

**BARANGAROO HEADLAND PARK AND NORTHERN COVE-  
Modification to MAIN WORKS PROJECT APPROVAL  
Re: HARBOUR CONTROL TOWER DEMOLITION  
(Modification 4)**

**RESPONSE TO SUBMISSIONS**



JULY 2014

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## GLOSSARY

<b>The Authority</b>	Barangaroo Delivery Authority
<b>CTMP</b>	Construction Traffic Management Plan
<b>EA Report</b>	Environmental Assessment Report
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act, 1979</i>
<b>EPA</b>	Environment Protection Authority
<b>HCT</b>	Harbour Control Tower
<b>Minister</b>	Minister for Planning
<b>Minister's Terms of Approval</b>	Approval issued on 9 February 2007 by the Minister for the Barangaroo Concept Plan and as modified on 16 February 2009 and 11 November 2009
<b>SOHI</b>	Statement of Heritage Impact
<b>TfNSW</b>	Transport for New South Wales

# 1. Introduction

## 1.1. Purpose

This Response to Submissions report has been prepared by the Barangaroo Delivery Authority (“the Authority”) following the exhibition of the EA Report for the removal of the Harbour Control Tower to respond to issues raised in submissions and the Department of Planning and Environment’s letter 23 June 2014.

The Authority’s response to the key issues raised in submissions is addressed in **Section 2**.

**Section 3** outlines proposed changes to the Statement of Commitments

The appendices supporting this Response to Submissions are:

- Appendix 1** – A detailed response to individual issues raised within the submissions
- Appendix 2** – A detailed Options Assessment of the retention, adaptive reuse and retention of the Tower under a multi- criteria assessment
- Appendix 3** – A revised Statement of Heritage Impact including a detailed assessment of heritage significance.
- Appendix 4** – An updated Demolition Noise and Vibration Report
- Appendix 5** - An updated Air Quality Management report to clarify issues raised by the EPA
- Appendix 6** - A Soil and Water Management Plan referenced in the EA Report but omitted in error.

This Response to Submissions report is to be read in conjunction with the EA Report dated April 2014 and supporting documentation.

## 1.2. Analysis and Decision Rationale

The Authority has examined retention and re-use options for the Tower, and has considered the merit in those options and is confident that matters which mitigate against those options substantially outweigh any merits of retention or reuse. Those matters include:

- the primacy of creating, as far as possible, a natural headland form at Millers Point, which speaks of the pre-European landscape of Port Jackson
- the primacy of remediating, where possible, damage done to the nationally significant heritage urban fabric of Millers Point by the intervention of the Control Tower in 1974
- the single-purpose-specific design of the Control Tower, and the incongruence this would present to adaptive reuses
- the significant costs and liabilities associated with any adaptive reuse of the tower, to the extent that these effectively preclude adaptive reuse scenarios
- the need to structurally and visually alter the Tower in order to achieve public use
- the distinction between interpreting the limited and interim maritime use of the Tower versus interpreting the natural headland form at Millers Point and the two-century heritage of Sydney as an evolving harbour city.

The challenge before the Authority was to assess what role, if any, the Tower could play in the future Barangaroo precinct, and the efficacy of achieving that in the context of a public urban project. This assessment broke down into the following major steps:

- Baseline assessment
- Exploring re-use potential with structure fully retained
- Exploring re-use potential with structure partially retained
- Exploring the opportunities, risks, benefits and losses of conservation (as opposed to adaptive reuse)
- Exploring the opportunities, risks, benefits and losses of demolition.

Details of the key issues identified during the assessment are provided below.

### ***Baseline Assessment***

- Retention of the Tower, even without reuse or modification, would require significant investment to ensure the ongoing integrity of the facility and address public safety issues, which are anticipated to emerge over the next 3 to 5 years.
- The Tower was designed and constructed for a highly specific working purpose. Access to the tower is via a narrow lift, which is classified as a "confined space" Work Health and Safety Act 2011, and was never designed for public use. Further, the lift does not reach all levels of the upper tower, raising access equity issues.

The tower is designed to “flex” in conditions of high wind, creating movement within the tower that is perceptible to users, and which is considered beyond comfortable (i.e., capable of creating fear or alarm).

- To adequately certify an adaptive re-use scheme the whole structure would need to be assessed and brought in line with present day codes of practice and standards and wind and earthquake risks would need to be assessed. Adaptive re-use schemes that add additional area and mass would increase load carrying requirements. In addition, the need to ameliorate wind sheer and increase public access, would likely see the tower shaft significantly altered and widened. The constraints of the constructing of an adaptive re-use include difficult site access, working at heights, cramage, dynamic stability during construction, suitable working platform, etc. The work required to make the Control Tower publicly usable would be costly (estimates range from \$23M - \$34M), difficult to execute, and would significantly alter the appearance of the Tower itself.
- The Tower has no heritage status in either State or local planning instruments. It is not listed as a heritage item within the State Heritage Inventory or within the City of Sydney LEP 2012. It is not located within the Millers Point Heritage area. The Tower was listed on the Sydney Ports Section 170 Register (SHI 4560017), however such listings are agency-specific and the listing lapsed with Sydney Ports Corporation’s decision to transfer the Tower in 2012. The heritage analysis prepared for the Authority notes that the social and working heritage significance of the tower cited in Sydney Ports listing has diminished, following the transfer of its working function to Port Botany – thus severing the nexus between the Tower and the activity of the surrounding harbour.
- The Tower represents a significant intervention into both the built and natural form of the Millers Point area – accurately signifying the rapid and single-minded approach taken to its development, and that of the surrounding cliff cutting and wharfage. A present challenge of the Authority is to remediate, where possible, the damage the Tower rendered to the Millers Point headland, by creating a new, naturalistic headland park form on the Harbour. The Tower is incongruous with the vision of the Barangaroo Headland Park as a contribution to the natural headland estate of Sydney Harbour, and its ability to visually interplay with surrounding green headlands and Goat Island.

#### ***Exploring Re-Use Potential with Structure Fully Retained***

- During 2012/13 the Authority explored artistic, commercial and tourism uses. In all cases the significant access, structural and liability issues identified in the baseline assessment precluded further investigation or interest in adaptive reuse options. Furthermore, commercial leisure operators approached to gauge interest in a leisure/adventure use of the tower advised that they had no interest in pursuing the opportunity, given the physical limitations of the existing tower and the prohibitive costs of modification.

### ***Exploring Re-Use Potential with Structure Partially Retained***

- The Authority also explored alternative reuse scenarios involving partial retention of the tower (to say 50m in height compared to the current 84m) as for an artistic, lighting, sculptural vein, sustainable energy infrastructure opportunities for the top of the Tower.
- A limiting factor on lighting and artistic reuse was that regular night time lighting from the tower would be subject to measures to minimise light shed on the adjacent Sydney Observatory.
- The greened vertical garden and sustainable energy options were explored as reuse options and were determined to provide negligible sustainability benefit in comparison to their capital investment requirements.

### ***Exploring the opportunities, Risks, Benefits and Losses of Conservation***

With adaptive reuse precluded, the next option before the Authority was conservation. The Authority noted:

- the incongruity of the Tower with the emerging natural landscape at Barangaroo Headland Park
- the incongruity of the Tower with the immediate surrounding low lying Millers Point heritage area
- the obsolescence of its design purpose, relocation by Sydney Ports Corporation and ultimate disposal of the asset
- the Tower's lack of State or local heritage status
- the unlikely success or viability of conserving a structure of this nature, with no adaptive purpose, at public expense
- the local assessment of significance of the Tower in the Authority's Heritage Impact Statement and Assessment Reports (Rintoul Associates)
- the capital maintenance costs, annual recurring costs and long term liabilities of retention of the tower for future generations.

### ***Exploring the opportunities, risks, benefits and losses of demolition***

In the context of the renewal of Barangaroo as a new international urban precinct of Sydney, incorporating a significant new natural headland park, demolition of the Tower:

- removes an element that significantly detracts from the achievement of the naturalised headland form, intrinsic to the Barangaroo vision and required by the approved Concept Plan
- removes an ongoing maintenance liability of an ageing piece of redundant infrastructure on future custodians of both the Headland Park and cultural institution
- removes the need for potentially high cost remediation works, including that associated with the ongoing integrity of the facility

- removes an element that significantly detracts from the cultural institution located within the park structure and opens up significant new light opportunities for that space by interpreting the Tower's existing circumference as an oculus
- improves the landmark qualities of other local items of heritage significance such as Moores Wharf, The Hungry Mile, the linear wharf edge from Barnagaroo Central south through King Street Wharf, the Palisade hotel and residential terraces
- increases public amenity of the parkland and cultural institution.

The Authority notes that integration of the Barangaroo precinct with the surrounding Sydney city urban scape is a primary design goal of the renewal. In this sense it is stressed that the removal of the Tower not only facilitates the creation of a natural headland outcome on the Barangaroo site, but also the sensitive integration of that headland park with the surrounding low-scale and fine grain of the Millers Point heritage area.

### **Conclusion**

The single purpose specific design of the Control Tower, and the significant costs and liabilities associated with any adaptive reuse of the tower, severely curtailed any prospective adaptive reuse proposals.

The modifications to the tower required to accommodate a new public purpose would extensively alter its appearance, negating the very reason for goodwill towards adaptive reuse in the first place.

The multi criteria assessment incorporating design excellence, heritage, cost, experience, sustainability and the estimated cost analysis in the table below are reflective of the holistic approach the Authority has undertaken leading to the decision rationale to remove the tower:

<b>Option</b>	<b>Multi Criteria Score</b>	<b>Cumulative 20 Year Undiscounted Costs</b>	<b>20 Year NPV Cost (7% Discount Rate)</b>
Option 1 - Retain 'as is'	200	\$8,213,171	\$5,400,000
Option 2A - Current height and reuse as a Viewing Platform	220	\$31,402,000	\$25,193,000
Option 2B - Reduce height to 50m and provide basic artistic treatment	270	\$9,324,000	\$7,099,000
Option 3 - Removal / demolition	340	\$6,621,888	\$5,783,000

The Authority is confident that the benefits (to Sydney, to the experience of Sydney Harbour, to the experience of the Barangaroo Headland, and to the experience of Millers Point as a nationally significant heritage precinct) by the removal of an object that is incongruous, dominant and intrusive to its immediate natural and built form surrounds, outweigh the benefit of keeping that object of limited interpretive use. Furthermore, the public domain opportunities created through the Barangaroo renewal will provide a more holistic, contextual and educative interpretation.

## 2. Background

On 9 February 2007 the then Minister for Planning approved a Part 3A Concept Plan (MP 06\_0162) that provided for the development of the Barangaroo site. The Concept Plan as approved contemplates an urban structure comprising 11 hectares of foreshore promenade and public domain, street patterns and development blocks. Further on 12 October 2007 the land was rezoned to facilitate its redevelopment via an amendment to Schedule 3 of the State Environmental Planning Policy (Major Development) 2005 ("Major Development SEPP").

The original Concept Plan provided for the retention of the Harbour Control Tower (HCT) with development proposed to occur surrounding the HCT. However, in November 2009 the Concept Plan approval (MP 06\_1062 MOD 3 – Headland Park and Northern Cove) was amended to delete the requirement for retention of the HCT. The modification to the Concept Plan allowed for the demolition of the HCT, subject to a future application.

As currently approved the Main Works approval (MP 10\_0048) for Headland Park and Northern Cove provides that the HCT would remain on site and be operational in accordance with Sydney Ports Corporation's requirements until future modification for demolition or reuse is required. The approval further provides that "any changes to the HCT would be the subject of a separate application".

Accordingly the subject application seeks to modify the existing Main Works approval (MP10\_0048) to provide for demolition and removal of the HCT (Modification 4).

A summary of the proposed works and modification to the Main Works approval includes:

- Demolition of the Operations Room, the tower shaft and services rooms at the base, all in carefully planned and controlled stages
- Termination and removal of remaining building services throughout the HCT and related structures
- Removal of the fire services water supply storage tank at the base of the tower building at RL2.8m
- Removal of three mobile phone telecommunication huts and related services across the existing escarpment face
- Decommissioning and removal of essential services and the passenger lift
- Infill around the existing shaft area leaving an opening for a circular oculus to the future cultural space below
- Construction of an interpretive structure on the site of the HCT surrounding the oculus
- Removal and replacement of the existing slab at ground floor level RL2.8.

Following transfer of the HCT from Sydney Ports Corporation to the Authority in July 2012, a number of options were considered regarding the future uses for the HCT. These options included retention, adaptive reuse and removal. However, the investigations revealed significant limitations to reusing the HCT, including:

- In its current form the structure and access arrangements to the HCT are limited. It does not meet current building code compliance. Significant structural augmentation would be required for any use other than its previous intended use. In this regard it is noted that the structure was specifically designed to a maximum carrying and wind loading capacity limited to the current surface area. The current access arrangements are very limiting and egress does not comply with current code requirements. Augmentation would require a significant investment to bring the structure up to code and would substantially change the external and internal appearance of the HCT.
- Commercial leisure operators approached to gauge private sector investment options indicated no interest in pursuing the opportunity given the physical limitations of the existing tower and the prohibitive costs of modification; and
- Regular night time lighting of the HCT is an issue that would be subject to measures to minimise light pollution and impact on the adjacent Sydney Observatory.
- The purpose built, transitional structure is obsolete with its former function no longer required.
- Retention is not compatible with the Headland Park design vision which is to provide for a “naturalistic form and character”.
- The HCT’s bulk and form is visually intrusive to key harbour vistas and is not in keeping with the intimate small scale character of the local residences in the Millers Point Conservation Area.

Having regard to the above considerations it has been determined that the optimal solution is for the HCT to be demolished and removed from site.

In March 2014, the Environmental Assessment was reviewed by the Department of Planning and Environment and considered acceptable for public display.

The EA Report was exhibited from 30 April to 30 May 2014. In response to the public exhibition, 17 submissions were received from agencies, the public and from the National Trust of Australia (NSW).

In addition, the Department of Planning and Environment in their letter dated 23 June 2014 noted that the submission from the Heritage Division advises that additional advice may be provided by the Heritage Council following its consideration of the heritage significance of the HCT at its meeting on 4 June 2014. No further advice was received from the Heritage Division via the Department of Planning. On 14 July 2014 the Heritage Division notified the Authority of an intention to consider listing the tower on the State Register.

The Department of Planning and Environment requested further information regarding the following:

- Provides further details outlining the various options considered for the retention and adaptive re-use of the HCT. Details should include sound justification for not pursuing these options.
- Provided a copy of the Summary of Structural Assessment Report prepared by Robert Bird Group (2012) (Note: This request was an oversight as it did form Appendix 5 to the Statement of Heritage Impact supplied as part of the Environmental Assessment).
- Amends the Heritage Impact Statement to include detailed and thorough assessment of the significance of the HCT against all relevant criteria for assessing cultural heritage significance.

### 3. Response to Key Issues

Submissions were received from the following government authorities or agencies:

- City of Sydney
- Environment Protection Authority (EPA)
- Transport for NSW
- WorkCover Authority of NSW
- Heritage Division (Office of Environment and Heritage)

One submission was received from the National Trust of Australia (NSW)

Eleven public submissions were received including eight objections. Concerns were primarily in relation to:

- Retention and adaptive re-use of the HCT
- Heritage impacts
- Noise and vibration.

The main issues of alternative options for the tower, heritage significance and interpretation, and the air quality management raised in the submissions are addressed below.

Detailed responses to the issues identified in the submissions are provided in **Appendix 1**.

#### 3.1. Options Assessment

Value Network Pty Ltd (VN) undertook an options assessment of the potential future outcomes of the HCT. A summary of the assessment is provided below and further details of the assessment can be found in their Harbour Control Tower Options Assessment Report (July 2014) found in **Appendix 2**.

The future options identified for the HCT are as follows:

- Option 1: Retain 'as is'
- Option 2A: Retain current height and reuse as a Viewing Platform
- Option 2B: Retain and reduce the height to 50m with artistic treatment
- Option 3: Removal / demolition.

The challenge in the assessment of the options for the HCT is valuing non-market outcomes such as, the non-tangible benefits that might be attached to a cultural reuse

of the tower. Accordingly, the following qualitative and quantitative assessment has been completed as follows:

- *Qualitative:* Each option has been considered on the basis of advantages and disadvantages. A multi criteria assessment was then used to test the advantages and disadvantages of each option based on alignment with the Headland Park Project Objectives.
- *Quantitative:* Option costs are in July 2014 dollars. These costs are presented on an 'order of magnitude' capital basis, as well as the long-term cost of ownership in terms of 5, 10 and 20-year cumulative totals. The Net Present Value (7% discount rate) of the 20 year ownership cost is also provided.

***Qualitative – Multi Criteria Analysis (MCA)***

Multi criteria decision making or multiple criteria decision analysis is a discipline that explicitly considers multiple criteria to be evaluated in making decisions. The MCA criteria developed reflects the Headland Park aims / objectives as well as the wider stakeholder interests. The adopted criteria are:

1	Design Excellence  Recreate a memorable Headland Park that captures the community’s imagination and pride through design excellence
2	Stimulate Patronage  Encourage interest in the parkland and enhance way finding
3	Parkland Experience  Value of the parkland as a space for recreation, expression, celebration, and community
4	Public enjoyment / amenity  Provide parklands that have a range of diverse uses that are enjoyable and accessible
5	Public Safety  Enhance public safety through good management
6	Heritage Asset  Value of the asset as a stand-alone heritage representation

7	Heritage Context Asset as a component of development and evolution over time
8	Long Term Sustainability Improve the sustainability of the parklands and surrounding area of influence
9	Total Asset Management Long term asset ownership and management implications
10	Value for Money Option cost implications

The MCA assessed the Options using the following rating scale: 50: Exceptional, 40: Very Good, 30: Good, 20: Average, 10: Low, 0: Fail.

The assessment identified Option 3 - Removal / demolition as the preferred option by a significant margin. The option priority / ranking of the MCA is summarised in the following table:

Option	Rank	Comment
Option 1 Retain 'as is'	<b>3</b>	MCA Score 200  Rated as 'Fail' for the 'Long Term Sustainability' criteria as the Tower detracts from sustainability outcomes in requiring ongoing O&M investment for no operational benefit  Rated a 'Low' for Design Excellence criteria as the HCT detracts from achievement of the naturalised headland. Also rated as low against the criterion of Public Safety, Total Asset Management as the HCT will require ongoing whole of life investment to ensure the integrity of the structure.
Option 2A Current height and reuse as a Viewing Platform	<b>4</b>	MCA Score 220  Rated 'Fail' for Value for Money criteria as the option cost is prohibitive.  Rated as 'Low' for Heritage Context as the heritage value is diminished by the reuse activity but at the same time retains a structure of sufficient scale to disproportionately outweigh other aspects of the ports overall history

Option	Rank	Comment
Option 2B Reduce height to 50m and provide basic artistic treatment	<b>2</b>	MCA Score 270  Represents a substantial improvement over Option 1 and Option 2A  Scores 'Low' Public Enjoyment Amenity as the reduced HCT height and basic artistic treatment adds little or nothing to the diversity of use of the parkland. Rated as 'Average' or 'Good' for the remaining assessment criteria
Option 3 Removal / demolition	<b>1</b>	MCA Score 340  Achieves an overall superior level of performance compared to the other options. Only option to be rated as 'Exceptional' for design excellence by optimising the achievement of the design goals for the Headland Park

The MCA outcome was tested by weighted sensitivity, wherein the Heritage Asset criteria were afforded an average of three times the value of any of the other criteria. The sensitivity test confirmed Option 3 as the best performing option.

#### **Quantitative – Cost Assessment**

The following table lists the capital costs (\$ July 2014) of the options plus the operational and maintenance costs over the evaluation period of 20 years. In addition, Net Present Value (NPV) of the costs has been assessed.

Description	Cumulative 20 Year Undiscounted Costs	20 year Net Present Value (7% Discount Rate)
Option 1 Retain as is	Capital - \$3,464,103 O&M - \$4,749,068 Total - \$8,213,171	\$5,400,000
Option 2A Reuse at current height for Viewing Platform	Capital - \$23,568,000 O&M -\$7,834.00 Total - \$31,402,000	\$25,193,000
Option 2B Reduce height to 50m with basic artistic treatment	Capital - \$6,824,000 O&M -\$2,500,000	\$7,099,000

<b>Description</b>	<b>Cumulative 20 Year Undiscounted Costs</b>	<b>20 year Net Present Value (7% Discount Rate)</b>
	Total - \$9,324,000	
Option 3 Removal / demolition	Capital - \$6,621,888 O&M -\$0 Total - \$6,621,888	\$5,783,000

The assessment outcomes are summarised as follows:

- Retaining the HCT as is (Option 1) is some \$1.6M dearer than removal of the HCT (Option 3) in terms of whole of life (undiscounted) costs
- In NPV terms, there is little difference between Option 1 and Option 3, to the point where they could be considered equal. The advantage reflected in the NPV of Option 3 is part removal of the cost risks associated with long term ownership / retention of the tower.
- While Option 1 is the less expensive in terms of capital outlay, there remains considerable uncertainty on costs associated with long-term retention of HCT. The potential of the dilapidation cost risk is demonstrated by the long term ownership costs (undiscounted dollars) exceeding the cost of removal of the tower.
- Option 2A is the most expensive both initially and over the 20-year assessment period. Importantly, the 20 year cumulative cost of reusing the tower is almost four (4) times the cost of other Option 1 and Option 2B, and almost 5 times the cost of Option 3. The option retains some of the long term ownership cost risks identified for Option 1.
- While the cost of Option 2B has been capped to improve its affordability, it is only the third best performing option based on the 20 year cumulative cost. The option retains, albeit to a lesser extent, some of the long-term ownership cost risks associated with Option 1 and Option 2A.

### ***Overall Assessment***

The MCA outcome should be preferred as it provides the overall assessment that is based on the criteria considered most relevant to the decision making process. This includes the cost, which underpins the Value for Money Criteria.

The MCA has confirmed that Option 3 Removal / Demolition is the most advantageous option by a considerable margin. In comparison, Option 1 scores 'Fail' for one (1) and 'Low' for four (4) of the ten (10) assessment criteria. On the basis that 'Low' can be considered a threshold viability score, Option 1 scoring 'Fail' borders on the option not warranting further consideration.

In respect of cost, Option 1 and Option 3 are on parity in NPV terms. Option 3, while initially more expensive than Option 1 is the least cost of all options in terms of the 20-year cumulative cost of ownership / retention.

### **3.2. Heritage Impacts**

In November 2009 the Barangaroo Concept Plan (MOD3) determination allowed for the demolition of the Tower. At the time, the NSW Heritage Branch raised no objection to the tower's removal. A heritage assessment of significance, prepared by CityPlan Heritage, was included to meet the Concept Approval and the Director General Requirements.

In accordance with Director General's Requirements (9 September 2013) a Statement of Heritage Impact and an Interpretation Strategy was included within the Environmental Assessment for the Demolition of the Harbour Control Tower.

The statement of commitments (revised December 2010) which form part of the Barangaroo Concept Plan approval has also been considered as part of the preparation of the Statement of Heritage Impact addressing the State Heritage Register criteria for listing.

Items of State Heritage Significance in the vicinity of the HCT include the State significant Millers Point, Dawes Point & the Rocks Conservation Areas and as identified on the attached SREP- 2005, Heritage Map; the Sydney Harbour Bridge, Circular Quay wharves, the Opera House, Fort Denison, Goat island. Sydney Ports included the HCT within their s.170 register but when adopted by the Heritage Council, the HCT was not nominated for individual listing as a State Heritage Item. (The Tower does not equate in heritage terms with the other State heritage significant items in the area. However, it is more than 'Local'. Its significance could best be described as "Regional". Its transitional role should also be a factor when establishing its significance as well as its impact upon adjacent items of State Heritage Significance. It is obviously intrusive within the setting of Millers Point and interrupts and dominates views to the Harbour Bridge and interrupts views of the Opera House. These factors lessen the HCT's overall significance).

The Harbour Control Tower has been a visibly dominant feature of Darling Harbour and Walsh Bay for 40 years as a landmark and associated element of the transitional roll-on/roll-off bulk cargo and container terminals. Both the stevedoring wharves and the tower have now been disposed of by Sydney Ports following the establishment of the Port of Botany Bay for container and bulk cargo shipping. There are many historic maritime relics in the vicinity of the tower including the Walsh Bay and Pyrmont finger wharves, the massive Millers Point headland cutting, large remaining sections of the container stevedoring wharves with intact caissons and mooring bollards, the recently excavated Munn's Slipway, the Moores Wharf Building, Goat Island and Millers Point itself. These are tangible surviving memories of Sydney Harbour's maritime history which has been evolving over a period of two centuries. Interpretive signs and an

interpretive maritime time-line are proposed to reveal the stories of the late 20th Century bulk cargo and container phase of shipping and stevedoring in Darling Harbour.

Previous Harbour Observation Posts include the first Harbour Master's residence (and lookout) which was constructed 1901-3 by the Sydney Harbour Trust on Goat Island with panoramic views in all directions. In 1952, the new Maritime Services Board (MSB) head office was opened at Circular Quay. In 1964, the opening of the transitional roll-on/roll-off container facilities at Darling Harbour were opened as Botany Bay was planned (approved in 1969). The HCT officially opened in 1974 but was not fully operational until 1992. In the meantime, a lookout into Darling Harbour was established at the end of Bettington Street (it is still evident). The HCT effectively operated from 1992 until 2009. When the stevedoring wharves and the HCT (essentially transitional infrastructure) became redundant, they were transferred to the Authority. (The tower had High (State) Significance to Sydney Ports as part of their collection of light towers and light stations. However, most lighthouses are in prominent coastal positions and have been constructed as permanent structures. The HCT was part of a transitional phase of shipping within Sydney Harbour and is therefore of less significance than a coastal lighthouse).

Following a request by the NSW Heritage Council (30 May 2014), a further detailed assessment (Section 4.3.1 & 4.3.4) using the NSW heritage assessment criteria has been undertaken concluding that the Tower is of Local significance to the people of NSW.

A revised Statement of Heritage Impact (SOHI revised) has been prepared and forms **Appendix 3**.

### **3.3. Noise and Vibration**

One public submission (No.1) raised a number of issues relating to the noise and vibration assessment conducted by Acoustic Logic Consultancy Pty Ltd.

A revised Demolition Noise and Vibration Assessment can found in **Appendix 4**.

### **3.4. Other Issues**

The EPA recommends that the proponent provides some minor clarification on air emission control best practice process design and matters relating to an Asbestos Management Plan. Once the above clarifications have been supplied, the EPA has no objections to the Department of Planning and Environment approving the modification request should it decide to do so.

The Air Quality Management Plan has been updated to respond to the issues raised and includes an Asbestos Management Plan (See **Appendix 5**)

## 4. REVISED STATEMENT OF COMMITMENTS

The Approved Headland Park and Northern Cove Main Works application includes a Statement of Commitments which details a range of measures to be undertaken to ensure the development of Barangaroo achieves the objectives set out in the various reports. The Statement of Commitments is in addition to the Minister's Terms of Approval for the development.

For the subject Section 75W modification application project application further commitments are proposed that relate specifically to the proposed demolition of the HCT. The Statement of Commitments below supersedes the Commitments made in the Headland Park and Northern Cove Main Works Harbour Control Tower Demolition Environmental Assessment.

<b>SUBJECT</b>	<b>COMMITMENTS</b>	<b>TIMING</b>
Demolition Methodology	A detailed construction / demolition environmental management plan is to be prepared prior to the commencement of works on site generally in accordance with the Evans & Peck Demolition Review report dated March 2014.	Prior to the commencement of works on site
Air Quality	To ensure the decommissioning and demolitions works associated with the removal of the Harbour Control Tower have minimal air quality impact and risks, and where possible, enhanced environmental outcomes works are to be undertaken in accordance with the Air Quality Management Plan prepared by JBS&G dated 3 July 2014.	During proposed works
Archaeology	Work shall be undertaken in accordance with the following recommendations to minimise potential archaeological impact: if there are to be below-ground impacts around the HCT entrance on the Merriman Street level, the works be subject to monitoring by a suitably qualified archaeologist; in the event that historical archaeological relics not assessed are found during the works, all works that would affect the find in the immediate vicinity are to cease immediately and a qualified archaeologist be contacted to assess the situation and possibly consult with	During proposed works

	<p>the Department of Planning and Environment regarding the most appropriate course of action; in the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works that would affect the find in the immediate vicinity must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Office of Environment and Heritage (OEH) and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the NPW Act 1974 requires that the OEH must be notified of any Aboriginal objects discovered within a reasonable time; and should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required.</p>	
Geotechnical	<p>Prior to the mobilisation of works the following investigations are to be undertaken:</p> <ul style="list-style-type: none"> <li>▪ service investigations in the vicinity of the works for Merriman Street, Merriman Street footpath and Clyne Reserve, including Dial before you Dig, electronic services scans and possibly the use of ground penetrating radar;</li> <li>▪ investigations to satisfy the requirements for “Working Platforms for Tracked Plant”, BRE (2004) for the crane and outrigger pad foundations;</li> <li>▪ Obtain advice from a geotechnical consultant as to the design bond strength for hold-down anchors (if required); and</li> <li>▪ Confirmation of foundation requirements for a tower crane, should it be required.</li> </ul>	Prior to mobilisation of works on site
Noise and Vibration	<p>The proposed works are to be undertaken in accordance with the Preliminary Noise and Vibration Management Plan prepared by</p>	During proposed works

	Acoustic Logic dated 9 July 2014.	
Heritage and Interpretation	Development is to be undertaken in accordance the Interpretation Strategy prepared by Rintoul Associates dated November 2013.	During proposed works
Soil and Water Management	Development is to be undertaken in accordance with the Soil and Water Management Plan prepared by Boulderstone dated 26 November 2013.	During proposed works
Waste	Development is to be undertaken in accordance with the Waste Management Plan prepared by Boulderstone date 26 November 2013.	During proposed works
Construction Traffic Management	Development is to be undertaken in accordance with the Construction Traffic Management Plan prepared by GTA Consultants dated 21 March 2014.	During proposed works
Asbestos Management	An asbestos management plan has been prepared and forms part of the revised Air Quality Management Plan JBS&G dated 3 July 2014. Material containing asbestos will be removed by an accredited asbestos removal team in accordance with legislative requirements.	During proposed works
Consultation	The Authority will undertake a range of communication and consultation activities. These will include one-on-one meetings, information and consultation meetings, digital information via the Authority's website and social media platforms, as well a letterbox drop to neighbours.	Prior to and during the proposed works

## 5. CONCLUSION

The Authority is seeking the Minister for Planning's approval for the proposed works and modification to the Main Works approval including:

- Demolition of the Operations Room, the tower shaft and services rooms at the base, all in carefully planned and controlled stages;
- Termination and removal of remaining building services throughout the HCT and related structures;
- Removal of the fire services water supply storage tank at the base of the tower building at RL2.8m;
- Removal of three mobile phone telecommunication huts and related services across the existing escarpment face;
- Decommissioning and removal of essential services and the passenger lift;
- Infill around the existing shaft area leaving an opening for a circular oculus to the future cultural space below;
- Construction of an interpretive structure on the site of the HCT surrounding the oculus; and
- Removal and replacement of the existing slab at ground floor level RL2.8.

Submissions received as a result of the public exhibition of the application for the demolition and removal of the HCT have been assessed in this report as required under Section 75H(6) of the EP&A Act. No changes are proposed to the project as a result of the review of submissions.

It is the Authority's view that the impacts from the application for the demolition and removal of the HCT can be appropriately managed through the range of measures detailed in the EA Report and in the updated specialist reports and management plans. The Statement of Commitments proposed in the EA Report has been amended to address issues raised in submissions and arising from the additional technical work undertaken following exhibition.

# APPENDIX 1

## Summary of Submissions & Responses to Issues Raised

**Demolition of Harbour Control Tower – Barangaroo Headland Park & Northern Cove Main Works (MP10-0048 Modification 4)**  
**Summary of Public Submissions & Responses to Issues Raised**

Respondent	Main Issues Raised	Response
No.1	<p>1.1 - Sydney is missing a unique opportunity to adapt and re-use this icon of the harbour</p> <p>1.2 - Section 4.2 and elsewhere in the document makes reference to trucks entering/leaving via Pottinger Street and Hickson Road which is not possible as Pottinger Street is blocked by bollards at the Windmill Street end. The entry and departure route is Merriman Street to Bettington Street to Dalgety Terrace to Towns Place then to Hickson Road. This may be built in to the assessment of the noise effects on the streets after Merriman listed above.</p> <p>1.3 - Section 5.1 states “that all practical measures be taken to regulate noise emissions”. This has not been the respondent’s experience. The replacement of reversing beepers with quakers in close proximity to residential property for example required the insistence of Planning NSW.</p>	<p>1.1 – Noted</p> <p>1.2 – The original assessment was prepared based on preliminary information provided by contractor as to the likely construction traffic access routes. A traffic management plan has since been prepared – “<i>Harbour Control Tower Demolition Works – Preliminary Construction Traffic Management Plan</i>” by GTA Consultants (reference: 14S901800, issue D, dated 21/03/14).</p> <p>The acoustic assessment has been amended to reflect the access routes and predicted peak and average movements.</p> <p>1.3 -No works associated with the demolition of the Harbour Control Tower have commenced on site. Reference to the replacement of the reversing alarms with quakers is most likely associated with the works being undertaken as part of the Barangaroo Headland Park development site.</p> <p>Acoustic Logic Consultancy Pty Ltd cannot comment on the feasibility of quakers as a</p>

	<p>1.4 - Section 6.2.1 states that the facades of the properties on Merriman Street face south. They face almost due west and face both the current works and the Harbour Control Tower. All windows on the dwellings are either at the front or the back of the properties. This error changes the expectation of the levels of internal noise.</p>	<p>suitable replacement for standard reversing alarms, as this issue is related to Occupational Health and Safety and is the responsibility of the contractor and Occupational Health and Safety officer on the project.</p> <p>The acoustic assessment and attached noise and vibration management detail general and site specific noise control and mitigation methods. Prior to the commencement of any works on site, when all works and methodology have been finalised, the contractor will consult with the acoustic consultant to investigate if any feasible ameliorative/mitigation treatments can be implemented on the works.</p> <p>1.4 – Reference to the southern façades of the residences along Merriman Street was consistent with the orientation used in the site description figure contained in the Demolition Noise &amp; Vibration Assessment (Figure 1, i.e. – project north to top of page), although we note that in reality, the façades face west. The acoustic assessment report has been amended to show project north facing true north (refer Figure 1, where top of page is facing east of the revised report in Appendix 4).</p> <p>However, it should be noted that the noise attenuation between the site and the residences</p>
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	<p>1.5 - Issue with the background noise levels for Merriman Street used to date in three reports and a review by the EPA. The first report by Acoustic Logic Consultancy for JBA Urban Planning Consultants dated 30 June 2010 lists the dB(A) L90 for Merriman Street as 54db and for Kent Street and Dalgety Terrace as 50 and 48 respectively. This could not be accurate given Kent Street and Dalgety Terrace have a constant stream of traffic, Merriman Street is a dead-end street largely unknown to most people with occasional traffic and minimal harbour noise. These numbers are still being used in the reports.</p> <p>The respondent has measured the daytime background level with less sophisticated but calibrated equipment to be below and up to 40 db, when there is some light work it increases to 42.</p> <p>1.6 - The respondent's measurement (taken standing from the open front door) during sandstone sawing + rock breaking + truck movements ranged between 50</p>	<p>was calculated based on distance and barrier effect caused by the sandstone cliff (for some of the proposed activities and equipment), and no correction for orientation of façade was taken into account. Hence there is no change to the predicted noise levels.</p> <p>1.5 - The rating background noise level (dB(A)<sub>L90</sub>) used to develop the management level was 44dB(A)<sub>L90</sub>, not 54dB(A)<sub>L90</sub> as referred to. The noise affected management level presented in Section 5.2.3 of the acoustic assessment is the measured rating background noise level + 10dB (as per the NSW EPA Interim Construction Noise Guideline), resulting in a level of 54dB(A)<sub>Leq(15min)</sub>.</p> <p>This level of 44dB(A)<sub>L90</sub> was determined using long term noise monitoring conducted on Merriman Street (as per EPA practice). This is the most appropriate ambient noise level to use for assessment purposes. The unattended noise monitor installed in the level 1 balcony of a dwelling along Merriman Street, overlooking the Headland Park Site. The rating background noise level was corrected for inclement weather. Noise monitoring was conducted from 26<sup>th</sup> August – 7<sup>th</sup> September 2010.</p> <p>1.6 - The submission also outlines measured noise levels from sandstone sawing + rock breaking +</p>
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	<p>to 60 db and most commonly between 54 to 58db. Measurements in the backyard were 2db less which questions the consultant's claim that the housing in Merriman Street will mitigate the sound levels in Dalgety Terrace and Towns Place.</p> <p>There is enough doubt about the veracity of the background levels, so far used, that a new set needs to be done. It is not accurate, as the consultant claims, that given ongoing work on site that it is impossible to do new measurements. There are regular no-work days and times to do new measurements.</p>	<p>truck movements, along the western façade of a Merriman Street property. These measurements were most likely conducted as part of the early works activities associated with the Headland Park site.</p> <p>A noise and vibration assessment report was previously prepared by Acoustic Logic Consultancy Pty Ltd (reference: 2010539/0528A/R6/YK) for the proposed early works at the Headland Park Site. The following noise levels were predicted for the residential properties along Merriman Street;</p> <ul style="list-style-type: none"> <li>-Sawing – 62-69dB(A)</li> <li>-Hammering – 85-92 dB(A) or 62-69dB(A) (if an alternating rock saw and bucket on excavator is used).</li> <li>- Truck movements – 62-64 dB(A).</li> </ul> <p>The levels predicted in the assessment are significantly higher than those measured at the façade of Merriman Street.</p> <p>Additionally, a 2dB reduction in noise level was noted (in the submission) between the measurement conducted along the Merriman Street façade of a property and backyard of the same property. Typically we would expect a line of sight barrier to provide an attenuation in the order of 5-7dB. The receivers along Dalgety Road</p>
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		and Towns Place will be shielded by the Merriman Street properties for some of the proposed activities (from activities occurring either at Merriman Street level or lower) and are also located further away from the Harbour Control Tower (noise attenuation from distance).
No.2	<p>2.1 - Strongly object to the Harbour Control Tower being demolished.</p> <p>2.2 – The Statement of Heritage Impact (SOHI) lists, amongst other impacts of the demolition “Major positive impact within Millers Point, restoring and retaining historic views from public spaces within and towards Millers Point”. The respondent does not see this as a positive impact.</p> <p>2.3 – The Harbour Control Tower is part of the history of the place. The appearance of the harbour and the Millers Point precinct is enhanced by the presence of the Tower, which adds a historically significant twentieth century layer to the views.</p> <p>2.4 – The SOHI blatantly attempts to play down the heritage significance of the tower. The summary says the tower “has become redundant since the planned Port of Botany container facilities commenced operations in 1979.” This statement has been worded so that the casual reader will think the tower has been redundant since 1979, when operations did not cease there until 2011. The summary also says that the Sydney Ports Heritage Listing “included the State</p>	<p>2.1 –Noted</p> <p>2.2 - The removal of the HCT will restore the small scale intimacy of the State Significant Millers Point’s roads, laneways and 19th century housing.</p> <p>2.3 - -The tower is a local landmark and its place in the history of Sydney Harbour will be interpreted both individually and in a timeline of maritime history of Millers Point dating from 1790 to the present.</p> <p>2.4 - The HCT was constructed in 1974 ‘but it was not until 1992, when operations including visual surveillance of commercial shipping at the South Head Signal Station transferred to the Control Tower’ – (Sydney Ports s.170 listing). The HCT’s former role was transferred to the new</p>

	<p>Themes of Economy – Communications and Transport, both of which are now redundant” but does not explain how.</p> <p>2.5 – The summary does not discuss the thrust of the two heritage criteria listed: SHR Criteria a) Historical significance:          “The Port Operations and Communication Centre is significant in the history and operation of the Port of Sydney. Since 1790 the European settlers struggled to gain visual communication across the uneven topography of the harbour. These efforts culminated in the construction of the Tower which provided visual oversight of the major wharfage areas and the operations of the Sydney Harbour for the first time in 150 years”</p> <p>2.5.1- SHR Criteria c) Aesthetic significance:          “The Port Operations and Communications Centre is a prominent landmark and part of the skyline of Sydney Harbour. It is a significant element of the maritime landscape.”</p> <p>2.5.2 - The response to these criteria can only be found in the body of the report, which states:          “It should be noted that the Harbour Control Tower is no longer owned by Sydney Ports and has been transferred from their s170 Heritage Inventory to the Barangaroo Delivery Authority. The tower no longer functions as a communications tower nor does it facilitate shipping movements in Sydney Harbour. The tower functioned in this role from 1992 to 2010 until transfer to the</p>	<p>Operations Centre at Port Botany which became operational in December 2009.</p> <p>2.5 - The South Head Signal Station was constructed in 1790 (rebuilt in the 1840s to a Mortimer Lewis design). Its visual surveillance role was transferred to the Control Tower in 1992. In 1838, the first Water Police Station on Goat Island was sited for visual surveillance of major wharfage areas in Port Jackson as was the Harbourmaster’s residence and lookout (1900 – 1952). The Control Tower continued this role overlooking the interim Darling Harbour container wharves from 1992 – 2009.</p> <p>2.5.1 -The Tower is generally recognised as a prominent local landmark in the Darling Harbour/Walsh Bay area.</p> <p>2.5.2 -The HCT was constructed as a ‘transitional’ element of the former interim ‘roll-on/roll-off container terminals’ at Darling Harbour. (Sydney Ports s.170 listing). ). It is recognised as ‘<i>contributing to the character and significance of the locality</i>’ by the City of Sydney and as a ‘<i>local landmark</i>’ by the National Trust. The Tower is not listed on any</p>
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	<p>Port of Botany Operations Centre. The radar has been transferred to the top of Blues Point Tower which relays information to the Port of Botany Operations Centre.</p> <p>2.5.3 - Both of the above criteria are therefore no longer relevant to the Harbour Control Tower.”</p> <p>This is another attempt to limit the perception of the years the Tower was operationally significant. Where do the writers of the report get the date 1992 when the Tower was built and operating from the early 1970s until 2011?</p> <p>2.5.4 - How does the fact that the tower is no longer owned by Ports and is no longer operational detract from its “significance in the history and operation of the port”? Where is the discussion of criteria c)? The report simply says both criteria are “no longer relevant” and yet the tower is still as listed in criteria c) “a prominent landmark and part of the skyline of Sydney Harbour.” And although no longer operational the tower is still “a significant element of the maritime landscape.”</p> <p>2.6 – The table of impacts in the SOHI summary also lists:  “Positive impacts by restoring the dominance of Sydney’s iconic Harbour Bridge”  and “Major positive impact by restoring an uncluttered view of the Opera House sails viewed upon entry to Sydney Harbour”</p>	<p>statutory instrument apart from the Sydney Port’s s.170 Register prior to its change of ownership.</p> <p>2.5.3 -The Tower was constructed in 1974 ‘<i>but it was not until 1992, when operations including visual surveillance of commercial shipping at the South Head Signal Station transferred to the Control Tower</i>’ – (Sydney Ports s.170 listing).</p> <p>2.5.4 -The Control Tower was constructed 40 years ago after ‘<i>The master plan for Sydney Harbour addressed transitional requirements in an attempt to make the best use of existing opportunities while building the new port of Botany Bay.... which began operating in the late 1970s.</i>’ (Sydney Ports Centenary Book, 2001, Chapter 3). The tower was fully operational from 1992 – 2009. The Control Tower remains as a local landmark within Darling Harbour and Millers Point but no longer has a maritime use.</p> <p>2.6 -The Control Tower currently dominates the view of the Sydney Harbour Bridge (of National Heritage Significance) both from Pyrmont and as ships leave Darling Harbour and White Bay. This iconic view of the Nationally Significant Sydney</p>
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	<p>The respondent states that “upon entry to Sydney Harbour you can’t even see the Opera House”. Further, “the Opera House is so striking that it holds its own against whatever background, including the massed buildings of the CBD”.</p> <p>2.7 – Barangaroo should capitalise on the magnificence of the views from the top of the tower.</p> <p>2.8 – Why put up interpretative plaques on Merriman Street memorialising the building, when the building itself could remain for all to experience?</p> <p>2.9 – The Barangaroo Delivery Authority has not considered any alternative solutions. It has not called for proposals for adaptive re-use. It has listed a number of impediments to adaptive re-use, see SOHI 7.3c), but has not said why these can’t be overcome. The Barangaroo Delivery Authority has therefore not fulfilled the Director General’s Requirements.</p> <p>2.10 – The Tower’s condition was defined as “Excellent” in the Ports Heritage listing.</p> <p>2.11 – Calls for the NSW Planning to refuse permission for demolition and require Barangaroo Delivery Authority to call for proposals adapting the Harbour Control Tower for interpretation of this history.</p>	<p>Harbour Bridge would benefit from the removal of the tower.</p> <p>2.7 Refer to 2.9 below</p> <p>2.8 -The Control Tower represents the last quarter of the 20thC as part of 225 years of rapidly changing maritime efforts to keep Sydney as an economically thriving port. The Tower’s story is proposed to be interpreted both individually and as part of an interpretive historic maritime timeline for Darling Harbour and Millers Point spanning 225 years.</p> <p>2.9 – The Authority utilised a multi criteria assessment of the options for retention, adaptive reuse and retention. Removal of the tower rates as a superior holistic outcome. Refer to the Options Assessment for further detail.</p> <p>2.10 - Noted</p> <p>2.11 – The Authority’s assessment of the various options has led to a decision for removal.</p>
No.3	3.1 - The Harbour Control Tower should be preserved for heritage reasons	3.1 -The HCT was constructed as a ‘transitional’ element of the former interim ‘roll-on/roll-off

	3.2 - The current plans for the development of the Barangaroo site bear little resemblance to the development originally granted planning approval	<p>container terminals' at Darling Harbour. (Sydney Ports Centenary Book, 2001, Chapter 3). It is recognised as a local landmark in the context of Darling harbour and Walsh Bay and as such has Local heritage Significance historically.</p> <p>3.2 Issue not the subject of this modification.</p>
No.4	4.1 - Objects to the proposal	4.1 - Noted.
No.5	<p>5.1 - The old Sydney Harbour Control Tower should be retained, we have already obliterated most of the historic harbour facilities and visual references to the harbour's former role as a major port.</p> <p>5.2 - There are only a few reminders of Sydney's historic gateway role remaining.</p> <p>5.3 - The Harbour Control Tower is a very visible building in an area associated with the more recent phase of Sydney as a working port, and is a very important part of this story and of this popular and busy historic precinct.</p>	5.1 - 5.3 - Sydney Harbour remains a busy working port with cruise liners, oil tankers, tugs, pilot boats, lighters, tourist boats and ferries. While container shipping has moved to Botany Bay where there is adequate road and rail transport to support the intensity of the shipping, the Walsh Bay and Pyrmont finger wharves, Goat Island, Mort Bay and the harbour 'dolphins' are tangible reminders of the harbour's ongoing role as a major port. The 'Container' phase can be interpreted by wharfage and mooring bollards left intact, the huge sandstone rockface along the Hungry Mile and within the skylit future cultural space and proposed interpretive devices, timelines & signage.
No.6	6.1 - Objects to the demolition of the Harbour Control Tower on the grounds that it is a unique and important part of the heritage of Sydney Harbour as a working port	6.1 See response to Submission No.5 above.
No.7	7.1 - Objects to the demolition of the Control Tower	7.1 - Noted.
No.8	8.1 – Objects to the destruction of the Harbour Control Tower. It is an important part of harbour skyline and harbour history – and should be preserved as such.	8.1 See response to Submission No.5 above.

<p>No.9</p>	<p>9.1 – Very strongly supports the removal of the Harbour Control Tower  9.2 – Very strongly supports the Interpretation Strategy and the construction of the oculus at the surface of the new headland park. The plan to direct moving sunlight onto the sandstone features below is brilliant.  9.3 – Suggestion that prior to removal video cameras be installed at the top observation deck such that a video record of the views and activity of the harbour be recorded, as historical record of the view from the top. This video should be a 360 degree record, extended over at least 24 hours, and preferably much longer. It could include any special events on the harbour. Lighting effects during Vivid Sydney such as the projections onto the Opera House, and festivities at Darling Harbour, could be included.</p> <p>Most important is the historical video record which could include the industrial shipping movements, the commercial fishing boats, the oil tankers, the other large cargo ships and the ferry movements.</p> <p>When the tower is gone the videos should be displayed as appropriate in the public museum sites that are developed at Barangaroo and Millers Point. They would be presented as “the views from the tower that used to be here.”</p> <p>The videos could also be displayed in the Sydney Museum and the Maritime Museum. Parts of the videos could be accessible via the internet.</p>	<p>9.1 Noted  9.2 Noted</p> <p>9.3 CCTV cameras have been installed during the construction of Barangaroo to capture aerial views of the project.</p>
<p>10. Millers Point Owners Association</p>	<p>10.1 – The Headland Park vision clearly draws inspiration from the naturalistic elements of its pre-1815 form, to in 2015, renew, engage with and reveal this prominent landscape as re-connected to the broader harbour.</p>	<p>10.1 - Sydney Harbour is uniquely beautiful due to its headlands remaining ‘green’. The restoration of the Point after 100 years of huge maritime industrial landform changes is a major positive benefit to Sydney Harbour.  <i>“The removal of the Harbour Control Tower will allow for a greater appreciation of the reinstated historic natural landform of the headland and the</i></p>

	<p>10.2 – The modern installation (“oculus”) planned for the site of the Harbour Control Tower has the potential to stimulate interest for Headland Park visitors entering the Merriman Street level and, pleasingly, gently encourage discovery of the Park’s hidden built, cultural, natural and conservation treasures.</p> <p>Understanding this vision and direction, the respondent has provided for consideration some thoughts (Headland inspirations and a contemporary example of wind powered installation) around integrating this modern installation with significant aspects of the Park’s built, natural and cultural form to innovatively stamp the Park’s Clyne Reserve entrance as one quietly acting as a beacon, directly engaging visitor eye and interest, enhancing a deeper Park experience and natural wish to return soon.</p>	<p><i>park without compromising its natural and landscaped setting and qualities.”</i>  (CityPlan Heritage- 2009; Mod 3 submission- Appendix 6; Addendum to Heritage Impact Statement for East Darling Harbour Concept Plan)</p> <p>10.2 Noted</p>
<p>11. National Trust of Australia</p>	<p>11.1 - Objection to the proposed demolition of the Harbour Control Tower at Millers Point.</p> <p>11.2 - HCT is an important historic structure which has a positive aesthetic impact upon the character of Sydney Harbour and is an important relic of the use of Sydney Harbour for shipping.</p>	<p>11.1 – Noted</p> <p>11.2 - The HCT was constructed as a ‘transitional’ element of the former interim ‘roll-on/roll-off container terminals’ at Darling Harbour. (Sydney Ports Centenary Book, 2001, Chapter 3). It is recognised as a local landmark by the City of Sydney although not included in the LEP.</p> <p>-It should be noted that Sydney Harbour remains a busy working port with cruise liners, oil tankers,</p>

	<p>11.3 - Objection to the content and conclusions in the Statement of Heritage Impact (SOHI) prepared by Rintoul Associates. The SOHI is seriously deficient and the assertions upon which its conclusions rely are unsupported.</p> <p>11.4 - Section 4.3.1 "Individual significance of the Port Operations and Communications Centre" of the report states that: " The Harbour Control Tower has been transferred from the Sydney Ports s170 register and no longer functions in its designed role which results in both of the themes listed above being redundant"</p> <p>Section 4.3.2 "Criteria for assessing cultural heritage" of the report states that: "The Harbour Control Tower is not longer owned by Sydney Ports and has been transferred from the s170 Heritage Inventory to the Barangaroo Delivery Authority. The Tower no longer functions as a communications tower nor does it facilitate shipping movements in Sydney Harbour. The tower functioned in this</p>	<p>tugs, pilot boats, lighters, tourist boats and ferries. While shipping needs are changing, the harbour continues as a major port.</p> <p>11.3 - A detailed and thorough assessment of the Harbour Control Tower in its current situation and context is being undertaken in accordance with Commitment 67 to the Barangaroo Concept Plan Approval. The Sydney Ports s.170 listed themes of Communication and Transport no longer occur but the Control Tower's role as a 'transitional' element of the former interim 'roll-on/roll-off container terminals' is proposed to be interpreted both individually and as part of an interpretive historic maritime time-line of 225 years for Darling Harbour and Millers Point.</p> <p>11.4 - The Control Tower is part of 225 years of rapidly changing maritime efforts to keep Sydney as a thriving port. The Harbour Control Tower's role in the interim container shipping phase of Darling Harbour in the last quarter of the 20<sup>th</sup>C is proposed to be interpreted both individually and as part of an interpretive historic maritime time-line for Darling Harbour and Millers Point.</p>
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	<p>role from 1992 to 2010 until transfer to the Port of Botany Operations Centre. The radar has been transferred to the top of Blues Point Tower which relays information to the Port of Botany Operations Centre. Both of the above criteria are therefore no longer relevant to the Harbour Control Tower"</p> <p>Bothe of these statements are assertions without merit and are rejected by the National Trust.</p> <p>In the first section quoted above, change of ownership and potential change of use do not nullify the importance of the historic role of the HCT and its significance in the history of port operations in Sydney Harbour. If this were the case, for example, Old Parliament House in Canberra, which is no longer used for its original purpose and whose ownership, like the HCT, has been transferred to another Government authority, would also have no heritage value.</p> <p>The second section quoted above is equally wrong in regard to the historic significance of the HCT being removed by its change of use. With the second criterion, the suggestion that its qualities as a: "prominent landmark and part of the Sydney skyline" and a "significant element of the maritime landscape" are removed by its change of ownership and use demonstrates a complete lack of logic.</p> <p>11.5 - Section 7.0 is the core of the "Assessment of Heritage Impact". Section 7.2 states: "Heritage setting; The Harbour Control Tower is not a harmonious presence within Millers Point. Its demolition and removal will enhance the existing State Significant heritage character of Millers Point".</p> <p>The heritage character of Millers Point is defined in the Statement of Significance for the State-significant Millers Point Conservation Area: "Millers Point Conservation Area is an intact residential and maritime precinct of outstanding</p>	<p>11.5 - The Harbour Control Tower has been a visibly dominant feature of Darling Harbour and Walsh Bay for 40 years as an associated element of the transitional roll-on/roll-off container terminals. Both the stevedoring wharves and the tower have now been disposed of following the establishment of the Port of Botany Bay for container shipping. There are other historic</p>
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	<p>State and national significance. It contains buildings and civic spaces dating from the 1830s and is an important element of nineteenth and early twentieth century adaptation of the landscape. The precinct has changed little since the 1930s"</p> <p>The history and situation of the Harbour Control Tower is as a maritime-related structure located on the wharf/port areas of Millers Point and is part of the history of the adaptation of Millers Point for these uses. These uses are central to the heritage significance of Millers Point. The judgement regarding "harmonious" appears to be an aesthetic yearning for an idealised "heritage" landscape, a concept which is contrary to the fundamental nature of heritage in the environment.</p> <p>11.6 - Scale; The HCT dominates not only its immediate small scale streetscapes but the entire of Millers Point due to its extreme height. Its demolition and removal will restore a harmonious sense of scale to the Millers Point village.</p> <p>This statement is simply risible. On this basis, Millers Point would also benefit from the demolition of the Sydney Harbour Bridge and the Botanic Gardens would benefit from the demolition and removal of the Opera House.</p> <p>11.7 - Materials; The materials of the HCT are concrete, stainless steel and glass which increases its visual dominance within a heritage area. Its removal will enhance and restore the visual predominance of the heritage landform and historic buildings of Millers Point.</p> <p>This statement appears to ignore the fact that the HCT is proposed to be removed</p>	<p>maritime relics in the vicinity of the tower including the Walsh Bay and Pyrmont finger wharves, the Moores wharf Building, Goat Island and Millers Point itself. These are tangible reminders of the harbour's maritime history. Remnants of the container phase will include the sandstone rock-face of the Hungry Mile and within the future cultural space lit from overhead, a major section of the original container wharf in Central Barangaroo extending through King Street Wharf with associated mooring bollards.</p> <p>11.6 – The Harbour Control Tower is not listed on any statutory listing, nor is it included in the State significant Millers Point Conservation Area. Its dominance and intrusive impact to the small-scale urban village of Millers Point is evident.</p> <p>11.7 - This excerpt is taken from listing SHI 5001049 which is attached to the SOHI as Appendix 3.</p>
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	<p>to establish a so called "naturalistic" urban park, which will itself be entirely incompatible with the "heritage landform and historic buildings of Millers Point."</p> <p>11.8 - Throughout the SOHI, claims are made that demolition of the HCT would restore a "harmonious sense of scale" to Millers Point. Again, this is a baseless claim, as similar claims could be made in relation to the removal of the Sydney Harbour Bridge and virtually every multi-storey office tower in the CBD, particularly those toward the northern end. The claim also ignores that the buildings proposed as part of the Barangaroo area will also be massive in relation to the "intimate small scale vistas of the early streetscapes and housing of Millers Point" and that the proposed hotel/casino building, whatever its final form, has been touted as a building of excessive scale so as to form a new landmark structure in Sydney's skyline.</p> <p>11.9 - There are many more assertions within the SOHI to which serious objection can be made, for example, that the HCT was only operational from 1992. The HCT was in operation from 1974, controlling shipping movement in Sydney Harbour, and 1992 was the year in which it took over other operations that had previously been decentralised. The constant, and erroneous, suggestion that the first eighteen years of operation are irrelevant appears to be based upon the misconception expressed in Section 4.4, that the HCT wasn't operational until 1992, which is simply incorrect.</p> <p>11.10 - Overall, the Trust's position is that the SOHI is inadequate and cannot be relied upon as a basis for any decision which might adversely affect the future of the HCT.</p> <p>11.11 - The National Trust notes that, in the NSW Ports Heritage and Conservation</p>	<p>11.8 – The Harbour Control Tower (40 years old) was constructed as a ‘transitional’ phase of Sydney Harbour’s 225 year shipping history which continues to change and evolve. A major section of container wharf is proposed to be retained in Barangaroo Central with intact shipping bollards and proposed maritime interpretation.</p> <p>11.9 – Sydney Port’s s.170 listing states that the HCT was constructed in 1974 <i>‘but it was not until 1992, when operations including visual surveillance of commercial shipping at the South Head Signal Station transferred to the Control Tower’</i>. This listing is attached as Appendix 1 to the SOHI.</p> <p>11.10– Noted</p> <p>11.11-The Authority’s heritage consultant has</p>
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	<p>Register (Section 170), the HCT was rated as being of State significance. This accords with the Trust's view that the HCT should be entered onto the NSW State Heritage Register, particularly now that it is no longer in use for its original purpose.</p> <p>11.12 - Throughout the SOHI, claims are made that demolition of the HCT would restore a "harmonious sense of scale" to Millers Point. Again, this is a baseless claim, as similar claims could be made in relation to the removal of the Sydney Harbour Bridge and virtually every multi-storey office tower in the CBD, particularly those toward the northern end. The claim also ignores that the buildings proposed as part of the Barangaroo area will also be massive in relation to the "intimate small scale vistas of the early streetscapes and housing of Millers Point" and that the proposed hotel/casino building, whatever its final form, has been touted as a building of excessive scale so as to form a new landmark structure in Sydney's skyline.</p> <p>11.13 - There are many more assertions within the SOHI to which serious objection can be made, for example, that the HCT was only operational from 1992. The HCT was in operation from 1974, controlling shipping movement in Sydney Harbour, and 1992 was the year in which it took over other operations that had previously been decentralised. The constant, and erroneous, suggestion that the first eighteen years of operation are irrelevant appears to be based upon the misconception expressed in Section 4.4, that the HCT wasn't operational until 1992, which is simply incorrect.</p> <p>11.14 - Overall, the Trust's position is that the SOHI is inadequate and cannot be relied upon as a basis for any decision which might adversely affect the future of the HCT.</p>	<p>assessed the HCT as having local significance.</p> <p>11.12 – Noted</p> <p>11.13 – refer to 11.9 above</p> <p>11.14 - Noted</p>
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	<p>11.15 - The National Trust notes that, in the NSW Ports Heritage and Conservation Register (Section 170), the HCT was rated as being of State significance. This accords with the Trust's view that the HCT should be entered onto the NSW State Heritage Register, particularly now that it is no longer in use for its original purpose.</p> <p>11.16 - The National Trust supports the retention of the Harbour Control Tower and considers that it should be conserved and potentially adapted to a new purpose compatible with its heritage significance.</p>	<p>11.15 - Noted</p> <p>11.16 - Noted.</p>
12. Sydney Harbour Association	<p>12.1 – Identification of positive impacts and benefits flowing from demolition of the Harbour Control Tower</p> <p>12.2 – The benefits from demolition are seen to be widespread, and the drawbacks are seen to be few, minor and manageable and mostly temporary.</p> <p>12.3 – The respondent understands that the existing approval for the project still includes consent for an over-water hotel which would have a very much contrasting and highly adverse impact on the near and far neighbourhoods of Barangaroo.</p> <p>12.4 - The impact indicators relating to views, heritage protection and setting that are utilised in the statements supporting this application are valid.</p> <p>12.5 – Should the Minister approve this present application, such an approval should be conditional on deletion of that part of the existing Approval relating to the over-water development.</p>	<p>12.1 - Noted.</p> <p>12.2 - Noted.</p> <p>12.3 - A hotel is not part of this proposal. The hotel at Barangaroo South is subject to a separate planning application process.</p> <p>12.4 - Noted.</p> <p>12.5 - See response to Issue 12.3 above.</p>

**Demolition of Harbour Control Tower – Barangaroo Headland Park & Northern Cove Main Works (MP10-0048 Modification 4)  
Summary of Submissions from Government Agencies & Responses to Issues Raised**

Submission from	Main Issues Raised	Response
No.1- City of Sydney Council	<p>1.1 - The Tower makes a significant positive contribution to the character and significance of the locality and should be retained.</p> <p>1.2 - The City does not agree that the Tower is obsolete and incompatible with the existing and future locality. The strong heritage and cultural significance of the tower is detailed below:</p> <p>1.2.1 - The Tower is a key remnant of the historical layering of the area.</p>	<p>1.1 - Noted</p> <p>1.2 - The Control Tower was constructed 40 years ago after <i>'The master plan for Sydney Harbour addressed transitional requirements in an attempt to make the best use of existing opportunities while building the new port of Botany Bay... which began operating in the late 1970s.'</i> (Sydney Ports Centenary Book, 2001, Chapter 3.) <i>5507 Centenary book 120pptxt - Sydney Ports</i> The tower was fully operational from 1992 – 2009. The Control Tower remains a dominant local landmark within Darling Harbour and Millers Point.</p> <p>1.2.1 - The Tower represents 40 years (17 years fully operational) of Darling Harbour's 225 years of maritime use. Other key remnants include Walsh Bay, Millers Point, the Moore's Wharf building, the Dalgety Wool Stores, the sandstone seawall and the recently uncovered Munn's slipway and Cuthbert's seawall. It is proposed to</p>

	<p>1.2 .2 - The Tower is a part of a series of installations around Sydney Harbour that represent the long processes of establishing visual control and guidance over maritime in Sydney Harbour;</p> <p>1.2.3 - The Tower contributes to the living cultural and historical landscape and is a clear connection with visual, functional and historical interfaces.</p>	<p>interpret the Late 20<sup>th</sup>C phase of shipping by the retention of a major section of roll-on/roll-off wharf at Barangaroo Central. This wharf retains mooring bollards and will interpret the 225 years of maritime industry in this area. The wharf could be named to reflect this period.</p> <p>1.2.2 - The South Head Signal Station was constructed in 1790 (rebuilt in the 1840s to a Mortimer Lewis design). Its visual surveillance role was transferred to the Control Tower in 1992. In 1838, the first Water Police Station on Goat Island was sited for visual surveillance of major wharfage areas in port Jackson as was the Harbourmaster's residence and lookout (1900 – 1952). The Control Tower continued this role overlooking the Darling Harbour container wharves from 1992 – 2009. While it is part of Sydney Harbour's visual surveillance controls, its role was short term and transitional compared to other installations.</p> <p>1.2.3 - The Tower's custom-designed maritime surveillance role is now redundant. Its interface with the roll-on/roll-off container wharves is no longer evident. The cultural and historical maritime activities in this area would be more comprehensively understood if the entire 225 years of maritime history were interpreted</p>
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	<p>1.2.4 - The Tower has aesthetic significance as part of the skyline of Sydney Harbour. At 87m above sea level the Tower is a powerful landmark that demarks the entrance to Darling Harbour and provides important visual links between Millers Point and other parts of the harbour and the City.</p> <p>1.2.5 - The Tower is evidence of former functional practices and processes occurring in Sydney Harbour over several decades – the spread of maritime industries for shipping, fishing and tourism and natural limitations within the Harbour for low-rise observation. The Tower is a significant element of the maritime landscape of Sydney Harbour and contributes to the overall understanding of the harbour as a maritime port. The tower represents the final culminating stages of port development.</p> <p>1.2.6 - The Tower is a monumental engineering structure, which when juxtaposed against smaller scale Victorian terrace development contributes to the</p>	<p>including the Tower’s role in the later part of the 20thC. This is proposed in Barangaroo Central and by interpretation of the Tower’s location and role in the late 20thC.</p> <p>1.2.4 - The Tower is a well-proportioned structure and a local landmark. It will become less prominent as the new Headland Park is established. The Headland Park and its rocky foreshore will potentially become the marker for the entrance to Darling Harbour.</p> <p>1.2.5 - The Tower was fully operational for 17 years associated with the former interim container stevedoring wharves in Darling Harbour. While this phase was vital to Sydney’s maritime economy as Port Botany was constructed, it would be more holistic to interpret the 225 years of maritime history and major land transformations which have occurred in this area. Port development continues within Sydney Harbour with new terminals and infrastructure supporting its role as a major tourist and cruise-liner destination. The container and oil tanker shipping are now associated with major road and rail infrastructure in Port Botany and are a vital part of Sydney’s maritime industry.</p> <p>1.2.6- The Tower is large but not a unique tower structure, built of reinforced concrete. The small</p>
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	<p>dramatic layer of historic events throughout the area.</p> <p>1.2.7 - The Tower is rare in Australia, and possibly rare at an international level. A comparative analysis included as part of the <i>East Darling Harbour Concept Plan Heritage Impact Statement</i> with other port control structures in other Australian port cities such as Melbourne and Newcastle, provides evidence that the Sydney Port Control Tower has a level of aesthetic refinement superior to its counterparts.</p> <p>1.2.8 - Further, the National Trust recognises the significance of the control tower in its <i>Industrial Heritage Site Listing Report</i> as follows: <i>'The Harbour Control Tower is significant as a part of a collection of navigation marks, light towers and light stations which are relics of the long history of control and management of maritime operations in the Port of Sydney and, as the most prominent expression of this history, the Tower symbolises two hundred years of commercial shipping in Sydney Harbour. The Tower is a local landmark and forms part of a notable group of landmark structures in the vicinity of Sydney Cove, including the Harbour Bridge, the Opera House, Blues Point Tower and the Hammerhead Crane.'</i></p> <p>1.3 - The City supports the retention of the structure, with or without an alternative use.</p>	<p>scale 19<sup>th</sup>C dwellings of Millers Point would be better appreciated in a more sympathetic setting.</p> <p>1.2.7-The Tower is not rare in Australia with <i>'other comparable tower structures ... in Queensland and Port of Melbourne.'</i> and <i>'Although they are not port control towers, the Sydney Airport Control tower and Sydney Tower, are examples of 20<sup>th</sup> century architecture and provide comparative elements in terms of aesthetic qualities of such structures.'</i> (CityPlan Heritage- 2009; Mod 3 submission- Appendix 6; Addendum to Heritage Impact Statement for East Darling Harbour Concept Plan)</p> <p>1.2.8 – This excerpt from the National Trust's listing is taken from Sydney port's s.170 listing where of the 41 items included in Sydney Port's 2009 s.170 Register, 16 were part of a collection of navigation marks, light towers and light stations of which six are listed as Sydney Harbour heritage items (SREP 2005 Heritage Map. )The Harbour Control Tower is not listed. The Tower symbolises the transitional use of Darling Harbour for container wharves while the Port of Botany Bay was constructed. The Tower remains a local landmark on the Point.</p> <p>1.3 - Noted</p>
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<p>1.4 - The Tower has existing services and amenities for potential longer term reuse. The reinforced concrete shaft of the tower is 4.9 metres in diameter with an internal lift, stairs and service risers, and is topped by a three storey stainless steel and glass observation area containing toilets and lockers. The City would support the re-use of the Tower and opening to the public as an artwork, landmark or observatory.</p> <p>1.5 - The area immediately surrounding the base of the Tower should be landscaped and trafficable so that visitors can get close to the base. The curved section of carved rock face around the tower could remain fully exposed, maintaining the lower entry to the tower. This would conserve physical evidence of the level to which the headland was excavated to form the ports facilities.</p> <p>1.6 - The BDA's proposal for the creation of an 'oculus' circular opening letting light into the future cultural facility and sandstone cutting below is an inadequate interpretation of the Tower's heritage.</p> <p>1.7 - If approved, the detailed design of this opening requires further refinement as follows:</p> <ul style="list-style-type: none"> <li>• Interpretation of the Tower should be included on the concrete wall upstand in addition to the new paths around the site. The introduction of interpretation on the wall would achieve greater visual impact;</li> <li>• The proposal for a wall 1100mm-1320mm high surrounding the void opening has safety implications in the event that a visitor climbs the wall and is unable to get out of the void; and</li> <li>• The skylights shown on the drawings are inconsistently located and this should be clarified in the documentation.</li> </ul>	<p>1.4 - Any public use would require a major building code compliance and Access upgrade potentially altering the external appearance of the Tower. Alternative uses were compared under a multi criteria assessment and did not compare favourably.</p> <p>1.5 - The carved rock face about the base of the tower is square reflecting the former benching of the 1903 Dalgety's Store. It is intended to be left evident and naturally lit from above.</p> <p>1.6 -The interpretation of the Tower will also include signage at park level regarding both the Tower and the massive landform changes of the 1900s and 1960s to accommodate changing maritime needs, and <i>'a slice of the HCT will become a concrete ring of memory'</i>.</p> <p>1.7 The design development of the interpretive elements will consider the recommendation from the City. Wall openings surrounding the void will be reviewed within a safety in design framework to ensure public safety is maintained.</p>
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	1.8 - The City opposes the demolition of the Tower and supports its conservation in situ and re-use as a public artwork or observatory Tower.	1.8 - Noted
No.2 - Heritage Council of NSW (Heritage Division, Office of Environment and Heritage)	<p>2.1 - It is noted that no detailed information or analysis of the specific options pursued for adaptive reuse and exact details regarding structural assessments has been included in the EA. This is considered inadequate as it is not possible to identify and assess the nature and scope of the investigations previously conducted or the specific and actual constraints identified around the question of an adaptive reuse for the existing HCT.</p> <p>2.2 - The EA report refers to consultation with key stakeholders and neighbours, including heritage groups, in Section 3.7. No detail regarding the nature or views expressed is provided in the EA .This is considered inadequate.</p> <p>2.3 - Key documents forming parts of the EA report such as the Statement of Heritage Impact have been reviewed by the Heritage Division. This review found the SOHI lacked rigour in the application of all relevant Criteria for Assessing Significance and in particular it has not adequately addressed all of the potential State significance of the Tower. Assumptions have been made that the loss of the operational capacity of the Tower has diminished its significance from a State to a local level. The SOHI notes that the Tower is out of scale and time period with other areas of Millers Point.</p> <p>2.4 - The significance of the tower is to be considered at the Heritage Council meeting to be held on 4 June 2014. It is likely that the Heritage Division will issue additional advice to the Department following that meeting.</p> <p>2.5 - Currently the Heritage Division considers the exhibited EA for the proposal lacks rigour and detail in a number of areas and that these should be addressed by</p>	<p>2.1 – Refer to the detailed Options Assessment in Appendix 2</p> <p>2.2 – Consultation has been held at the public presentation at Customs House in March 2014, at the public open days at Headland Park in 2013 &amp; 2014 with over 8,000 community members and at the community liaison groups.</p> <p>2.3 - The revised SOHI will includes an additional detailed and thorough assessment of the HCT against all the relevant criteria for assessing cultural heritage significance.</p> <p>2.4 – Noted.</p> <p>2.5 - Noted.</p>

	the proponent prior to determination of the Modification application.	
No.3 - Environment Protection Authority	<p>3.1 - The EPA recommends that the proponent provides some minor clarification on air emission control best practice process design and matters relating to an Asbestos Management Plan. Once the above clarifications have been supplied, the EPA has no objections to the Department of Planning and Environment approving the modification request should it decide to do so.</p> <p>3.2 - The EPA has reviewed the Proposal including relevant documents on air quality management issues such as <i>Harbour Control Tower Removal Works - Air Quality Management Plan (AQMP)</i> - (JBS Environmental, November 2013 and identified the following issues:</p> <ul style="list-style-type: none"> <li>• Clarification is required to ensure dust and asbestos emissions will be minimised to the maximum extent practicable.</li> <li>• The EPA recommends that the proponent clarifies project works and air mitigation strategies (described in the AQMP) have been designed to minimise particulate emissions to the maximum extent practicable through the implementation of best practice process-design and emission controls</li> <li>• The EPA recommends that the proponent clarifies whether or not a specific AMP will be developed for the project.</li> </ul>	The Air Quality Management Plan has been updated to respond to the issues raised and includes an Asbestos Management Plan (See Appendix 5)
No.4 - Transport for New South Wales (joint response with Roads & Maritime Services (RMS))	<p>4.1 - Consultation should be undertaken with the City of Sydney regarding the proposal and is to be satisfied with the submitted Austroads Swept Path Assessment Diagrams for 19m Articulated Vehicle/12.5m Heavy Rigid Vehicle (ingress/egress movements) into and out of Merriman Street.</p> <p>4.2 - The proposed Merriman Street closure to general traffic during demolition will require the proponent to prepare a Traffic Management Plan (TMP) which</p>	The Authority acknowledges and accepts these suggested conditions of approval.

	<p>should be submitted initially to City of Sydney and for referral to the RMS for endorsement. The TMP must also examine the implementation of appropriate measures to address the temporary loss of on-street resident car parking.</p> <p>4.3 - It is understood that the appointed contractor would update and modify the preliminary Construction Traffic Management Plan (CTMP) to better suit any proposed changes to the construction methodologies, staging etc. Any updates to the CTMP must be referred to Council for approval.</p> <p>4.4 - All works / regulatory signposting associated with the proposed development are to be at no cost to the RMS</p> <p>4.5 - In case of any impacts on regular bus services operating on roads within the vicinity of the site are identified during the demolition period, including any proposed road closures, appropriate consultation should be carried out with RMS, TfNSW and bus operators.</p>	
No.5 - WorkCover Authority of NSW	5.1 - WorkCover Authority of NSW has no objections to the methodology recommended (Structural Dismantling of the Harbour Control Tower) pending the appointment of a suitably qualified demolition contractor who prepares an approved demolition work plan.	5.1 – Noted.

# APPENDIX 2

## Harbour Control Tower Options Assessment Report (July 2014)

# APPENDIX 3

Statement of Heritage Impact (revised July 2014)

# APPENDIX 4

Demolition Noise and Vibration Assessment (revised July 2014)

# APPENDIX 5

**Air Quality Management Plan (revised July 2014)**

# APPENDIX 6

## Soil and Water Management Plan