



## **Proposed Cycleway Upgrade: Rose Bay Promenade, New South Head Road, Rose Bay**

### **Statement of Environmental Effects**



*Prepared by*  
**Chris Betteridge, Betteridge Heritage**

*for*  
**Complete Urban Pty Ltd**

*on behalf of*  
**Woollahra Municipal Council**

**Version 2, 3 May 2019**



## Report Register

The table below documents the development and issue of drafts and the final document titled "Proposed Cycleway Upgrade, Rose Bay Promenade, Statement of Environmental Effects", prepared by Betteridge Consulting Pty Ltd t/a Betteridge Heritage in accordance with the company's Quality Assurance Policy.

Issue No.	Description	Issue Date
1	Statement of Environmental Effects Version 1	26 April 2019
2	Statement of Environmental Effects Version 2	3 May 2019

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Date	3 May 2019	Date:	3 May 2019

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## Executive summary

Woollahra Municipal Council (the Council) proposes to construct a shared pathway for cyclists and pedestrians along the Sydney Harbour side of New South Head Road from Double Bay to Rose Bay (the Proposal). The Council has commissioned Complete Urban Pty Ltd (Complete) to undertake a concept design documentation for the provision of cycle facilities along New South Head Road, Rose Bay, from William Street to Kent Road. Part of the proposed route for the pathway, between Cranbrook Lane in the west and the access road to Rose Bay Wharf in the east adjoins an item listed on the State Heritage Register (SHR), namely the 'Rose Bay Sea Wall, Promenade and its setting'.

The SHR-listed item includes the sea wall balustrade, four sets of stairs, parking bays, light standards, an avenue of Hills Weeping Figs and the southern portion of the road comprising the road and footpath. It extends to the entrance of Lyne Park in the east and to the beginning of the sea wall in the west. The northern boundary runs east to west, parallel to the sea wall, 20 metres from the sea wall into the waters of Rose Bay as shown on Heritage Council of NSW Plan No. HC2612.

This Statement of Environmental Effects (SEE) has been prepared by Betteridge Heritage for Complete Urban on behalf of the Council in accordance with the requirements of Woollahra Municipal Council Development Application Guide, including the following:

1. Summary of the history of New South Head Road between Double Bay and Rose Bay and the heritage significance of the place.
2. Summary of the site analysis; description of the existing conditions of the site and surrounding area;
3. Description of the proposal in detail and how it meets the relevant planning controls in the relevant State Environmental Planning Policies (SEPPs), Local Environmental Plan (LEP) and Development Control Plan (DCP); and,
4. Summary of the elements of the proposal that may impact on the listed heritage item and how any impacts are to be mitigated.

The SEE includes heritage impact assessment, including non-Aboriginal archaeological and arboricultural impacts and traffic and parking impacts.

The SEE concludes that relevant due diligence studies have been carried out to assess the likely environmental and heritage impacts arising from the Proposal. The proposal is consistent with the historic rationale and current use of the site as a promenade, providing the community with physical and visual access to Syd Harbour along the Rose Bay foreshore. Further, the Proposal responds to a demonstrated need for safer access for cyclists between Double Bay and Rose Bay, particularly in the area of the SHR curtilage for the seawall and promenade.

The detailed design of the proposal will need to be modified from that shown in the Concept Plan – Option A, Revision B but provided the adverse impacts to the trees can be eliminated or reduced to an acceptable level at the detailed design stage, there are no other heritage grounds for refusal of the Development Application for the Proposal. Notwithstanding these issues, the recommended mitigative measures in section 10.2 should be implemented and the potential design solutions in section 10.3 further investigated.

## 1.0 Introduction

This section of the SEE provides a background to the Proposal, locates and identifies the site, discusses the methodology used, identifies the author and his qualifications and experience and acknowledges those who have assisted in the preparation of the SEE.

### 1.1 Background

Woollahra Municipal Council (the Council) proposes to construct a shared pathway for cyclists and pedestrians along the Sydney Harbour side of New South Head Road from Double Bay to Rose Bay. The Council has commissioned Complete Urban Pty Ltd (Complete) to undertake a concept design documentation for the provision of cycle facilities along New South Head Road, Rose Bay, from William Street to Kent Road. The pavement construction methodology has not yet been determined. Part of the proposed route for the pathway, between Cranbrook Lane in the west and the access road to Rose Bay Wharf in the east adjoins an item listed on the State Heritage Register (SHR) and *Woollahra Local Environmental Plan 2014* (WLEP 2014), namely the 'Rose Bay Sea Wall, Promenade and its setting'.

Since parts of the proposed works are located within the curtilage of a heritage item listed on the SHR and WLEP 2014, the Council is required to prepare an Integrated Development Application and a Section 60 application to the Heritage Council of New South Wales. Pursuant to Clause 5.10 (4) of the LEP Council "must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area". Accordingly, pursuant to Clause 5.10 (5) (a) Council has required a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.

This heritage management document, in the form of a Statement of Environmental Effects (SEE), has been prepared by Betteridge Heritage for Complete Urban on behalf of the Council in accordance with Woollahra Municipal Council Development Application Guide, including the following:

1. Summary of the history of New South Head Road between Double Bay and Rose Bay and the heritage significance of the place.
2. Summary of the site analysis; description of the existing conditions of the site and surrounding area;
3. Description of the proposal in detail and how it meets the relevant planning controls in the relevant State Environmental Planning Policies (SEPPs), Local Environmental Plan (LEP) and Development Control Plan (DCP); and,
4. Summary of the elements of the proposal that may impact on the listed heritage item and how any impacts are to be mitigated.

The SEE includes historic heritage impact assessment, non-Aboriginal historical archaeological impact assessment, arboricultural impact assessment and traffic and parking impact assessment.

This SEE is complementary to the Heritage Impact Statement (HIS) for the proposed works also prepared by Betteridge Heritage for Complete Urban on behalf of Council and should be read in conjunction with that report.

## 1.2 Site location and identification

The site which is the subject of this SEE is on the Sydney Harbour foreshore at Rose Bay in the Municipality of Woollahra and is within the SHR curtilage described as the sea wall balustrade, four sets of stairs, parking bays, light standards, an avenue of Hills Weeping Figs and the southern portion of the road comprising the road and footpath [i.e. that part of New South Head Road and footpath on the opposite side from the seawall]. It extends to the entrance of Lyne Park in the east and to the beginning of the sea wall in the west. The northern boundary runs east to west, parallel to the sea wall, 20 metres from the sea wall into the waters of Rose Bay as shown on Heritage Council of NSW Plan No. HC2612 (see Fig.1).



**Figure 1** Heritage Plan 2612 showing State Heritage Register Item 1932, edged red. (Source: Heritage Council of NSW)

## 1.3 Methodology

This report has been prepared in accordance with the guidelines for preparation of Statements of Environmental Effects in the Woollahra Municipal Council Development Application Guide. Preparation of the report involved library and web-based research of documentary material on the site, site inspections on 14 February and 17 April 2019 and consultations with officers of Complete Urban and the Council.



The report includes a brief physical description of the site, a visual analysis, consideration of the heritage significance of the subject property, description of the proposed works, impact assessment, assessment against relevant planning control including LEP, DCP, SEPPs and REPs, conclusion and recommended mitigative measures.

### **1.4 Author identification, qualifications and experience**

This report has been prepared by Chris Betteridge BSc (Sydney), MSc (Museum Studies) (Leicester), AMA (London), M. ICOMOS, Director of Betteridge Consulting Pty Ltd trading as Betteridge Heritage, specialists in the identification, assessment, management and interpretation of cultural landscapes. The author was Specialist – Environmental / Landscape in the Heritage & Conservation Branch, NSW Department of Planning for ten years. He has been in private practice as a heritage consultant since 1991 including extensive periods as consultant Heritage Advisor to both Port Stephens Council and Wollondilly Shire Council and a member of the heritage advisory panel of Northern Beaches Council. Chris has specialised in the conservation of significant places, including some of the most important cultural landscapes in NSW. He has prepared or contributed to conservation planning documents for many significant sites and in recent years has prepared numerous heritage impact statements for proposed developments affecting listed items or conservation areas.

The Archaeological Impact Assessment (see Appendix B) was prepared by Dr Iona Kat McRae, Senior Archaeologist, Casey & Lowe Archaeology & Heritage and reviewed by Tony Lowe, Director, Casey & Lowe. The Arboricultural Impact Assessment Report (see Appendix C) was prepared by Andrew Morton, Dip. (Arboriculture) [AQF Level 5], B. App. Sci. (Horticulture), A. Dip. App. Sci. (Landscape), Director, Earthscape Horticultural Services. The Traffic and Parking Report (see Appendix D) was prepared by Nathan Parish, engineering Manager, Complete Urban Pty Ltd.

### **1.5 Acknowledgments**

The author would like to thank the following for their kind assistance in the preparation of this report:

Emilio Andari, Team Leader Traffic and Transport Engineering Services, Woollahra Municipal Council;  
 Margaret Betteridge, Director, Betteridge Heritage;  
 Ian Berger, Roads & Maritime Services;  
 Jane Britten, Local Studies Librarian, Woollahra Libraries, Woollahra Municipal Council;  
 Anne Bickford, consultant archaeologist;  
 Elizabeth Hartnell, Local History Librarian, Woollahra Libraries, Municipal Council  
 Tony Lowe, Director, Casey & Lowe Archaeology & Heritage;  
 Iona Katriona McRae, Senior Archaeologist / Researcher, Casey & Lowe Archaeology & Heritage;  
 Nathan Parish, Engineering Manager, Complete Urban Pty Ltd;  
 Heath Quint, Listings Officer, National Trust of Australia (NSW);  
 Barbara Swebeck, Local Studies Librarian, Woollahra Libraries, Woollahra Municipal Council;  
 van Tilburg, Alice, Graduate Policy Officer, Coastal and Environment Policy, NSW Department of Planning & Environment;  
 Leica Wigzell, Board & Executive Support, National Trust of Australia (NSW).



## 2.0 The history of New South Head Road

New South Head Road was completed in 1839 at least as far as the signal station at Vaucluse, generally following the shoreline route of a Cadigal clan track known as 'Maroo'. In May 1848 the South Head Roads Trust Act was passed, and this enabled the Government to appoint a Road Trust to control several roads and construct tollgates. The roads under the Trust's jurisdiction included New and Old South Head Roads and Point Piper Road. It was not until the passage of the Local Government Act of 1906 that the Government gave councils in the Eastern Suburbs the authority to take charge of the major roads running through their local government areas. During the late 19th century the volume of traffic along New South Head Road steadily increased. Tramlines were constructed extending out from the City of Sydney and by the 1890s a tramway terminus was situated at the western end of Rose Bay. The tram service was extended as far as Dover Road in 1900 and was pushed out to Watson's Bay Wharf by 1909.

As residential development consolidated in the area around Rose Bay, improvements were contemplated for New South Head Road, perhaps spurred on by complaints received by residents concerning its deplorable condition. Council was certainly purchasing land for road widening purposes by the beginning of 1917, and a New South Head Road Improvement Committee was formed to oversee the proposed works, which included resumptions, realignment of parts of the road and widening it to 100 feet (30.48 metres).

The road widening works took place over a number of stages, and in 1923 Council submitted a request for a grant and loan to the Department of Local Government to cover the cost of widening the road in several places: at the junctions of New South Head Road and Darling Point Road and Cross Street, in the vicinity of what is now Cranbrook School to Victoria Road, and improvements and widening between Rose Bay Park and Lyne Park.

In June 1924 the prominent architect Herbert E Ross offered his services as honorary consulting engineer for the works between Rose Bay Park and Lyne Park, including the Rose Bay sea wall and Promenade, acting in conjunction with Council's own engineer.<sup>1</sup>

On Friday 19 February 1926 a ceremony was held during which the widened road was opened and the lights along the Promenade switched on (Howard, 2001:6). The completed road widening was officially placed under the management and control of Woollahra Council on 17 March 1926, but during 1928 and 1929 the Main Roads Board was given wider responsibilities and so New South Head Road was proclaimed a main road under the Local Government Act and placed under the control of the Board.

The tram service from the City of Sydney to Watsons Bay was closed on 10 July 1960 and replaced by buses.

New South Head Road was again widened in the late 1970s and early 1980s to four lanes (two each way). An engineering study in 2003 into the condition of the concrete seawall, balustrade, stairs and light standards found evidence of cracking and salt attack in the seawall and varying degrees of spalling and corrosion in the other elements. The study proposed various remedial measures

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<sup>1</sup> Howard 2001, p.5

The major restoration and upgrade works carried out in 2007 included repairs to the balustrade, light standards and stairs. The seawall was generally retained in its existing condition with only minor repairs. However, significant repairs were required to the concrete balustrade, with sections affected by concrete cancer removed and repaired with epoxy cement, and degraded reinforcing replaced with stainless steel. A new layer of thin render was applied to the surface of the balustrade to bond the repaired and original sections.

All the original lamp standards were replaced with exact replicas made by casting new columns from an original mould. New glass spheres were installed, which were appropriate to the size of the columns (previously, there had been much larger spheres and sets of double spheres hung off either side of a T-shaped bracket).

The footpath was reconstructed to its original 4 metre width, with a new granite paving pattern with a border to the sea side of the footpath, and strips crossing the footpath at every light standard. The fig trees were preserved, with native groundcover plantings of grasses and shrubs planted beneath. Replacement trees were planted where older trees needed to be removed. Porous asphalt surfaces to protect tree roots and provide drainage around trees was installed, along with new timber and steel street furniture and steel bollards in front of the refreshment pier.

The stairs were rebuilt on top of the existing stairs. New handrails of timber with steel wire balustrading were installed. A new secondary lighting system was considered necessary due to the insufficient spacing of the existing lights, and the fact that the existing street lighting is blocked by the fig trees. Low grey metal pier lighting with a square cross-section has been added to the south side of the footpath, set low to light the footpath and not disrupt views of the harbour.

A sustainable stormwater treatment and recycling system was built into the upgrade works. Run-off water is collected in large tanks under the parking bays, treated by filtering systems, and then available for reuse for localised irrigation and maintenance.

The remedial works were carried out by Woollahra Municipal Council, with the design works by Conybeare Morrison, and the contractor Eco Civil. The upgrading works won the Woollahra Heritage Conservation Award in 2008.

See HIS section 2.1 for a more extensive account of the history of Rose Bay and New South Head Road.

### **3.0 Site description**

The Rose Bay Promenade is a collective term for various elements including: the seawall, the balustrade with light standards directly above; four sets of stairs to access Rose Bay; the road carriageway, footpaths to the north and south of New South Head Road; landscaped verge of mature fig trees and other plantings punctuated by parking bays either side of New South Head Road; and the early refreshment rooms. The setting comprises Rose Bay Park to the west and the waters of Rose Bay.

The seawall consists of a structure covered by cement render, above which is a reinforced concrete balustrade wall of 30 panelled bays topped by 29 regularly-spaced light standards of precast concrete columns with single spherical glass lights.

A thin coat of surface render has been applied in the 2007 reconstruction. The balustrade and lamp standards are designed in the Inter-War Free Classical style; the Tuscan order has been used in the design of the light standards. Pairs of lamp standards flank openings for three sets of concrete stairs which provide access to the water of the bay, or at low tide, the narrow beach below the seawall, from the northern footpath. Openings for two of them are aligned with streets intersecting with New South Head Road (O'Sullivan and Beresford Roads). Another flight of stairs links the northern footpath to the jetty and Rose Bay Park.

See HIS section 2.2 for a more extensive description of the site affected by the Proposal.

## 4.0 Site significance

The Statement of significance for the SHR-listed item follows.

*“The Rose Bay Sea Wall, Promenade and its setting may be of state heritage significance for its historic values as a good and representative example of one of the earliest and largest 20th Century civic improvement schemes for the recreation of both pedestrians and motorists. It clearly demonstrates the increasing uptake of private motor transport in the early 1920s.*

*It's [sic] potential State heritage significance is enhanced through its association with noted engineer and architect Herbert Ross whose architectural partnership with Ruskin Rowe was one of the largest architectural offices in Sydney producing well regarded building designs such as the former Government Savings Bank, the Royal Automobile Club and the former Ushers Hotel.*

*The Rose Bay Sea Wall, Promenade and its setting has potential state heritage significance for its aesthetic values including high quality architectural elements in the Inter War Free Classical style. It is an early and at the time unique integrated civic improvement design with low lying balustrades, parking bays, lighting and landscape elements (including the avenue of weeping figs) designed in such a way as to allow the pleasure of viewing Rose Bay by both pedestrian and motoring visitors. The scheme defined the sweeping interface between the waters of Rose Bay and the foreshore zone which is reflected in the inclusion of 20 meters of the bay waters, following the contours of the bay, as an indicative setting in the State Heritage listing curtilage. The experience of this interface to both pedestrians and motorists was integral to the original scheme.*

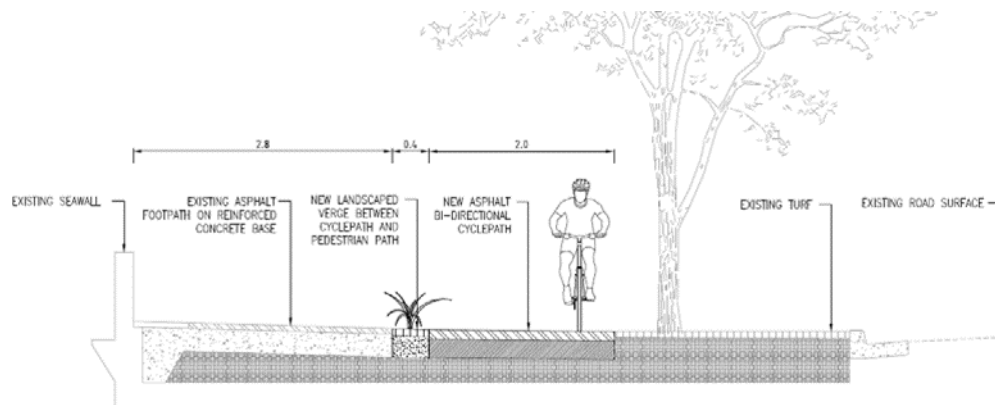
*The Sea Wall Promenade and its setting are a relatively intact and good representative example of a 1920s civic improvement scheme designed in the Inter War Free Classical style and using trees representative of street and park plantings of the 1920s.”*

See HIS section 3.2.1 and Appendices C and D for more information on the significance of the site.

## 5.0 The Proposal

The proposed measures across the entire project involve the provision of cycle facilities along New South Head Road connecting Double Bay to Rose Bay. For most of the route, the proposals provide a shared path on the northern side of New South Head Road. However, along the Rose Bay Promenade, the area subject of this report, the facility provides a 2.8m wide pedestrian path adjacent to the sea wall,

a 0.4m wide planted separation strip, and a 2.0m bi-directional separated cycleway. Refer to Appendix A for the concept design plans.



**Figure 2** Proposed cross-section of the upgraded pedestrian path / cycle path. (Source: New South Head Road – Cycleway Upgrade: Traffic and Parking Report, April 2019)

Several additional modifications to the surrounding landscape are required. These include:

- The removal or reduction of several garden beds along the new path;
- The relocation of existing bench seats and rubbish bins, the extension of concrete pads;
- Moving the kerb in parking bays to allow for car door buffers;
- Relocating existing stormwater pits.

## 6.0 Heritage Impact Assessment

### 6.1 Non-Aboriginal Archaeological Impact Assessment

The non-Aboriginal Archaeological Impact has been assessed in a separate report commissioned by Betteridge Heritage and prepared by Casey & Lowe Archaeology & Heritage. This report has been prepared by highly qualified and experienced historical archaeologists. See Appendix C, HIS, for the full report which concludes:

*“The proposed works are predominantly at ground level and are not expected to impact any known or potentially significant archaeological deposits”.*<sup>2</sup>

### 6.2 Arboricultural Impact assessment

An ‘Arboricultural Impact Assessment Report: Proposed Cycleway, New South Head Road, Rose Bay’, dated March 2019, has been prepared for Woollahra Council c/- Complete Urban by Andrew Morton, Earthscape Horticultural Services and is attached as Appendix D. This report has been prepared by a highly qualified and experienced arborist to assess the potential impacts posed by the proposed works on the specimens of trees within the SHR curtilage, numbered T1 - 26. This report finds, inter alia, that:

*“Widening the pavement will result in an encroachment to the Tree Protection Zones (TPZs) and Structural Root Zones (SRZs) of Trees T2-T21. A conventional pavement system would require excavations and compaction for the pavement subgrade within*

<sup>2</sup> Ibid., section 5, p.16

*the soft landscape area between the existing footpath and the subject trees and over the existing permeable area of pavement. Given the nature of the root systems of these trees (some of which have large buttresses and above grade woody surface roots), excavations of this nature are highly likely to result in severance and damage to woody roots, leading to an adverse impact on these trees. As no suitable alternatives exist to relocate the pavement further from the trees, alternative construction methodologies should be adopted in order to avoid any adverse impact”<sup>3</sup>.*

*“The most appropriate alternative pavement system may need to be considered on a case by case basis, as every tree situation and root arrangement may be slightly different. Essentially these options involve installing the pavement system either above grade with minimal sub-grade excavation or installing the pavement system as an elevated decking and supporting it using isolated post or pier footings (which can be placed to avoid root severance and damage). The pavement system should preferably be permeable (to allow some moisture percolation to the root zone), as much of the root zones are already covered with non-permeable pavement systems. In some instances, local narrowing of the cycleway may be required, with suitable mitigation measures (such as signage, line marking, barriers or similar measures) installed to warn cyclists of any irregular conditions (obstacles, reduced clearances or other potential hazards), in accordance with Roads and Maritime Services (RMS) guidelines. It should be noted that raising the pavement surface level may have implications for designated clearances between trees and the cyclist envelope”<sup>4</sup>.*

### **6.3 Overall Heritage Impact Assessment**

The Heritage Division, NSW Office of Environment and Heritage has published a standard set of questions that need to be addressed in the assessment of the impact of proposed development on items of environmental heritage. The following assessment answers those questions that are relevant to the current proposal and details those aspects of the proposal considered likely to enhance the significance of the place and any considered likely to be detrimental. A conclusion is then drawn as to whether the proposal is acceptable, and recommendations are made for any mitigative measures to reduce adverse impacts.

### **6.4 Works to or adjoining a heritage item**

#### **6.4.1 How is the impact of the works on the heritage significance of the item to be minimised?**

The proposed works have been designed and located to be harmonious in design, scale, fabric and finishes to the heritage item and its curtilage and environmental context. Any alterations to or relocations of kerbs, landscaping and street furniture will be minimal and within the limits of acceptable change for the item and its curtilage. However, the siting of the new cycle path closest to the existing trees poses potentially high impacts to root systems and canopies of some of those trees.

#### **6.4.2 Will the works visually dominate the item?**

The works are predominantly at ground level and will not visually dominate the item.

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<sup>3</sup> Arboricultural Assessment March 2019, Section 9.2.3

<sup>4</sup> Ibid., Section 9.2.4

**6.4.3 Are the works sited on any known or potentially significant archaeological deposits?**

*“The proposed works are predominantly at ground level and are not expected to impact any known or potentially significant archaeological deposits”.<sup>5</sup>*

**6.4.4 Are the works sympathetic to the heritage item? In what way (form, proportions, design)?**

See answer to 5.4.1 above.

**6.4.5 Why are the works required to be adjacent to a heritage item?**

The works are designed to increase the public's opportunities to use and appreciate the heritage item and the opportunities that the promenade affords for views over Sydney Harbour.

**6.4.6 How does the statutory curtilage of the item contribute to the retention of heritage significance?**

Curtilage is the area that needs to be protected around a heritage item to retain its significance. In the case of the Rose Bay promenade, seawall and setting, the curtilage extends to the southern boundary of the New South Head Road road reserve and out into Rose Bay. The SHR curtilage is considered to be sufficient to provide the necessary statutory protection and development controls for the item.

**6.4.7 How do the works affect views to and from the heritage item? What has been done to minimise negative effects?**

The proposed works will have minor effects on close views to the item, arising from the upgrade pedestrian path, new planting beds, new cycle path and additional markings on the paved surface required to enhance public safety. These visual impacts are considered to be within the limits of acceptable change for the item and will be attenuated by distance of the viewer from the pathway. Views from the harbour will not be affected.

**6.4.8 Will the public and users of the item still be able to view and appreciate the item?**

The Proposal will enhance opportunities for the public and users of the promenade to view and appreciate the item and Sydney Harbour by providing safer access for cyclists along the harbour foreshore and by maintaining access for pedestrians.

**6.5 Potential positive and negative aspects of the proposal**

**6.5.1 Aspects of the proposal considered likely to retain and/or enhance significance**

The Proposal essentially retains the existing route of the pathway along the promenade and retains the fabric of the seawall, balustrade, light standards and stairways but enables the promenade to be safely shared by pedestrians and cyclists.

**6.5.2 Aspects of the proposal considered likely to have a possible adverse impact on significance**

The siting of the proposed cycle path on the side closest to the existing trees poses identifiable and potential negative impacts on the tree root systems and canopies.

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<sup>5</sup> Ibid., section 5, p.16

These impacts will need to be eliminated or reduced to a level acceptable to qualified arborists and heritage practitioners in the detailed design phase of the project.

Having analysed the documentary and physical evidence related to the area likely to be affected by the Proposal, reviewed the heritage significance of the State Heritage Register-listed item and assessed the likely heritage impacts of the proposed works, including the archaeological and arboricultural impacts assessed in separate reports, I am of the opinion that many aspects of the proposal are within the limits of acceptable change for the SHR-listed item and can be managed effectively to maintain heritage values. However, if the potential impacts on the trees are to be eliminated or reduced to an acceptable level, the detailed design of the proposal will need to be modified from that shown in the Concept Plan – Option A, Revision B. Provided the adverse impacts to the trees can be eliminated or reduced to an acceptable level at the detailed design stage, there are no other heritage grounds for refusal of the Development Application for the Proposal. Notwithstanding these issues, the recommended mitigative measures in section 6.2 should be implemented and the potential design solutions further investigated.

## **7.0 Traffic and Parking Impacts**

Complete Urban Pty Ltd has prepared a Traffic and Parking Report for Woollahra Council (Version 1, 17 April 2019). This report provides the following:

1. Cyclist and pedestrian counts during daylight hours on a weekday and a weekend day;
2. Discussion of count results;
3. Estimates of pedestrian and cyclist generation arising from implementation of the proposal;
4. Assessment of Traffic, Parking and Pedestrian Impacts

The report makes the following conclusions:

“It is considered that the proposals will have no impact on the traffic on New South Head Road as the proposals are located fully within the existing path and verge width”.

“The proposals have minimal impact on parking along New South Head Road. Two (2) car parking spaces are proposed to be lost immediately west of Regatta Rose Bay, with the adjacent loading zone relocating to the inset parking bay at the expense of the two (2) 4P parking bays.

Throughout the remainder of the Promenade, the inset car parking bays are retained, although they are narrowed slightly to improve the separation between the proposed cycleway and the car parks. It is noted that the inset bays are currently very wide and that any narrowing results in car parks that meet the requirements of the Australian Standards”.

“The proposed separated cycleway will have a neutral impact on pedestrian using the Promenade.

Whilst the proposals reduce the current path width from 4m to 2.8m, the proposals also remove cyclists from the pedestrian path meaning that whilst the pedestrian path is narrower, the potential conflict between pedestrians and cyclists is reduced.

Pedestrians accessing car parks on the northern side of New South Head Road are required to cross the separated cycleway”.



The report recommends the following conflict mitigation measures:

- To minimise the risk of pedestrians and cyclists using the incorrect paths and conflicting, a landscaped separation strip is proposed longitudinally along the Promenade to physically prevent movement between the paths;
- Longitudinal line marking and cycle symbols are proposed within the separated cycleway to make it clear that it is a cycle facility;
- Appropriate signage is proposed to confirm each path designation;
- The kerb within the inset car parking bays is proposed to be relocated away from the separated cycleway to increase the distance with the cyclists and parked cars, removing the risk of 'car dooring' of cyclists. The space also provides room for people to get into and out of their car without standing in the cycleway;
- SLOW markings are located in locations with longitudinal fall to reduce the speeds of cyclists.

The report concludes:

The Rose Bay Promenade is popular with both pedestrians and cyclists, with an increase in usage during the weekend when compared to weekday use. Whilst currently illegal to cycle on for all but those under 16 or those accompanying someone under 16, counts indicate a high volume of cyclist use, especially at weekends. Whilst the counts do not differentiate by age, observations indicate that adult cyclists do use the Promenade so providing a cycle facility is key to promoting cycling in the area.

Additionally, cycling within the New South Head Road traffic lanes is fraught with safety concerns, with high speeds and high volumes making it undesirable for all but the most competent cyclists. Crash history also indicates a number of cyclist incidents in the vicinity.

It is considered that the proposed separated cycleway along the Rose Bay Promenade will have little impact on the current traffic, parking and pedestrian usage. Traffic impacts are nil, and parking impacts are negligible. Pedestrians are more significantly affected with a narrower path, but with cyclists removed there is an argument that the pedestrian facility is now safer. Where potential conflicts between pedestrians and cyclists exist, a range of mitigation measures have been proposed to mitigate the risks to ensure safe operation.

Other potential impacts relating to trees, heritage etc. are being considered as part of separate reports by specialists in those fields.

## 8.0 Stormwater runoff impacts

As part of the upgrade works to the promenade and seawall in 2007, Council implemented along a 750 metre stretch of New South Head Road at Rose Bay a system for the treatment and re-use of stormwater in which stormwater is treated through a porous paving infiltration system, and then stored in underground tanks for re-use. The porous pavers were installed as the surface treatment to eleven car parking bays along the promenade. There will be no alterations to the existing stormwater system and no additional stormwater runoff impacts arising from implementation of the Proposal<sup>6</sup>.

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<sup>6</sup> E. Andari, Woollahra Council, pers. comm., 16 April 2019, 3 May 2019

## **9.0 Compliance with Statutory Requirements**

This section addresses the compliance of the Proposal with relevant statutory controls.

### **9.1 *Heritage Act 1977, as amended***

The Proposal affects an item listed on the State Heritage Register. In accordance with the requirements of the Heritage Act 1977, as amended, a Section 60 Application has been prepared and a Heritage Impact Statement (HIS) has been prepared for the Proposal, in accordance with the guidelines published by the Heritage Council of NSW to accompany an Integrated Development Application to the Heritage Council.

### **9.2 *Environmental Planning & Assessment Act 1979, as amended***

The Proposal affects an item listed on Schedule 5, Woollahra Local Environmental Plan 2014 and, in accordance with section 5.10 of the LEP, a heritage management document has been prepared so that Council can consider the impact of the Proposal on the listed item.

### **9.3 *Woollahra Development Control Plan 2015***

Various chapters and clauses of Woollahra DCP 2015 are relevant to the Proposal. Compliance is discussed below.

#### **9.3.1 Chapter B3 – General Development controls**

##### **B 3.1.3 Design Excellence**

Woollahra Council has a strong commitment to design excellence. Design excellence may be achieved by development that meets the following criteria, as well as all other relevant objectives and controls in this chapter. 1. Development contributes positively to the desired future character of the relevant residential precinct described in section B1 of this DCP. 2. Development respects the natural, built and cultural significance of the site and its location. 3. Development conserves and protects established trees and plantings of landscape value and deep soil landscaping and, where possible, enhances plantings and deep soil landscaping. 4. Development responds to the topography. 5. Development contributes positively to the streetscape. 6. Development provides high levels of amenity for both the private and public domain. 7. Development incorporates the principles of ecologically sustainable development, such as: • minimising energy consumption, • reducing potable water use, • using energy and water efficient appliances, • using environmentally friendly products, and • enhancing indoor environmental quality.

The proposal satisfies the controls in Chapter B3, Part B 3.1.3.

##### **B 3.5.1 Streetscape and local character**

A quality streetscape provides good public amenity and contributes to the character and identity of the locality. As character can vary from street to street, it is important that development recognises predominant streetscape qualities, such as building form to ensure a cohesive streetscape character.

#### **Relevant Objectives and Controls**

O1 To ensure that the built form is compatible with the streetscape and the desired future character of the area.

O2 To ensure that development is of high visual quality and enhances the street.

C2 Development retains vegetation of landscape value.

C3 Development steps down sloping sites and follows the topography of the land.

C4 External building materials and colours do not detract from the streetscape.

Bright or obtrusive colour schemes are avoided.

C6 The use of reflective materials is minimal (including windows, access hatches, skylights and balustrades).

The Proposal satisfies the relevant objectives and controls of this Chapter of the DCP.

### **B 3.5.3 Public and private views**

Views are a special element of Woollahra's unique character. The sloping topography, leafy setting and harbour frontage combine to offer dramatic bushland and water views which contribute to the amenity of both private dwellings and the public domain. In addition, the municipality's frontage to Sydney Harbour places responsibilities upon the Woollahra community, to ensure development maintains the scenic beauty of the foreshore and headland areas when viewed from the water and from the land.

#### **Public views**

Public views from streets, footpaths, parks and other public areas are among Woollahra's most prized assets and are key elements of the municipality's identity. These views may take the form of discrete views between buildings and vegetation, more open views across the harbour and local landscape from public parks, or more defined vistas along streets terminating at Sydney Harbour or local landmarks. Important views and vistas are identified on the precinct maps in Chapters B1 and B2 in this part of the DCP.

The preservation and, wherever possible, enhancement of public views helps to maintain legibility within Woollahra by allowing people to see and interpret the surrounding landscape and landmark features. Public views also allow Woollahra's scenic beauty and special character to be appreciated.

The Proposal complies with both the objectives and controls of this chapter of the DCP.

### **9.3.2 Chapter E2 – Stormwater and Flood Risk management**

The objectives of this chapter of the DCP are:

O1 To encourage ecologically sustainable stormwater management and the use of water sensitive urban design.

O2 To maintain existing natural drainage patterns.

O3 To ensure that adequate provision has been made for the disposal of stormwater from land proposed to be developed.

O4 To ensure the controlled release of stormwater to public stormwater systems without adversely impacting on adjoining or downstream properties.

O5 To protect Sydney Harbour and its waterways from stormwater pollution.

O6 To minimise flood risk and damage to people and property by setting appropriate development controls.

O7 To ensure that flood levels are not increased by development.

The existing stormwater treatment and re-use system along the relevant section of New South Head Road complies with the DCP and will not be altered by implementation of the Proposal.

### **9.3.3 Chapter E3 – Tree Management**

#### **E3.2 Trees and works that require approval**

A person must not undertake works to a prescribed tree without development consent or a permit granted by Council. This section identifies what trees are “prescribed” and sets out the approval mechanism that applies.

##### **E3.2.1 Prescribed trees**

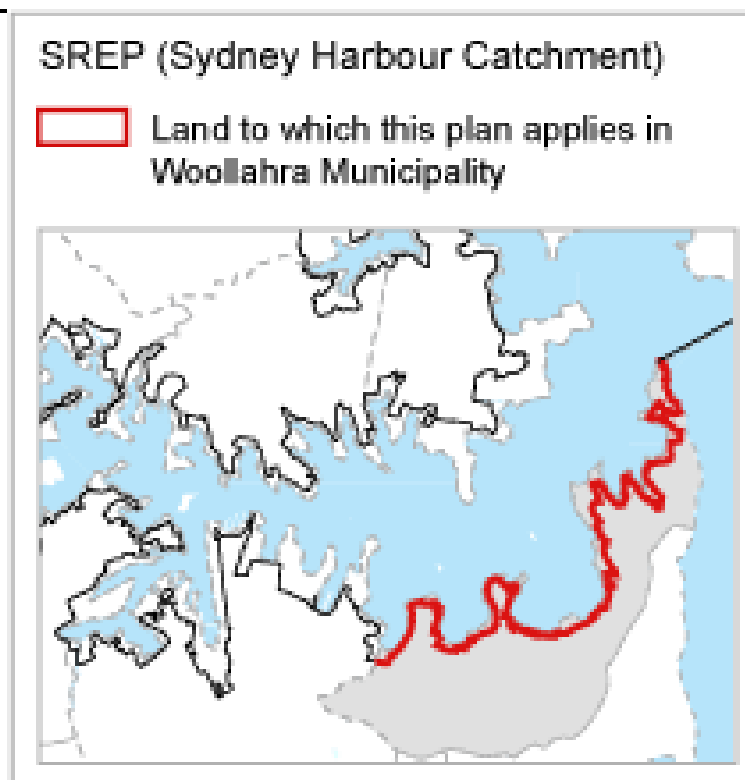
The species or kinds of trees that are prescribed for the purpose of clause 5.9(2) of Woollahra LEP 2014 are: 1. Any tree or palm, whether of indigenous, endemic, exotic or introduced species with a diameter spread of branches greater than 3m or with a height greater than 5m, irrespective of the spread of branches, and that is not identified in this chapter as exempt. 2. Any tree, whether of indigenous, endemic, exotic or introduced species with roots greater than 50mm diameter, but only if root pruning is proposed. 3. Any tree or palm identified in Council's Significant Tree Register. 4. Any tree or palm identified in Schedule 5 Environmental Heritage of Woollahra LEP, or located on land identified in Schedule 5 including: a) a tree listed as a heritage item; b) a tree located on land identified as containing a heritage item; or c) a tree on land within a heritage conservation area. 5. Any bushland as defined in State Environmental Planning Policy 19 – Bushland in Urban Areas.

##### **E3.2.2 Works that requires a development application**

A development application (DA) is required for the tree works if the tree is a type prescribed in Section 3.2.1 above, and any of the following apply: 1. the proposed works to the tree are part of an application for other building work or development that requires a DA; 2. the tree is identified in Council's Significant Tree Register and the tree works involve the removal of the tree; or 3. the tree is identified in Schedule 5 Environmental Heritage of Woollahra LEP 2014, or located on land identified in Schedule 5, and the tree works are not minor (i.e. may have an impact on heritage significance and amenity).

The trees within the SHR curtilage and in the LEP-listed item are prescribed trees under the DCP, therefore any works to the trees arising from implementation of the Proposal will require a DA. See Arboricultural Impact Assessment Report and HIS regarding potential tree impacts.

## 9.4 Sydney Regional Environmental Plan – Sydney Harbour Catchment 2005



**Figure 3** Land in Woollahra LGA to which the SREP – Sydney Harbour Catchment 2005 applies. (Source: [Foreshores and Waterways Area Boundary Map](#))

This plan aims to establish a balance between promoting a prosperous working harbour, maintaining a healthy and sustainable waterway environment and promoting recreational access to the foreshore and waterways. Specific heritage items in Rose Bay to which the SREP applies are listed below:

55	Woollahra	Remains of Western Rose Bay ferry wharf	New South Head Road, Rose Bay
56	Woollahra	Group of remains of wharf, baths and waterfront relics, including former Tivoli Pier and former Thorne's (or Claremont) Wharf	Bayview Hill Road, Rose Bay
59	Woollahra	Site of Public Baths	Lyne Park, Rose Bay

### 22 Public access to, and use of, foreshores and waterways

The matters to be taken into consideration in relation to public access to, and use of, the foreshores and waterways are as follows:

- (a) development should maintain and improve public access to and along the foreshore, without adversely impacting on watercourses, wetlands, riparian lands or remnant vegetation,
- (b) development should maintain and improve public access to and from the waterways for recreational purposes (such as swimming, fishing and boating),

without adversely impacting on watercourses, wetlands, riparian lands or remnant vegetation,

(e) the need to minimise disturbance of contaminated sediments.

#### **24 Interrelationship of waterway and foreshore uses**

The matters to be taken into consideration in relation to the interrelationship of waterway and foreshore uses are as follows:

(b) development on foreshore land should minimise any adverse impact on the use of the waterway, including the use of the waterway for commercial and recreational uses,

(c) development on foreshore land should minimise excessive congestion of traffic in the waterways or along the foreshore,

(e) development should avoid conflict between the various uses in the waterways and along the foreshores.

#### **25 Foreshore and waterways scenic quality**

The matters to be taken into consideration in relation to the maintenance, protection and enhancement of the scenic quality of foreshores and waterways are as follows:

(b) development should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands, foreshores and tributaries,

The Proposal complies with the relevant clauses of Sydney Regional Environmental Plan – Sydney Harbour Catchment 2005

### **9.5 State Environmental Planning Policy No. 71 – Coastal Protection**

Clause 14 Public access requires:

A consent authority must not consent to an application to carry out development on land to which this Policy applies if, in the opinion of the consent authority, the development will, or is likely to, result in the impeding or diminishing, to any extent, of the physical, land-based right of access of the public to or along the coastal foreshore.

The Proposal will enhance land-based access of the public to or along the coastal foreshore by enhancing safe access by cyclists and therefore complies with the SEPP.

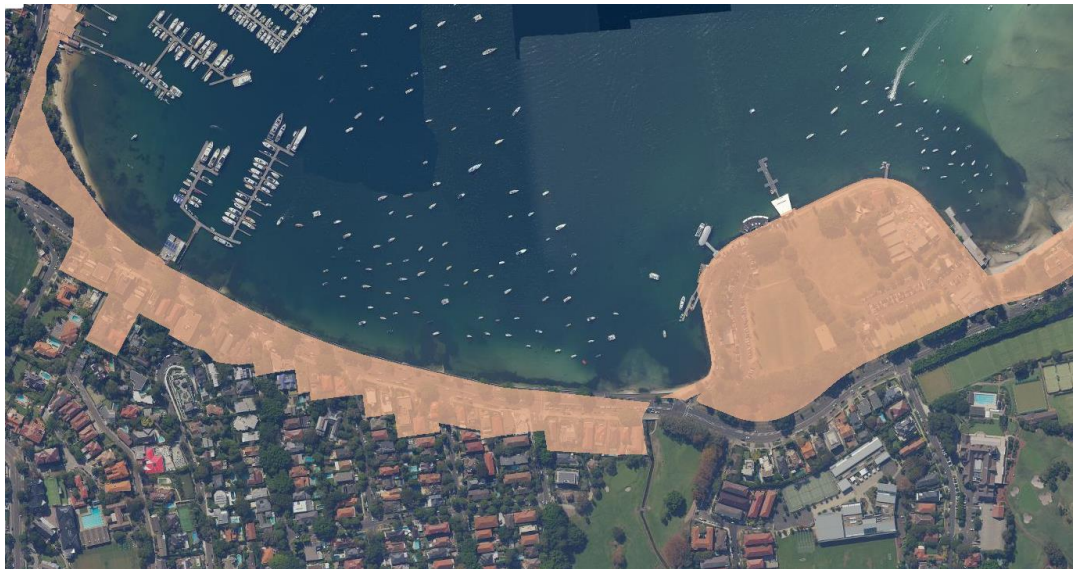
### **9.6 State Environmental Planning Policy No. 106 – Coastal Management 2018**

The aim of this Policy is to promote an integrated and coordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the *Coastal Management Act 2016*, including the management objectives for each coastal management area, by:

(a) managing development in the coastal zone and protecting the environmental assets of the coast, and

(b) establishing a framework for land use planning to guide decision-making in the coastal zone, and

(c) mapping the 4 coastal management areas that comprise the NSW coastal zone for the purpose of the definitions in the *Coastal Management Act 2016*.



**Figure 4** Extract of Coastal Use Areas map from SEPP No. 106 – Coastal Management 2018 showing areas subject to the SEPP coloured beige. (Source: [http://webmap.environment.nsw.gov.au/PlanningHtml5Viewer/?viewer=SEPP\\_CoastalManagement](http://webmap.environment.nsw.gov.au/PlanningHtml5Viewer/?viewer=SEPP_CoastalManagement))

The Rose Bay seawall and promenade area are inside the coastal use area and the coastal environment area; however, due to clause 13(3) and clause 14(2) of the Coastal Management SEPP, the Coastal Management SEPP does not apply. This is due to an interaction between the Coastal Management SEPP and *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*, known as the Sydney Harbour REP.

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*Woollahra Development Control Plan 2015*

*Woollahra Local Environmental Plan 2014* and associated Heritage Maps

Woollahra Municipal Council Local Studies Collection files: New South Head Road Widening and Rose Bay

## **11.0 Conclusion, mitigative measures and possible design solutions**

### **11.1 Conclusion**

In my opinion this Statement of Environmental Effects meets the due diligence requirements required for SEEs in the Woollahra Municipal Council Development Application Guide in addressing the assessment of impacts posed by the Proposal and assessing the compliance of the Proposal with relevant statutory controls.

Having analysed the documentary and physical evidence related to the area likely to be affected by the Proposal, reviewed the heritage significance of the State Heritage Register-listed item and assessed the likely heritage impacts of the proposed works, including the archaeological and arboricultural impacts assessed in separate reports, I am of the opinion that many aspects of the proposal are within the limits of acceptable change for the SHR-listed item and can be managed effectively to maintain heritage values. The proposal is consistent with the historic rationale and current use of the site as a promenade, providing the community with physical and visual access to Syd Harbour along the Rose Bay foreshore. Further, the Proposal responds to a demonstrated need for safer access for cyclists between Double Bay and Rose Bay, particularly in the area of the SHR curtilage for the seawall and promenade.

However, if the potential impacts on the trees posed by the current concept plan are to be eliminated or reduced to an acceptable level, the detailed design of the proposal will need to be modified from that shown in the Concept Plan – Option A, Revision B. Provided the adverse impacts to the trees can be eliminated or reduced to an acceptable level at the detailed design stage, there are no other heritage grounds for refusal of the Development Application for the Proposal. Notwithstanding these issues, the recommended mitigative measures in section 6.2 should be implemented and the potential design solutions further investigated.

### **11.2 Recommended mitigative measures**

#### **11.2.1 Detailed design**

Detailed design for the Proposal should eliminate the potential impacts on the trees assessed in the Arboricultural Impact Assessment Report or reduce those impacts to a level considered by a suitably qualified and experienced arborist.

#### **11.2.2 Materials and finishes**

Paving, landscaping and signage materials, surface finishes and exterior colours to meet Council requirements and be chosen from a colour palette appropriate for the heritage item and to minimise negative visual impact when viewed from the public domain.

### **11.2.3 Soft landscaping**

Any new soft landscaping should be with plant species to meet the following requirements:

1. Compatibility with existing heritage plantings;
2. Suitability for the local climatic conditions;
3. Environmental sustainability wherever possible;
4. Non-invasiveness.

### **11.2.4 Protection of site**

Measures should be taken to ensure that during construction there is no runoff or spillage of concrete, adhesives, spoil or other waste from the site that might have a negative impact on the heritage item, Sydney Harbour or adjoining properties.

### **11.2.5 Protection of trees**

During site works and construction all significant trees within the area subject to the Proposal should be protected in accordance with Council requirements, Australian Standard AS4970-2009 – Protection of Trees on Development Sites and any recommendation in the Arboricultural Impact Assessment Report.

### **11.2.6 Unexpected archaeological finds**

If any unexpected archaeological finds are revealed during site works or construction, then the recommendations contained in the Archaeological Impact Assessment should be followed.

## ***11.3 Possible design solutions to reduce arboricultural impacts***

Consideration should be given to the following design solutions to reduce the potential impact of the cycle way construction on the trees within the SHR curtilage.

### **11.3.1 Reduction in width of existing footpath**

Subject to meeting relevant standards, a reduction in the width of the existing footpath would enable the cycle path to be moved further north, away from the trees but would involve excavating the reinforced concrete base and existing asphalt paving of the footpath as well as reducing the width of the Promenade.

### **11.3.2 Replacement of the landscaped verge with a narrow kerb**

At best this would achieve a saving in width of 0.2m and would provide less barrier between pedestrians and cyclists as well as removing a strip of greenery between the two paths. However, some understorey landscaping could still be provided between trees subject to maintaining access to the Promenade from parked cars.

### **11.3.3 Various alignment and surface treatments of the cycle path**

The Arboricultural Impact Assessment Report canvasses a number of design solutions involving surface treatments, variable widths, etc. which should be given further consideration in the development of detailed design.



Chris Betteridge  
Director, Betteridge Heritage  
3 May 2019

## **12.0 Appendices**

### ***Appendix A – Parking and Traffic Report***