NSW GOVERNMENT | Land & Housing Corporation

Our Ref | HOA/56450

The Department of Planning Infrastructure
GPO Box 550
Sydney NSW 2001

Attention: Juliet Grant

Dear Ms Grant,

RE: SITE COMPATIBILITY CERTIFICATE APPLICATION
118 – 120 HANNANS ROAD, NARWEE (LOTS 139 & 140 in DP 35912)

The NSW Land and Housing Corporation is seeking a site compatibility certificate under "Division 5 Residential flat buildings—social housing providers, public authorities and joint ventures" of the State Environmental Planning Policy Affordable Rental Housing 2009 at the abovementioned site.

It is proposed to construct a residential development containing a three (3) storey residential flat building comprising ten (10) units and five (5) two storey townhouses resulting in a total of 15 units on the subject site. The site is currently zoned 2(a) Residential under the Canterbury City Council Planning Scheme Ordinance 1970 and residential flat buildings are a prohibited use in this zone.

The site consists of vacant land at 118 Hannans Road and an older style, single storey brick dwelling is located at 120 Hannans Road. This existing cottage is over 50 years old built as part of a larger Housing Commission development and has reached the end of its life cyle. This dwelling and other surrounding properties in the area which are owned by the NSW Land and Housing Coporation are earmarked for future demolition and redevelopment as the costs associated to upgrade and maintain these properties are becoming financially unsustainable.

A higher density development is considered to be reasonable and justifiable. The site is located within the Sydney Region and is within 450 metres of the entrance to Narwee railway station. The site is also close to a wide range of local services, community and cultural facilities, educational facilities, shops and infrastructure. The presence of these services in the area and surrounding neighbourhoods are considered to be extensive and will be more than able to meet the demands and needs of the residents who will live in the proposed development. The close proximity to public transport also enables easy access to regional and metropolitan services.

It is noted that although residential flat buildings are not a permissible use on the site, the proposal has a number of positive impacts as follows:

- Providing more affordable housing close to public transport and services is consistent with the aims of the Metropolitan Plan and objectives of the Draft South Subregional Strategy;
- the dwelling on the site, including those in surrounding areas have reached the end of their life cycle and need to be redeveloped in the near future as on-going

223-239 Liverpool Road, Ashfield NSW 2131
Locked Bag 4001, Ashfield BC 1800
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maintenance and upgrade of these old dwellings is not the best use of public funds;

- there is currently a shortage of well serviced sites and the proposal maximises the site's development potential to allow for much needed affordable housing in the Canterbury Local Government Area and would assist in achieving its dwelling targets under the Metropolitan Plan;
- the proposed development as designed is in keeping with the emerging and the future character of the area and fulfils new and flexible housing needs for its residents;
- the proposal demonstrates that higher densities may be achieved without having an adverse impact on the streetscape, adjoining properties and the surrounding area and respecting the amenity of the neighbours;
- the proposal has been designed to protect the natural environment by reducing energy and water consumption, facilitates recycling and managing stormwater runoff; and
- a site compatibility certificate would allow the Land and Housing Corporation to take advantage of funding opportunities without having to undergo the rezoning process.

The proposal has been discussed with Canterbury City Council and the Department of Planning and Infrastructure and no major concerns regarding the proposed development were raised at these meetings.

A detailed attachment to the application form (three hard copies) has been enclosed for the Department's consideration as follows:

- Map and Detailed description of the land;
- Copy of proposed site layout;
- Copy of zoning extract;
- Development Proposal Information – Context, Proposal, Strategic Justification and Pre-lodgement consultation;
- Additional information for statements against site compatibility criteria; and
- Site compatibility matters in Section C2 of the form.

An electronic copy of the above information has also been enclosed for your consideration.

Three copies of the concept plans, a completed application form and a cheque for the amount of $850.00 covering the site compatibility application fee are also included with this application.

Any enquiries or correspondence concerning this project should initially be directed to Anna Tomas, Senior Planner, who can be contacted by telephone on 8753-8427 or by email at anna.tomas@services.nsw.gov.au

Yours sincerely

28.06.12

Daniel Ouma-Machio
Manager Planning, Technical Services

NSW GOVERNMENT | Planning

STATE ENVIRONMENTAL PLANNING POLICY (AFFORDABLE RENTAL HOUSING) 2009

DIRECTOR-GENERAL'S SITE COMPATIBILITY CERTIFICATE—APPLICATION FORM

Date received: ___/___/___

Site compatibility application no. _____

LODGEMENT

Instructions to users

This application form is to be completed by a **public authority, social housing provider, or applicant undertaking development with the Land and Housing Corporation** who wishes to apply to the Director-General of the Department of Planning for a site compatibility certificate under Division 5, Part 2 of State Environmental Planning Policy (Affordable Rental Housing) 2009 (the SEPP).

A site compatibility certificate is required under clause 50(2A) of the Environmental Planning and Assessment Regulation 2000 to accompany development applications for certain classes of development identified in the SEPP. In particular, consent for development under clause 36 of the SEPP may be granted only if the development is the subject of a certificate from the Director-General certifying that the development is compatible with surrounding land uses.

Before lodging this application, it is recommended that you consult with the Department of Planning concerning your development proposal, including whether a site compatibility certificate is required and what application fee will apply. The application fee must be provided at the time you lodge this application form.

To ensure that your application is accepted, you must:

- complete **all** relevant parts of this form, and
- submit **all** relevant information required by this form, and
- provide **3 copies** of this form and attached documentation, and
- provide form and documentation in **electronic format** (e.g. CD-ROM).

NB: The Department of Planning may request further information if your application is incomplete or inadequate.

All applications **must be lodged** with the Director-General, by courier or mail. Applications can be lodged with the relevant regional office of the NSW Department of Planning. Please refer to www.planning.nsw.gov.au for contact details.

PART A — APPLICANT AND SITE DETAILS

A1 APPLICANT FOR THE SITE COMPATIBILITY CERTIFICATE

Name of public authority / social housing provider / applicant undertaking development with the Land and Housing Corporation

Land and Housing Corporation

☐ Mr ☐ Ms ☐ Mrs ☐ Dr ☐ Other

First name

Family name

Street address — Unit/street no.: 223 - 239; Street name: Liverpool Road

Suburb or town: Ashfield; State: NSW; Postcode: 2131

Postal address (or mark 'as above') — PO Box or Bag: Locked Bag 4001; Suburb or town: Ashfield; State: NSW; Postcode: BC 1800

Daytime telephone: 02 8753 8427; Fax: 02 8753 8015

Email: anna.tomas@services.nsw.gov.au

Mobile

A2 SITE AND PROPOSED DEVELOPMENT DETAILS

Identify the land you propose to develop and for which you seek the Director-General's site compatibility certificate.

NAME OF PROPOSAL

Proposed three (3) storey residential flat building comprising ten (10) units and five (5) two storey townhouses resulting in a total of 15 units

NSW DEPARTMENT OF PLANNING – DIRECTOR-GENERAL'S SITE COMPATIBILITY CERTIFICATE – APPLICATION
STATE ENVIRONMENTAL PLANNING POLICY (AFFORDABLE RENTAL HOUSING) 2009

STREET ADDRESS

Unit/street no.	Street or property name	
118 - 120	Hannans Road	
Suburb, town or locality	**Postcode**	**Local government area**
Narwee	2209	Canterbury City Council

NAME OF PROPERTY

REAL PROPERTY DESCRIPTION

Lots 139 & 140 DP 35912

Attach map and detailed description of land.

The **real property description** is found on a map of the land or on the title documents for the land. If you are unsure of the real property description, you should contact the Department of Lands. Please ensure that you place a slash (/) to distinguish between the lot, section, DP and strata numbers. If the proposal applies to more than one piece of land, please use a comma to distinguish between each real property description.

LAND OWNER'S NAME AND CONTACT PHONE NO.
If the land owner is the same as the applicant on this site compatibility certificate form please write 'the applicant' here.

Land and Housing Corporation Contact: Anna Tomas, Senior Planner 02 8753 8427

DEVELOPMENT PROPONENT'S NAME AND CONTACT PHONE NO.
Who will be lodging any subsequent development application to council? If the development proponent is the same as the applicant on this form for a site compatibility certificate please write 'the applicant' here.

'The Applicant'

DESCRIPTION OF PROPOSED DEVELOPMENT. Include proposed uses, access and height of buildings or structures.

Proposed 3 Storey Residential Flat Buildings comprising 10 units and 5 two storey Townhouses resulting in a total of 15 units

Attach copy of proposed site layout.

CURRENT ZONING OF LAND AT THE PROPERTY

The site is zoned 2(a) Residential under the Canterbury City Council Planning Scheme Ordinance 1970.

CURRENT LAND USE AND APPROVALS AT THE PROPERTY e.g. land use type, approved developments on site.

Current land use is "residential". 118 Hannans Road is a vacant site and 120 Hannans Road currently contains a single storey detached brick cottage with tile roof built in circa 1959 as part of a larger Housing Commission development.

ZONING OF LAND ADJACENT TO THE PROPERTY. List zones for ALL adjoining land.

The zoning of adjacent land comprises of zone 2(a) Residential under the Canterbury City Council Planning Scheme Ordinance 1970.

CURRENT LAND USE AND KNOWN APPROVALS ON THE ADJACENT LAND

Adjoining development located along Hannans Road on either side of the subject site comprise of single storey brick dwellings of tile roof construction similar to the existing dwelling located on 120 Hannans Road. Located directly opposite the site at 85 – 91 Hannans Road is a Land and Housing Corporation residential development comprising of 17 units of single and double storey brick construction.

Attach copy of zoning extract from the relevant LEP or other environmental planning instrument showing zoning at the site and all adjoining zones in relation to the site.

PART B — RESIDENTIAL FLAT BUILDINGS NEAR RAILWAY STATIONS AND NOMINATED TOWNS (CLAUSE 36 OF SEPP)

In this Part, identify the reasons why you need to apply for a Director-General's site compatibility certificate.

B1 IS THE PROPOSAL FOR DEVELOPMENT UNDER CLAUSE 36 OF THE SEPP?

1.1. Is the proposal for residential flat buildings by or on behalf of a public authority or social housing provider or by a person who is undertaking the development in a joint venture with the Land and Housing Corporation?

☒ Yes ☐ No. This section does not apply.

1.2. If yes, is the proposed development to be located in the Sydney Region within 800 metres of a public entrance to a railway station or light rail station, or in the case of a light rail station with no entrance – a platform of the light rail station,
OR
within 400 metres of land in Zone B3 Commercial Core or Zone B4 Mixed Use or in an equivalent zone, of any of the following towns: Albury, Ballina, Batemans Bay, Bathurst, Bega, Bowral, Cessnock, Charlestown, Coffs Harbour, Dapto, Dubbo, Glendale–Cardiff, Gosford, Goulburn, Grafton, Lismore, Maitland, Morisset, Newcastle, Nowra, Orange, Port Macquarie, Queanbeyan, Raymond Terrace, Shellharbour, Tamworth, Taree, Tuggerah–Wyong, Tweed Heads, Wagga Wagga, Warrawong, Wollongong.

☒ Yes Which station or town? Narwee railway station

☐ No. This section does not apply.

1.3. If yes, is the proposed development to be located in a land use zone in which development for the purpose of a residential flat building is **not** permissible on the land under another environmental planning instrument?

☒ Yes. What zone? Zone 2(a) Residential under the Canterbury City Council Planning Scheme Ordinance 1970.

☐ No. This section does not apply.

1.4. Did you answer YES to all questions from 1.1 to 1.3 above?

☒ Yes. You require a site compatibility certificate under clause 36 of the SEPP. **Proceed to Part C.**

☐ No. **DO NOT** continue filling out this form. A site compatibility certificate will not be issued.

INTERNAL DEPARTMENT USE ONLY — SUMMARY OF PART B

2. APPLICATION OF SEPP TO THE SITE

2.1. Does the proposed development require a site compatibility certificate under the SEPP?

☐ Yes ☐ No

APPLICANT FOR SITE COMPATIBILITY CERTIFICATE

Public authority	☐ Yes	☐ No
Social housing provider	☐ Yes	☐ No
Applicant undertaking development with the Land and Housing Corporation	☐ Yes	☐ No

Name of public authority / social housing provider / applicant undertaking development with the Land and Housing Corporation

Note: *Social housing provider* is defined under the SEPP (Affordable Rental Housing) 2009 as any of the following:

- Department of Human Services
- Land and Housing Corporation
- a registered community housing provider
- Aboriginal Housing Office
- a registered Aboriginal housing organisation within the meaning of the *Aboriginal Housing Act 1998*
- a local government authority that provides affordable housing
- a not-for-profit organisation that is a direct provider of rental housing to tenants.

PART C — SITE COMPATIBILITY OF THE PROPOSED DEVELOPMENT

In this Part, provide documentation to describe the development proposal, its context, strategic justification and compatibility with surrounding land uses.

C1 DEVELOPMENT PROPOSAL INFORMATION

1. CONTEXT

Attach information to support the site context such as photos, maps and written evidence.

- Description of the site and the surrounding environment (including all adjacent lands)
  - location, zoning of the site, existing and approved uses, built form, and past land uses
  - zoning, current land uses and built form of surrounding lands
  - areas or items of cultural heritage significance on site or within surrounding lands (including Aboriginal cultural heritage and other cultural heritage)
  - natural environment on site and of surrounding lands (including significant environmental values and natural resources)
  - hazards and natural constraints on site and of surrounding lands (e.g. flood prone land, bush fire risks)
- Access to services and facilities
  - access to transport infrastructure and services, accessible pedestrian routes
  - provision of utilities including water, sewage, electricity and gas
  - access to social infrastructure including hospitals and other medical facilities, schools, community services, open space and cultural and recreational facilities
  - location and description of available shops and other business services

2. PROPOSAL

Attach information to adequately describe the development proposal (including photos, maps etc).

- Description of the proposal including numbers of units/dwellings
- Proposed site layout and relationship to the surrounding environment including any areas or items of cultural heritage significance, the natural environment, and hazards and natural constraints
- Building envelope (footprint and height) relative to any adjoining development/uses; indicative layout of proposed development in relation to adjoining development/uses; floor space ratio and setbacks; other relationships between the proposed development and the existing built environment

3. STRATEGIC JUSTIFICATION

Attach brief description of the strategic justification for the proposed development – limit to 10 pages

- Consistency with regional and local strategies
- Adequacy of services and infrastructure to meet demand
- Environmental benefits and appropriate management of constraints
- Public benefits from developing the site for the proposed purpose

4. PRE-LODGEMENT CONSULTATION WITH THE CONSENT AUTHORITY (COUNCIL) AND INFRASTRUCTURE/SERVICE PROVIDERS

Attach evidence of pre-lodgement consultation

- Evidence of consultation
- Description of and response to issues raised in consultation

Note: Pre-lodgement discussion with the council and with agencies such as the Roads and Traffic Authority, Rural Fire Service and providers of infrastructure and services such as health, community, transport, electricity, water, and sewerage infrastructure and services, will assist in preparation and assessment of your application.

C2 STATEMENT ADDRESSING SEPP SITE COMPATIBILITY CRITERIA

Applicants should provide a statement demonstrating whether the site is suitable for additional uses, and that those uses are compatible with surrounding land uses. In doing so, have regard to (at least) the following matters for consideration outlined under clause 37 of the SEPP:

1. EXISTING USES AND APPROVED USES OF LAND IN THE VICINITY OF THE PROPOSED DEVELOPMENT

(See Attachment)

2. THE IMPACT THAT THE PROPOSED DEVELOPMENT (INCLUDING ITS BULK AND SCALE) IS LIKELY TO HAVE ON THE EXISTING USES, APPROVED USES AND USES THAT ARE LIKELY TO BE THE PREFERRED FUTURE USES OF THE SURROUNDING LAND.

(See Attachment)

3. THE SERVICES AND INFRASTRUCTURE THAT ARE OR WILL BE AVAILABLE TO MEET THE DEMANDS ARISING FROM THE DEVELOPMENT (E.G. COMMUNITY, HEALTH, EDUCATION, TRANSPORT AND RETAIL SERVICES)

(See Attachment)

4. THE LIKELIHOOD OF THERE BEING ANY ADVERSE EFFECT ON THE ENVIRONMENT OR UNACCEPTABLE ENVIRONMENTAL RISKS TO THE LAND. CONSIDER THE NATURE OF THE SURROUNDING ENVIRONMENT, INCLUDING KNOWN SIGNIFICANT ENVIRONMENTAL VALUES, RESOURCES OR HAZARDS

(See Attachment)

C3 ADDITIONAL COMMENTS

(See Attachment)

PART D — CHECKLIST, PAYMENT AND SIGNATURES

D1 APPLICATION CHECKLIST

Please check that you have provided all the information required for your application.

I have completed all sections of this application form.	☒ Yes	☐ No
I have attached all relevant supporting information (please check box as relevant).	☒ Yes	☐ No
▪ Map and detailed description of land	☒	
▪ Copy of proposed site layout	☒	
▪ Copy of zoning extract or other evidence	☒	
▪ Proposal information - context, proposal, strategic justification, and pre-lodgement consultation	☒	
▪ Additional information for statements against site compatibility criteria	☒	
I have addressed the following SEPP site compatibility matters in **section C2** of the form.	☒ Yes	☐ No
1. Existing uses and approved uses	☒	
2. Impact of development including bulk and scale	☒	
3. Availability of services and infrastructure	☒	
4. Effect on environment or environmental risks	☒	
I have provided three **(3)** hard copies of this form and all relevant supporting information	☒ Yes	☐ No
I have provided the application form and supporting information in electronic format	☒ Yes	☐ No

I have enclosed the application fee (see below for details) ☒ Yes ☐ No

D2 APPLICATION FEE

You are required to pay a fee for the assessment of an application for a Director General's site compatibility certificate. The prescribed fee under clause 262A of the Environmental Planning and Assessment Regulation 2000 is calculated at $250 for lodgement, plus an additional $40 for each dwelling in the development in respect of which the certificate is to be issued. The maximum fee payable is $5,000. Please contact the Department of Planning prior to application lodgement to verify the amount payable.

Number of dwellings in the development to which a site compatibility certificate is required	Estimated fee payable ($250 plus an additional $40 for each dwelling in the development)
15	$250 + ($40 x 15) = $850

D3 CERTIFICATE APPLICANT'S AUTHORISATION

By signing below, I/we hereby:

- apply, subject to satisfying the relevant requirements under State Environmental Planning Policy (Affordable Rental Housing) 2009 for a Director-General's site compatibility application pursuant to clause 50(2A) of the Environmental Planning and Assessment Regulation 2000
- provide a description of the proposed development and address all matters required by the Director-General pursuant to clause 37(6)(b) of State Environmental Planning Policy (Affordable Rental Housing) 2009
- declare that all information contained within this application is accurate at the time of signing.

Signature(s)

Name(s)

In what capacity are you signing, if you are not the owner of the land?

Date

NSW LAND AND HOUSING CORPORATION
Signed 28.06.12
DANIEL OUMA-MACHIO
MANAGER PLANNING, TECHNICAL SERVICES
As a delegate of Director General
Department Finance & Services

D4 LANDOWNER'S CONSENT

As the owner(s) of the subject land for which the proposed development will be permitted and in signing below, I/we hereby agree to the lodgement of an application for a Director-General's site compatibility certificate.

Signature(s)

Name(s)

Date

NSW LAND AND HOUSING CORPORATION
Signed 28.06.12
DANIEL OUMA-MACHIO
MANAGER PLANNING, TECHNICAL SERVICES
As a delegate of Director General
Department Finance & Services

PART C – SITE COMPATIBILITY OF THE PROPOSED DEVELOPMENT 118 – 120 HANNANS ROAD, NARWEE

PART A – APPLICANT AND SITE DETAILS

A1 APPLICANT FOR THE SITE COMPATIBILITY CERTIFICATE

Refer to Application Form

A2 SITE AND PROPOSED DEVELOPMENT DETAILS

Map and detailed description of land

The 'subject site' is located at 118-120 Hannans Road, Narwee and consists of two (2) freehold lots with a total site area of 1811.4 m² (refer to detail and contour plan in Appendix A).

The legal description of the land is Lots 139 & 140 in Deposited Plan 35912. The land is owned by the NSW Land and Housing Corporation.

The subject site has a main street frontage to Hannans Road. The subject site slopes down from Hannans Road towards the rear boundary. 118 Hannans Road is a vacant site and 120 Hannans Road currently contains a single storey detached brick cottage with tile roof built in circa 1959 as part of a larger Housing Commission development. The site has a cross fall from the south west to the north east corner of the site of approximately 3 metres (refer to Figure 1 for aerial map of subject site).



Figure 1: Aerial Map 118-120 Hannans Road, Narwee.

Source – www.googlemaps.com

The subject site is located in an established and changing residential area and a large number of surrounding and nearby properties are owned by the NSW Land and Housing Corporation. Surrounding streets include Karne Street to the west and Nirimba Avenue to the north of the site (Figure 2 identifies the site in its local context).



Figure 2: Locality Map 118-120 Hannans Road, Narwee.
Source – www.googlemaps.com

Description of proposed development (include proposed uses, access and height of building or structures)

The Land and Housing Corporation proposes to construct a total of 15 residential units on the subject site comprising of a three (3) storey residential flat building containing 10 units and 5 x two storey townhouses. The maximum height of the residential flat building would be 9.4 metres. The three (3) storey building has been located at the front of the site and also setback from the street to minimise the impact of overlooking and overshadowing onto adjoining properties. The double storey townhouses at the rear of the site would have a maximum height of seven (7) metres.

The development data details of the proposed development are as follows:

Unit No	Dwelling Type	Bedroom	Area (m^2)
1	Ground Floor of RFB Adaptable	2	75
2	Ground Floor of RFB Adaptable	1	65
3	Ground Floor of RFB Adaptable	1	65
4	First Floor of RFB Adaptable	2	75
5	First Floor of RFB Adaptable	1	65
6	First Floor of RFB Adaptable	1	65
7	First Floor of RFB Adaptable	2	75
8	Second Floor of RFB Adaptable	1	65
9	Second Floor of RFB Adaptable	1	65
10	Second Floor of RFB Adaptable	3	110
11	Townhouse	2	85
12	Townhouse	2	85
13	Townhouse	2	85
14	Townhouse	2	85
15	Townhouse	2	85
Total Gross Floor Area	**Note: RFB refers to Residential Flat Building**		1150

The residential flat building is proposed along the front of the site and would address Hannans Road and the townhouses are located along the rear boundary of the site. Pedestrian access into the development would be available from Hannans Road. A pedestrian pathway/access ramp is proposed adjacent to the main driveway located along the eastern boundary and would lead to the central staircase and lift foyer entrance on the ground floor of the residential flat building.

The main driveway would be located off Hannans Road and would have an entrance width of 3.790 metres and lead to seven (7) parking spaces situated underneath the residential flat building. These parking spaces would be for the use of the residents and visitors of the residential flat building and townhouses (refer to Figure 3 for proposed site layout).

Landscaping screens are proposed along the rear and eastern boundaries for added privacy. Trees and shrubs are proposed along these boundaries to reduce overlooking onto adjoining owners and to provide a pleasant outlook for the residents and visitors. A total landscaped area of 650m^2 is proposed on the site.

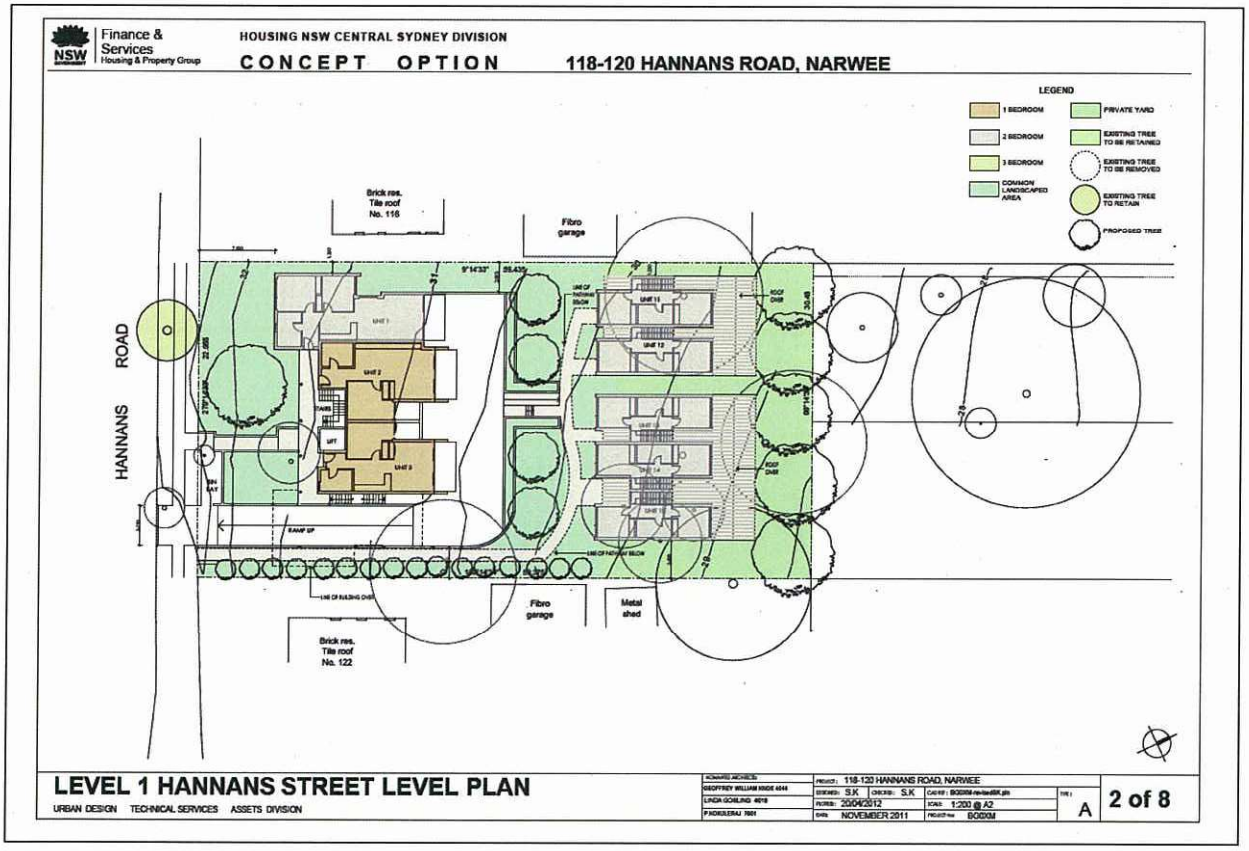
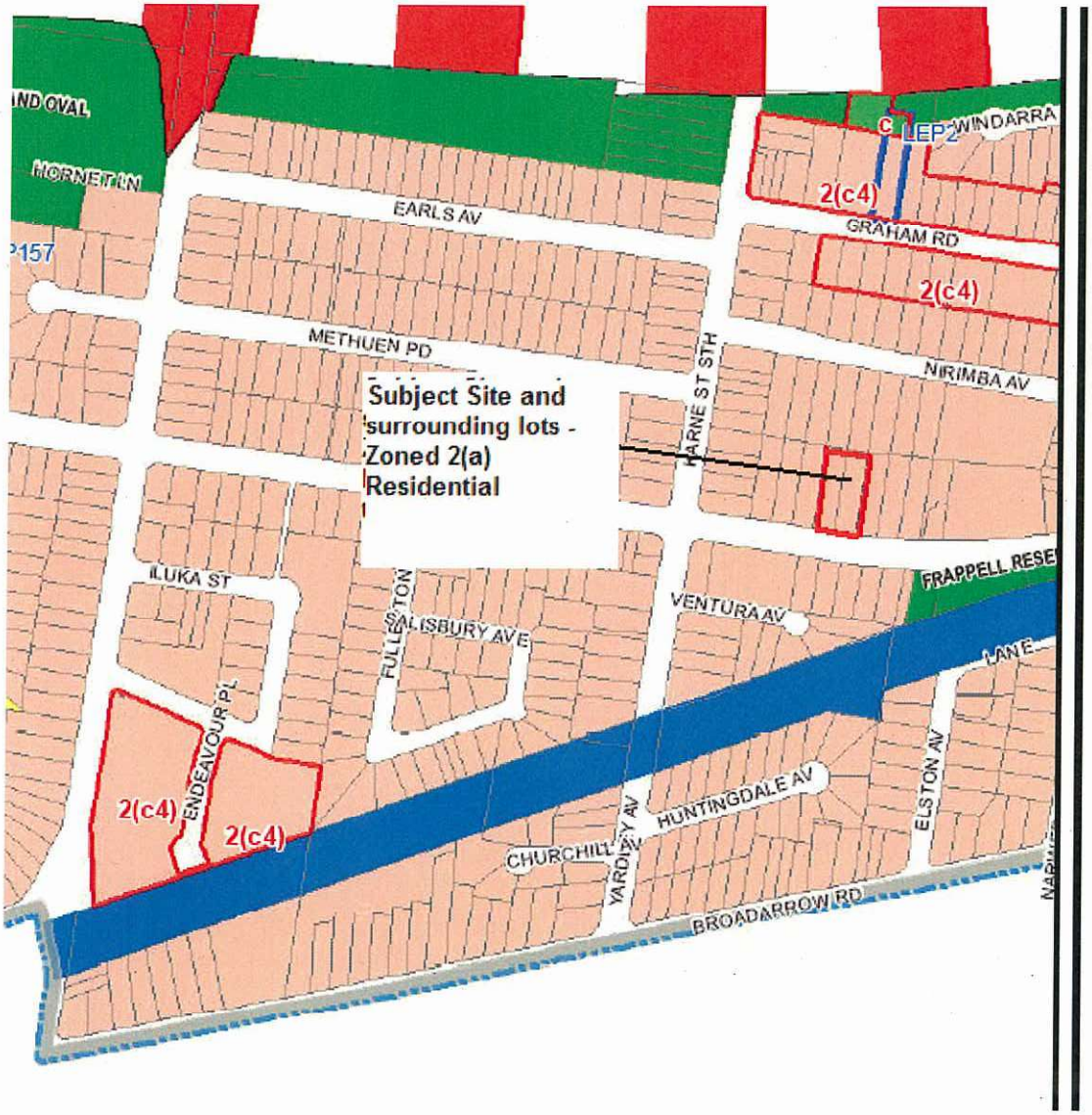


Figure 3: Proposed Site Layout
Source – Land and Housing Corporation

Current Zoning of the Land at the Property

The subject site is currently zoned 2(a) Residential under the Canterbury City Council Planning Scheme Ordinance 1970. (Refer to Figure 4).



ZONING LEGEND

2. RESIDENTIAL

(a) RESIDENTIAL

Figure 4: Extract of Zoning Map
Source – Canterbury Planning Scheme Ordinance Zones, Canterbury City Council

Current Land Use and Approvals at the Property

The current land use of the site is "residential". Number 118 Hannans Road is a vacant site and number 120 Hannans Road currently contains a single storey detached brick cottage with tile roof built circa 1959 as part of a larger Housing Commission development.

Zoning of Land Adjacent to the Property

The zoning of adjacent land comprises of zone 2(a) Residential under the Canterbury City Council Planning Scheme Ordinance 1970. (Refer to Figure 4).

Current Land Use and Known Approvals on the Adjacent Land

Adjoining development located along Hannans Road on either side of the subject site comprise of single storey brick dwellings of tile roof construction similar to the existing dwelling located on 120 Hannans Road. Located directly opposite the site at 85 – 91 Hannans Road is a Land and Housing Corporation residential development comprising of 17 units of single and double storey brick construction.

PART B – RESIDENTIAL FLAT BUILDINGS NEAR RAILWAY STATIONS AND NOMINATED TOWNS (CLAUSE 36 OF SEPP)?

B1 IS THE PROPOSAL FOR DEVELOPMENT UNDER CLAUSE 36 OF THE SEPP?

1.1 Is the proposal for residential flat buildings by or on behalf of a public authority or social housing provider or by a person who is undertaking the development in a joint venture with the Land and Housing Corporation?

☑ Yes

1.2 If yes, is the proposed development to be located in the Sydney Region within 800 metres of a public entrance to a railway station or light rail station, or in the case of a light rail station with no entrance – a platform of the light rail station,
OR
within 400 metres of land in Zone B3 Commercial Core or Zone B4 Mixed Use or in an equivalent zone, of any of the following towns: Albury, Ballina, Batemans Bay, Bathurst, Bega, Bowral, Cessnock, Charlestown, Coffs Harbour, Dapto, Dubbo, Glendale-Cardiff, Gosford, Goulburn, Grafton, Lismore, Maitland, Morrisset, Newcastle, Nowra, Orange, Port Macquarie, Queanbeyan, Raymond Terrace, Shellharbour, Tamworth, Taree, Tuggerrah-Wyong, Tweed Heads, Wagga Wagga, Warrawong, Wollongong.

☑ Which station or town?

Narwee railway station (located 450 metres from the subject site and located within the Sydney Region)

1.3 If yes, is the proposed development to be located in a land use zone in which development for the purpose of a residential flat building is **not** permissible on the land under another environmental planning instrument?

☑ Yes

What zone? The subject site is currently zoned 2(a) Residential under the Canterbury City Council Planning Scheme Ordinance 1970.

1.4 Did you answer YES to all questions from 1.1 to 1.3 above?

☑ Yes.

You require a site compatibility certificate under clause 36 of the SEPP. **Proceed to Part C.**

PART C – SITE COMPATIBILITY OF THE PROPOSED DEVELOPMENT

C1 DEVELOPMENT PROPOSAL INFORMATION

1. CONTEXT

- **Description of the site and the surrounding environment (including all adjacent lands)**

Property Location

The 'subject site' is located at 118-120 Hannans Road, Narwee and consists of two (2) freehold lots with a site area of 1811.4m².

The legal description of the land is Lots 139 & 140 in Deposited Plan 35912.

The subject site has a main street frontage to Hannans Road and slopes down from Hannans Road towards the rear boundary of the site.

Current Zoning

The site is zoned 2(a) Residential under the Canterbury City Council Planning Scheme Ordinance 1970 (refer to Appendix B for Section 149 Certificate for each site).

The objectives of the 2(a) Residential zoning are:

(a) Residential development comprising single dwellings, dual occupancies, townhouses and villa homes; and

(b) Development which will not detrimentally affect the residential character or amenity of the area.

Residential flat buildings are currently a prohibited use in the 2(a) Residential Zone. However, 2(c4) zoned land which allows the construction of residential flat buildings is located approximately 200 metres north of the subject site. There are also existing forms of older style three (3) storey residential flat development located along Hannans Road situated directly across from Narwee railway station and located approximately 450 metres from the site (refer to Figure 6).

State Environmental Planning Policy (Affordable Rental Housing) 2009

Subject to "Clause 13 Division 1 In-fill Affordable Housing" of the Affordable Rental Housing SEPP, bonus floor space ratios are provided for any form of residential accommodation permitted on the land. Permissible forms of development on the land include villas and townhouses. If the bonus floor space ratios allowed under the ARH SEPP were to be utilised under Clause 13 of this SEPP, a maximum floor space ratio of 1:1 could essentially be applied to the site.

However, the bonus floor space ratios allowed have not been used in this instance as the proposed development having a total floor space ratio of 0.6:1 is considered to be the best design option for this site. Although higher density development is proposed, it does not result in an over development of the site and has been designed to respect the amenity of the residents and surrounding neighbours.

The Draft Canterbury Local Environmental Plan

The Draft Canterbury Local Environmental Plan (LEP) will be on public exhibition from 29 March to 11 May 2102. The Land and Housing Corporation will make a submission to request that its properties located near Narwee railway station be upzoned to allow higher density development to allow the construction of residential flat buildings. This will reflect the aims of the Metropolitan Plan to develop more energy efficient homes, reduce dependence on cars and promote use of public transport.

Under the Draft Canterbury LEP, the subject site is proposed to be zoned R3 Medium Density Residential. The general purpose of this zone is for land where a variety of medium density accommodation is to be established or maintained. Permissible residential uses in this zone include Dwelling Houses, Dual Occupancy, Semi-detached dwellings, Boarding houses, Attached dwellings, Multi dwelling housing, Group homes, and Seniors housing. A maximum floor space ratio (FSR) of 0.5:1 and a maximum building height of 8.5 metres would apply to this medium density zone.

Canterbury Development Control Plan

A new comprehensive Development Control Plan (DCP) is currently under preparation to support the new Draft LEP. This DCP will be adopted by Council at the same time as the gazettal of the new LEP. The comprehensive DCP will provide the detail for the new LEP in terms of other development controls and design standards.

Existing and Approved Uses

The site is currently used and approved for residential purposes.

Built form

The current land use of the site is "residential". 118 Hannans Road is a vacant site and 120 Hannans Road currently contains a single storey detached brick cottage with tile roof built in circa 1959 as part of a larger Housing Commission development (refer to Figure 5).



Figure 5: View of Subject Site from Hannans Road, Narwee
Source – www.googlemaps.com

Zoning, Current land uses and built form of surrounding lands

The zoning of surrounding land generally comprises of zone 2(a) Residential under the Canterbury City Council Planning Scheme Ordinance 1970 (refer to Figure 4).

It is evident that the area of Narwee is undergoing a change in its residential character from low density housing to new medium and high density developments as new developments of this type have been constructed in nearby streets. Older cottages are also being replaced by larger modern brick dwellings and is evident by the new double storey brick dwelling located across the subject site at 91 Hannans Road (refer to Figure 6). As this double storey house is perched on higher ground, the proposed development would be situated at a lower height than this existing double storey dwelling.



Figure 6: Modern two storey brick dwelling house located directly across the subject site at 91 Hannans Road, Narwee
Source – Land and Housing Corporation

Three storey residential flat buildings are located at the corner of Nirimba Avenue and Hannans Road, Narwee. Although it is noted that this site is currently zoned Residential 2(c4) and allows for residential flat buildings, the close proximity of the subject site to Narwee railway station demonstrates its suitability for higher density development (refer to Figure 7).



Figure 7: View of residential flat buildings located on the corner of Nirimba Avenue and Hannans Road, Narwee
Source – www.googlemaps.com

Other examples of medium to high density residential development in the area include:

- 19 – 23 Graham Road: Residential flat buildings comprising a total of twenty eight (28) units of four (4) storey construction. This development is located approximately equal distance from the subject site and is situated equal distance from the subject site to Narwee railway station (refer to Figure 8)



Figure 8: View of four storey residential flat buildings located at 19 – 23 Graham Road, Narwee
Source – Land and Housing Corporation

- 25 – 27 Graham Road: Four storey residential flat buildings land located directly adjacent to the residential flat buildings shown in Figure 9 (refer to Figure 9).

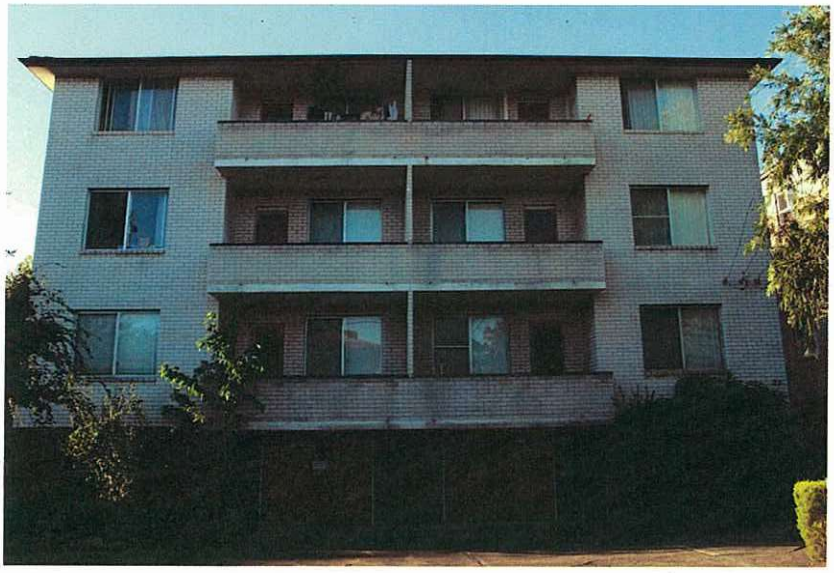


Figure 9: View of four storey residential flat building located at 25 – 27 Graham Road, Narwee
Source – Land and Housing Corporation

- 130 – 136 Hannans Road: Double storey multi-unit residential development located 130 metres east of the subject site (refer to Figure 10).



Figure 10: Multi-unit residential development located at 130 – 136 Hannans Road, Narwee
Source – Land and Housing Corporation

- 17 – 21 Windarra Avenue: three new double storey brick dual occupancies located approximately 600 metres north of the subject site (refer to Figure 11)



Figure 11: View of modern double storey dual occupancy developments located at 17, 19 & 21 Windarra Street, Narwee
Source – www.googlemaps.com



- Corner Graham Road and Nanowie Street: Three storey residential flat building located approximately 400 metres from the subject site (refer to Figure 12)

Figure 12: Three storey residential flat building located at the corner of Graham Road and Nanowie Street, Narwee
Source – Land and Housing Corporation

Areas or Items of cultural heritage significance on site within surrounding lands (including Aboriginal cultural heritage and other cultural heritage)

A search of the Office of the Environment and Heritage Aboriginal Heritage Information Management System Web Services (AHIMS) of the site and 50m buffer from the site conducted on 26 March 2012 did not identify any Aboriginal sites being recorded nor was it a declared Aboriginal place in or near the subject site (refer to Appendix C for the AHIMS searches).

Natural environment on site and of surrounding lands (including significant environmental values and natural resource)

A site investigation report prepared for the site has identified that the subsurface conditions consist of topsoil/fill overlying silty clays and weathered shale. There are no significant trees, items of heritage significance or natural resources located on the site.

Hazards and natural constraints on site and or surrounding lands (eg flood prone land, bush fire risks)

The Section 149 Certificates for the subject sites (Certificates number 22317 & 22341 have confirmed the following):

- Heritage restrictions are not applicable to the site
- There is no notification that the subject properties are affected by the provisions of Section 38 or 39 of the Coastal Protection Act 1979
- The subject site is not within a mine subsidence district within the meaning of Section 15 of the Mine Subsidence Compensation Act 1961
- The land is not affected by a road widening or road realignment proposal
- The land is not affected by a policy restriction to landslip
- The land is not bushfire prone land
- The land is not affected by a policy restriction relating to tidal inundation
- The land is not affected by a policy restriction relating to subsidence
- The land is not affected by a policy restriction relating to acid sulphate soils
- The land is not affected by a policy restriction relating to unhealthy building land
- Development on the land for the purpose of residential flat buildings is not subject to any flood related development controls
- Matters pertaining to contaminated land are not applicable

Refer to Appendix B for the Section 149 Certificates

- **Access to services and facilities**

Access to transport infrastructure and services, accessible pedestrian routes

A bus stop is located approximately 100 metres east of the subject site. Another bus stop is located approximately 130 metres west of the subject site situated close to the roundabout at Karne Street and Hannans Road. The Punchbowl Bus Company (Route 944) provides a bus service along Hannans Road. This bus route provides half hourly services between the hours of 6am and 6pm to Roselands Shopping Centre, Punchbowl Station, Bankstown interchange and Centro Bankstown. Bankstown City Centre provides an ample range of shopping, retail, banking, medical and community facilities and services.

The site is within 800 metres of a railway station in the Sydney Region as required under Division 5 of the Affordable Rental Housing SEPP. The subject site is located approximately 450 metres west of the site to Narwee Railway Station and is part of the East Hills Railway line. The east Hills line is being quadruplicated and Narwee Station is identified as a larger commuter station under the NSW Transport Strategy.

A concrete footpath is located in front of the subject site and a footpath is located on both sides of Hannans Road. The pedestrian footpath pathway located outside the site leads directly to Narwee railway station and nearby shops. Four traffic islands are also located at the roundabout of Karne Street and Hannans Road to provide pedestrians with a safe route when crossing these busy roads. Traffic lights are located at the junction of Hannans and Penshurst Road at the entrance of Narwee Railway station.

Provision of utilities including water, sewerage, electricity and gas

Water, sewer, electricity, telephone and gas services are all available to the property. The locations of the services are shown on the detail and contour plan (refer to Appendix A).

Access to social infrastructure including hospitals and other medical facilities, schools, community services, open space and cultural and recreational facilities

Hospitals and Medical Facilities

St George Private Hospital and St George Hospital are located approximately 8 kilometres south of the subject site. Canterbury Hospital and Bankstown-Lidcombe Hospital are located approximately 8 kilometres north and 6.4 kilometres from the site respectively. A number of private and public bus companies provide services to these hospitals.

Medical centres are also located in close proximity to the site with a centre being located approximately 450 metres east from the site at 137 Penshurst Road. Narwee Family Practice is located approximately 850 metres south of the site at 4 Fisher Place. Additional medical services and practices are also located in the surrounding suburbs of Roselands and Beverly Hills and Roselands Shopping Centre.

Schools

Beverly Hills North Public School is located at 1 – 3 Shorter Avenue, Beverly Hills located approximately 1.5 kilometres north-west from the subject site. Bus route 944 by Punchbowl Bus Company provides a regular bus service from Hannans Road to Shorter Avenue.

Beverly Girls High School is located at the corner of Broad Arrow Road and King Georges Road and is located approximately 1.2 kilometres east of the subject site. The subject site is located approximately 450 metres from Narwee Railway Station which is located on the Airport and East Hills Line. The next station to the east of this line is Beverly Hills Railway station and is located approximately 400 metres from Beverly Girls High School.

Narwee Primary School is located at 61 – 65 Broad Arrow Road Narwee and is located 850 metres south east of the subject site.

Community Services

Learning Wonderland located at 77 Hannans Road Riverwood is a family owned and operated day care facility and caters for children from 0 to 6 years of age. This centre is located approximately 200 metres west of the subject site.

There are two Active Kids - Centres of Excellence located in Narwee and are situated at 64 and 85 Penshurst Road. These long day care and preschool centres are located approximately 1 kilometre north east from the subject site and provide high quality care for children from six weeks to six years of age.

Bupa Care Services Narwee provides aged care and is located approximately 1.4 kilometres from the subject site at 59 – 63 Karne Street. This service provides care for residents seeking low care (hostel) and high care (nursing home) services on a permanent or respite basis.

The Morris Iemma Indoor Sports Centre is located at 150 Belmore Road Riverwood and situated approximately 2.2 kilometres south west of the subject site. This facility is managed by the YMCA of Sydney and built by Canterbury City Council. Officially opened in March 2011, this modern facility delivers YMCA community programs and caters for a variety of indoor sports including netball, basketball, soccer and volleyball and incorporating a gym, change rooms, cafeteria and childcare services. The Centre provides residents with a place to get fit and healthy in a safe community atmosphere.

Open Space

Robert Gardner Reserve is located along Graham Road Narwee and is situated approximately 700 north-east of the site. This open space corridor situated south of the M5 motorway provides ample open space for walking, picnic and leisure activities.

Bennett Park is located 1.8 kilometres north of the subject site at 86 – 88 Karne Street. This Park contains four full size soccer fields, 2 cricket practice pitches and practice chain wire nets. Amenities at this park include toilets, disabled toilets, dressing rooms, play equipment and a kiosk.

Cultural Facilities

Horizon Theatre Company Ltd was founded in 1997 and is a non-profit, multi-arts organisation situated which provides access, services and opportunities for creative expression to people of all ages. This theatre company is located at the Wiley Park Ampitheatre at 1071 Canterbury Road Wiley Park located approximately 3 kilometres north of the subject site.

The Riverwood Senior Citizens Centre is located at the corner of Washington Avenue and Kentucky Road Riverwood. This Centre runs Community art programs, social activities and dance and exercise classes for Seniors and is located approximately 1.3 kilometres west of the subject site.

Recreational Facilities

Movie cinemas are located in the surrounding suburbs of Beverly Hills, Bankstown and Hurstville and all these areas can be easily accessed by bus and rail transport.

John Mount Reserve is located approximately 1.6 kilometres north-east of the subject site and contain a number of facilities including 4 tennis courts, a playground, a bike and walking path, BBQs and a car park. This reserve also offers a number of amenities including toilets, dressing rooms, picnic sheds and shade structures.

Salt Pan Creek Wetlands located in Riverwood is located along Belmore Road approximately 1.3 kilometres west of the subject site. This reserve contains BBQ facilities, a playground, walkways and cycleways and provides families with the opportunity to enjoy a picnic, ride their bikes and feed the ducks. The reserve also features a wetland with fish, turtles, birdlife and other animals.

Location and description of available shops and other business services

A local shopping strip located along Penshurst Road across the road from Narwee railway station is situated approximately 450 metres east from the site and contains a bakery, newsagent, supermarket, take-away, chemist, medical centre and convenience store. A wider range of shops and services are located approximately 850 metres east from the site along Broad Arrow Road and includes a post office, fruit and vegetable grocer, café, mini-mart, bakery, newsagency, chemist, tobacconist, restaurants, petrol station, veterinary and dental clinic.

Beverly Hills shopping strip located along King Georges Road is situated approximately 1.6 kilometres east of the subject site and is accessible by train or bus. A number of restaurants, shops and businesses are located along this major arterial road.

Roselands Shopping Centre (Centro Roselands) is located approximately 2.6 kilometres north of the subject site. This Centre features department stores, supermarkets, a post office, banks, a food court and numerous speciality stores, medical services and early childhood. Punchbowl Bus (Route 944) provides a half hourly bus service from Hannans Road to Centro Roselands shopping centre.

The subject site is ideally located to major centres including Riverwood, Hurstville and Bankstown. These centres also contain a diverse range of retail, cultural, community and recreational services. Regular bus and train services to these employment centres are available from the site and provide convenient and easy access not only to these centres but also the Sydney CBD.

2. PROPOSAL

- **Description of the proposal**

The Land and Housing Corporation proposes to construct a total of 15 units on the subject site comprising of a three (3) storey residential flat building containing 10 units and 5 x two storey townhouses. The residential flat building is proposed along the front of site and would address Hannans Road and contain 6 x 1 bedroom units, 3 x 2 bedroom units and a 1 x 3 bedroom unit. The five (5) townhouses are proposed along the rear boundary of the site and would each contain two bedroom dwellings.

- **Proposed site layout and relationship to the surrounding environment including any areas or items of cultural heritage significance, the natural environment, and hazards and natural constraints**

Surrounding environment

The site is located within an established residential area dominated by post war cottages and more recently modern multi unit housing.

Site layout and impact on streetscape

To reduce the impact of the development on the streetscape, the centre portion of the residential flat building has been setback a further 2.1 metres from the front building line. As indicated by the Hannans Road elevation, a lighter finish is proposed to the façade of the centre portion and top floor of the residential flat building. This would ensure that these parts of the building were not a prominent feature along the streetscape. This lighter shade would also allow these elements of the buildings to blend with the sky and soften the overall appearance of the building along Hannans Road. The outer portions of the residential flat building are proposed to be a darker shade of brick to follow the domestic rhythm of the street and to be in keeping with the single storey nature of adjoining dwellings.

The skillion roofs of the residential flat building and the townhouses have been especially designed to collect rain water and to allow the rain water to run off more effectively. This design also minimises the overall collection points within the roof and its slope also allows solar panels to be installed on the roof to promote energy efficiency. All roof water would be collected by underground rainwater tanks to be re-used for toilets and landscaping purposes.

Each dwelling within the residential flat building would be provided with a drying line and these would be provided within the balcony of each dwelling. Appropriate screening would be provided for each balcony to ensure that drying lines are not visible from the streetscape.

The townhouses would not be visible from the street and are proposed to be located at the rear boundary of the site to minimise the impact of overlooking and overshadowing onto adjoining properties. Each townhouse would be self contained and would be provided with its own private yard located at the rear of each townhouse. Drying lines would be provided in the private open space area of each townhouse.

Site Orientation and Building Separation

Due to the site's north-south orientation, the residential flat building is proposed at the front of the site to allow the shadows cast by the building to fall onto Hannans Road. This would ensure that the shadows cast at 9am and 12 noon on the 21st of June fall generally within the centre of the site as well as onto Hannans Road. The shadows cast created by the residential flat building at 3pm would fall mainly onto the front yard of the adjoining dwelling located east of the site at 122 Hannans Road.

A distance of 16.6 metres would separate the residential flat building from the townhouses. This ample separation distance would ensure that the shadow casts by the townhouses at 3pm would fall onto the fibro garage and metal shed of the adjoining property at 122 Hannans Road.

- **Building envelope (footprint and height) relative to any adjoining development/uses; indicative layout of proposed development in relation to adjoining development/uses; floor space ratio and setbacks; other relationships between the proposed development and the existing built environment**

Building envelope relative to adjoining development/uses

A double storey, multi unit residential development has recently been constructed directly opposite the subject site. This existing development is similar to the proposed development in relation to its proposed materials and modern built form. The surrounding development would therefore not be out of character with the high density nature of the proposal.

Layout of proposal and impact on privacy

The design of the development would allow privacy to be maintained for neighbours and potential for overlooking onto adjoining properties would be minimised by introducing new trees and landscaping screens on the site. The appropriate siting of trees on the site would also contribute to energy efficiency and increased amenity for the residents by providing shade and acting as landscaping screens and windbreaks.

Four (4) evergreen trees are proposed to be planted at the centre of the site to provide adequate screening between the townhouses and the residential flat building. These trees would grow to a height that would ensure they provided privacy between the buildings but still allowed the adequate sunlight to penetrate the buildings on the site.

Deciduous trees are proposed to be planted along the northern boundary to create a landscaping screen at the rear of the site. As these trees would lose their leaves during the autumn and winter months, it would still allow sunlight to penetrate through the branches and provide adequate solar access to the balconies and living areas of the residential flat building.

The development has been designed to minimise overlooking onto adjoining properties wherever possible and no window openings are proposed along the western boundary of the site. Windows are proposed along the eastern boundary of Unit 15 townhouse which would comprise of a kitchen, laundry and toilet window on the ground floor and a bathroom window

on the top floor. Potential overlooking from this unit to the neighbouring property at 122 Hannans Road would be minimised as these are not high activity rooms and the toilet and bathroom windows would be frosted for complete privacy. In addition, Unit 15 would only overlook onto the fibro garage and metal shed of the adjoining property as the existing dwelling house is located towards the front portion of the site.

The 3.6 metre side setback and the 1.8 metre high boundary fence would also assist in creating a sufficient buffer from the adjoining property. As previously indicated, the townhouse development has been located along the rear of the site to minimise the impact of overshadowing and overlooking onto adjoining properties, which was a major issue of concern in discussions with Council's Planning Officers.

Floor Space Ratio and Setbacks

A floor space ratio of 0.63:1 is proposed for the subject site in contrast to the 0.5:1 allowed under Council's Planning controls. This is considered justification for reasons discussed later in the application.

A 7.5 metre front setback is proposed along Hannans Road and the centre portion of the residential flat building is set back a further 2.1 metres. A minimum side setback of 1.2 metres is proposed along the western boundary and a 7.5 metre setback is proposed along the rear boundary of the site.

The setbacks proposed are considered adequate in regard to providing the adequate separation from the street and adjoining development to maintain privacy and reduce loss of privacy and overlooking onto neighbouring properties.

Solar access

All the balconies and living areas for the residential flat building and the townhouses face north and would receive the necessary levels of solar access. This would result in all units within the development receiving more than 3 hours of direct sunlight a day throughout the year. The shadow diagrams submitted with this application also demonstrate that the adjoining properties to the sides and rear of the site would not be detrimentally impacted by the proposed development.

Landscaping

A communal open space area is proposed at the centre of the site and would include the area where the four evergreen trees would be planted. A seating area would also be provided in this common space to provide the residents with an area for relaxation and socialisation.

A deep soil zone area is proposed at the rear of the site behind the townhouses. This would provide a sufficient area to assist in the growth of a vegetation corridor and promote the growth of mature healthy trees. This area would provide a landscaping screen along the rear boundary fence for additional privacy for both the residents and adjoining neighbours.

A 3.6 metre setback is proposed along the eastern boundary of the site as suggested by the Arborist report to provide the sufficient area required for the zone of influence. This would ensure that the tree located within the property of No 122 Hannans Road and towards the rear portion of the site along the side boundary fence would survive (refer to Appendix D for the Arborist report). A new tree is proposed at the front of the site directly in front of Unit 2 in order to soften the front elevation of the residential flat building and enhance the overall appearance of the development.

A landscaping strip in the form of hedge planting is proposed along the eastern boundary adjacent to the pedestrian pathway which leads directly to the townhouses. This pathway would provide a dual purpose of maintaining privacy to adjoining neighbours as well as providing a pleasant outlook and vista for residents and visitors.

Pedestrian Access

Pedestrian access to the residential flat building is proposed via a pedestrian ramp which would lead from Hannans Road into the lift foyer of the residential flat building. The lift would provide direct access to the carparking area and the first and second floor levels of the residential flat building. A central staircase would provide access to the first and second floor levels of this building.

A separate pedestrian pathway is proposed to the townhouses and would be located along the eastern boundary of the site. This pathway is linked to a series of pathways which lead directly to each townhouse located at the rear of the site.

Parking

A total of seven (7) parking spaces are proposed on site in accordance with the parking requirements of the Affordable Rental Housing SEPP. These seven covered spaces would be located underneath the residential flat building and would be accessible via the central driveway. These parking spaces would be for the benefit of the residents and visitors of the residential flat and townhouse units. Access to the car parking area would also be available via the lift.

3. STRATEGIC JUSTIFICATION

- Consistency with regional and local strategies

Metropolitan Plan for Sydney

The Metropolitan Plan for Sydney 2036 contains a vision and strategic direction for the metropolitan area of Sydney. It provides a framework for sustainable growth and development towards a more connected city with many centres and improved accessibility. This Metropolitan Plan recognises the contribution of the entire 'Global Sydney Region' including all its centres, employment lands and resources in building the productivity and status of the city region.

It aims to strengthen Sydney's city of cities structure by:

- Promoting the regional cities to underpin sustainable growth across Sydney
- Achieving a compact, connected, multi-centred and increasingly networked city structure
- Containing the urban footprint and achieving a balance between greenfields growth and renewal in existing urban areas
- Supporting, protecting and enhancing nationally and internationally significant infrastructure in the metropolitan area
- Identifying and planning for infrastructure to support Global Sydney
- Constantly strengthening Sydney's capacity to attract and retain global businesses and investment
- Strengthening Sydney's role as a hub for NSW, Australia and South East Asia through better communications and transport connections
- Strengthening Sydney's position as a contemporary global tourism destination

- Ensuring Sydney continues to support major events in iconic locations and remains competitive in the global event and convention market
- Planning and coordinating delivery of infrastructure to meet metropolitan housing and employment growth targets

The proposed development meets these objectives by developing more efficient homes, reducing dependence on cars, promoting public transport, reducing green house emissions and containing Sydney's urban sprawl.

Draft South Subregional Strategy

The Draft South Subregional Strategy provides greater details to the Metropolitan Plan and includes the Local Government Areas (LGAs) of Canterbury, Hurstville, Kogarah, Marrickville, Rockdale and Sutherland Shire.

One of the key Objectives of the Draft South Subregional Strategy is to:

- Identify and investigate renewal areas for the south.

The Metropolitan Plan 2036 has set new targets for the South subregion as follows:

- Dwelling target have increased from 35,000 to 58,000 new dwellings by 2036 and;
- Employment targets have increased from 29,000 to 52,000 jobs by 2036.

The proposed development meets these objectives by assisting to increase its dwelling targets by building new and higher density housing near major commuter railway stations.

Centres and Corridors

The draft Subregional Strategy identifies a hierarchy of centres with different functions. The strategy identifies Narwee as a small village centre.

Housing

The draft Subregional Strategy identifies a number of key housing strategies that aim to ensure provision of the 7,100 additional dwellings required to be provided in the Canterbury City LGA.

The housing strategies will ensure a mix of housing is provided that contributes towards increased housing affordability.

C4.1 Improve the affordability of housing

C4.1.2 The Department of Housing (the Land and Housing Corporation) and Department of Planning to identify how possible affordable housing initiatives can be applied to the South Sub region.

C4.2 Redevelop and regenerate Department of Housing stock

C4.2.1 Prior to the preparation of Local Environmental Plans, local councils will consult with the Department of Housing (the Land and Housing Corporation) regarding the redevelopment and renewal of Department of Housing (NSW Land and Housing Corporation) assets.

The proposed development meets these objectives by providing new affordable housing that meets current housing needs. It replaces older housing stock which is expensive to maintain and does not meet the demand and need within the public housing portfolio.

Rezoning Potential

It is unlikely that Canterbury Council would support a spot rezoning application on this site in isolation of other Land and Housing Corporation Land holdings in the locality. Given the aims of subregional strategies and the location of this site, the Land and Housing Corporation has requested Council to consider rezoning to allow for increased densities as part of the Standard LEP Template or as an amendment. Council's Strategic Planner advised that addressing the future use of the surrounding precinct rather looking at isolated sites would allow for a more comprehensive and holistic strategic planning approach for this area.

The NSW Land and Housing Corporation owns a large number of properties within the immediate vicinity of the site and Narwee area generally. The majority of these properties have reached the end of their economic life and these sites are targeted for redevelopment. The proposed redevelopment on the site would demonstrate how higher densities can be achieved without undermining the local character of the area.

The properties as shown in yellow below are considered to be ideally located in terms of supporting increased densities beyond what is currently permissible to be developed on the site (refer to Figure 13: NSW Land and Housing Corporation Ownership Map, Narwee).

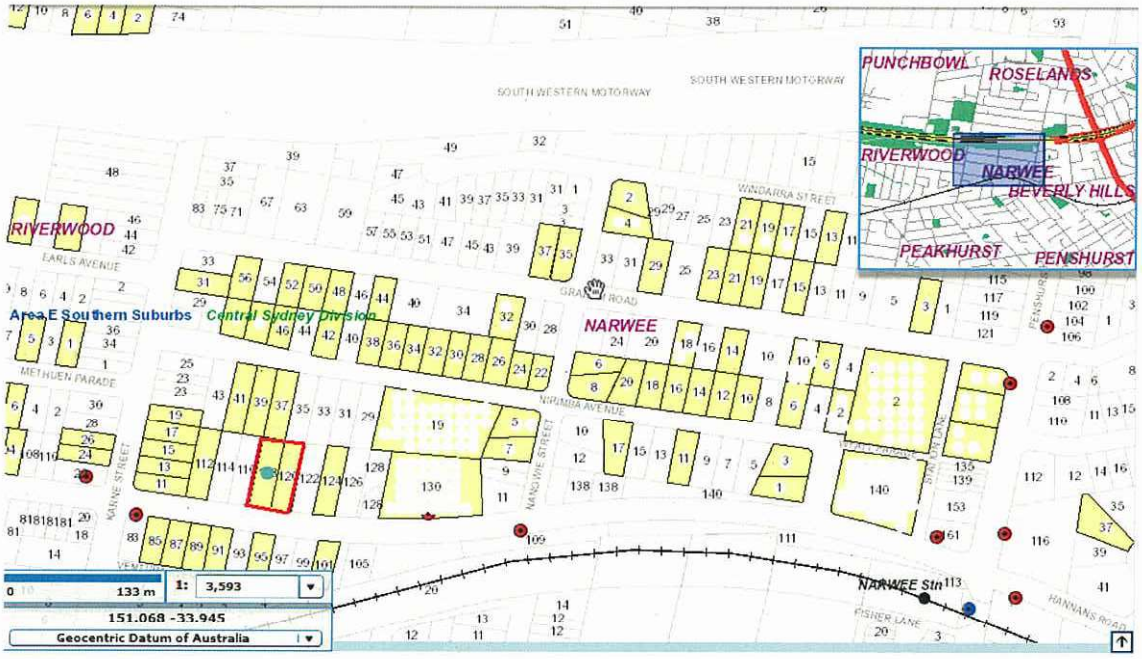


Figure 13: NSW Land and Housing Corporation Ownership Map, Narwee

Source – Land and Housing Corporation PLOT System

Kingsgrove to Revesby Rail Quadruplication project

The $774 million Kingsgrove to Revesby quadruplication project forms part of the New South Wales Government's $2 billion Rail Clearways Program. This program is designed to simplify the metropolitan rail network by separating the existing 14 CityRail lines into five independent lines. This quadruplication project involves the construction of two additional railway tracks between Kingsgrove and Revesby and will pass through Padstow, Riverwood, Narwee and Beverly Hills railway stations (see Figure 14 for extract of CityRail network map).

The two additional tracks will allow the separation of local all-stops services from express services on the East Hills line. Other works to these stations will include the provision of additional commuter parking spaces. Narwee station has been provided with additional parking spaces with the recent conversion of Frappell Reserve to commuter parking spaces.

The benefit of this project will be that the improved facilities and services will encourage more people to use public transport. Following the completion of this major project, Narwee will be a key commuter railway station and strengthens the need for higher density housing near railway lines. Completion of this project is scheduled for January 2013.

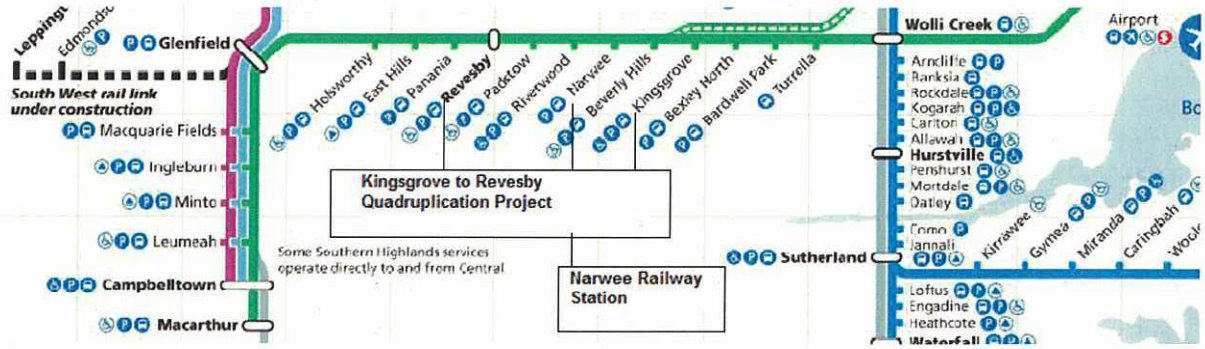


Figure 14: Extract of East Hills railway line

Source – CityRail network map

- Adequacy of services

As identified in "Section 1. Context" of this application, the subject site is considered to be well serviced in relation to access to services and facilities both locally and regionally. The site is provided with regular access to bus and rail services and also has access to safe, direct and convenient pedestrian routes to the nearest bus stops and railway stations.

Water, sewer, electricity, telephone and gas services are all available to the property.

The site has convenient access to social infrastructure and is ideally located in close proximity to a number of major retail, commercial, educational, social and cultural services.

- Environmental benefits and appropriate management of constraints

The subject site is ideally located and is located approximately 450 metres from Narwee Railway station which is a major commuter station located on the East Hill railway line. The existing dwelling on the subject site has reached the end of its economic life and the site's close proximity to transport, shopping, educational and community and cultural facilities would be better used for the purposes of higher density affordable housing.

The NSW Land and Housing Corporation is committed to building developments that result in good urban design and which are conveniently located, sensitive to its neighbourhood, ecologically sustainable and economical in construction and maintenance. The costs required to cover the on-going maintenance of the existing dwelling house, which is more than 50 years old, is therefore not considered to be the best use of public funding. Dwellings of this type and age are planned for future demolition as their deteriorating state will no longer be responsive to its Clients' needs and community expectations.

The new development would incorporate building materials and energy efficient design features which maximise durability and results in lower operating costs for both the residents and the Land and Housing Corporation. The use of solar panels, re-use of rain water, landscaping for energy efficiency and maximising the northern orientation of the lot all assist in reducing water and energy consumption and assists in providing healthy environments.

The close proximity to the railway station also reduces the need for excessive on-site parking. This leads to positive environmental outcomes as it results in less cars on the road as the residents are encouraged to use the convenient and accessible modes of public transport available to them.

- Public benefits from developing the site for the proposed purpose

A primary aim of the Land and Housing Corporation is to secure appropriate accommodation for some of the neediest members of our community which is cost effective, fulfils their needs and relates well to its environment. The use of this well located site for higher density housing would therefore meet these primary aims and allows development opportunities to be fully maximised. Developing this site for low density housing for which it is currently zoned would therefore not be considered to be the best and highest use of the site.

The diversity of clients housed by the Land and Housing Corporation vary widely in relation to age, gender, disabilities and family types. The variety in housing types that would be offered by this development comprising of 1 and 2 bedroom units of double and triple storey construction, would present residents with choice and flexibility in their housing considerations.

Regardless of the family group or age profile of its residents, experience indicates that the Land and Housing Corporation residents have lower than average rates of car ownership. This low car ownership pattern places a greater emphasis on sites with good access to public transport, community facilities, schools and shops. As this site is well serviced, it is regarded as an ideal choice to develop higher density development in an area which is moving towards this type of development near a busy railway line.

4. PRE-LODGEMENT CONSULTATION WITH THE CONSENT AUTHORITY (COUNCIL) AND INFRASTRUCTURE/SERVICE PROVIDERS

Two meetings were held Canterbury Council Planning Officers to discuss the proposal pursuant to Division 5 of the ARH SEPP.

The first meeting was held with Officers from the Land and Housing Corporation and Council Planning Officer Ms Rita Nakhle on 23 August 2011. Council was shown an initial concept plan comprising of 17 units consisting entirely of 2 storey construction at the front of the site and 3 storey construction at the rear of the site (refer to Figures 15 & 16 showing the original ground floor plan and elevations and sections).

At this meeting, Council's Planning Officers indicated their concerns with the proposed 3 storey dwellings at the rear boundary due to potential overlooking and loss of privacy for adjoining neighbours. Instead, they suggested a concept plan that had a 3 storey development located along the front of the site and 2 storey development located to the rear to minimise the impact of overshadowing and overlooking onto neighbouring properties.

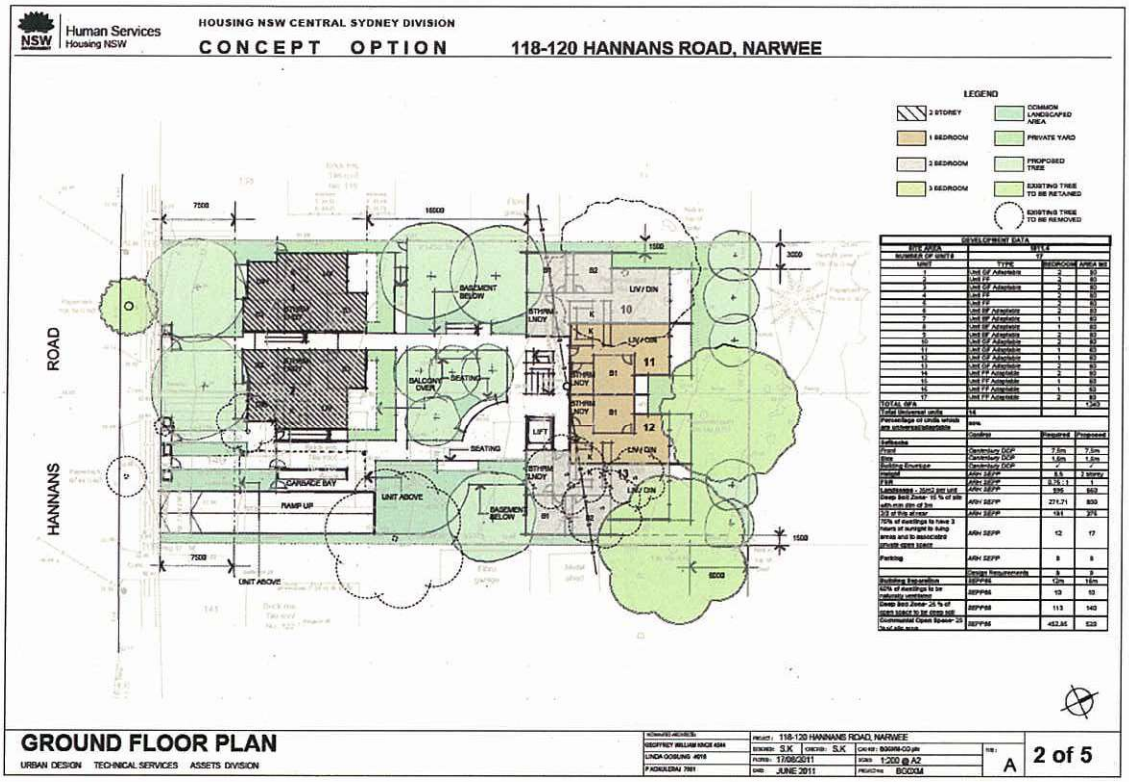


Figure 15: Ground Floor Plan of Original Concept comprising of 17 units

Source – Land and Housing Corporation

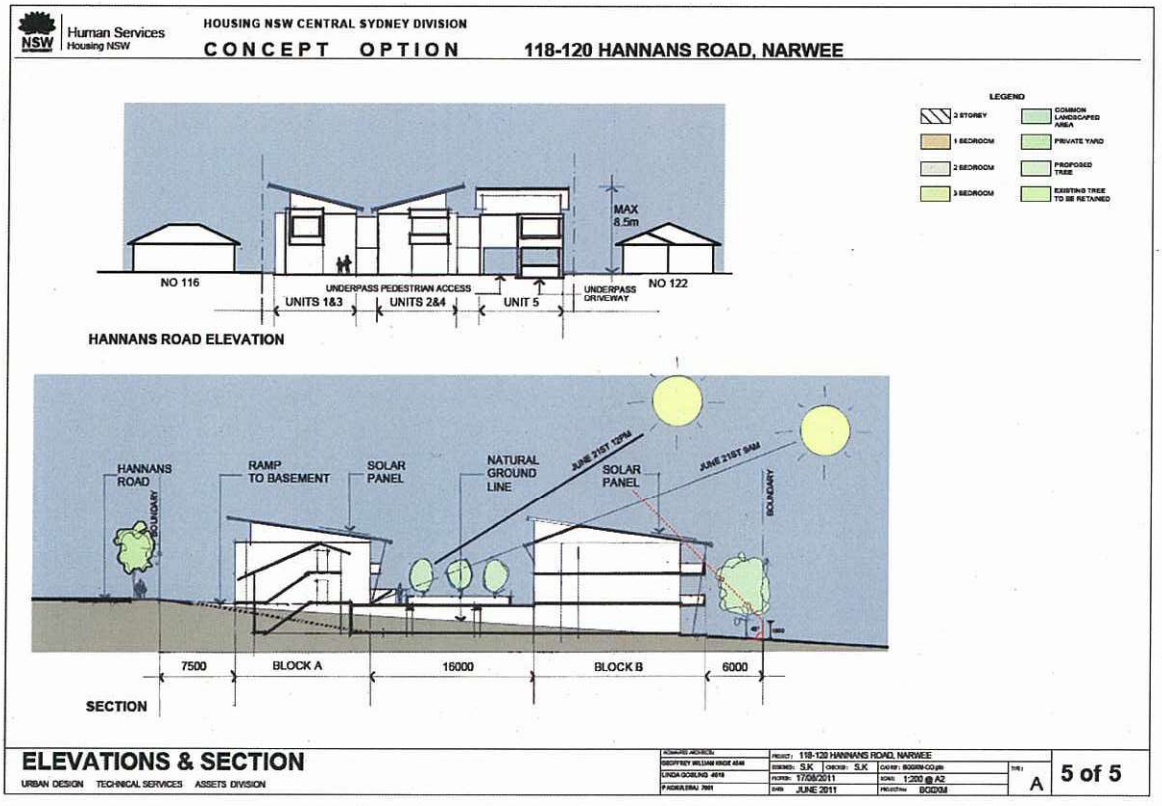


Figure 16: Elevations and Sections of Original Concept Plan

Source – Land and Housing Corporation

A second meeting was held with Council's Planning Officers in November 2011 and a new concept plan was discussed with Council's Strategic Planning Officer Mr Warren Farleigh. This concept plan was amended accordingly to include the comments made by Council in the August 2011 meeting (ie 3 storey development at the front and 2 storey development at the rear of the site). At this November meeting, Council's Officers also advised that it would consider the issue of up zoning land and Land and Housing Corporation land holdings in the precinct as a stand alone rezoning of sites bounded by Karne Street, Windarra Street, Penshurst Road and Hannans Road rather than as part of its new comprehensive LEP.

Water, sewer, electricity, telephone and gas services are all available to the property.

C2 STATEMENT ADDRESSING SEPP SITE COMPATIBILITY CRITERIA

1. EXISTING USES AND APPROVED USES OF LAND IN THE VICINITY OF THE PROPOSED DEVELOPMENT

The surrounding land uses in the vicinity of the subject site comprise generally of old single storey brick dwellings similar to the existing dwelling located at 120 Hannans Road. As shown in Figure 8, the Land and Housing Corporation owns a large number of properties in the surrounding residential precinct. These dwellings were constructed over 50 years ago and are nearing the end of their life cycle. These properties will eventually be earmarked for future redevelopment or sale and there is evidence that the low density residential character of the surrounding area will move towards medium to high density housing. This is indicated by the new multi-unit development located directly across the road from the subject site and in immediately surrounding areas.

2. THE IMPACT THAT THE PROPOSED DEVELOPMENT (INCLUDING ITS BULK AND SCALE) IS LIKELY TO HAVE ON THE EXISTING USES AND USES THAT ARE LIKELY TO BE THE PREFERRED FUTURE USES OF THE SURROUNDING LAND

Various development options for the site and extensive re-designs of the proposal were undertaken to minimise the overall impact of the development onto adjoining uses. The siting of the 3 storey residential flat building allows the upper storey windows to be oriented towards the front of the development to minimise overlooking directly into other dwellings.

The setting back of the centre portion of the residential flat building would minimise the impact of the overall bulk and scale along the street. In addition, the use of lighter colours for the top floor and centre portions of the building would result in a softer appearance for the development along Hannas Road. The introduction of darker colours along the outer sections of this building would ensure that it were in harmony with the lower density housing located on either side of the proposed development on Hannans Road.

The ample setbacks and landscaping screens proposed along the boundaries would provide a sense of privacy for the residents and adjoining neighbours. Windows along side boundaries have been minimised where possible to avoid overlooking. Where windows are proposed, these windows would overlook non-habitable structures such as garages and sheds.

The careful use and selection of evergreen and deciduous trees on the site would allow the use of shade and sunlight to modify the climate conditions on the site depending on the current season. This would result in a pleasant environment for the residents and adjoining neighbours as the development would not provide unreasonable overshadowing.

Careful layout and design of the development and the location of the communal open space on the site would ensure that good urban design, privacy and ample solar access was maintained while still preserving the character of the street.

3. THE SERVICES AND INFRASTRUCTURE THAT ARE OR WILL BE AVAILABLE TO MEET THE DEMANDS ARISING FROM THE DEVELOPMENT (EG COMMUNITY, HEALTH, EDUCATION, TRANSPORT AND RETAIL SERVICES)

As demonstrated in Section C1 Access to services and facilities, the site is very well serviced by public transport and has excellent access to community and cultural facilities, educational facilities and shops. The existing services and infrastructure available in the area and surrounding neighbourhoods are considered to be extensive and would be more than able to meet the demands and needs of the residents who would live in the proposed development.

4. THE LIKELIHOOD OF THERE BEING ANY ADVERSE EFFECT ON THE ENVIRONMENT OR UNACCEPTABLE ENVIRONMENTAL RISKS TO THE LAND. CONSIDER THE NATURE OF THE SURROUNDING ENVIRONMENT, INCLUDING KNOWN SIGNIFICANT ENVIRONMENTAL VALUES, RESOURCES OR HAZARDS

Preliminary investigations undertaken for the site has identified that the site or surrounding lands are not affected by hazards and natural constraints (refer to Appendix E for the Development Appraisal report prepared by Dennis Smith Surveys).

C3 ADDITIONAL COMMENTS

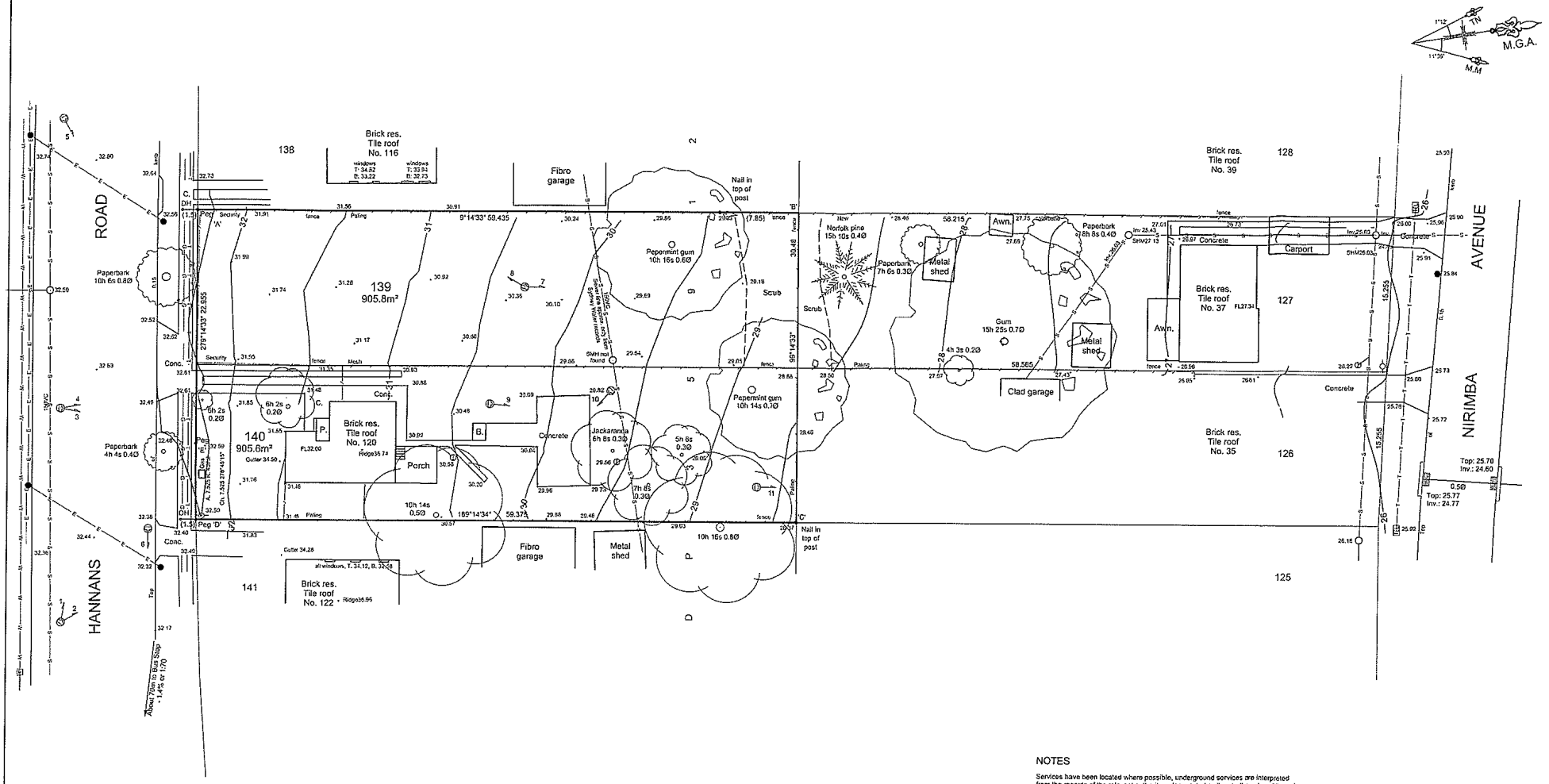
Careful attention has been given to the siting of the buildings on the site and has taken into consideration the slope, size, shape and orientation of the site. The development has been well designed and consideration has been made to the relationship with adjoining properties, street address, pedestrian and vehicle access and the connection between the dwellings and landscaping and open space.

It is noted that although residential flat buildings are not a permissible use on the site, the proposal has a number of positive impacts on the community as follows:

- the site is within 800 metres of a railway station in the Sydney Region as required under Division 5 of the Affordable Rental Housing SEPP and is consistent with the aims of the Metropolitan Plan;
- the existing dwelling on part of the site including those in surrounding areas have reached the end of their life cycle and need to be demolished and redeveloped in the near future as on-going maintenance and upgrade of these old dwellings is not the best use of public funds;
- there is currently a shortage of well suitably located (transport/services) sites and the proposal would maximise the site's development potential and allow for much needed affordable housing in the Canterbury Local Government Area and would in turn assist the Council in achieving its dwelling targets under the Metropolitan Plan;
- the quadruplication of the East Hills railway line would result in Narwee railway station to become a key commuter railway station and strengthens the need for higher density housing near railway lines;
- the proposed development as designed would be in keeping with the future character of the area and fulfils new and flexible housing needs for some of the neediest members of the community;
- the proposal would not have an adverse impact on the streetscape, adjoining properties and the surrounding area and respects the amenity of the neighbours;
- the proposal has been designed to protect the natural environment by reducing energy and water consumption, facilitates recycling and managing stormwater runoff; and
- a site compatibility certificate would allow the Land and Housing Corporation to take advantage of available funding opportunities without having to resort to the rezoning process.

Appendix A – Detail & Contour Plan

LGA: CANTERBURY



	Easting	Northing
'A'	321192.46	6242044.17
'B'	321202.09	6242102.83
'C'	321232.09	6242097.94
'D'	321222.55	6242039.33
'E'	321215.11	6242040.48

NOTES

Services have been located where possible, underground services are interpreted from the records of the relevant authority unless stated as 'located' on plan. All services should be accurately located prior to any works or dependant design works.

Distances should not be scaled from this plan. All critical dimensions should be confirmed by survey.

Contours shown are interpolated at 0.5m intervals and are an indication of landform only. Spot levels should be adopted in preference to contours.

This plan has been prepared from field survey and existing records for the purpose of 1:200 general planning and should not be used for any other purpose.

Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for location of underground services and detailed locations of all services.

Tree details are approximate only.

No.	DATE	NOTATION/AMENDMENT
1	25/5/09	SURVEY OF LOT 127

No.	DATE	NOTATION/AMENDMENT

FILE	FILE SIZE (MB)	CHECKED BY

CONTOUR INTERVAL: 0.5 m
DATUM: AHD
ORIGIN OF DATUM: SSM 68081 RL 31.0
100 YEAR FLOOD RL: N/A
RECOMMENDED MINIMUM FLOOR RL: N/A
SOURCE OF FLOOD INFO: CANTERBURY COUNCIL

LEGEND OF COMMONLY USED SYMBOLS
WATER
SEWER
ELECTRICITY
TELECOM
GAS
DRAINAGE
BENCH MARK
SURVEY CONTROL MARK

REDUCTION RATIO 1 : 200 @ A1, 400 @ A3
0 10 20
LAND TITLE INFORMATION
LOTS: 139 & 140
PLAN NOs: DP 35912
OTHER:
AREA: 1811.4 m²

DATE OF SURVEY: 15 / 01 / 2009
SURVEY CONSULTANT:
DENNIS SMITH SURVEYS
P.O.Box 12, 9 Railway Street Bull, 2515
Ph: (02) 4234 9402
Fax: (02) 4285 7042
SURVEYORS REF: 5619
Registered Surveyor

RESITECH
RESIDENTIAL TECHNOLOGIES AUSTRALIA
A SERVICE AGENCY OF NSW DEPARTMENT OF HOUSING

DRAWING TITLE
DETAIL & CONTOUR PLAN
LOTS 139 & 140 DP 35912

LOCATION: NARWEE
STREET ADDRESS: 118-120 HANNANS RD
TYPE: S
SITE LAYOUT JOB: 71915 / 001 / 01
SHT. 1
OF 1

Appendix B – Section 149 Planning Certificates

City of Canterbury
City of Cultural Diversity

Administration Centre: 137 Beamish Street,
CAMPSIE N.S.W. 2194
DX: 3813 Campsie
Telephone: (02) 9789 9300
Fax: (02) 9789 1542

SAI Global Partners
DX 885
SYDNEY

PLANNING CERTIFICATE

Section 149 of the Environmental Planning and Assessment Act, 1979.

Certificate No: 22317
22 March 2012

Land which Certificate is issued for:

Lot 139 DP 35912

118 Hannans Road, NARWEE NSW 2209

City of Canterbury
City of Cultural Diversity
Administration Centre, 137 Beamish Street,
CAMPSIE N.S.W. 2194
DX: 3813 Campsie
Telephone: (02) 9789 9300
Fax: (02) 9789 1542

INFORMATION PROVIDED UNDER SECTION 149 (2) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979.

Land which Certificate is issued for:

Lot 139 DP 35912

118 Hannans Road, NARWEE NSW 2209

PART 1:
ENVIRONMENTAL PLANNING INSTRUMENTS

1.1 Principal Environmental Planning Instrument

Canterbury Planning Scheme Ordinance

Gazetted

28 August 1970

Land Use Zone

RESIDENTIAL 2(a)

Purposes for which development may be carried out without consent:
Resident commercial vehicle parking.

Purposes for which development may be carried out subject to such conditions as may be imposed by the council:
Nil.

Purposes for which development may be carried out only with consent:
Any other purpose.

Purposes for which development is prohibited:
Auction rooms; boarding houses; bulk stores; caravan parks; car repair stations; clubs; commercial premises; community facilities, gas holders; generating works; hotels; institutions; junk yards; light industries; liquid fuel depots; mines; motels; motor showrooms; multiple unit housing; places of assembly; recreation facilities; refreshment rooms; roadside stalls; sawmills; service stations; shops; stock and sale yards; transport terminals; warehouses.

Administration Centre, 137 Beamish Street,
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Fax: (02) 9789 1542

1.2 State Environmental Planning Policies

Note:
The following information indicates those State Environmental Planning Policies (SEPP) which may apply to the subject land. A summary explanation of each SEPP can be sourced from the Department of Planning (DoP) website at www.planning.nsw.gov.au . The full wording of each SEPP can also be accessed via the DoP website.

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No. 1 - Development Standards.
No. 4 - Development Without Consent and Miscellaneous Exempt and Complying Development
No. 4 - Development Without Consent (Amendment No.7) – Bushfire Reduction
No. 6 - Number of Storeys in a Building
No. 19 - Bushland in Urban Areas
No. 21 - Caravan Parks
No. 22 - Shops and Commercial Premises
No. 30 - Intensive Agriculture
No. 32 - Urban Consolidation (Redevelopment of Urban Land)
No. 33 - Hazardous and Offensive Development
No. 50 - Canal Estates
No. 55 - Remediation of Land
No. 60 - Exempt and Complying Development
No. 64 - Advertising and Signage
No. 65 - Design Quality of Residential Flat Development
No. 71 - Coastal Protection
State Environmental Planning Policy - (Housing for Seniors or People with a Disability) 2004
State Environmental Planning Policy - Building Sustainability Index: BASIX 2004
State Environmental Planning Policy - (Repeal of Concurrence and Referral Provisions) 2004.
State Environmental Planning Policy - (Major Projects) 2005
State Environmental Planning Policy - (Mining, Petroleum Production and Extractive Industries) 2007
State Environmental Planning Policy - (Temporary Structures and Places of Public Entertainment) 2007
State Environmental Planning Policy - (Infrastructure) 2007
State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions) 2008
State Environmental Planning Policy (Exempt and Complying Development Codes) 2008
State Environmental Planning Policy (Affordable Rental Housing) 2009

Greater Metropolitan Regional Environmental Plan
Georges River Catchment

Aims to protect the water quality of the Georges River and its tributaries and the environmental quality of the whole catchment. The objectives of the plan are to be achieved through coordinated land use planning and development control. The plan establishes the framework within which local, State and Federal agencies will consult so that there is a consistent approach to planning and development within the catchment.

Draft State Environmental Planning Policies

Draft State Environmental Planning Policy No. 66 - Integration of Land Use and Transport
Draft State Environmental Planning Policy (Application of Development Standards) 2004

Administration Centre, 137 Beamish Street,
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1.3 **Proposed Environmental Planning Instruments (including any Planning Proposals) that are or have been the subject of community consultation or on public exhibition under the Act**
Not applicable.

1.4 **Development Control Plans.**

Development Control Plan 12 - TOWNHOUSE AND VILLA HOME CODE
Guidelines and controls for townhouse and villa home development in Residential 2 (a) (where permissible) and Residential 2(b) zones.

Development Control Plan 20 - CAR PARKING
Requirements for the design & provision of on-site parking, incl loading and unloading requirements.

Development Control Plan 24 - ADVERTISING SIGNS
Guidelines and controls for outdoor advertising.

Development Control Plan 29 - CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN
Strategies to improve community safety through design and development processes.

Development Control Plan 33 -TELECOMMUN'TION & RADIOCOMMUN'TION FACILITIES
Establishes controls for the siting, design and installation of telecommunication and radiocommunication facilities that require development consent and guidelines for facilities that do not require consent.

Development Control Plan 9 -NON RESIDENTIAL BUILDINGS ADJ RESIDENTIAL ZONES
Building height plane controls for all non-residential development adjoining land within a residential zone.

Development Control Plan 37 - ENERGY SMART HOMES.
Establishes standards and requirements for energy efficiency in residential development, including the residential component of mixed use developments.

Development Control Plan 30 - SUBDIVISION OF LAND
Standards for the subdivision of land in residential zones.

Development Control Plan 14 - DUAL OCCUPANCY DEVELOPMENT
Guidelines and controls for dual occupancy development in residential zones.

Development Control Plan 25 - CHILD CARE CENTRES
Guidelines and controls for the establishment of child care centres.

Development Control Plan 31 - EXEMPT AND COMPLYING DEVELOPMENT
Establishes requirements for the carrying out of Exempt Development and Complying Development, as defined in the EP & A Act 1979.

Development Control Plan 32 - NOTIFICATION POLICY
Establishes requirements for the notification and advertising of development applications in Canterbury City.

Development Control Plan 45 - LANDSCAPE
Provides a common set of landscape design, construction and management principles for all development applications within Canterbury City.

Development Control Plan 48 - WASTE MANAGEMENT
Establishes requirements for the handling, storage, collection and disposal of waste for new development.

Development Control Plan 49 - SINGLE DWELLING CODE.
Guidelines & controls for new single dwelling houses and alterations and additions to existing single dwellings.

Development Control Plan 51 - ACCESS AND MOBILITY
Facilitates consideration of access and mobility issues for people with a disability.

Administration Centre, 137 Beamish Street,
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1.5 **Contribution Plans.**
Council has in place a Section 94 Contributions Plan prepared and adopted under Section 94 of the Environmental Planning and Assessment Act, 1979.

PART 2:
RESTRICTIONS ON DEVELOPMENT

2.1 **Heritage**
Not applicable.

2.2 **Coastal Protection**
There is no notification that the subject property is affected by the provisions of Section 38 or 39 of the Coastal Protection Act, 1979.

2.3 **Mine Subsidence**
The subject land is not within a mine subsidence district within the meaning of Section 15 of the Mine Subsidence Compensation Act, 1961.

2.4 **Road Widening and Road Realignment**
Whether or not the land is affected by a road widening or road realignment proposal under Division 2 or Part 3 of the Roads Act 1993 or an environmental planning instrument;

The land is not affected by a road widening or road realignment proposal under Division 2 or Part 3 of the Roads Act 1993, or an environmental planning instrument.

Whether or not the land is affected by a road widening or road realignment proposal under any resolution of Council.

The land is not affected by a road widening or road realignment proposal under any resolution of Council.

2.5 **Council and Other Public Authority Policies on Hazard Risk Restrictions**
Whether or not the land is affected by a policy adopted by Council or adopted by any other public authority (and notified to the Council for the express purpose of its adoption by that authority being referred to) that restricts the development of the land because of the likelihood of:

- **Land Slip**
  The land is not affected by a policy restriction relating to landslip
- **Bushfire**
  The land is not bushfire prone land (as defined in the Act).
- **Tidal Inundation**
  The land is not affected by a policy restriction relating to tidal inundation
- **Subsidence**
  The land is not affected by a policy restriction relating to subsidence
- **Acid Sulfate Soils**
  The land is not affected by a policy restriction relating to acid sulfate soils.
- **Unhealthy Building Land**
  The land is not affected by a policy restriction relating to Unhealthy Building Land.
- **Any Other Risk**
  Not applicable.

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2.6 **Flooding**

Development on the land, or part of the land, for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is not subject to any flood related development controls.

Development on the land, or part of the land, for any other purpose is not subject to flood related development controls.

2.7 **Matters arising under the Contaminated Land Management Act, 1997.**

Not applicable.

2.8 **Land Reserved For Acquisition**

There is no environmental planning instrument, or proposed environmental planning instrument, applying to the land that makes provision for the acquisition of the land (or any part thereof) by a public authority, as referred to in Section 27 of the Act.

2.9 **Property Vegetation Plans**

Not applicable

2.10 **Orders under Trees (Disputes Between Neighbours) Act 2006**

Not applicable

2.11 **Directions under Part 3A**

Not applicable

2.12 **Site Compatibility Certificates and Conditions for Seniors Housing**

Not applicable

2.13 **Site Compatibility Certificates for Infrastructure**

Not applicable

2.14 **Site Compatibility Certificates and Conditions for Affordable Rental Housing**

Not applicable

2.15 **Certain Information Relating to Beaches and Coasts**

Not applicable

2.16 **Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works**

Not applicable

2.17 **Biodiversity certified land**

Not applicable

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2.18 Complying Development

Whether or not the land is land on which complying development may be carried out under each of the Codes for complying development because of the provisions of clauses 1.17A (c) and (d) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 and, if no complying development may be carried out on that land under that Policy, the reasons why complying development may not be carried out on that land.

The land is land on which Complying Development can be carried out under the General Housing Code (if in a residential zone), the Housing Alterations Code, the General Development Code, the General Industrial and Commercial Code, the Demolition Code and the Subdivision Code.

Important Disclaimer: This clause of the Certificate only contains information in respect of that required by clause 3 of Schedule 4 of the Environmental Planning and Assessment Regulation 2000, in relation to Complying Development under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. Other provisions contained in the SEPP, including but not limited to, minimum allotment size requirements, specified development standards or any other general exclusions, may preclude Complying Development under the SEPP from being able to be carried out. You will need to refer to the SEPP for complete details. It is your responsibility to ensure that you comply with all other general requirements of the SEPP. Failure to comply with these provisions may mean that any Complying Development Certificate issued under the provisions of the SEPP is invalid.

City of Canterbury
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PART 3

INFORMATION PROVIDED UNDER SECTION 149 (5) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979.

Note: *When information pursuant to Section 149(5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that Section. Council draws your attention to Section 149(6), which states that a Council shall not incur any liability in respect of any advice provided in good faith pursuant to sub-section (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter not referred to in this Certificate.*

3.1 Amending Local Environmental Plans

Site specific and, where relevant, general amendments to the principal planning instrument are identified below:

Local Environmental Plan 164
Gazette Date: 29 March 1996
Permitted townhouse and villa home development in the Residential 2(a) zone under the CPSO, except for certain land in Earlwood.

Local Environmental Plan 183
Gazette Date: 19 June 1998
Permitted dual occupancy development in residential zones.
Required a minimum lot frontage of 7.5 metres for each lot for any subdivision of dual occupancy development.

Local Environmental Plan 188
Gazette Date: 10 December 1999
Introduced provisions for Exempt and Complying Development.

Local Environmental Plan 194
Gazette Date: 6 July 2001
Introduced standard definitions for residential land uses.

3.2 Tree Preservation Order

A tree preservation order applies to the whole of the City of Canterbury.

3.3 Council Policy on Contaminated Land

On the 10 June 1999 Council adopted a policy on contaminated land. This policy will restrict development of land:

a) which is affected by contamination;
a) which has been used for certain purposes;
b) in respect of which there is not sufficient information about contamination;
c) which is proposed to be used for certain purposes;
d) in other circumstances contained in the policy.

3.4 General Advice Regarding Use of Property

Persons considering commencing a use of or purchasing a property are advised to seek confirmation that the current, or intended, use (as the case may be) has been approved by Council, or does not require Council approval. It is pointed out that the question of "existing use rights" within the meaning of the Environmental Planning and Assessment Act, 1979, is a complex matter, and that the commencement of a use without Council approval (where required) is unlawful and may be subject to enforcement action.

3.5 Other Matters

Not applicable.

JIM MONTAGUE
GENERAL MANAGER

City of Canterbury
City of Cultural Diversity

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Telephone: (02) 9789 9300
Fax: (02) 9789 1542

SAI Global Partners
DX 885
SYDNEY

PLANNING CERTIFICATE

Section 149 of the Environmental Planning and Assessment Act, 1979.

Certificate No: 22341
23 March 2012

Land which Certificate is issued for:

Lot 140 DP 35912

120 Hannans Road, NARWEE NSW 2209

City of Canterbury
City of Cultural Diversity
Administration Centre, 137 Beamish Street
CAMPSIE N.S.W. 2194
DX. 3813 Campsie
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INFORMATION PROVIDED UNDER SECTION 149 (2) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979.

Land which Certificate is issued for:

Lot 140 DP 35912

120 Hannans Road, NARWEE NSW 2209

PART 1:
ENVIRONMENTAL PLANNING INSTRUMENTS

1.1 Principal Environmental Planning Instrument

Canterbury Planning Scheme Ordinance

Gazetted

28 August 1970

Land Use Zone

RESIDENTIAL 2(a)

Purposes for which development may be carried out without consent:
Resident commercial vehicle parking.

Purposes for which development may be carried out subject to such conditions as may be imposed by the council:
Nil.

Purposes for which development may be carried out only with consent:
Any other purpose.

Purposes for which development is prohibited:
Auction rooms; boarding houses; bulk stores; caravan parks; car repair stations; clubs; commercial premises; community facilities, gas holders; generating works; hotels; institutions; junk yards; light industries; liquid fuel depots; mines; motels; motor showrooms; multiple unit housing; places of assembly; recreation facilities; refreshment rooms; roadside stalls; sawmills; service stations; shops; stock and sale yards; transport terminals; warehouses.

Administration Centre: 137 Beamish Street,
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1.2 State Environmental Planning Policies

Note:

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No. 4 - Development Without Consent (Amendment No.7) – Bushfire Reduction
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State Environmental Planning Policy (Affordable Rental Housing) 2009

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Draft State Environmental Planning Policy No. 66 - Integration of Land Use and Transport
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1.3 **Proposed Environmental Planning Instruments (including any Planning Proposals) that are or have been the subject of community consultation or on public exhibition under the Act**
Not applicable.

1.4 **Development Control Plans.**

Development Control Plan 12 - TOWNHOUSE AND VILLA HOME CODE
Guidelines and controls for townhouse and villa home development in Residential 2 (a) (where permissible) and Residential 2(b) zones.

Development Control Plan 20 - CAR PARKING
Requirements for the design & provision of on-site parking, incl loading and unloading requirements.

Development Control Plan 24 - ADVERTISING SIGNS
Guidelines and controls for outdoor advertising.

Development Control Plan 29 - CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN
Strategies to improve community safety through design and development processes.

Development Control Plan 33 -TELECOMMUN'TION & RADIOCOMMUN'TION FACILITIES
Establishes controls for the siting, design and installation of telecommunication and radiocommunication facilities that require development consent and guidelines for facilities that do not require consent.

Development Control Plan 9 -NON RESIDENTIAL BUILDINGS ADJ RESIDENTIAL ZONES
Building height plane controls for all non-residential development adjoining land within a residential zone.

Development Control Plan 37 - ENERGY SMART HOMES.
Establishes standards and requirements for energy efficiency in residential development, including the residential component of mixed use developments.

Development Control Plan 30 - SUBDIVISION OF LAND
Standards for the subdivision of land in residential zones.

Development Control Plan 14 - DUAL OCCUPANCY DEVELOPMENT
Guidelines and controls for dual occupancy development in residential zones.

Development Control Plan 25 - CHILD CARE CENTRES
Guidelines and controls for the establishment of child care centres.

Development Control Plan 31 - EXEMPT AND COMPLYING DEVELOPMENT
Establishes requirements for the carrying out of Exempt Development and Complying Development, as defined in the EP & A Act 1979.

Development Control Plan 32 - NOTIFICATION POLICY
Establishes requirements for the notification and advertising of development applications in Canterbury City.

Development Control Plan 45 - LANDSCAPE
Provides a common set of landscape design, construction and management principles for all development applications within Canterbury City.

Development Control Plan 48 - WASTE MANAGEMENT
Establishes requirements for the handling, storage, collection and disposal of waste for new development.

Development Control Plan 49 - SINGLE DWELLING CODE.
Guidelines & controls for new single dwelling houses and alterations and additions to existing single dwellings.

Development Control Plan 51 - ACCESS AND MOBILITY
Facilitates consideration of access and mobility issues for people with a disability.

Administration Centre, 137 Beamish Street,
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DX. 3813 Campsie
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1.5 **Contribution Plans.**
Council has in place a Section 94 Contributions Plan prepared and adopted under Section 94 of the Environmental Planning and Assessment Act, 1979.

PART 2:
RESTRICTIONS ON DEVELOPMENT

2.1 **Heritage**
Not applicable.

2.2 **Coastal Protection**
There is no notification that the subject property is affected by the provisions of Section 38 or 39 of the Coastal Protection Act, 1979.

2.3 **Mine Subsidence**
The subject land is not within a mine subsidence district within the meaning of Section 15 of the Mine Subsidence Compensation Act, 1961.

2.4 **Road Widening and Road Realignment**
Whether or not the land is affected by a road widening or road realignment proposal under Division 2 or Part 3 of the Roads Act 1993 or an environmental planning instrument;

The land is not affected by a road widening or road realignment proposal under Division 2 or Part 3 of the Roads Act 1993, or an environmental planning instrument.

Whether or not the land is affected by a road widening or road realignment proposal under any resolution of Council.

The land is not affected by a road widening or road realignment proposal under any resolution of Council.

2.5 **Council and Other Public Authority Policies on Hazard Risk Restrictions**
Whether or not the land is affected by a policy adopted by Council or adopted by any other public authority (and notified to the Council for the express purpose of its adoption by that authority being referred to) that restricts the development of the land because of the likelihood of:

- **Land Slip**
  The land is not affected by a policy restriction relating to landslip
- **Bushfire**
  The land is not bushfire prone land (as defined in the Act).
- **Tidal Inundation**
  The land is not affected by a policy restriction relating to tidal inundation
- **Subsidence**
  The land is not affected by a policy restriction relating to subsidence
- **Acid Sulfate Soils**
  The land is not affected by a policy restriction relating to acid sulfate soils.
- **Unhealthy Building Land**
  The land is not affected by a policy restriction relating to Unhealthy Building Land.
- **Any Other Risk**
  Not applicable.

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2.6 **Flooding**
Development on the land, or part of the land, for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) is not subject to any flood related development controls.

Development on the land, or part of the land, for any other purpose is not subject to flood related development controls.

2.7 **Matters arising under the Contaminated Land Management Act, 1997.**
Not applicable.

2.8 **Land Reserved For Acquisition**
There is no environmental planning instrument, or proposed environmental planning instrument, applying to the land that makes provision for the acquisition of the land (or any part thereof) by a public authority, as referred to in Section 27 of the Act.

2.9 **Property Vegetation Plans**
Not applicable

2.10 **Orders under Trees (Disputes Between Neighbours) Act 2006**
Not applicable

2.11 **Directions under Part 3A**
Not applicable

2.12 **Site Compatibility Certificates and Conditions for Seniors Housing**
Not applicable

2.13 **Site Compatibility Certificates for Infrastructure**
Not applicable

2.14 **Site Compatibility Certificates and Conditions for Affordable Rental Housing**
Not applicable

2.15 **Certain Information Relating to Beaches and Coasts**
Not applicable

2.16 **Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works**
Not applicable

2.17 **Biodiversity certified land**
Not applicable

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2.18 Complying Development

Whether or not the land is land on which complying development may be carried out under each of the Codes for complying development because of the provisions of clauses 1.17A (c) and (d) and 1.19 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 and, if no complying development may be carried out on that land under that Policy, the reasons why complying development may not be carried out on that land.

The land is land on which Complying Development can be carried out under the General Housing Code (if in a residential zone), the Housing Alterations Code, the General Development Code, the General Industrial and Commercial Code, the Demolition Code and the Subdivision Code.

Important Disclaimer: This clause of the Certificate only contains information in respect of that required by clause 3 of Schedule 4 of the Environmental Planning and Assessment Regulation 2000, in relation to Complying Development under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. Other provisions contained in the SEPP, including but not limited to, minimum allotment size requirements, specified development standards or any other general exclusions, may preclude Complying Development under the SEPP from being able to be carried out. You will need to refer to the SEPP for complete details. It is your responsibility to ensure that you comply with all other general requirements of the SEPP. Failure to comply with these provisions may mean that any Complying Development Certificate issued under the provisions of the SEPP is invalid.

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City of Cultural Diversity
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Fax: (02) 9789 1542

PART 3

INFORMATION PROVIDED UNDER SECTION 149 (5) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979.

Note: *When information pursuant to Section 149(5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that Section. Council draws your attention to Section 149(6), which states that a Council shall not incur any liability in respect of any advice provided in good faith pursuant to sub-section (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter not referred to in this Certificate.*

3.1 Amending Local Environmental Plans

Site specific and, where relevant, general amendments to the principal planning instrument are identified below:

Local Environmental Plan 164
Gazette Date: 29 March 1996
Permitted townhouse and villa home development in the Residential 2(a) zone under the CPSO, except for certain land in Earlwood.

Local Environmental Plan 183
Gazette Date: 19 June 1998
Permitted dual occupancy development in residential zones.
Required a minimum lot frontage of 7.5 metres for each lot for any subdivision of dual occupancy development.

Local Environmental Plan 188
Gazette Date: 10 December 1999
Introduced provisions for Exempt and Complying Development.

Local Environmental Plan 194
Gazette Date: 6 July 2001
Introduced standard definitions for residential land uses.

3.2 Tree Preservation Order

A tree preservation order applies to the whole of the City of Canterbury.

3.3 Council Policy on Contaminated Land

On the 10 June 1999 Council adopted a policy on contaminated land. This policy will restrict development of land:

a) which is affected by contamination;
a) which has been used for certain purposes;
b) in respect of which there is not sufficient information about contamination;
c) which is proposed to be used for certain purposes;
d) in other circumstances contained in the policy.

3.4 General Advice Regarding Use of Property

Persons considering commencing a use of or purchasing a property are advised to seek confirmation that the current, or intended, use (as the case may be) has been approved by Council, or does not require Council approval. It is pointed out that the question of "existing use rights" within the meaning of the Environmental Planning and Assessment Act, 1979, is a complex matter, and that the commencement of a use without Council approval (where required) is unlawful and may be subject to enforcement action.

3.5 Other Matters

Not applicable.

JIM MONTAGUE
GENERAL MANAGER

Appendix C – Aboriginal Heritage Information Management System (AHIMS) Search

Office of Environment & Heritage

AHIMS Web Services (AWS)
Search Result

Your Ref Number : 118 Hannans Road Narwee

Client Service ID : 66560

Department of Housing

Date: 26 March 2012

Attention: Anna Tomas

Email: anna.tomas@dhs.nsw.gov.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 139, DP:DP35912 with a Buffer of 50 meters, conducted by Anna Tomas on 26 March 2012

A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

PO BOX 1967 Hurstville NSW 2220
43 BridgeStreet HURSTVILLE NSW 2220
Tel: (02)9585 6345 (02)9585 6741 Fax: (02)9585 6094

ABN 30 841 387 271
Email: ahims@environment.nsw.gov.au
Web: www.environment.nsw.gov.au

Office of Environment & Heritage

AHIMS Web Services (AWS)
Search Result

Your Ref Number : 120 Hannans Road Narwee

Client Service ID : 66563

Department of Housing

Date: 26 March 2012

Attention: Anna Tomas

Email: anna.tomas@dhs.nsw.gov.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 140, DP:DP35912 with a Buffer of 50 meters, conducted by Anna Tomas on 26 March 2012

A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

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- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
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- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

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Tel: (02)9585 6345 (02)9585 6741 Fax: (02)9585 6094

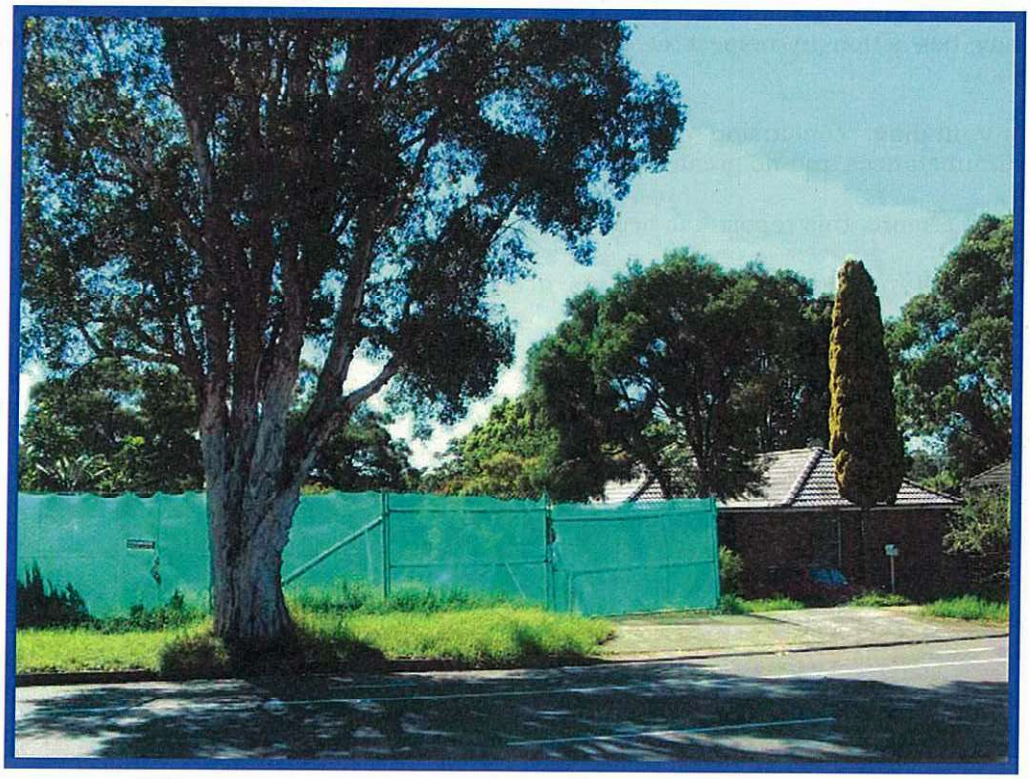
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Web: www.environment.nsw.gov.au

Appendix D – Arborist Report

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ARBORICULTURAL ASSESSMENT REPORT PREPARED FOR

RESIDENTIAL DEVELOPMENT 118 – 120 HANNANS ROAD NARWEE, NSW



REPORT PREPARED BY: HORTICULTURAL MANAGEMENT SERVICES

REPORT PREPARED FOR:

TJA Architects
Tim Antiohos
PO Box R844 Royal Exchange
Sydney 1225

15th April 2009

DISCLAIMER

This report has been prepared in accordance with the scope of services described in agreement between Horticultural Management Services and the client.

This report relies upon data, surveys and site inspections results taken at or under the particular time and or conditions specified herein.

Any representation, statement, opinion or advice, expressed or implied in this publication is made in good faith but on the basis that Horticultural Management Services, its agents and employees are not liable (whether by reason of negligence, lack of care or otherwise) to any person for any damage or loss whatsoever which has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representation, statement, or advice referred to above.

Any finding, conclusion or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client.

Furthermore, this report has been prepared solely for the use by the Client.

Horticultural Management Services accepts no responsibility for its use by other parties.

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1.0 INTRODUCTION AND BACKGROUND

Horticultural Management Services were engaged to conduct an Arboricultural Assessment Report with particular regard to the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, with reference made to the National Parks and Wildlife Services, Threatened Species Conservation Act 1995 and Canterbury City Council Tree Preservation Order.

Site investigations were undertaken on Wednesday 15th April 2009 to determine the existing trees overall health, structural integrity and identification of other physical conditions that may be present within the proposed development site, which may be affected by the proposed development.

The purpose of this report is to identify the trees within the site, provide information on their individual current health and condition, determine their remaining life expectancy and significance in the landscape and assess their suitability for retention/preservation.

The potential impact of the proposed residential development has also been assessed, together with recommendations for amendments to the design or construction to ensure the retention of tress considered worthy of preservation.

This assessment takes into consideration the ecological qualities of all trees and other significant vegetation on the site and its biotic, ecological, historical and visual significance.

The scope of this report includes the allocation of SULE ratings (Safe Useful Life Expectancy), identification of arboricultural and recommended work as required.

2.0 SITE LOCATION

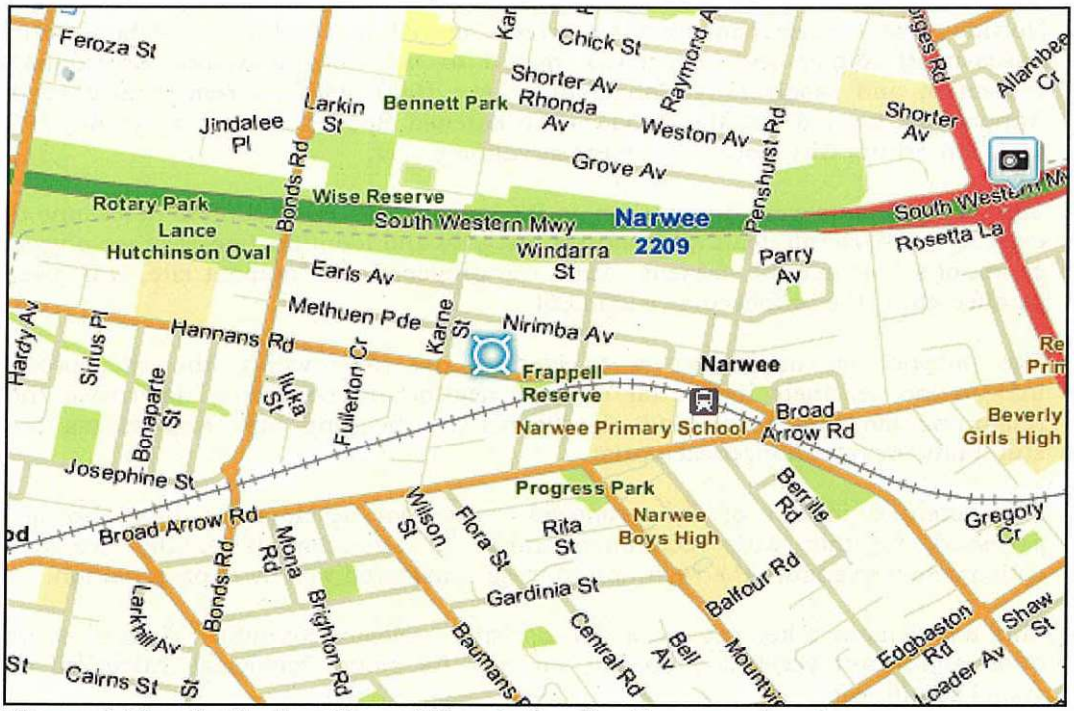


Figure 1 Show's the location of the study site. Source *whereis.com.au*

2.1 AERIAL OF SITE LOCATION AND PROPOSED DEVELOPMENT OVERLAY



Figure 2 Show's an aerial of the site. Source *whereis.com.au*

3.0 AIMS

To detail the condition of the trees and consider the location and condition of such in relation to their surrounds.

Provide as an outcome of the assessment, the following:

- Assess the condition of the subject tree(s),
- A description of the tree's and other vegetation on the subject site,
- Observations made,
- Discussion on the tree's in their current landscape and,
- Consider the benefits of retention or removal of the trees for the medium to long-term benefit of the tree's and on-going public safety,
- Provide recommendations for Tree Management, if or as required, within the context of a development application for the construction of a new residential development within the property.

4.0 SITE DESCRIPTION AND PROPOSED DEVELOPMENT

Relevant site plans and or documents were viewed prior to undertaking the Arborist Assessment.

118 Hannans Road site is already cleared of residential house and associated paths and driveways and now consists of several trees and shrub species. Other minor vegetation was observed; however these species are list as exempt under Councils TPO and were not assessed as part of this application.

The subject property at 120 Hannans Road contained one-(1) single residential housing commission house. The site currently contains existing, ornamental gardens, garden shed, driveway, paths and associated infrastructure on site. Other minor vegetation was also noted; however these species are list as exempt under Councils TPO and were not assessed as part of this application.

Both sites contain a mixture of both indigenous and introduced exotic vegetation observed. From the author's observations no vegetation (trees or shrubs) are indigenous to the local area, rather species planted through on-going gardening/landscaping by previous residents.

The herbaceous or grass vegetation consists of a mixture of introduced pastural grasses/weed species due to the sites long term residential pursuits.

The site is subject to an application for approval to construct new residential housing units and associated infrastructure on site as per Annexure A.

5.0 METHOD OF ASSESSMENT

The subject trees were inspected by Horticultural Management Services (HMS) on Wednesday 15th April 2009. Each tree has been provided with identification number for reference purposed denoted on the attached tree location plan and correlating with the Tree Assessment Schedule and as discussed within the report.

The method of assessment applied to the proposed development site is adapted from the principles developed by the Local Government Tree Resources Association (LGTRA). This recognised form of assessment considers the trees health/condition and subsequent stability, both in the long and short term at the time of the assessment and including but not limited to;

- Observations made including an evaluation of the tree's health,
- Likely future amenity based on a visual assessment,
- The trees tolerance to development impacts based on surface observations,
- Significance -specific heritage, cultural or intrinsic importance,
- Amenity value -as shade, windbreak etc or subjective, aesthetic values,
- Habitat value -both as a individual tree and as part of an ecological community,
- Species identification (botanical and common),
- Height and form,
- Crown spread, cover and density,
- Observations of soil conditions and likely root spread,
- Overall condition assessment and suitability,
- Hazard/failure potential of tree to damage property or result in death,
- Safe Useful Life Expectancy (SULE) after Barrell (1995),

5.1 VISUAL TREE ASSESSMENT

This assessment process is used to determine the sustainability of each tree in the landscape.

The assessment of each tree was made using Visual Tree Assessment (VTA). All trees were assessed from the ground. Destructive, resistance testing or aerial inspections have not been undertaken as part of this assessment.

5.2 HERITAGE SIGNIFICANCE

There are no trees within the site that have been identified as Heritage Items under Canterbury City Council Planning Scheme Ordinance or identified within a Significant Tree Register.

5.3 TREES ON ADJOINING LAND

In accordance with Council's requirements, all trees within the site and those species adjoining the property boundary have been assessed as part of this report.

There are no trees on adjoining properties that will be removed, or will be adversely affected upon or will require pruning under this proposed development.

5.4 PROPOSED DEVELOPMENT

The proposed development includes the construction of residential housing units located within the bounds of the existing property boundary as per Annexure A Proposed Building Layout.

The development will require the formalisation of associated site infrastructure including access roadway, paths, utility services and installation of associated landscaping.

5.5 IMPACT ASSESSMENT

A summary of the impact of the proposed development upon each tree identified within the study site is outlined in section 12.0 Assessment of Existing Trees Identified on Site.

The assessment in each case has considered the following issues;

- Root Zones (CRZ),
- Building works or footprint within TPZ or CRZ,
- Optimum Tree Protection Zones (TPZ) and Critical Root Zones (CRZ),
- SULE Rating for value of the tree assessed,
- Assessment of the likely impact of the proposed works,
- Recommendations for retention, management or removal,

Changing the drainage patterns around a tree by constructing a building, driveways, road and paths etc will alter the amount of water the tree receives and may cause root death or damage. Trenches dug beside or adjoining large trees for water, sewer or services may also damage the roots and will make a tree unstable.

Older trees will tolerate far less stress than younger trees as with age they become less responsive and find it very strenuous to respond to changes in their environment.

The components of tree risk assessment include the trees failure potential or in the case of land clearing/development, an environment conductive to tree failure.

Other factors are also considered related to the site, such as potential development or land use, soil condition and prevailing winds must be considered in conjunction when assessing the potential of failure for any tree.

6.0 PRUNING/REMOVAL STANDARDS

Any pruning recommended in this report is to be to the Australian Standard® AS4373 'Pruning of amenity trees', and conducted in accordance with the NSW Work Cover Authority Code of Practice for the Amenity Tree Industry, 1998

All pruning or removal works are to be in accordance with the appropriate Tree Management Policy where applicable, or Tree Management Order (TMO), or Tree Preservation Order (TPO), or applicable consent conditions.

Tree maintenance work is specialised and in order to be undertaken safely and to ensure the works carried out are not detrimental to the survival of the tree or surrounding vegetation, all works should be undertaken by a qualified Arboriculturist with appropriate competencies recognised within the Australian Qualification frame work, with a minimum of 5 years of continual experience within the industry of operational amenity arboriculture, and covered by appropriate and current types of insurance to undertake such works.

Any pruning near electricity wires should be undertaken in accordance with relative Electrical Safety Rules and be performed by persons individually authorised by Energy Australia with a "Work Near Overhead Power Lines" Certificate to undertake this scope of works.

7.0 TREE PROTECTION ZONES AND ROOT SYSTEM

On average the trees roots will extend to the outer reaches of their canopies, depending on the individual tree species, soil type and location. These roots have two major functions, which are to obtain water and minerals from the soil and to give anchorage support to the tree.

This area is known as the Tree Protection Zone (TPZ), this is a designated area around tree where optimum protection and preservation efforts are implemented.

No disturbance should occur within this area. It is calculated by using a formula that considers the tolerance level of the species to disturbance, its age class, and its condition and trunk diameter.

The main area for surface feeding roots to occur is from the tree trunk to the outer canopy known as the drip zone. These fibrous roots are less likely to occur under or near other buildings, as there is little surface moisture or soil air presence for root survival. These fibrous roots are those that take up water and nutrients.

While some tree roots will deeply penetrate the soil profile, in search of available water, most will occupy the first 60-70cm of the soil, as to obtain the needed sustenance. At times it will not be possible to retain the optimum TPZ around each tree and any activities proposed within this area must be carefully analysed to minimise any effects on its health and/or stability.

The actual spread of the root system is largely dependent on the particular species involved, and their localised environment. Any work carried out within the TPZ should be reviewed and supervised by an appropriately qualified Arborist.

Construction works proposed to be undertaken around the trees if not correctly assessed may modify the natural water table and reduce the amount of soil air and moisture present/available to the trees and their longevity may be greatly diminished.

If under the course of construction the tree roots are damaged or adversely affected, their demise will cause drought stress; poor uptake of water and nutrients, slower dispersal of gums and resins and could, in the long term, have an effect on the movement of certain compounds which make up the structure of the tree.

Any trees identified to be retained, protected and monitored by Council should be undertaken as per Annexure B: Tree Protection Details.

8.0 TREE PROTECTION ZONE

A Tree Protection Zone (TPZ) is a radial distance measured from the centre of the trunk of the tree. The intention of the TPZ is to minimise incursions to the root system and canopy to ensure the long term health and stability of the tree.

A commonly used delineation for the TPZ is the drip-line (extent of the crown spread projected to the ground plane). However, this may not provide adequate protection for trees that have prominent leans or distorted imbalanced or narrow crowns. A more appropriate guideline is the trunk diameter.

Within this TPZ it is then divided up into secondary protection/exclusion zones depending on the individual tree species, soil type and location commonly know as the Critical Root Zone (CRZ) and Primary Root Zone (PRZ).

The above criteria also consider the following elements;

- The trunk diameter,
- The sensitivity/tolerance of the species to construction impacts,
- The level of maturity,
- The health, vigour and structural integrity of the tree,
- The trees root and crown formation,

Trunk Diameter, (DBH) is measured at 1.4 metres from ground level using a metric tape measure.

Construction Tolerance considers the following elements;

- Good – Good tolerance to construction impacts,
- Moderate – Moderate tolerance to construction impacts,
- Poor- Poor tolerance to construction impacts,

Maturity class of the tree considers the following elements;

- Over-mature – Greater than 80% of the life expectancy for the species,
- Mature – Greater than 50 – 80% of the life expectancy for the species,
- Immature – Less than 20% of the life expectancy for the species,

8.1 TYPES OF TREE ROOTS

The trees root system develops in accordance with its pre-determined, height, soil conditions (availability of water and nutrients) and location of the root systems in response to the need to support the tree.

Unless conditions are uniform around the tree, which would be highly unusual, the extent of the root-systems can be irregular and difficult to predict. As tree roots are very opportunistic, they will not generally show the symmetry seen in the aerial parts. The majority of the root system is in the surface 600mm to 700mm, extending radially for distances which are frequently in excess of the tree height.

8.2 ROOT PLATE

This forms the main structural woody roots which provides overall anchorage for the tree. It is this central part of the root-system (large root mass with sub-soil normally attached) which may tilt over or rotates in storm events.

8.3 WOODY ROOTS

Beyond the root plate the root system rapidly subdivides into smaller diameter woody roots (hydrotropic) which conduct water and nutrients from the non-woody roots.

8.4 NON-WOODY ROOTS

Off the smaller diameter woody root system, a mass of non-woody, fine feeder roots system develops. These are the roots which are active in water and nutrient uptake, are very fine in structure, typically less than 0.5mm diameter, and include mycrorrhizal associations with some soil fungi. They are short lived, growing in response to the needs of the tree, with the majority dieing back each winter.

Conditions should be conductive for maintaining the growth of these non-woody roots to provide for the water and nutrient requirements of the tree.

Non-woody roots are vulnerable to damage, and once it occurs, water and nutrient uptake will be restricted until new ones are produced. Vigorous young trees will be capable of rapid regeneration, but more mature to over mature trees will respond slowly, if at all.

Any root damage and or demise may cause some drought stress; poor uptake of water and nutrients, slower dispersal of gums and resins and could, in the long term, have an effect on the movement of certain compounds which make up the structure of the tree, resulting in the slow decline to death of the trees.

9.0 DEFINITION OF ASSESSED HEALTH AND CONDITION OF TREE

The condition of each tree has been related in overall terms as one of the following headings and information is presented in section 12.0 Assessment of Existing Trees Identified on Site.

Good, the tree is generally healthy, vigorous, and free from the presence of major disease, obvious structural weaknesses, and fungal or insect infestation and is expected to continue to live in the same condition as at the time of the inspection.

Only small recommendations may be required to help continue the trees longevity.

Fair, the tree is generally vigorous but has some indication of decline due to the early effects of disease, fungal or insect infestation, or has been affected by physical (storm damage) or mechanical damage (Vandalism or involved in an accident by a vehicle) or is faltering due to the modification of the trees environment essential for it's survival.

This tree group may recover with remedial work undertaken by a Qualified Arborist where appropriate or without intervention and may regain some vigour and stabilise over time. Medium recommendations are required to bring this tree up to a satisfactory standard.

Poor, the tree is exhibiting symptoms of advanced and irreversible decline due to factors such as fungal infestation, termite damage, ring barking of the trees trunk due to borer infestation, major die-back in branches and the foliage is thinning in the crown due to various effects, epicormic growth is present throughout the inner canopy wile the tree is using up it's stored sugar and is in a state of stress.

This tree group will decline further to death over a period of time regardless of remedial works or modifications undertaken.

Dead, the tree is no longer alive and is in poor structural condition, that may cause damage to people or property and removal is strongly recommended.

9.1 TREE AGE CLASS TERMINOLOGY

Age Class (Modified from the British Standard 5837 -1991)

Immature:	Young trees, less than 1/3 of life expectancy,
Semi-mature:	Middle age trees, 1/3 to 2/3 of life expectancy,
Mature:	Mature trees older than 2/3 of life expectancy.
Over-mature:	Senescent trees, or those declining irreversibly to death.

9.2 ASSESSED STRUCTURAL CONDITION

This refers to the tree's form and growth habit modified by its environment, the state of the trunk and main structural branches.

It includes the presence of defects as decay, weak branch junctions and other visible abnormalities. Although some trees without defects fail in major storms, the presence of any defect will increase the chances of failure.

Good; Trees with a single dominant trunk along which evenly spaced branches are spread. Branches have properly formed collars which provide strong attachment to the trunk, and are about 25% of the trunk diameter. Minor structural defects may be present with low failure potentials.

Average; Trees with structural defects with low failure potential.

Fair; Trees with structural defects with medium failure potentials and require monitoring on an annual basis.

Poor; Trees with defects which have failed, or have a high risk of failing soon, and corrective action must be taken soon as possible.

9.3 ECOLOGICAL VALUE OF TREE

These categories are based upon the criteria used in the Thyer Tree Valuation Method (1996) to evaluate a tree's ecological benefit.

0.	None	Weed species
1.	Low	Restricts desirable plants or of little benefit to fauna.
2.	Medium	Beneficial to flora & fauna provides food source and/or shelter.
3.	High	Remnant /indigenous species of native vegetation.
4.	Very High	Indigenous species being an integral part of a natural ecosystem.

9.4 VISUAL AMENITY PROVIDED-PROMINENCE

These categories are based upon the criteria used in the Thyer Tree Valuation Method (1996) to evaluate a tree's visibility in the local area.

0.	None	Seldom/rarely seen (remote location).
1.	Low	Seen frequently by private owners or adjacent residents.
2.	Medium	Seen by neighbourhood residents and or passers by.
3.	High	Known locally or seen by many passers by.
4.	Very High	Of local historical importance, or known widely.

10.0 TREE INDENTIIFCATION ASSESSMENT SUMMARY

Tree Number	Species	DBH (mm) Diameter at Breast Height	Estimated Height (metres)	Crown Spread (metres)	Age Class	Canopy percentage	Health	Condition	Ecological	Visual amenity	SULE Rating	Recommendation
1	Melaleuca quinpuenervia	1600mm	16m	11 x 9m	M	90%	G	G	2	3	2	Council Street Tree- No adverse impacts and or long term effects are proposed to this tree as part of this development process. Approval is recommended for the retention, protection and annual monitoring / assessment of this tree as part of this development process.
2	Melaleuca quinpuenervia	Multi trunk	6m	8 x 8m	M	85%	G	G	2	3	3	Council Street Tree- No adverse impacts and or long term effects are proposed to this tree as part of this development process. Approval is recommended for the retention, protection and annual monitoring / assessment of this tree as part of this development process.
3	Cupressus spp	150mm	5m	1 x 1m	M	60%	G	G	1	2	5	Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment

4	Melaleuca bracteata	Multi trunk	7m	5 x 5m	M	70%	G	F	2	2	5	Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment and poor long-term health.
5	Cinnamomum camphora	900mm	6m	12 x 10m	M	75%	G	G	0	1	5	Many Local Governments now consider this species as a weed or nuisance species in areas of natural bushland. Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment and poor long-term health.
6	Jacaranda minosifolia	Multi trunk	7m	5 x 4m	M	70%	G	G	1	1	5	Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to long term modifications to the trees natural environment if retained.
7	Bauhinia spp	Multi trunk	8m	7 x 8m	M	85%	G	F	1	1	5	Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment, surface roots and water table through soil compaction would result in a decline of the trees health and stability.

8	Zelkova serrata	300mm	8m	7 x 7m	M	85%	G	G	1	1	5	Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment, surface roots and water table through soil compaction would result in a decline of the trees health and stability.
9	Cinnamomum camphora	Multi trunk	18m	16 x 16m	M	85%	F	G	0	1	2	Approval is recommended for the retention, protection and annual monitoring / assessment of this tree as part of this development process. This tree is to be protected as per Annexure B combined with the use of a Rocla Tri hex® paver, Eco paver ® series and or open lawn area, which would be sufficient enough to allow surface moisture and air into both trees surface feeding zone given the provided minimum distance of 3m as per attached plans.
10	Eucalyptus nicholii	1250mm	12m	10 x 12m	M	65%	F	P	2	1	4C	Approval is recommended for the removal of this tree and associated stump grinding works by a qualified Arborist due to its existing poor health and identification of poor structural conditions.

11	Eucalyptus nicholii	1200mm	11m	12 x 10m	M	65%	F	F	2	1	4A	Approval is recommended for the removal of this tree and associated stump grinding works by a qualified Arborist due to its existing poor health and identification of poor structural conditions.

Figure 3 Show's a detailed list of trees observed and assessed in relation to this application.

All species were identified, numbered, assessed and referenced against Councils Tree Preservation Guidelines by a Qualified Horticulturist and Arborist.

11.0 TREE LOCATION PLAN

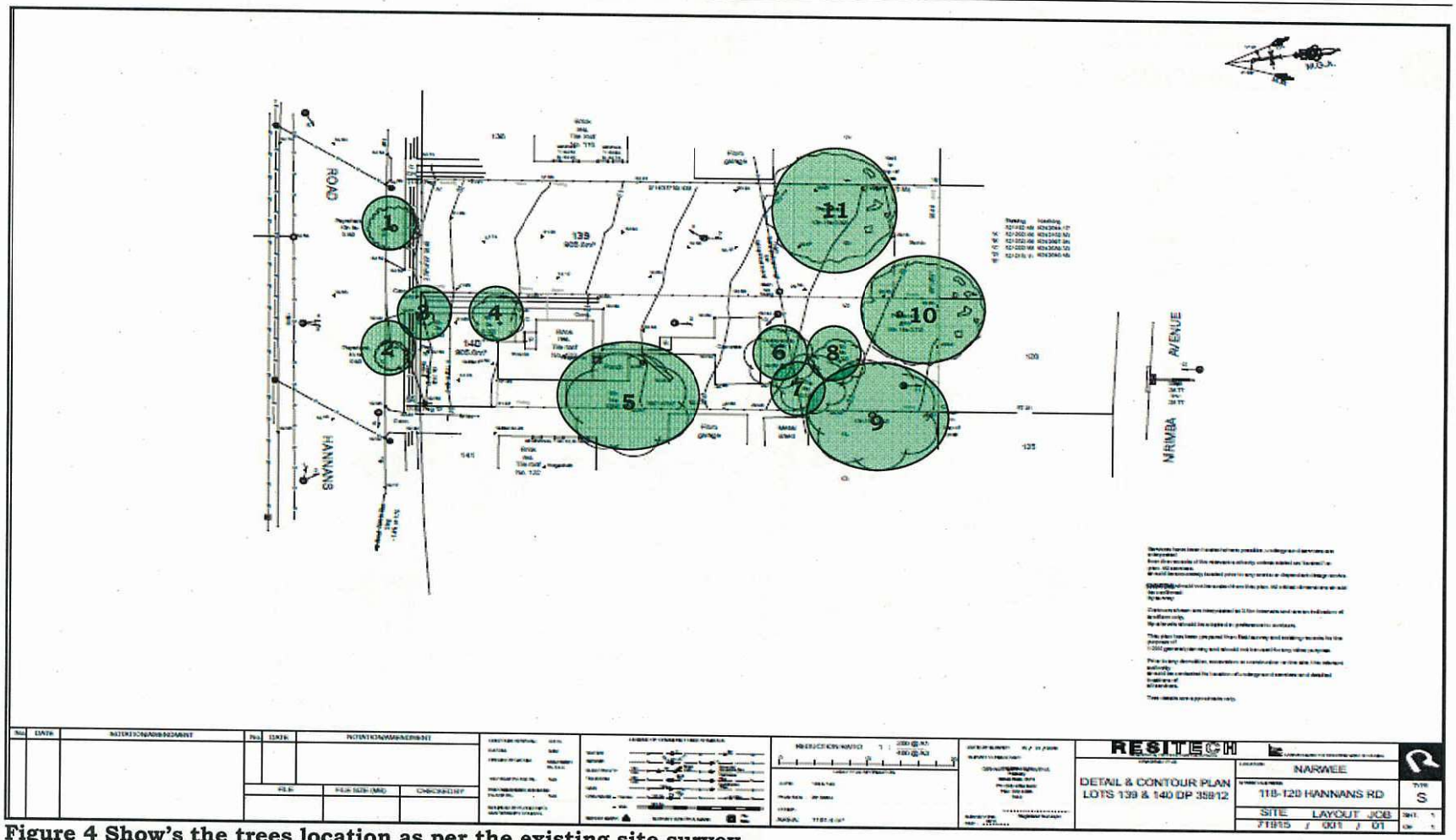


Figure 4 Show's the trees location as per the existing site survey.

11.1 TREES PROPOSED TO BE RETAINED- SITE LOCATION PLAN

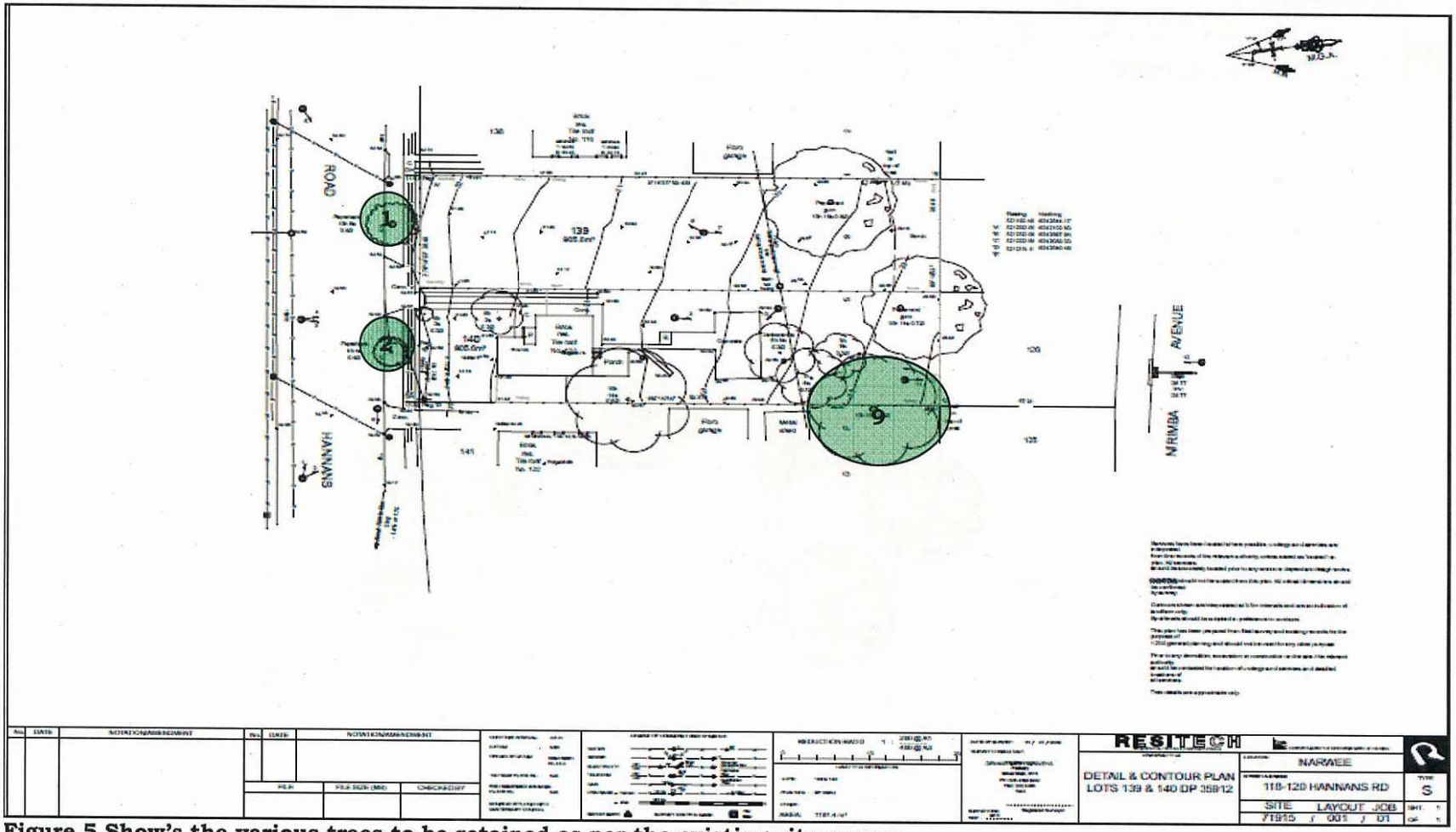


Figure 5 Show's the various trees to be retained as per the existing site survey.

11.2 TREES PROPOSED TO BE REMOVED- SITE LOCATION PLAN

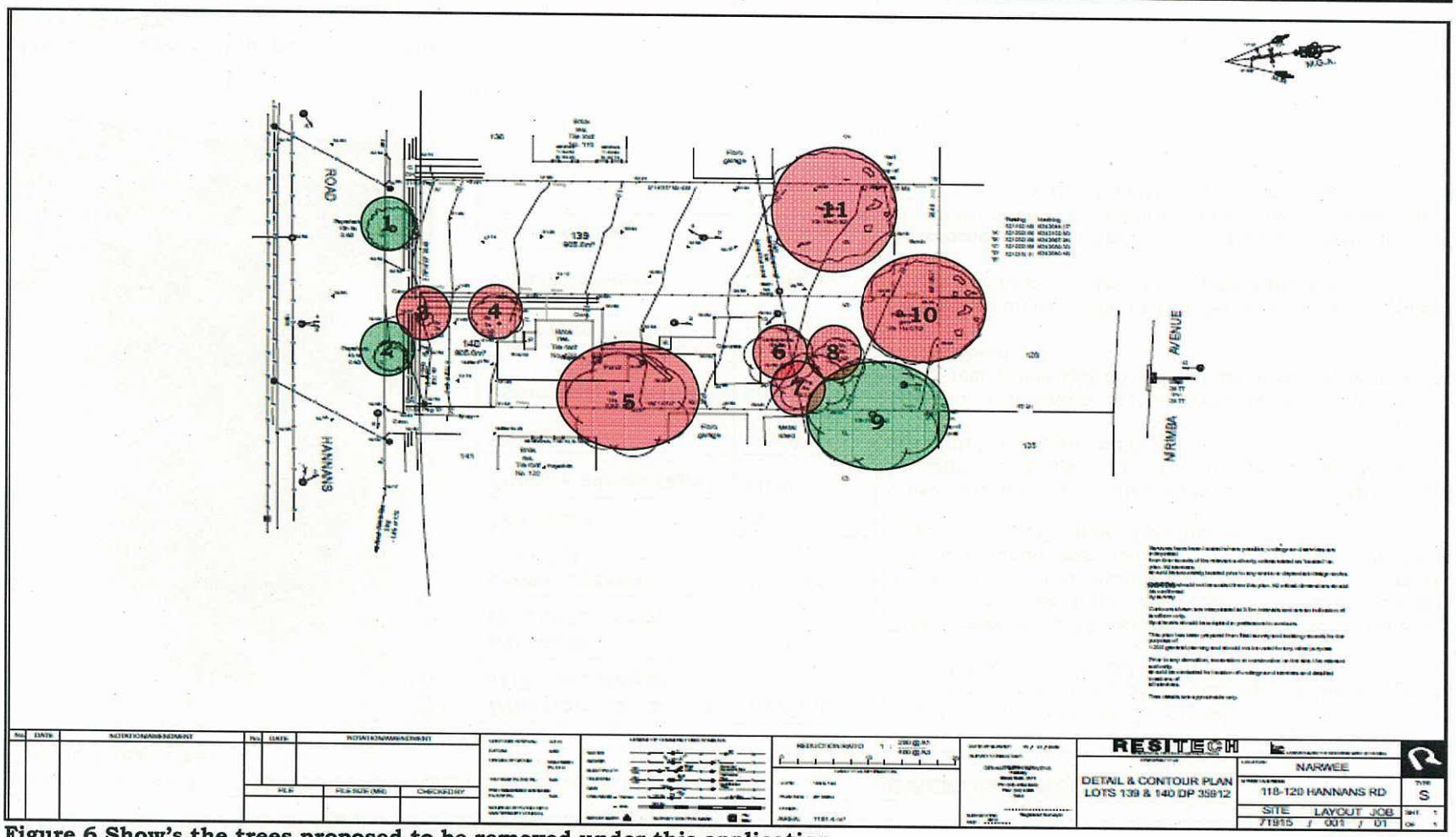
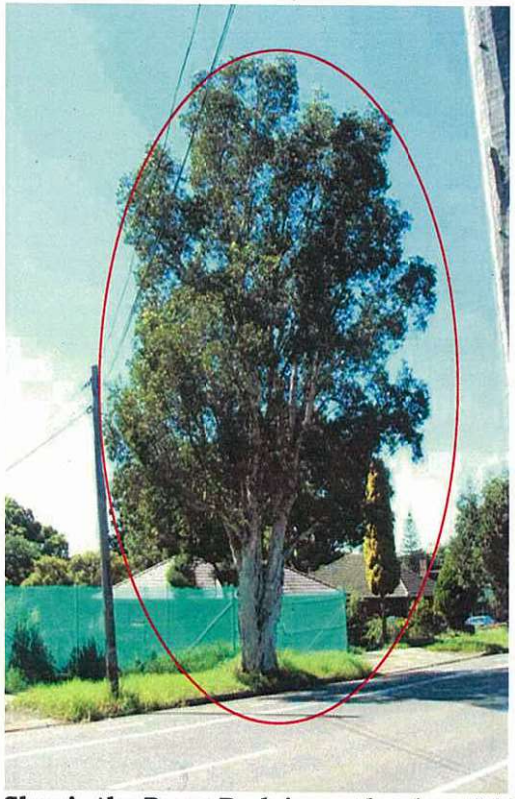


Figure 6 Show's the trees proposed to be removed under this application.

12.0 ASSESSMENT OF EXISTING TREES IDENTIFIED ON SITE

TREE NUMBER 1 **Council Street Tree**	**BOTANICAL NAME:** Melaleuca quinpuenervia	**COMMON NAME:** Paper Bark



Show's the Paper Bark in good order within the streetscape.

DBH (mm) Diameter at Breast Height	1600mm
Estimated Height (metres)	16m
Crown Spread (metres)	11 x 9m
Age Class	M
Canopy percentage	90%
Health	Good
Structural Condition	Good
Ecological Value	2- Medium
Visual amenity	3- High
SULE Rating	2

This Council Street tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

Tree Assessment Summary- Good, the tree is generally healthy and free from the presence of major disease, obvious structural weaknesses and fungal or insect infestation and is expected to continue to live in the same condition as at the time of the inspection.

Close and physical examination of the tree, trunk and branches indicated the tree to be in good health, structural condition and density.

Physical observation of the tree's lower branches and trunk region revealed no indications of stress, termites or borers noted.

No adverse impacts and or long term effects are proposed to this tree as part of this development process.

Recommendation: Approval is recommended for the retention, protection and annual monitoring / assessment of this tree as part of this development process.

TREE NUMBER 2 **Council Street Tree**	**BOTANICAL NAME:** Melaleuca quinpuenervia	**COMMON NAME:** Paper Bark



Shows the trees upper canopy reduced.

DBH (mm) Diameter at Breast Height	Multi trunk
Estimated Height (metres)	6m
Crown Spread (metres)	8 x 8m
Age Class	M
Canopy percentage	85%
Health	Good
Structural Condition	Good
Ecological Value	2- Medium
Visual amenity	3- High
SULE Rating	3

This Council Street tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

Tree Assessment Summary- Good, the tree is generally healthy and free from the presence of major disease, obvious structural weaknesses and fungal or insect infestation and is expected to continue to live in the same condition as at the time of the inspection.

An observation of previous upper canopy reduction was noted. This work may have been undertaken as part of overhead powerline maintenance, hence its current shape.

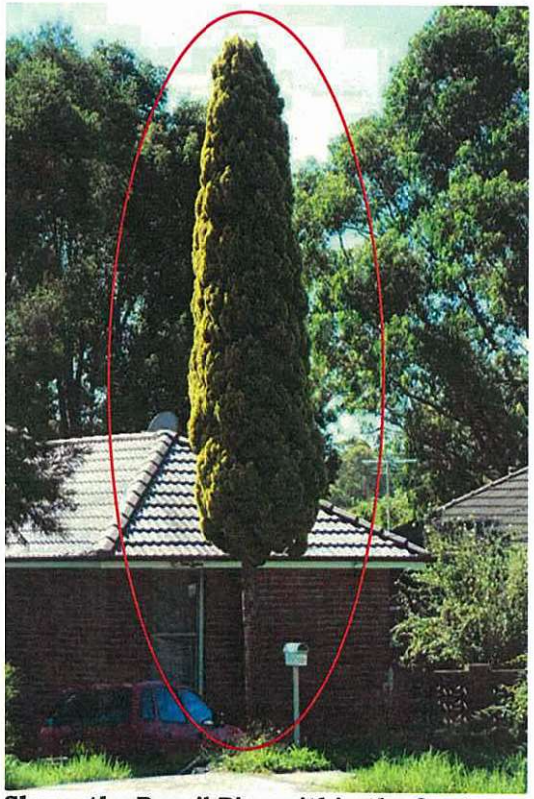
Close and physical examination of the tree, trunk and branches indicated the tree to be in good health, structural condition and density.

Physical observation of the tree's lower branches and trunk region revealed no indications of stress, termites or borers noted.

No adverse impacts and or long term effects are proposed to this tree as part of this development process.

Recommendation: Approval is recommended for the retention, protection and annual monitoring / assessment of this tree as part of this development process.

TREE NUMBER 3	**BOTANICAL NAME:** Cupressus spp	**COMMON NAME:** Golden Pencil Pine



Shows the Pencil Pine within the front garden.

DBH (mm) Diameter at Breast Height	150mm
Estimated Height (metres)	5m
Crown Spread (metres)	1 x 1m
Age Class	M
Canopy percentage	60%
Health	Good
Structural Condition	Good
Ecological Value	1- Low
Visual amenity	2- Medium
SULE Rating	5

The tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

Tree Assessment Summary- Good, the tree was border line as being exempt, however it was assessed to given Council a clear determination of site vegetation as part of this Development Application.

The Pencil Pine is generally healthy, vigorous and free from the presence of major disease, obvious structural weaknesses and fungal or insect infestation.

Close and physical examination of the tree, trunk and foliage indicated the tree to be in good structural condition and density. The tree's upper canopy appeared to be in good health, vigour and condition.

However, based on the attached plans and proposed scope of works the construction process will adversely affected the overall stability of this tree due to the loss of critical anchorage / supporting roots, modifications to the trees natural environment and loss of soil and air / moisture, hence full removal is warranted.

Recommendation: Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment and poor long-term health.

This tree should be replaced with more suitable species within the landscape master plan.

TREE NUMBER 4	BOTANICAL NAME: Melaleuca bracteata	COMMON NAME: Golden Honey Myrtle



Shows the trees upper canopy



Show's the poor multi trunk.

DBH (mm) Diameter at Breast Height	Multi trunk
Estimated Height (metres)	7m
Crown Spread (metres)	5 x 5m
Age Class	M
Canopy percentage	70%
Health	Good to Fair
Structural Condition	Fair
Ecological Value	2- Medium
Visual amenity	2- Medium
SULE Rating	5

The tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

Tree Assessment Summary- Fair, the tree is mature in age and appears healthy and free from the presence of major disease, fungal or insect infestation.

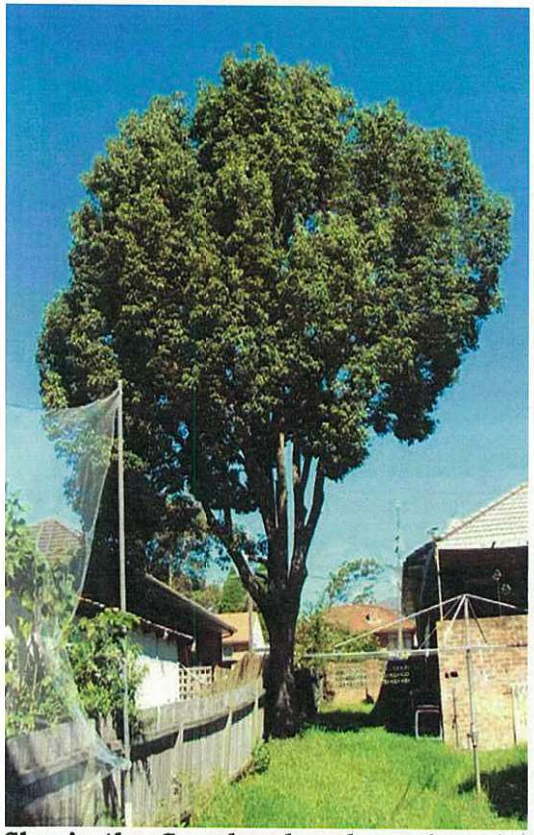
Examination of foliage and upper canopy indicated fair health and density with observation noted of previous vandalism (broken limbs) within the trees lower and mid trunk region resulting in an open and poor canopy spread, which would place additional stress upon the tree multi trunk form.

Furthermore, based on the attached plans and proposed scope of works the construction process will adversely affected the overall stability of this tree due to the loss of critical anchorage / supporting roots, modifications to the trees natural environment and loss of soil and air / moisture, hence full removal is warranted.

Recommendation: Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment and poor long-term health.

This tree should be replaced with more suitable species within the landscape master plan.

TREE NUMBER 5	**BOTANICAL NAME:** Cinnamomum camphora	**COMMON NAME:** Camphor laurel



Show's the Camphor laurel growing along the boundary and close to adjoining residential dwellings.

DBH (mm) Diameter at Breast Height	900mm
Estimated Height (metres)	6m
Crown Spread (metres)	12 x 10m
Age Class	M
Canopy percentage	75%
Health	Good
Structural Condition	Good
Ecological Value	0- None Weed sp
Visual amenity	1- Low
SULE Rating	5

The tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

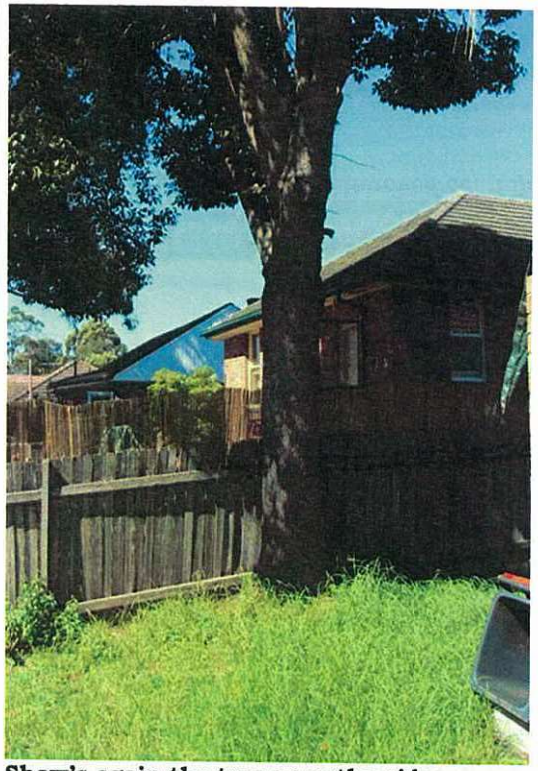
Tree Assessment Summary- Good, this large and mature tree has been identified for Council to ensure no adverse impacts and or long term effects may be experienced as part of this development process.

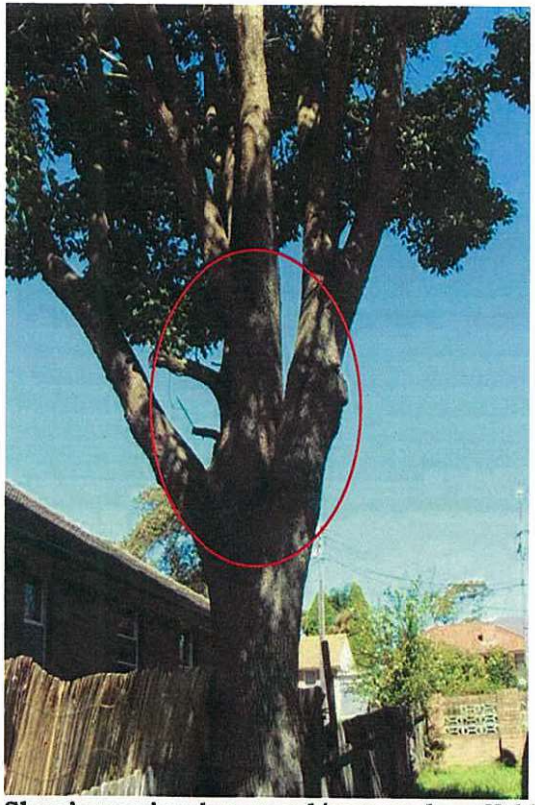
This tree is generally healthy, vigorous and free from the presence of major disease, obvious structural weaknesses and insect infestation and is expected to continue to live in the same condition as at the time of the inspection.

Close and physical examination of the mid scaffold branch showed minor observations of previous limb removal due to its close proximity to the residential house.

The tree trunk appeared to be in good condition with no observations of borer or termite presence. The upper canopy was noted to have minor epicormic growth, which indicates the tree is in a stressed condition; however it appears only superficial at this time. The foliage and upper canopy appeared to be in good health, vigour and condition.

Under this proposed development application the tree is proposed to be retained, however based on the attached plans and proposed scope of works the construction process may adversely affected the overall stability of this tree due to the loss of critical anchorage / supporting roots, modifications to the trees natural environment and loss of soil air / moisture will result in a decline of the trees health and stability in the long term and therefore it should be removed.

 **Show's again the tree near the side boundary.**			Based on the proposed scope of works this tree will be replaced with more suitable species within the landscape master plan. Many Local Governments now consider this species as a weed or nuisance species in areas of natural bushland. **Recommendation:** Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment and poor long-term health. Given the trees existing location to adjoining residents and proposed new dwelling this tree is retained may cause damage to persons or property. This tree will be replaced with more suitable species within the landscape master plan. If Council specifies retention of this tree, the following points may be considered for the long term preservation of the tree under this application. ■ Avoid large changes to the surface structure due to modification of the trees moisture / surface feeding roots, ■ A Qualified Arborist/Horticulturalist undertakes any/all Arboricultural works. ■ Any trenching near the trees as required is to be hand dug to ensure minimal disturbance to additional surface feeding roots. ■ Roots are cut cleanly with root pruning devices as required, ■ Any proposed work located near the trunk or outer canopy of the trees drip line, were services are known to be in the vicinity, any excavation for



Show's previously pruned/removed scaffold branches.

services should be hand dug to ensure minimal impact to the trees surface feeding and support roots.

- Any tree roots that are exposed will be removed by approved Arboricultural techniques and have a root hormone i.e. Formula 20® or equivalent applied at the manufactures specification.
- Any trenching will be backfilled and compacted with an approved Australian Standard orchid mix 60/40 containing washed river sand and peat moss to a minimum depth of 700mm, the remaining soil profile is to be filled with an approved topsoil to meet the existing soil surface.
- No building waste is to be disposed of/or stored near the tree trunk or drip zone.
- In order to ameliorate impact of any development, standard erosion and sediment controls are recommended.
- The trees drip line/zone is to be mulched to the Horticultural standard of 75mm.
- Regular watering is to be undertaken in hot dry periods to alleviate any short-term stress or loss of available water.
- Erection of a chain mesh safety fence is installed to ensure the protection of Trees and Critical Root Zone as per Annexure B.

TREE NUMBER 6	BOTANICAL NAME: Jacaranda minosifolia	COMMON NAME: Jacaranda



Shows the Jacaranda growing near adjoining trees.

DBH (mm) Diameter at Breast Height	Multi trunk
Estimated Height (metres)	7m
Crown Spread (metres)	5 x 4m
Age Class	M
Canopy percentage	70%
Health	Good
Structural Condition	Good to Fair
Ecological Value	1- Low
Visual amenity	1- Low
SULE Rating	5

The tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

Tree Assessment Summary- Good, this tree is mature in age and appears healthy, vigorous and free from the presence of major disease, obvious structural weaknesses, fungal or insect infestation.

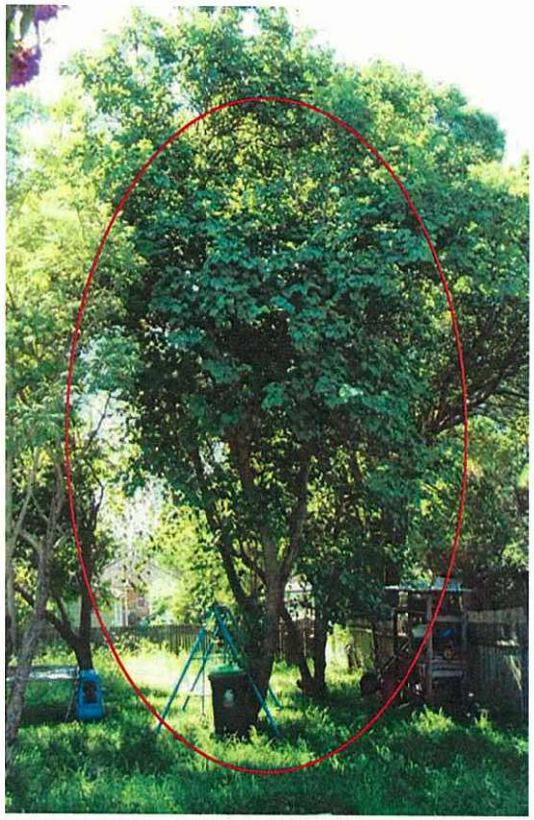
Examination of foliage and upper canopy indicated good health, density given this species natural aesthetic shape and vigour with no major deficiencies or disease observed.

However, based upon site plans provided and proposed scope of works (building locations) and modifications to the trees natural environment, surface roots and water table through soil compaction would result in a decline of the trees health and stability in the long term and therefore it should be removed.

Based on the proposed scope of works this tree will be replaced with a more suitable species within the proposed landscape master plan.

Recommendation: Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to long term modifications to the trees natural environment if retained.

TREE NUMBER 7	**BOTANICAL NAME:** Bauhinia spp	**COMMON NAME:** Orchid Tree



DBH (mm) Diameter at Breast Height	Multi trunk
Estimated Height (metres)	8m
Crown Spread (metres)	7 x 8m
Age Class	M
Canopy percentage	85%
Health	Good
Structural Condition	Fair
Ecological Value	1- Low
Visual amenity	1- Low
SULE Rating	5

The tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

Tree Assessment Summary- Good, this tree is mature in age and appears healthy, vigorous and free from the presence of major disease, obvious structural weaknesses, fungal or insect infestation.

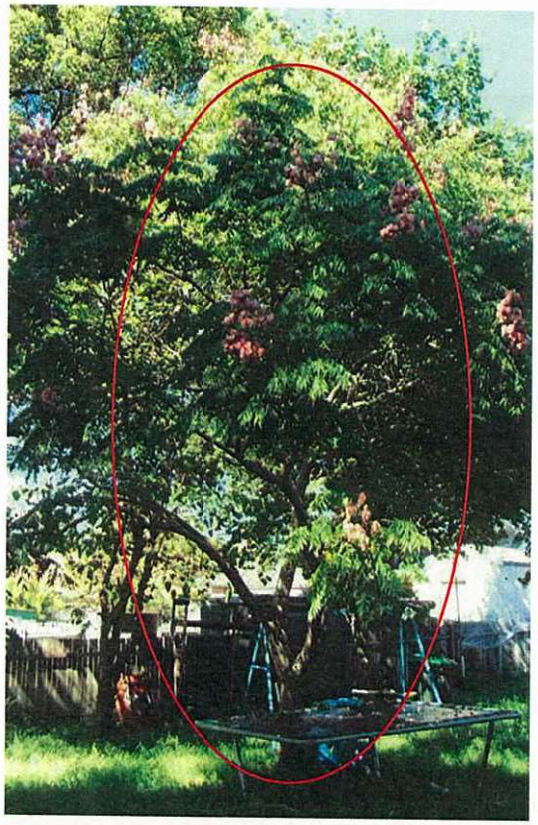
Examination of foliage and upper canopy indicated good health, density given this species natural aesthetic shape and vigour with no major deficiencies or disease observed.

However, based upon site plans provided and proposed scope of works (building locations) and modifications to the trees natural environment, surface roots and water table through soil compaction would result in a decline of the trees health and stability in the long term and therefore it should be removed.

Based on the proposed scope of works this tree will be replaced with a more suitable species within the proposed landscape master plan.

Recommendation: Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment, surface roots and water table through soil compaction would result in a decline of the trees health and stability.

TREE NUMBER 8	BOTANICAL NAME: Zelkova serrata	COMMON NAME: Japanese Zelkova



DBH (mm) Diameter at Breast Height	300mm
Estimated Height (metres)	8m
Crown Spread (metres)	7 x 7m
Age Class	M
Canopy percentage	85%
Health	Good
Structural Condition	Good
Ecological Value	1- Low
Visual amenity	1- Low
SULE Rating	5

The tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

Tree Assessment Summary- Good, this tree is mature in age and appears healthy, vigorous and free from the presence of major disease, obvious structural weaknesses, fungal or insect infestation.

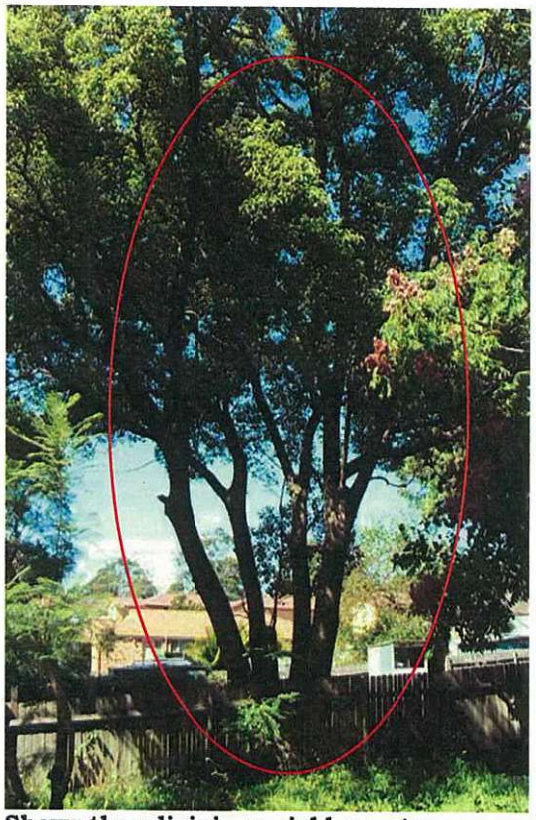
Examination of foliage and upper canopy indicated good health, density given this species natural aesthetic shape and vigour with no major deficiencies or disease observed.

However, based upon site plans provided and proposed scope of works (building locations) and modifications to the trees natural environment, surface roots and water table through soil compaction would result in a decline of the trees health and stability in the long term and therefore it should be removed.

Based on the proposed scope of works this tree will be replaced with a more suitable species within the proposed landscape master plan.

Recommendation: Approval should be considered for the removal of this tree and associated stump grinding works by a qualified Arborist, due to modifications to the trees natural environment, surface roots and water table through soil compaction would result in a decline of the trees health and stability.

TREE NUMBER 9	**BOTANICAL NAME:** Cinnamomum camphora	**COMMON NAME:** Camphor laurel



Shows the adjoining neighbours tree proposed to be retained and monitored.

DBH (mm) Diameter at Breast Height	Multi trunk
Estimated Height (metres)	18m
Crown Spread (metres)	16 x 16m
Age Class	M
Canopy percentage	85%
Health	Good to Fair
Structural Condition	Good
Ecological Value	0- None Weed sp
Visual amenity	1- Low
SULE Rating	2

The tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

Tree Assessment Summary- Good to Fair, the tree is generally healthy, vigorous and free from the presence of major disease, obvious structural weaknesses and fungal or insect infestation and is expected to continue to live in the same condition as at the time of the inspection.

This tree is an introduced exotic weed species located within an adjoining residential property which has been identified for assessment to ensure no adverse impacts and or long term affects may be experienced as part of this development process.

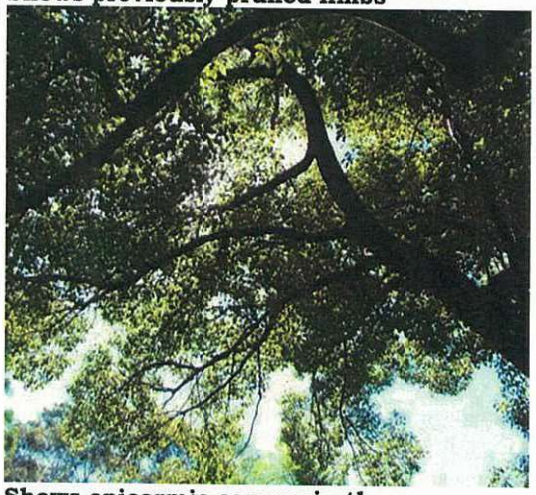
Many Local Governments now consider this species as a weed or nuisance species in areas of natural bushland.

Close and physical examination of the tree, trunk and foliage indicated the tree to be in Fair to Good health, structural condition and density. The tree's upper canopy appeared to be in Fair health and vigour as minor observations of outer canopy/branch die-back and epicormic growth were noted, which indicates the tree is in a stressed condition.

Based upon the proposed development and the trees overall size, health and root spread the Critical Root Zone Requiring Protection, Minimum distance on one side only from trunk per unit trunk diameter based upon Guidelines for Optimum Tree Protection Zones For Trees, Richard W Harris et al (1999, 3rd edition) Arboriculture Prentice Hall, N.J. would be considered a preferred minimum distance of 4m with a Preferred minimum distance of 6m.



Shows previously pruned limbs



Shows epicormic canopy in the canopy

Suitable engineering techniques may be undertaken to ensure minimal/no impacts are placed upon the tree through a pier and beam system to build above any anchorage or surface feeder roots that may be encountered.

This tree is to be protected as per Annexure B combined with the use of a Rocla Tri hex® paver, Eco paver ® series and or open lawn area, which would be sufficient enough to allow surface moisture and air into both trees surface feeding zone given the provided minimum distance of 3m as per attached plans.

Based on the proposed scope of works this tree is considered suitable for retention at the time of assessment for 5 to 15 years with acceptable level of risk and on-going maintenance.

Recommendation: Approval is recommended for the retention, protection and annual monitoring / assessment of this tree as part of this development process.

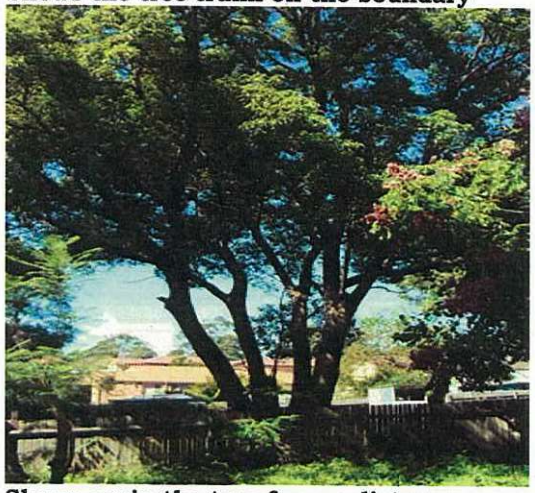
This tree is to be protected as per Annexure B combined with the use of a Rocla Tri hex® paver, Eco paver ® series and or open lawn area, which would be sufficient enough to allow surface moisture and air into both trees surface feeding zone given the provided minimum distance of 3m as per attached plans.

The following points may be considered for the long term preservation of the tree under this application.

- Avoid large changes to the surface structure due to modification of the trees moisture / surface feeding roots,
- A Qualified Arborist/Horticulturalist undertakes any/all Arboricultural works.



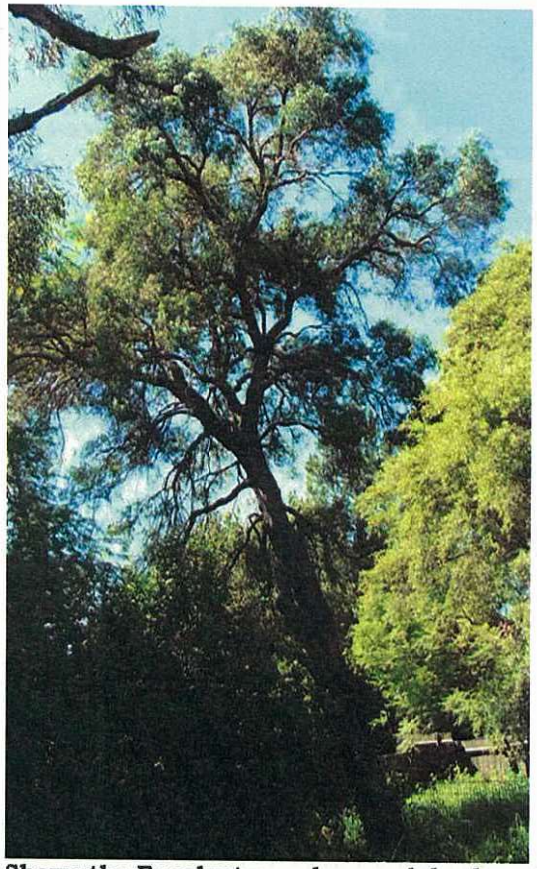
Shows the tree trunk on the boundary



Shows again the tree from a distance.

- Any trenching near the trees as required is to be hand dug to ensure minimal disturbance to additional surface feeding roots.
- Roots are cut cleanly with root pruning devices as required,
- Any proposed work located near the trunk or outer canopy of the trees drip line, were services are known to be in the vicinity, any excavation for services should be hand dug to ensure minimal impact to the trees surface feeding and support roots.
- Any tree roots that are exposed will be removed by approved Arboricultural techniques and have a root hormone i.e. Formula 20® or equivalent applied at the manufactures specification.
- Any trenching will be backfilled and compacted with an approved Australian Standard orchid mix 60/40 containing washed river sand and peat moss to a minimum depth of 700mm, the remaining soil profile is to be filled with an approved topsoil to meet the existing soil surface.
- No building waste is to be disposed of/or stored near the tree trunk or drip zone.
- The trees drip line/zone is to be mulched to the Horticultural standard of 75mm.
- Regular watering is to be undertaken in hot dry periods to alleviate any short-term stress or loss of available water.
- Erection of a chain mesh safety fence is installed to ensure the protection of Trees and Critical Root Zone as per Annexure B.

TREE NUMBER 10	**BOTANICAL NAME:** Eucalyptus nicholii	**COMMON NAME:** Narrow Leafed Peppermint



Shows the Eucalypt on a lean and deadwood within the lower scaffold limbs.

DBH (mm) Diameter at Breast Height	1250mm
Estimated Height (metres)	12m
Crown Spread (metres)	10 x 12m
Age Class	M
Canopy percentage	65%
Health	Fair
Structural Condition	Poor
Ecological Value	2- Medium
Visual amenity	1- Low
SULE Rating	4C

The tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

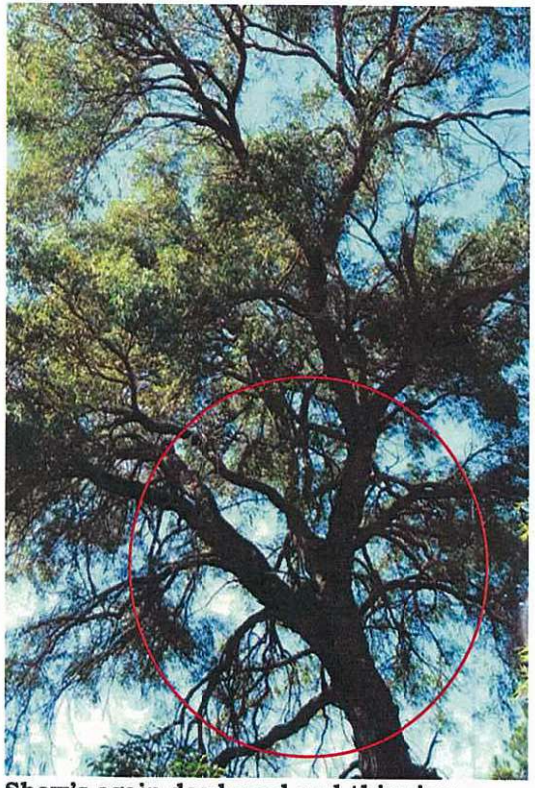
Tree Assessment Summary- Fair to Poor, This tree is not indigenous species associated with the local area.

Whilst undertaking this tree condition assessment the tree in its present state to a common person would be considered to be in fair health and condition based visually upon its size, upper canopy spread and foliage colour, however this assumption is incorrect as the tree is in a state of slow decline.

This tree is typical of this species with multi trunk leader and numerous scaffold branches produced from within the main trunk area.

Close and physical examination of the trunk and foliage indicated the trees to be in fair to poor visual condition and density. This opinion is based upon various visual observations noted during the assessment process including but not limited to;

- Die-back on outer canopy/extremities,
- Epicormic growth on mid section scaffold branches and trunk region,
- Epicormic growth located from the main trunk region is also thinning and failing,
- Large percentage of leaf/foliage drop within the drip zone;
- Large sections of deadwood noted,
- Thinning and loss of the trees upper canopy, and
- Wound callus tissue splitting and drying out around open wounds.



Show's again deadwood and thinning canopy.

The tree's upper canopy appeared to be in a declining condition and best described as being in fair to poor health and condition.

The dieback of this tree is probably the best observed and described by the symptoms that can be quantified. Those symptoms can be grouped into stages of increasing severity. The first stage is decline and thinning of the crown, beginning at the tips of the twigs and progressing along the branches towards the inner trunk and scaffold branches.

As the outer parts die, the dead sections of branches protrude beyond the remaining foliage. Once there has been considerable decline of the crown, new shoots may be produced directly from the trunk or main branches. These shoots, called epicormic shoots give the tree a distinctive compact and healthy appearance; however this is not the case.

If recovery does occur, the epicormic growth may eventually produce a new, healthy crown. If not, they in turn may begin to die. There may be several cycles of production of epicormic shoots followed by then decline to death. As long as the tree has sufficient reserves of energy to produce new shoots, it can continue to survive, however, once those reserves are exhausted, no further epicormic shoots can be produced this leads to the third and final stage of dieback, death of the whole tree. Isolated trees or whole forests can be affected. (Heatwole & Lowman 1986) as observed here on site throughout the trees various stages to its decline and death.

Physical observation of the trees lower trunk region revealed minor open wounds with secondary infections (fungal infestation) which may place structural weakness on the lower trunk area due the mature size and weight distribution of its canopy.



Shows previous failed limbs



Show's an open wound with soft rot

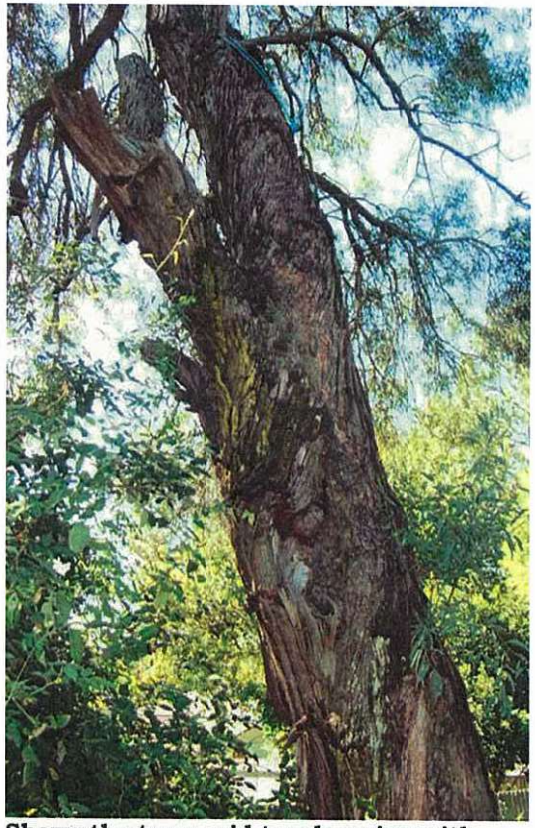
Based on the trees present size, spread and site any proposed development of the site including the retention of the tree, will ultimately have an adverse affect upon the trees root system by reduction of its anchorage and surface feeding area, secondary complications will result expedite limb shedding and total failure of the trees remaining structure.

Any modification to the tree's present shape or size to facilitate its short term retention would irrevocably change the inherent nature of this tree. Complete or even partial removal of any large scaffold limbs to reduce its size and canopy spread would have some serious effects including but not limited to;

- *Loss of symmetry and aesthetical shape of this tree,*
- *Loss of the aesthetical shape, which cannot be regrown,*
- *A large shift in weight in the trees crown may result in excessive movement of the trees root ball and may increase the likelihood of the tree failure in stormy conditions,*
- *Removal of the remaining limbs would leave an open wound which may not always callus over and examination of the trees present health would allow other secondary infections into the tree, as already noted on site.*

Pruning of the tree's limbs is known to redirect the stored sugars in remaining branches to the roots system (stimulating root growth), causing secondary thickening and further expansion of the root ball.

This is caused by the tree trying to compensate for its loss and shift in the upper canopy and to further boost the supplies in what remains of the crown; however this only expedites the loss of valuable resources, resulting in the overall decline and failure of the remaining structure.

 **Shows the trees mid trunk region with damaged upper scaffold limbs and fungal infestation in the open wound.**			Furthermore, the long term vision/health for this tree is considered by the author to be very low, with a high probability of failure of the trees remaining Critical Root Mass (root plate zone) in a storm event and will have the potential to affect neighbouring properties and general public. It is my professional opinion and position that this tree would not recover with remedial work undertake by a Qualified Arborist and no guarantee could be given, expressed or implied to the remaining structural integrity of the tree and or its root zone/plate regarding its anchorage/support due to the trees health, age and structural condition as tabled within this report. The close proximity of the tree to the adjoining residential properties also warrants the removal of this tree with consideration of replanting with a more suitable species on site. **Recommendation:** Approval is recommended for the removal of this tree and associated stump grinding works by a qualified Arborist due to its existing poor health and identification of poor structural conditions. This tree is in an advanced state of decline and will decline further to death over a period of time regardless of any proposed redevelopment of the site, remedial works or modifications undertaken. This tree should be removed whilst it is in-tacked and has not failed or resulted in loss of life or damage to persons or property.

TREE NUMBER 11	**BOTANICAL NAME:** Eucalyptus nicholii	**COMMON NAME:** Narrow Leafed Peppermint



Shows the tree from a distance.

DBH (mm) Diameter at Breast Height	1200mm
Estimated Height (metres)	11m
Crown Spread (metres)	12 x 10m
Age Class	M
Canopy percentage	65%
Health	Fair
Structural Condition	Fair
Ecological Value	2- Medium
Visual amenity	1- Low
SULE Rating	4A

The tree assessed was evaluated on its own merits, health, structure and age of the specimen, were all taken into consideration.

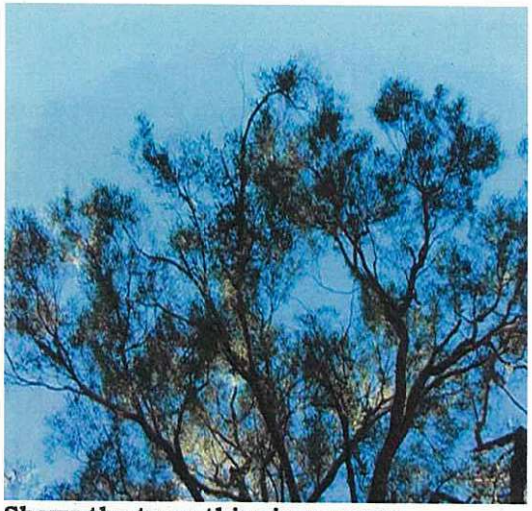
Tree Assessment Summary- Fair to Poor, This tree is not indigenous species associated with the local area.

Whilst undertaking this tree condition assessment the tree in its present state to a common person would be considered to be in fair health and condition based visually upon its size, upper canopy spread and foliage colour, however this assumption is incorrect as the tree is in a state of slow decline.

This tree is typical of this species with multi trunk leader and numerous scaffold branches produced from within the main trunk area.

Close and physical examination of the trunk and foliage indicated the trees to be in fair to poor visual condition and density. This opinion is based upon various visual observations noted during the assessment process including but not limited to;

- Die-back on outer canopy/extremities,
- Epicormic growth on mid section scaffold branches and trunk region,
- Epicormic growth located from the main trunk region is also thinning and failing,
- Large percentage of leaf/foliage drop within the drip zone;
- Large sections of deadwood noted,
- Thinning and loss of the trees upper canopy, and
- Wound callus tissue splitting and drying out around open wounds.



Shows the trees thinning canopy.



Shows dead wood and die back.

The tree's upper canopy appeared to be in a declining condition and best described as being in fair to poor health and condition.

The dieback of this tree is probably the best observed and described by the symptoms that can be quantified. Those symptoms can be grouped into stages of increasing severity. The first stage is decline and thinning of the crown, beginning at the tips of the twigs and progressing along the branches towards the inner trunk and scaffold branches.

As the outer parts die, the dead sections of branches protrude beyond the remaining foliage. Once there has been considerable decline of the crown, new shoots may be produced directly from the trunk or main branches. These shoots, called epicormic shoots give the tree a distinctive compact and healthy appearance; however this is not the case.

If recovery does occur, the epicormic growth may eventually produce a new, healthy crown. If not, they in turn may begin to die. There may be several cycles of production of epicormic shoots followed by then decline to death. As long as the tree has sufficient reserves of energy to produce new shoots, it can continue to survive, however, once those reserves are exhausted, no further epicormic shoots can be produced this leads to the third and final stage of dieback, death of the whole tree. Isolated trees or whole forests can be affected. (Heatwole & Lowman 1986) as observed here on site throughout the trees various stages to its decline and death.

Physical observation of the trees lower trunk region revealed minor open wounds with secondary infections (fungal infestation) which may place structural weakness on the lower trunk area due the mature size and weight distribution of its canopy.



Shows active borers and damage on the tree mid trunk region.

Based on the trees present size, spread and site any proposed development of the site including the retention of the tree, will ultimately have an adverse affect upon the trees root system by reduction of its anchorage and surface feeding area, secondary complications will result expedite limb shedding and total failure of the trees remaining structure.

Any modification to the tree's present shape or size to facilitate its short term retention would irrevocably change the inherent nature of this tree. Complete or even partial removal of any large scaffold limbs to reduce its size and canopy spread would have some serious effects including but not limited to;

- *Loss of symmetry and aesthetical shape of this tree,*
- *Loss of the aesthetical shape, which cannot be regrown,*
- *A large shift in weight in the trees crown may result in excessive movement of the trees root ball and may increase the likelihood of the tree failure in stormy conditions,*
- *Removal of the remaining limbs would leave an open wound which may not always callus over and examination of the trees present health would allow other secondary infections into the tree, as already noted on site.*

Pruning of the tree's limbs is known to redirect the stored sugars in remaining branches to the roots system (stimulating root growth), causing secondary thickening and further expansion of the root ball.

This is caused by the tree trying to compensate for its loss and shift in the upper canopy and to further boost the supplies in what remains of the crown; however this only expedites the loss of valuable resources, resulting in the overall decline and failure of the remaining structure.



Shows a lower scaffold limb, which has been pruned previously to attach a chain swing.

The chain is still attached and cutting into the trees limb.

Furthermore, the long term vision/health for this tree is considered by the author to be very low, with a high probability of failure of the trees remaining Critical Root Mass (root plate zone) in a storm event and will have the potential to affect neighbouring properties and general public.

It is my professional opinion and position that this tree would not recover with remedial work undertake by a Qualified Arborist and no guarantee could be given, expressed or implied to the remaining structural integrity of the tree and or its root zone/plate regarding its anchorage/support due to the trees health, age and structural condition as tabled within this report.

The close proximity of the tree to the adjoining residential properties also warrants the removal of this tree with consideration of replanting with a more suitable species on site.

Recommendation: Approval is recommended for the removal of this tree and associated stump grinding works by a qualified Arborist due to its existing poor health and identification of poor structural conditions.

This tree is in an advanced state of decline and will decline further to death over a period of time regardless of any proposed redevelopment of the site, remedial works or modifications undertaken.

This tree should be removed whilst it is in-tacked and has not failed or resulted in loss of life or damage to persons or property.

13.0 SITE PHOTOGRAPHS

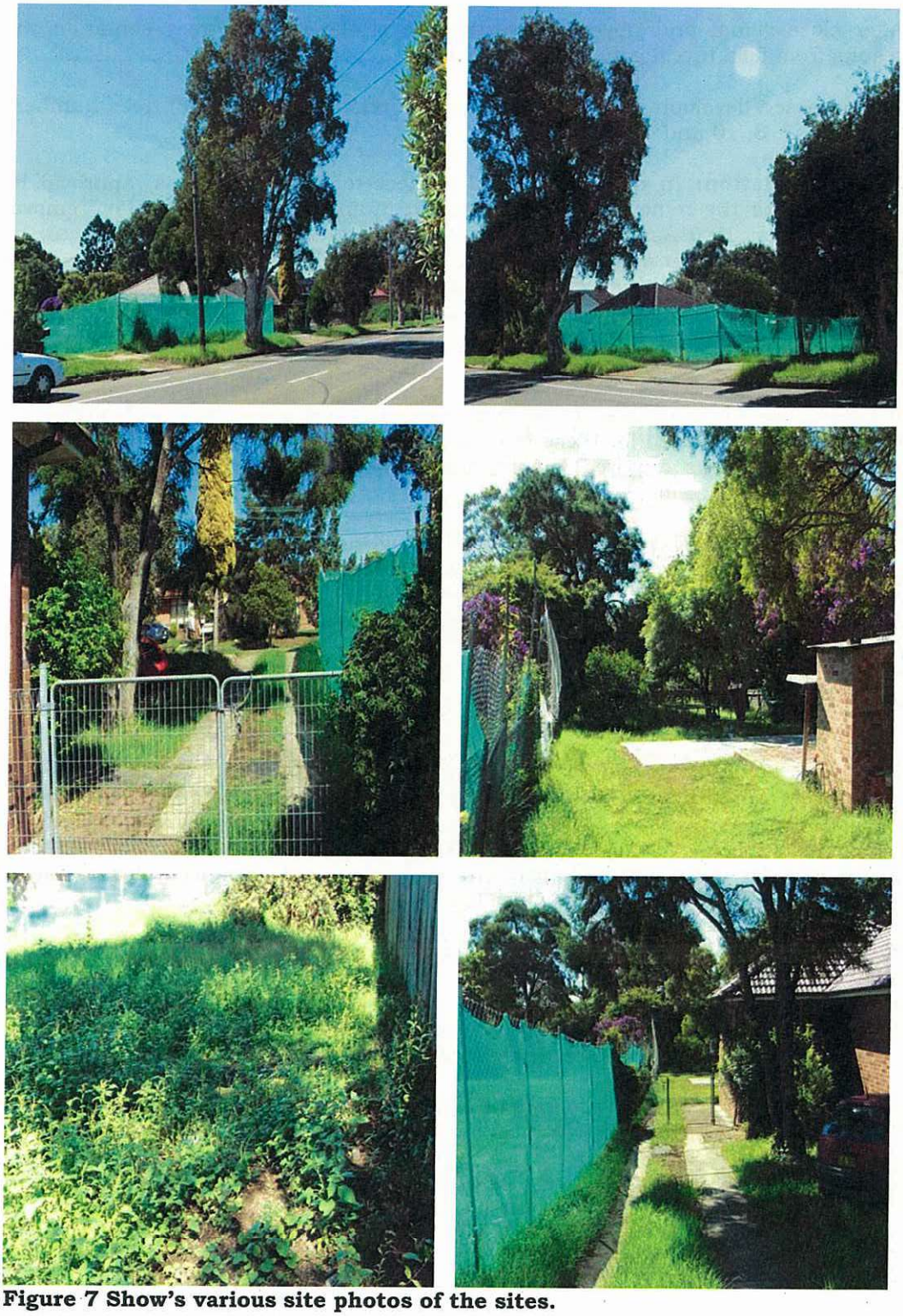


Figure 7 Show's various site photos of the sites.

14.0 RECOMMENDATIONS

After close visual and physical investigation of the various trees condition the results from field investigations are as follows.

The proposed development will necessitate the removal of Eight- (8) trees numbers 3, 4, 5, 6, 7, 8, 10 and 11.

Recommendation: In my opinion and subject to Council process, approval be considered for the removal of trees identified (numbers tabled above) for removal within section 12.0 Assessment Of Existing Trees Identified On Site, due to the proposed development and layout, infrastructure, modifications to the trees natural environment through loss of surface roots, modified natural water table, soil compaction and trenching for services that would result in the overall decline of these tree's health and stability in the long term and therefore it should be removed and replaced.

If these trees are considered to be retained by Council under this application, the long term vision/health for these trees is considered by the author to be low given the scope of works required, environmental weed species, loss of stability and advance state of decline.

Therefore, full removal and associated stump grinding works be undertaken by a qualified Arborist prior to the development commencement.

The following points may be considered for the proposed redevelopment under this application.

- Use mulch that is free of deleterious and extraneous matter such as soil, weeds and sticks. Use organic mulches that are free of stones,
- The applicant considers choosing plant species indigenous to the area, and thus would help to increase flora and fauna habitat and greater diversity of the area,
- In order to ameliorate impact of any development, advanced plants may be used in the Landscape Master Plan,
- Plantings should take into consideration the high priority of the streetscape and visual element,
- In order to ameliorate impact of any redevelopment, standard erosion and sediment controls are recommended,
- The trees should be programmed to be removed whilst they are upright and intact and have not failed,
- The trees prior to removal shall be fully investigated for any nesting or roosting fauna,

RETENTION OF TREES 1, 2 AND 9

The following points may be considered for the long term retention of trees as listed in Section 12.0 Assessment of Existing Trees Identified on Site, not affected by this proposed development under this application.

- Avoid large changes to the surface structure due to modification of the trees moisture / surface feeding roots,
- A Qualified Arborist/Horticulturalist undertakes all Arboricultural works,
- All trenching near the trees as required is to be hand dug to ensure minimal disturbance to additional surface feeding roots,
- Any tree roots discovered are cut cleanly with root pruning devices,
- Vertical deep watering points for stressed mature trees if or as required,
- Air-knife treatments, to alleviate soil compaction where trees are suffering stress, and to inspect tree root structures and growth patterns,
- Any proposed work located near the trunk or outer canopy of the trees drip line, were services are known to be in the vicinity, any excavation for services should be hand dug to ensure minimal impact to the trees surface feeding and support roots,
- Any tree roots that are exposed will be removed by approved Arboricultural techniques and have a root hormone i.e. Formula 20® or equivalent applied at the manufactures specification,
- Any trenches undertaken near tree drip zones will be backfilled and compacted with an approved Australian Standard orchid mix 60/40 containing washed river sand and peat moss to a minimum depth of 700mm, the remaining soil profile is to be filled with an approved topsoil to meet the existing soil surface,
- No building waste is to be disposed of/or stored near the tree trunk or drip zone,
- The applicant considers choosing plant species indigenous to the area, and thus would help to increase flora and fauna habitat and greater diversity of the area,
- In order to ameliorate impact of any development, advanced indigenous plants may be used in the Landscape Master Plan,
- Plantings should take into consideration the high priority of the streetscape and visual amenity,
- Any vegetation removed during the development not be mulched and used in landscaping due to the high levels of weed infestation on the site and the likelihood that seeds and viable cuttings may be spread throughout the development,
- In order to ameliorate impact of any development, standard erosion and sediment controls are recommended,
- The trees drip line/zone is to be mulched to the Horticultural standard of 75mm,
- Regular watering is to be undertaken in hot dry periods to alleviate any short-term stress or loss of available water,
- Erection of a chain mesh safety fence be installed to ensure the protection of Trees Critical Root Zone as per Annexure B,
- A qualified Arborist should monitor these trees over a twelve (12) month period to evaluate the trees recovery and provide technical information to Council as required.

15.0 CONCLUSION

The removal of trees identified (Trees Numbered 3, 4, 5, 6, 7, 8, 10 and 11.) from this site is acceptable due to modifications to the sites natural environment, age of the specimen trees, their individual poor health and structural conditions that would not allow their individual safe retention due to changes including but not limited to; soil compaction, modification to the natural water table and loss of soil oxygen and moisture.

The dieback of the larger Eucalypt trees number 10 and 11 is probably the best observed and described by the symptoms that can be quantified. Those symptoms can be grouped into stages of increasing severity.

The first stage is decline and thinning of the crown, beginning at the tips of the twigs and progressing along the branches towards the inner trunk and scaffold branches. As the outer parts die, the dead sections of branches protrude beyond the remaining foliage. Once there has been considerable decline of the crown, new shoots may be produced directly from the trunk or main branches.

These shoots, called epicormic shoots give the tree a distinctive compact and healthy appearance; however this is not the case.

If recovery does occur, the epicormic growth may eventually produce a new, healthy crown. If not, they in turn may begin to die. There may be several cycles of production of epicormic shoots followed by then decline to death. As long as the tree has sufficient reserves of energy to produce new shoots, it can continue to survive, however, once those reserves are exhausted, no further epicormic shoots can be produced this leads to the third and final stage of dieback, death of the whole tree.

Isolated tree or whole forests can be affected. (Heatwole & Lowman 1986) as observed here on site throughout the trees various stages to their decline and death.

No guarantees or assumptions could be drawn from this report based on any of the individual tree's existing condition if they are to be retained in the long term under this development application. As stated this tabled report is a snap shot of the existing trees structural condition on site and should be used as a guide when assessing this Development Application.

Based on the information provided approval should be given for the complete removal of all trees assessed and recommended for full removal, including associated stump grinding works by a qualified Arborist identified within section 12.0 Assessment of Existing Trees Identified on Site.

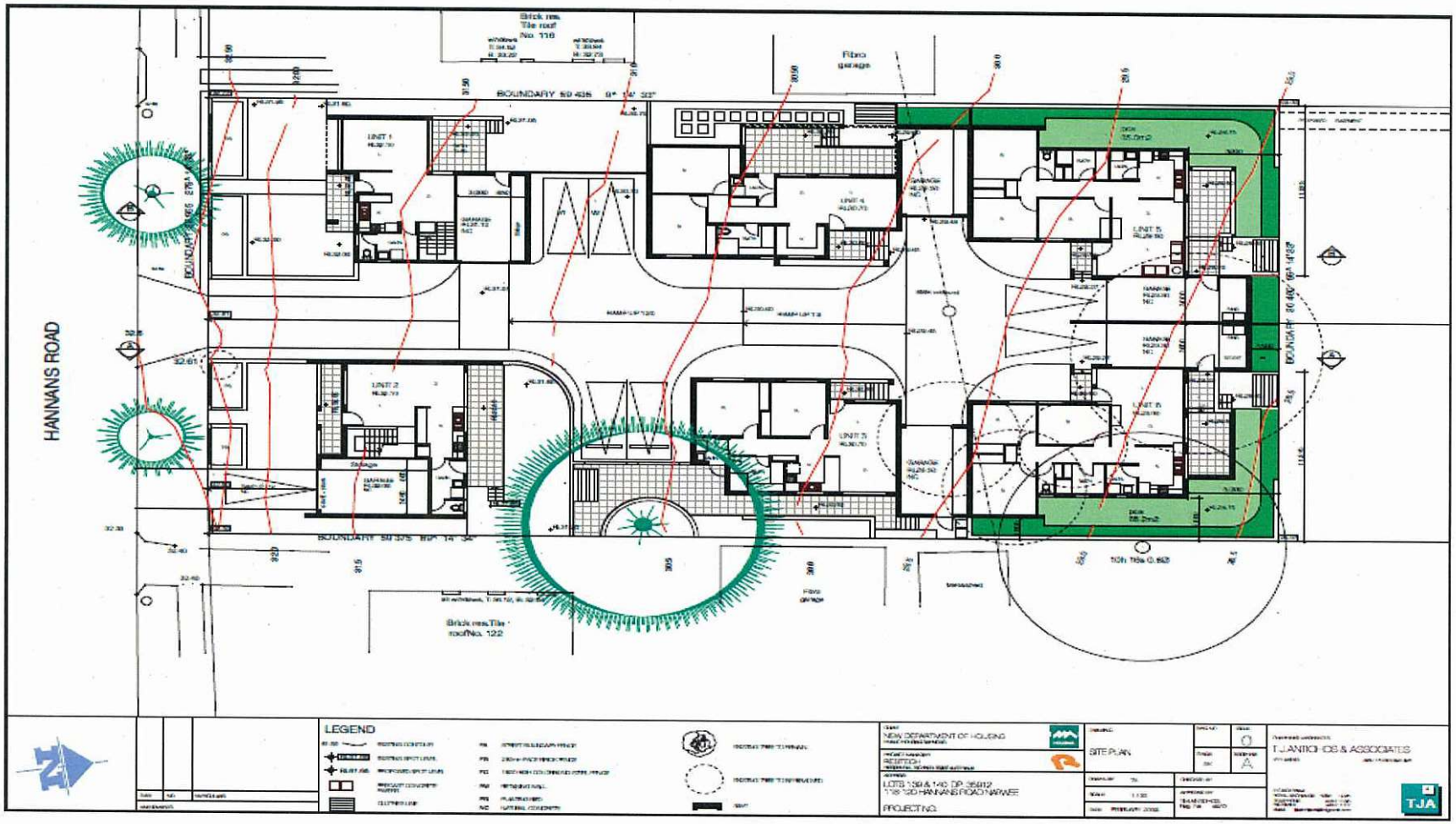
Based on the various trees size and spread of both surface feeding and support/anchorage roots any development of the site (residential construction) will ultimately have an adverse affect upon many of these trees by reduction of their surface feeding area, loss of soil air, moisture and support from anchorage roots due to the scope of works required.

The removal of these trees from this site will not have an adverse effect on the environment or Section 5A "*Significant effects on threatened species, populations or ecological communities, or their habitats*" as defined under the Environmental Planning and Assessment Act (1979).

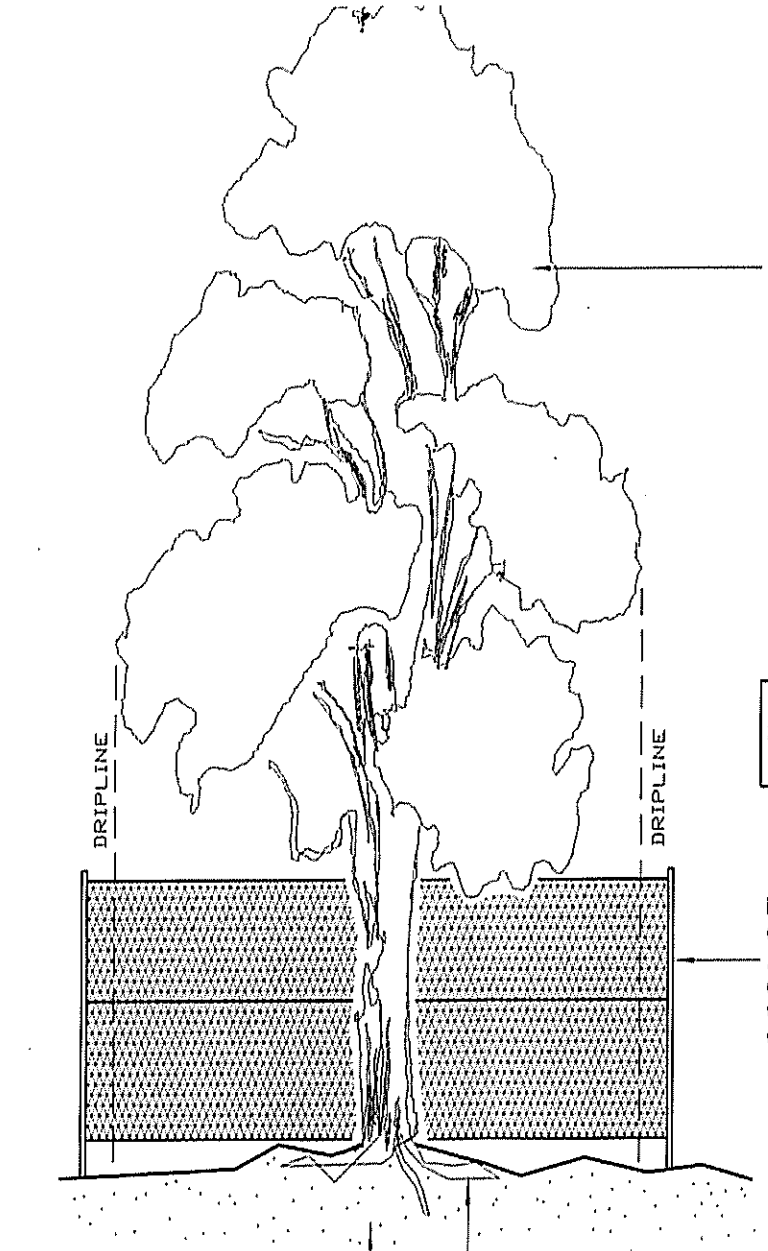
This assessment indicates whether a viable local population of a species or an endangered ecological community will be placed at risk of extinction as a result of the proposal; or whether a significant area of known habitat will be modified or removed and has been also taken into consideration and has not been triggered by this tree application.

In summary these trees should be removed and replaced within the landscape master plan.

ANNEXURE A: PROPOSED DEVELOPMENT LAYOUT



ANNUXURE B: TREE PROTECTION DETAIL



ANY TREE SURGERY SUCH AS LIMB REMOVAL CROWN PRUNING OR CROWN LIFTING IS TO BE CONDUCTED BY A QUALIFIED ARBORIST ONLY OR AS DIRECTED.

DO NOT PLACE PLANT, EQUIPMENT OR MATERIALS WITHIN TREE DRIPLINE DO NOT REMOVE SOIL FROM THIS ZONE.

INSTALL PHYSICAL BARRIER SUCH AS CHAINWIRE FENCING OR SAFETY WEBBING AROUND PERIMETER OF TREE CLEAR OF CANOPY DRIPLINE FOR DURATION OF WORKS. REMOVE UPON COMPLETION OF WORKS.

WHERE EXCAVATION WITHIN THE DRIPLINE IS NECESSARY, USE HAND METHODS ONLY SUCH THAT ROOT SYSTEMS REMAIN PROTECTED AND INTACT.

DO NOT CUT ROOTS GREATER THAN ø50mm WITHOUT APPROVAL FROM THE SITE SUPERVISOR OR A QUALIFIED ARBORIST. CLEANLY CUT ROOTS USING A CHAIN SAW OR HAND SAW ONLY. DO NOT UNDULY ROCK THE ROOT SYSTEM. DO NOT TREAT WOUNDS WITH PAINT.

ANNEXURE C: Minimum setbacks (from the centre of the tree's trunk)

1. Tree Age/Vitality Assessed by suitably qualified tree professional/arborist.	2. Size Trunk diameter 1.4 meters above ground.	3. Distance Preferred minimum distance (M)	4. Minimum distance On one side only (m)
Young trees, normal vitality.	< 200 200 – 400 >400	2.0 3.0 4.0	1.3 2.0 2.7
Young trees, low vitality.	<200 200 – 400 >400	3.0 4.5 6.0	2.0 3.0 4.0
Middle age trees, normal vitality.	<200 250 - 500 >500	3.0 4.5 6.0	2.0 3.0 4.0
Middle age trees, low vitality	<250 250 – 500 >500	5.0 7.5 10.0	3.3 5.0 6.0
Mature trees, normal vitality	<350 350 – 750 >750	4.0 6.0 8.0	2.7 4.0 5.3
Mature trees of low vitality and over-mature trees.	<350 350 – 750 >750	6.0 9.0 12.0	4.0 6.0 8.0

Engineering Requirements for Development-Design, Maintenance and Construction Guidelines, Chapter 3 - Environment, Vegetation and Heritage Protection, p 3-7. (Wyong Shire Council, March 1997) adapted from British Standard BS 5837:1991 "Guide for Trees in Relation to Construction"

NOTE In clay soils the setback distances in Column 3 should be adopted because the critical root zone of a tree will occupy a larger surface area.

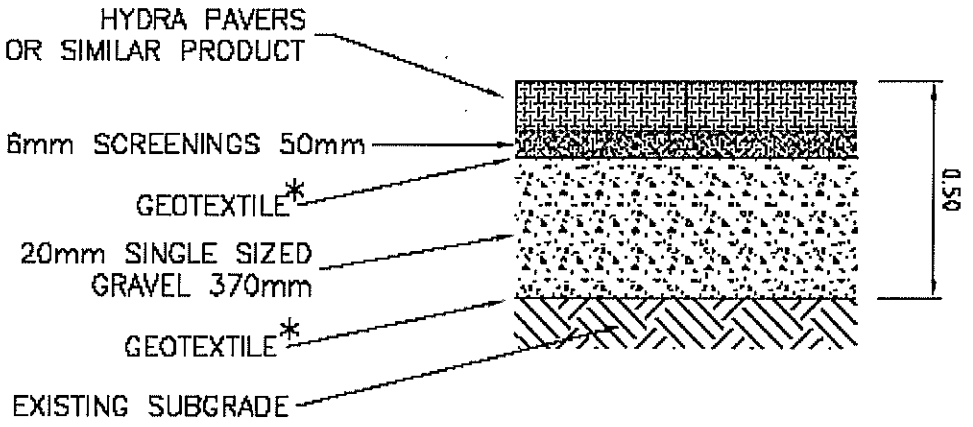
ANNEXURE D: S.U.L.E- SAFE USEFUL LIFE EXPECTANCY (Barrell 1995)

	1 LONG	2 MEDIUM	3 SHORT	4 REMOVAL	5 MOVED OR REPLACED
	Likely to be useful for over 40 years with acceptable risk and assuming reasonable maintenance	Likely to be useful for 15-40 years with acceptable risk and assuming reasonable maintenance	Trees that appeared to be retainable at the time of assessment for 5 to 15 years with acceptable level of risk.	Tree to be removed within the next 5 years	Tree which can be reliably moved or replaced.
A	Structurally sound trees growing in positions that can accommodate future growth	Trees which may only live 15-40 years	Trees that may only live between 5 and 15 more years.	Dead, dying, suppressed or declining trees through disease or inhospitable conditions.	Small tree less than 5m in height.
B	Trees which could be made suitable for long term retention by further care	Trees which may live for more than 40 years but which would be removed for safety or nuisance reasons	Trees which may live for more than 15 years but which would be removed for safety or nuisance reasons	Dangerous trees through instability or recent loss of adjacent trees.	Young trees less than 15 years old but over 5m in height.
C	Trees of special significance for history, commemorative or rarity reasons that warrant extraordinary efforts to secure their long term future	Trees that may live for more than 40 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting	Trees that may live for more than 15 years but should be removed to prevent interference with more suitable individuals or to provide space for new plantings	Dangerous trees through structural defects including cavities, decay included bark, wounds or poor form.	Trees that have been pruned to artificially control growth.
D		Trees which could be made suitable for medium term retention by remedial care	Trees which require substantial remediation tree care and are only suitable for retention in the short term.	Damaged trees that are clearly not safe to retain.	
E				Trees that may live for more than 5 years but should be removed to prevent interference with more suitable individuals or to provide space for new plantings	
F				Trees damaging Or which may cause damage to existing structures within the next 5 years	
G				Trees that will become dangerous after removal of other tress for reasons given in A) to F)	

NOTE: No tree is "safe" i.e. entirely without hazard potential. The SULE rating given to any tree in this report assumes that reasonable maintenance will be provided by & qualified arborist using correct and acknowledged techniques. Retained trees are to have a reasonable setback and be protected from root damage. Incorrect practices can significantly accelerate tree decline and increase hazard potential.

ANNUXURE E: SEMI-PERMIABLE PAVEMENT TREATMENT

Rocla Tri hex® paver or Eco paver ® series would be sufficient to allow surface moisture and air into both trees surface feeding zone should the development require close development to existing trees.



DETAILED SETION

ANNUXURE F: ROOT PRUNING TECHNIQUE FOR TREE RETENTION

SOURCE: Air-Spade®-Frequently Asked Questions

1. What can AIR-SPADE® be used for? Arborist' s and Horticulturalists can use the Air-Spade® for just about any application that requires digging around sensitive plant roots or buried objects. Some typical applications include root collar excavation, soil compaction relief, diagnosis, treatment of diseases such as Oak Wilt, trenching for irrigation installation and underground utilities, root pruning, root structure analysis, transplanting, educational work on roots and plants, and unearthing underground utilities. It has also been used for new development proposal to accurately determine the location of roots to be conserved and to set up accurate tree protection zones. As an aside, lower pressure Air-Spades have also been used for humanitarian land mine and unexploded ordinance removal from sites all over the world.

2. How does AIR-SPADE® work? Air-Spade® uses a patented supersonic nozzle that focuses the air "like a laser beam" to break up the soil. The soil can then be easily removed from the excavation site. Air exiting the nozzle is at twice the speed of sound (approximately 1300 mph) which allows for fast digging even in the hardest soils. The air is not harmful to even fine roots or pipes etc. because to work, Air-Spade® needs a material that is porous. Even the slightest porosity in the material to be excavated, such as in heavy clays will allow Air-Spade® to work efficiently.

3. What is the difference between AIR-SPADE® and other similar tools I have seen? Air-Spade® is the only tool that has a real supersonic nozzle, which has been patented by CEG. In head to head testing, Air-Spade® was able to dig over 50% faster and in harder soils than its competitors. Don't be fooled by imitations or old technology, Air-Spade® Series 2000 represents state of the art in air excavation tools. It is constructed of durable and lightweight space age materials, ergonomically designed, and saves compressor fuel costs.

4. What are the benefits of using AIR-SPADE®? Air-Spade® significantly reduces the time to excavate sensitive objects like roots and pipes. It has been used to replace costly and messy water excavation methods and in some of the hardest clays and soils. Businesses can offer their clients a valued-added Air-Spade® service thus increasing revenue. By replacing existing air lances, industrial and utility users have increased productivity. Current users often comment that it is a "truly an amazing tool" and can "pay for itself in one job".

5. What size compressor do I need for using AIR-SPADE® properly? Air-Spade® Series 2000 with a 150/90 nozzle uses a standard size compressor rated at 150 cfm (cubic feet per minute) at 90 psig (lbs. per square foot gauge). You need to rent or obtain a compressor at least this size or preferably 165 scfm and 100 psi. The use of smaller size compressors may inhibit the proper operation of the tool. This type of compressor typically rents for $100 to $150 per day depending on the area or is easily purchased. Air-Spade® comes with standard air hose connectors.

6. How much does AIR-SPADE® cost and when can I get it? Air-Spade® Series 2000, as well as most accessories, can be purchased from the sole Australian distributor, Tree Logic Pty Ltd. The standard model (Air-Spade® Series 2000 150/90) costs approximately $3,200 + shipping and is available upon order and is all you need to get started

ANNUXURE G: TREE ROOT PROTECTION (Root Wall-root barrier) ®

RootWall™ is a durable, thick-walled root barrier, easy to install and cut. It stops unwanted tree and plant root damage to pavements and other infrastructure.



Ideal for other sub-surface uses, including pipe protection it is manufactured from 90% recycled plastic.

Benefits

- Easy protection
- Protects paved areas, foundations or water features against root lift or associated damage.
- Easy and simple to install.
- Long lasting
- UV-stabilised high-density polyethylene ensures long-term protection.

Source: http://www.treemax.com.au/

ANNUXURE H: DEFINIATION OF TERMINOLOGY

This attachment is to accompany this Arborist Assessment to explain the terminology used and the rationale and assessment of factors used in the Safe Useful Life Expectancy (SULE) method of tree evaluation.

A site plain accompanies this report and identifies all trees located on and or adjoining this proposed development, which may be impacted upon.

TERMINOLOGY USED:

DBH: Acronym for trunk diameter at breast height (1 4m from ground level)

VITALITY: Indicates the energy reserves of the tree and is determined by the observed crown colour and density, the percentage of dead / dying branches and epicormic growth. The vitality of the canopy and that of the root system is interdependent; root damage or heavy pruning draws on a tree's energy reserves. The tree's ability to initiate internal defense systems (compartmentalisation of damage) is reduced and it can also become predisposed to attack by insects and pathogens.

EPICORMIC GROWTH: The production of epicormic growth from dormant buds is a response to stress. Epicormic growth may be initiated by various causes such as branch loss, excessive pruning, fire damage, drought, defoliation and/or disease.

MYCORRHIZAE / RHIZOSPHERE: Mycorrhizae are fungi that grow in symbiotic association with tree roots (especially the fine root hairs) and are attributed with increasing the uptake of nutrients, particularly phosphorus, and reducing infection from soil borne pathogens. They greatly increase the surface area of a tree's root system. Mycorrhizae require aerobic soil conditions and are reduced in number by compaction, waterlogging and over-use of soil fertilisers. Forest litter or similar mulch provides ideal conditions for the proliferation of mycorrhizae. Rhizosphere is a term describing the peripheral area of a tree's root system where this symbiotic association most commonly occurs.

CONDITION: An evaluation of the structural status of the tree including defects that may affect the useful life of an otherwise healthy specimen. Such influencing factors include cavities and decay, weak unions between scaffolds (major branches) or trunks and faults of form or habit.

TREE HAZARD POTENTIAL: An assessment of the risks associated in retaining a tree in its existing or proposed surrounds. Factors to consider are the growth characteristics of the species, tree vitality, condition and the frequency and type of potential targets. The impact the proposed works may have on tree vitality can only be assumed.

CO-DOMINANT: Trees that define the general upper edge of the canopy, receiving light primarily from above.

DOMINANT: Trees with crowns above the upper layer of the canopy and generally receiving light from above and the sides.

EDGE: Trees located on the edge of a more dominant canopy, and frequently possessing asymmetrical crowns, (heavier on the open side) and trunks that bow out of die stand.

FOREST: Trees that have grown in a forest setting and only have about 1/3 of their canopy located on tall straight trunks.

INTERMEDIATE: Trees that have been overtopped, and become part of the understorey canopy

ANNEXURE I: REFERENCES

1. Barrell, J., (1993) 'Pre-planning Tree Surveys: Safe Useful Life Expectancy {SULE) is the Natural Progression' Arboricultural Journal Vol. 17, pp 33-46, AB Academic Publishers, Great Britain.

2. Barrell, J., (1995) 'Pre-development Tree Assessment', from Trees & Building Sites, Proceedings of an International Conference Held in the Interest of Developing a Scientific Basis for Managing Trees in Proximity to Buildings, The International Society of Arboriculture, Illinois, USA, pp. 132-142.

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4. Engineering Requirements for Development-Design, Maintenance and Construction Guidelines, Chapter 3 - Environment, Vegetation and Heritage Protection, p 3-7. (Wyong Shire Council, March 1997) adapted from British Standard BS 5837:1991 "Guide for Trees in Relation to Construction"

5. British Standards Institute. (1991). 'Trees in Relation to Construction' 5837

6. Harris R W, 1983, Arboriculture. Prentice- Hall Inc., Englewood Cliffs, New Jersey.

7. Heatwole, H. & Lawman, M. (1986) 'Dieback. death of an Australian landscape' Reed Books Pry Ltd. Frenchs Forest, NSW

8. Rowell, R. J. (1980) 'Ornamental Flowering Trees of Australia1 Reed Books Pty Ltd.

9. Thyer, P. (1996) 'Thyer Tree Valuation Method'

ANNUXURE: J: CERTIFICATION

I certify that the enclosed "Arboricultural Assessment Report" for the proposed development of 118 – 120 Hannans Road, Narwee, NSW has been prepared by Horticultural Management Services on behalf of TJA ARCHITECTS Pty Ltd.

To the best of my knowledge and professional integrity, it is true in all material particulars and does not, by its presentation or omission of information, materially mislead.

Qualifications:

- Advanced Certificate in Urban Horticulture (1996)
  Southern Sydney Institute of TAFE, Padstow
- Statement of Attainment in Horticultural Science (1996)
  Southern Sydney Institute of TAFE, Padstow
- Horticulture Certificate (1994)
  Southern Sydney Institute of TAFE, Padstow
- Certificate in Tree Surgery (1993)
  Northern Sydney Institute of TAFE, Ryde
- Certificate in Parks & Gardens, Trade – Credit (1989)
  Department of Technical & Further Education, Padstow NSW

Scott Freeman

Scott Freeman
Principal
Horticultural Management Services

Dated 15.04.2009

Published by Horticultural Management Services.
Horticultural Management Services Narellan NSW 2567
First edition, first, Published 2009.
By Horticultural Management Services.

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Appendix E – Development Appraisal Report

DENNIS SMITH SURVEYS

DEVELOPMENT APPRAISAL

Date: 19th January 2009
P.R.: 9810

No. 118 - 120 Hannans Road, Narwee.

Lots 139 - 140 DP35912

8 Railway Street Bulli, P.O.Box 12 Bulli N.S.W 2516
Ph: (02) 4284 9402, Fax: (02) 4285 7042
E-mail: dssurvey@bigpond.net.au

Contents

1. Site description, land use and zoning
2. Adjoining land uses
3. Roads, access and traffic
4. Site drainage
5. Flooding
6. Bushfire
7. Services
8. Endangered species
9. Site contamination and soils
10. Mine subsidence
11. Historical
12. Costal protection zone
13. Boundary definition
14. Building envelope
15. Contour and detail survey
16. Site photographs
17. Seniors living
18. Section 149 certificate

1. Site description, land use and zoning

The subject site is located over two rectangular shaped lots which have frontage to Hannans Road

The land use is detached residential housing mainly constructed of older brick residences with tile roofs.

The land is zones 2(a) Residential for details of this classification see the accompanying section 149 certificate or relevant council documentation.

2. Adjoining land uses

All adjoining properties are residential and generally single storey brick, clad or fibro.

3. Road, access and traffic

The site is bounded on the south by Hannans Road. This road is not heavily trafficked, has an upright kerb, bitumen seal and are in good condition.

A concrete footpath has been constructed within the road reserve, this footpath is in average condition.

4. Site drainage

The site falls in a northerly direction away from Hannans Road and towards the Nirimba Avenue where there is a drainage system constructed. An interallotment drainage system with relevant easement rights will need to be constructed to enable drainage to this system.

5. Flooding

Canterbury City Council's flood risk records indicate that the site is not affected by flooding.

6. Bushfire

Canterbury City Council does not identify the site to be within a bushfire prone area.

7. Services

Sewer, water, electricity, gas and telephone services are all available to the property. The locations of the services are shown on the Contour and detail plan and copies of the service diagrams obtained from the relevant authorities are enclosed. The locations of service lines are approximate only and their exact location should be found before commencing any works at the site.

8. Endangered species

In my opinion the re-development of the site (in accordance with Canterbury City Council's environmental and planning requirements) will not have any impact on endangered species.

9. Site contamination and soils

Canterbury City Council has identified that land as not subject to any site contamination or acid sulphate soils.

10. Mine subsidence

Canterbury City Council indicates that the site is not within the affected mine subsidence area.

11. Historical

Canterbury City Council has not identified the site as having any historical significance.

12. Costal protection zone

Canterbury City Council has not shown the land to be located within a costal protection zone.

13. Boundary definition

The subject site is shown in DP35912. Boundary definition has been taken from DP865480 to the south, No differences have been found to exist and it is my opinion that the site does not need any boundary redefinition.

14. Building envelope

Canterbury City Council has acknowledged that any building will be subject to the normal side and street setback requirements.

15. Contour and detail survey

Two copies of the contour and detail survey are enclosed. The azimuth (north orientation) of these plans is on Map Grid of Australia (M.G.A.) A CD is supplied which contains DGN & DWG files of the survey.

16. Site photographs

Site photographs are enclosed and also contained on the CD.

17. Seniors living

Bus stops are located approximately 70m to the east of the site, a grade and distance has been shown on the detail plan however accurate footpath levels were not requested.

18. Section 149 certificate

A full Section 149 Certificate has been obtained from Canterbury City Council.

CONCEPT OPTION

118-120 HANNANS ROAD, NARWEE

DRAWING SCHEDULE:

ARCHITECTURAL

SITE ANALYSIS	Sheet 1 of 8
SITE / GROUND FLOOR PLAN	Sheet 2 of 8
BASEMENT PLAN	Sheet 3 of 8
FIRST FLOOR PLAN	Sheet 4 of 8
SECOND FLOOR PLAN	Sheet 5 of 8
ROOF PLAN	Sheet 6 of 8
SHADOW DIAGRAM	Sheet 7 of 8
ELEVATIONS & SECTION	Sheet 8 of 8

SURVEY

SURVEY PLAN	Sheet 1 of 1

DEVELOPMENT DATA BLOCK A			
SITE AREA	**1811.5**		
NUMBER OF UNITS	**15**		
UNIT	**TYPE**	**BEDROOM**	**AREA M2**
1	Unit GF Adaptable	2	75
2	Unit GF Adaptable	1	65
3	Unit GF Adaptable	1	65
4	Unit FF Adaptable	2	75
5	Unit FF Adaptable	1	65
6	Unit FF Adaptable	1	65
7	Unit FF Adaptable	2	75
8	Unit SF Adaptable	1	65
9	Unit SF Adaptable	1	65
10	Unit SF Adaptable	3	110
11	Townhouse	2	85
12	Townhouse	2	85
13	Townhouse	2	85
14	Townhouse	2	85
15	Townhouse	2	85
TOTAL GFA			1150
Total Universal units	**10**		
Total Adaptable units	**10**		
Percentage of Units which are universal/adaptable	**66%**		
	Control	**Required**	**Proposed**
Setbacks			
Front	*Canterbury DCP*	7.5m	7.5m
Side	*Canterbury DCP*	1,.2m	1.2 / 3.0m
Second Storey Rear	*Canterbury DCP*	3	7.5m
Height	*ARH SEPP*	7.2m	3 storey
FSR	*ARH SEPP*	0.41:1	0.63: 1
Landscape - 35m2 per unit	*ARH SEPP*	525	650
Deep Soil Zone- 15 % of site with min dim of 3m	*ARH SEPP*	271.725	600
2/3 of this at rear	*ARH SEPP*	179	420
70% of dwellings to have 3 hours of sunlight to living areas and to associated private open space	*ARH SEPP*	11	15
Parking	*ARH SEPP*	7	7
	Design Requirements	7	7

LOCATION PLAN:



FIGURES USED IN PROPOSAL ARE INDICATIVE ONLY

NSW GOVERNMENT Finance & Services Housing & Property Group

LOCKED BAG 4001
ASHFIELD NSW BC1800
PHONE No (02) 8753 8000
FAX No (02) 8753 8888
www.services.nsw.gov.au

PROJECT MANAGER & ARCHITECT
HOUSING & PROPERTY GROUP
PH (02) 8753 8000 FAX (02) 8753 8888

BUSINESS PARTNER
NSW GOVERNMENT Finance & Services Housing & Property Group

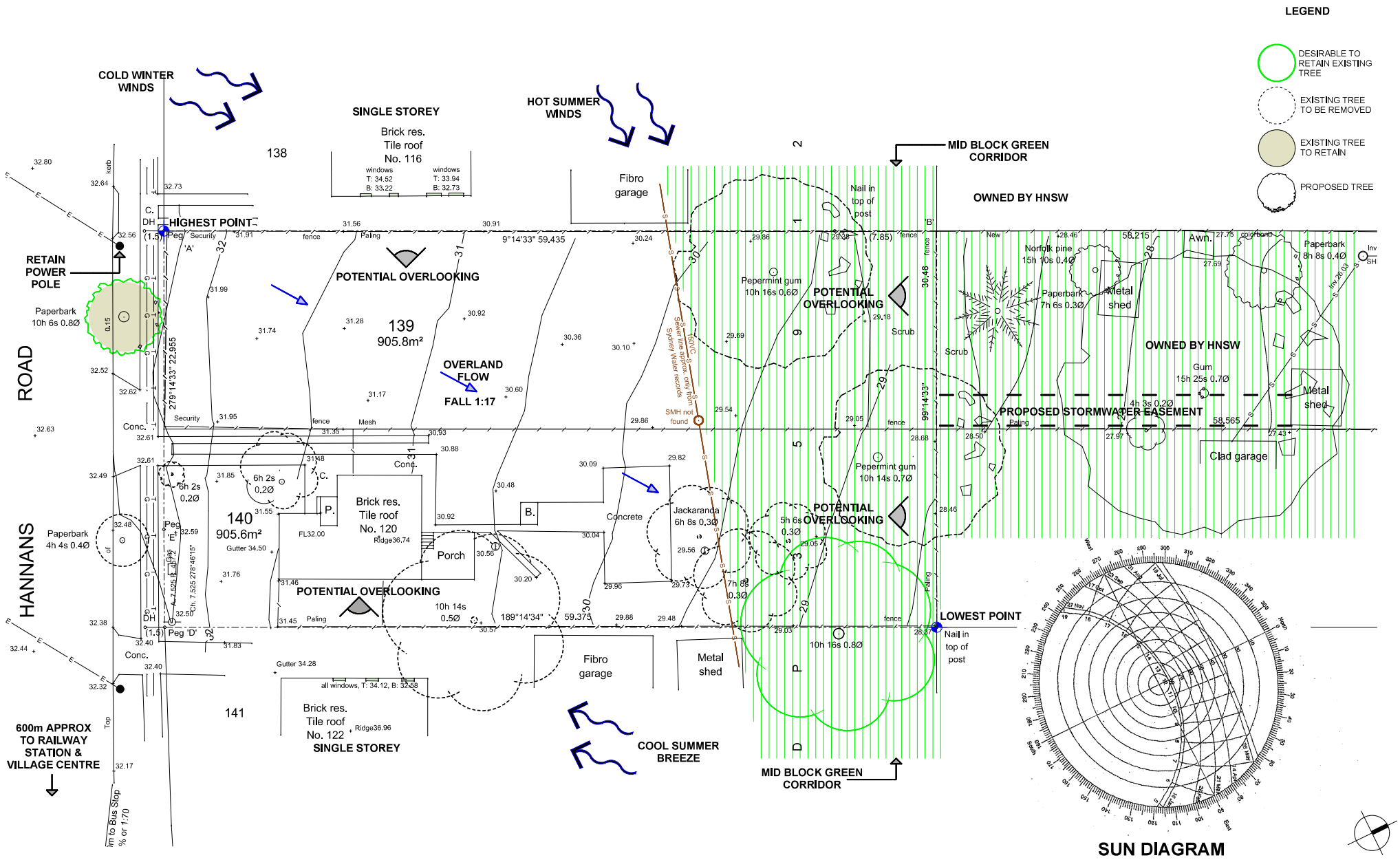
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DESIGN: SK
PROJECT No: BG0XM

NOMINATED ARCHITECTS:
GEOFFREY WILLIAM KNOX 4544
LINDA GOSLING 4018
P.KOKULERAJ 7001

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HOUSING NSW CENTRAL SYDNEY DIVISION

CONCEPT OPTION — 118-120 HANNANS ROAD, NARWEE



SITE ANALYSIS

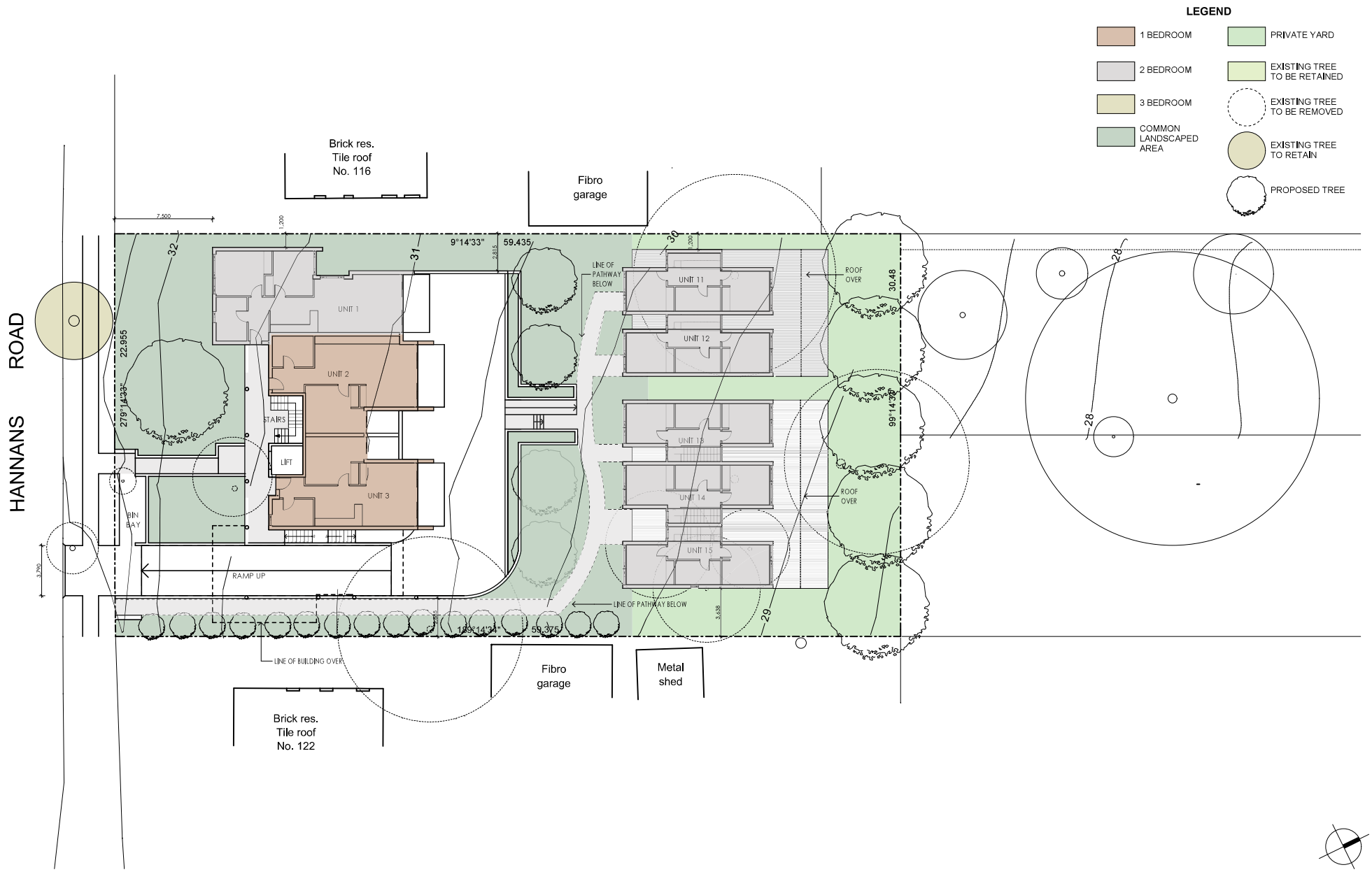
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P.KOKULERAJ 7001	DATE: NOVEMBER 2011		PROJECT No: BG0XM	

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CONCEPT OPTION 118-120 HANNANS ROAD, NARWEE



LEVEL 1 HANNANS STREET LEVEL PLAN

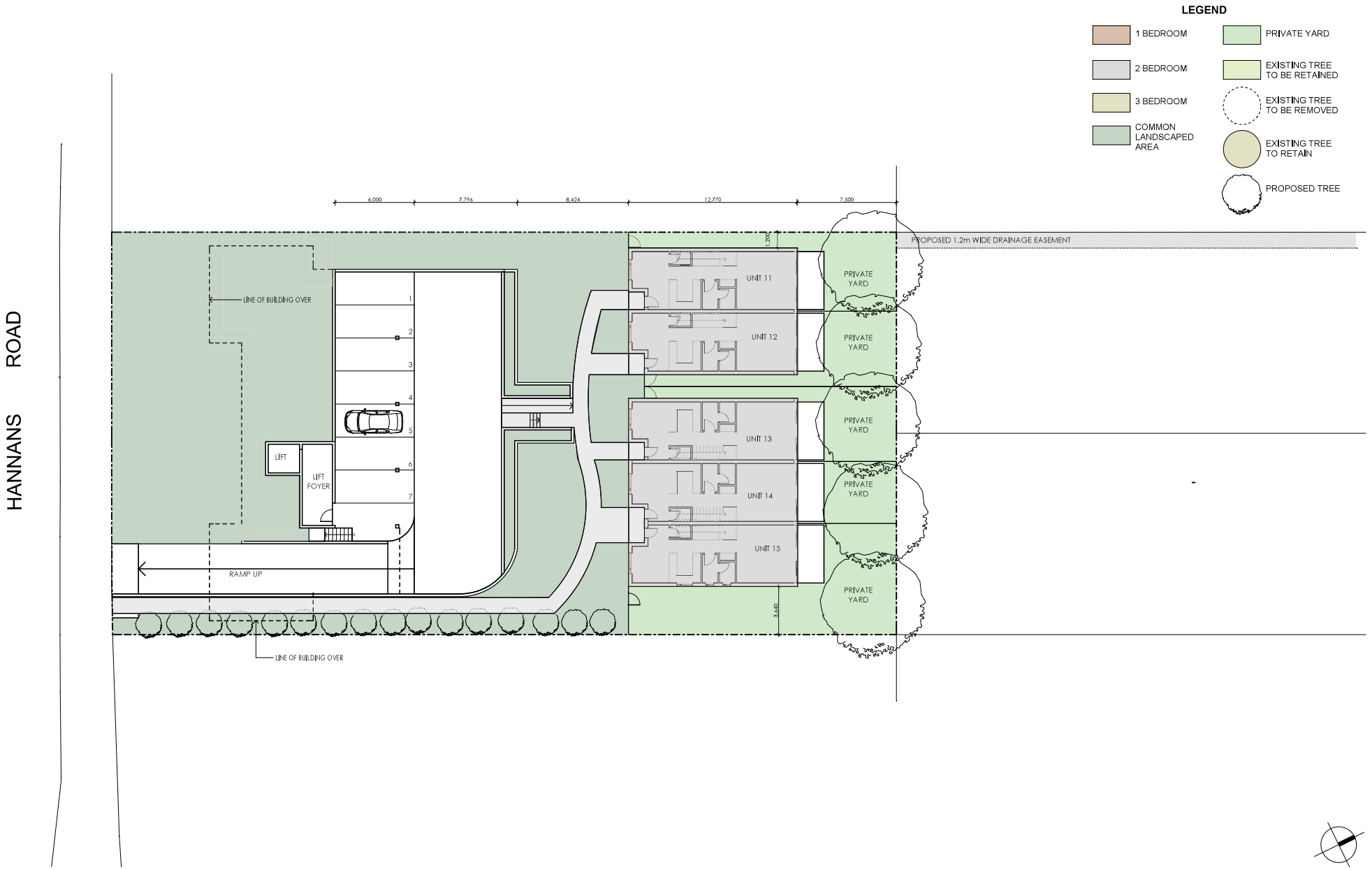
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LEVEL 0 GROUND FLOOR TOWNHOUSES PLAN

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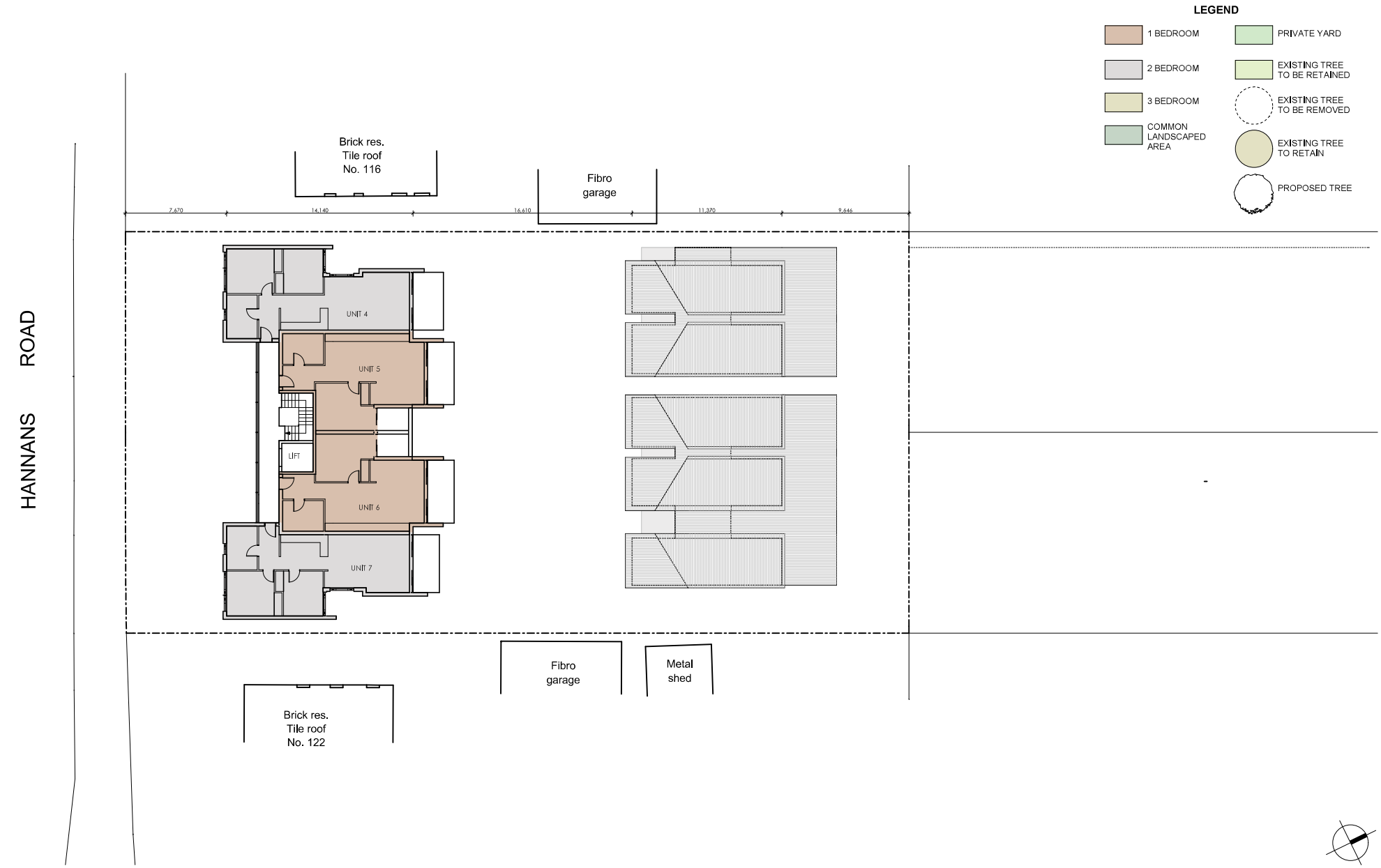
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CONCEPT OPTION 118-120 HANNANS ROAD, NARWEE



LEVEL 2 PLAN

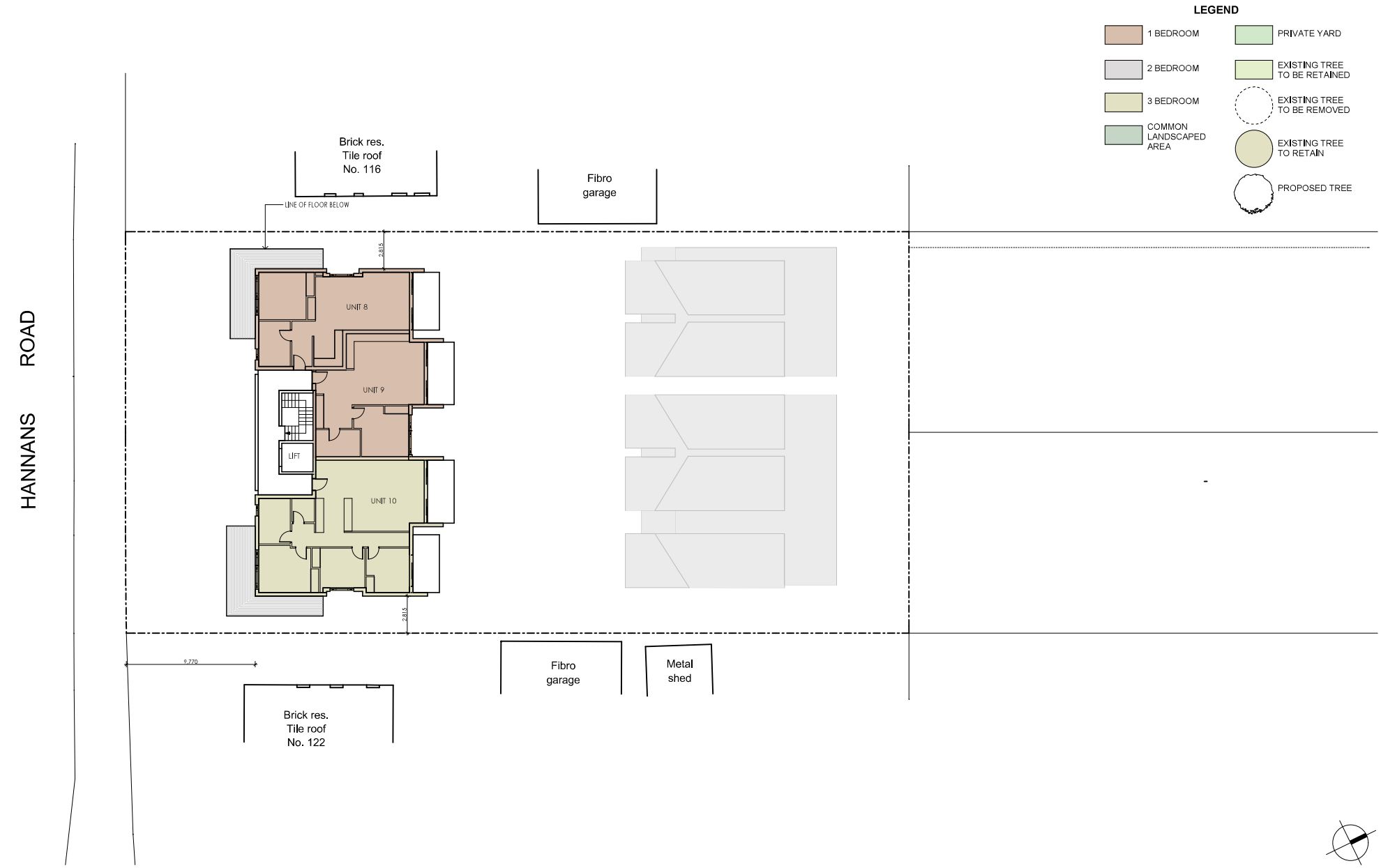
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P.KOKULERAJ 7001	
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TYPE:	A

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LEVEL 3 PLAN

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DESIGNED: S.K	CHECKED: S.K
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PLOTTED:	20/04/2012
SCALE:	1:200 @ A2
DATE:	NOVEMBER 2011
PROJECT No:	BG0XM
TYPE:	A

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CONCEPT OPTION 118-120 HANNANS ROAD, NARWEE



ROOF PLAN

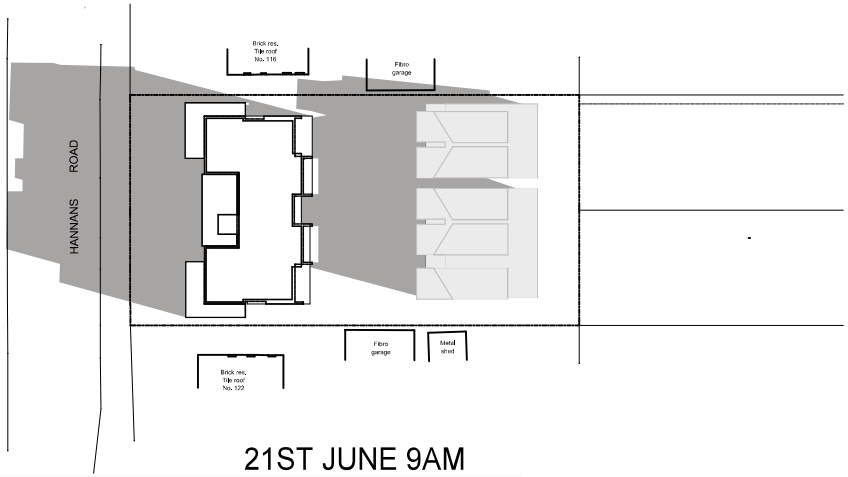
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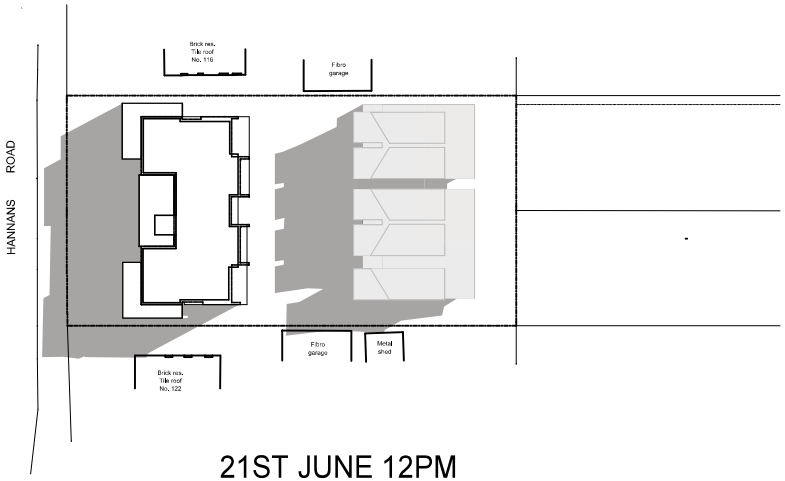
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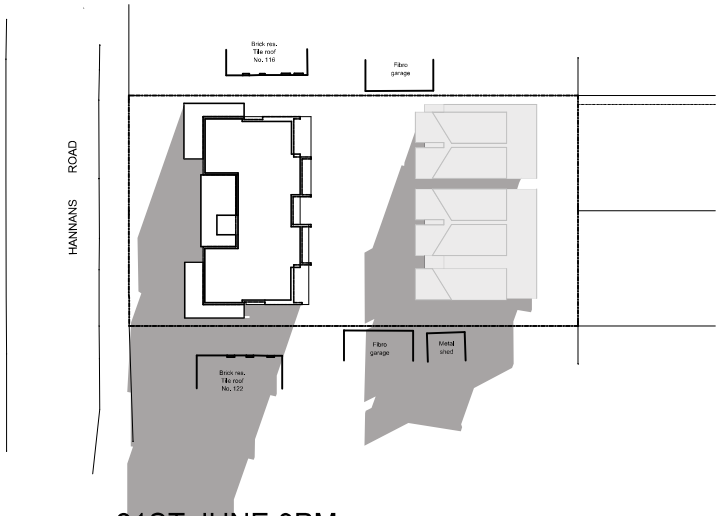
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1 21ST JUNE 9AM
1:500



2 21ST JUNE 12PM
1:500



3 21ST JUNE 3PM
1:500

SHADOW DIAGRAMS

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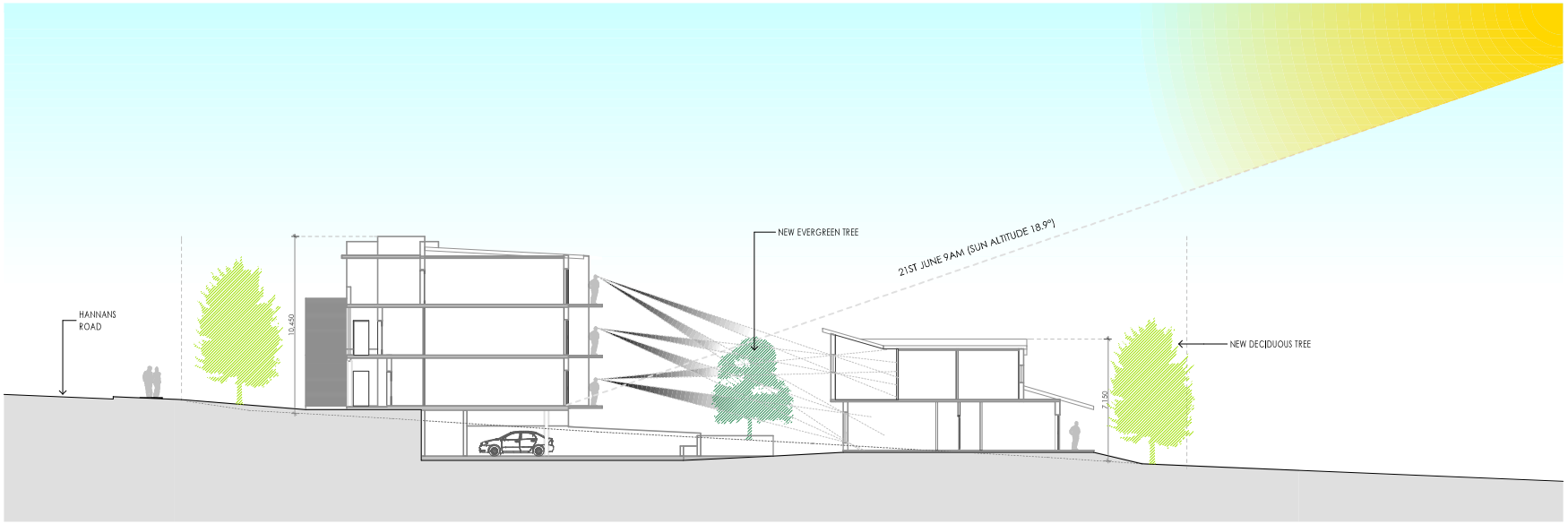
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1 HANNANS ROAD ELEVATION
1:200



2 SOUTHERN ELEVATION
1:200



3 SECTION A
1:200

ELEVATIONS & SECTION

URBAN DESIGN TECHNICAL SERVICES ASSETS DIVISION

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