INNER WEST COUNCIL

DEVELOPMENT ASSESSMENT REPORT

Application No.	D/2018/672
Address	147 Darling Street, Balmain
Proposal	Removal of a *Casuarina glauca* (Swamp She-Oak) tree located at rear of a heritage listed site.
Date of Lodgement	20 December 2018
Applicant	Carlene York
Owner	Carlene York
Number of Submissions	One (1)
Value of works	$2000.00
Reason for determination at Planning Panel	Partial demolition of heritage item (tree removal only)
Main Issues	Nil
Recommendation	Approval
Attachment A	Recommended Conditions of Consent
Attachment B	Statement of Environmental Effects
Attachment C	Arborist Report
Attachment D	Statement of Significance (Heritage Item)
Attachment E	Statement of Significance (Waterview Estate)

LOCALITY MAP

Subject Site		Objectors	
Notified Area		Supporters	

1. Executive Summary

This report is an assessment of the application submitted to Council for removal of a *Casuarina glauca* (Swamp She-Oak). tree located at rear of 147 Darling Street, BALMAIN NSW 2041. The application was notified to surrounding properties and one (1) submission was received.

The proposal will not result in any adverse heritage or landscape amenity impacts and therefore the application is recommended for approval.

2. Proposal

The application proposes the removal of one (1) *casuarina glauca* (Swamp She-Oak) from the rear yard of the site. This tree has a height of approximately 15 metres with an estimated canopy spread of 11 metres. The tree was recorded to have a trunk diameter reading of 670mm measured at 1400mm from ground level. The tree is growing in a raised garden bed consisting of dislodged sandstone block work. The dimensions of the retained garden bed were measured to be 0.6m in height, 1.2m deep and 5m long.

No other works are proposed as a part of this application.

A copy of an aerial photo identifying the tree location and photos of the subject site and tree are reproduced below:

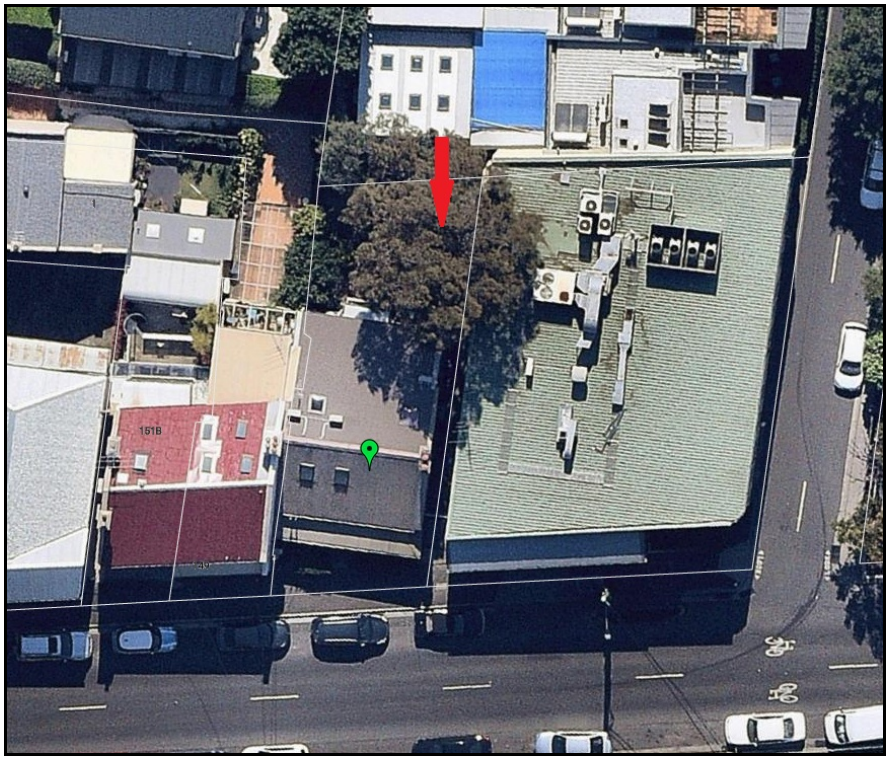

Image 2: Aerial Photo with tree identified

Image 3: Subject Site

Image 4: Subject Swamp She-Oak tree (side setback)

Image 5: Subject Swamp She-Oak tree (rear yard)

3. Site Description

The subject site is located on the northern side of Darling Street, between St Andrews Street and Cooper Street, Balmain. The site consists of 1 allotment and is generally square shaped with a total area of 241.47 m2 and is legally described as Lot A in Deposited Plan 442842.

The site contains a two & three storey building with separate outbuilding at the rear. The site is adjoined by 145 Darling Street which contains two storey carpark under a rendered building and 149 Darling Street, which contains a two and three storey building.

The subject site is listed as a heritage item (I180) and is located within the Waterview Heritage Conservation Area (Heritage Conservation Area C5).

4. Background

4(a) Site history

The following application outlines the relevant development history of the subject site and any relevant applications on surrounding properties.

Subject Site

Application	Proposal	Decision & Date
DA/276/1995	To use the premises as an office advertising agency.	Approved
D/2011/348	Removal of Trees.	Rejected
D/2011/636	Removal of two trees (Casuarina and Eucalyptus) from the rear yard of the subject site.	Rejected

D/2014/455	Removal of a tree that is dead or dying or is a risk to human health.	Rejected
D/2014/481	Removal of suspected dead eucalyptus nicholii (willow peppermint gum).	Rejected
D/2014/553	Removal of Eucalyptus nicholii (Willow peppermint Gum) tree from property.	Approved
D/2018/524	Change of use from commercial premises to dwelling and tree removal.	Rejected

The applications above determined as 'rejected' were based on a lack of information submitted. No merit assessment was carried out as part of these applications. The subject application has provided the necessary information to carry out an assessment.

Relevant applications to the surrounding properties are limited to the following:

Application	**Proposal**	**Decision & Date**
145 Darling Street, Balmain		
D/2014/372 –.	Enclosure of the loading dock and use of the existing building as office premises. Variation to Floor Space Ratio development standard.	Approved operational consent
M/2015/28	Modification of Development Consent D/2014/372 which approved enclosure of the loading dock and use of the existing building as an office premises. Modifications include the amendment of complying and non-complying air conditioning units located on the roof, additional acoustic measures in the basement and on the roof, the deletion of Condition 13 which requires all plant and associated equipment to be located within the approved building envelope, and ground floor changes to the Darling Street elevation.	Approved operational consent

4(b) Application history

Not applicable

5. Assessment

The following is a summary of the assessment of the application in accordance with Section 1.15 of the Environmental Planning and Assessment Act 1979.

5(a) Environmental Planning Instruments

The application has been assessed against the relevant Environmental Planning Instruments listed below:

- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Leichhardt Local Environmental Plan 2013

The following provides further discussion of the relevant issues:

5(a)(i) State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017

A permit under Part 3 of the Policy cannot be issued for the clearing of vegetation that is or forms part of a heritage item or that is within a heritage conservation area. An appropriate application for development consent relating to the subject tree removal has been made, and its removal is supported subject to conditions. The proposal raises no issues that are contrary to the provisions of this SEPP.

5(a)(ii) State Environmental Planning Policy (Coastal Management) 2018

The subject site is not located within the coastal zone, and as such, the provisions of this SEPP are not applicable.

5(a)(iii) Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

An assessment has been made of the matters set out in Clause 20 of the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005. It is considered that the carrying out of the proposed development is generally consistent with the objectives of the Plan and would not have an adverse effect on environmental heritage, the visual environmental, the natural environment, and open space and recreation facilities.

5(a)(iv) Leichhardt Local Environment Plan 2013 (LLEP 2013)

The application was assessed against the following relevant clauses of the Leichhardt Local Environmental Plan 2013:

- Clause 1.2 – Aims of the Plan
- Clause 2.3 – Zone objectives and Land Use Table
- Clause 5.10 – Heritage Conservation

The following provides further discussion of the relevant issues:

Clause 5.10 – Heritage Conservation

The property is listed as a heritage item in Schedule 5 of the LLEP 2013 (I180). The listing refers to the stone house including the interiors. The site is next to heritage items located at 139-143 Darling Street, Balmain (I179) and 149 Darling Street, Balmain (I181).

No. 147 Darling Street is of local historic, aesthetic and technological significance as part of an early subdivision and early stone building constructed in c. 1844-45 probably of locally quarried stone. The building significantly retains its original scale and form including sandstone facades, roof and chimney and simple pattern of openings and open front verandah. The building makes a positive contribution to the associated group of early commercial development in Balmain (Nos. 147-155) and Darling Street streetscape.

The property is located within a Heritage Conservation Area under LLEP 2013, (Heritage Conservation Area C5 – Waterview Estate Heritage Conservation Area.

The application seeks consent for tree removal works only and it is considered that the development would not adversely affect the heritage significance of the Kingston West Conservation Area or the Item. It is noted that the tree does not form part of the significance

of the heritage listing which relates to the building and its interiors. Therefore the development is acceptable having regard to Clause 5.10 (6) of LLEP 2013.

5(b) Draft Environmental Planning Instruments

There are no relevant Draft Environmental Planning Instruments.

5(c) Development Control Plans

The application has been assessed and the following provides a summary of the relevant provisions of Leichhardt Development Control Plan

Part	Compliance
Part A: Introductions	
Section 3 – Notification of Applications	Yes
Part B: Connections	
B1.1 Connections – Objectives	Yes
Part C	
C1.0 General Provisions	Yes
C1.1 Site and Context Analysis	Yes
C1.4 Heritage Conservation Areas and Heritage Items	Yes
C1.12 Landscaping	Yes
C1.14 Tree Management	Yes
Part C: Place – Section 2 Urban Character	
C2.2.2.1 Darling Street Distinctive Neighbourhood	Yes
Part C: Place – Section 3 – Residential Provisions	
C3.1 Residential General Provisions	Yes

The following provides discussion of the relevant issues:

C1.12 – Landscaping

The objectives of C1.12 *Residential Development* are:

O1 Development includes on-site landscaped open space that:
- *a. enhances the visual setting of buildings;*
- *b. contributes to the distinct landscape character within the neighbourhoods and preserves, retains and encourages vegetation and wildlife that is indigenous to the municipality and Sydney;*
- *c. preserves or retains natural features such as rock outcrops that contribute to the landscape of the area;*
- *d. conserves water resources by reducing the need for irrigation;*
- *e. maximises vegetation to regulate and increase rainwater infiltration, thereby increasing nutrient recycling and reducing surface runoff;*
- *f. is compatible with the heritage significance of the place;*
- *g. contributes to the amenity of the residents and visitors;*
- *h. where involving new plantings, benefit the building's energy efficiency;*
- *i. protects and retains existing trees on the subject and surrounding sites, including the street verge; and*
- *j. is designed to encourage the retention and enhancement of green corridors.*

Removal of the subject tree is supported as it is considered that it is located where the prevailing environmental conditions are unsuitable.

Replacement planting with minimum of 1 x 200 litre size additional tree, which will attain a minimum mature height of 8 metres, shall be planted in a more suitable location within the property at a minimum of 1.5 metres from any boundary or structure.

This replacement tree as conditioned will create a positive contribution to the surrounding landscape and enhance the visual appeal of the neighbourhood.

C1.14 – Tree Management

The proposed tree removal is consistent with the *Tree Management Control*s under C1.14.7 which provides the criteria under which the removal of a prescribed tree is to be assessed:

a. the tree is located where the prevailing environmental conditions are unsuitable;
b. the tree is in a state of irreversible decline or is dead;
c. the tree poses a threat to human life or property;
d. the tree is causing significant damage to public infrastructure which cannot be remediated by any other reasonable and practical means;
e. the replacement of damaged or failed sewer pipes or storm water lines cannot reasonably be undertaken with the retention of the tree;
f. the tree is not deemed to be a tree of landscape significance; and
g. replacement planting can better achieve the objectives of this section of the Development Control Plan *within a reasonable time.*

The proposal seeks removal of 1 *Casuarina glauca* (Swamp She-Oak) tree at the rear of the property and the applicant submitted an arborist report that supports the removal of that tree,

The application was referred to Councils Landscape Officer who inspected the site on 07 February 2019. The Landscape Officer's observations and arboricultural advice is provided below:

- The subject tree was identified as a *Casuarina glauca* (Swamp She-Oak).
- The specimen was recorded to have a trunk diameter reading of 670mm measured at 1400mm from ground level.
- The height and canopy spread of the specimen was estimated to be 15 x 11m.
- At the time of inspection the specimen appeared to be in good health and vigour. No significant structural defects could be seen from ground level however a previously removed branch of 150mm in diameter at approximately 6.5m in height was noted from the southern aspect of the canopy.
- The specimen was seen to be growing in a raised garden bed consisting of dislodged sandstone block work. The dimensions of the retained garden bed were measured to be 0.6m in height, 1.2m deep and 5m long.
- Several tree roots identified to be originating from the subject tree were observed to be extending through the raised garden bed and travelling beneath brick paving in the rear of the site for several metres.
- Evidence of root damage could be seen on the northern aspect of the base of the tree. The roots were observed to have been cut in line with recent paving for a pathway. The diameter of the roots were measured to be 60mm in diameter.
- A masonry garden shed was measured to be 170mm from the N/W face of the specimen however, the trunk could be seen to be visibly touching and callousing over the roof facing of the shed at 2.2m. A visible crack in the brick work could be seen directly adjacent to the base of the tree.
- Further cracking of brickwork was observed on the opposite side of the shed, indicating movement.

- A trench of approximately 3m in the garden bed was excavated with a hand trowel along the external face of the brick shed revealing that the wall had been structurally compromised by roots from both the subject *Casuarina glauca* (Swamp She-Oak) as well as a nearby *Camellia japonica* (Japanese Camellia).

A review of the submitted *Arboricultural Risk Assessment and Assessment for Damage* report, prepared by *The Ents Tree Consultancy*, dated 12/09/2018 has found that the Arborist has determined that the immediate surrounds cannot be remediated without the subject tree being removed.

This assertion is supported as it is considered that the majority of the structural root system was restricted to the confines of the garden bed. The specimen has potential to become destabilized in its current location without the support of the external wall of the shed and retaining wall requiring repair.

Damage to landscape features such as garden beds and sheds are not normally considered valid reasons for the removal of trees in the landscape however, in this instance concerns are raised in relation to the long term retention of the subject tree.

Given the above, the application is supported subject to the below conditions. From satellite imaging it has been calculated that 116m^2 of canopy cover is proposed to be removed from site. Adequate replacement planting is required to offset this loss of canopy from the Urban Forest.

Council's Landscape Officer has agreed to the removal of the removal of the subject tree from the site subject to the imposition of appropriate conditions. Those conditions are included in the recommendation.

5(d) The Likely Impacts

The assessment of the Development Application demonstrates that, subject to the recommended conditions, the proposal will have minimal impact in the locality.

5(e) The suitability of the site for the development

The site is zoned R1 General Residential. Provided that any adverse effects on adjoining properties are minimised, this site is considered suitable to accommodate the proposed development, and this has been demonstrated in the assessment of the application.

5(f) Any submissions

The application was notified in accordance with Councils policy for a period of 14 days to surrounding properties. A total of one (1) submission was received in support of the application.

5(g) The Public Interest

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by Council ensuring that any adverse effects on the surrounding area and the environment are appropriately managed.

The proposal is not contrary to the public interest.

6 Referrals

6(a) Internal

The application was referred to the following internal sections/officers and issues raised in those referrals have been discussed in section 5 above.

- Heritage Officer: The proposal is acceptable from a heritage perspective as the removal of the tree will have little to no impact on the heritage item or the items within the vicinity or the Waterview Estate HCA.

- Landscape: The application is supported subject to appropriate conditions. From satellite imaging it has been calculated that 116m^2 of canopy cover is proposed to be removed from site. Adequate replacement planting is required to offset this loss of canopy from the Urban Forest and appropriate conditions are included.

6(b) External

The application was not required to be referred to any external body for comment.

7. Section 7.11 Contributions

Section 7.11 contributions are not payable for the proposal.

8. Conclusion

The proposal generally complies with the aims, objectives and design parameters contained in Leichhardt Local Environmental Plan 2013 and Leichhardt Development Control Plan 2013. The development will not result in any significant impacts on the amenity of adjoining premises and the streetscape. The application is considered suitable for approval subject to the imposition of appropriate conditions.

9. Recommendation

A That the Inner West Local Planning Panel exercising the functions of the Council as the consent authority, pursuant to section 4.16 of the Environmental Planning and Assessment Act 1979, grant consent to Development Application No: D/2018/672 for the removal of a Casuarina glauca (Swamp She-Oak) tree located at rear of a heritage listed site at 147 Darling Street, Balmain subject to the conditions listed in Attachment A below.

Attachment A – Recommended conditions of consent

CONDITIONS OF CONSENT – D/2018/672

<table>
<tr>
<td>1.</td>
<td>Approval is given for the following works to be undertaken to trees on the site:

<table>
<tr><th>Tree/location</th><th>Approved works</th></tr>
<tr><td>Casuarina glauca (Swamp She-Oak) located in rear property.</td><td>Remove.</td></tr>
</table>

Removal or pruning of any other tree (that would require consent of Council) on the site is not approved.

The approved works shall not be carried out unless this letter, or copy of it, is kept on the site. It shall be shown to any authorised Council Officer upon request.

Consent for removal shall lapse if the work has not been completed within 12 months of the date of issue of the permit.

All tree work shall be undertaken by an experienced Arborist with a minimum qualification of Level 3 under the Australian Qualification Framework (AQF). The work shall be undertaken in accordance with AS4373 – 2007 ‘Pruning of amenity trees’ and in compliance with the Safe Work Australia Code of Practice ‘Guide to Managing Risks of Tree Trimming and Removal Work’.</td>
</tr>
<tr>
<td>2.</td>
<td>The following trees must be planted:

A minimum of 1 x 200 litre size additional tree, which will attain a minimum mature height of 8m metres, shall be planted in a more suitable location within the property at a minimum of 1.5m from any boundary or structure. The tree is to conform to AS2303—Tree stock for landscape use.

Replacement trees (as specified above) are to be planted within 30 days of the removal. Council is to be notified when the replacement tree has been planted within the timeframe specified above and an inspection arranged with Council's Tree Assessment Officer. If the replacement is found to be faulty, damaged, dying or dead prior to being protected under the Tree Management Controls of the Leichhardt Development Control Plan 2013, the replacement tree shall be replaced with the same species, which will comply with the criteria above.

Council encourages the uses of replacement trees that are endemic to the Sydney Basin to increase biodiversity in the local environment and provide a natural food source for native birds and marsupials. Note: Any replacement tree species must not be a palm tree species or be a plant declared to be a noxious weed under the Noxious Weeds Act 1993 or tree species listed as an exempt species under Section C1.14 (Tree Management) of the Leichhardt Development Control Plan 2013.

If the replacement trees are found to be faulty, damaged, dying or dead within twelve (12) months of planting then they must be replaced with the same species. If the trees are found dead before they reach a height where they are protected by Council’s Tree Management Controls, they must be replaced with the same species.</td>
</tr>
</table>

DURING WORKS

3.	No activities, storage or disposal of materials taking place beneath the canopy of any tree protected under Council's Tree Management Controls at any time.
4.	No trees on public property (footpaths, roads, reserves etc) are to be removed or damaged during works unless specifically approved in this consent or marked on the approved plans for removal. Prescribed trees protected by Council's Management Controls on the subject property and/or any vegetation on surrounding properties must not be damaged or removed during works unless specific approval has been provided under this consent.

PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE

5.	Prior to the issue of any Occupation Certificate, the Principal Certifying Authority is to be satisfied that all landscape works, including the removal of all noxious weed species and planting of canopy trees, have been undertaken in accordance with the approved landscape plan and/or conditions of Development Consent.

ONGOING CONDITIONS OF CONSENT

6.	The canopy replenishment trees required by this consent are to be maintained in a healthy and vigorous condition until they attain a height of 6 metres whereby they will be protected by Council's Tree Management Controls. Any of the trees found faulty, damaged, dying or dead shall be replaced with the same species within 2 months.

Attachment B – Statement of Environmental Effects

Statement of Environmental Effects

Proposed Removal of One (1) Tree

147 Darling St Balmain
(Lot A DP 442842)

Prepared by NSW Town Planning
December 2018
Ref | 18062-SEE_Final.docx

Document Control Table

Document Reference:	18062-SEE_Final.docx	
Date	**Version**	**Author**
13 December 2018	1	N. Murray

Foreword

This Statement of Environmental Effects (SEE) has been prepared to support a development application submitted to Inner West Council and relates to the proposed removal of one (1) tree.

The Site is zoned R1 General Residential under Leichhardt Local Environmental Plan 2013.

A detailed survey of the Site was also undertaken by the new owners in January 2018, shortly after purchase which confirms the location of the subject tree layout (attached).

An arborist report has been prepared in relation to the tree removal and concludes that the tree has average health, average vigour and below average form for the species. The tree removal is requested to address damage the tree is causing to the water meter, nearby outbuilding wall and the surrounding hardscape. The report notes that due to the position of the tree, the existing damages and the trees growth potential it is not likely that the damages could be repaired effectively and the tree retained.

It is noted that the Site is heritage-listed and located within the Waterview Estate Heritage Conservation Area; however, the significance of the conservation area relates primarily to built form elements demonstrating close physical relationship between industry and housing in the 19th century. Key features are built form such are architctural detailing, subdivision layout, kerbs and gutters. The tree is located in a rear yard, at a substantially lower ground floor level than the road and does not form a major part of the streetscape or form a major part of the conservation significance.

This SEE provides an assessment of the proposed development against the relevant matters for consideration under Part 4.15C of the *Environmental Planning and Assessment Act 1979* and determines that the proposal is consistent with the relevant provisions contained in *Leichhardt Local Environmental Plan 2012* and *Development Control Plan*.

In particular the proposal represents a reasonable and appropriate use of the existing building. No adverse impact on the significance of the heritage conservation values of the Site will result.

Based on the assessment undertaken, it is recommended that Council's favourable consideration to the approval of the Development Application be given.

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1. Introduction

This Statement of Environmental Effects (SEE) has been prepared to support a development application submitted to Inner West Council and relates to the proposed removal of one (1) tree at 147 Darling Street Balmain.

This SEE provides an assessment of the proposal against the relevant matters for consideration under Part 4.15 of the *Environmental Planning and Assessment Act 1979*. The document is arranged as follows:

Section 1	Introduction
Section 2	describes the site and its context
Section 3	outlines the details of the proposed development
Section 4	provides an assessment against the relevant policies within the planning framework
Section 5	provides the conclusions and recommendations.

2. The Site

2.1 Location and Description

The subject site is legally identified as Lot A in Deposited Plan 442842, known as 147 Darling Street, Balmain (**Figure 1**).

The site is an semi-rectangular in shape, and is approximately 254.1m^2 positioned on an north-south orientation and located on the northern side of Darling Street (road frontage is approximately 9.9m metres). The Site also benefits from a right of carriageway across the neighbouring property to the west, to gain vehicular access to St Andrews street.

The Site is currently occupied by a split-level structure which appears as single storey from the street and three storeys from the rear due to the sloping terrain (**photos 1 and 2**). A separate outbuilding is also provided in the rear yard.

Private open space provided to the rear yard and a rear-facing first floor balcony. The tree that is proposed to be removed is located in the rear yard, within a raised garden bed, adjacent to the outbuilding. It is identified as a Swamp She-Oak (*Casuarina glauca*).

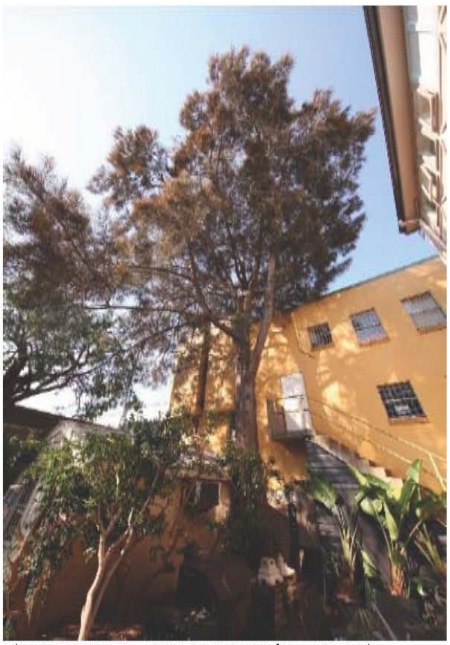
A detailed survey of the Site was also undertaken by the new owners in January 2018, shortly after purchase which confirms the location of the tree.

The structure is shown in **Photo 1 and 2.** The tree proposed for removal is shown in **Photos 3 and 4**.

Figure 1. Site Location (Source: Land and Property Information, 2018)

Photo 1 - Building as viewed from Darling Street

Photo 2 – View of rear of structure



Photos 3 and 4 – Tree proposed for removal

2.2 Site Context

The suburb of Balmain is an inner-city suburb previously located within the former Leichhardt Local Government Area (now part of the amalgamated Inner West Council), position on a peninsular between Mort Bay and White Bay, east of the Sydney CBD.

The subject Site is located within an established village-like locality that contains a mixture of development of varying scales, type and design. Development surrounding the site is predominantly residential, with the exception of Balmain Bowling Club which is located immediately opposite the Site.

The main commercial precinct for the area is located along the Darling Street, some 300m west of the Site. This area provides for a range of services including supermarkets, pubs and dining, real estate, banking, newsagents and household needs with some accommodating educational and medical services. The Balmain East local centre is located approximately 500m east of the Site, along Darling Street.

Darling Street forms the main thoroughfare in the locality and provides connectivity from the peninsula to Victoria Road and beyond. White Bay cruise terminal is located 300m south of the Site while Balmain Shipyard/marina is located 300m to the north.

A large proportion of sites within immediate proximity to the subject Site are occupied by developments that are two-storeys and above, contributing to a varied streetscape. Various sites in the locality have undergone upgrade to meet the high urban design standards and add to the creation of a modern village environment.

The inner-city region is widely known for its urban cultural qualities, including the arts, music and café lifestyle and is also well serviced by public transport, recreation, education and community services.

The majority of the suburbs within the inner city have undergone significant transformation to become highly sought-after destinations to live, work and visit whilst retaining significant historic and cultural qualities.

The Site context is indicated in **Figure 2**.

Figure 2. Site Context (Source: Land and Property Information, 2018)

3. Proposed Development

One (1) Swamp She-Oak (*Casuarina glauna*) located in the rear yard of the property is proposed for removal.

As indicated in the Arborist Report:

> *The tree is located in a partially exposed position with some protection from surrounding trees, topography and surrounding structures. This tree appears to be average in size for its age which appears to be related to its growing conditions.*
> ...
> *When measured from the centre of the tree it is estimated that the tree has been planted .5m from the wall of the rear building structure. The tree has matured and is now in contact with the building structure, callusing over the guttering. The tree is damaging the building wall, the retaining wall and the paving surrounding the tree.*
> ...
> *The structural root zone (SRZ) of the tree is calculated at 3.05m and the pruning of structural roots 50mm+ is not recommended within or at the edge of this area. This means that the options for pruning roots are limited and will not be effective in stopping the damage to the building wall.*
> ...
> *The tree will continue to cause damages to the surrounding structures. The damages to the paving and the retaining wall may be possible, however due to the position of the tree and the trees growth potential, options for repairing the damage to the wall and retaining the tree are not likely.*

4. Environmental Assessment

This section examines the proposed development against the specific criteria noted in Section 4.15 of the *Environmental Planning and Assessment Act 1979*.

4.1 State Environmental Planning Policies

State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017
The proposal includes the removal of one (1) existing tree on the Site (Swamp She-Oak *casuarina glauca*).

The vegetation is not significant in terms of biodiversity or ecology and does not form part of any wider corridor.

The vegetation can be offset by new planting comprising native species if required.

It is noted that Clause 9 of the SEPP states that Council permits for clearing are required for vegetation that is declared by a development control plan to be vegetation to which this Part of the SEPP applies. No declaration applies under the Leichhardt DCP 2013.

Sydney Regional Environmental Plan – Sydney Harbour Catchment 2005

The Site is located on land that is with the Sydney Harbour Catchment (**Figure 3**). The planning principles for land within the Sydney Harbour Catchment are as follows:

(a) *development is to protect and, where practicable, improve the hydrological, ecological and geomorphological processes on which the health of the catchment depends,*
(b) *the natural assets of the catchment are to be maintained and, where feasible, restored for their scenic and cultural values and their biodiversity and geodiversity,*
(c) *decisions with respect to the development of land are to take account of the cumulative environmental impact of development within the catchment,*
(d) *action is to be taken to achieve the targets set out in Water Quality and River Flow Interim Environmental Objectives: Guidelines for Water Management: Sydney Harbour and Parramatta River Catchment (published in October 1999 by the Environment Protection Authority), such action to be consistent with the guidelines set out in Australian Water Quality Guidelines for Fresh and Marine Waters (published in November 2000 by the Australian and New Zealand Environment and Conservation Council),*
(e) *development in the Sydney Harbour Catchment is to protect the functioning of natural drainage systems on floodplains and comply with the guidelines set out in the document titled Floodplain Development Manual 2005 (published in April 2005 by the Department),*
(f) *development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour,*
(g) *the number of publicly accessible vantage points for viewing Sydney Harbour should be increased,*
(h) *development is to improve the water quality of urban run-off, reduce the quantity and frequency of urban run-off, prevent the risk of increased flooding and conserve water,*
(i) *action is to be taken to achieve the objectives and targets set out in the Sydney Harbour Catchment Blueprint, as published in February 2003 by the then Department of Land and Water Conservation,*
(j) *development is to protect and, if practicable, rehabilitate watercourses, wetlands, riparian corridors, remnant native vegetation and ecological connectivity within the catchment,*
(k) *development is to protect and, if practicable, rehabilitate land from current and future urban salinity processes, and prevent or restore land degradation and reduced water quality resulting from urban salinity,*
(l) *development is to avoid or minimise disturbance of acid sulfate soils in accordance with the Acid Sulfate Soil Manual, as published in 1988 by the Acid Sulfate Soils Management Advisory Committee.*

The development is consistent with the planning principles for the Catchment Area as it applies to land that has distance from the harbour of 300m or more. The tree removal will not cause detrimental impacts beyond that already experienced in the locality.

The Site is not located within the area defined as the 'Foreshore or Waterways Area', or a 'strategic foreshore site', and is not zoned under the Plan. Additionally, the site is not identified as an item of heritage significance under the Sydney Harbour Catchment Plan or adjacent to an identified heritage site under that Plan. Similarly, no impact on Wetlands is to occur and no Critical Habitat is located on or near the subject Site.

It is noted that a Development Control Plan (DCP) has also been prepared to support the Sydney Harbour Catchment REP. The DCP provides detailed design guidelines for development and criteria for natural resource protection for the area identified as Foreshores and Waterways. As the Site is not within the Foreshores and Waterways Area, the provisions of the DCP are not applicable to the proposal.

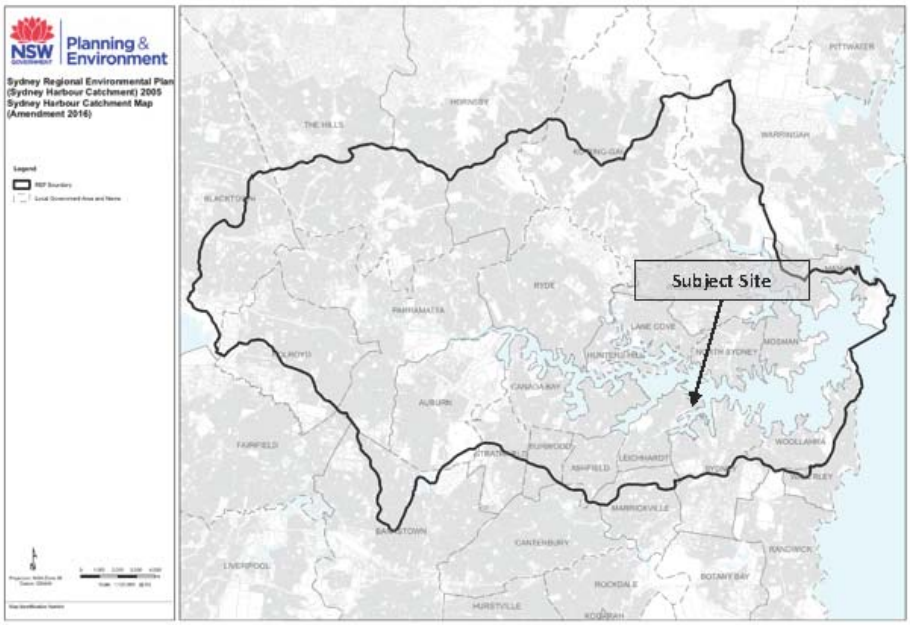


Figure 3. Sydney Harbour Catchment Map (Source: NSW Department of Planning and Environment)

4.2 Leichhardt Local Environmental Plan 2013

Leichhardt Local Environment Plan 2013 (LLEP 2013) applies to the subject Site. The provisions of LLEP 2013 as they relate to the proposed development are considered below:

Zoning and Permissibility
The Site is zoned R1 – General Residential (see **Figure 4**). The objectives of Zone R1 are:

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To improve opportunities to work from home.*

- *To provide housing that is compatible with the character, style, orientation and pattern of surrounding buildings, streetscapes, works and landscaped areas.*
- *To provide landscaped areas for the use and enjoyment of existing and future residents.*
- *To ensure that subdivision creates lots of regular shapes that are complementary to, and compatible with, the character, style, orientation and pattern of the surrounding area.*
- *To protect and enhance the amenity of existing and future residents and the neighbourhood.*

The proposal does not prevent the achievement of the zone objectives and does not result in amenity issues for the occupants or surrounding activities.

Figure 4. Leichhardt Local Environmental Plan 2013 Zoning Map (Source: Leichhardt Council, 2013)

Height of Buildings
No maximum building height applies to the site. Notwithstanding, the proposal does not involve any change to the existing structure.

Landscaped Areas for Residential Accommodation in Zone R1
Development consent must not be granted to residential accommodation in the R1 zone unless:

(a) the development includes landscaped area that comprises at least:
  (i) where the lot size is equal to or less than 235 square metres—15% of the site area, or
  (ii) where the lot size is greater than 235 square metres—20% of the site area, and
(b) the site coverage does not exceed 60% of the site area.

The proposal maintains compliance with the minimum landscape requirement as the Site has an area of 254.1sqm, requiring a landscaped area of at least 50.82sqm. The Site provides for well in excess of this requirement and provides 89sqm in the rear yard (exclusive of the outbuilding). See **Figure 5**. The area calculated exceeds the minimum 1m dimension and no greater than 500mm above existing ground level.

The Site Coverage is 48% (122sqm), within the meaning of Site Cover under LLEP2013 as follows:

site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

(a) any basement,
(b) any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
(c) any eaves,
(d) unenclosed balconies, decks, pergolas and the like.

Figure 5. Primary Landscaped Area (Source: CMS Surveyors, 2018)

Floor Space Ratio
The maximum floor space ratio of the Site as shown on the Floor Space Ratio Map is 0.5:1 (**Figure 6**). No change will occur.

Architectural Roof Features
No architectural roof features are proposed.

Heritage Conservation
The Site is located within the Waterview Estate Heritage Conservation Area under LLEP 2013 and is heritage-listed (**Figure 6**).

The Site is identified as Item I180 and is described as "Stone house, including interiors" and having local significance.

The NSW Heritage Office heritage inventory sheet provides the following statement of significance and history:

> *No. 147 Darling Street is of local historic, aesthetic and technological significance as part of an early subdivision and early stone building constructed in c. 1844-45 probably of locally quarried stone. The building significantly retains its original scale and form including sandstone facades, roof and chimney and simple pattern of openings and open front verandah. The building makes a positive contribution to the associated group of early commercial development in Balmain (Nos. 147-155) and Darling Street streetscape.*
>
> *The site is part of Lot 6 of Section 1 of the Waterview Estate, bought by Castlereagh Street cabinet maker Andrew Lenahan in 1843. The item is estimated to have been constructed as a stone cottage between 1844-1845 and was sold to cabinet maker John Clarke in 1947 who opened the Balmain Hotel on the Site.*
> ...
> *Clarke sold the Hotel to Balmain publican James Barr who opened it as the Waverly Hotel. Barr was the licensee of the Hotel until 1863 from which time it was leased. The name changed to Dick's Hotel between 1868 and 1872. Barr resumed the licence in 1874 and continued to operate the Hotel until 1889. The Waverly was also known as the Balmain Hotel during this period.*
> ...
> *The Waverly finally closed in 1911 and was converted to a dwelling. The house continued to be let by its various owners. In 1957 Lot 6 and adjacent land was subdivided into Lots A-D with No. 147 occupying Lot A which continued to be leased out as a dwelling from this time. The building has since been used for commercial/ office purposes.*

More recently, the following approvals have been recorded:

> 1963: Erection of a drive in shop (5618).
> 1979: Alterations and renovations (18005).
> 1982 Alterations and additions comercial building (21119).
> 1985: Alter roof structure attic area (85/530).
> 1995: Office - Advertising agency.

Key modifications included Steel security doors have been added to the front door and adjacent French doors. Two skylights have also been added to the western end of the main, front roof slope. Air conditioning units are located on the eastern setback with ducting fixed to the eastern stone wall. The stone floor finish to the front verandah has also been painted.

The proposal does not alter the significance of the stone building in the streetscape, which is considered to be the most important aspect of the Site.

It is noted that the recommended management on the Heritage Inventory states:

It is recommended that:

- *the existing one and two storey scale and character of the building including face stone facades, gabled roof form, simple pattern of openings on the front and eastern side façade and open front verandah should be retained and conserved;*
- *the front verandah should remain open and stone flagged finish should remain face stone;*
- *the existing relationship with Darling Street and low plantings and fence should continue to allow views to and from the building;*
- *no new openings should be made in the front and eastern stone facades and face stone facades should remain face stone and not be painted. Elements such as timber work should continue to be painted in appropriate colours;*
- *any additions should be restricted to the rear of the building;*
- *services such as air conditioning units should not be highly visible to the streetscape; and*

- *replacement and adaptation of the rear weatherboard wing is acceptable provided that there is no adverse visual or physical impacts to the stone facades.*

The proposal is consistent with these recommendations.

In terms of the heritage conservation area, the controls and guidelines prepared for Council by Godden Mackay Logan indicated that the Waterview Estate is considered significant as it:

- Is one of a number of conservation areas which collectively illustrate the nature of Sydney's early suburbs and Leichhardt's suburban growth particularly between 1871 and 1891, with pockets of infill up to the end of the 1930s (ie prior to World War II). This area is significant for the layers of development from presuburban marine villas of the 1850/60s to small-scale workers' housing from the 1870s through to the late 1930s.
- Demonstrates the close physical relationship between industry and housing (both middle class and workers' housing) in nineteenth century cities.
- Demonstrates the nature of some private subdivisions before the introduction of the Width of Streets and Lanes Act of 1881 required roads to be at least one chain wide.

The management of heritage values in the area aim to retain:

- Narrow streets.
- All pre-1939 buildings and structures, especially timber and stone buildings.
- Maritime and industrial buildings that have played a part in the history of this area.
- Original plaster finishes to external walls (as a rough rule of thumb this will mostly apply to pre-1890s buildings. Reconstruct the finish where necessary.
- Original unplastered face brick external walls.
- Original architectural details to building. Encourage replacement of lost elements, but only where evidence is available.
- Uninterrupted sandstone kerbs and gutters.

and avoiding:

- Alterations that change the shape of the building or original roof forms on the main part of the buildings.
- Second-storey additions to original single-storey houses, other than as separated pavilion forms.
- Removal of original detail. Encourage restoration from evidence.
- Removal of original plaster finishes to external walls.
- Plastering or painting of original face brick walls.
- Additions of details not part of the original fabric of the building.
- Inappropriate fences such as high brick fences/walls, new iron palisades on high brick bases.
- Interruption to almost continuous kerb and gutters.

The proposal is consistent with these management outcomes.

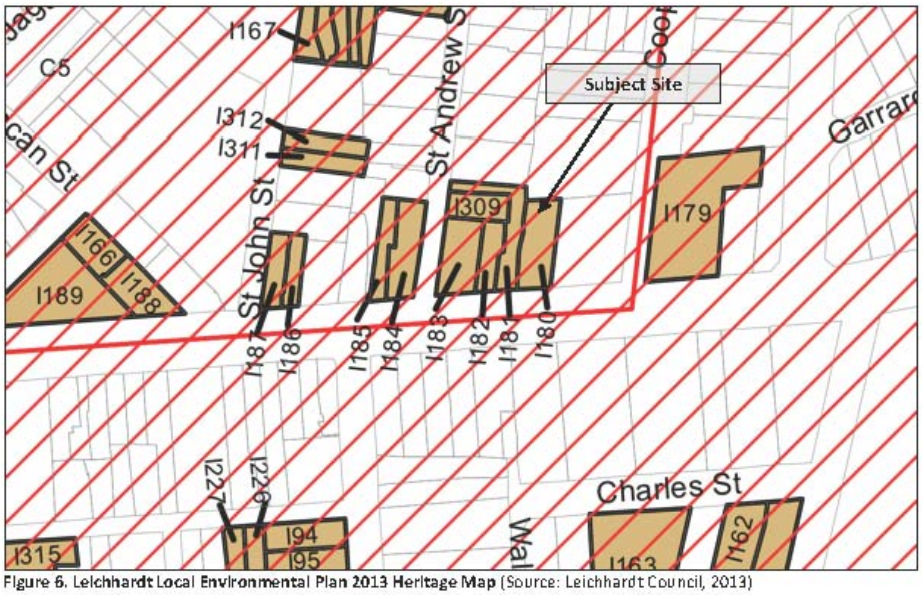


Figure 6. Leichhardt Local Environmental Plan 2013 Heritage Map (Source: Leichhardt Council, 2013)

Acid Sulfate Soils
The Site is identified as being within Acid Sulfate Soils Category 5. The provisions for Category 5 are:

"Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land. "

The proposal does not involve works that require an Acid Sulfate Soils Management Plan.

Earthworks
No earthworks are proposed.

Flood Planning
The Site is not flood prone land.

Stormwater Management
No change to the impervious surfaces on the Site is proposed.

Development Subject to Aircraft Noise
Not applicable.

Use of Existing Buildings in R1 Zone
Not applicable.

Adaptive Reuse of Existing Buildings in the R1 Zone
Not applicable.

Diverse Housing
Not applicable.

4.3 The Provisions of any Draft Environmental Planning Instruments

There are no draft Environmental Planning Instruments that apply to the subject site.

4.4 Leichhardt Development Control Plan 2013

Leichhardt Development Control Plan 2013 (LDCP) supports the objectives of *Leichhardt Local Environmental Plan 2013*, providing more specific controls to protect and enhance the public domain and to contribute to the amenity and character of the locality. The relevant controls are considered as follows:

Part B – Connections

Connections
The proposal does not prevent the achievement of urban design that accommodates active travel options such as walking, cycling and public transport between homes, workplaces, centres and attractions.

Health and Wellbeing
No impact on the quality or quantity of public spaces will occur from the proposal.

Social Inclusion
The proposal is not of a scale or type that warrants a Social Impact Assessment.

Events and Activities in the Public Domain
The proposal does not involve and prevent activities in the public domain.

Public Art
The proposal does not include or require public art.

Part C – Place – Section 1: General Provisions

Site and Context Analysis
The tree is located in a rear yard, at a substantially lower ground floor level than the road and does not form a major part of the streetscape or form a major part of the conservation significance.

Demolition
No demolition is proposed.

Alterations and Additions
No alterations or additions are proposed.

Heritage Conservation Areas and Heritage Items
The Site is located within a heritage conservation area and is a local heritage item. As outlined earlier, the proposed tree removal is not considered to have any negative impact on the heritage qualities of the Site or the conservation area.

No building works that will affect any heritage fabric is proposed under this application.

Corner Sites
The Site is not a corner Site.

Subdivision
No subdivision is proposed.

Site Facilities
No change to Site Facilities are proposed.

Contamination
The past uses of the Site do not suggest a risk of contamination. A Preliminary Site Investigation is not considered warranted.

Safer By Design
No increased risk of crime in comparison to the current situation is presented by the use of the property for residential activities.

Equity of Access and Mobility
The development is not of a type or scale requiring equitable access and mobility.

Parking
No change to existing vehicle access (via the rear right of way) and parking is proposed. Vehicles can enter and exit in a forward direction.

Landscaping
The Site includes landscaping to the rear and front yard areas, both of which support deep soil zones and the capacity for planting. 89sqm of landscaped area is provided in the rear yard.

The structure is also built on a sloping terrain which includes rock walls.

The proposal seeks removal of one (1) tree (Swamp She-Oak) – see below.

Open Space Design with the Public Domain
No works in the public domain are proposed.

Tree Management
The application seeks the removal of one (1) Swamp She-Oak located in the rear yard.

An arborist report has been prepared in relation to the tree removal and concludes that the tree has average health, average vigour and below average form for the species. The tree removal is requested to address damage the tree is causing to the water meter, nearby outbuilding wall and the surrounding hardscape.

The report notes that due to the position of the tree, the existing damages and the trees growth potential it is not likely that the damages could be repaired effectively and the tree retained.

Signs and Outdoor Advertising
No signage works are proposed.

Structures In or Over the Public Domain: Balconies, Verandahs and Awnings
No structures in or over the public domain are proposed.

Minor Architectural Details
No changes to existing architectural details will be undertaken.

Laneways
The Site does not have laneway frontage.

Rock Faces, Rocky Outcrops, Cliff Faces, Steep Slopes and Rock Walls
No impact to any natural features.

Foreshore Land
The Site is not located on foreshore land.

Green Roofs and Green Living Walls
The proposal does not involve a green roof or living wall.

Part C – Place – Section 2: Urban Character
The Site is located in the Balmain/Balmain East and Birchgrove Suburb Profile. In particular, the Darling Street Distinctive Neighbourhood, which is then further broken down into the Balmain Village Sub-Area.

The proposal is consistent with the Desired Future Character that applies generally to the Darling Street Distinctive Neighbourhood as well as the Balmain Village Sub-Area.

In particular, the proposal:

- maintain the heritage-listed sandstone building fronting Darling Street
- does not include any alterations of additions and maintains existing height, setbacks, landscape area and roof form
- has an appropriate relationship with surrounding land uses.

Urban Framework Plans
The proposal does not prohibit the achievement of any Urban Framework Plan outcome.

In particular, the proposal maintains the built form to converse and enhance the special townscape qualities of this part of Darling Street and does not prevent any future main street improvement.

Part C – Place – Section 3: Residential Controls

No relevant provisions apply under this Part.

Part G – Site Specific Controls
The Site is not located within an area that is subject to site-specific controls under the DCP.

4.5 The Likely Impacts of the Development

Context and Setting
The proposed development is situated in an established suburban area that is characterised by development of varying scales and design, with structures in close proximity to the subject site ranging from single-storey to three (3) or more storeys.

The tree is positioned in the rear yard, at a level that is much lower than the road and has only a small portion showing above the existing structure. It is not a visually dominant landscape feature of the locality.

Social Impact
The tree is not considered to have any social significance.

Public Domain
The proposal is consistent with the character of the locality and will not detrimentally affect the public domain.

Heritage
The Site is listed as an item of environmental heritage and is located within a Heritage Conservation Area.

The tree is not heritage-listed.

The development does not impact upon the significance of the built form or the major qualities of the conservation area which are focused on buildings, street layout and historic uses in the area.

Flora and Fauna
One (1) tree is to be removed to address damage being caused. Suitable replacement planting can be undertaken if required.

The tree does not form part of any greater corridor or habitat.

Due to the position of the tree, the existing damage and the trees growth potential it is not likely that the damages could be repaired effectively and the tree retained.

An Arborist Report prepared for the tree identifies average health, average vigour and below average form for the species (She-Oak) and considers the removal to be a reasonable request.

Water Quality and Quantity
No impact on downstream waterways or features is to result from the proposal.

The Site is not flood affected.

Adequate provisions for water disposal are to be retained.

Air and Microclimate
The proposal will not adversely impact air and micro-climactic conditions in the locality and is not affected by any adverse air conditions.

Natural Hazards
No natural hazards have been identified as affecting the Site.

Site and Internal Design
No building work is proposed.

Appropriate open space provision, parking and amenity is provided within the current design.

Cumulative Impacts
No foreseeable cumulative impacts are to result from the proposed development.

4.6 The Suitability of the Site for the Development

No significant environmental, social or economic effects are to result from the development.

4.7 Any Submissions made in Accordance with the Act

No submissions have been received in relation to the proposed development. Council will undertake notification to surrounding residents as part of the assessment process. Any submissions received will then be taken into consideration.

4.8 The Public Interest

The development has no detrimental effects on the public and is not against the public interest.

4. Conclusion

The proposed removal of one (1) tree, at 147 Darling Street Balmain is permitted with the consent of Council.

No building work is required.

No heritage, streetscape or amenity impacts are identified from the proposal.

The specimen is a mature tree that has average health, average vigour and below average form for the species.

Due to the position of the tree, the existing damages and the trees growth potential it is not likely that the damages could be repaired effectively and the tree retained.

Based on the above assessment, it is requested that Council's favourable consideration to the proposal is granted.

INNER WEST COUNCIL

Statement of Environmental Effects – Removal of Tree/s from Heritage Items or Heritage Conservation Areas

About this form:	This form is provided to assist applicants in the preparation of Development Application to remove one or more trees from heritage listed properties or properties located within a Heritage Conservation Area.
How to complete:	1. Ensure that all fields have been filled out correctly. 2. Please print clearly. 3. Once completed, please refer to the lodgement details section for further information.

Development Application Details:	
Address:	147 Darling Street Balmain
Proposed Development:	Removal of one (1) tree
Prepared By:	NSW Town Planning Pty Ltd

What is the Heritage Status of the Subject Site:

■ Heritage Item

■ Heritage Conservation Area

Tree Characteristics:	
Species	Swamp She-Oak (Casuarina glauca)
Approximate Height and Spread:	17m high / 13m spread
Approximate Age:	Mature

INNER WEST COUNCIL

Statement of Environmental Effects – Removal of Tree/s from Heritage Items or Heritage Conservation Areas

Is the Tree a Prescribed Tree:

■ Yes
☐ No

Approval for removal is sought as:

■ The tree is located where the prevailing environmental conditions are unsuitable;

☐ The tree is in a state of irreversible decline or is dead;

☐ The tree poses a threat to human life or property;

☐ The tree is causing significant damage to public infrastructure which cannot be remediated by any other reasonable and practical means;

■ The replacement of damaged or failed sewer pipes or storm water lines cannot reasonably be undertaken with the retention of the tree;

■ The tree is not deemed to be a tree of landscape significance; and

☐ Replacement planting can better achieve the objectives of this section of the Development Control Plan within a reasonable time.

Please provide further details/justification:

The tree removal is requested to address damage the tree is causing to the water meter, nearby outbuilding wall and the surrounding hardscape. The Arborist report notes that due to the position of the tree, the existing damages and the trees growth potential it is not likely that the damages could be repaired effectively and the tree retained.

Is the application accompanied by specialist consultant report/s ?

■ Yes
☐ No

INNER WEST COUNCIL

Statement of Environmental Effects – Removal of Tree/s from Heritage Items or Heritage Conservation Areas

Environmental Impacts Please specify the environmental impacts associated with the proposal and measure to be taken to mitigate the impacts:	
Context	An Arborist Report prepared for the tree identifies average health, average vigour and below average form for the species and considers the removal to be a reasonable request.
Significance of the Heritage Item/Conservation Area:	The Site is located within the Waterview Estate Heritage Conservation Area under LLEP 2013 and on land described as "Stone house, including interiors" having local significance. The conservation area is important in demonstrating close physical relationship between industry and housing in the 19th century. Key features are built form such are architctural detailing, subdivision layout, kerbs and gutters. The tree is located in a rear yard, at a substantially lower ground floor level than the road and does not form a major part of the streetscape or form a major part of the conservation significance.
Flora and Fauna:	The vegetation is not significant in terms of biodiversity or ecology and does not form part of any wider corridor.

Is Replacement Planting proposed:

■ Yes – Please specify: The vegetation can be offset by new planting comprising native species if required.

☐ No – Please specify:

INNER WEST COUNCIL

Statement of Environmental Effects – Removal of Tree/s from Heritage Items or Heritage Conservation Areas

Site Plan:
In the space provided below, please include: ▪ A diagram of the subject site, indicating street frontage, general location of any buildings, the location of all trees that are the subject of this application and any other trees on the property. ▪ Approximate height, trunk diameter, canopy width and species of each tree that is the subject of this application. ▪ Please number the trees which are subject to this application.
See attached Site survey.

INNER WEST COUNCIL

Statement of Environmental Effects – Removal of Tree/s from Heritage Items or Heritage Conservation Areas

Declaration

I understand that information provided with this application (including the application form) and any subsequent information submitted as part of this application may be disclosed under the provisions of the Government Information (Public Access) Act 2009 and correspondence from Council may be made available for viewing by the general public.

Applicant's signature:	per Carlene York	**Date:**	14 / 12 / 2018

Privacy statement

Application forms and/or names and addresses of people making an application is information that is publicly available. In accordance with section 18(1)(b) of the *Privacy and Personal Information Protection Act 1998 (NSW)*, you are advised that all application forms received by Council will be placed on the appropriate Council file and may be disclosed to Councillors, Council officers, consultants to Council or members of the public. Pursuant to the provisions of the *Government Information (Public Access) Act 2009*, Council is obliged to allow inspection of its documents, including any application you make. However, should you wish for your contact details to be suppressed, please indicate on this application form.

Instructions for applicants

This form must be lodged with your Development Application. Both an electronic and hard copy should be provided.

Incomplete/illegible applications will not be accepted and will be returned to you.

Lodge in person: Inner West Council's Customer Service Centres:

- Ashfield – 260 Liverpool Road Ashfield.
- Leichhardt – 7-15 Wetherill Street Leichhardt.
- Petersham – 2-14 Fisher Street Petersham.

Opening hours: Monday-Friday, 8:30am-5:00pm
www.innerwest.nsw.gov.au/ContactUs

Cashiering: 8:30am-4:30pm.

Lodge by mail: Inner West Council, PO Box 14, Petersham NSW 2049

Attachment C- Arborist Report

The Ents Tree Consultancy
ABN 95 598 933 136
theents@bigpond.net.au
P.O Box 6019 Marrickville NSW 2042
ph. 0422 265 128

Client	Mr Steve York
Location	147 Darling Street, Balmain
Document Type	Arboricultural Risk Assessment & Assessment for Damage
Date	12th September 2018

The Ents Tree Consultancy

Development Reports | Hazard Assessments | Tree Management

INSTITUTE OF AUSTRALIAN CONSULTING ARBORICULTURISTS
IACA
ACCREDITED MEMBER™

Hayden Coulter
The Ents Tree Consultancy
ABN 95 598 933 136

Client	Mr Steve York
Location	147 Darling Street, Balmain
Document Type	Arboricultural Risk Assessment & Assessment for Damage
Date	12th September 2018

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Hayden Coulter
The Ents Tree Consultancy
ABN 95 598 933 136

2. Introduction

2.1 On the 10th September 2018 Mr York engaged The Ents Tree Consultancy in regard to completing a site assessment and tree report for a tree located at 147 Darling Street, Balmain. The client stated that the tree has been nominated to be inspected due to concerns over the trees position, the damage the tree is causing to the adjoining hardscapes and the potential damage to the adjoining structures which include the water service, boundary wall and garden edging.

2.2 The site inspection of the nominated tree occurred on the 12th September 2018. The tree is located in a partially exposed position with some protection from surrounding trees, topography and surrounding structures. This tree appears to be average in size for its age which appears to be related to its growing conditions. The tree is growing close to the rear building of the property at .5m off the wall. All natural soil areas appear to have been disturbed previously for the construction of the surrounding buildings and the surrounding landscapes. The client was not present for the site inspection and issued a verbal brief providing background information in regard to the tree on site.

2.3 The purpose of this report is to assess the tree in relation to the site, noting the health and structure at the time of the inspection. The growth potential of the tree, its characteristics and risk potential will be reviewed to estimate the trees landscape value and retention rating. The damage that the tree is doing in relation to the property will also be assessed. Tree Protection Guidelines will be discussed if relevant to this situation and options will be provided to resolve the issues concerning the tree if possible and requested by the client. The information in this report will be based on the information presented by the client at the time of the inspection as well as the site inspection. No root mapping or specialised testing was completed for the purpose of this report.

2.4 To achieve the objectives of the report, the tree will be assessed noting the species, size, general condition with any defects or damage to the trees discussed. The trees characteristics and eventual sizes will be taken into consideration as will the trees position in relation to structures and hard scapes. Recommendations will be outlined in section 5 of the report. Details of the tree surveyed will be provided in Appendix 2 of the report and a numerical system will be used to identify the tree for this report and future reference on this job site. A site plan will show the tree and its allocated number in Appendix 4. If no site plan has been provided by the client, an aerial image will be provided to indicate the position of the trees on site.

2.5 To assess the level of risk the tree poses to the surrounding houses and the land users TRAQ Tree Risk Assessment will be completed based on the tree at the time of the assessment and the areas use. The trees Risk Potential was recorded using the TRAQ methodology and criteria from the ISA Publication, Best management Practice, Tree Risk Assessment. Refer to Appendix 6 for the Likelihood Matrix under the risk categorisation section of the QTRA form. The trees landscape and retention value will also be assessed using the STARS system, refer to Appendix 7. This will assist in ascertaining the trees value in the landscape as well as their overall retention value. This methodology of tree assessment is consistent with the best practices of the industry and recognised industry standards. Please note that no aerial inspections, specialised testing or root mapping was completed for the purpose of the assessment.

3. Methodology

3.1 The tree was assessed using the standard Visual Tree Assessment technique (VTA). The tree was assessed from the ground for the purpose of this report. VTA is an internationally recognised practice in the visual assessment of the tree as formulated by Mattheck & Breloer (1994).

3.2 A Lufkin 6.5m diameter tape was used to obtain the Diameter at breast height (DBH) as recommended at 1.4 metres unless otherwise stated due to variations in the trees form.

3.3 The height of the tree was estimated and the spread of the trees canopy was paced out.

3.4 A Canon 5D Digital camera with an 11-24mm and 24-105mm lens was used to take all photographs in this report. No image modification has been used in any of the images, although due to the wide-angle lens some distortion of images may occur.

3.5 The ULE rating system has been used as a guide to assist in determining the Useful Life Expectancy of the tree surveyed. Refer to Appendix 1.

Hayden Coulter
The Ents Tree Consultancy
ABN 95 598 933 136

4. Discussion

4.1 The tree nominated to be inspected is located on the property in a raised garden bed at 147 Darling Street, Balmain. The tree is significant in the immediate landscape and may be likely to be considered important in the local areas landscape in terms of amenity and function due to its size. The client is concerned about the damage the tree is causing to the water meter, the surrounding hardscape and the front boundary wall. The client is concerned about the potential for the tree to damage the structures as the tree matures further, slowly increasing in size.

4.2 The tree is in a raised garden bed and is .5m off the wall of rear building. The tree is located on a partially sheltered site with some protection provided from the surrounding structures, trees and topography from some aspects. The soil on the site appeared to be a sandy loam. This soil has been disturbed previously for earthworks, the construction of buildings and hardscapes. There did not appear to be any disturbances around the trees structural root zone in recent years, however not all parts of the trees root zone could be viewed. Some previous root pruning was evident with developing decay evident in one root .60mm diameter. No root mapping, aerial assessments or specialised diagnostic testing was completed for the purpose of this report as it did not appear to be warranted.

4.3 **Tree 1** is a mature tree that has average health, average vigour and below average form for this species. The tree has lost apical dominance. The tree has a low level of deadwood, a low level of dieback, a low amount of epicormic growth with reasonable average vitality at the time of the inspection. The tree has some dieback in its crown and tree has some included branch unions with previous failures evident. The tree has no significant defects within the trees structure that would warrant its immediate removal.

4.4 When measured from the centre of the tree it is estimated that the tree has been planted .5m from the wall of the rear building structure. The tree has matured and is now in contact with the building structure, callusing over the guttering. The tree is damaging the building wall, the retaining wall and the paving surrounding the tree. The tree 10m away from the client's house. This tree appears to be mature at this stage in its life with small increments of growth anticipated over a long period of time. The tree may increase in size by approximately 25%.

4.5 The structural root zone (SRZ) of the tree is calculated at 3.05m and the pruning of structural roots 50mm+ is not recommended within or at the edge of this area. This means that the options for pruning roots are limited and will not be effective in stopping the damage to the building wall. The tree will continue to cause damages to the surrounding structures. The damages to the paving and the retaining wall may be possible, however due to the position of the tree and the trees growth potential, options for repairing the damage to the wall and retaining the tree are not likely. The client has requested to remove the tree and replace it with a better specimen that will offer better amenity and function for the site. The replacement tree will replace the canopy cover lost and could improve the canopy cover for the area.

4.6 A tree risk assessment has been completed using the ISA, TRAQ Tree Risk Assessment methodology which is based on the Best Management Practice for Tree Risk Assessment. Part of the form has been included for transparency, refer to Appendix 5. Within the target zone of the tree there is the client's building as well as the rear yard. There are the adjoining buildings and adjoining rear yards under the tree. There is also the boundary fences and landscape features on the client's property and the adjoining yards. The areas within the fall zone of the tree appeared to be of low use for most of the time and received moderate levels of use for limited times during the week. The areas are used intermittently by people, but the structures are always in the fall zone. The consequence of a tree part failing, will either be damage to the surrounding hardscapes or possibly damage to the adjoining building. The pedestrian traffic is intermittent and the chances of hitting a person are unlikely with minor to significant consequences, (depending on the type of failure).

4.8 Using the risk matrix as shown in appendix 5 the likelihood of failure within the next year is possible from the second / third order branches. A failure from the trees primary branches, trunk or the trees basal plate is unlikely. The likelihood of hitting a structure is likely, combined with the consequence of hitting a structure, (minor). The consequences of the tree part failing and hitting the target are low. This tree receives a rating of having a low level of risk for damaging a building/hardscape based on the assessment criteria. Using the risk matrix as shown in appendix 5 the likelihood of failure within the next year is possible, the likelihood of hitting a person is unlikely, combined with the consequence of hitting a person, (minor to significant). The consequences of the tree part failing and hitting the target are low. This tree receives a rating of having a low level of risk for hitting a person based on the assessment criteria.

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5. Recommendations

5.1 Tree 1 is a mature tree that has average health, average vigour and below average form for the species. The tree has a risk potential that is deemed to be a low risk to people and a low risk to property.

5.2 Due to the position of the tree, the existing damages and the trees growth potential it is not likely that the damages could be repaired effectively and the tree retained. The client would like to remove the tree to repair the damages that are present. This appears to be a reasonable request.

5.3 If the tree is removed it should be replaced with a better specimen it a more suitable position replacing the canopy cover lost.

Please do not hesitate to call ***0422 265 128*** if you have any questions regarding the contents of this report.

Regards

Hayden Coulter
AQF Level 5 Consulting Arborist
AQF Level 4 Advanced Certificate in Urban Horticulture

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Development Reports | Hazard Assessments | Tree Management

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Disclaimer
All trees have been assessed based on the information and facts of the site and as presented by the client or relevant parties at the time of inspection. No responsibility can be taken for incorrect or misleading information provided by the client or other parties. The nominated tree/s are assessed for biological requirements and hazard potential with reasonable care. The trees are assessed from the ground and by visual means only unless otherwise stated. All tree protection and tree preservation measures are designed to minimise the damage to the tree/s or to reduce the hazard potential of the tree/s. Trees are inherently dangerous, therefore will always have a hazard potential. Trees fail in ways that are not predictable or fully understood. There is no guarantee expressed or implied that failure or deficiencies may not arise of the subject trees in the future. No responsibility is accepted for damage to property or injury/death caused by the nominated tree/s.

Appendix 1 ULE Rating

Useful Life Expectancy (ULE): Useful life expectancy refers to an expected period of time the tree can be retained within the landscape before its amenity value declines to a point where it may detract from the appearance of the landscape and/or becomes potentially hazardous to people and/or property. ULE values consider tree species, current age, health, structure and location. ULE values are based on the tree at the time of assessment and do not consider future changes to the tree's location and environment which may influence the ULE value.

Category rating:	Category definition in years:	Category rating:
1	> 40 Years	High
2	15 to 40 Years	Medium
3	10-20 Years	Low
4	0 Years	Dead

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Appendix 2 Assessment of Trees

Tree No	Species	Height (m)	DBH* & DAC**	Canopy Spread (m)	TPZ ***	Health #	Structure #	ULE Rating ****	Landscape Rating +	Stars Rating +	Observations and comments
1	*Casuarina glauca* Swamp She-Oak	17	.67 DAC .82	13	8.05 SRZ 3.05	A	Ba	3	M	M	# A mature tree that has average health, average vigour and below average form for this species. # The tree has lost apical dominance and has some dieback in the upper crown. # The tree has a low level of deadwood, a low level of dieback, a low amount of epicormic growth with reasonable average vitality at the time of the inspection. # The tree has some included branch unions and previous failures but has no significant defects within the trees structure that would warrant its immediate removal. # The tree is damaging the paving, the retaining wall of the raised garden bed and the wall of the rear building.

Explanatory Notes for Table

- *Dbh = Diameter of trunk at breast height.
- ** DAC = Diameter above the root collar used to measure the Structural Root Zone (SRZ).
- ***TPZ is the recommended TPZ 12x the DBH at 1.4m, SRZ is the trees structural root zone. Refer to AS4970 for details.
- **** ULE Explanation can be found in Appendix 1.
- + IACA Landscape value and S.T.A.R.S Rating system. Refer to Appendix 5
- # Health and Structure values represented above are P = poor, BA = Below Average, A = Average, G = Good

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Appendix 3 Images of Tree




Image 1 shows the tree on site. Image 2 above centre shows the crack in the wall due to the tree. Image 3 & 4 above right centre and above right show the tree in contact with the building. Image 5 below left shows the cracked retainig wall and the cut root 60mm with decay. Image 6 below centre shows the lifted paving. Image 7 below right shows the damaged retaining wall.



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Appendix 4 Existing Site Plan
Darling St
Tree 1
147
8
Arboriculture Risk Assessment and Assessment for Damage.
Date: 12th September 2018. Site: 147 Darling Street, Balmain

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Appendix 5 Tree References

Harris, R. W; Clark, J.R; & Matheny, N.P (2004). *Arboriculture:* Integrated Management of Landscape Trees, Shrubs & Vines 4th Edition, Prentice Hall, New Jersey

Shigo, A.L. (1986). *A New Tree Biology*. Shigo & Trees, Associates, Durham, New Hampshire

Hadlington, P. & Johnston, J. (1988). *Australian Trees: Their Care & Repair. University of NSW Press, Kensington*

Lonsdale, D. (1999). *Principles of Tree Hazard Assessment & Management*. Forestry Commission, The Stationery Office, London

Mattheck, C. & Breloer, H. (1994). *The Body Language of Trees*. Research for Amenity Trees No.4. The Stationery Office, London

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Appendix 6 TRAQ Tree Risk Assessment

This Tree Risk Assessment is the Likelihood Matrix from the risk categorization section of the TRAQ form for Tree Risk Assessment Qualified Arborists 2013. This TRAQ form has been based on the Best Management Practice for Tree Risk Assessment, E. T Smiley, Nelda Matheny, Sharon Lily, published by the ISA 2011.

The Tree Risk Categorization in this case is a qualitative risk assessment used by qualified tree assessors in combination with a matrix to assign risk. The assessor considers possible targets, the target zone, occupancy rates, site specific factors, Tree species, noted defects and environmental factors within a specified period.

The tree assessor uses this information to Categorize risk for the Likelihood of failure, combined with the Likelihood of impacting a target. These two categories make up the first table (table 1) in the Tree Risk Matrix. The second table assesses the Tree Risk rating by combing the Likelihood of failure and impact in table 1 with the Consequences of the branch or tree failing, refer to table 2. The end result is a risk rating of low, moderate, high or severe.

The Likelihood of failure options,

- **Improbable**- the tree or branch is not likely to fail in normal weather conditions within the specified time period.
- **Possible**- Failure of the tree or branch could occur in normal weather conditions within the specified time period.
- **Probable**- the tree or branch may be expected to fail in normal weather conditions within the specified time period.
- **Imminent**- the tree or branch failure has started and is likely to occur in the near future, even without significant wind or load. This is a rare occurrence for the risk assessor to encounter and immediate action must be taken to prevent harm to people or property.

The Likelihood of impacting a target options,

- **Very low-** The chance of the failed tree or branch hitting a target is remote. This would be the case in a site with no targets or a rarely used site or a site that is protected by from impact by other structures.
- **Low-** It is not likely that the failed tree or branch will impact the target. This would be the case in a site which is fully exposed to the tree but is used occasionally, a frequently used area that is partially exposed to the assessed tree.
- **Medium-** The failed tree or branch may or may not hit the target with nearly equal likelihood. This would be the case in a frequently used area that is fully exposed on one side to the assessed tree, or a constantly occupied area that is partially protected for the assessed tree.
- **High-** The failed tree or branch will most likely impact the target. This would be the case when a fixed target is fully exposed to the assessed tree or near a high use road or walkway with an adjacent street tree.

Table 1. The matrix used to estimate the likelihood of a tree failure impacting a specified target.

Likelihood of failure	Likelihood of Impacting Target			
	Very Low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Categorizing Consequences of failure

- **Negligible**- consequences are those that involve low value property damage or disruption that can be replaced or repaired and does not involve personal injury.
- **Minor**- consequences are those that involve low – moderate property damage, disruptions in traffic or disruption in communications or minor personal injury.
- **Significant**- consequences that involve property damage of a moderate to high value, considerable disruption or personal injury.
- **Severe**- consequences that could involve serious personal injury or death, damage to high value property or disruption of important activities.

Table 2. Risk rating matrix showing the level of risk as the combination of likelihood of a tree or part failing and impacting a target and severity of the associated consequences.

Likelihood of failure and impact	Consequences			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

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The four levels of risk as used in the table are defined below and should be used in making recommendations.

- **Extreme**- The extreme risk category applies in situations in which failure is *imminent* and there is a high likelihood of impacting the target with severe consequences. The tree risk assessor should recommend mitigation measures to be taken as soon as possible. This may involve immediately restricting the target zone.

- **High**- High risk situations are those for which consequences are *significant* and likelihood is *very likely* or *likely* or consequences are *severe* and likelihood is *likely*. This combination of likelihood and consequences indicates that the tree risk assessor should recommend mitigation measures. The decision for mitigation and timing of treatment depends upon the risk tolerance of the tree owner or risk manager.

- **Moderate**- Moderate risk situations are those in which consequences are *minor* and likelihood is *very likely* or *likely* or likelihood is somewhat likely and consequences are *significant* or *severe*. The tree risk assessor should recommend mitigation and or retaining the tree with monitoring. The decision for mitigation and timing depends upon the risk tolerance of the tree owner or manager.

- **Low-** The low risk category applies when consequences are *negligible* and likelihood is *unlikely* or consequences are *minor* and likelihood is *somewhat likely*. Some trees with this level of risk may benefit from mitigation or maintenance measures, but immediate action is not usually required. Tree risk assessors may recommend retaining and monitoring these trees as well as mitigation that does not include tree removal.

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Appendix 7 STARS Rating System

IACA Significance of a Tree, Assessment Rating System (STARS) ©
(IACA 2010) ©

In the development of this document IACA acknowledges the contribution and original concept of the Footprint Green Tree Significance & Retention Value Matrix, developed by Footprint Green Pty Ltd in June 2001.

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assist in determining the retention value for a tree. To assist this process all definitions for terms used in the *Tree Significance - Assessment Criteria* and *Tree Retention Value - Priority Matrix*, are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on or adjacent a development site. The system uses a scale of *High*, *Medium* and *Low* significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined.

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Tree Significance - Assessment Criteria

1. High Significance in landscape

- The tree is in good condition and good vigour;
- The tree has a form typical for the species;
- The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age;
- The tree is listed as a Heritage Item, Threatened Species or part of an Endangered ecological community or listed on Councils significant Tree Register;
- The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity;
- The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values;
- The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa *in situ* - tree is appropriate to the site conditions.

2. Medium Significance in landscape

- The tree is in fair-good condition and good or low vigour;
- The tree has form typical or atypical of the species;
- The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area
- The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street,
- The tree provides a fair contribution to the visual character and amenity of the local area,
- The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa *in situ*.

3. Low Significance in landscape

- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area,
- The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen,
- The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa *in situ* - tree is inappropriate to the site conditions,
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms,
- The tree has a wound or defect that has potential to become structurally unsound.

Environmental Pest / Noxious Weed Species

- The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties,
- The tree is a declared noxious weed by legislation.

Hazardous/Irreversible Decline

- The tree is structurally unsound and/or unstable and is considered potentially dangerous,
- The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

Note: The assessment criteria are for individual trees only, however, can be applied to a monocultural stand in its entirety e.g. hedge.

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Table 1.0 Tree Retention Value - Priority Matrix.

Estimated Life Expectancy	Significance				
	1. High Significance in Landscape	**2.** Medium Significance in Landscape	**3.** Low Significance in Landscape	**3.** Low Environmental Pest / Noxious Weed Species	**3.** Low Hazardous / Irreversible Decline
1. Long **>40 years**					
2. Medium **15-40 Years**					
3. Short **<1-15 Years**					
Dead					

Legend for Matrix Assessment

	Priority for Retention (High) - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 *Protection of trees on development sites*. Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.
	Consider for Retention (Medium) - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.
	Consider for Removal (Low) - These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.
	Priority for Removal - These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

REFERENCES

Australia ICOMOS Inc. 1999, *The Burra Charter – The Australian ICOMOS Charter for Places of Cultural Significance*, International Council of Monuments and Sites, www.icomos.org/australia

Draper BD and Richards PA 2009, *Dictionary for Managing Trees in Urban Environments*, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.

Footprint Green Pty Ltd 2001, *Footprint Green Tree Significance & Retention Value Matrix*, Avalon, NSW Australia, www.footprintgreen.com.au

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Appendix 8 Glossary of Terms

Abiotic	Nonliving
Anthracnose	a fungal disease causing dead areas on the leaves, buds, stems.
Arboriculture	The science and art of caring for trees, shrubs and other woody plants in landscape settings.
Barrier Zone	Protective boundary formed in new wood in response to wounding or other injury.
Biotic	Alive, pertaining to living organisms.
Branch attachment	The structural union of a lateral branch.
Callus	Undifferentiated tissue produced in response to wounding.
Canker	A dead spot or necrotic lesion that is caused by a bark inhabiting organism/pathogen.
Cavity	an open wound characterized by the presence of decay resulting in a hollow.
Collar	the ring of tissue that surrounds the lateral branch at its point of attachment.
Compartmentalization	A physiological process that creates the chemical and physical boundaries that act to limit the spread of disease and decay organisms.
Compression wood	A type of reaction wood that forms on the underside of branches which tends to maintain a branch angle of growth.
Crown	The above ground parts of the tree, including the trunk.
DBH	The diameter of a trees trunk measured at 1.4m.
Decay	Process of degradation of woody tissues by fungi and bacteria through the decomposition of cellulose and lignin.
Decline	Progressive decrease in health of organs or the entire plant usually caused by a series of interacting factors.
Drip line	The width of the crown, as measured by the lateral extent of the foliage.
Epicormic shoot	a shoot that arises from latent or adventitious buds that occur on stems, branches or the bases of trees.
Included bark	Pattern of development at branch junctions where bark is turned inward, rather than pushed out; contrast with the branch nark ridge.
Mortality Spiral	The sequence of events describing a change in the trees health from vigorous to declining to death.
Photosynthesis	The transformation in the presence of chlorophyll and light, of carbon dioxide from (the air) and water (primarily from soil) into a simple carbohydrate and oxygen.
Pruning	systematic removal of branches of a plant usually a woody perennial.
Reaction wood	Specialized secondary xylem that develops in response to a lean or similar mechanical stress to restore the stem to vertical.
Taper	The change in diameter over the length of trunks and branches. Important to mechanical support.
Tension wood	A type of reaction wood that trees form on the upper side of branches and stems and roots.
VTA	Visual Tree Assessment is a method of evaluating structural defects and stability in trees.
Wound	Any injury that induces a compartmentalization response.

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Appendix 9 Curriculum Vitae

Education and Qualifications

- 2005 Diploma of Arboriculture (AQF Cert 5), Ryde TAFE. Distinction.
- 2000 Tree Climbing Course (AQF Cert 2), Ryde TAFE.
- 1999 Advanced Certificate in Urban Horticulture, (AQF Cert 4), Ryde TAFE. Distinction.
- 1995 Greenkeepers Trade Certificate (AQF 3) Ryde TAFE. Credit.
- 1991 Higher School Certificate.

Conference Attendance/presentation of Scientific Papers

- Barrell Tree Care Workshop- Trees on Construction Sites (Brisbane 2005)
- Tree Logic seminar- Urban Tree Risk Management (Sydney 2005)
- Tree Pathology and Wood Decay Seminar Sydney (2004)
- Excelsior Training Claus Mattheck (Sydney 2001)
- Managing Mature Trees NAAA(Sydney 2000), Presented a Paper "Habitat Value of Mature Trees"

Industry Experience

- **2004 to Date, Sole Trader, The Ents Tree Consultancy.** Consultant for the Royal Botanic Gardens, Consultant Parramatta Park Trust, Consultant/ Expert Witness Woollahra Council. Master plan works for Sydney University, Taronga Zoo and University of NSW. Writing of tree reports for development applications for Energy Australia, Numerous Architectural Firms and builders. Provision of master plans, hazard evaluations, tree management plans and expert witness reports. Hazard assessments, tree surveys and consultations.
- **2003 to 2008, Arborist University of New South Wales**. Survey all trees on site, developed a Tree Management Database. Minimise hazard potential of all trees on site through evaluation and works. Generate and prioritise works and tree assessment based areas usage, tree conditions and staff required. Development of UNSW Tree Protection Guidelines for master planning works. Acting Supervisor December 2006 to May 2007.
- **2003 Tree management Officer Randwick Council**. Liaise with public to explain and enforce the councils Tree Preservation order. Management of internal staff and contractors. Project management and co-ordination of street tree planting and maintenance.
- **1999 to 2003 Animal Food Production Manager and Arborist**. Management of Koala food Plantation, Management of animal food supply registry for herbivores/omnivores. Coordination of staff contractors and volunteers. Maintain and manage tree management database, complete tree works within zoo grounds and at zoo owned plantations. Acting supervisor 6 month period 2002 for grounds dept and asset management trade team (60 Staff).
- **1998 to 1999 Sole Trader Techniques Lawn & Garden Consultancy.** Lawn, garden and Tree care. Garden design and maintenance. Tree works and tree removal. Installation of irrigation equipment.
- **1997 to 1998 Greenkeeper / Horticulturist Muirfield Golf Course.** General grounds duties, machinery maintenance, horticultural works, tree works
- **1992 to 1997 Greenkeeper / Horticulturist Ashlar Golf Course.** General grounds duties, machinery maintenance, horticultural works, tree works.

Attachment D – Statement of Significance Heritage Item

Stone house

Item details

Name of item: Stone house

Other name/s: Waverly Hotel, Dick's Hotel, Balmain Hotel

Type of item: Built

Group/Collection: Residential buildings (private)

Category: Cottage

Primary address: 147 Darling Street, Balmain, NSW 2041

County: Cumberland

Local govt. area: Leichhardt

All addresses

Street Address	Suburb/town	LGA	Parish	County	Type
147 Darling Street	Balmain	Leichhardt		Cumberland	Primary Address

Statement of significance:

No. 147 Darling Street is of local historic, aesthetic and technological significance as part of an early subdivision and early stone building constructed in c. 1844-45 probably of locally quarried stone. The building significantly retains its original scale and form including sandstone facades, roof and chimney and simple pattern of openings and open front verandah. The building makes a positive contribution to the associated group of early commercial development in Balmain (Nos. 147-155) and Darling Street streetscape.

Note: This inventory sheet is not intended to be a definitive study of the heritage item, therefore information may not be accurate and complete. The information should be regarded as a general guide. Further research is always recommended as part of the preparation of development proposals for heritage items.

Date significance updated: 25 Aug 10

Note: The State Heritage Inventory provides information about heritage items listed by local and State government agencies. The State Heritage Inventory is continually being updated by local and State agencies as new information becomes available. Read the OEH

Description

Builder/Maker:	Andrew Lenehan
Construction years:	1844-1845
Physical description:	One and two storey with attic face stone and timber weatherboard building with gable and skillion roof clad in corrugated steel and stone chimney with profiled capping and terracotta pots over the eastern end wall. An open verandah extends across the front façade and has stone flagged floor and simple timber posts which support the hipped roof which is clad in corrugated steel with timber boarded lining. A timber picket fence/ balustrade bounds vernadah. The front façade has a central timber panelled door with toplight over framed by two pairs of glazed French doors also with toplights over. The building and front verandah is setback from the street frontage which features a stone edged garden bed with ornamental plantings and hedge. A modern concrete path extends from the street frontage to the building entry. The building is constructed to and abuts two storey terraces to the west with open setback from the building to the east. A gate and paved path extends is located along the eastern side of the building. The eastern façade has several small timber framed windows including one smaller lower ground window opening. The weather board wing extends across the rear of the building and is flush with the eastern side façade. The area to the rear of the building has been paved with one pine and some planting also located at the rear.
Physical condition and/or Archaeological potential:	In good condition. The mortar joints to the stonework above the verandah roof and stone chimney details have deteriorated.
Modifications and dates:	1963: Erection of a drive in shop (5618). 1979: Alterations and renovations (18005). 1982 Alterations and additions comercial building (21119). 1985: Alter roof structure attic area (85/530). 1995: Office - Advertising agency.
Further information:	Steel security doors have been added to the front door and adjacent French doors. Two skylights have also been added to the western end of the main, front roof slope. Air conditioning units are located on the eastern setback with ducting fixed to the eastern stone wall. It would appear that the stone floor finish to the front vernadah has been painted at some stage.
Current use:	Commercial/ offices

Former use: Hotel/ Residential

History

Historical notes: Surgeon William Balmain was granted 550 acres and most of the area now encompassing Balmain in 1800. In 1801 the entire grant was transferred to fellow surgeon John Gilchrist. Gilchrist never actually lived in NSW and advertised the land for sale in 1823. However, the sale was not a success. He gave power of attorney to his Sydney-based agent and merchant, Frank Parbury, who commissioned Surveyor John Armstrong to subdivide part of the land. In 1836 22, 2-4 acres lots mostly about Balmain East were auctioned for sale by Parbury on behalf of the absentee landowner, Gilchrist.

Parbury himself leased/ bought 10 acres at the south eastern part of the Waterview Bay and built the first house on the Balmain grant, Waterview House in 1835 (demolished c. 1905). It was a six-roomed single storey house with stables, outbuildings and a fenced garden. It stood near the corner of Colgate and Caroline Street. It was later purchased by George Cooper, Comptroller of Customs, who owned/ leased 28 acres adjacent to the west. Cooper subsequently fell victim to the crash of the early 1840s and was declared bankrupt. The Waterview Estate was subsequenlty divided into modest building allotments with very narrow streets (leaving as much land for development) leading down to the bay with its slipway and wharves. The site is part of Lot 6 of Section 1 of the Waterview Estate, bought by Castlereagh Street cabinet maker Andrew Lenahan in 1843. In 1844-45 he built tenements and a dwelling house with suitable offices and out buildings on the site. He sold the one storey stone house to another cabinet maker John Clarke in 1847. Clarke opened the Balmain Hotel there and advertised it to let and being capable of doing a “snug” business with no fittings and fixtures required. Clarke sold the Hotel to Balmain publican James Barr who opened it as the Waverly Hotel.

Barr was the licensee of the Hotel until 1863 from which time it was leased. The name changed to Dick’s Hotel between 1868 and 1872. Barr resumed the licence in 1874 and continued to operate the Hotel until 1889. He developed and lived in the property next door (No. 149) at this time. He leased No. 147 and No. 149 from this time, the Waverly was also known as the Balmain Hotel during this period. The buildings continued to be let by his family after his death in 1892.

A Sydney Water plan (Municipality of Balmain Sheet No. 17) dating from the 1880s shows the building constructed with square footprint constructed to the buildings to the west and setback from the street frontage. A number of detached outbuildings and structures are located to the rear of the building.

The Waverly finally closed in 1911 and was converted to a dwelling. The house continued to be let by its various owners. In 1957 Lot 6 and adjacent land was subdivided into Lots A-D with No. 147 occupying Lot A which continued to be leased out as a dwelling from this time.

The building has since been used for commercial/ office purposes.

Attachment E – Statement of Significance Waterview Estate

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Area 16 Waterview Estate Conservation Area

Comprises Parbury's 10-acre Waterview Estate and Cooper's 28-acre estate adjoining it to the northwest.

Landform

This Conservation Area comprises land on the southeast of Waterview Bay (now Morts Bay). It slopes quite steeply towards the bay from the Darling Street ridge.

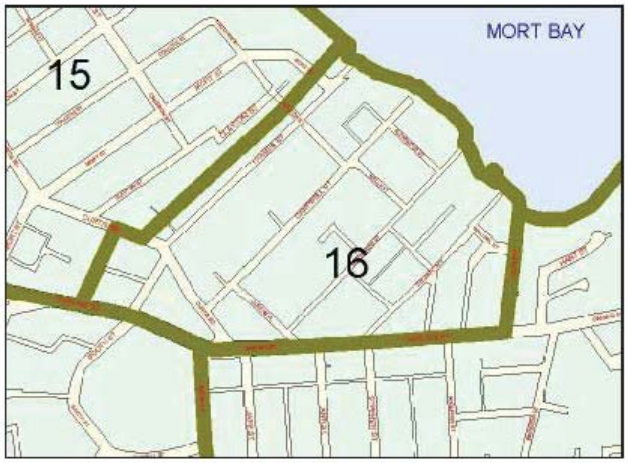

Figure 16.1 Waterview Estate Conservation Area Map.

History

This area contains two large sections of land which were among the earliest to be carved out of Gilchrist's Balmain Estate. Dr William Balmain had given his grant of 550 acres to fellow surgeon and friend John Gilchrist in 1801. Gilchrist's agent, Sydney merchant Frank Parbury put a number of land parcels up for sale in 1836, all near the eastern end of the Balmain peninsula, with easy water access to Sydney Town.

Parbury himself leased/bought ten acres at the southeastern part of Waterview Bay, and built the first house on the Balmain grant, Waterview House, in 1835. It was a six-roomed single-storey house with stables, outbuildings and a fenced garden and stood near the corner of Colgate Avenue and Caroline Street. It was later purchased by George Cooper, Comptroller of Customs, who owned/leased 28 acres adjacent to the west. Like many people who overstretched themselves in the late 1830s, Cooper fell victim to the crash of the early 1840s and was declared bankrupt. The Waterview Estate was then divided into modest building allotments, with very narrow streets (leaving as much land as possible for development) leading down to the bay with its slipways/wharves.

With the expansion of industry out of Sydney Town in the 1880s, allotments close to the water were taken up for water dependent industrial uses, such as

the Balmain Ferry Co works. Some villas were built on the higher slopes of the land, while other allotments were resubdivided for closer development. The growth of the Morts Dock and Engineering Company provided an impetus for the construction of small terraces and cottages to house the growing maritime workforce. A number of these resubdivisions provided narrow back lanes.

Waterview House was demolished after 1905, probably in the 1920s. Colgate Palmolive established a factory on the water's edge in 1922. The conversion of this factory to apartments in the 1990s, and the remaining small maritime activities around the Balmain Ferry Co works at the end of Waterview Street illustrate the close and enduring relationship between housing and industry.

Sources

Solling, M and Reynolds, P 1997, 'Leichhardt: on the margins of the city', *Leichhardt Historical Journal*, Vol. 22, Allen and Unwin.

Reynolds, P 1985, 'The first 22 lots – an overview: Suburbanisation in Balmain', *Leichhardt Historical Journal*, Vol. 14.

Significant Characteristics

- Very narrow straight streets, most of which lead down to Morts Bay.
- Clusters of small maritime activities end the view down some streets.
- Buildings generally sited close to street, defining edge of narrow roads.
- Varied streetscape comprising dense post-1870s housing – two-storey terraces and single and double-fronted detached cottages; the occasional large early villa, industrial buildings, shops and commercial buildings.
- Variety of building materials and finishes: rendered brick, face brick, weatherboard, stone.
- Roofs mostly of iron or terracotta tiles.
- Sandstone kerbs and gutters mostly uninterrupted by driveway access.

Statement of Significance or Why This Area is Important

- One of a number of conservation areas which collectively illustrate the nature of Sydney's early suburbs and Leichhardt's suburban growth particularly between 1871 and 1891, with pockets of infill up to the end of the 1930s (ie prior to World War II). This area is significant for the layers of development from presuburban marine villas of the 1850/60s to small-scale workers' housing from the 1870s through to the late 1930s.
- Demonstrates the close physical relationship between industry and housing (both middle class and workers' housing) in nineteenth century cities.
- Demonstrates the nature of some private subdivisions before the introduction of the Width of Streets and Lanes Act of 1881 required roads to be at least one chain wide.

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Management of Heritage Values

Generally

This is a conservation area. Little change can be expected other than modest additions and discrete alterations. Buildings which do not contribute to the heritage significance of the area may be replaced with sympathetically designed infill.

Retain

- Narrow streets.
- All pre-1939 buildings and structures, especially timber and stone buildings.
- Maritime and industrial buildings that have played a part in the history of this area.
- Original plaster finishes to external walls (as a rough rule of thumb this will mostly apply to pre-1890s buildings. Reconstruct the finish where necessary.
- Original unplastered face brick external walls.
- Original architectural details to building. Encourage replacement of lost elements, but only where evidence is available.
- Uninterrupted sandstone kerbs and gutters.

Avoid

- Alterations that change the shape of the building or original roof forms on the main part of the buildings.
- Second-storey additions to original single-storey houses, other than as separated pavilion forms.
- Removal of original detail. Encourage restoration from evidence.
- Removal of original plaster finishes to external walls.
- Plastering or painting of original face brick walls.
- Additions of details not part of the original fabric of the building.
- Inappropriate fences such as high brick fences/walls, new iron palisades on high brick bases.
- Interruption to almost continuous kerb and gutters.