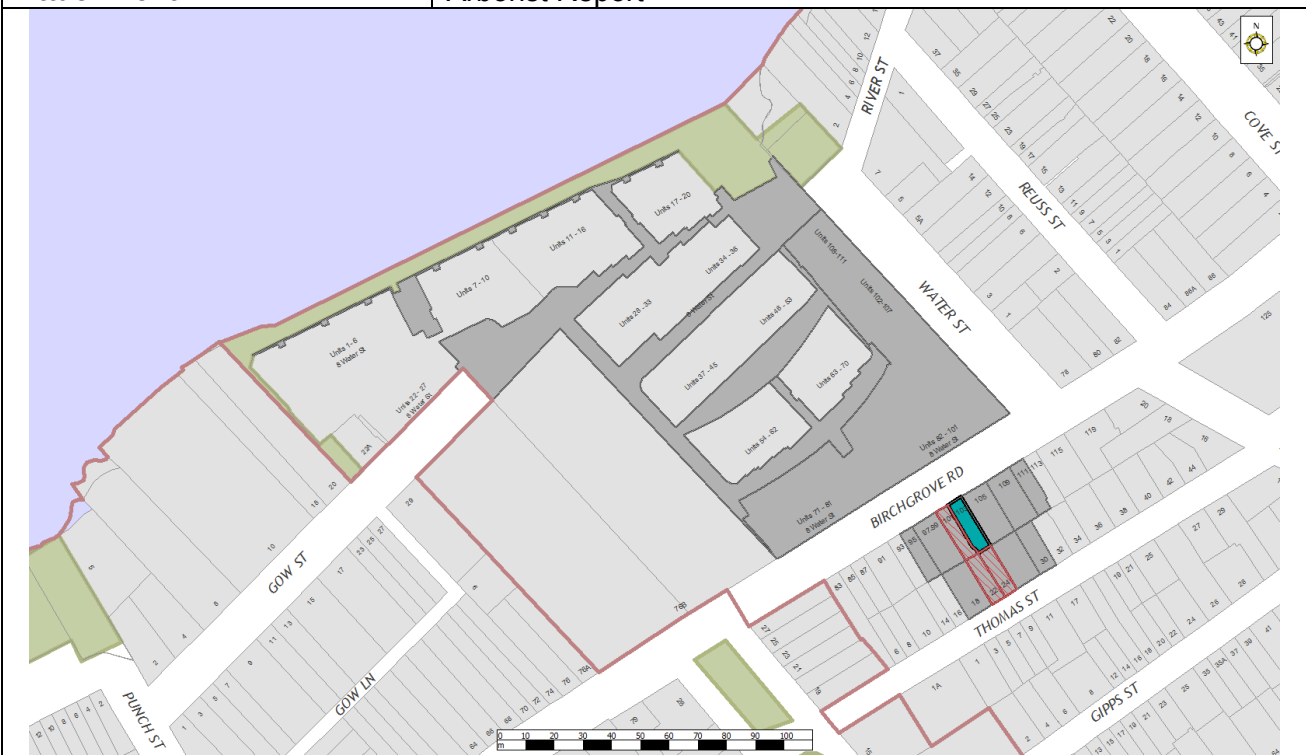




INNER WEST COUNCIL

DEVELOPMENT ASSESSMENT REPORT

Application No.	D/2018/474
Address	103 Birchgrove Road, BIRCHGROVE NSW 2041
Proposal	Alterations and additions to a semi detached cottage.
Date of Lodgement	7 September 2018
Applicant	L Mitchell
Owner	Ms L J Mitchell
Number of Submissions	Three
Value of works	\$226,000
Reason for determination at Planning Panel	Clause 4.6 variation exceeds officer delegation
Main Issues	Heritage Glazed balustrade around roof
Recommendation	Approval
Attachment A	Recommended conditions of consent
Attachment B	Plans of proposed development
Attachment C	Clause 4.6 Exception to Development Standards
Attachment D	Statement of Heritage Significance for Iron Cove heritage conservation area
Attachment E	Arborist Report



LOCALITY MAP

Subject Site		Objectors		↑ N
Notified Area		Supporters		

1. Executive Summary

This report is an assessment of the application submitted to Council for alterations and additions including new first floor to a semi detached dwelling at 103 Birchgrove Road, Birchgrove. The application was notified to surrounding properties and three submissions were received.

The main issues that have arisen from the application include:

- Non-compliance with current heritage controls to permit proposed first floor to match existing first floor of attached semi.
- Proposed glazed balustrading and access window to roof.

The proposed glazed balustrading and access window to the roof are recommended for deletion via condition. Variance to Council’s controls to permit changes to the rear roof plane of the main building are the preferred option on heritage grounds in this instance and therefore the application is recommended for approval.

2. Proposal

Alterations and additions to existing semi-detached dwelling comprising:

- New first floor over rear roof plane of main roof;
- Glazed balustrade around roof of addition (including part of original dwelling);
- Single storey rear addition to three boundaries. Note: the existing dwelling already extends to the rear boundary.

3. Site Description

The subject site is located on the southern side of Birchgrove, between Spring Street and Macquarie Terrace. The site consists of one allotment and is generally rectangular, although there is legally a slight kink towards the rear of the site, this is located within the party wall and is not visible (see boundary extract below). The site has a total area of 108.6 sqm and is legally described as Lot A DP446795.

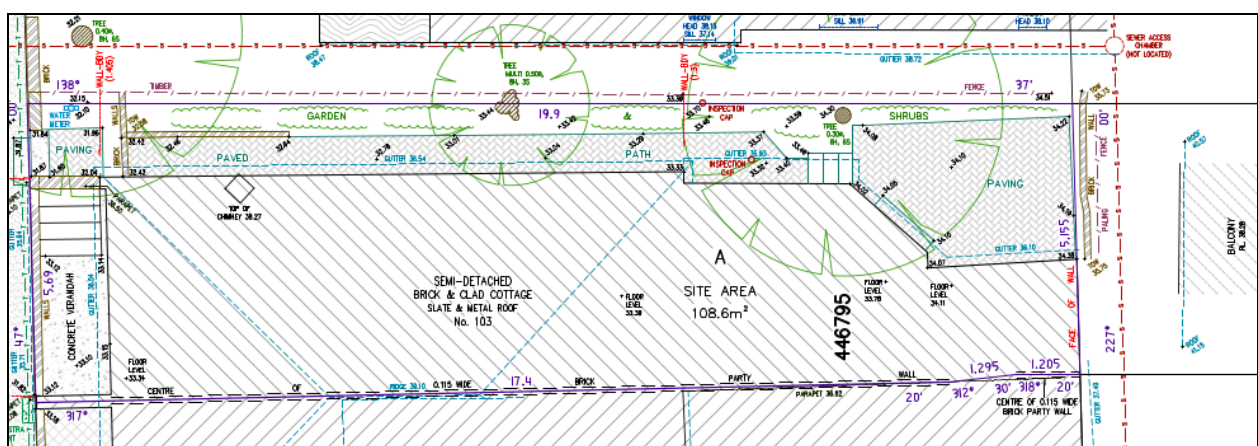


Figure 1: Extract of site survey. Source: Bee & Lethbridge

The site has a frontage to Birchgrove Road of 5.69 metres. A party wall is located on the south-western boundary.

The site supports a single storey semi-detached dwelling comprised of masonry with a metal roof. The adjoining property at 101 Birchgrove Road, Birchgrove contains the other “half” of

the semi-detached dwelling (see photograph below). Note: the dwelling at 101 Birchgrove Road has a first floor addition approved in 2005 under the Leichhardt Local Environmental Plan/Development Control Plan 2000.



Figure 2: Front elevation from Birchgrove Road. Subject site to left. 101 Birchgrove to right behind street tree with existing first floor. 99 Birchgrove on far right – three storey dwelling.

The property is located within the Iron Cove heritage conservation area.

The following trees are located on the site and within the vicinity:

- Lilly Pilly (*Syzygium paniculatum*) in the side setback close to the eastern boundary line; and
- Kumquat (*Fortunella japonica*) in the rear setback close to the eastern boundary line.

4. Background

4(a) Site history

The subject site has no relevant development history. The following section outlines the relevant applications on surrounding properties.

Surrounding properties

Application	Proposal	Decision & Date
D/2005/114 CC/2005/370 OC/2006/273	Ground and first floor alterations and additions to existing single storey semi-dwelling at 101 Birchgrove Road, Birchgrove.	Approved 17/3/2005
BC/2016/51	Erection of rear awning at 101 Birchgrove Road, Birchgrove.	Approved – 2/11/2016

4(b) Application history

The following table outlines the relevant history of the subject application.

Date	Discussion / Letter/ Additional Information
4/10/2018	Updated BASIX Certificate provided as the one submitted with the application was older than 3 months when lodged and therefore invalid.
12/10/2018	Applicant advised that glazed balustrade around roof addition would not be supported.

18/10/2018	Site inspection.
------------	------------------

5. Assessment

The following is a summary of the assessment of the application in accordance with Section 4.15 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 No 55—Remediation of Land
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- 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 No 55—Remediation of Land—

State Environmental Planning Policy No. 55 - Remediation of Land (SEPP 55) provides planning guidelines for remediation of contaminated land. LDCP 2013 provides controls and guidelines for remediation works. SEPP 55 requires the consent authority to be satisfied that land is, or can be made suitable for the proposed use prior to granting development consent.

The site has not been used in the past for activities which could have potentially contaminated the site. It is considered that the site will not require remediation in accordance with SEPP 55.

5(a)(ii) State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

A valid BASIX Certificate was submitted during the assessment of the application and compliance with that Certificate is required via condition of development consent.

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 environment, the natural environment and open space and recreation facilities.

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

The proposal involves the removal of one prescribed tree. No objection is posed to the removal of the Kumquat subject to a suitable replacement planting.

5(a)(v) 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 2.7 – Demolition Requires Development Consent
- Clause 4.3A(3)(a) – Landscaped Area for residential development in Zone R1
- Clause 4.3A(3)(b) – Site Coverage for residential development in Zone R1
- Clause 4.4 – Floor Space Ratio
- Clause 4.5 – Calculation of floor space ratio and site area
- Clause 4.6 – Exceptions to development standards
- Clause 5.10 – Heritage Conservation
- Clause 6.1 – Acid Sulphate Soils
- Clause 6.2 – Earthworks
- Clause 6.4 – Stormwater management

The following table provides an assessment of the application against the development standards:

Standard (maximum)	Proposal	% of non compliance	Compliance
Floor Space Ratio Maximum permitted: 0.9:1/97.74 sqm	0.85:1 or 92.5 sqm	Complies	Yes
Landscape Area Minimum permitted: 16.3 sqm/15%	16.3 sqm or 15%	Complies	Yes
Site Coverage Maximum permitted: 65.16 sqm/60%	80.27 sqm or 74%	No	No

The following provides further discussion of the relevant issues:

Clause 5.10 – Heritage Conservation

The subject site is not listed as a heritage item on the Leichhardt LEP 2013 and there are no listed heritage items in close proximity that would be adversely affected by the proposal.

The site is however located in a heritage conservation area. The statement of significance of the HCA is appended at Attachment D and available on Council's website:
<https://www.innerwest.nsw.gov.au/develop/planning-controls/heritage-and-conservation/heritage-conservation-areas>

The subject site is occupied by a single storey semi-detached house that is part of a pair together with no.101. The subject pair is contributory to the heritage conservation area.

The proposal is against good heritage practice and is contrary to Leichhardt Development Control Plan 2013 as it would remove the rear roof plane of the main roof of a contributory item.

However, the subject pair has been irremediably altered by the 2005 approval to 101 Birchgrove Road which approved a similar addition on the attached property. That approval pre-dates the current heritage controls for the area and was granted under controls which were more flexible, posing fewer constraints than current controls. Taking the surrounding context and the site's constraints into consideration, including the fact that the subject site is one of the few single storey houses left, the proposal to match 101 is not opposed from a heritage perspective despite the fact that it will result in an adverse impact over the

conservation area and over a contributory and significant item with the loss of significant fabric.

The approach is contingent on the bulk and scale and removal of original fabric to the principal building form being limited to the works previously approved at 101 Birchgrove Road. Council's Heritage Adviser has stated that *the new addition must retain a symmetrical approach to the pair when viewed from the public domain and must be more recessive in terms of materials, finishes and colours to mitigate its adverse visual impact.*

Conditions to mitigate the adverse impact have been recommended as follows:

- X. Amended plans are to be submitted incorporating the following amendments:
- The first floor must not exceed the height of the first floor on the adjoining dwelling at 101 Birchgrove Road, Birchgrove. The proposed glazed balustrading and clerestory window should be deleted.
 - Windows W1 and W2 shall be deleted as these are located in the side wall of the original dwelling and will result in the loss of original fabric. The front bedroom already has a window in the front elevation, thus the window is not required for BCA compliance.
 - New roofing for the front verandah must match the same material and colour as 101 Birchgrove Road, Birchgrove.
 - Materials, finishes and colours of the addition must be off white in order to give the new addition a 'lighter' appearance or match the existing colour-scheme of the first floor addition at 101 Birchgrove Road, Birchgrove.
 - The colour of the front door, window and front balustrade shall remain as existing or match the adjoining dwelling at 101 Birchgrove Road, Birchgrove.
 - With the exception of the flat section of the new addition which has no pitch, new roofing material must comprise of either heritage barrel rolled traditional corrugated galvanised steel or pre-coloured traditional corrugated galvanised steel in a colour equivalent to Colorbond's "Windspray" or "Wallaby".

Details demonstrating compliance with the requirements of this condition are to be marked on the plans and be submitted to the Principal Certifying Authority's satisfaction prior to the issue of any Construction Certificate.

The proposed glazed balustrades are considered unsympathetic materials and will be deleted via a condition of development consent. While Council's heritage adviser prefers the colour-scheme to remain as existing, given that the first floor is to match the adjoining semi-detached dwelling it is considered acceptable for the colour-scheme to also match that property.

Clause 4.6 Exceptions to Development Standards

As outlined in table above, the proposal results in a breach of the following development standard:

- Clause 4.3A(3)(b) – Site Coverage for residential development in Zone R1

Clause 4.6(2) specifies that Development consent may be granted for development even though the development would contravene a development standard.

1. *The objectives of this clause are as follows:*
 - (a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
 - (b) *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

2. *Development consent may be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument.*

Comment: As discussed below in subclauses (3) and (4), it is considered that the contravention to the development standard is acceptable in this instance.

3. *Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:*
 - (a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
 - (b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*

Comment: The 'key' reasons submitted by the applicant as justification to the contravention of the standards are:

- It would be unreasonable to expect the building footprint to occupy only 60% of a site area that totals 108.5 sqm; and
 - The proposal meets the objectives of the controls.
- (4) *Development consent must not be granted for development that contravenes a development standard unless:*
 - (a) *the consent authority is satisfied that:*
 - (i) *the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
 - (ii) *the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*
 - (b) *the concurrence of the Secretary has been obtained.*

Comment: The applicant has addressed the matters required under Clause 4.6 Exceptions to development standards, and the request to contravene the standard is considered to be well founded in this instance. The proposal will not result in a detrimental impact on the public interest and can satisfy the objectives of the development standard and General Residential zoning as demonstrated below:

- The proposal is compatible with the desired future character of the area in relation to building bulk, form and scale;
- The proposal complies with the Floor Space Ratio and Landscaped Area development standards, providing a suitable balance between landscaped areas and the built form;
- The siting of the building is within the building location zones when it can be reasonably assumed development can occur; and
- The proposal does not result in any adverse amenity impacts to the surrounding properties.

The Secretary has provided concurrence.

5(b) Draft Environmental Planning Instruments

The application has been assessed against the Draft Environment SEPP and satisfies the relevant provisions of the SEPP.

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 2013.

Part	Compliance
Part A: Introductions	
Section 3 – Notification of Applications	Yes
Part B: Connections	
B1.1 Connections – Objectives	Yes
B2.1 Planning for Active Living	Not applicable
B3.1 Social Impact Assessment	Not applicable
B3.2 Events and Activities in the Public Domain (Special Events)	Not applicable
Part C	
C1.0 General Provisions	No
C1.1 Site and Context Analysis	Yes
C1.2 Demolition	Not applicable
C1.3 Alterations and additions	No
C1.4 Heritage Conservation Areas and Heritage Items	No
C1.5 Corner Sites	Not applicable
C1.6 Subdivision	Not applicable
C1.7 Site Facilities	Yes
C1.8 Contamination	Not applicable
C1.9 Safety by Design	Yes
C1.10 Equity of Access and Mobility	Not applicable
C1.11 Parking	Not applicable
C1.12 Landscaping	Yes
C1.13 Open Space Design Within the Public Domain	Not applicable
C1.14 Tree Management	Yes
C1.15 Signs and Outdoor Advertising	Not applicable
C1.16 Structures in or over the Public Domain: Balconies, Verandahs and Awnings	Not applicable
C1.17 Minor Architectural Details	Not applicable
C1.18 Laneways	Not applicable
C1.19 Rock Faces, Rocky Outcrops, Cliff Faces, Steep Slopes and Rock Walls	Yes
C1.20 Foreshore Land	Not applicable
C1.21 Green Roofs and Green Living Walls	Not applicable
Part C: Place – Section 2 Urban Character	
C2.2.2.6 Birchgrove distinctive neighbourhood, Birchgrove	Yes
Part C: Place – Section 3 – Residential Provisions	
C3.1 Residential General Provisions	No
C3.2 Site Layout and Building Design	No
C3.3 Elevation and Materials	No
C3.4 Dormer Windows	Not applicable
C3.5 Front Gardens and Dwelling Entries	Not applicable
C3.6 Fences	Not applicable
C3.7 Environmental Performance	Not applicable
C3.8 Private Open Space	Yes
C3.9 Solar Access	Yes

C3.10 Views	Yes
C3.11 Visual Privacy	Yes
C3.12 Acoustic Privacy	Yes
C3.13 Conversion of Existing Non-Residential Buildings	Not applicable
C3.14 Adaptable Housing	Not applicable
Part C: Place – Section 4 – Non-Residential Provisions	Not applicable
Part D: Energy	
Section 1 – Energy Management	
Section 2 – Resource Recovery and Waste Management	
D2.1 General Requirements	
D2.2 Demolition and Construction of All Development	
D2.3 Residential Development	
D2.4 Non-Residential Development	
D2.5 Mixed Use Development	Not applicable
Part E: Water	
Section 1 – Sustainable Water and Risk Management	
E1.1 Approvals Process and Reports Required With Development Applications	
E1.1.1 Water Management Statement	
E1.1.2 Integrated Water Cycle Plan	Not applicable
E1.1.3 Stormwater Drainage Concept Plan	Yes
E1.1.4 Flood Risk Management Report	Not applicable
E1.1.5 Foreshore Risk Management Report	Not applicable
E1.2 Water Management	
E1.2.1 Water Conservation	Not applicable
E1.2.2 Managing Stormwater within the Site	Yes
E1.2.3 On-Site Detention of Stormwater	Not applicable
E1.2.4 Stormwater Treatment	Not applicable
E1.2.5 Water Disposal	Yes
E1.2.6 Building in the vicinity of a Public Drainage System	Not applicable
E1.2.7 Wastewater Management	Yes
E1.3 Hazard Management	Not applicable
E1.3.1 Flood Risk Management	Not applicable
E1.3.2 Foreshore Risk Management	Not applicable
Part F: Food	Not applicable
Part G: Site Specific Controls	Not applicable

The following provides discussion of the relevant issues:

C1.14 Tree Management

The proposal has the potential to impact on the following three trees:

1. Kumquat located to the rear of the site;
2. A lilly pilli is located in a small raised garden bed that straddles the boundary with 105 Birchgrove Road; and
3. A large tree located in the front yard of 105 Birchgrove Road.

No objection is posed to the removal of the kumquat as its location conflicts with the proposed addition.

The other two trees are not limited to the confines of the site, and thus, must be protected. To ensure these trees are not impacted by the proposed works, conditions have been imposed including a requirement for no excavation within the TPZ of these trees, i.e. *the width and height of the garden bed and the existing paving must not be removed or altered and must remain as is.*

It is noted that Council would not oppose the removal of the lilly pillly were owners consent from the owner of 105 Birchgrove Road to be provided.

C1.19 Rock Faces, Rocky Outcrops, Cliff Faces, Steep Slopes and Rock Walls

No excavation of the existing rock face at the rear of the site is proposed; a condition of development consent will be imposed to ensure that no such excavation occurs.

C1.0 General Provisions / C1.3 Alterations and additions / C1.4 Heritage Conservation Areas and Heritage Items / C3.1 Residential General Provisions / C3.3 Elevation and Materials

The proposal is contrary to Council's design approach for heritage dwellings as discussed previously in this report in Part 5(a)(iv). Despite this non-compliance, a first floor addition that matches the addition of the adjoining semi-detached pair (101 Birchgrove Road) as seen from the street is considered to meet the objectives of the controls and would result in a better planning outcome in this instance.

C3.2 Site Layout and Building Design

Building envelope / Building location zone

The building envelope that applies in the Birchgrove distinctive neighbourhood is based on a 6 metre wall height and the proposal complies with this control.

The existing dwelling is already constructed to the back boundary, thus the ground floor building location zone is not altered by the proposal.

The proposed first floor extends further to the rear than the adjoining dwelling at 101 Birchgrove, but not as far as the dwelling at 105 Birchgrove Road, and thus, the proposal complies with the site specific building location zone. It is noted that the dwelling at 105 Birchgrove Road is atypical as the site extends through to Thomas Street, however, the location of the first floor does not exceed the first floors at 93-95 Birchgrove and does not result in significant impacts in terms of privacy, views, sunlight or streetscape (subject to deletion of the proposed glazed balustrade of the roof) and this is considered to be acceptable.

Building location zone (BLZ) is the part of the subject site where it can be reasonably expected that a building can be located and is defined by the front and rear setbacks of adjacent dwellings. The proposal complies with the applicable building location zone.

Side setback

The dwelling has a maximum height of 7.5 metres (which relates to the proposed glazed balustrade and clerestory window recommended to be deleted), a maximum height of 5.5 m for the proposed works and is built to the south-western boundary. Buildings of such height are required to be setback approximately 1.8-2.8 metres under this control, thus the proposal does not comply with the side setback control graph.

Notwithstanding, the non-compliance is considered to be acceptable for the following reasons:

- The pattern of development within the streetscape is not compromised; Birchgrove Road contains many dwellings which are built to one or both side boundaries.
- The bulk and scale of the development has been minimised.
- The siting of the dwelling adjacent to similarly sized dwellings will ensure that the dwelling will not result in adverse impacts in terms of bulk and scale.
- The non-compliance with the side setback control does not result in adverse amenity impacts for adjoining properties.
- Reasonable access is maintained for the necessary maintenance of adjoining properties as they have access to their side walls from their own properties.

Part E – Water

The proposed rear addition extends to all three boundaries whereas the existing development is only built to two sides boundary. The additional consequently blocks surface flows from uphill lands and redirect these to adjoining properties. To avoid this, the rear additions must be setback from the north-eastern side boundary to provide an overland flow path of not less than 500mm clear width from the rear boundary to Birchgrove Road. In addition, the proposed rear courtyard at RL33.26 is below the level of the adjacent pathway to the north east and thus is unable to drain overland. The pathway must be lowered and regraded to provide an overland flow path to Birchgrove Road. Conditions have been placed on the consent to achieve this.

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 Leichhardt Development Control Plan 2013 for a period of 14 days to surrounding properties. A total of three submissions were received.

The following issues raised in submissions have been discussed in this report:

- Heritage – see Section 5(a)(iv) – Clause 5.10.
- The increase in visual bulk from the development – see Section 5(c) – C3.9
- Privacy implications from new windows – see Section 5(c)

In addition to the above issues, the submissions raised the following concerns which are discussed under the respective headings below:

Issue: No structural impacts on shared fence with 24 Thomas Street, Birchgrove

Comment: A condition of consent is recommended to ensure that the proposed works do not affect the rock face on the rear boundary; this condition should ensure that the rear boundary fence is not impacted by the proposal.

Issue: Purpose of the glazed balustrade, concerned that people will be accessing this area on a regular basis

Comment: The applicant has advised *the proposal includes a guard rail for the perimeter of the roof over the first floor as a safety measure when carrying out maintenance work at this level.* The objector rightly points out that “if such a “safety measure” is needed for maintenance, there would be guardrails on most Balmain properties, including mine.” The proposed balustrade is opposed from a heritage perspective and on planning grounds.

Issue: *I cannot tell from the plans whether the 2nd floor will have windows facing my house – the alterations at number 101 had an unexpected impact of strong lights shining into my house at night.*

Comment: No rear facing windows are proposed at first floor level.

Issue: Overshadowing to property and courtyard at 101 Birchgrove Road.

Comment: The submitted shadow diagrams indicate that the courtyard of 101 Birchgrove Road is currently overshadowed throughout the day in winter and this will not be altered by the proposal. The area affected by additional overshadowed from the proposal indicated in red on the submission is not the courtyard at 101 Birchgrove Road but the roof of the kitchen/bathroom as indicated in real estate brochures from late 2016.

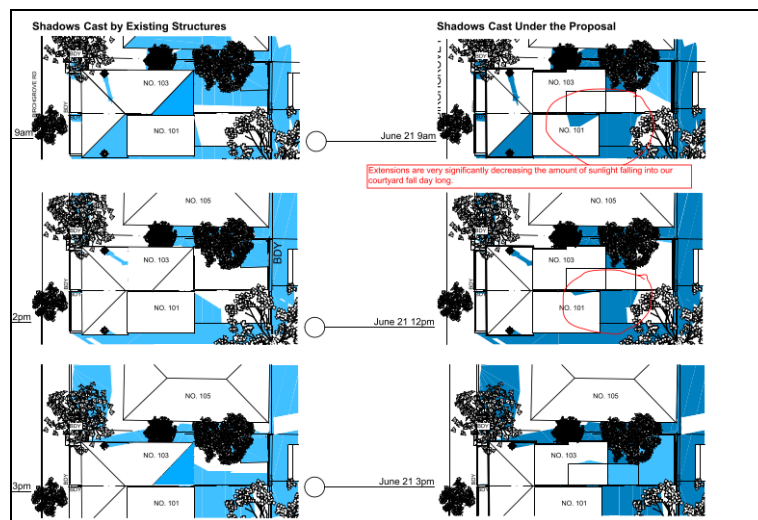


Figure 3: Shadow diagrams as marked up in submission

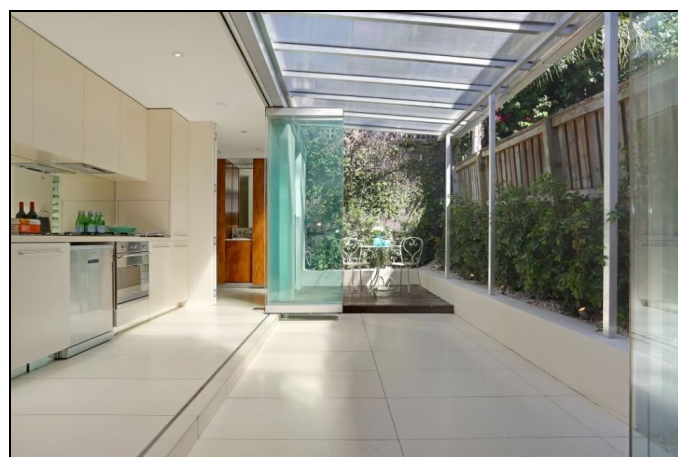


Figure 4: Rear courtyard at 101 Birchgrove Road, Birchgrove.

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 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 – acceptable subject to conditions to minimise bulk and heritage impact including height of the addition matching the neighbouring semi and deletion of the glazed balustrade surround to the roof of the addition.

- Development Engineer – acceptable subject to conditions requiring an overland flow path of 500 mm from the northern boundary and ensuring flowpath to street provided.
- Landscape – acceptable provided no excavation occurs within raised planter bed housing the lilly pilli on the boundary; this will be enforced via condition.

6(b) External

The application was not required to be referred to any external bodies.

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. The applicant has made a written request pursuant to Clause 4.6(3) of the Leichhardt Local Environmental Plan 2013 in support of the contravention of the development standard for Site Coverage. After considering the request, and assuming the concurrence of the Secretary has been given, the Panel is satisfied that compliance with the standard is unnecessary in the circumstance of the case and that there are sufficient environmental grounds, the proposed development will be in the public interest because the exceedance is not inconsistent with the objectives of the standard and of the zone in which the development is to be carried out.
- B. That the Inner West Local Planning Panel exercising the functions of the Council, as the consent authority pursuant to s4.16 of the Environmental Planning and Assessment Act 1979, grant consent to Development Application No: D/2018/474 for Alterations and additions to a semi detached cottage at 103 Birchgrove Road, Birchgrove subject to the conditions listed in Attachment A below.

Attachment A – Recommended conditions of consent

CONDITIONS OF CONSENT

- Development must be carried out in accordance with Development Application No. D/2018/474 and the following plans and supplementary documentation, except where amended by the conditions of this consent.

Plan Reference	Drawn By	Dated
Landscape and Stormwater Drainage Concept Plan	ESNH Design Pty Ltd	September 2018
Elevation and Section plans sheet 1 of 2	ESNH Design Pty Ltd	September 2018
Elevation and Section plans sheet 2 of 2	ESNH Design Pty Ltd	September 2018
Sections aa and bb	ESNH Design Pty Ltd	September 2018
Plans sheet 1 of 2	ESNH Design Pty Ltd	September 2018
Plans sheet 2 of 2	ESNH Design Pty Ltd	September 2018
Materials and Finishes Board	ESNH Design Pty Ltd	May 2017

Document Title	Prepared By	Dated
BASIX Certificate A316838_02	ESNH Design Pty Ltd	4/10/2018
Site Waste Minimisation and Management Plan	ESNH Design Pty Ltd	18/5/2018
Arborist Report	Bradley Magus	2018

In the event of any inconsistency between the approved plans and the conditions, the conditions will prevail.

Where there is an inconsistency between approved elevations and floor plan, the elevation shall prevail.

In the event of any inconsistency between the approved plans and supplementary documentation, the plans will prevail.

The existing elements (walls, floors etc) shown to be retained on the approved plans shall not be removed, altered or rebuilt without prior consent of the consent authority.

Note: Carrying out of works contrary to the above plans and/ or conditions may invalidate this consent; result in orders, on the spot fines or legal proceedings.

- Approval is given for the following works to be undertaken to trees on the site:

Tree/location	Approved works
Kumquate (rear of site)	Removal

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

- The trees identified below are to be retained:

Tree/location
<i>Syzygium paniculatum</i> (Lilly Pilly), in the side setback on the boundary between the site and 105 Birchgrove Road.

Details of the trees to be retained must be included on the Construction Certificate plans

4. Consent is granted for the demolition of the following currently existing on the property, subject to strict compliance with the following conditions:

Elements
Shown dotted red on approved plans ,

- a) The adjoining residents must be notified seven (7) working days prior to demolition. Such notification is to be clearly written on A4 size paper giving the date demolition will commence, site contact details/person, elements to be demolished and be placed in the letterbox of every premises (including every residential flat or unit, if any) either side, immediately at the rear of and directly opposite the demolition site.
- b) Written notice is to be given to the Principal Certifying Authority for inspection prior to demolition. Such written notice is to include the date when demolition will commence and details of the name, address, business hours and contact telephone number and licence number of the demolisher. The following building inspections must be undertaken by the Principal Certifying Authority:
 - i) A *pre commencement* inspection when all the site works are installed on the site and prior to demolition commencing.
 - ii) A *final* inspection when the demolition works have been completed.

NOTE: If Council is nominated as your Principal Certifying Authority 24 - 48 hours notice to carry out inspections is required. Arrangement for inspections can be made by phoning 9367 9222.

- c) Prior to demolition, the applicant must erect a sign at the front of the property with the demolisher's name, licence number, contact phone number and site address.
- d) Prior to demolition, the applicant must erect a 2.4m high temporary fence, hoarding between the work site and any public property (footpaths, roads, reserves etc). Access to the site must be restricted to authorised persons only and the site must be secured against unauthorised entry when work is not in progress or the site is otherwise unoccupied.
- e) The demolition plans must be submitted to the appropriate Sydney Water Quick Check agent for a building plan approval.
- f) Demolition is to be carried out in accordance with the relevant provisions of Australian Standard 2601:2001: *Demolition of structures*.
- g) The hours of demolition work are limited to between 7:00am and 6:00pm on weekdays. No demolition work is to be carried out on Saturdays, Sundays and public holidays.
- h) Hazardous or intractable wastes arising from the demolition process must be removed and disposed of in accordance with the requirements of WorkCover New South Wales and the Environmental Protection Authority.
- i) Demolition procedures must maximise the reuse and recycling of demolished materials in order to reduce the environmental impacts of waste disposal.
- j) During demolition, public property (footpaths, roads, reserves etc) must be clear at all times and must not be obstructed by any demolished material or vehicles. The footpaths and roads must be swept (not hosed) clean of any material, including clay, soil and sand. On the spot fines may be levied by Council against the demolisher and/or owner for failure to comply with this condition.
- k) All vehicles leaving the site with demolition materials must have their loads covered and vehicles must not track soil and other materials onto public property (footpaths, roads,

reserves etc) and the footpaths must be suitably protected against damage when plant and vehicles access the site.

- l) The burning of any demolished material on site is not permitted and offenders will be prosecuted.
- m) Care must be taken during demolition to ensure that existing services on the site (ie, sewer, electricity, gas, phone) are not damaged. Any damage caused to existing services must be repaired by the relevant authority at the applicant's expense. Dial before you dig www.1100.com.au should be contacted prior to works commencing.
- n) Suitable erosion and sediment control measures in accordance with the Soil and Water Management Plan must be erected prior to the commencement of demolition works and must be maintained at all times.
- o) Prior to demolition, a Work Plan must be prepared and submitted to the Principal Certifying Authority in accordance with the relevant provisions of Australian Standard 2601:2001 *Demolition of structures* by a person with suitable expertise and experience. The Work Plan must identify hazardous materials including surfaces coated with lead paint, method of demolition, the precautions to be employed to minimise any dust nuisance and the disposal methods for hazardous materials.
- p) If the property was built prior to 1987 an asbestos survey prepared by a qualified occupational hygienist is to be undertaken. If asbestos is present then:
 - i) A WorkCover licensed contractor must undertake removal of all asbestos.
 - ii) During the asbestos removal a sign "DANGER ASBESTOS REMOVAL IN PROGRESS" measuring not less than 400 mm x 300 mm is to be erected in a visible position on the site to the satisfaction of Council.
 - iii) Waste disposal receipts must be provided to Council / Principal Certifying Authority as proof of correct disposal of asbestos laden waste.
 - iv) All removal of asbestos must comply with the requirements of WorkCover and Leichhardt Council.
 - v) An asbestos clearance certificate prepared by a qualified occupation hygienist must be provided at the completion of the demolition works.

PRIOR TO THE RELEASE OF A CONSTRUCTION CERTIFICATE

- 5. In accordance with the provisions of the *Environmental Planning and Assessment Act 1979* construction works approved by this consent must not commence until:
 - a) A Construction Certificate has been issued by Council or an Accredited Certifier. Either Council or an Accredited Certifier can act as the "Principal Certifying Authority."
 - b) A Principal Certifying Authority has been appointed and Council has been notified in writing of the appointment.
 - c) At least two days notice, in writing has been given to Council of the intention to commence work.

The documentation required under this condition must show that the proposal complies with all Development Consent conditions and is not inconsistent with the approved plans, the Building Code of Australia and the relevant Australian Standards.

6. Amended plans are to be submitted incorporating the following amendments:
- a) Details of the relative levels of all landscape elements on the eastern side of the dwelling house, including heights of garden beds, top and bottom of any garden bed retaining walls and planter boxes, and paving. The plan must clearly show no changes to the garden bed soil height or garden bed width, no garden bed retaining wall requiring any footings and no changes to the materials or height of the existing paving within 1.5 metres of the *Syzygium paniculatum* (Lilly Pilly).
 - b) Details of all proposed landscape materials including paving and retaining walls. These plans must clearly show 16.3 sqm of landscaped area with a minimum width of 1 m as defined under Leichhardt Local Environmental Plan 2013.
 - c) Details of earthworks including mounding, retaining walls and planter boxes.
 - d) Details of drainage and watering systems.
 - e) No works to the rock face at the rear of the site.
 - f) The first floor must not exceed the height of the first floor on the adjoining dwelling at 101 Birchgrove Road, Birchgrove. The proposed glazed balustrading and clerestory window should be deleted.
 - g) Windows W1 and W2 shall be deleted.
 - h) New roofing for the front verandah must match the same material and colour as 101 Birchgrove Road, Birchgrove.
 - i) Materials, finishes and colours of the addition must be off white in order to give the new addition a 'lighter' appearance or match the existing colour-scheme of the first floor addition at 101 Birchgrove Road, Birchgrove.
 - j) The colour of the front door, window and front balustrade shall remain as existing or match the adjoining dwelling at 101 Birchgrove Road, Birchgrove.
 - k) With the exception of the flat section of the new addition which has no pitch, new roofing material must comprise of either heritage barrel rolled traditional corrugated galvanised steel or pre-coloured traditional corrugated galvanised steel in a colour equivalent to Colorbond's "Windspray" or "Wallaby".
 - l) The northern-eastern wall of the Lounge shall be set back a minimum 500mm inside the north-eastern side boundary to provide an overland flow path of not less than 500mm clear width between the rear boundary and Birchgrove Road frontage.

Details demonstrating compliance with the requirements of this condition are to be marked on the plans and be submitted to the Principal Certifying Authority's satisfaction prior to the issue of any Construction Certificate.

7. Prior to the issue of a Construction Certificate, Architectural Plans accompanied by a Structural Certificate must be provided to the Principal Certifying Authority. The Certificate must verify that the architectural plans that are the subject of the Construction Certificate application do not rely on the Party Wall for lateral or vertical support and that additions are independently supported. A copy of the Certificate & plans must be provided to the consent authority and all owners of the party wall/s.
8. Prior to the issue of the Construction Certificate the Principal Certifying Authority is to ensure that the plans state that no high front gutters will be installed.

9. In accordance with Section 34 of the *Building and Construction Industry Long Service Payments Act 1986*, the applicant must pay a long service levy at the prescribed rate of 0.35% of the total cost of the work to either the Long Service Payments Corporation or Council for any work costing \$25,000 or more. The Long Service Levy is payable prior to the issue of a Construction Certificate.

Details demonstrating compliance are to be shown on the plans submitted to the satisfaction of the Certifying Authority prior to the issue of the Construction Certificate.

10. If any excavation extends below the level of the base of the footings of a building on an adjoining property, the person causing the excavation:
- a) Must preserve and protect the adjoining building from damage
 - b) Must, at least seven (7) days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished.
 - c) The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land.

In this condition, the allotment of land includes public property.

11. The following fire upgrading is required pursuant to Clause 94 of the *Environmental Planning and Assessment Regulation 2000*:
- The building is to be provided with smoke alarm system that complies with *AS3786-1993: Smoke Alarms* and the smoke alarms must be connected to the consumer mains electrical power supply and interconnected where there is more than one alarm with a stand-by (battery back-up) power supply. The smoke alarm system must be installed in suitable locations on or near the ceiling in accordance with Part 3.7.2 of the Building Code of Australia.

Amended plans and specifications demonstrating compliance with this condition must be submitted to the satisfaction of the Principal Certifying Authority with the application prior to the issuing of a for a Construction Certificate.

Note: Where an existing system complying with the above requirements is already installed in the building, evidence of this should be submitted with the application for a Construction Certificate.

12. A Certificate prepared by an appropriately qualified and practising structural engineer, certifying the structural adequacy of the property and its ability to withstand the proposed additional, or altered structural loads during all stages of construction must be provided prior to the issue of a Construction Certificate to the satisfaction of the Principal Certifying Authority. The certificate shall also include all details of the methodology to be employed in construction phases to achieve the above requirements without result in demolition of elements marked on the approved plans for retention.

Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Certifying Authority prior to the issue of any Construction Certificate.

13. The approved plans must be checked online with Sydney Water Tap In to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met. A copy of this approval must be

supplied with the Construction Certificate application. Please refer to the web site <http://www.sydneywater.com.au/tapin/index.htm> for details on the process or telephone 132092.

The Certifying Authority must ensure that the appropriate approval has been provided prior to the issue of a Construction Certificate.

14. A stormwater drainage design prepared by a Licensed Plumber or qualified practicing Civil Engineer must be provided prior to the issue of a Construction Certificate. The design must be prepared/ amended to make provision for the following:
 - a) Stormwater runoff from all roof and paved areas within the property must be collected in a system of gutters, pits and pipelines and be discharged together with overflow pipelines from any rainwater tank(s) by gravity to the kerb and gutter of a public road or directly into Council's piped drainage system.
 - b) Charged or pump-out stormwater drainage systems are not permitted.
 - c) The design must make provision for the natural flow of stormwater runoff from uphill/upstream properties/lands.
 - d) An overland flowpath must be provided within the setback to the eastern side boundary between the rear of the dwelling and Birchgrove Road frontage. The rear courtyard and side passageway must be graded so that bypass flows from the site drainage system are directed to the overland flowpath and the overland flow path has continuous fall from the Courtyard to the Birchgrove Road frontage.
 - e) A minimum 150mm step up must be provided between all external finished surfaces and adjacent internal floor areas, except where a reduced step is permitted under Section 3.1.2.3 (b) of the Building Code of Australia for Class 1 buildings.
 - f) All plumbing within the site must be carried out in accordance with Australian Standard AS/NZS 3500.3-2015 Plumbing and Drainage – Stormwater Drainage
 - g) No nuisance or concentration of flows to other properties.
 - h) The stormwater system must not be influenced by backwater effects or hydraulically controlled by the receiving system.
 - i) Plans must specify that any components of the existing system to be retained must be certified during construction to be in good condition and of adequate capacity to convey the additional runoff generated by the development and be replaced or upgraded if required.
 - j) An inspection opening or stormwater pit must be installed inside the property, adjacent to the boundary, for all stormwater outlets.
 - k) All redundant pipelines within footpath area must be removed and footpath/kerb reinstated.
 - l) New pipelines within the footpath area that are to discharge to the kerb and gutter must be hot dipped galvanised steel hollow section with a minimum wall thickness of 4.0mm and a maximum section height of 100mm.
 - m) New kerb outlets in stone kerb shall be carefully cored through the existing kerb stone such that the kerb outlet is perpendicular (a 90° angle) with the gutter. The pipe under the footpath shall end 30mm within the kerb stone with mass concrete around the pipe connection to the kerb stone. Purpose made pipe fittings and bends or welded joints shall be used where necessary to align the discharge pipe with the kerb outlet.

- n) Only a single point of discharge is permitted to the kerb and gutter, per frontage of the site.

The design must be certified as compliant with the terms of this condition by a suitably qualified Civil Engineer.

Details demonstrating compliance are to be submitted to the satisfaction of the Certifying Authority prior to the issue of the Construction Certificate.

- 15. Prior to the issue of a Construction Certificate, the applicant must prepare a Construction Management and Traffic Management Plan. The following matters should be addressed in the plan (where applicable):

- a) A plan view of the entire site and frontage roadways indicating:
 - i) Dedicated construction site entrances and exits, controlled by a certified traffic controller, to safely manage pedestrians and construction related vehicles in the frontage roadways.
 - ii) The locations of work zones (where it is not possible for loading/unloading to occur on the site) in the frontage roadways accompanied by supporting documentation that such work zones have been approved by the Local Traffic Committee and Council.
 - iii) Location of any proposed crane and concrete pump and truck standing areas on and off the site.
 - iv) A dedicated unloading and loading point within the site for construction vehicles, plant and deliveries.
 - v) The proposed areas within the site to be used for the storage of excavated material, construction materials and waste and recycling containers during the construction period.
- b) Noise and vibration
During excavation, demolition and construction phases, noise & vibration generated from the site must be controlled. Refer to other conditions of this consent. If during excavation, rock is encountered, measures must be taken to minimise vibration, dust generation and impacts on surrounding properties. Refer to Environmental Noise Management Assessing Vibration: a technical Guideline (Department of Environment and Conservation, 2006) www.epa.nsw.gov.au for guidance and further information.
- c) Occupational Health and Safety
All site works must comply with the occupational health and safety requirements of the New South Wales Work Cover Authority.
- d) Toilet Facilities
During excavation, demolition and construction phases, toilet facilities are to be provided on the site, at the rate of one toilet for every twenty (20) persons or part of twenty (20) persons employed at the site. Details must be shown on the plan.
- e) Traffic control plan(s) for the site
All traffic control plans must be in accordance with the Roads and Maritime Services publication "Traffic Control Worksite Manual"

Approval is to be obtained from Council for any temporary road closures or crane use from public property. Applications to Council shall be made a minimum of 4 weeks prior to the activity proposed being undertaken.

Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Certifying Authority prior to the issue of any Construction Certificate.

16. Before the issue of a Construction Certificate, the Principal Certifying Authority shall be satisfied that no proposed underground services (i.e. water, sewerage, drainage, gas or other service) unless previously approved by conditions of consent, are located beneath the canopy of any tree protected under State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017, located on the subject allotment and adjoining allotments.

A plan detailing the routes of these services and trees protected under the State Environmental Planning Policy shall be prepared. Details demonstrating compliance are to be shown on the plans submitted to the satisfaction of the Certifying Authority prior to the issue of the Construction Certificate.

17. The footings of the proposed addition to the eastern side of the dwelling house must be isolated pier or pier and beam construction within the specified radius of the trunk(s) of the following tree(s).

Schedule	
Tree/location	Radius in metres
<i>Syzygium paniculatum</i> (Lilly Pilly), eastern boundary in the side setback	2.64

The piers shall be located such that no roots of a diameter greater than 30mm will be severed or injured during the construction period. The beam(s) shall be of reinforced concrete or galvanised steel sections and placed in positions with the base of the beam being a minimum of 50mm above existing soil levels.

Structural details of the pier or pier and beam construction shall be submitted to the Principal Certifying Authority satisfying the above requirements prior to the release of a Construction Certificate.

PRIOR TO WORKS COMMENCING OR ISSUE OF A CONSTRUCTION CERTIFICATE (WHICHEVER OCCURS FIRST)

18. Prior to the commencement of demolition works on the subject site or a Construction Certificate being issued for works approved by this development consent (whichever occurs first), a security deposit and inspection fee as detailed below must be paid to Council to cover the cost of making good any damage caused to any Council property or the physical environment as a consequence of carrying out the works.

Security Deposit (FOOT)	\$2152.50
Inspection fee (FOOTI)	\$230.65

Payment will be accepted in the form of cash, bank cheque or EFTPOS/credit card (to a maximum of \$10,000) or bank guarantee. Bank Guarantees must not have an expiry date.

The inspection fee is required for Council to determine the condition of the adjacent road reserve & footpath prior to & on completion of the works being carried out.

Should any of Council's property and/or the physical environment sustain damage during the course of the demolition or construction works, or if the works put Council's assets or the environment at risk, Council may carry out any works necessary to repair the damage and/or remove the risk. The cost of these works will be deducted from the security deposit.

A request for release of the security may be made to the Council after all construction work has been completed and a Final Occupation Certificate issued.

The amount nominated is only current for the financial year in which the consent was issued and is revised each financial year. The amount payable must be consistent with Council's Fees and Charges in force at the date of payment.

Requirements of this condition are to be met prior to works commencing or prior to release of a Construction Certificate (whichever occurs first). Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Principal Certifying Authority prior to the issue of any Construction Certificate.

19. A dilapidation report including a photographic survey of the following adjoining properties must be provided to Principal Certifying Authority prior to any demolition or works commencing on the site or the issue of a Construction Certificate (whichever comes first). The dilapidation report must detail the physical condition of those properties, both internally and externally, including walls, ceilings, roof, structural members and other similar items.

Property	Structures / Area
101 Birchgrove Road, Birchgrove	All structures

If excavation works are proposed the dilapidation report must report on the visible and structural condition of neighbouring structures within the zone of influence of the excavations. This zone is defined as the horizontal distance from the edge of the excavation face to twice the excavation depth.

The dilapidation report is to be prepared by a practising Structural Engineer. All costs incurred in achieving compliance with this condition shall be borne by the applicant. A copy of the report must be provided to Council, the Principal Certifying Authority and the owners of the affected properties prior to any works commencing.

In the event that access for undertaking the dilapidation report is denied by an adjoining owner, the applicant must demonstrate, in writing that all reasonable steps have been taken to obtain access and advise the affected property owner of the reason for the survey and that these steps have failed. Written correspondence from the owners of the affected properties or other evidence must be obtained and submitted to the Principal Certifying Authority in such circumstances that demonstrates such documentation has been received. The Principal Certifying Authority must be satisfied that the requirements of this condition have been met prior to commencement of any works.

Note: This documentation is for record keeping purposes and may be used by an applicant or affected property owner to assist in any action required to resolve any civil dispute over damage rising from the works.

Requirements of this condition are to be met prior to works commencing or prior to release of a Construction Certificate (whichever occurs first). Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Principal Certifying Authority prior to the issue of any Construction Certificate.

20. Where it is proposed to occupy or carry out works on public roads or Council controlled lands, the person acting on this consent shall obtain all applicable Permits from Council in accordance with Section 68 (Approvals) of the Local Government Act 1993 and/or Section 138 of the Roads Act 1993. Permits are required for the following activities:
 - a) Work zone (designated parking for construction vehicles). Note that a minimum of 2 months should be allowed for the processing of a Work Zone application.
 - b) A concrete pump across the roadway/footpath
 - c) Mobile crane or any standing plant
 - d) Skip bins
 - e) Scaffolding/Hoardings (fencing on public land)

- f) Public domain works including vehicle crossing, kerb & guttering, footpath, stormwater, etc.
- g) Awning or street verandah over footpath
- h) Partial or full road closure
- i) Installation or replacement of private stormwater drain, utility service or water supply

Contact Council's Road Access team to ensure the correct Permit applications are made for the various activities.

Applications for such Permits shall be submitted and approved by Council prior to the commencement of the works associated with such activity.

- 21. A Project Arborist must be engaged before work commences for the duration of the site preparation, demolition, construction and landscaping works.

For the purpose of these conditions a Project Arborist is a suitably qualified professional with, as a minimum, Level 5 (Diploma) certification in Arboriculture under the Australian Qualification Framework (AQF) and who does not remove or prune trees in the Inner West local government area.

- 22. The contact details of the Project Arborist must be advised to Council before any work commences and maintained up to date for the duration of the proposed development works. If a new Project Arborist is appointed at any time during the works, details of the new Project Arborist must be submitted to Council within 7 days of the appointment.

- 23. To preserve the following tree/s and avoid soil compaction, no work shall commence nor shall a Construction Certificate be issued (whichever occurs first) until temporary measures to avoid soil compaction (e.g. rumble boards or similar as specified in Section 4.5.3 of AS4970—*Protection of trees on development sites*) within the specified radius of the trunk(s) of the following tree(s) are installed:

Schedule	
Tree/location	Radius in metres
<i>Syzygium paniculatum</i> (Lilly Pilly), eastern boundary in the side setback	2.64

Requirements of this condition are to be met prior to works commencing or prior to release of a Construction Certificate (whichever occurs first). Details demonstrating compliance with the requirements of this condition are to be submitted by the Project Arborist to the satisfaction of the Principal Certifying Authority prior to the issue of any Construction Certificate.

- 24. To preserve the following tree/s no work shall commence nor shall a Construction Certificate be issued (whichever occurs first) until the trunk/s/branches are protected (in accordance with AS4970-*Protection of trees on development sites*) by the placement of 2 metre lengths of 50 x 100mm timbers spaced at 150mm centres and secured by wire/hoop strap over suitable protective padding material (i.e. underlay or carpet). The trunk/branch protection shall be maintained intact until the completion of all work on site.

Tree/Location
<i>Syzygium paniculatum</i> (Lilly Pilly), eastern boundary in the side setback

Requirements of this condition are to be met prior to works commencing or prior to release of a Construction Certificate (whichever occurs first). Details demonstrating compliance with the requirements of this condition are to be submitted by the Project Arborist to the satisfaction of the Principal Certifying Authority prior to the issue of any Construction Certificate.

25. Upon installation of the required tree protection measures, an inspection of the site by the Principal Certifying Authority is required to verify that tree protection measures comply with all relevant conditions.

Requirements of this condition are to be met prior to works commencing or prior to release of a Construction Certificate (whichever occurs first). Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Principal Certifying Authority prior to the issue of any Construction Certificate.

26. Prior to works commencing or release of a Construction Certificate (whichever occurs first), tree protection signage is to be attached to the trunk protection specified in these conditions, displayed in a prominent position. Each sign shall contain in a clearly legible form (lettering should comply with AS 1319-*Safety signs for the occupational environment*), the following information:
- a) Tree protection zone;
 - b) This protection has been installed to prevent damage to the tree;
 - c) Any removal or alteration of the tree protection measures not previously approved within the tree protection zone shall be the subject to advice from the Project Arborist in report form and must include the following:
 - Proof shall be provided that no other alternative is available;
 - On completion, the Project Arborist's report shall be submitted to the Principal Certifying Authority for further consultation with Council;
 - d) The name, address and telephone number of the builder and Project Arborist.

Requirements of this condition are to be met prior to works commencing or prior to release of a Construction Certificate (whichever occurs first). Details demonstrating compliance with the requirements of this condition are to be submitted by the Project Arborist to the satisfaction of the Principal Certifying Authority prior to the issue of any Construction Certificate.

27. The person acting on this consent shall submit to the Principal Certifying Authority a dilapidation report including colour photos showing the existing condition of the footpath and roadway adjacent to the site before the issue of a Construction Certificate.

PRIOR TO THE COMMENCEMENT OF WORKS

28. The site must be secured with temporary fencing prior to any works commencing.

If the work involves the erection or demolition of a building and is likely to cause pedestrian or vehicular traffic on public property to be obstructed or rendered inconvenient, or building involves the enclosure of public property, a hoarding or fence must be erected between the work site and the public property. Additionally an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling onto public property, where necessary.

Separate approval is required under the *Roads Act 1993* to erect a hoarding or temporary fence or awning on public property. Approvals for hoardings, scaffolding on public land must be obtained and clearly displayed on site for the duration of the works.

Any hoarding, fence or awning is to be removed when the work is completed and must be maintained clear of any advertising.

29. The *Home Building Act 1989* requires that insurance must be obtained from an insurance company approved by the Department of Fair Trading prior to the commencement of works approved by this Development Consent.

A copy of the certificate of insurance must be submitted to the Certifying Authority prior to the works commencing.

If the work is to be undertaken by an owner-builder, written notice of their name and owner-builder permit number must be submitted to the Certifying Authority.

In all other cases, written notice must be given to the Certifying Authority of:

- a) the name and licence number of the principal contractor; and
- b) reasons why a certificate of insurance is not required.

Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Certifying Authority prior to the issue of any Construction Certificate.

30. Any person acting on this consent or any contractors carrying out works on public roads or Council controlled lands shall take out Public Liability Insurance with a minimum cover of twenty (20) million dollars in relation to the occupation of, and approved works within those lands. The Policy is to note, and provide protection for Inner West Council, as an interested party and a copy of the Policy must be submitted to Council prior to commencement of the works. The Policy must be valid for the entire period that the works are being undertaken on public property.
31. Prior to the commencement of works, the Principal Certifying Authority shall be notified in writing of the name and contractor licence number of the owner/builder intending to carry out the approved works.
32. At least forty-eight (48) hours prior to the commencement of works, a notice of commencement form (available on Council's web page) and details of the appointed Principal Certifying Authority shall be submitted to Council.
33. Prior to the commencement of works, a sign must be erected in a prominent position on the site (for members of the public to view) on which the proposal is being carried out. The sign must state:
 - a) Unauthorised entry to the work site is prohibited.
 - b) The name of the principal contractor (or person in charge of the site) and a telephone number at which that person may be contacted at any time for business purposes and outside working hours.
 - c) The name, address and telephone number of the Principal Certifying Authority for the work.

Any such sign must be maintained while the work is being carried out, but must be removed when the work has been completed.

Photographic evidence demonstrating compliance with the requirements of this condition is to be submitted to the satisfaction of the Principal Certifying Authority and Council for records purposes prior to the commencement of any onsite work.

34. The proposed structure(s) to be erected must stand wholly within the boundaries of the subject site. No portion of the proposed structure, including gates and doors during opening and closing operations, shall encroach onto adjoining properties or upon public property.

To ensure that the location of the building satisfies the provision of the approval, the footings and walls within one (1) metre of the property boundaries must be set out by or the location certified by a registered surveyor in accordance with the approved plans, prior to the commencement of works.

To ensure that the location of the building satisfies the provision of the approval, a check survey certificate shall be submitted to the Principal Certifying Authority either prior to the pouring of the ground floor slab or at dampcourse level, whichever is applicable or occurs first, indicating the:

- a) location of the building with respect to the boundaries of the site;

DURING WORKS

35. All excavations and backfilling associated with the development must be executed safely, properly guarded and protected to prevent them from being dangerous to life or property and in accordance with the design of a suitably qualified structural engineer.

If excavation extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation must:

- a) Preserve and protect the building from damage.
- b) If necessary, underpin and support the building in an approved manner.
- c) Give at least seven (7) days notice to the adjoining owner before excavating, of the intention to excavate within the proximity of the respective boundary.

Any proposed method of support to any excavation adjacent to adjoining properties or any underpinning is to be designed by a Chartered Civil Engineer, with National Professional Engineering Registration (NPER) in the construction of civil/structural works. Copies of the design plans must be provided to the relevant adjoining property owner/s prior to commencement of such works. Prior to backfilling, any method of support constructed must be inspected by the designing Engineer with certification provided to all relevant parties.

36. The site must be appropriately secured and fenced at all times during works.
37. All fill used with the proposal shall be virgin excavated material (such as clay, gravel, sand, soil and rock) that is not mixed with any other type of waste and which has been excavated from areas of land that are not contaminated with human made chemicals as a result of industrial, commercial, mining or agricultural activities and which do not contain sulphate ores or soils.

Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Principal Certifying Authority.

38. Unless otherwise approved by Council, excavation, demolition, construction or subdivision work shall only be permitted during the following hours:
 - a) 7:00 am to 6.00 pm, Mondays to Fridays, inclusive (with demolition works finishing at 5pm);
 - b) 8:00 am to 1:00 pm on Saturdays with no demolition works occurring during this time; and
 - c) at no time on Sundays or public holidays.

Works may be undertaken outside these hours where they do not create any nuisance to neighbouring properties in terms of dust, noise, vibration etc and do not entail the use of power tools, hammers etc. This may include but is not limited to painting.

In the case that a standing plant or special permit is obtained from Council for works in association with this development, the works which are the subject of the permit may be carried out outside these hours.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons, to prevent risk to life or environmental harm.

Activities generating noise levels greater than 75dB(A) such as rock breaking, rock hammering, sheet piling and pile driving shall be limited to:

8:00 am to 12:00 pm, Monday to Saturday; and
2:00 pm to 5:00 pm Monday to Friday.

The Proponent shall not undertake such activities for more than three continuous hours and shall provide a minimum of one 2 hour respite period between any two periods of such works.

“Continuous” means any period during which there is less than an uninterrupted 60 minute respite period between temporarily halting and recommencing any of that intrusively noisy work.

Noise arising from the works must be controlled in accordance with the requirements of the *Protection of the Environment Operations Act 1997* and guidelines contained in the New South Wales Environment Protection Authority Environmental Noise Control Manual.

39. In addition to meeting the specific performance criteria established under this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the demolition, construction or operation/use of the development.
40. Any new information revealed during development works that has the potential to alter previous conclusions about site contamination or hazardous materials shall be immediately notified to the Council and the Principal Certifying Authority.
41. The development must be inspected at the following stages by the Principal Certifying Authority during construction:
 - a) after excavation for, and prior to the placement of, any footings, and
 - b) prior to pouring any in-situ reinforced concrete building element, and
 - c) prior to covering of the framework for any floor, wall, roof or other building element, and
 - d) prior to covering waterproofing in any wet areas, and
 - e) prior to covering any stormwater drainage connections, and
 - f) after the building work has been completed and prior to any occupation certificate being issued in relation to the building.
42. A copy of the approved plans and this consent must be kept on site for the duration of site works and in the case of any commercial or industrial premise for the duration of the use/trading. Copies shall be made available to Council Officer's upon request.
43. Building materials and machinery are to be located wholly on site unless separate consent (Standing Plant Permit) is obtained from Council/ the roads authority. Building work is not to be carried out on the footpath.

Construction materials and vehicles shall not block or impede public use of the footpath or roadway.
44. Sedimentation controls, tree protection measures and safety fencing (where relevant) shall be maintained during works to ensure they provide adequate protection during the course of demolition, excavation and construction works. Materials must be stored in a location and

manner to avoid material being washed to drains or adjoining properties.

The requirements of the Soil and Water Management Plan must be maintained at all times during the works and shall not be removed until the site has been stabilised to the Principal Certifying Authority's satisfaction.

Material from the site is not to be tracked onto the road by vehicles entering or leaving the site. At the end of each working day any dust/dirt or other sediment shall be swept off the road and contained on the site and not washed down any stormwater pit or gutter.

The sediment and erosion control measures are to be inspected daily and defects or system failures are to be repaired as soon as they are detected.

- 45. 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 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.

- 46. The Tree protection measures specified in these conditions must be installed, maintained and kept in place until the completion of the development works.

- 47. If tree roots are required to be severed for the purposes of constructing the approved works, they shall be cut cleanly using a sharp and *fit for purpose tool*. The pruning shall be undertaken by a minimum Level 3 (AQF 3) qualified Arborist.

Details demonstrating compliance with the requirements of this condition are to be submitted by the Project Arborist undertaking the works to the satisfaction of the Principal Certifying Authority.

For the purpose of these conditions a Project Arborist is a suitably qualified professional with, as a minimum, Level 5 (Diploma) certification in Arboriculture under the Australian Qualification Framework (AQF) and who does not remove or prune trees in the Inner West local government area.

- 48. The trees to be retained shall be inspected, monitored and treated by the Project Arborist during and after completion of development works to ensure their long-term survival. Regular inspections and documentation from the Project Arborist to the Principal Certifying Authority are required at the following times or phases of work:

Schedule	
Tree/location	Time of Inspection
<i>Syzygium paniculatum</i> (Lilly Pilly), eastern boundary in the side setback	<ul style="list-style-type: none"> • Directly following installation of stem and ground protection. • During any demolition, excavation or works within the Tree Protection Zone. • At any time the trunk protection or ground protection is required to be moved or altered. • Once each month during the development works. • At project completion to verify that protection measures have been undertaken.

Recommendations to ensure the tree/s long term survival must be carried out immediately upon receipt of the report.

Details demonstrating compliance with the requirements of this condition are to be submitted by the Project Arborist undertaking the works to the satisfaction of the Principal Certifying Authority.

49. No tree roots of 30mm or greater in diameter located within the specified radius of the trunk(s) of the following tree(s) must be severed or injured in the process of any works during the construction period:

Schedule	
Tree/location	Radius in metres
<i>Syzygium paniculatum</i> (Lilly Pilly), eastern boundary in the side setback	2.64

Details demonstrating compliance with the requirements of this condition are to be submitted by the Project Arborist undertaking the works to the satisfaction of the Principal Certifying Authority.

50. Alignment levels for the site at all pedestrian shall match the existing back of footpath levels at the boundary.
51. All excavation within the specified radius of the trunk(s) of the following tree(s) must be hand dug and must be supervised by the Project Arborist:

Schedule	
Tree/location	Radius in metres
<i>Syzygium paniculatum</i> (Lilly Pilly), eastern boundary in the side setback	2.64

Details demonstrating compliance with the requirements of this condition are to be submitted by the Project Arborist undertaking the works to the satisfaction of the Principal Certifying Authority.

52. 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.
53. Excavation for the installation of any services within the specified radius of the trunk(s) of the following tree(s) shall utilise the thrust boring method. Thrust boring being carried out at least 600mm beneath natural ground level to minimise damage to tree(s) root system. All such work must be supervised by the Project Arborist.

Schedule	
Tree/location	Radius in metres
<i>Syzygium paniculatum</i> (Lilly Pilly), eastern boundary in the side setback	2.64

Details demonstrating compliance with the requirements of this condition are to be submitted by the Project Arborist undertaking the works to the satisfaction of the Principal Certifying Authority.

54. 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

55. An Occupation Certificate must be obtained prior to any use or occupation of the development or part thereof. The Principal Certifying Authority must ensure that all works are completed in accordance with this consent including all conditions.

56. A second Dilapidation Report including photos of any damage evident at the time of inspection must be submitted after the completion of works. A copy of this Dilapidation Report must be given to the property owners referred to in this Development Consent. The report must:

- Compare the post construction report with the pre-construction report required by these conditions,
- Clearly identify any recent damage and whether or not it is likely to be associated with the development works including suggested remediation methods.

A copy must be lodged with Council and the Principal Certifying Authority prior to the issue of an Occupation Certificate. Details demonstrating compliance with the requirements of this condition are to be submitted to the satisfaction of the Principal Certifying Authority prior to the issuing of any Occupation Certificate.

57. Prior to the issue of the Occupation Certificate the Principal Certifying Authority is to confirm that no high front gutters have been installed.

58. Prior to the issue of an Occupation Certificate, the Principal Certifying Authority must ensure that all works have been completed in accordance with the approved Waste Management Plan referred to in this development consent.

Proof of actual destination of demolition and construction waste shall be provided to the Principal Certifying Authority prior to the issue of an Occupation Certificate.

59. Prior to the release of an Occupation Certificate, the Principal Certifying Authority must be satisfied that the development complies with:

- the approved plans;
- BASIX certificate (where relevant),
- approved documentation (as referenced in this consent); and
- conditions of this consent.

60. Prior to the issue of any Occupation Certificate, the Principal Certifying Authority is to be satisfied that all landscape works, including tree planting, have been undertaken in accordance with the approved plan(s) and conditions of consent. A copy of an active Landscape management plan/contract for the maintenance of the landscaping for a period of not less than two years after the installation is to be provided prior to the issue of the Occupation Certificate.

61. 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.

62. Prior to the issue of an Occupation Certificate, the Principal Certifying Authority must ensure that the stormwater drainage system has been constructed in accordance with the approved design and relevant Australian Standards.

A plan showing pipe locations and diameters of the stormwater drainage system, together with certification by a Licensed Plumber or qualified practicing Civil Engineer that the drainage system has been constructed in accordance with the approved design and relevant Australian Standards, must be provided to the Principal Certifying Authority prior to the issue of an Occupation Certificate.

63. The existing stone kerb adjacent to the site is of local heritage value and is to be preserved at no cost to Council. Any damage to the stone kerb will require the replacement of the damaged individual stone units before the issue of the Occupation Certificate. Non-compliance with this condition will result in loss of your security deposit.
64. You are advised that Council has not undertaken a search of existing or proposed utility services adjacent to the site in determining this application. Any adjustment or augmentation of any public utility services including Gas, Water, Sewer, Electricity, Street lighting and Telecommunications required as a result of the development shall be at no cost to Council and undertaken before the issue of an Occupation Certificate.
65. Encroachments onto Council's road or footpath of any service pipes, sewer vents, boundary traps, downpipes, gutters, stairs, doors, gates, garage tilt up panel doors or any structure whatsoever shall not be permitted. Any encroachments on to Council road or footpath resulting from the building works will be required to be removed before the issue of the Occupation Certificate.

ONGOING CONDITIONS OF CONSENT

66. Any lighting of the premises shall be installed and maintained in accordance with Australian Standard AS 4282-1997: *Control of the Obtrusive Effects of Outdoor Lighting* so as to avoid annoyance to the occupants of adjoining premises or glare to motorists on nearby roads. The intensity, colour or hours of illumination of the lights shall be varied at Council's discretion if in the opinion of an Authorised Council Officer it is considered there to be have adverse effects on the amenity of the area.

PRESCRIBED CONDITIONS

A. BASIX Commitments

Under clause 97A of the Environmental Planning & Assessment Regulation 2000, it is a condition of this development consent that all the commitments listed in each relevant BASIX Certificate for the development are fulfilled. The Certifying Authority must ensure that the building plans and specifications submitted by the Applicant, referenced on and accompanying the issued Construction Certificate, fully satisfy the requirements of this condition.

In this condition:

- a) Relevant BASIX Certificate means:
 - i) a BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under section 96 of the Act, a BASIX Certificate that is applicable to the development when this development consent is modified); or
 - ii) if a replacement BASIX Certificate accompanies any subsequent application for a construction certificate, the replacement BASIX Certificate; and
- b) BASIX Certificate has the meaning given to that term in the Environmental Planning & Assessment Regulation 2000.

B. Building Code of Australia

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

C. Home Building Act

- 1) Building work that involves residential building work (within the meaning and exemptions provided in the Home Building Act 1989) must not be carried out unless the Principal Certifying Authority for the development to which the work relates has given Leichhardt Council written notice of the following:
 - a) in the case of work for which a principal contractor is required to be appointed:
 - i) the name and licence number of the principal contractor, and
 - ii) the name of the insurer by which the work is insured under Part 6 of that Act, or
 - b) in the case of work to be done by an owner-builder:
 - i) the name of the owner-builder, and
 - ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.
- 2) If arrangements for doing residential building work are changed while the work is in progress so that the information submitted to Council is out of date, further work must not be carried out unless the Principal Certifying Authority for the development to which the work relates (not being the Council), has given the Council written notice of the updated information.

Note: A certificate purporting to be issued by an approved insurer under Part 6 of the Home Building Act 1989 that states that a person is the holder of an insurance policy issued for the purposes of that Part is, for the purposes of this clause, sufficient evidence that the person has complied with the requirements of that Part.

D. Site Sign

- 1) A sign must be erected in a prominent position on any work site on which work involved in the erection or demolition of a building is being carried out:
 - a) stating that unauthorised entry to the work site is prohibited;
 - b) showing the name of the principal contractor (or person in charge of the work site), and a telephone number at which that person may be contacted at any time for business purposes and outside working hours; and
 - c) showing the name, address and telephone number of the Principal Certifying Authority for the work.
- 2) Any such sign must be maintained while the building work or demolition work is being carried out, but must be removed when the work has been completed.

E. Condition relating to shoring and adequacy of adjoining property

- 1) For the purposes of section 4.17(11) of the Act, it is a prescribed condition of development consent that if the development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the development consent must, at the person's own expense:
 - a) protect and support the adjoining premises from possible damage from the excavation, and
 - b) where necessary, underpin the adjoining premises to prevent any such damage.

- 2) The condition referred to in subclause (1) does not apply if the person having the benefit of the development consent owns the adjoining land or the owner of the adjoining land has given consent in writing to that condition not applying.

NOTES

1. This Determination Notice operates or becomes effective from the endorsed date of consent.
2. Section 8.2 of the *Environmental Planning and Assessment Act 1979* provides for an applicant to request Council to review its determination. This does not apply to applications made on behalf of the Crown, designated development or a complying development certificate. The request for review must be made within six (6) months of the date of determination or prior to an appeal being heard by the Land and Environment Court. Furthermore, Council has no power to determine a review after the expiration of these periods. A decision on a review may not be further reviewed under Section 8.2.
3. If you are unsatisfied with this determination, Section 8.7 of the *Environmental Planning and Assessment Act 1979* gives you the right of appeal to the Land and Environment Court within six (6) months of the determination date.
4. Failure to comply with the relevant provisions of the *Environmental Planning and Assessment Act 1979* and/or the conditions of this consent may result in the serving of penalty notices or legal action.
5. Works or activities other than those approved by this Development Consent will require the submission of a new development application or an application to modify the consent under Section 4.55 of the *Environmental Planning and Assessment Act 1979*.
6. This decision does not ensure compliance with the *Disability Discrimination Act 1992*. Applicants should investigate their potential for liability under that Act.
7. This development consent does not remove the need to obtain any other statutory consent or approval necessary under any other Act, such as (if necessary):
 - a) Application for a Construction Certificate under the *Environmental Planning and Assessment Act 1979*.
 - b) Application for an Occupation Certificate under the *Environmental Planning and Assessment Act 1979*.
 - c) Development Application for demolition if demolition is not approved by this consent.
 - d) An application under the Roads Act 1993 for any footpath / public road occupation. A lease fee is payable for all occupations.
8. Prior to the issue of the Construction Certificate, the applicant must make contact with all relevant utility providers (such as Sydney Water, Energy Australia etc) whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifying Authority, must be obtained.

Attachment B – Plans of proposed development

alterations and additions
Mitchell House
103 birchgrove road
birchgrove

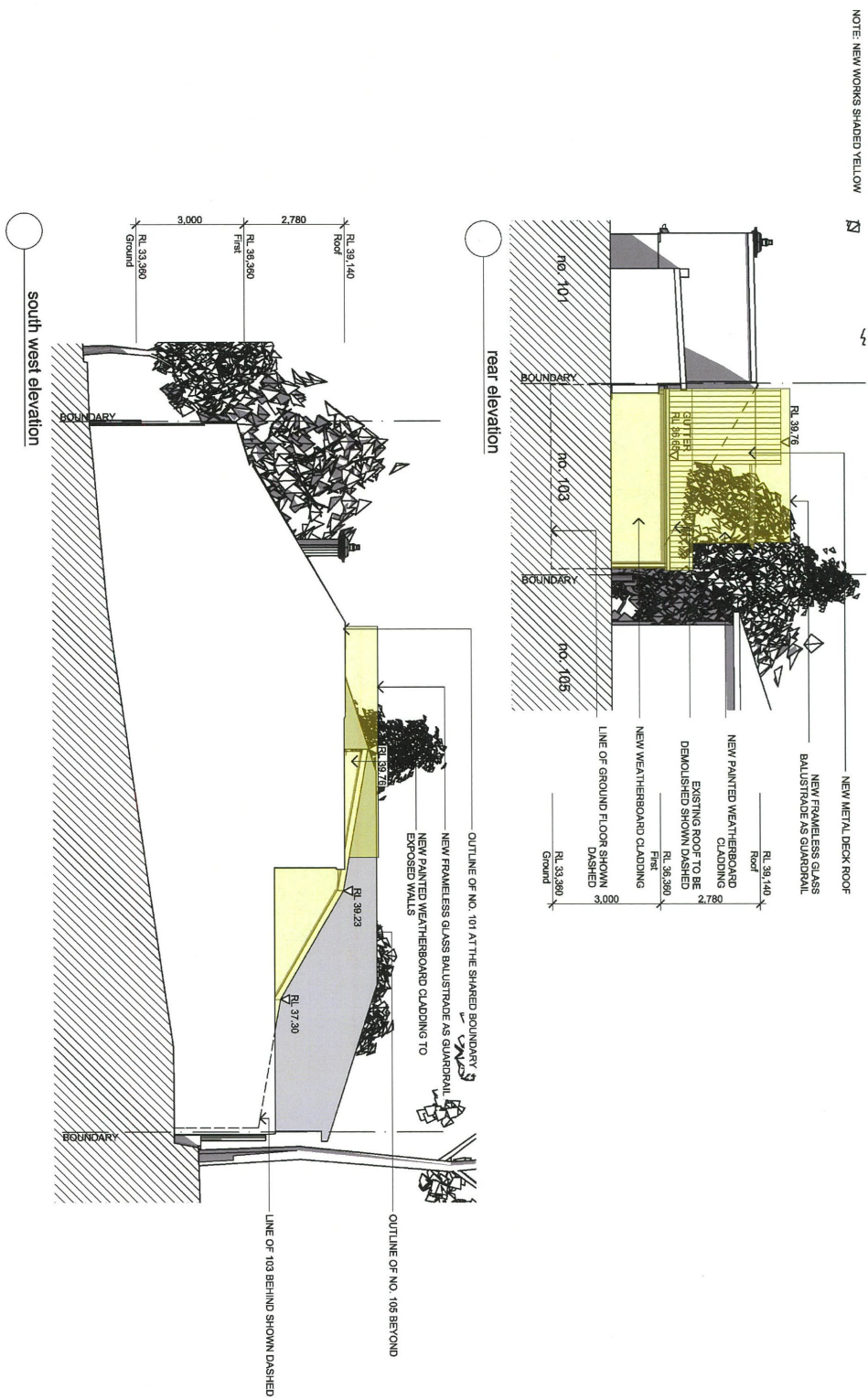


elevations sheet 1 of 2

DWG. 1015 DA 04
SCALE 1:100
DATE September 2018
ISSUE DA

ESNH
DESIGN PTY LTD
P.O. Box 3127
Ferntree Gully VIC 3157
T: 0418 487 346
F: 03 9412 5200
ACN 134395550

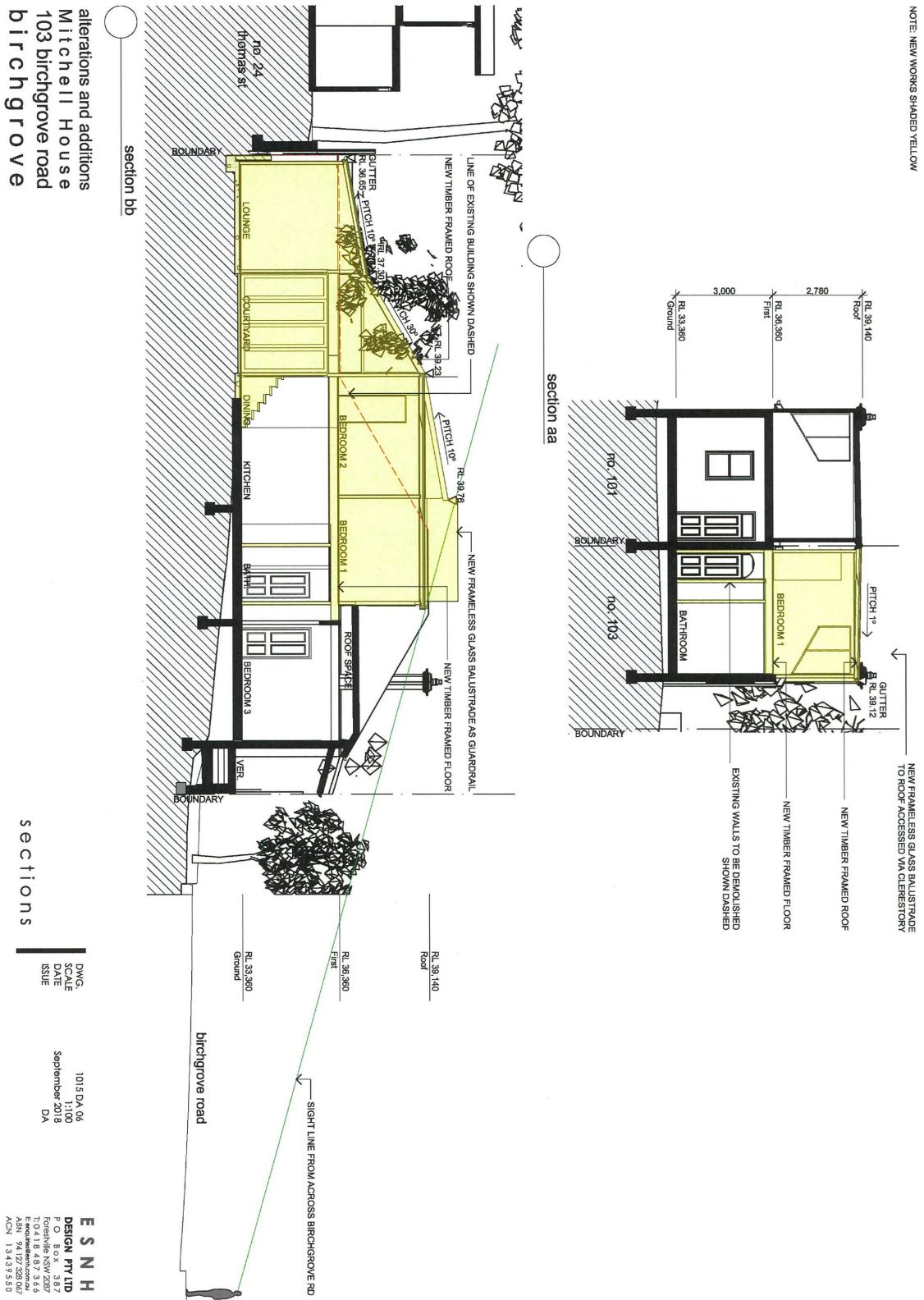
alterations and additions
Mitchell House
103 birchgrove road
birchgrove



elevations sheet 2 of 2

DWG
SCALE
DATE
ISSUE
1015 DA 05
1:100
September 2018
DA

ESNH
DESIGN PTY LTD
P O Box 387
Forestville NSW 2057
T 0418 487 366
M 94127 528 007
ACN 13439 550



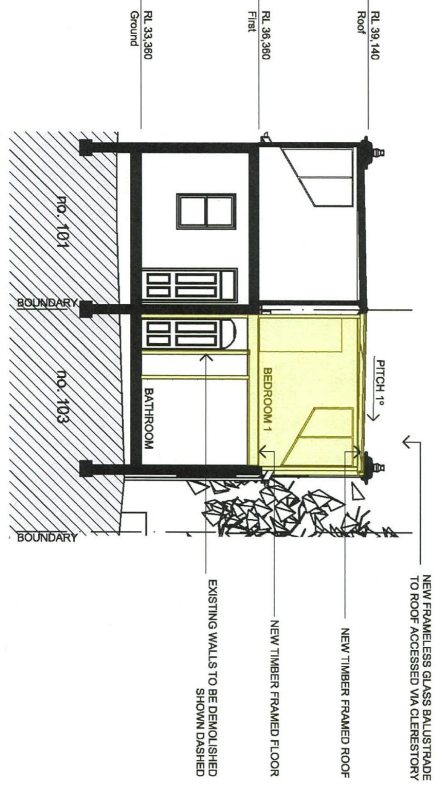
alterations and additions
 Mitchell House
 103 Birchgrove road
 Birchgrove

sections

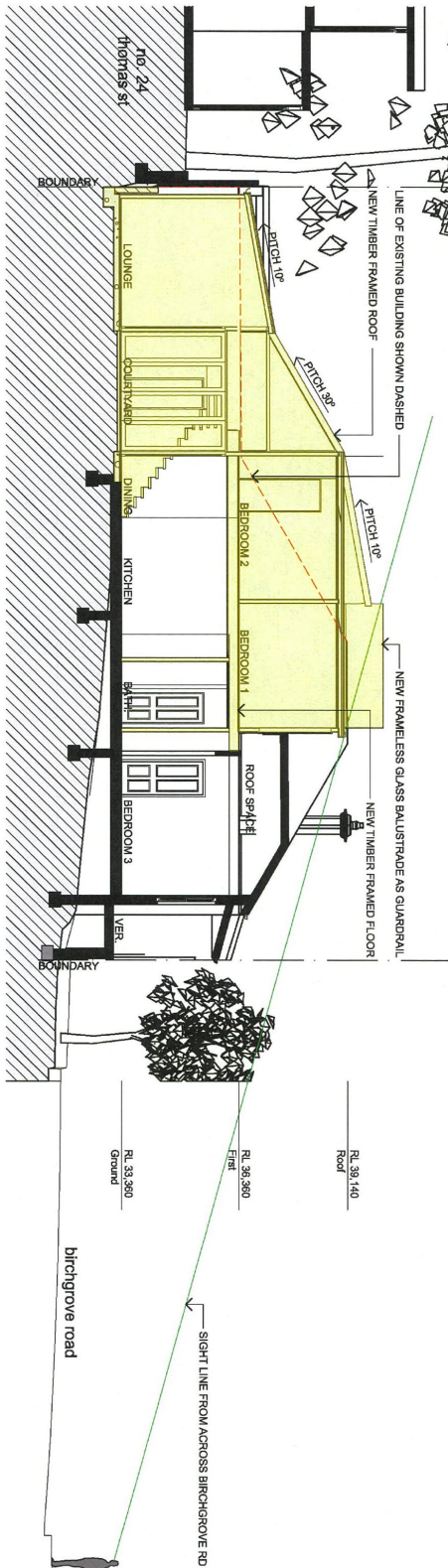
DWG: 1015 DA 06
 DATE: September 2018
 ISSUE: DA

ESNH
 DESIGN PTY LTD
 P O BOX 5117
 Forestville NSW 2087
 T 0 2 9 4 1 8 4 8 7 3 6 6
 F 0 2 9 4 1 8 2 2 0 0 0 0 7
 A 100/102 Birchgrove Rd
 ACN 134395550

NOTE: NEW WORKS SHADED YELLOW



section aa



section bb

alterations and additions
Mitchell House
103 birchgrove road
birchgrove

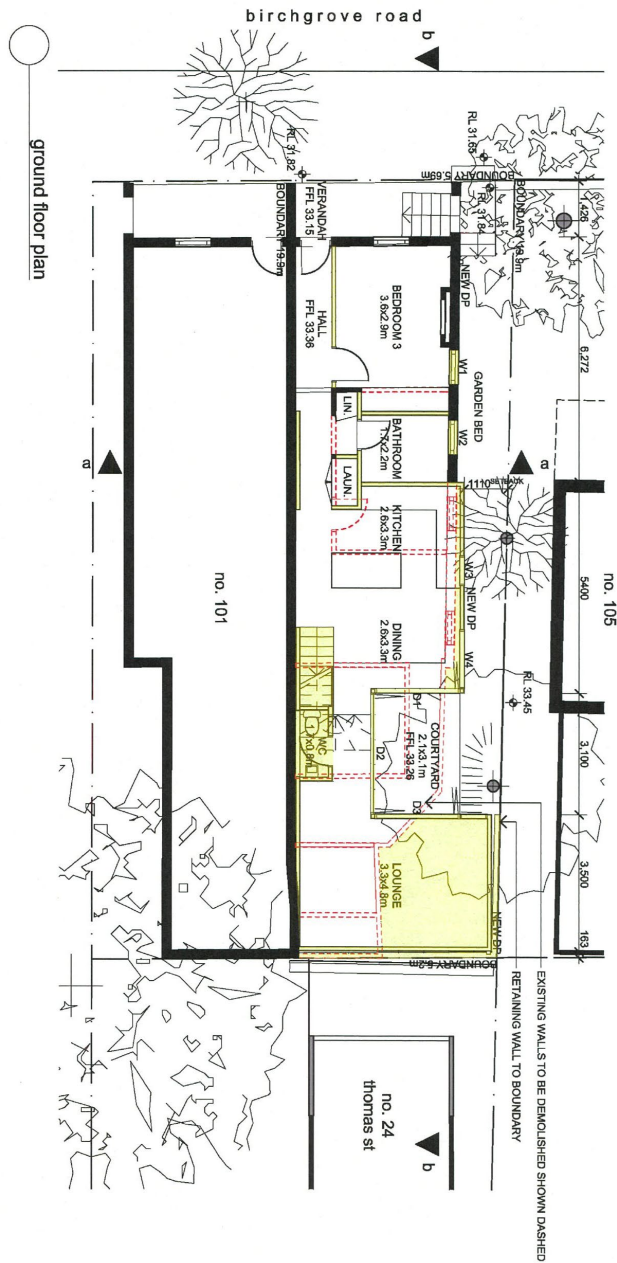
sections

DWG.
SCALE
DATE
ISSUE

1015 DA 06
1:100
MAY 2017
DA

ESNH
DESIGN PTY LTD
10/15 DA 06
1:100
MAY 2017
DA
E: esnh@esnh.com.au
P: 0418 487 366
F: 0418 487 367
ACN: 13437550

NOTE: NEW WORKS SHADED YELLOW



alterations and additions
 Mitchell House
 103 birchgrove road
 birchgrove

plans sheet 1 of 2

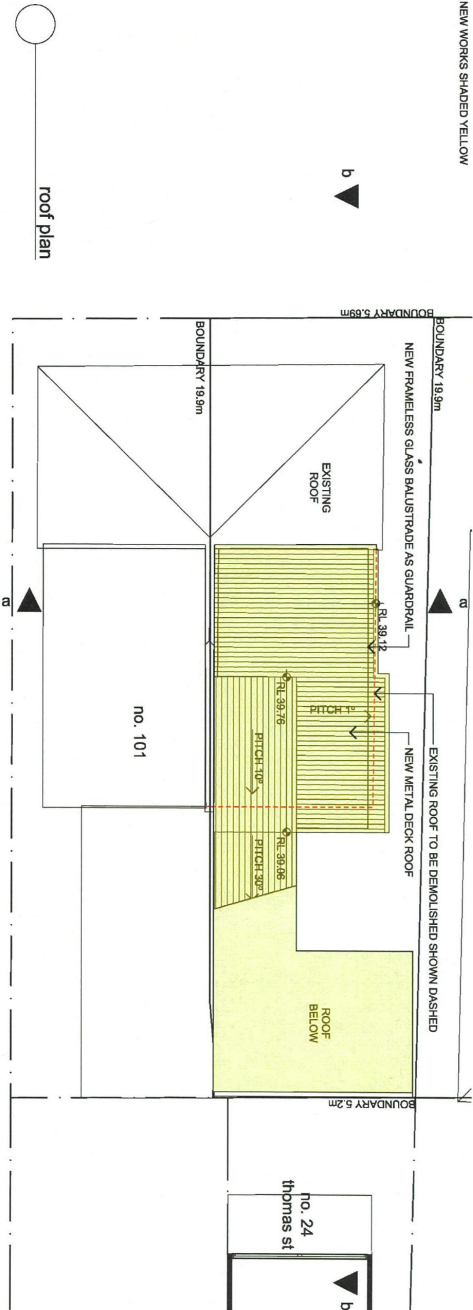
DWG.
 DATE
 ISSUE

1015 DA 02
 September 2018
 DA

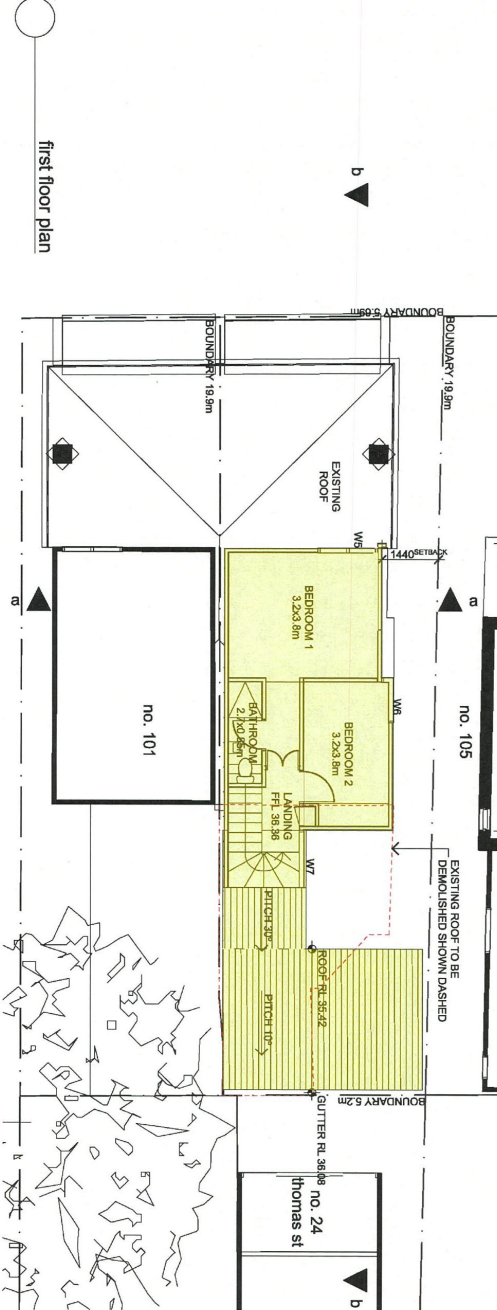


E S N H
 DESIGN PTY LTD
 P.O. Box 100
 Footscray NSW 2037
 T: 0418 487 346
 F: 616 9452 0000
 www.esnh.com.au
 ACN 13439550

NOTE: NEW WORKS SHADED YELLOW



roof plan



first floor plan

alterations and additions
Mitchell House
103 birchgrove road
birchgrove

plans sheet 2 of 2

DWG. SCALE 1:100
DATE 11/10
ISSUE September 2018
DA



ESNH
DESIGN PTY LTD
PO BOX 1287
FOUNTAIN VALLEY NSW 2087
T: 0418 487 366
E: esnh@esnh.com.au
ACN 13437550

NOTE:
FINISHES ARE SELECTED TO MATCH THE
EXISTING FINISHES OF NO. 101



alterations and additions
Mitchell House
103 birchgrove road
birchgrove

materials & finishes board

DW
SCD
DATE
ISSUE

10/15 DA08
1:50
MAY 2017
DA

ESNH
DESIGN PTY LTD
P O BOX 387
FOOTBYRIDGE NSW 2087
TEL 02 9412 2007
F 02 9412 2007
ASN 94 122 208 007
ACN 134 539 530

Attachment C – Clause 4.6 Exception to Development Standards

ESNH DESIGN

Appendix A

Clause 4.6 Exception to a Development Standard

Under Clause 4.6 of the Local Environmental Plan, development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

- (a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and
- (b) that there are sufficient environmental planning grounds to justify contravening the development standard.

This Development Application seeks leave to contravene Clause 4.3A 3(b) which requires that "the site coverage does not exceed 60% of the site area".

Compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and there are sufficient environmental planning grounds to justify contravening the development standard because the objectives of Clause 4.3A are satisfied as follows:

(a) *to provide landscaped areas that are suitable for substantial tree planting and for the use and enjoyment of residents*

Response: the landscaped area proposed is 15.2% of the site area and therefore complies with LEP Clause 4.3A 3(a) (i). As such, it is deemed to provide suitable landscaped area for the site.

(b) *to maintain and encourage a landscaped corridor between adjoining properties*

Response: this is maintained by keeping a side setback that is consistent with that of the existing cottage.

(c) *to ensure that development promotes the desired future character of the neighbourhood*

Response: compliance with this objective is discussed in the Statement of Environmental Effects under the heading '03. Urban character'.

(d) *to encourage ecologically sustainable development by maximising the retention and absorption of surface drainage water on site and by minimising obstruction to the underground flow of water*

Response: this is achieved by complying with the landscaped area control under LEP Clause 4.3A 3(a) (i).

(e) *to control site density,*

Response: It would be unreasonable to expect the building footprint to occupy only 60% of a site area that totals 108.5sqm. This is especially the case given that the development controls set out in Leichhardt DCP 2013 only allow a small first floor envelope to be approved. Site density is also controlled by LEP Clause 4.4 Floor Space Ratio and the development complies with this control.

(f) *to limit building footprints to ensure that adequate provision is made for landscaped areas and private open space.*

Response: the development proposal achieves this by complying with LEP Clause 4.3(a) (i).

Attachment D – Statement of Heritage Significance for Iron Cove heritage conservation area

Godden Mackay Logan

Area 13 Iron Cove Conservation Area

Landform

A northwest facing shoreline area, running from Victoria Road along the back of the Darling Street commercial zone and the Darling Street ridge to Rowntree Street and Cove Street. There are some relatively steep shoreline areas providing views to the Parramatta River, and a central flat plateau area around Turner Street.

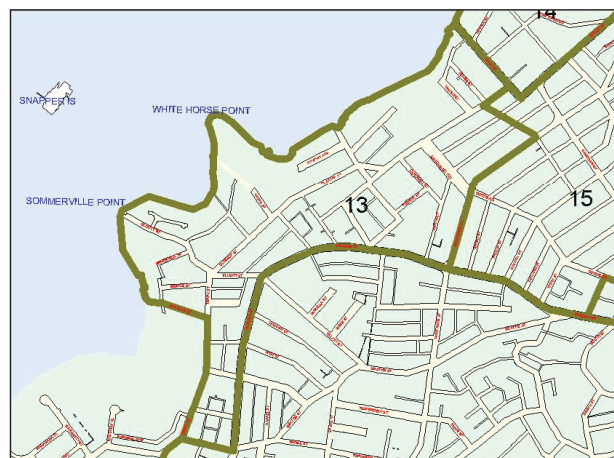


Figure 13.1 Iron Cove Conservation Area Map.

History

When sales of John Gilchrist's Balmain grant of 550 acres were resumed in 1852, Surveyor Charles Langley subdivided the remaining acres into 46 (later 47) sections. He used existing routes such as Darling Street and Birchgrove Road, and other contour-hugging tracks, such as Terry Street/Glassop Street to delineate the parcels. The sections were purchased over the next thirty years by wealthy investors, local speculators and builders.

A group of busy speculators, William Paling, FH Reuss, Alfred Hancock, John Booth, George Weston, Owen Evans and others bought up the tract of land that stretched along the waterfront from Cove Street to just beyond Bayville Street, and broadly bounded by Birchgrove Road and Glassop Street. These same speculators were also involved in land from Darling Street down to Rozelle Bay, including much of the very densely developed area now known as The Valley. The remainder of the area was bought up in a similar fashion and subdivision of the Iron Cove area stretched over twenty-four years from 1853 to 1877. By 1891 the streets that laced this precinct were largely built up. Some steep parcels of land, because of their deep water frontages, were taken up initially for small water-based industries, which expanded over the twentieth century.

A large area of Housing Commission flats was constructed near the waterfront in the early postwar years.

Godden Mackay Logan

Sources

Information provided by Max Solling.

Significant Characteristics

- Contour hugging main access roads.
- Many irregular, narrow and wide minor roads.
- Stone steps providing public pedestrian access.
- Trees and street tree planting particularly noticeable along Glassop and Cove Streets and Macquarie Terrace.
- Elkington Park – mature trees, palm trees and Edwardian plantings.
- Irregular-shaped sections of subdivisions.
- Narrow allotments, with groups of allotments of uniform width.
- Buildings set back from the street alignment.
- Groups of shops along Darling Street with parapets and awnings.
- Corner shop buildings and other former commercial buildings.
- Garden space small, but a noticeable characteristic.
- Variety of housing:
 - terrace and semi-detached housing with groups of uniform development; and
 - some free-standing housing and Victorian villas.
- Landmarks: the Birchgrove Public School and the Elkington Park (with the Dawn Fraser Swimming Pool) are noticeable places within the area and visible from the harbour.
- Building materials vary:
 - plastered brick (generally pre-1890) and pockets of face brick (generally post-1890);
 - some timber cottages; and
 - occasional stone cottage or villa.
- Roofs of terracotta tiles, slate and iron.
- Fences – low or transparent fences: some iron palisade fences remain; early twentieth-century low brick fences contemporary with house.
- Sandstone kerbs and gutters, mostly uninterrupted by vehicular access.

Statement of Significance or Why the Area is Important

- One of a number of conservation areas that 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 important for

Godden Mackay Logan

illustrating development particularly from 1870s-1910s, and this forms the major element of its identity, with later pockets of infill prior to World War II (ie pre-1939).

- Through the route of its main access roads, demonstrates the subdivision sections, closely related to the landform, drawn up by Surveyor Langley for the sale of Gilchrist's Balmain grant after 1852.
- Illustrates through its irregular small street layout, and varied allotment width and length (within a limited range), the many different groups of speculators and subdividers involved in the development of the area.
- Through the materials of its outer masonry walls, demonstrates the rapid advances in brick making in the Sydney area over the period 1870s-1910s.
- Through its now rare weatherboard buildings it continues to demonstrate the nature of that major construction material in the fabric of early Sydney suburbs.

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

- existing width and alignment of the streets: avoid chicanes which cut diagonally across the carriageways.
- All remaining sandstone kerbs and gutters, uninterrupted by access driveways.
- All pre-1939 buildings and structures, especially weatherboard buildings.
- All original plaster finishes to external walls (as a rough rule of thumb this will mostly apply to pre-1890s buildings). Reconstruct where necessary.
- All original unplastered face brick external walls (usually applies to post-1890s buildings).
- All original external architectural detail, and encourage replacement of lost elements, but only where evidence is available.
- Any remaining original iron palisade or low brick fences.
- All street planting schemes and park planting; reinstate individual trees where they have been lost.
- Green front garden space.

Avoid

- Demolition of any pre-1939 building, especially timber buildings.

Godden Mackay Logan

- Removal of any plaster or decorative plaster to external walls, except where it is to remove more recent plaster/paint on face brick walls.
- Plastering and/or painting of original face brick walls.
- Removal of original architectural details.
- Second-storey additions to an original single-storey building, other than in a separated pavilion form.
- Alteration to the original roof form over the main part of any building.
- Additional architectural detail for which there is no evidence in the photographic record or on the building itself.
- Inappropriate fences such as high brick fences/walls, new iron palisades on high brick bases.
- Interruption of the kerb and gutter line for vehicular access.
- Development that encroaches upon the setting of important buildings/parks.

Attachment E – Arborist Report

Arborist Report

Client: Lisa Mitchell
Address: 103 Birchgrove Road,
Birchgrove N.S.W 2041



Bradley Magus

Valuation Solutions PTY LTD
Trading as ***Abacus Tree Services***
ABN: 63 163 718 631
ACN: 108 515 859
50 Northumberland Avenue, Mt Colah
(Ph 0425 203 049)
Email: abacustrees@gmail.com
www.abacustreeservices.com
Tafe RTO Provider Number: 90002
This document is copyright © 2018



Table of Contents

1.0	Executive Summary	3
2.0	Arborist Details	5
2.1	Introduction	5
2.2	Aims of this report/Procedure	6
3.0	Disclaimer	6
3.2	Site Description	7
3.4	Soil Considerations	8
4.0	Tree Schedule	9
4.1	Trees & Impact on Development	11
5.0	Discussion & Compliance to Australian Standards 4970 – 2009, 4373 – 2007 & Rural Fire Service (RFS) 10:50 Code	12
6.0	Conclusions	17
7.0	Recommendations	19
8.0	References	22
9.0	APPENDIX 1 Site Maps	23
APPENDIX 2	U.L.E (Useful Life Expectancy) Categories and Subgroups	24
APPENDIX 3	Notes on Tree Assessment	25

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

2

1.0 *Executive Summary*

- It is recommended that Lisa Mitchell embark on a management program for two (2) trees (Trees 1 & 2) before commencement of the proposed building/constructions works as follows:
- It is recommended that Trees 1 & 2 (1 in total) be retained and incorporated into the development. It is recommended that bearers and joists or similar method of construction be utilised for the proposed development associated with the lounge. It is recommended that pilot holes be dug before commencement of building works to determine the pier locations. It is recommended that no structural roots greater than 80mm in diameter be pruned. Upon finding roots greater than 80mm will require the pier to be dug to an alternative location. All pilot holes/piers are to be dug by hand (shovel) to the required depth inside the TPZ. It is recommended that final pier placement be a minimum of 100mm to all structural roots to allow for spatial separation and expansion of the root plate.
- It is recommended that an exclusion zone be established for Trees 1 & 2 to allow the SRZ to remain intact. In order to retain Trees 1 & 2 and allowing for the reduction in soil levels in the proposed courtyard will require the garden beds to remain intact as outlined in Figures 4 – 7. This will include retaining the existing garden bed within the TPZ of Tree 1. This will include retaining the existing garden bed within the TPZ to the edge of the proposed lounge and the area as outlined in Figures 6 & 7 (Tree 2). The exclusion zone for Tree 1 is outlined in Figures 4 & 5. Soil amelioration can take place including raising the existing garden beds by up to 100mm above natural ground levels. The existing dilapidated retaining wall closest to the house can be removed however will need to be undertaken by hand (shovel) within the TPZ.
- It is recommended that protection measures be put in place that aid in the preservation of Trees 1 & 2 (2 in total). To avoid injury or damage, Trees 1 & 2 must have trunks protected by 1 – 1.5 metre lengths of 75mm X 25mm hardwood spaced at 80mm secured with galvanised wire (not fixed or nailed to the tree in any way. The hoarding is to be erected before commencement of building works and remain in place until the release of the occupation certificate.
- It is recommended that all civil contractors that enter the site are made aware of the importance of preserving Trees 1 & 2 and understand the tree protection measures that are put in place to preserve Trees 1 & 2.

- All stockpile sites to be maintained a minimum 3 metres away from the trunk of Trees 1 & 2 and all other trees that come under the requirements of Inner West Councils' Tree Preservation order.
- It is recommended that all parking of vehicles & heavy machinery be kept a minimum 2.76 metres from retained trees during construction works.
- This report is not for publication to the internet and submission of this report in the submission phase set out by Council is to be taken down upon completion of the development application.

2.0 Arborist Details

<p>Bradley Magus</p> <p>Contact Details:</p> <p>50 Northumberland Ave, Mt Colah Ph: 0425 203 049</p> <p>Email: abacustrees@gmail.com or bradmagus1@bigpond.com Web: www.abacustreeservices.com</p>	<p>Qualifications</p> <ol style="list-style-type: none"> 1. Diploma Horticulture (1993) 2. Bachelor of Horticulture Science (1996) 3. Masters Land Economics (2002) 4. Diploma Horticulture (Arboriculture) (AQF 5) 2007 (Dux) 5. International Society of Arboriculture Certified Arborist (2007) 6. QTRA Assessor – 2011 & 2013
---	--

2.1 Introduction

Abacus Tree Services was commissioned by Lisa Mitchell to assist in the preparation of an arborist report. An assessment was made on two (2) trees (Trees 1 & 2 located within the confines of 103 Birchgrove Road, Birchgrove. There is in total two (2) trees located at 103 Birchgrove Road, Birchgrove that were assessed as per the applicant’s instructions.

The purpose of this report is to provide information and guidance to the applicant in relation to two (2) trees only. The information in this report is to be used in correlation with other reports identified by Inner West Council and will provide Inner West Council with a framework for determining the development application (D.A).

This report and its recommendations are based upon a physical site inspection undertaken on the 28 August 2018.

The photographs included in this report were taken at the time of the inspection on the 28 August 2018.

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

2.2 Aims of this report/Procedure

The aim of this report is to assess the health and condition of two (2) trees (Trees 1 & 2). The condition of the trees was assessed from ground level using the VTA (Visual Tree Assessment) method as outlined by Mattheck & Breloer (1999). The following criteria will be assessed within this report –

- An assessment of the dimensions (age, class, height and Diameter at Breast Height (D.B.H))
- An assessment of the health and condition of the trees;
- An assessment of the Useful Life Expectancy (U.L.E)
- Compilation of an appropriate report detailing the results of the above assessments
- Trees earmarked for retention to be assessed as per Australian Standards 4970-2009
- Hazard Rating, Recommendations for each tree

The (U.L.E) method of tree assessment, as outlined by Jeremy Barrell (1999) has been adopted within this report. U.L.E categories give an indication of the useful life expectancy anticipated for the tree that has been adopted for this report. Several factors are considered in determining this rating such as species, location, age, condition and health of the tree. The five U.L.E categories are outlined in detail within Appendix 2.

3.0 Disclaimer

This assessment has been prepared for the exclusive use of the applicant (Lisa Mitchell), for the preparation of a development application submission. Information in this report relates to two (2) trees within the premises of 103 Birchgrove Road, Birchgrove only and should not be used in conjunction with any other property.

This assessment was carried out from the ground, and covers what was reasonably able to be assessed and available to the assessor at the time of the inspection. The assessor carried out no aerial inspections. Information contained in this report covers only the trees that were examined and reflects the condition of the trees at the time of the inspection; furthermore the inspection was limited to a visual examination of the subject trees without dissection, excavation, probing or coring. Trees are living things and their condition will change over time. Therefore there is no guarantee that problems or deficiencies of the subject tree may not arise in the future.

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

6

3.1 Site Map



Figure 1
 Location: All trees are located within 103 Birchgrove Road, Birchgrove
 Source: www.googlemaps.com.au

3.2 Site Description

Trees 1 & 2 are located wholly within 103 Birchgrove Road, Birchgrove. The site is located in the municipality of Leichardt Council. The species on site have been assessed against the requirements set out in Inner West Council's Tree Preservation Order. The species on site have been assessed against the requirements set out in Leichardt Council's Local Environmental Plan (2013) pursuant to Section 5.9 & 5.9AA (repealed) & Development Control Plan (2013) pursuant to Section C1.14. I have assessed the property against Schedule 5 (Environmental Heritage) within Leichardt Council LEP. The property is not listed in accordance with Part 1 (Heritage Items). There are no local items that have been listed under Schedule 5 (LEP). The property is listed as being mapped within a Heritage Conservation Area as per the LEP (Schedule 5 – Part 2 Map C6). There are no listed items as searched per the Office of Environment & Heritage (Section 3).

© Abacus Tree Services Ph: 0425 203 049
 Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
 Client: Lisa Mitchell
 Date: 30 August 2018

The site is gently undulating with the immediate area being dominated by residential houses. The nearest major arterial road is River Road. Trees 1 & 2 are located towards the side boundary within the subject property identified as 103 Birchgrove Road, Birchgrove. Trees 1 & 2 are located within close proximity to the subject property & proposed development.



Figure 2 – Location of subject property identified as 103 Birchgrove Road, Birchgrove

3.4 Soil Considerations

From a visual observation there has been minimal soil disturbance in the last few years within the subject property. From a visual observation there has been no recent excavation works in and around Trees 1 & 2. Trees 1 & 2 are situated within a small garden bed. A root investigation would need to be undertaken if any roots have been damaged or diseased.

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

8

4.0 *Tree Schedule*

Species & dimension requirements on Page 10. This page intentionally left blank

© *Abacus Tree Services Ph: 0425 203 049*
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

9

Tree No	Scientific Name	Common Name	DBH (MM)	Height (M)	AGE CLASS	Vigour	SPREAD N.E.S.W.	ULE	Comments
1	Acmena smithii	Lilly Pilly	100,120,160	6.5	SM	G	1.5,1.5,3,2	2d	Symmetrical. LCR = 95 – 100%, Bifurcated at ground level. Growing from old stump.
2	Kumquat	Kumquat	180,140	5	M	G	1,4,4,2	2d	Symmetrical. LCR = 95 – 100%, Located 1.5 metres to the existing building

Key:

Age class: Young = Y, Semi mature = SM, Mature = M, YM = Young Mature, Over mature = OM
 DBH = Diameter at Breast Height LCR = Live Crown Ratio
 Vigour = Excellent = E, Good = G, Fair = f, Poor = P
 LDW = large deadwood over 40mm, MDW = Minor deadwood less than 40mm
 N= north, E = east, W = west, S = south MS = multiple Stems
 ULE = Useful Life Expectancy (See appendix 2 for guidelines)
 MS = Multiple Stems
 IWC = Inner West Council UFTM + Urban Forestry Technical Manual

4.1 *Trees & Impact on Development*

Trees are living organisms and their root systems play an integral role in stability and providing nutrient storage as well as water uptake. The majority of tree roots for Dicotyledons occur within the first metre of the soil. Therefore construction works can have a profound effect on their health and longevity as well as their structural stability. Tree distances from excavation works must be taken into consideration at the planning stage to ensure that the tree is not damaged.

There are several main factors that occur at the construction phase that can have a negative impact on the trees health and stability. These practices can include but are not limited to –

- Parking of vehicles and heavy machinery within the drip line of the tree.
- Stockpiling of materials within the drip line of the tree.
- Excavating within the drip line and damaging the structural root system.
- Raising soil levels in and around the base of the tree therefore reducing the trees ability for gaseous exchange.
- Damage to the tree due to heavy machinery and equipment resulting in large bark tears or loss of branches and scaffolds.

To reduce the effects of construction it is imperative to provide an area underneath the tree where no works are undertaken. The area where supervised works are undertaken is referred to as the structural root zone (SRZ). The S.R.Z is an area where no to minimal activities listed above should occur. All trees require a S.R.Z and will vary from species to species but for the purposes of this report the Australian Standards 4970 has now been adopted.

In conclusion the Australian Standards like similar methods for protecting trees is only a guide. To ensure the health and longevity of trees within construction sites it is imperative to provide a large protection zone taking into consideration that the tree will also grow over time. The greater area that can be put aside where no works occur will aid in the preservation of the tree. The activities listed above should be kept to a minimum and encroachment within the SRZ will require the supervision by a qualified AQF 5 arborist. These impacts will be taken into consideration in the discussion & recommendations section of this report.

5.0 Discussion & Compliance to Australian Standards 4970 – 2009, 4373 – 2007 & Rural Fire Service (RFS) 10:50 Code

Abacus Tree Services has been approached by ESNH Design on behalf of their client (Lisa Mitchell) to undertake an arborist (assessment) report on Trees 1 & 2 that come under the requirements of Inner West Council tree preservation order (Leichardt Council tree preservation order). There are two (2) trees that have been assessed within the subject property identified as 103 Birchgrove Road, Birchgrove. Trees 1 & 2 are located within the side yard closest to the boundary with 105 Birchgrove Road. The applicant proposes to erect/construct new additions to the existing dwelling within close proximity to Trees 1 & 2. (Appendix 1).

Abacus Tree Services has relied upon the sketch drawings provided by ESNH Design (Drawing number – 1015 DA 02) to formulate distances and setbacks in accordance with Australian Standards 4970 – 2009. I have relied upon this information to be true and accurate. Any changes to the sketching and drawings will require the calculations to be reassessed in accordance with Australian Standards 4970 – 2009.



Figure 3 – showing the location of Tree 1 in the side yard of the subject property.

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

12

The table below represents the S.R.Z (Structural Root Zone) and TPZ (Tree Protection Zone) figures based on Australian Standards 4970 - 2009.

Tree No	SRZ (metres)	TPZ (metres)
1	1.72	2.64
2	1.88	2.76

All trees require a S.R.Z and a T.P.Z with Australian Standards 4970- 2009 being used as a guideline. Tree 1 has been given an SRZ and TPZ of 1.72 & 2.64 metres in accordance with Australian Standards 4970 - 2009. Tree 1 is a small tree that is located on the side boundary as indicated in Figure 3. Tree 1 is located in a small garden bed as shown in Figure 4. This species has the potential for extensive future growth. Tree 1 is growing from an old stump and has coppiced as shown in Figure 4. This species is approximately 1.15 metres to the existing dwelling.



Figure 4 – showing the location of Tree 1 in relation to the existing dwelling. This species is bordered by two properties. This species is located in a raised garden bed before stepping down to a paved area an estimated 30cm below the stump. The area in red is identified as the raised garden bed area. This area will need to be maintained as a protection zone in order to retain the tree.

© Abacus Tree Services Ph: 0425 203 049
 Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
 Client: Lisa Mitchell
 Date: 30 August 2018



Figure 5 – showing the small garden bed associated with Tree 1. The garden bed is elevated above the paved area by an estimated 30cm.

The proposed development will extend further towards the side boundary and proximity to Tree 1 by an estimated 40cm. Due to the raised garden bed this species is primarily limited to the garden bed zone. The TPZ that will be affected is the existing paved area that will be removed and the building extended out. The total area of TPZ has been calculated at 21.9m². The incursion into the TPZ on one side has been calculated at 59.09%. The incursion on one side is taken from the centre of the stem. The overall loss of TPZ has been calculated as the extension works within the TPZ. This represents a total area of 2.2m². The overall loss of TPZ associated with the development has been calculated at 10.05%. This sits just above the 10% incursion however due to the elevation changes there is the potential for minimal root plate incursion into this zone. On the proviso that the existing garden bed and soil zone can be maintained would allow the proposed elevation change to take place. This species is also only young mature and the potential for extensive future growth. There is the potential for this species to reach a height of 12 metres (minimum) in its current growing conditions. It may be beneficial to remove the species before it reached its full potential. This is also taking into consideration the proximity to the neighbours dwelling.

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

14



Figure 6 – showing the raised garden bed associated with Tree 2. This area has been established as the critical root zone for Tree 2. This area would need to be maintained in order to retain Tree 2.

Tree 2 has been given an SRZ and TPZ of 1.88 & 2.76 metres in accordance with Australian Standards 4970 - 2009. Tree 2 is a small fruit tree that is located towards the back boundary fence. The overall area of TPZ has been calculated at 23.93m². The proposed lounge will come within close proximity to Tree 2. The proposed lounge will be on bearers and joists. Tree 2 will be located 0.8 metres to the trunk of Tree 2. The overall loss of TPZ associated with the lounge has been calculated at 14.5%. This could be reduced considerably due to the fact that the proposed lounge is on bearers and joists. Allowing for an estimated 9 piers for the proposed lounge at a diameter of 0.3 metres each would be a total area of 2.7m². This would reduce the loss of TPZ down to 11.28%. The proposed courtyard is to be extended and lowered from existing levels by an estimated 1 metre from the base of the trunk. This would only be feasible if the existing raised garden bed can be maintained to the edge of the development (lounge) as highlighted in red. If this cannot be achieved than the loss of SRZ would lead to structural instability of the tree.

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

15

Tree 2 may also require minor pruning works to accommodate the proposed lounge. It is estimated that 10 – 15% of the tree may require pruning to accommodate the proposed lounge. The works could be undertaken in accordance with Australian Standards 4373 – 2007.



Figure 7 – showing the small garden bed associated with Tree 1. The garden bed would need to be maintained up to the proposed development in order to retain the tree. Majority of the root plate is bound within the garden bed due to the extensive elevation changes.

6.0 Conclusions

- Abacus Tree Services has been approached by ESNH Design on behalf of their client (Lisa Mitchell) to undertake an arborist (assessment) report on Trees 1 & 2 that come under the requirements of Inner West Council tree preservation order (Leichardt Council tree preservation order). There are two (2) trees that have been assessed within the subject property identified as 103 Birchgrove Road, Birchgrove. Trees 1 & 2 are located within the side yard closest to the boundary with 105 Birchgrove Road. The applicant proposes to erect/construct new additions to the existing dwelling within close proximity to Trees 1 & 2. (Appendix 1). Trees 1 & 2 have been assessed in accordance with Australian Standards 4970 – 2009.
- Trees 1 & 2 are located wholly within 103 Birchgrove Road, Birchgrove. The site is located in the municipality of Leichardt Council. The species on site have been assessed against the requirements set out in Inner West Council's Tree Preservation Order. The species on site have been assessed against the requirements set out in Leichardt Council's Local Environmental Plan (2013) pursuant to Section 5.9 & 5.9AA (repealed) & Development Control Plan (2013) pursuant to Section C1.14. I have assessed the property against Schedule 5 (Environmental Heritage) within Leichardt Council LEP. The property is not listed in accordance with Part 1 (Heritage Items). There are no local items that have been listed under Schedule 5 (LEP). The property is listed as being mapped within a Heritage Conservation Area as per the LEP (Schedule 5 – Part 2 Map C6). There are no listed items as searched per the Office of Environment & Heritage (Section 3).
- The subject property identified as 103 Birchgrove Road, Birchgrove is not located in a Rural Fire Service (RFS) 10:50 area. Therefore all trees have been assessed in accordance with council requirements with no exemptions under RFS 10:50 legislation. The search was undertaken on the 31 August 2018. Rules and regulations in relation to the RFS 10:50 can change and it is therefore up to the applicant to ensure they comply with the 10:50 code and any updates that may occur.
- Protection fencing for Trees 1 & 2 (2 in total) if retained has not been considered as this would not allow the development to proceed due to the proposed courtyard levels and lounge both being inside the TPZ. Hoarding would be the preferred method of retaining the species as this will protect the trunks during the construction phase. Hoarding is to be erected in accordance with Australian Standards 4970 – 2009.

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

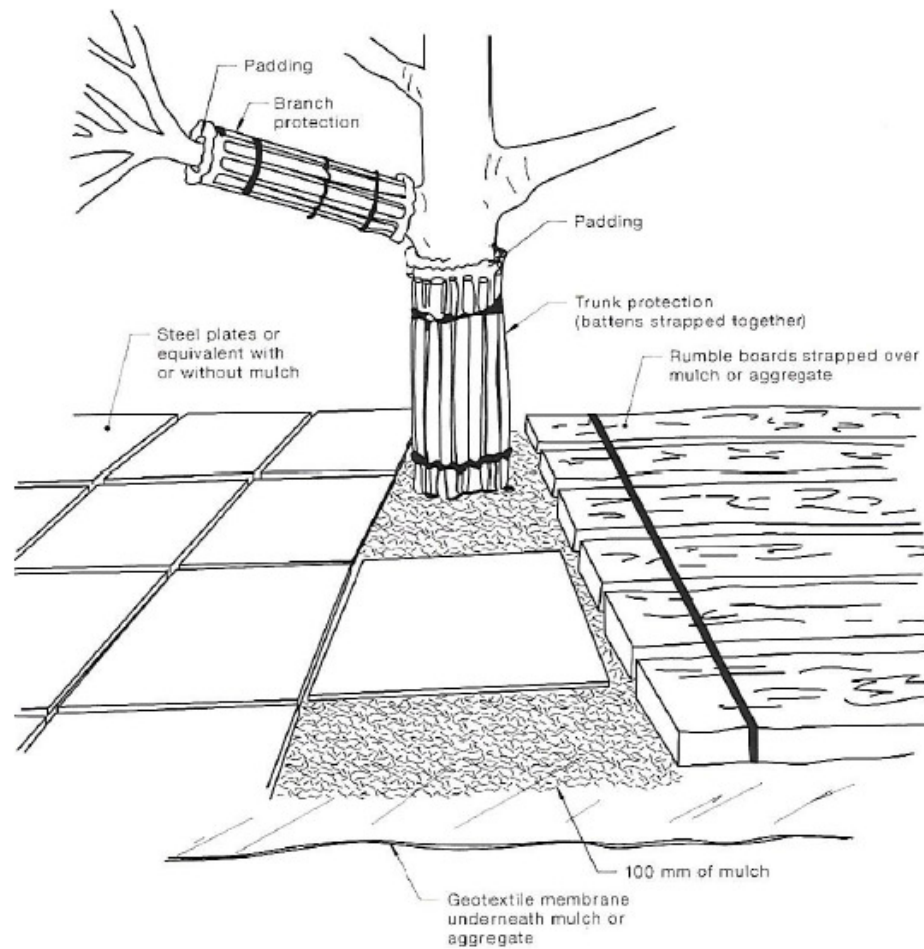
17

- Tree 1 has the potential for extensive future growth and therefore the canopy and root plate have the potential for future growth. All measures have been taken to minimise damage to the proposed buildings and hardstand areas however future growth has the potential to cause damage to the proposed buildings and/or hardstand areas. It may be beneficial to remove Tree 1 before it reaches maturity. If the applicant is to retain Tree 1 then measures have been described in the recommendations section of the report.
- Trees 1 & 2 are growing and confined to a small growing area as shown in Figures 4 – 7. These trees are within a raised garden bed that sits above the paved area by an estimated 35 – 40cm. This area is identified as the critical root zone as the root plate would be reduced within the existing paved area.
- The overall loss of TPZ (Tree 1) associated with the development has been calculated at 10.05%. This sits just above the 10% incursion however due to the elevation changes there is the potential for minimal root plate incursion into this zone. On the proviso that the existing garden bed and soil zone can be maintained would allow the proposed elevation changes to take place. The exclusion zone is outlined in Figures 4 & 5. This species is also only young mature and the potential for extensive future growth. There is the potential for this species to reach a height of 12 metres (minimum) in its growing conditions. It may be beneficial to remove the species before it reached its full potential. This is also taking into consideration the proximity to the neighbours dwelling.
- The proposed lounge will be on bearers and joists. Tree 2 will be located 0.8 metres to the trunk of Tree 2. The overall loss of TPZ (Tree 2) associated with the lounge has been calculated at 14.5%. This could be reduced considerably due to the fact that the proposed lounge is on bearers and joists. Allowing for an estimated 9 piers for the proposed lounge at a diameter of 0.3 metres each would be a total area of 2.7m². This would reduce the loss of TPZ down to 11.28%. The proposed courtyard is to be extended and lowered from existing levels by an estimated 1 metre from the base of the trunk. This would only be feasible if the existing raised garden bed can be maintained to the edge of the development (lounge) as highlighted in red. If this cannot be achieved than the loss of SRZ would lead to structural instability of the tree. The exclusion zone is outlined in Figures 6 & 7.

7.0 Recommendations

- It is recommended that Lisa Mitchell embark on a management program for two (2) trees (Trees 1 & 2) before commencement of the proposed building/constructions works as follows:
- It is recommended that Trees 1 & 2 (1 in total) be retained and incorporated into the development. It is recommended that bearers and joists or similar method of construction be utilised for the proposed development associated with the lounge. It is recommended that pilot holes be dug before commencement of building works to determine the pier locations. It is recommended that no structural roots greater than 80mm in diameter be pruned. Upon finding roots greater than 80mm will require the pier to be dug to an alternative location. All pilot holes/piers are to be dug by hand (shovel) to the required depth inside the TPZ. It is recommended that final pier placement be a minimum of 100mm to all structural roots to allow for spatial separation and expansion of the root plate.
- It is recommended that an exclusion zone be established for Trees 1 & 2 to allow the SRZ to remain intact. In order to retain Trees 1 & 2 and allowing for the reduction in soil levels in the proposed courtyard will require the garden beds to remain intact as outlined in Figures 4 – 7. This will include retaining the existing garden bed within the TPZ of Tree 1. This will include retaining the existing garden bed within the TPZ to the edge of the proposed lounge and the area as outlined in Figures 6 & 7 (Tree 2). The exclusion zone for Tree 1 is outlined in Figures 4 & 5. Soil amelioration can take place including raising the existing garden beds by up to 100mm above natural ground levels. The existing dilapidated retaining wall closest to the house can be removed however will need to be undertaken by hand (shovel) within the TPZ.
- It is recommended that protection measures be put in place that aid in the preservation of Trees 1 & 2 (2 in total). To avoid injury or damage, Trees 1 & 2 must have trunks protected by 1 – 1.5 metre lengths of 75mm X 25mm hardwood spaced at 80mm secured with galvanised wire (not fixed or nailed to the tree in any way). The hoarding is to be erected before commencement of building works and remain in place until the release of the occupation certificate.
- It is recommended that all civil contractors that enter the site are made aware of the importance of preserving Trees 1 & 2 and understand the tree protection measures that are put in place to preserve Trees 1 & 2.

- All stockpile sites to be maintained a minimum 3 metres away from the trunk of Trees 1 & 2 and all other trees that come under the requirements of Inner West Councils' Tree Preservation order.
- It is recommended that all parking of vehicles & heavy machinery be kept a minimum 2.76 metres from retained trees during construction works.
- This report is not for publication to the internet and submission of this report in the submission phase set out by Council is to be taken down upon completion of the development application.



➤ Figure 8 – showing the proposed fencing that is to be put in place before the commencement of building works on site (Trees 1 & 2 only).
 Source: Australian Standards 4970 - 2009

Bradley Magus (Member ISAAC & LGTRA)
 Consulting Arborist/Certified Arborist (ISAAC 2007)
 Diploma in Horticulture (Arbiculture) (AQF 5) (Dux)
 Bachelor of Horticulture Science

© Abacus Tree Services Ph: 0425 203 049
 Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
 Client: Lisa Mitchell
 Date: 30 August 2018

8.0 References

AS4373-2007 Pruning of Amenity Trees. Standards Australia

AS 4970 – 2009 Protection of trees on development sites

Clark R.J & Matheny N (1998) Trees & Development – A technical guide to Preservation of trees during land development: International Society of Arboriculture

Mattheck C., Breloer, (1999) The Body Language of Trees – a handbook for failure analysis 5th ed., London: The Stationery Office, U.K

Internet Sites

www.googlemaps.com.au

www.rfs.nsw.gov.au

www.innerwest.nsw.gov.au

www.olg.nsw.gov.au

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

22

9.0 APPENDIX 1 Site Maps

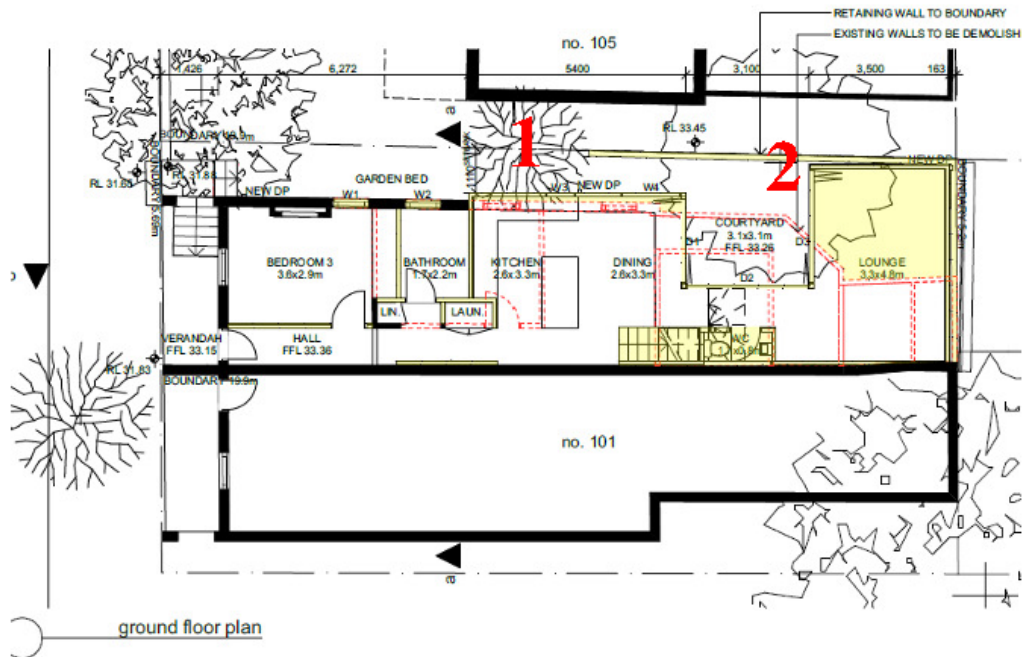


Figure 9 - Close up of the subject property and canopy area of Trees 1 & 2. Not to scale
Source: ESNH Designs

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

APPENDIX 2 U.L.E (Useful Life Expectancy) Categories and Subgroups

Useful Life Expectancy – Classification

1. Long ULE > 40 Years

- a. Structurally sound and can accommodate future growth
- b. Long term potential with minor remedial treatment
- c. Trees of special significance which warrant extra care

2. Medium ULE of 15-40years

- a. Will live between 15 – 40 years
- b. Will live for more than 40 years but would be removed for safety or other reasons
- c. May live for more than 40 years but will interfere with more suitable specimens and need removal eventually
- d. More suitable for retention in the medium term with some remedial care

3. Short ULE of 5-15 years

- a. Trees that may only live between 5 – 15 more years
- b. May live for more than 15 years but would need removal for safety or other reasons
- c. Will live for more than 15 years but will interfere with more suitable specimens or provide space for replacement plantings
- d. Require substantial remedial care but are only suitable for short term retention

4. Remove tree within 5 years

- a. Dead, dying or seriously diseased
- b. Dangerous trees through instability or loss of adjacent trees
- c. Structural defects such as cavities
- d. Damaged that are clearly not safe to retain
- e. May live for more than 5 years but will need replacement to prevent interference or make space for more suitable trees
- f. May or are causing damage to structures
- g. That will become dangerous

5 Trees suitable to transplant

- a. Small trees can be reliably moved or replaced
- b. Young trees between 5 – 15 years
- c. Trees that have been regularly pruned to control growth

© Abacus Tree Services Ph: 0425 203 049
Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
Client: Lisa Mitchell
Date: 30 August 2018

24

APPENDIX 3 Notes on Tree Assessment

Key	Criteria	Comments
Tree no		
Species	Relates to the two on the site plan	
Remnant /planted Self Sown	May be coded – See Key for details	
Special Significance	A – Aboriginal C- Commemorative Ha- Habitat Hi- Historic M- Memorial R- Rare U- Unique form O- Other	May require specialist knowledge
Age Class	Y- Young- Recently Planted S-Semi mature (<20% of life expectancy) M- Mature (20-80% of life expectancy) O- Over mature (>80% of life expectancy)	
Height	In Metres	
Spread	Average diameter of canopy in metres	
Crown Condition	Overall vigour and vitality 0 – Dead 1 – Severe decline (<20% canopy, major deadwood 2 – Declining 20-60% canopy density, twig dieback 3- Average/low vigour (60-90% canopy density, twig dieback) 4- Good (90-100% crown cover, little or no dieback or other problems) 5- Excellent (100% crown cover, no deadwood or other problems)	
Failure Potential	Identifies the most likely failure and rates the likelihood that the structural defects will result in failure within the inspection period. 1- Low – Defects are minor (eg dieback of twigs, small wounds with good wound development) 2 – Medium – Defects are present and obvious egg Cavity encompassing 10-25% of the circumference of the trunk) 3 High- Numerous and/or significant defects present (eg cavity encompassing 30-50% of the circumference of the trunk, major bark inclusions) 4- Severe- Defects are very severe (eg fruiting	Requires specialist knowledge

© Abacus Tree Services Ph: 0425 203 049
 Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
 Client: Lisa Mitchell
 Date: 30 August 2018

	bodies, cavity encompassing more than 50% of the trunk)	
Size of defective part	Rates the size of the part most likely to fail. The larger the part that fails the greater the potential for damage. 1- Most likely failure less than 150mm in diameter 2- Most likely failure 150-450mm in diameter 3- Most likely failure 450-750mm in diameter 4- Most likely failure more than 750mm in diameter	
Target rating	Rates the use and occupancy that would be struck by the defective part: 1. Occasional use (jogging, cycle track 2. Intermittent use (e.g picnic area, day use parking 3. Frequent use, secondary structure (eg seasonal camping, storage facilities) 4. Constant use structures (year round use for a two of hours each day, residences)	
Hazard rating	Failure potential + size of part + target rating Add each of the above sections for a two out of 12	The final two identifies the degree of risk. The next step is to determine a management strategy. A rating in this column does not condemn a tree but may indicate the need for more investigation and a risk management strategy.
Root Zone	C-Compaction D- Damaged/wounded roots E- Exposed roots Ga- Tree in graded bed Gi- Girdled roots Gr- Grass K-Kerb close to tree L+- Raised soil level L- Lowered soil level M- Mulched Pa- Paving concrete bitumen	

© Abacus Tree Services Ph: 0425 203 049
 Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
 Client: Lisa Mitchell
 Date: 30 August 2018

	Pr- Roots pruned O-Other	
Defects	B-Borers C-Cavity D-Decay Dw-Deadwood E-Epicormics I-Inclusions L- Lopped LDCMP- Leaf damage by chewing mouthpiece insects M- Mistletoe/parasites MBA- Multi branch attachments PD- Parrot damage PFS- Previous failure sites S-Splits/Cracks T-Termites TL- Trunk lean TW- Trunk wound O-Other	
Services/adjacent structures	Bs- Bus stop Bu- Building within 3 metres Hvo- High voltage open wire construction Hvb- High voltage bundled (ABC) Lvo- Low voltage open wire construction Lvb- Low voltage bundled (ABC) Na- No services above Nb- No services below ground Si- Signage SL- Street light T- Transmission U- Underground services O- Other	More than one of these may apply

© Abacus Tree Services Ph: 0425 203 049
 Project: 103 Birchgrove Road, Birchgrove N.S.W 2041
 Client: Lisa Mitchell
 Date: 30 August 2018