remove for repair as per Action Plan 16 & 17 Salvage label and store representative samples of each profile type to facilitate fabrication of new elements to match. Discard all other elements not being repaired.

Received and Checked By: ……
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

ACTION PLAN 5

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase	:	2
Description	:	Heritage Technology, Walsh Bay Art Precinct
Action Plan	:	**5**
Title	:	**SALVAGE AND REUSE OF INDUSTRIAL TECHNOLOGY**
Revision No	:	1
Date of revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This plan applies to all items in Wharves 2/3 & 4/5 and has regard for adjacent areas.
It applies to all items (including those that may as yet be undiscovered) that are to be removed.

OBJECTIVES

This Action Plan is intended to:
- Maximise the amount of significant fabric conserved.
- Protect adjacent retained in-situ elements from damage.
- Facilitate, where appropriate, the labelling, removal, storage, conservation and re-installation of specific elements of significant fabric.
- Maximise recycling of salvaged heritage materials.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The Industrial Heritage Technology items need to be tabulated using item descriptions and numbers. The actions required will be listed next to each individual item.

GENERIC METHODOLOGY

Work which includes care and protection of fabric and review of methods and approach is to be carried out to the satisfaction of and with approval and/or as instructed by the Heritage Conservation Architect (HCA) and the Design Architect (DA).

All removed and / or relocated fabric is to be minimal and is to be identified and carefully salvaged for reuse, storage or removal as instructed by and to the satisfaction and approval of the HCA and the DA.

Conserve all early signage and identification as approved and directed by the HCA and DA.

STRATEGY

PROTECTION OF ADJOINING FABRIC

- Where parts of adjoining structures are exposed during the works and are subject to weather or other damage, these parts are to be suitably protected at all times during the works.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.

SALVAGED ITEMS

1. All material deemed significant either in the CMP or by the HCA is to be salvaged in accordance with the action plan.
2. All elements salvaged are to be handled and treated during the process with care, to prevent any further mechanical, water, termite or fungal damage.
3. Stripping of lead based paint for environmental reasons is permitted.
4. Salvage is to be completed in a manner to minimise damage to salvaged material.
5. The methods of salvage are to be prepared in conjunction with the proposed demolisher and submitted prior to commencement of the works.
6. Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
7. Where the existing fabric is to be reused in situ or in another location and is to be used as a working platform, the fabric is to be protected during the works.

DOCUMENTATION

1. Items must have a Treatment Proposal, in accordance with the Conservation Management Plan, prepared before removal and storage can take place.
2. If items are to be stored off site the storage facility must be approved by the HCA.
3. Items or parts of items identified for storage must be fully documented before removal and the information entered into the CMS (Conservation Management System).
4. All items are to be labelled with the following information:
    - the number of the item
    - the name of the item
    - the site of origin
    - the location within the site of origin
    - the date of removal

STORAGE

The place of storage must be inspected by the HCA prior to transportation of items. Optimum storage conditions must be guaranteed for items in storage:

- The areas must be under cover and offer dry conditions and not be kept in direct sunlight.
- All items should be covered with cover sheets that allow free movement of air.
- Pest controls should be in place.
- All items should be supported off the floor.
- Paper and textile items require specialist storage facilities.
- Items are to be stored for their own safety and care.
- Appropriate security measures must be provided for all storage areas used for the storage of items identified in the CMS.
- A regular inspection of each item should take place with the conditions entered into the CMS database and the Item Tracking List.

TRANSPORTATION

1. Transportation to storage facilities is to be completed in a manner which will minimise damage to salvaged material.
2. The HCA is to be notified of the method and day of transportation.
3. All items are to be suitably packaged and protected for transportation.
4. Items should not be considered for removal before approval is gained from the HCA.

Sub Action Plans Include:

5A Conservation of Industrial Fabric
5B Conservation Storage of Industrial Fabric
5C Permanent Removal of Industrial Fabric

The following major industrial items and artefacts have been identified in the *'Walsh Bay Precinct Heritage Technology Conservation Management Plan', November 1999, by Tropman & Tropman Architects.*

Item No.	Item Name	Site	Building Proposal	Item Proposal	Action Plan Referral	Schedule of Works & Action	Executive Summary
52	Dead House (Ground Floor)	Pier 2/3	Restored and adaptively reused.	Retain in situ and adapt	5A 5C	Check for termites & fumigate if required. Repair and/ or replace defective timberwork and metalwork. Dry clean timber.	This item is of local significance and is to be conserved and adapted into the new building format.
89	Bag Chute	Pier 2/3	Restored and adaptively reused.	Retain in situ and adapt	5A 5C	Check for termites & fumigate if required. Repair and/ or replace defective timberwork and metalwork. Dry clean timber.	This item is of local significance and is to be conserved and adapted into the new building format.
54	Travelling Gantries (Removed)	Pier 2/3	Restored and adaptively reused.	Retain in situ and adapt	5A 5C	Check for termites & fumigate if required. Repair and/ or replace defective timberwork and metalwork. Treat with corrosion inhibitor. Inspect and replace as necessary all anchors, connectors and mountings. Dry clean timber.	This item is of local significance and is to be conserved and adapted into the new building format.
55	Dead House (First Floor)	Pier 2/3	Restored and adaptively reused	Retain in situ and adapt	5A	Check for termites & fumigate if required. Repair and/ or replace defective timberwork and metalwork. Dry clean timber.	The item is of regional significance and is to be conserved and used for interpretation of the bond store.
--	Timber Stairs	Pier 2/3	Restored	Retain in situ	5A	Check for termites & fumigate if required. Repair and/ or replace defective timberwork and metalwork. Dry clean timber.	This item is of local significance and is to be conserved and adapted into the new building format.

Received and Checked by:
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

ACTION PLAN 5A

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase	:	2
Description	:	Heritage Technology, Walsh Bay Art Precinct
Action Plan	:	**5A**
Title	:	**CONSERVATION OF INDUSTRIAL FABRIC**
Revision No	:	1
Date of revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This plan applies to all items of WBAP that have been identified in the Walsh Bay Heritage Technology Conservation Management Plan 1999 and the revised Interpretation Strategy for Movable Heritage Items Pier 2/3 Walsh Bay 2016. It applies to all items that are retained in situ, moved to a new setting on site or to be removed.

For details on the salvage, conservation, storage and removal of the items, refer to Action Plans 5, 5A, 5B and 5C respectively.

OBJECTIVES

This Action Plan is intended to:
- Minimise any further deterioration of the industrial items.
- Maximise the amount of significant fabric conserved.
- Protect adjacent retained elements from damage.
- Facilitate conservation and future installation of significant fabric.
- Stipulate the method of repair and or replacement of specific elements of the fabric consistent with the Conservation Management Plan.
- Maximise re-use of salvaged heritage items.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The Industrial Heritage Technology is tabulated in terms of its principal materials. These have been grouped according to the nature of the actions required to conserve or repair them.

GENERIC METHODOLOGY

Work is to be carried out to the satisfaction and with approval and/or as instructed by the Heritage Conservation Architect (HCA).

Care and protection against damage to the existing fabric is to be taken at all times to the satisfaction and approval of the HCA.

Prior to any works commencing, the methods and approach for care and protection of the existing fabric are to be documented by the Contractor to the satisfaction and approval of the HCA.

All removed and/or relocated fabric is to be identified and carefully salvaged for reuse, storage, or removal as instructed by the HCA. Removal of any existing fabric is to be minimal to the satisfaction and approval of the HCA.

Conserve all early signage and identification as approved and directed by the HCA.

STRATEGY

1. Where the extent of damage may not be immediately obvious (like termite damage) the elements in question should be thoroughly investigated by an appropriate testing method, prior to the scheduling of work.
2. A summary of damaged, unsound or missing items is to be carried out prior to removal of items from the site.
3. All sound material is to be salvaged in accordance with the action plan.
4. All items are to have a Treatment Proposal prepared before any conservation work commences.
5. All Treatment Proposals are to conform to the relevant Government Agencies approvals.
6. If the proposal does not conform to the Government Agencies approval, approval must be obtained before work commences.
7. All work and Treatment Proposals must be documented and entered into the CMS treatment sheet.
8. The treatment proposal will form the specification for work to be undertaken on the item and include a description of materials, chemicals, finishes and the name of the person recommending the treatment.
9. Replacement should occur only when the existing item is causing damage to the surrounding fabric.
10. Replacement sections must be clearly identified by marking the component with W B-2000
11. The CMS is to be implemented to allow for the long-term management and regular inspections of the items.

The following is general advice to be applied to all items (for specific details refer to the Treatment Proposals included in the CMS):

- Replacement should occur only when the original section is unable to be conserved.
- Replacement should be carried out using similar fabric, finishes and profiles as the original.
- Replacement is to occur when the section is missing and is required to maintain the integrity and heritage significance of the item.

BUILDING ELEMENTS

MATERIAL	GENERAL ADVICE	TREATMENT
Iron/steel	Stabilise so as to prevent further corrosion. Replace sections if they are crucial to the interpretation of the item	Corrosion is to be treated with a tannic acid. Iron proposed for an external location in an unpainted condition is to be coated with Shell Ensis or similar oil.
Brass/bronze	Check for bronze disease.	Coat with microcrystalline wax.
Timber	Replace if the section has become so deteriorated that the item's integrity is threatened, or where the section will cause damage to the item if not replaced.	Dry clean all sections. Check for termites and fumigate if required.
Electrical	Electrical items must not to be immersed in water or stored in damp conditions. Asbestos components may be removed by qualified personnel. Prepare for interpretation purposes.	SLS for interpretation purposes.
Hydraulic (water)	Drain all pipes. Allow for all pipes to be open to allow for the free flow of air. Prepare for interpretation purposes.	External unpainted iron is to be coated with Shell Ensis oil or similar. To be treated with a tannic acid.
Glass	To be salvaged and removed from site. RI where possible.	Replace all broken sections with new glass. RI where possible. DIS broken glass.
Paper	To be stored in archival storage conditions. Make facsimile.	Consult a conservator.
Textiles	To be stored in archival storage conditions.	Consult a conservator
Leather	Replace all missing or torn sections.	Consult a conservator. To be cleaned with a leather soap.

Received and Checked By:
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

ACTION PLAN 5B

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase	:	2
Description	:	Heritage Technology, Walsh Bay Art Precinct
Action Plan	:	**5B**
Title	:	**CONSERVATION & STORAGE OF INDUSTRIAL FABRIC**
Revision No	:	1
Date of revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This plan applies to all items of WBAP that have been identified in the Walsh Bay Heritage Technology Conservation Management Plan 1999 and the revised Interpretation Strategy for Movable Heritage Items Pier 2/3 Walsh Bay 2016. It applies to all items that are retained in situ, moved to a new setting on site or to be removed.

For details on the salvage, conservation, storage and removal of the items, refer to Action Plans 5, 5A, 5B and 5C respectively.

OBJECTIVES

This Action Plan is intended to:

- Minimise any further deterioration of industrial items.
- Maximise the amount of significant fabric conserved.
- Protect adjacent retained elements from damage.
- Facilitate, where appropriate, the labelling, removal, storage, conservation and re-installation of specific elements of significant fabric.
- Stipulate the method of repair and or replacement of specific elements of the fabric consistent with the Conservation Management Plan of the building.
- Maximise reuse of salvaged heritage items.
- Protect archaeological information and artefacts.
- To provide the best temporary conditions for storage of items during the construction phase of the redevelopment of Walsh Bay.

REPORT STRUCTURE

The procedures and practices for the conservation & storage of the industrial Heritage Technology is described in terms of the principal requirements for storage and care.

GENERIC METHODOLOGY

Work is to be carried out to the satisfaction and with approval and/or as instructed by the Heritage Conservation Architect (HCA).

Care and protection against damage to the existing fabric is to be taken at all times to the satisfaction and approval of the HCA.

Prior to any works commencing, the methods and approach for care and protection of the existing fabric are to be documented by the Contractor to the satisfaction and approval of the HCA.

All removed and/or relocated fabric is to be identified and carefully salvaged for reuse, storage, or removal as instructed by the HCA. Removal of any existing fabric is to be minimal to the satisfaction and approval of the HCA.

Conserve all early signage and identification as approved and directed by the HCA.

STRATEGY

1. All elements stored are to be handled and treated during the process to prevent any further mechanical, water, termite or fungal damage.
2. All sound material is to be stored in accordance with the action plan.
3. Transportation to storage facilities is to be completed in a manner which will minimise damage to salvaged material.
4. The method of transportation is to be prepared in conjunction with the proposed contractor and submitted prior to removal.
5. Structural elements are to be disconnected, handled and recovered in sections, lengths and sizes suitable for their planned reuse in the project.
6. Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
7. All items are to be suitably packaged and protected for transportation
8. Items should not be considered for removal before approval for work to commence in that phase or site is gained from the HCA.
9. Items must have a Treatment Proposal, in accordance with the Conservation Management Plan, prepared before removal and storage can take place.
10. If items are to be stored off site the storage facility must be approved by the HCA
11. Items or parts of items identified for storage must be fully documented before removal and the information entered into the CMS.

All items are to be labelled with the following information:

- the number of the item
- the name of the item
- the site of origin
- the location within the site of origin
- the date of removal

STORAGE CONDITIONS

Optimum storage conditions must be guaranteed for items in storage:

- The areas must be under cover and offer dry conditions and not be kept in direct sunlight.
- All items should be covered with cover sheets that allow free movement of air.
- Pest controls should be in place.
- All items should be supported off the floor.
- Paper and textile items require specialist storage facilities.
- Items are to be stored for their own safety and care.
- Appropriate security measures must be provided for all storage areas used for the storage of items identified in the CMS.
- A regular inspection of each item should take place with the conditions entered into the Inventory database and the Item Tracking List.

Received and Checked by:
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

ACTION PLAN 5C

Walsh Bay Redevelopment
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase	:	2, by Walsh Bay Art Precinct
Description	:	Heritage Technology, Walsh Bay Art Precinct
Action Plan	:	**5C**
Title	:	**PERMANENT REMOVAL OF INDUSTRIAL FABRIC**
Revision No	:	1
Date of revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This plan applies to all items of WBAP that have been identified in the Walsh Bay Heritage Technology Conservation Management Plan 1999 and the revised Interpretation Strategy for Movable Heritage Items Pier 2/3 Walsh Bay 2016. It applies to all items that are retained in situ, moved to a new setting on site or to be removed.

For details on the salvage, conservation, storage and removal of the items, refer to Action Plans 5, 5A, 5B and 5C respectively.

OBJECTIVES

This Action Plan is intended to:

- Secure significant Heritage items for conservation because they are no longer safe in their current location.
- Facilitate the documentation, removal, storage, conservation and re-installation of significant fabric.
- Maximise reuse of salvaged heritage items.
- Protect archaeological information and artefacts.
- Allow for the removal of items identified in the CMS after following this action plan.

REPORT STRUCTURE

The procedures and practices for the permanent removal of industrial fabric are described herein.

GENERIC METHODOLOGY

Work is to be carried out to the satisfaction and with approval and/or as instructed by the Heritage Conservation Architect (HCA).

Care and protection against damage to the existing fabric is to be taken at all times to the satisfaction and approval of the HCA.

Prior to any works commencing, the methods and approach for care and protection of the existing fabric are to be documented by the Contractor to the satisfaction and approval of the HCA.

All removed and/or relocated fabric is to be identified and carefully salvaged for reuse, storage, or removal as instructed by the HCA. Removal of any existing fabric is to be minimal to the satisfaction and approval of the HCA.

Conserve all early signage and identification as approved and directed by the HCA.

STRATEGY

1. All elements salvaged are to be handled and treated during the process to prevent any further mechanical, water, termite or fungal damage.
2. All sound material is to be salvaged in accordance with the action plan.
3. Removal is to be completed in a manner to minimise damage to salvaged material.
4. The method of removal is to be prepared in conjunction with the proposed demolisher and submitted to the HCA prior to removal.
5. Structural elements are to be disconnected, handled and recovered in sections, lengths and sizes suitable for their planned reuse in the project.
6. Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
7. Items identified in the CMS are only to be removed if approved by the HCA and other consent authorities.
8. All alternative possibilities for the retention of the item on site must be assessed and documented by suitably qualified personnel before an item is removed.
9. Items should be considered for interpretation value.
10. Any item that is to be removed must first be offered to a collecting institution nominated by the consent authorities to be accessioned into its collection if accepted.
11. Items or parts of items identified for removal must be fully documented before removal, and the information entered into the CMS.
12. Items that are to be disposed of and have failed to be relocated may be used for the repair and conservation of other items listed in the Inventory.
13. All items to be removed off site must be fully documented in accordance with NSW Heritage Office Guidelines.

AN ITEM MAY BE REMOVED FOR THE FOLLOWING REASONS:

- If it has been identified (and documented after examination) to be of a condition that is dangerous and may cause harm.
- If the condition of the item is diminished to a point where it fails to be of heritage significance.
- If the item has been assessed as having no Heritage Significance.
- If the item has been nominated and approved for removal by the relevant consent authorities and the actions herein have been adhered to.

Received and Checked by:
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

ACTION PLAN 6

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: **Tropman and Tropman Architects**
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**6**
Title	:	**SALVAGE AND STORAGE OF TIMBER PILES**
Revision No	:	1
Date of Revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This plan applies to timber piles at WBAP, including the Pier & Shoreshed, that require salvage as a result of structural rectification and proposed development interventions.

OBJECTIVES

This Action Plan is intended to:
- Maximise the amount of significant metal conserved and retained in situ.
- Protect adjacent retained elements from damage.
- Facilitate, where appropriate, the documenting, labelling, removal, storage, conservation, and re-installation of significant fabric.
- Stipulate the methods by which appropriate documenting, labelling, removal, storage, and conservation of the fabric will best be achieved.
- Maximise recycling of salvaged heritage materials.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The piles are tabulated according to the nature of actions required to salvage and store them.

INVESTIGATION OF EXISTING FABRIC

Where the extent of damage may not be immediately obvious, the elements in question should be thoroughly investigated by an appropriate testing method, prior to the scheduling of work. A summary of damaged, unsound or missing heritage fabric is to be carried out prior to removal from site.

GENERIC METHODOLOGY

Work which includes care and protection of fabric and review of methods and approach is to be carried out to the satisfaction of and with approval and/or as instructed by the Heritage Conservation Architect (HCA) and the Design Architect (DA).

All removed and / or relocated fabric is to be minimal and is to be identified and carefully salvaged for reuse, storage or removal as instructed by and to the satisfaction and approval of the HCA and the DA.

Conserve all early signage and identification as approved and directed by the HCA and DA.

STRATEGY

PROTECTION OF ADJOINING FABRIC

- Where parts of adjoining structures are exposed during the works and are subject to weather or other damage, these parts are to be suitably protected at all times during the works.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.

SALVAGED ITEMS

1. All sound material is to be salvaged in accordance with the action plan.
2. All elements salvaged are to be handled and treated during the process with care, to prevent any further mechanical, water, termite or fungal damage.
3. Stripping of lead based paint for environmental reasons is permitted.
4. Salvage is to be completed in a manner to minimise damage to salvaged material.
5. The methods of salvage are to be prepared in conjunction with the proposed demolisher and submitted prior to commencement of the works.
6. Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
7. Where the existing fabric is to be reused in situ or in another location and is to be used as a working platform, the fabric is to be protected during the works.

BUILDING ELEMENTS

The following actions are to be carried out in respect to the substructural timber piling:

NO.	ELEMENT	CONDITION/LOCATION OF ELEMENT	ACTION
01	Existing Timber Piles	Structurally sound; all areas	• Retain all sound timber piling in outer two rows. Stabilise and conserve. • Retain all sound timber piling below internal deck area, except where removal is necessary for the integration of services and new substructure. • Salvage lable & store removed sections of piling >4m. • Discard lengths <4m.
		Non-structural; all areas	• Retain if intact. Stabilise and conserve. • If pile is structurally required, rectify as required, by replacing with new timber pile. Removed sections of piling >4m to be salvaged labled & stored for reuse or interpretation. • Discard if not intact.
02	Ironmongery attached to piles	All conditions	• Retain in situ all ironmongery attached to piles where possible. • Salvage label & store groups of best intact items of each type for future interpretation. • See also Action Plan 4 – Salvage and storage of metalwork during demolition. • Discard where not intact.

Received and Checked by:
Signature: ……
Company: **Tropman & Tropman Architects**

Date: ……

ACTION PLAN 7

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman & Tropman Architects
55 Lower Fort Street, Sydney 2000

Phase	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**7**
Title	:	**EXCAVATION METHODOLOGY**
Revision No	:	1
Date of revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This plan applies to the whole of the WBAP site.

OBJECTIVES

Where applicable this Action Plan is intended to:
- Maximise the amount of significant fabric conserved.
- Protect adjacent retained elements from damage.
- Facilitate the labelling, removal, storage, conservation and re-installation of significant fabric.
- Stipulate the method of repair and/or replacement of specific elements of the fabric consistent with the Conservation Management Plan.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The excavation is described in general terms across the entire site. This is because the archaeological value of the site is unknown.

STRATEGY

- Investigation of the historical conditions of the site is to be carried out prior to the commencement of excavation in order to establish the nature and probability of archaeological finds.
- Where parts of adjoining structures are exposed during the works and are subject to weather damage, these parts are to be suitably protected.
- Adjoining structures & fabric which are to be retained are to be fully protected at all times during the works.
- Stripping of lead based paint for environmental reasons is permitted.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.
- During the refurbishment process, all elements salvaged are to be handled and treated during the process to prevent any further mechanical, water, termite or fungal damage.
- Demolition is to be completed in a manner to minimise damage to salvaged material.
- The method of excavation is to be prepared in conjunction with the proposed excavation and submitted prior to excavation.
- Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.

BUILDING ELEMENTS

No.	Element	Condition/ Location of element	Action
01	Archaeology	Entire Site.	Record any findings. Excavation methodology to be established & to be monitored by an appropriate conservation specialist. HCA to be notified of commencement of work.
02	Adjacent Structures	Hickson Road Façade.	Consult Structural Engineer on protection and stabilisation of structures without damage to the specified items

Received and Checked by:
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

ACTION PLAN 8

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**8**
Title	:	**DEMOLITION OF SEAWALL METHODOLOGY**
Revision No	:	1
Date of Revision	:	February 21017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This Action Plan applies to any interventions in the Sea Wall at Wharf 2/3 & 4/5, necessary for the adaptation of the subject site & in compliance with uses set out in section 9.0 of the Conservation Management Plan.

OBJECTIVES

This Action Plan is intended to:

- Protect from damage & stabilise where necessary the seawall & adjacent retained elements on the subject, & adjoining sites.
- Maximise the amount of significant fabric conserved and retained in-situ.
- Stipulate the methods by which appropriate removal of fabric will best be achieved. Also to ensure the recording, labelling, storage, and conservation of any fabric which may be revealed during demolition.
- Maximise salvage of any heritage items and technology.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The report tabulates action required for removing fabric.

GENERIC METHODOLOGY

Demolition refers to items/ fabric that are being changed or removed permanently from the site.

Work which includes care and protection of fabric and review of methods and approach is to be carried out to the satisfaction of and with approval and/or as instructed by the Heritage Conservation Architect (HCA) and the Design Architect (DA).

STRATEGY

1. Demolition is to be completed in a manner which will minimise damage to retained material on this site and adjacent sites
2. New structures & services should be sensitively located so as to minimise disturbance to the seawall and adjacent elements.
3. The method of demolition is to be prepared in conjunction with the proposed demolisher and submitted to the HCA prior to demolition.
4. Where parts of adjoining structures become exposed during the works, and are subject to weather damage, these parts are to be suitably protected for the duration of the works.
5. Adjoining structures and fabric are to be retained in-situ and are to be fully protected at all times during the works.
6. In the completed works all external elements are to be suitably protected from the weather and other damage in ways consistent with their original appearance and normal building practice.
7. Structural and architectural elements are to be disconnected, handled and recovered in a manner suitable for their reuse in the project.
8. Where existing fabric is to be used as a working platform it must be suitably protected throughout the works.

BUILDING ELEMENTS

NO.	ELEMENT	CONDITION / LOCATION OF ELEMENT	ACTION
01	All elements of seawall constructed of concrete or precast concrete.	Unsound elements to be removed in whole or part as a result of new work.	Remove from site after recording configuration of seawall construction, stabilise seawall.
		Sound elements to be removed in whole or part as a result of new work.	Salvage label & store representative samples of complete construction types for interpretive purpose. Remainder to be removed from site after recording configuration of seawall construction.
		Sound or unsound elements not affected by new works.	To remain, repair where required.
02	All sandstone blocks forming seawall.	Sound elements to be removed due to new work.	Move to storage for repair of other sections of the seawall after recording configuration of seawall construction.
		Unsound elements to be removed due to new work.	Remove from site after recording configuration of seawall construction.
		Sound or unsound elements not affected by new works.	To remain, repair where required.

Received and Checked by:

Signature: ……

Company: **Tropman & Tropman Architects**

Date: ……

ACTION PLAN 9

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**09**
Title	:	UNDERPINNING OF HICKSON ROAD FACADE
Revision No	:	1
Date of Revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This plan applies to the underpinning of the entire brick & masonry façade of Shoresheds 2/3 - 4/5.

OBJECTIVES

This Action Plan is intended to:
- Maximise the amount of significant fabric conserved and retained in situ.
- Protect adjacent retained elements from damage.
- Facilitate, where appropriate, the labelling, removal, storage, conservation, and re-installation of specific elements of significant fabric.
- Stipulate the method of repair and or replacement of specific elements of the fabric consistent with the conservation of the building (note that conservation of the place in this case may include some adaptation of particular elements or areas).
- Maximise recycling of salvaged heritage materials.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The facade is described in terms of its principal elements. These have been grouped according to the nature of actions required to preserve, retain in situ, repair or remove them.

INVESTIGATION OF EXISTING FABRIC

Where the extent of damage may not be immediately obvious, the elements in question should be thoroughly investigated by an appropriate testing method, prior to the scheduling of work.

A summary of damaged, unsound or missing heritage fabric is to be carried out prior to removal from site.

GENERIC METHODOLOGY

Work, which includes care & protection of fabric, review of methods & approach, is to be carried out to the satisfaction and with approval and/or as instructed by the Heritage Conservation Architect (HCA) & the Design Architect (DA).

All removed and/or relocated fabric is to be identified and carefully salvaged for reuse, storage, or removal as instructed by & to the satisfaction and approval of the HCA & DA.

Conserve all early signage and identification as approved and directed by the HCA.

STRATEGY

PROTECTION OF REMAINING OR ADJOINING FABRIC

- Where parts of adjoining structures are exposed during the works and are subject to weather damage, these parts are to be suitably protected.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.

SALVAGED ITEMS

- All sound material is to be salvaged in accordance with the action plan in a manner which will minimise damage to salvaged material.
- All elements salvaged are to be handled & treated with care during the process to prevent any further mechanical, water, termite or fungal damage
- Stripping of lead based paints for environmental reasons is permitted
- The methods of salvage are to be prepared in conjunction with the proposed demolisher and submitted prior to the works.
- Structural elements are to be disconnected, handled and recovered in sections, lengths and sizes suitable for their planned reuse in the project.
- Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
- Where the existing fabric is to be reused in situ or in another location and is to be used as a working platform, the fabric is to be protected during the works.

REPAIR AND REPLACEMENT

i. Repair methods are to include maintenance, patching, strapping, encapsulation, patch welding, caulking, splicing and regalvanising.
ii. Adaptation methods include introduction of supplementary elements, services, fixtures, bracing and replacement.
iii. The main renewal method to be used is the replacement of elements/fixtures to match existing in appearance and function.
iv. All repair works to match existing, employing traditional construction methods wherever possible, including fixings.
v. Reuse existing fabric to fullest extent possible for all conservation, repair and replacement work as approved and instructed by the HCA & DA.

vi. All repairs, adaptations and new work to be identified with appropriate date stamp as approved and instructed by the HCA & DA.

vii. Any new structural, system required, or works other than replacement of existing to match existing, should be identifiable as being distinct from the existing & part of new works. It is to have minimal connections to & intervention with existing fabric as approved by the HCA & DA. Samples of fabric and full size conservation techniques and construction systems are to be satisfactorily provided as required by the HCA & DA before proceeding with works.

BUILDING ELEMENTS

NO.	ELEMENT	CONDITION / LOCATION OF ELEMENT	ACTION
01	Concrete foundation to wall having timber piles under.	Where found under Hickson Road façade to Shoreshed 2/3 and in sound or unsound condition.	• Concrete foundations and timber piles under to remain. • Locate and protect existing services. • Where excavation is required, refer to action plan 07. • Protect brick façade and joinery from damage during erection of structural steel support and jet grouting. Install structural steel in a manner to cause minimum damage to fabric. Penetrations in sandstone are not acceptable. • Jet grout under concrete foundation and around timber piles to provide new support to wall above. • Check concrete foundation is sound. Repair where necessary in accordance with structural engineers details.
02	Concrete foundation wall being founded on rock.	Where found under Hickson Road façade to Shoreshed 2/3 in sound and unsound condition.	• Concrete foundation to remain in place. • Locate and protect existing services. • Where excavation is required, refer to action plan 07. • Protect brick façade and joinery from damage during erection of structural steel support and jet grouting. Install structural steel in a manner to cause minimum damage to fabric. Penetrations in sandstone are not acceptable. • Check concrete foundation is sound. Repair where necessary in accordance with structural engineers requirements.
03	Brick & stone façade wall.	Full length of Shoreshed 2/3 including returns.	• Full length of Hickson Road brick & stone façade to be retained and repaired. • Protect brick & stone façade and joinery from damage during erection of structural steel support and jet grouting. Penetrations in sandstone are not acceptable.

			• Support façade with structural steel to engineers' details and approval of heritage consultant prior to demolition. Install structural steel in a manner to cause minimum damage to fabric. • Repairs to façade brickwork and windows – refer action plans No. 14 and 15.

Received and Checked by:

Signature: ……

Company: **Tropman & Tropman Architects**

Date: ……

ACTION PLAN 10

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant **Tropman and Tropman Architects**
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**10**
Title	:	**REPAIR AND REPLACEMENT OF WHARF SUBSTRUCTURE AND PILES**
Revision No	:	1
Date of Revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This plan applies to the substructural areas of WBAP, including Shoresheds 2/3-4/5.

OBJECTIVES

This Action Plan is intended to:

- Maximise the amount of significant fabric conserved and retained in situ.
- Protect adjacent retained elements from damage.
- Stipulate the method of repair and or replacement of specific elements of the fabric consistent with the conservation of the building (note that conservation of the place in this case may include some adaptation of particular elements or areas).
- Maximise recycling of salvaged heritage materials.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The wharf substructure and piles are tabulated in terms of their principal elements. These have been grouped according to the nature of actions required to preserve, retain in situ, repair or remove them.

INVESTIGATION OF EXISTING FABRIC

Where the extent of damage may not be immediately obvious (e.g. such as termite damage to the core of large section hardwood columns or rot damage), the elements in question should be thoroughly investigated by an appropriate testing method, prior to the scheduling of work.

A summary of damaged, unsound or missing heritage fabric is to be carried out prior to removal from site.

GENERIC METHODOLOGY

Work, which includes care & protection of fabric, review of methods & approach, is to be carried out to the satisfaction and with approval and/or as instructed by the Heritage Conservation Architect (HCA) & the Design Architect (DA).

All removed and/or relocated fabric is to be identified and carefully salvaged for reuse, storage, or removal as instructed by & to the satisfaction and approval of the HCA & DA.

Conserve all early signage and identification as approved and directed by the HCA.

STRATEGY

PROTECTION OF REMAINING OR ADJOINING FABRIC

- Where parts of adjoining structures are exposed during the works and are subject to weather damage, these parts are to be suitably protected.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.

SALVAGED ITEMS

- All sound material is to be salvaged in accordance with the action plan in a manner which will minimise damage to salvaged material.
- All elements salvaged are to be handled & treated with care during the process to prevent any further mechanical, water, termite or fungal damage
- Stripping of lead based paints for environmental reasons is permitted
- The methods of salvage are to be prepared in conjunction with the proposed demolisher and submitted prior to the works.
- Structural elements are to be disconnected, handled and recovered in sections, lengths and sizes suitable for their planned reuse in the project.
- Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
- Where the existing fabric is to be reused in situ or in another location and is to be used as a working platform, the fabric is to be protected during the works.

REPAIR AND REPLACEMENT

i. Repair methods are to include maintenance, patching, strapping, encapsulation, patch welding, caulking, splicing and regalvanising.
ii. Adaptation methods include introduction of supplementary elements, services, fixtures, bracing and replacement.

iii. The main renewal method to be used is the replacement of elements/fixtures to match existing in appearance and function.

iv. All repair works to match existing, employing traditional construction methods wherever possible, including fixings.

v. Reuse existing fabric to fullest extent possible for all conservation, repair and replacement work as approved and instructed by the HCA.

vi. All repairs, adaptations and new work to be identified with appropriate date stamp as approved and instructed by the HCA.

vii. Any new structural system required, or works other than replacement of existing to match existing, should be identifiable as being distinct from the existing & part of new works. It is to have minimal connections to & intervention with existing fabric as approved by the HCA. Samples of fabric and full size conservation techniques and construction systems are to be satisfactorily provided as required by the HCA before proceeding with works.

BUILDING ELEMENTS

NO.	ELEMENT	CONDITION/ LOCATION OF ELEMENT	ACTION
01	Historical Recording	All areas; all conditions	• Record with photographs and drawings before and during the work
02	Piles - General	Piling layout	• Retention of existing piling layout with both structural and non-structural timber piles.
03	External piles (outer two rows of piling) including Raking Piles	All conditions	• Retain, stabilise and conserve all sound timber piles. • Replace with new timber piles to match existing where required
04	Internal piles including Raking Piles	Structural	• Timber piles required structurally are to be rectified as required or new steel piles added to sustain design loads. • Salvage sound piles where removal is required for insertion of services. Discard lengths <4m, keeping sound timber only.

		Non structural	• Retain and stabilise where sound or substantially intact. • Salvage lengths >4m for re-use. • Discard lengths <4m.
06	Headstocks	All conditions	• Retain all sound existing headstocks where possible – stabilise and conserve. • Replace or repair headstocks with termite or rot damage as required.
08	Decking/Girders	All Areas	• Retain all timber girders. The girders are to be stabilised and conserved. Replace or renew girders with termite or rot damage as required. • Repair/ replace existing Concrete apron as necessary • All penetrations in Deck are to be minimal and neat
09	Fenders/Fender Piles	All areas	• Repair or replace according to original layout.
10	Walings	All areas	• Repair or replace according to existing layout.
11	Edge Baulks	All areas	• Repair or replace according to existing layout.
12	Special Items: existing gantry crane rail, early ironmongery (including iron spikes, straps and fixings, and cast iron bollards, ladders and early identification	All areas	• Stabilise and conserve in situ, or • Remove, repair and reinstall in original locations, or • If attached to elements being permanently removed - repair, & relocate.

Received and Checked By:
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

ACTION PLAN 11

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant **Tropman and Tropman Architects**
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**11**
Title	:	**REPAIR OF WHARF SUPERSTRUCTURE INCLUDING STRUCTURAL TIMBERS, METALWORK, CLADDING AND ROOF**
Revision No	:	1
Date of Revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This plan applies to all the superstructure of WBAP including structural timbers, metalwork, cladding and joinery, and roof.

OBJECTIVES

This Action Plan is intended to:

- Maximise the amount of significant fabric conserved and retained in situ.
- Protect adjacent retained elements from damage.
- Facilitate, where appropriate, the labelling, removal, storage, conservation, and re-installation of specific elements of significant fabric.
- Stipulate the method of repair and or replacement of specific elements of the fabric consistent with the conservation of the building (note that conservation of the place in this case may include some adaptation of particular elements or areas).
- Maximise recycling of salvaged heritage materials.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The wharf superstructure is described in terms of its principal elements. These have been grouped according to the nature of actions required to preserve, retain in situ, repair or remove them.

INVESTIGATION OF EXISTING FABRIC

Where the extent of damage may not be immediately obvious (e.g. such as termite damage to the core of large section hardwood columns or rot damage), the elements in question should be thoroughly investigated by an appropriate testing method, prior to the scheduling of work.

A summary of damaged, unsound or missing heritage fabric is to be carried out prior to removal from site.

GENERIC METHODOLOGY

Work, which includes care & protection of fabric, review of methods & approach, is to be carried out to the satisfaction and with approval and/or as instructed by the Heritage Conservation Architect (HCA) & the Design Architect (DA).

All removed and/or relocated fabric is to be identified and carefully salvaged for reuse, storage, or removal as instructed by & to the satisfaction and approval of the HCA & DA.

Conserve all early signage and identification as approved and directed by the HCA.

STRATEGY

PROTECTION OF REMAINING OR ADJOINING FABRIC

- Where parts of adjoining structures are exposed during the works and are subject to weather damage, these parts are to be suitably protected.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.

SALVAGED ITEMS

- All sound material is to be salvaged in accordance with the action plan in a manner which will minimise damage to salvaged material.
- All elements salvaged are to be handled & treated with care during the process to prevent any further mechanical, water, termite or fungal damage
- Stripping of lead based paints for environmental reasons is permitted
- The methods of salvage are to be prepared in conjunction with the proposed demolisher and submitted prior to the works.
- Structural elements are to be disconnected, handled and recovered in sections, lengths and sizes suitable for their planned reuse in the project.
- Assemblies and architectural elements are to be disconnected, handled and recovered in whole elements.
- Where the existing fabric is to be reused in situ or in another location and is to be used as a working platform, the fabric is to be protected during the works.

REPAIR AND REPLACEMENT

i. Repair methods are to include maintenance, patching, strapping, encapsulation, patch welding, caulking, splicing and regalvanising.
ii. Adaptation methods include introduction of supplementary elements, services, fixtures, bracing and replacement.
iii. The main renewal method to be used is the replacement of elements/fixtures to match existing in appearance and function.
iv. All repair works to match existing, employing traditional construction methods wherever possible, including fixings.
v. Reuse existing fabric to fullest extent possible for all conservation, repair and replacement work as approved and instructed by the HCA & DA.
vi. All repairs, adaptations and new work to be identified with appropriate date stamp as approved and instructed by the HCA & DA.
vii. Any new structural, system required, or works other than replacement of existing to match existing, should be identifiable as being distinct from the existing & part of new works. It is to have minimal connections to & intervention with existing fabric as approved by the HCA & DA. Samples of fabric and full size conservation techniques and construction systems are to be satisfactorily provided as required by the HCA & DA before proceeding with works.

BUILDING ELEMENTS

No.	ELEMENT	CONDITION/ LOCATION OF ELEMENT	ACTION
01	Ladders from water to Apron	Where retained in situ	Repair consistent with original details
		Where removed during substructure works	Salvage label & store, repair consistent with original details, reinstate
02	Timber kerbs to outer apron edge	Some (to be determined on site) of one element / individual piece affected by substantial surface splitting, termite or fungal damage.	Retain in situ where possible, otherwise Salvage label & store, then repair & reinstall
		Most (to be determined on site) of one element / individual piece affected by substantial surface splitting, termite or fungal damage.	Salvage label & store, then repair & reinstall Or Reconstruct
03	Ground Floor Columns First Floor Columns Joists, Bearers, Studs, Rails and Noggings Timber components of roof trusses, wall braces, top and bottom plates, Roof Purlins & Cargo Door Frames	Sufficient strength.	Retain in situ & repair where possible, otherwise Salvage label & store, then repair & reinstall.

		Insufficient strength	Retain in situ, strengthen by attaching steel plates or other approved methods
		Sound but removed as a result of new works	Salvage label & store; retain whole lengths and any sound sections from damaged areas. Re-use for the repair of similar elements, Reinstall as appropriate.
		Surface damage	Retain & repair in situ
		Substantial termite damage to some of the element	Retain & repair in situ, or Salvage label & store; retain whole lengths and any sound sections from damaged areas. Re-use for the repairs of areas retained in situ. Reconstruct
		Substantial termite damage to most of the element	Retain in situ, fill cavity with epoxy & stabilise.
		Substantial damage due to mechanical or fungal damage	Retain in situ, splice repair damaged area Or Reconstruct
04	Timber Plinth (ground level) Weatherboards and cappings Skirtings Fascias and eaves soffits Sill and door plate moulds Panel Moulds Timber floorboards Timber balustrades Boarded soffit linings Boarded interior wall claddings	Sound	Retain in situ timber plinth Retain in situ all other items where possible, Otherwise Salvage label & store, & reinstall,
		Sound but removed as a result of new works	Salvage label & store, retain whole lengths and any sound sections from damaged areas. Re-use for the repair of similar elements.
		Most (to be determined on site) of the length of a component has termite,	Salvage label & store, Repair or Reconstruct Retain any sound

		fungal or mechanical damage.	sections from damaged areas. Re-use for the repair of similar elements.
		Some (to be determined on site) of the length of a component has termite, fungal or mechanical damage.	Salvage label & store, patch and/or splice repair, Reinstall
05	Timber cover battens Mouldings securing fibre cement panels and galvanised corrugated steel panels	Sound	Retain in situ where possible. Or Salvage label & store, & Reinstall
		Unsound	Salvage label & store, Reconstruct or repair, Reinstall
06	Window and door frames including jambs, sills and heads and transoms. Door mullions	Sound	Salvage label & store, Repair & Reinstall
		Sound but removed as a result of new works	Salvage label & store where required for potential reuse in the project and retain any whole lengths and any sound sections >800mm in length from damaged areas. Re-use for the repair of similar elements, Reinstall
		Most (to be determined on site) of the length of a component has termite, fungal or mechanical damage.	Salvage label & store, RC or RME (PS) Retain any sound sections from damaged areas where required for potential reuse in the project. Reuse for the repair of similar elements, Reinstall
		Some (to be determined on site) of the length of a component has termite, fungal or mechanical damage.	Salvage label & store, Reconstruct and/or splice repair, Reinstall
07	Window Sashes Louvred Sashes	All sashes (treat individual sash components as follows below)	Salvage label & store, Repair or Reconstruct, Reinstall
		Sound but not required as a result of new works.	Salvage label & store. Re-use for the

			replacement of similar elements elsewhere in the fabric.
		Most of the length (to be determined on site) of a component has termite, fungal or mechanical damage.	Repair or Reconstruct, Reinstall Retain any sound component sections. Re-use for the repair of similar components.
		Some of the length (to be determined on site) of a component has termite, fungal or mechanical damage.	Patch and/or splice repair or Reconstruct, Reinstall
08	Framed and sheeted door leafs.	All doors (treat individual door components as follows below).	Salvage label & store, Repair or Reconstruct, Reinstall
		Sound.	Retain in situ or if not operating well, remove repair & reinstall
		Sound but not required as a result of new works.	Salvage label & store. Re-use for the replacement of similar components.
		Most of the length (to be determined on site) of a component has termite, fungal or mechanical damage.	Repair or Reconstruct, Retain any sound component from damaged areas. Re-use for the repair of similar components.
		Some of the length (to be determined on site) of a component has termite, fungal or mechanical damage.	Patch and/or splice repair. Reinstall
09	Window and door hardware, Steel door tracks and runners for top hung sliding doors.	Sound.	Items fixed to fabric: retain on fabric & repair where appropriate or, Remove to workshop, rust treat, make operable where possible. Reinstall
		Sound but not required as a result of new works	Retain in situ for interpretation Or where interfering with new works. Relocate to appropriate location or Re-use for the

			replacement of similar elements elsewhere in the fabric.
		Not sound or repairable	Discard
10	Metal components of timber roof trusses including ties and stiffening plates External Knee Braces Internal Knee Braces Internal Knee Brace Angles Strong Back Trusses	Sufficient strength	Retain in situ
		Insufficient strength	Retain in situ, strengthen by attaching steel plates or other approved methods.
		Surface rust damage	Rust treat
		Substantial damage to most of the element.	Discard
		Substantial damage to some of the element.	Retain samples
		Minor damage	Retain in situ & stabilise.
11	Fibre cement panels	Sound.	Discard
		Sound but not required as a result of new works.	Discard
		Cracked or otherwise damaged.	Discard
12	Corrugated iron external cladding	Sound panels including those with minor rusting or mechanical damage.	Retain in situ & patch
		Panels with substantial rusting or mechanical damage.	Replace with matching profile in galvanised corrugated steel. Fixing method and centres to match original detail.
13	Metal gutters, flashings, downpipes. Metal cover strips to window mullions.	All areas except where removed to allow adaptation.	Retain in situ where possible or Reconstruct or Repair & reinstall

Received and Checked By:

Signature: ……
Company: **Tropman & Tropman Architects**

Date: ……

ACTION PLAN 12

Walsh Bay Art Precinct
Conservation Action Plan

Heritage Consultant: Tropman and Tropman Architects
55 Lower Fort Street, Sydney NSW 2000

Phase:	:	2
Description	:	Walsh Bay Art Precinct
Action Plan	:	**12**
Title	:	**REPAIR OF MASONRY WALLS**
Revision No	:	1
Date of Revision	:	February 2017

INTRODUCTION

This Action Plan has been prepared and appended to the Conservation Management Plan and the Heritage Impact Assessment for Wharves 2/3 and 4/5, Walsh Bay, to outline the actions necessary to fulfil its policies and recommendations.

APPLICABILITY

This Action Plan applies to Masonry at WBAP that requires salvage and repair as a result of structural rectification and proposed development interventions.

OBJECTIVES

This Action Plan is intended to:
- Maximise the amount of significant fabric conserved and retained in situ.
- Protect adjacent retained elements from damage.
- Facilitate, where appropriate, the documenting, labelling, removal, storage, conservation, and re-installation of significant fabric.
- Stipulate the methods by which appropriate documenting, labelling, removal, storage, and conservation of the fabric will best be achieved.
- Maximise recycling of salvaged heritage materials.
- Protect archaeological information and artefacts.

REPORT STRUCTURE

The structural masonry is tabulated in terms of its principal elements. These have been grouped according to the nature of actions required to salvage and store them.

INVESTIGATION OF EXISTING FABRIC

Where the extent of damage may not be immediately obvious, the elements in question should be thoroughly investigated by an appropriate testing method, prior to the scheduling of work. A summary of damaged, unsound or missing heritage fabric is to be carried out prior to removal from site.

GENERIC METHODOLOGY

Work which includes care and protection of fabric and review of methods and approach is to be carried out to the satisfaction of and with approval and/or as instructed by the Heritage Conservation Architect (HCA) and the Design Architect (DA).

All removed and / or relocated fabric is to be minimal and is to be identified and carefully salvaged for reuse, storage or removal as instructed by and to the satisfaction and approval of the HCA and the DA.

Conserve all early signage and identification as approved and directed by the HCA and DA.

STRATEGY

PROTECTION OF ADJOINING FABRIC

- Where parts of adjoining structures are exposed during the works and are subject to weather or other damage, these parts are to be suitably protected at all times during the works.
- In the completed works, all external elements are to be protected from the weather and other damage in ways consistent with their original appearance and normal building practice.

REPAIRED ITEMS

1. All significant damaged material is to be repaired in accordance with the action plan.
2. All repairs are to be sensitive, to prevent any further mechanical, water or fungal damage.
3. Stripping of lead based paint for environmental reasons is permitted.
4. Repairs are to be completed in a manner which will minimise damage to salvaged material.
5. Repairs are only as necessary to stabilise or complete fabric. Generally repairs should aim to retain the patina of heritage fabric. New fabric should be clearly distinguished from the existing
6. The methods of repair are to be prepared in conjunction with the HCA and submitted prior to commencement of the works.
7. Where the existing fabric is to be reused in situ or in another location and is to be used as a working platform, the fabric is to be protected during the works.

DOCUMENTATION

1. Heritage Technology Items must have a Treatment Proposal, in accordance with the Conservation Management Plan, prepared before repairs can take place.
2. If items are to be repaired off site the repairer must be approved by the HCA
3. Items or parts of items identified for off site repair must be fully documented before removal and the information entered into the CMS (Conservation Management System).
4. All items are to be labelled with the following information:
    - the number of the item
    - the name of the item
    - the site of origin
    - the location within the site of origin
    - the date of removal

TRANSPORTATION

1. Transportation to repair facilities is to be completed in a manner which will minimise damage to salvaged material.
2. The HCA is to be notified of the method and day of transportation.
3. All items are to be suitably packaged and protected for transportation
4. Items should not be considered for removal before approval is gained from the HCA.

BUILDING ELEMENTS

NO.	ELEMENT	CONDITION/ LOCATION OF ELEMENT	ACTION
01	Historical Recording	All areas; all conditions	Record with photographs and drawings before and during salvage or removal
02	Hazardous materials	All areas, refer to Hazardous Materials Survey; all conditions	Remove all the hazardous materials in the manner described in the Hazardous Materials Survey and prior to commencement of demolition. Ensure all heritage fabric remains intact.
03	Face & carved stonework including cornices, parapet cappings, base courses and sills	All parapet cappings, string course and cornice wider than 150mm	Provide flashing.
		Sound	Retain in –situ. Repoint where necessary to match sound original joints
		Sound but demolished as a result of the new works	Salvage label and store where required for potential re-use in the project.
		Some of the element (to be determined on site) is damaged.	Repair in situ. Repoint to match existing joints
		Most of the element (to be determined on site) is damaged	Where sufficient thickness present, reface to a depth of 100mm. Repoint to match sound existing joints, Or Replace to match existing.

05	Face Brickwork	Sound	Repair in situ. Repoint to match sound existing joints. Remove intrusive surface cladding or render as required for new work.	
		Sound but demolished as a result of new works	Salvage, label and store where required for potential reuse in the project	
		Unsound	Replace to match existing. Match brick rod, bond & joints of existing brickwork.	
		Localised Damage	Patch masonry	
06	Concrete and Render including cornices, parapet cappings, base courses and sills	All cappings, string course & cornice wider than 150mm	Provide flashing	
		Sound	Retain in-situ . Repoint to match existing	
		Sound but demolished as a result of the new works	Discard	
07	Masonry door & window sills & lintels	Sound	Retain in-situ . Repoint to match existing	
		Sound but removed as a result of the new works	Salvage, label and store where required for potential reuse in the project.	
		Sufficient strength but with water or mechanical damage which does not compromise strength	Retain in-situ and fill cavities with plastic material, or patch repair damaged area. Repoint where necessary to match sound existing.	
		Insufficient strength but with no damage	Strengthen by attaching concealed steel plates or channels or by other approved methods. Repoint to match sound existing	
		Insufficient strength due to mechanical or water damage	Limited damage	Where possible strengthen by concealed steel plates or channels or by other approved methods. Repoint to match sound existing
			Extensive damage	Discard and replace to match existing
			Visually prominent	Discard and replace to match existing
			Visually recessive	Supplement with reinforcing to support loads & repoint to match
08	Steel lintels, beams & columns See Action Plan17	Sound	Retain in-situ . Rust treat	
		Sound but removed as a result of the new works	Salvage, label and store where required for potential reuse in the project.	
		Sufficient strength but with water or mechanical damage which does not compromise strength	Retain in-situ, rust treat, and fill cavities with plastic material, or patch repair damaged area.	

		Insufficient strength but with no damage	Strengthen by attaching concealed steel plates or channels or by other approved methods. Rust treat	
		Insufficient strength due to mechanical or water damage	Limited damage	Where possible strengthen by concealed steel plates or channels or by other approved methods. Rust treat
			Extensive damage	Discard and replace to match existing
			Visually prominent	Rust treat & salvage label and store for reuse in the project
			Visually recessive	Supplement with new steel elements to support load
09	Parapet stepped and raking flashings	All conditions	Retain in-situ. If new are required install without damaging or removing existing	

Received and Checked by:
Signature: ……
Company: **Tropman & Tropman Architects**
Date: ……

TROPMAN & TROPMAN ARCHITECTS

Architecture Conservation Landscape Interiors Urban Design
55 LOWER FORT STREET SYDNEY NSW 2000 FAX (02) 9251 6109 PHONE (02) 9251 3250

DISPOSAL RECORD: WBAP

TO: WALSH BAY Road and Maritime Services

SHEET NUMBER: **Date**

DATE	DESCRIPTION OF FABRIC/ITEMS TO BE REMOVED	ORIGINAL LOCATION	PROPOSED LOCATION	CHECKED BY	SENT FOR APPROVAL