

PCU073022

Westpac

LIVERPOOL NSW

Westpac Banking Corporation

7, 11, 2017

Pay NSW DEPARTMENT OF PLANNING or bearer
ENVIRONMENT

\$ 20,000 -

The sum of TWENTY THOUSAND DOLLARS

TCON CONSTRUCTIONS PTY LTD

NOT NEGOTIABLE

⑈ 200063 ⑈ 032⑈075⑈ 59⑈8322⑈

Department of Planning
Received
15 NOV 2017
Scanning Room



Rezoning Review Application Form

Date received:

Reference No.

LODGEMENT

Instructions to users

This form is to be completed if you wish to request an independent review of a request for a planning proposal prior to a Gateway determination being issued.

A **Rezoning Review** can be sought before a planning proposal has been submitted to the Department of Planning and Environment (Department) for a Gateway determination in the following circumstances:

- a) the council has notified the proponent that the request to prepare a planning proposal is not supported; or
- b) the council has failed to indicate its support 90 days after the proponent submitted a request, accompanied by the required information¹ or has failed to submit a planning proposal for a Gateway determination within a reasonable time after the council has indicated its support.

Before lodging a request for review, it is recommended that you consult the Planning Circular '*Independent reviews of plan making decisions*' and '*A guide to preparing local environmental plans*', which can be found on the Department's website www.planning.nsw.gov.au/Plans-for-Your-Area/Local-Planning-and-Zoning/The-Gateway-Process. The guide gives a step-by-step explanation of the review procedure and submission requirements.

To ensure that your request for review is accepted, you must:

- complete **all** relevant parts of this form
- submit **all** relevant information required by this form, including the **initial fee**.
- provide **one hard copy** of this form and required documentation
- provide the form and documentation in **electronic format** (e.g. CD-ROM)

Note: Requests for review will not proceed to initial assessment stage unless the correct fee is provided.

All requests **should be lodged** with the Department's relevant Regional Office. Please refer to www.planning.nsw.gov.au for contact details.

PART A – APPLICANT AND SITE DETAILS

A1 – Applicant Details

Principal contact

☒ Mr ☐ Ms ☐ Mrs ☐ Dr ☐ Other

First name

Ahmed

Family name

Taleb

Name of company (N/A if an individual)

TCON Constructions P/L

Street address

Unit/street no.

127

Street name

Water Street

Suburb/town

Cabramatta West

State

NSW

Postcode

2166

Postal address
(or mark 'as
above')

PO Box or Bag

As above

Suburb or town

State

Postcode

Daytime telephone

02 8798 5303

Fax

02 9823 7487

Email

Mobile

¹ 'A guide to preparing planning proposals' sets out what information a proponent may provide when requesting council to prepare a planning proposal. Information requirements will depend on the complexity of the planning proposal. Section 55 of the Act sets out what information a planning proposal is to include when submitted for a Gateway determination.

a.taleb@optusnet.com.au

0425 360 800

A2 – Site Details

Identify the land that is to be the subject of the planning instrument and for which you seek a review

Street address	Unit/street no.	Street name	
	400-404	Cabramatta Road West	
	2-18	Orange Grove Road	
	6	Links Avenue	
	Suburb/town	State	Postcode
	Cabramatta	NSW	2166

NAME OF THE SITE

As per street address

REAL PROPERTY DESCRIPTION

Lot 1 DP 29449; Lot 1 & Lot 2 DP 503339; Lot 6 & Lot 7 DP 709126; Lot 3 DP 30217

*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 Finance and Services, Land and Property Information. Please ensure that you place a forward 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.*

PROVIDE DETAILS OF ALL AFFECTED LANDOWNERS WHERE THEY ARE NOT THE DIRECT APPLICANT

NA

HAVE ALL OWNERS OF LAND TO WHICH THIS PROPOSED INSTRUMENT APPLIES BEEN NOTIFIED?

X Yes

☐ No

☐ Some have but not all

☐ N/A (Applicant is owner)

Note: If some land owners, but not all, have been notified, list below those notified:

CURRENT ZONING OF THE LAND AT THE SITE

R2 Low Density Residential

CURRENT LAND USE AT THE SITE

vacant

PART B – REASON FOR REVIEW AND THE PLANNING PROPOSAL

B1 – Reason for Rezoning Review and the Relevant Planning Authority (RPA)

Indicate below the reason for seeking a rezoning review. A review can only proceed if either of these two circumstances has occurred.

X **The council has confirmed in writing that the request to prepare a planning proposal is not supported. Confirmation dated 20 September 2017**

☐ **The council has failed to indicate its support 90 days after the proponent submitted a request, accompanied by the required information² or has failed to submit a planning proposal for a Gateway determination within a reasonable time after the council has indicated its support.**

Indicate below whether the request to prepare a planning proposal was submitted to the council prior to November 2012?

☐ Yes

Date:

X No

Note: If you have answered 'yes' to the above question, please note that a review can only be sought where the supporting information accompanying the request is less than two years old.

Note: If you have answered 'no' to the above question, please note that a review request accompanied by

² 'A guide to preparing planning proposals' sets out what information a proponent may provide when requesting council to prepare a planning proposal. Information requirements will depend on the complexity of the planning proposal. Section 55 of the Act sets out what information a planning proposal is to include when submitted for a Gateway determination.

information that is more than 2 years old, may, but will not normally, be considered.

NAME OF THE LOCAL GOVERNMENT AREA

Fairfield City Council

CONTACT DETAILS OF THE RELEVANT OFFICER AT COUNCIL

Julio Assuncao; JAssuncao@fairfieldcity.nsw.gov.au; 9725 0885

B2 – The Proposed Instrument

DESCRIPTION OF PROPOSED INSTRUMENT

Rezoning to amend land use zoning, height and FSR to accommodate a residential apartment development

LOCAL ENVIRONMENTAL PLAN (LEP) TO BE AMENDED BY THE PROPOSED INSTRUMENT

Fairfield LEP 2013

IS THE LEP TO BE AMENDED (ABOVE) A STANDARD INSTRUMENT LEP?

☒ Yes

☐ No

INFORMATION REQUIREMENTS

A proponent may request a review by writing to the Department and providing the following:

- a completed application form;
- a copy of the proponent's request for the council to prepare and submit a planning proposal for Gateway determination, including all supporting material and information that was submitted to Council (Note: A planning proposal request which has been amended after Council has resolved to not support the matter is not eligible for a Rezoning Review. The revised planning proposal request would need to be submitted to Council as a new planning proposal request);
- all correspondence from the council in relation to the proposed instrument, including (if relevant) a copy of the council's advice detailing why the council did not proceed with preparing a planning proposal;
- all correspondence from other Government agencies, if available, about the proposed instrument;
- proponent's justification to the Strategic and Site Specific Merit tests (refer to Step 2 of the Rezoning Review process set out in 'A guide to preparing local environmental plans'), to confirm why a review is warranted;
- disclosure of reportable political donations under section 147 of the Act, if relevant; and
- fee for lodging a rezoning review.

INFORMATION PROVIDED

List below all the documents, maps, plans, studies, information and any other supporting information that comprises your proposed instrument and request for rezoning review.

1 x cheque for \$20,000
Rezoning Review Request letter (including justification against the Strategic and Site Specific Merit Tests)
Planning Proposal Report
Site Survey
Urban Design Report
Traffic Impact Assessment Report
Preliminary Arboricultural Assessment
Ecological Impact Assessment
Fairfield Residential Strategy 2009 - Review and Analysis
Proposed LEP Maps
Flood Analysis
Council Correspondence
Planning Response to initial Council feedback
Amended Urban Design Report
Amended LEP Maps
Updated Flood Report
Drains Model (soft copy only)

PART C – PAYMENT, DISCLOSURE AND SIGNATURES

C1 – Application Fees

You are required to pay a fee on lodgement of your request. The relevant fee is confirmed on the Department's website www.planning.nsw.gov.au/Plans-for-Your-Area/Local-Planning-and-Zoning

Please note that a further fee payment shall be required if a Planning Panel or the Secretary of the Department of Planning and Environment is appointed as an alternate relevant planning authority. Further details can be found within 'A guide to preparing local environmental plans' and the Planning Circular 'Independent reviews of plan making decisions'

Payment methods:

- Cheque / bank order

C2 – Donation and Gift Disclosure

Section 147 of the Environmental Planning and Assessment Act 1979 requires the public disclosure of *reportable political donations* or gifts when lodging or commenting on a *relevant planning application*. This law is designed to improve the transparency of the planning system.

DO YOU HAVE ANY DONATIONS OR GIFTS TO DISCLOSE?

☐ Yes

X No

How and when do you make a disclosure?

The disclosure to the Minister or the Director-General of a *reportable political donation* or gift under section 147 of the Act is to be made:

- in, or in a statement accompanying, the relevant planning submission if the donation is made before the submission is made, or
- if the donation is made afterwards, in a statement of the person to whom the relevant planning submission was made within 7 days after the donation is made.

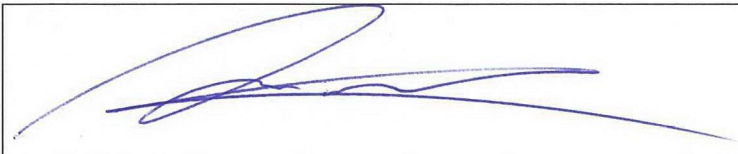
What information needs to be included in a disclosure?

The information requirements of a disclosure of reportable political donations are outlined in section 147(9) of the Act. A Disclosure Statement Template which outlines the information requirements for disclosures to the Minister or to the Director-General can be found on the department's website: www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Systems/Donations-and-Gift-Disclosure

C3 – Signature(s)

By signing below, I/we hereby declare that all information contained within this application form is accurate at the time of signing.

Signature(s)



Name(s)

Ahmed Taleb

In what capacity are you signing

Applicant

Date

9 November 2017



**Planning &
Environment**

13.11.2017

**TCON CONSTRUCTIONS P/L
127 WATER STREET
CABRAMATTA WEST, NSW 2166**

Attention: Ahmed Taleb

Receipt

**This is your official Receipt relating to fees received in regards to the below mentioned application.
Should you require further information concerning your application, please contact officer below.**

Payment Details : Cheque No. 200063 Received on 13.11.2017

Description	Amount
Rezoining Review	
400-404, Cabramatta Road West; 2-18, Orange Grove Road & 6 Links Avenue - Cabramatta, NSW 2166	\$20,000.00
Total	\$20,000.00
Amount paid	\$20,000.00
Balance	\$0.00


Dinesh Upreti
Administrative Officer
Planning Services Division
Email: dinesh.upreti@planning.nsw.gov.au
Telephone: (02) 9274 6126

ETHOS URBAN

Our Ref: 15203
Council Ref: 15/03740

10 November 2017

15203

Carolyn McNally
Secretary
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Terry Doran

Dear Terry,

Rezoning Review Request
400-404 Cabramatta Road West, 2-18 Orange Grove Road & 6 Links Avenue, Cabramatta

On behalf of our client, TCON Constructions P/L, we hereby seek a Rezoning Review in relation to a planning proposal lodged with Fairfield City Council (Council) for the site located at 400-404 Cabramatta Road West, 2-18 Orange Grove Road & 6 Links Avenue, Cabramatta.

This Rezoning Review request is submitted on the basis that Council has resolved not to support the Planning Proposal.

Please find attached to this letter:

- A signed Rezoning Review Application Form;
- A cheque for \$20,000, being the relevant application fee;
- A copy of the Planning Proposal including additional information as provided in response to Council's requests for further information;
- A copy of Council's report; and
- A copy of all Council correspondence.

The Rezoning Review process was initiated by the Department of Planning and Environment with the following objectives:

- To provide a mechanism for applicants to have Council rezoning decisions reviewed;
- To ensure decisions on planning proposals that are well located, planned, and assist housing and job supply can be independently reviewed; and
- To increase transparency and provide greater certainty in plan making.

This request is consistent with all these objectives, specifically we note that:

- a) The planning proposal has been considered by Council and was refused progression to Gateway. This is notwithstanding Council recognising that the proposal would provide additional housing consistent with the then Draft South West District Plan and that the outcome of the proposed rezoning of the nearby Orange Grove Mega Centre will impact on the potential suitability of the locality including the subject site for higher forms of residential

development. The rezoning review process will therefore provide an appropriate pathway for a recommendation to be made on whether the proposal has sufficient merit to proceed to Gateway.

- b) The planning proposal documentation submitted to Council and discussed further in this letter, clearly demonstrates that the site has strategic merit particularly with respect to providing a range of dwelling types with good proximity to the Orange Grove Mega Centre, public transport connections to Liverpool and Parramatta, schools, and recreation facilities.
- c) The final decision of Council to refuse to acknowledge the planning proposal's strategic proximity to the Orange Grove Mega Centre site which is located within the Liverpool Council LGA.

In light of the above we respectfully request that the Planning Proposal be forwarded to the Sydney Western City Planning Panel to carry out a Rezoning Review.

1.0 Planning Proposal

On 14 March 2016 a preliminary Planning Proposal request was submitted to Council in relation to the subject site. The Planning Proposal sought to amend the *Fairfield Local Environmental Plan 2013* (the LEP) as follows:

- Rezone the site to R1 General Residential;
- Increase the maximum building height for the site to part 14 metres and part 27 metres;
- Increase the maximum floor space ratio for the site to 2:1; and
- Allow 'office premises' and 'business premises' as additional permitted uses on the site.

An aerial site photo is provided at **Figure 1** and the site's proximity to surrounding amenities is provided as **Figure 2**.

The planning proposal was modified prior to Council's consideration of the proposal. The modifications were made in response to feedback received from Council officers during the initial assessment phase. Changes to the scheme include a reduction in the height and FSR for the site. Refer to **Table 1** below for a comparison of the amended and initial proposal.

Table 1 – Comparative analysis

Rezone the site to R1 General Residential with 'office' and 'business premises' as additional permitted uses.	Rezone the site to R4 High Density Residential. Remove 'office' and 'business premises' as additional permitted uses.
Increase the maximum building height for the site to part 14 metres (4 storeys) and part 27 metres (8 storeys);	Allow heights to permit a range of 4, 6 and 8 storey buildings. Level 7 and 8 on the taller buildings fronting Orange Grove Road and Cabramatta Road West are setback from the street façade.
FSR 2:1	FSR 1.9:1
GFA: 30,780m ² incorporating: <ul style="list-style-type: none"> • 29,580m² residential; and • 1,200m² non-residential. 	GFA: 28,557m ² incorporating: <ul style="list-style-type: none"> • 27,357m² residential; and • 1,200m² non-residential.
Approximately 340 x 2 bedroom apartments	Approximately 327 x 2 bedroom apartments, and 18 x 1 bedroom apartments

The planning proposal considered by Council sought to amend the LEP for the subject site as follows:

- Rezone the site to R4 High Density Residential;
- Increase the maximum building height for the site to part 9 metres, part 14 metres, part 19 metres and part 27 metres; and
- Increase the maximum floor space ratio for the site to 1.9:1.



Figure 1 – Aerial view of the site location
Source: Ethos Urban

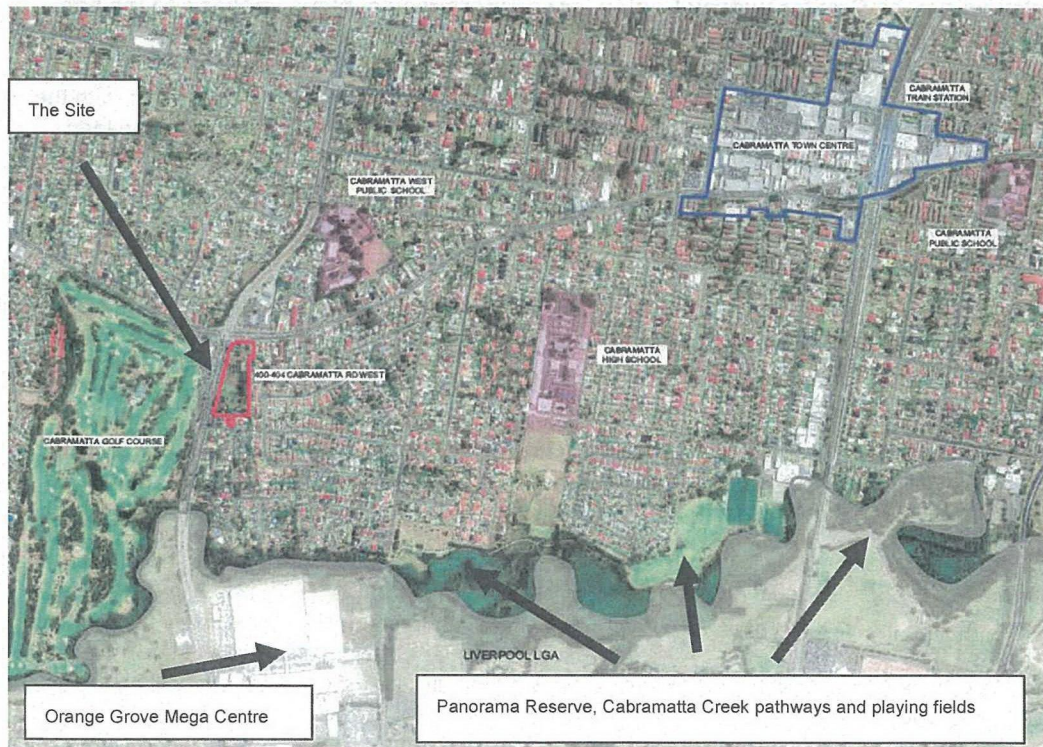


Figure 2 – An aerial photo of the site, demonstrating its proximity to the Orange Grove Mega Centre (Liverpool LGA) and surrounding amenities
Source: Nearmap

2.0 Background

The following table provides a summary of the chronology of the planning proposal, covering the period from the first formal discussions with Council through to their resolution to not support the Planning Proposal as amended.

Table 2 – Chronology of events

Date	Event
14/10/15	Pre-lodgement meeting with Council
23/10/15	Council issue meeting notes
14/3/16	Planning Proposal lodged
10/6/16	Council assessment letter issued (matters raised – Fairfield Residential Development Strategy; Status of the Orange Grove Mega Centre planning proposal; flooding; proposed zoning; additional permitted uses; built form).
23/6/17	JBA (now Ethos Urban) submit response to Council assessment letter
12/9/17	Council Meeting; Ethos Urban address the meeting on behalf of the applicant
20/9/17	Council refusal letter.

The Department have confirmed via email that the rezoning review can be submitted 42 working days following Council's notification that they are not preparing a planning proposal to forward for Gateway determination. This rezoning review has been submitted to the Department within the required timeframe.

3.0 Merit Assessment and Justification for Review

The following discussion demonstrates that the proposal reasonably and clearly meets the Strategic and Site-Specific Merit Tests and it is suitable to proceed to a Gateway determination.

3.1 Strategic Merit Test

Is the proposal consistent with the relevant regional plan outside of the Greater Sydney Region, the relevant district plan within the Greater Sydney Region, or corridor/precinct plans applying to the site, including any draft regional, district or corridor/precinct plans released for public comment?

Council acknowledged in their Outcomes Committee report that the proposal was 'generally consistent' with the relevant strategic actions within the Draft South West District Plan, where Council were identified as the lead agency, namely:

- Action L3: Councils to increase housing capacity across the District; and
- Action L4: Encourage housing diversity

In the intervening period, the Draft Western City District Plan has been released for public comment. The proposal is consistent with Planning Priority W5 *"Providing housing supply, choice and affordability, with access to jobs and services"* for the following reasons:

- The site is unique and represents one of the largest single landholdings in the LGA. It has the capacity to provide a range of smaller affordable dwelling types to suit the change in housing demand for one and two person dwellings. This will boost housing supply within the established neighbourhood of Cabramatta and close to Liverpool consistent with the Draft Plan and will also enable the existing community to remain in place;
- It will provide 'more housing in the right location'. In November 2016, the State Government determined that the Orange Grove planning proposal should proceed through the Gateway, and that the amending LEP is to be finalised within 12 months (i.e. November 2017). The Orange Grove planning proposal is likely to result in an additional 21,000sqm floor space for 'shops'. This will result in Orange Grove accommodating approximately 40,000sqm retail floor space. This will place the site within a 10-minute walk of a centre that will be a significant employment generator with the capacity to accommodate 1,600 future retail jobs.

The proposal to provide 1,200sqm of non-residential floor space has the potential to create 66 jobs on-site in professions that will not conflict with the employment in the commercial centres.

In this context, Council have previously acknowledged that the site is proximate to a development that is equivalent to future 'sub-regional town centre', and it is strategically appropriate and justified to consider high density residential development on the site.

The site is well positioned within walking distance of significant retail and recreation facilities and is located within a mini cluster of mixed uses (golf course and club / restaurant; fast food; car wash) centred on the Cabramatta Road West and Orange Grove Road intersection. It is located immediately adjacent to bus stops that service both Cabramatta and Liverpool. The site's location supports the Greater Sydney Commission's plans to deliver a 30-minute city which is a core strategic aim of the Draft Plan. The site's proximity to strategic centres identified in the Draft Plan and surrounding amenities is provided below:

- Cabramatta West Public School - 350m (4 min. walk)
- Panorama Reserve & Cabramatta Creek - 400m (5 min. walk)
- Cabramatta West neighbourhood centre- 750m (10 min. walk)
- Orange Grove Mega Centre - 800m (10 min. walk)
- Cabramatta High School - 1.1km (13 min. walk)
- Cabramatta strategic centre and railway station - 1.8km (approx. 8 min. bus journey)
- Fairfield strategic centre and railway station – 4.5km (approx. 20 min. bus / train journey)
- Liverpool metropolitan city cluster - 2.1km (approx. 12 min. bus journey)
- Future Badgery's Creek airport site - 20km (approx. 25 min. drive)
- Greater Parramatta CBD – 12km (approx. 40 min bus/train journey)

We also note that public transport travel times from the site to Liverpool and the Sydney CBD are shorter than the travel times from Bonnyrigg and Wetherill Park; and travel times to Parramatta from the site, Bonnyrigg and Wetherill Park are similar. It is noted that Bonnyrigg and Wetherill Park both accommodate land zoned for higher density residential. The subject site represents the right location and there is strategic merit for higher density development considering its proximity to the Orange Grove Mega Centre and the numerous significant employment centres within a 30 minute travel radius.

Is it consistent with a relevant local strategy that has been endorsed by the Department?

The Fairfield Residential Development Strategy was prepared in 2009 to establish a sustainable development framework to guide decision making for the provision of 14,400 new dwellings in the eastern part of the LGA by 2031. The Strategy is used by Council to inform land rezoning for residential purposes. It is noted that Strategy is now almost 10 years old. It is acknowledged that the site is not contemplated in the planning proposal for higher density residential development; however our analysis of the strategy has identified that the Strategy is not delivering the housing required to meet the Council's target. In summary:

- The Residential Strategy states that rezoning existing centres and corridors within the eastern half of the LGA will provide capacity for 11,520 new high and medium dwellings to 2031. The balance of the 14,400 (2,880) are to be located as medium density on the fringe of the centres.
- Council have identified that their strategies to deliver medium density dwellings on the fringe of the centres have the capacity to deliver approximately 1,069 new dwellings. This results in a shortfall of 1,811 dwellings in the fringe areas.
- The major centres of Fairfield and Cabramatta are severely constrained by various factors (multiple sites under strata ownership, small sites that require amalgamation, insufficient road infrastructure and environmental factors i.e. flooding) and the practical ability for large scale residential redevelopment of both centres prior to 2031 is uncertain. There is no planned alternative to meeting the dwelling requirements. The subject site is large and appropriately located to deliver higher density housing.
- This Planning Proposal does not seek to undermine the centres and corridors strategy adopted by Council. The Council's forecast target identifies an anticipated shortfall of 1,800 new dwellings through the implementation of

Residential Strategy in the eastern LGA. The Planning Proposal will contribute to the provision of housing in the right location without undermining the hierarchy, or reduce the density of the established centres and corridors.

Therefore, the proposal is not inconsistent with the Council's Strategy.

Is it responding to a change in circumstances, such as the investment in new infrastructure or changing demographic trends that have not been recognised by existing planning controls?

- As stated above, the Strategy is almost 10 years old.
- The planning proposal is responding to a recent change in circumstances that was not a consideration for Council during the preparation the Strategy in 2009. Namely, the positive Gateway determination to proceed with the Orange Grove rezoning. The Gateway determination and imminent rezoning represents a significant change to the strategic context and character of the surrounding area. Council acknowledge that once rezoned, Orange Grove will have the characteristics of a sub-regional town centre. The subject site is within easy walking distance of the Orange Grove site.
- This planning proposal seeks to amend the LEP to facilitate the future delivery of appropriate housing types that will reflect the subject site's strategic location that is not recognised by the existing planning controls.

3.2 Site-Specific Merit Test

The table below considers the planning proposal against the Department's site-specific merit considerations.

Table 3 – Site specific merit test

The natural environment (including known significant environmental values, resources or hazards);	Ecological
	An Ecological Issues and Assessment Report has been prepared by Gunninah (Appendix D to the initial planning proposal). In summary the assessment concluded that,
	<ul style="list-style-type: none"> • The site is located within a significant area of existing urban development and has been substantially cleared and developed in the past. The existing vegetation on the site is described as 'synthetic' and is dominated by introduced species and horticultural plantings. • The development area is not considered critical or important for the survival of a viable local population of any threatened biota or threatened or migratory species. • Therefore, the removal or modification of vegetation and trees from the site is not of particular concern. Where possible, trees around the periphery of the site should be retained for aesthetic and amenity reasons – they do not have any notable ecological value or function.
	The Planning Proposal to facilitate higher density development on the site is supportable on ecological grounds.
	Tree retention
	A Preliminary Arboricultural Assessment has been prepared by Urban Forestry Australia (Appendix C to the initial planning proposal). The assessment identified 75 trees on-site. None of the trees are listed as threatened under the Threatened Species Conservation Act 1995 or the Environmental Protection and Biodiversity Conservation Act 1999. Of the 75 trees, 32 (i.e. 42%) are located around the perimeter of the site and are able to be successfully retained subject to detailed design at any future development application stage.
	Flooding and overland flow
	Flooding analysis and modelling has been undertaken with regard to the amended indicative concept design. The analysis concludes that overland flow can be managed by the existing and future stormwater

	<p>drainage infrastructure and swales. In this regard, there will be no additional impact on surrounding properties and the analysis does not identify any requirement to adjust the indicative building layout or raise finished floor levels.</p> <p>Views and vistas</p> <p>The site is located on the Cabramatta Road ridgeline at the southern boundary of the Fairfield LGA. The site's unique location enables it to become a legible gateway site to the LGA. Further, the site's elevation will enable future residents to enjoy high quality district and regional views.</p>
<p>The existing uses, approved uses and likely future uses of land in the vicinity of the land subject to the proposal; and</p>	<p>The surrounding land to the east and south is zoned R2 Low Density Residential and generally accommodates typical suburban single lot dwellings. The indicative concept, and the proposed controls, is designed to protect the existing amenity of the low density residential by transitioning to a lower scale at the boundaries. The indicative scheme demonstrates compliance with the relevant NSW Apartment Design Guide boundary separation and solar access requirements to the adjoining properties. Further the significant boundary vegetation can be maintained to soften the boundary interface.</p> <p>As outlined above, the subject site is within walking distance of the Orange Grove site to the south. The Orange Grove site currently accommodates the following:</p> <ul style="list-style-type: none"> • Service NSW; • Restaurants and takeaway food outlets; • 'Fashion Spree' (40 well-known brands) • Fitness centres; • Homemaker retailers; • Electrical retailers; • AMF Bowling; and • Stationery retailers. <p>Liverpool City Council, the Planning Assessment Commission and the Greater Sydney Commission support the current planning proposal for the Orange Grove site to allow approximately 21,000m² additional retail floor space. The planning proposal received a positive Gateway determination in November 2016. The Delegate of the Greater Sydney Commission included an instruction to finalise the amending LEP within 12 months of the Gateway determination (i.e. November 2017).</p> <p>Therefore, in a matter of months, the Orange Grove site is likely to be zoned to facilitate retail development that Fairfield City Council acknowledge will make it equivalent to a sub-regional town centre.</p> <p>The planning proposal for the subject site seeks to provide additional residential development at a scale and density that is appropriate for a location within walking distance of a sub-regional town centre without creating any unreasonable impacts on existing or future development in the surrounding area.</p>
<p>The services and infrastructure that are or will be available to meet the demands arising from the proposal and any proposed financial arrangements for infrastructure provision.</p>	<p>The site is immediately adjacent to bus routes that provide direct access to Liverpool and Cabramatta. These bus routes run frequently during peak times and have travel times of no more than approximately 12 minutes to each centre. The site is located within 30 minutes travel from Cabramatta, Fairfield, Liverpool and the future Western Sydney Airport site.</p> <p>The RMS recently upgraded the Orange Grove Road and Cabramatta Road West intersection. The Traffic Impact Assessment Report (Appendix B in the initial planning proposal) determined that the proposed increase in vehicle movements generated by the planning proposal can be accommodated without creating any significant impact on the operation of the surrounding road network.</p>

Additionally, the site is well serviced by social infrastructure in the form of schools, recreational and sporting facilities (refer to the initial planning proposal).

The Council's Direct Development Contributions Plan 2011 (Amendment 10) outlines the funding and infrastructure required to support the population growth identified in the FRDS (i.e. 14,400 additional dwellings in the eastern side of the LGA).

The FRDS identifies that approximately 12,600 new dwellings can be accommodated within the existing centres or as medium density on the fringe of centres. The planning proposal has the potential to deliver approximately 340 of the 1,800 dwellings that the FRDS does not seek to accommodate. Therefore, the demand for infrastructure that the planning proposal will create is already accounted for in the existing Development Contributions Plan. No additional funding mechanisms are required at this stage.

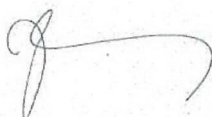
The planning proposal clearly meets the site-specific merit test.

4.0 Conclusion

In summary, the site has strategic and site specific merits that justify a rezoning review. As Council has determined not to support the planning proposal as amended, it is respectfully requested that the proposal to be considered under the Rezoning Review process.

I trust this information is what you require at this stage to progress this request, however should you have any queries about this matter or require any further information, please do not hesitate to contact me on 9956 6962 or at jmurray@ethosurban.com.

Yours sincerely,



Jim Murray
Associate Director



Planning Proposal

Amendment to the Fairfield LEP 2013

**400-404 Cabramatta Road West, 2-18 Orange Grove Road
& 6 Links Avenue, Cabramatta**

Proposal to amend zoning, building height and floor space ratio controls

Submitted to Fairfield City Council
On Behalf of TCON Constructions

March 2016 ■ 15203

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JBA operates under a Quality Management System that has been certified as complying with ISO 9001:2008. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared by:



Jim Murray

9/03/2016

This report has been reviewed by:



Bernard Gallagher

10/03/2016

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Executive Summary

This report has been prepared by JBA on behalf of TCON Constructions, the landowners of the site at 400-404 Cabramatta Road West, 2-18 Orange Grove Road and 6 Links Avenue, Cabramatta, in support of a Planning Proposal to amend the *Fairfield Local Environmental Plan 2013*. Specifically, this Planning Proposal seeks to:

- Rezone the site to R1 General Residential;
- Increase the maximum building height for the site to part 14 metres and part 27 metres;
- Increase the maximum floor space ratio for the site to 2:1; and
- Allow 'office premises' and 'business premises' as additional permitted uses on the site.

An indicative design concept has been prepared to demonstrate the site's capacity to accommodate higher density development that reflects the proposed amendments. The concept provides:

- 6 x buildings ranging height from 4 storeys to 8 storeys;
- Approximately 340 x 2 bedroom apartments;
- 30,780 sqm of gross floor area incorporating:
 - 29,580 sqm of residential floor area; and
 - 1,200 sqm of non-residential floor area at the corner of Cabramatta Road West and Orange Grove Road;
- Basement parking;
- Vehicular access via a new internal road connecting to Links Avenue; and
- Communal open space and landscaping including the retention of the existing trees around the perimeter of the site.

The Planning Proposal has been prepared in accordance with Section 55 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the relevant guidelines prepared by the former NSW Department of Planning and Infrastructure including "*A Guide to Preparing Local Environmental Plans*" and "*A Guide to Preparing Planning Proposals*".

The Site

The site of this Planning Proposal is a significant site of approximately 15,349 sqm under single ownership. It is located at a prominent gateway to the LGA on the fringe of the Liverpool Regional City Centre. It is:

- adjacent to bus stops that provide a short 8 minute trip to Cabramatta railway station and a 12 minute journey to the Liverpool CBD during the weekday peak hours;
- opposite the Cabramatta Golf Course and Club;
- a five minute walk to Cabramatta West Public School;
- a five minute walk to Panorama Reserve and Cabramatta Creek;
- a 10 minute walk to Cabramatta West village centre;
- a 10 minute walk to the Orange Grove MegaCenta; and
- a 13 minute walk to Cabramatta High School.

Further, the site is not burdened by any environmental constraints that would prevent or restrict development of the site.

Strategic Justification

The State Government has set the Fairfield Local Government Area a target to provide an additional 24,000 dwellings from 2007 – 2031. Council have identified that 52% of the housing target (approx. 12,590 dwellings) can be accommodated as new high and medium density housing in and around the eastern LGA town centres (Fairfield, Cabramatta, Canley Vale, Canley Heights and Villawood).

However, there are significant barriers to delivering new medium and high density housing in the short to medium term (in Cabramatta and Fairfield in particular) due to multiple sites under strata ownership, multiple sites requiring amalgamation, and insufficient road infrastructure. This is reflected by the low annual dwelling approval rate (549 on average) which needs to increase by 131% (721 dwelling approvals) per year to 2031 to achieve the State Government's target.

Council need to begin considering suitable alternative locations for increased density to ensure the dwelling target is achieved to meet the future needs of the local population.

The site represents an ideal opportunity to deliver over 300 new dwellings in a suitable location with good access to public transport, open space, shops and schools. The Planning Proposal will not undermine the Councils centres based planning strategy or reduce the planned density of the established centres and corridors.

Key Assessment Issues

Impacts on the neighbouring dwellings

The massing and layout of the indicative design concept has been arranged to ensure that:

- The buildings are setback between 9 – 20 metres from the common boundaries to maintain acoustic and visual privacy between dwellings.
- The boundary setbacks can accommodate appropriate landscape zones including the retention of existing trees which will further enhance the visual and acoustic privacy between dwellings and maintain the existing character of the boundary interface.
- The neighbouring dwellings will still receive a minimum of two hours direct sunlight to their rear living areas and backyards in mid-winter.
- All traffic will access the site via Links Avenue directly from Orange Grove Road. There will be no impact on traffic flow or parking on Smiths Avenue and Links Avenue.

Impacts on the economic viability of the surrounding centres

Permitting 'neighbourhood shops', 'business' and 'office' premises on the site will not reduce the viability or role of the existing centres in the Fairfield LGA for the following reasons:

- The retail floor space on the site will be limited to 80sqm (i.e. one neighbourhood shop) and is located in accordance with the criteria outlined in the Fairfield City Centres Policy 2015. Permitting one neighbourhood shop on the site will not impact the retail trade areas of the surrounding centres.
- Access to the site is constrained. There is no convenient on street parking nearby; visitors have to enter the site via Links Avenue south of Cabramatta Road West. This arrangement is unsuitable for any businesses that rely on foot

traffic, colocation and convenience for trade. Therefore, these types of business will not locate at the site and permitting business and office premises up to 1,200sqm floor space will not undermine the role and function of the surrounding centres or reduce the demand for commercial floor space in the centres.

Impacts on the surrounding road network

The Orange Grove Road intersection with Cabramatta Road West is proposed to be upgraded as part of the RMS 'Pinch Point' Program. The proposed upgrades are planned to be completed by early 2017. Any future development facilitated by the Planning Proposal will be completed following the upgrades and the forecast traffic demand generated by the indicative design concept would be adequately accommodated with no material increase in delays at the key intersections.

Residential amenity

The indicative design concept has been designed with reference to the Apartment Design Guide criteria and demonstrates that the site can accommodate a higher density residential development that will achieve good levels of residential amenity with regard to solar access, cross ventilation, privacy and communal open space.

The buildings along Cabramatta Road West and Orange Grove Road have a pleasant outlook across the Cabramatta Golf Course towards the Blue Mountains and will be designed to ensure that internal areas are not affected by traffic noise.

Planning Process and Next Stages

It is requested that Council consider the proposed amendments to the *Fairfield Local Environmental Plan 2013* contained in this Planning Proposal and, if Council forms the view that there is strategic merit in proceeding with the recommended amendments, refer the proposal to the NSW Department of Planning & Environment's Gateway Determination Panel.

Following the issuing of a Gateway Determination, additional design and technical assessment would be prepared in collaboration with the Fairfield City Council in order to support the final version of the Planning Proposal for public exhibition in order to obtain community and stakeholder input.

1.0 Introduction

This Planning Proposal is submitted to Fairfield City Council (Council) on behalf of TCON Constructions. The Planning Proposal is written in support of a proposed amendment to the *Fairfield Local Environmental Plan 2013* (the Fairfield LEP) as it applies to 400 - 404 Cabramatta Road West, 2-18 Orange Grove Road and 6 Links Avenue, Cabramatta (the site).

The Planning Proposal is informed by the indicative design concept prepared by Aleksandar Design Group (included at **Appendix B**) which demonstrates that the site's location and size is suitable for increased density without generating any unacceptable environmental impacts. Therefore, this Planning Proposal seeks to:

- Rezone the site to R1 General Residential;
- Increase the maximum building height for the site to part 14 metres and part 27 metres;
- Increase the maximum floor space ratio for the site to 2:1; and
- Allow 'office premises' and 'business premises' as additional permitted uses on the site.

The Planning Proposal will facilitate the provision of approximately 340 additional dwellings and a 1,200sqm component of non-residential floor space in an appropriate location on the fringe of the Liverpool Regional City Centre and adjacent to frequent peak hour bus services providing short connections to Liverpool and Cabramatta.

This Planning Proposal describes the site, the proposed amendments to the Fairfield LEP and provides an environmental assessment. The report should be read in conjunction with the Urban Design plans (**Appendix B**) and specialist consultant reports appended to this proposal (refer to the Table of Contents).

The Planning Proposal has been prepared in accordance with Section 55 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and the relevant guidelines prepared by the former NSW Department of Planning and Infrastructure including "*A Guide to Preparing Local Environmental Plans*" and "*A Guide to Preparing Planning Proposals*".

1.1 Background

TCON Constructions met with Council's Strategic Planning team on 14 October 2015 to discuss rezoning the Site to allow a residential development up to nine storeys in height with a retail commercial component at the corner of Cabramatta Road West and Orange Grove Road. **Table 1** summarises the matters raised by Council at the meeting.

Table 1 – Summary of Council meeting held 14 October 2015

Issue	Comment
The subject site is outside the areas identified by the draft Fairfield Residential Development Strategy, i.e. centres and corridors approach to increasing densities.	It is acknowledged that the site is outside the centres and corridor areas identified for greater density in the Fairfield Residential Strategy. It is noted that the Residential Strategy was developed by Council to deliver housing to meet a target of 24,000 new dwellings from 2007 - 2031. There is currently a pronounced shortfall in the approval and delivery of new dwellings to meet the target. The Planning Proposal demonstrates that the site's location and proximity to services makes it suitable for increased density.
Distance to frequent public transport (railway line or bus transit)	The site is currently serviced by frequent peak hour bus connections to Cabramatta and Liverpool railway stations. The travel times to

way) and services contained within a major town centre.	<p>Cabramatta and Liverpool are between 8 – 12 minutes making the site highly accessible to the local centres.</p> <p>The site is a 10 minute walk to the Cabramatta West neighbourhood centre and the Orange Grove MegaCenta.</p>
Council officers advised of a number of previous proposals where there was significant objection to proposed density increase. It was advised that these proposal either did not proceed or where scaled back to lower densities as a result of community submissions.	<p>The indicative scheme has been designed to minimise impacts on the neighbouring properties. It retains the existing trees around the site's perimeter, and to minimise overlooking and over shadowing to adjoining residential dwellings by reducing building heights and setting back the built form from the common boundaries.</p> <p>The site has direct access to Links Avenue which has a signalised intersection with Orange Grove Road thereby removing the potential for significant impacts on the local residential road network.</p>

Reports required by Council to be provided as part of any planning proposal (but not limited to):

Traffic, transport and impact on Links Avenue:

A Traffic Impact Assessment is submitted as **Appendix C**.

Vegetation / Ecological impact of the development on the site.

An Aboricultural Assessment is submitted as **Appendix D**.

An Ecological Assessment is submitted as **Appendix E**.

Residential Development Strategy (RDS) – Justification for out of centre increase in residential density, which is in conflict with RDS.

A review and analysis of the Residential Strategy has been submitted as **Appendix F**.

Retail/Commercial Centres Study – Justification for introduction of retail/commercial development which is not supported by current draft Study.

The indicative concept proposal accommodates approximately 1,200sqm non-residential gross floor area. The Council's Centres Policy 2015 is discussed at **Section 5.5** and the economic impacts of the proposal are discussed at **Section 7.2**.

2.0 The Site

2.1 Site Description

The site comprises six amalgamated lots on the corner of Cabramatta Road West and Orange Grove Road, Cabramatta. It has a secondary frontage to Links Avenue to the south. Refer to **Figure 1** below. The consolidated allotments that comprise the site are listed **Table 2**.



Figure 1 – Aerial view of the site location
Source: JBA

Table 2 – Site details

Address	Legal Description
400 Cabramatta Road West	Lot 1 DP 29449
402 Cabramatta Road West	Lot 1 DP 503339
402A Cabramatta Road West	Lot 2 DP 503339
404 Cabramatta Road West	Lot 6 DP 709126
2-18 Orange Grove Road	Lot 7 DP 709126
6 Links Avenue	Lot 3 DP 30217

In summary, the site:

- Has a site area of approximately 15,349sqm (1.5 hectares) and is a prominent corner site at the southern gateway to Fairfield Local Government Area;
- Has a 42m frontage to Cabramatta Road West; a 203m frontage to Orange Grove Road; and a 14m frontage to Links Avenue;
- Has a minimum width of 42m which increases to a maximum width of 96m at the southern boundary;
- Is relatively flat at the Cabramatta Road West frontage and then develops a pronounced cross fall of approximately 11m south towards to Links Avenue (refer to Site Survey at **Appendix A**);

- Is currently vacant with remnant trees and vegetation from previous low density residential development;
- Is immediately adjacent to a bus stop towards the Liverpool CBD on Orange Grove Road and approximately 140m walk (2 minutes) from a bus stop towards Cabramatta on Cabramatta Road West;
- Is not burdened by environmental constraints including:
 - Heritage and conservation;
 - Critical habitats;
 - Road widening, realignment or Council land acquisition;
 - Bushfire;
 - Acid Sulfate Soil; and
 - Flooding or overland flow.

The long street frontages and substantial site area establish the site as one of the most unique and prominent landholdings in the local area. Development sites of this size and nature are extremely uncommon in the LGA. Creating a site with similar characteristics in any of the town centres would require the amalgamation of multiple sites currently under strata ownership.

Site photographs are provided as **Figures 2 – 5**.



Figure 2 – The site looking south from Cabramatta Road West



Figure 3 – The site looking west from Orange Grove Road



Figure 4 – The site at the corner of Cabramatta Road West and Orange Grove Road



Figure 5 – The existing site frontage to Links Avenue

2.2 Public Transport

The current bus services that stop at the site are summarised in **Table 3** below. The bus timetable for these services indicates that the site is a short bus ride to the surrounding centres during the key week day peak periods. The bus journey to Cabramatta is approximately eight minutes and the journey to the Liverpool CBD is approximately 12 minutes. Liverpool and Cabramatta railway stations provide frequent connections to key metro centres including Campbelltown, Fairfield, Bankstown, Parramatta and the Sydney CBD.

Table 3 – Summary of bus services

Route	Destination	Frequency
Orange Grove Road Bus Stops		
801	Badgerys Creek to Liverpool via Bonnyrigg	2 services to Liverpool in AM + one in PM 3 service from Liverpool in afternoon/evening
819	Prarieewood to Liverpool	Every 0.5 hours to Liverpool from 6:42am to 8:42am Every 0.5 hours from Liverpool from 3:45pm to 6:15pm
Cabramatta Road West Bus Stops		
815	Cabramatta to Mt Pritchard	Approx. 20 services to/from Cabramatta Station per weekday
816	Greenfield Park to Cabramatta	Approx. 20 services to/from Cabramatta Station per weekday

2.3 Current Planning Controls

The key planning controls that currently apply to the site under the Fairfield LEP are outlined in **Table 4** below.

Table 4 – Current Fairfield LEP planning controls

Consideration	Existing Control
Land use zoning	The site is zoned R2 Low Density Residential which permits a range of residential uses (attached dwellings, dual occupancies, dwelling houses, secondary dwellings, semi-detached dwellings and seniors housing) and non-residential uses (child care centres, community facilities, educational establishments, health consulting rooms, information and education facilities, places of public worship and public administration buildings).
Additional permitted uses	Multi-dwelling housing is permitted as an additional use on the site under Schedule 1 of the Fairfield LEP.
Building height	The maximum building height on the site is nine metres above existing ground level (i.e. three storeys).
Floor space ratio	The floor space ratio for the site is 0.45:1 which allows a maximum gross floor area of approximately 6,907sqm.

3.0 The Surrounding Area

The surrounding area contains a number of land uses that support the strategic merit of the Planning Proposal. Key locations and their distance from the site are outlined in **Table 5** below. The site's locational context is shown in **Figures 6** and **7**.

Table 5 – The site's distance from key locations in the surrounding area

Location	Travel distance from the site
Cabramatta West Public School	350m (4 min. walk)
Panorama Reserve & Cabramatta Creek	400m (5 min. walk)
Cabramatta West neighbourhood centre	750m (10 min. walk)
Orange Grove MegaCenta	800m (10 min. walk)
Cabramatta High School	1.1km (13 min. walk)
Cabramatta town centre and railway station	1.8km (approx. 8 min. bus journey)
Liverpool CBD and railway station	2.1km (approx. 12 min. bus journey)
Future Badgery's Creek airport site	20km (approx. 25 min. drive)

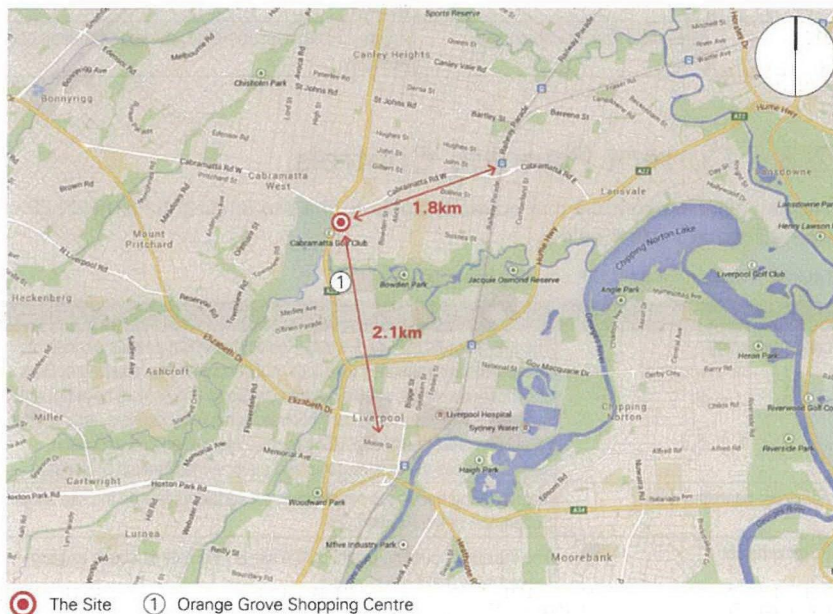


Figure 6 – Location plan
Source: JBA

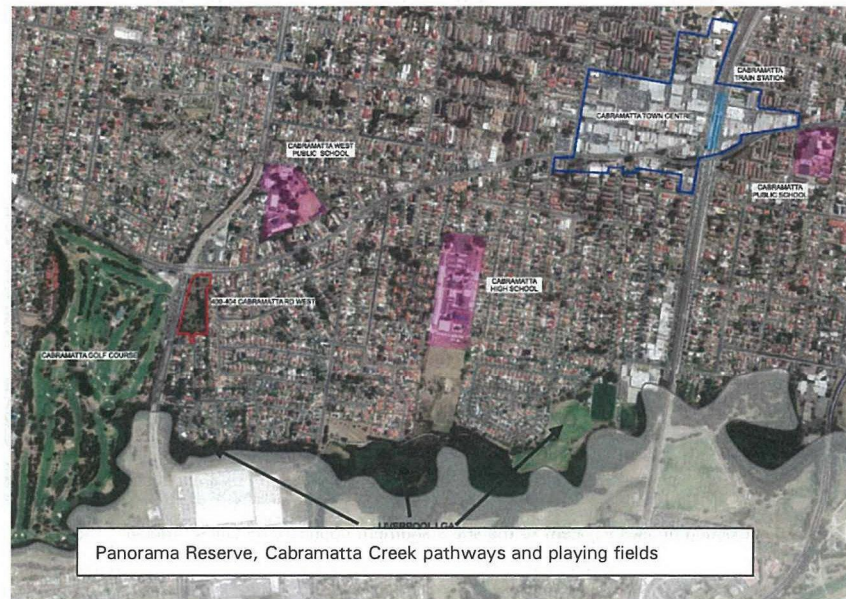


Figure 7 – The site and the surrounding context
Source: Alexandar Design Group

The surrounding area is described in further detail below.

North

A BP service station and Hungry Jacks restaurant lie immediately north of the site across Cabramatta Road West. Low density housing lies to the north east and west. Cabramatta West Public School is approximately 350m walking distance north-east of the site.



Figure 8 – Hungry Jacks and BP service station north of the site

South

Low density housing borders the southern edge of the site and extends to the Panorama Reserve neighbourhood park which is approximately 400m walk south of the site. The Reserve is connected to an extensive network of parks and sports fields via the Cabramatta Creek Trail. The Orange Grove MegaCenta lies further south beyond Cabramatta Creek.



Figure 9 – Existing houses adjacent to the site's southern boundary on Links Avenue

The Orange Grove MegaCenta currently accommodates approximately 29,000 sqm of net leasable area predominantly taken up by retail and bulky goods, it also accommodates a variety of other premises. The uses located at the MegaCenta include:

- Service NSW;
- Restaurants and takeaway food outlets;
- Fitness centres;
- Homemaker retailers;
- Electrical retailers;
- AMF Bowling; and
- Stationery retailers.

Liverpool City Council, at its meeting on 16 December 2015, resolved to support a Planning Proposal to permit up to an additional 21,000 sqm of gross floor area to permit 'shops' at the MegaCenta site. The Planning Proposal has been forwarded to the Department of Planning and Environment for Gateway determination.

Gazettal of the Planning Proposal would allow the MegaCenta to accommodate discount department stores (i.e. Kmart), full-line supermarkets and specialty retail shops to meet the needs of the surrounding residential community.

The site is within walking distance and ideally located to take advantage of the existing and proposed retail facilities and services available at the MegaCenta.



Figure 10 – The MegaCenta looking south from Orange Grove Road



Figure 11 – The MegaCenta looking north

East

Low density housing along Smiths Avenue borders the eastern edge of the site. Cabramatta High School lies further beyond approximately 1.1km walking distance. There are two churches located along Cabramatta Road West.



Figure 12 – Existing dwellings on Smiths Avenue east of the site

West

The Cabramatta Golf Course and Club (including restaurant and bar) lies immediately west of the site across Orange Grove Road. The Golf Course accommodates 'Red Gums' which are listed as a heritage item in the Fairfield LEP.



Figure 13 – Cabramatta Golf Club opposite the site at the corner of Cabramatta Road West and Orange Grove Road

The Road Network

Cabramatta Road West is a sub-arterial road that connects the site to the Cabramatta town centre 1.8km to the east; and to Elizabeth Drive which connects to the future Badgery's Creek airport site 20km to the west.

Orange Grove Road forms part of the Cumberland Highway which is major arterial road connecting Liverpool and Parramatta.

4.0 The Indicative Design Concept and the Planning Proposal

4.1 Indicative Design Concept

The intended outcome of this Planning Proposal is to enable the development of the site to accommodate a mixed use residential development comprising six buildings ranging in height from four to eight storeys. Aleksandar Design Group have undertaken an indicative design exercise to understand the site's opportunities and constraints and have developed an indicative design scheme. A copy of their Urban Design Report is submitted as **Appendix B**.

The key features of the indicative design concept are outlined in **Table 6** below.

Table 6 – Indicative design concept – key features

Element	Detail
No. of buildings	6
Building height	Minimum 14m (4 storeys) Maximum 27m (8 storeys)
Gross floor area	30,780 sqm incorporating: <ul style="list-style-type: none"> ▪ 29,580 sqm residential; and ▪ 1,200 sqm non-residential.
FSR	2:1
Setback to Orange Grove Road	6m
Setback to Cabramatta Road West	3.5m
Setback to southern boundary (Links Avenue properties)	Minimum 9m – maximum 18m
Setback to eastern boundary (Smiths Avenue properties)	Minimum 9m
Uses	<ul style="list-style-type: none"> ▪ Residential apartments; and ▪ Non-residential uses including: <ul style="list-style-type: none"> – Neighbourhood shops; – Business premises; and – Office premises
Apartments	Approximately 340 x 2 bedroom apartments
Vehicular access	Via a new two-way internal road connecting to Links Avenue.
Communal open space	Approximately 4,170sqm (27% of the site area)
Deep soil	Approximately 4,600sqm (30% of the site area)

4.1.1 Built form

The eight storey buildings

Three eight storey buildings are located on the Orange Grove Road and Cabramatta Road West frontage to define the street edge. The buildings are characterised by a four storey podium with a four storey massing above. They step down Orange Grove Road to respond to the topography of the site and transition to a four storey form at the interface with the neighbouring properties to the south on Links Avenue and to the east on Cabramatta Road West. The separation between the buildings provides relief, enhances the street edge articulation and allows a visual connection into the site.

The northernmost building addresses the corner which provides a landmark statement at the gateway to the LGA. Approximately 1,200 sqm of non-residential floor space is proposed to be accommodated on the ground floor of the corner building.

The four storey buildings

Three 4 storey residential buildings are proposed east of the new internal road. The lower building heights and boundary setbacks respond to the scale of the existing residential dwellings to the east and south.

Refer to **Figures 15 – 19** below for perspectives and indicative layout plans.

4.1.2 Non-residential uses

The proposed non-residential uses at the corner of Cabramatta Road West and Orange Grove Road will provide activation to the street in a location unsuitable for residential dwellings. The floor space is flexible and able to accommodate a range of tenancies and uses to meet the needs of the residents and surrounding community. The Planning Proposal seeks to enable neighbourhood shops, office and business premises to occupy the ground floor space in addition to the number of non-residential uses permitted with consent under the current zoning.

4.1.3 Access

All vehicular access to the site is proposed via a two-way internal road connecting to Links Avenue. Access to the basement levels is proposed from the internal road via a single point. The internal road will be designed to allow Council's waste vehicles to enter and collect rubbish and recycling at street level. A cul-de-sac will be provided to allow Council's vehicles to enter and exit in a forward direction (refer to **Figure 14**).

Pedestrian access is proposed from Orange Grove Road and Cabramatta Road West in locations which connect to internal pathways.



Figure 14 – Site access Source: Aleksandar Design Group

4.1.4 Parking

The concept includes a typical basement level with the capacity to accommodate approximately 300 cars. The Traffic Impact Assessment Report prepared by Ason Group (**Appendix C**) indicates that the indicative concept will require 455 parking spaces. The total parking requirement can easily be provided across two basement levels.

4.1.5 Tree retention and open space

The proposal retains the significant number of trees located around the site's perimeter. This will contribute to the provision of deep soil and continue to provide a buffer to the neighbouring properties to the east and south. New and

existing planting will be provided along the Orange Grove Road frontage within the 6 metres setback zone.

Large areas of landscaped communal open space for residents are provided in the spaces between the buildings and along the eastern boundary.



400 - 404 Cabramatta Road West, 2-18 Orange Grove Road & 6 Links Avenue, Cabramatta ■ Amendment to the Fairfield LEP 2013 | March 2016



Figure 15 – View looking east from Cabramatta Golf Course
Source: Aleksandar Design Group



Figure 16 – View looking north along Orange Grove Road
Source: Aleksandar Design Group



Figure 17 – View looking west from the eastern boundary
Source: Aleksandar Design Group

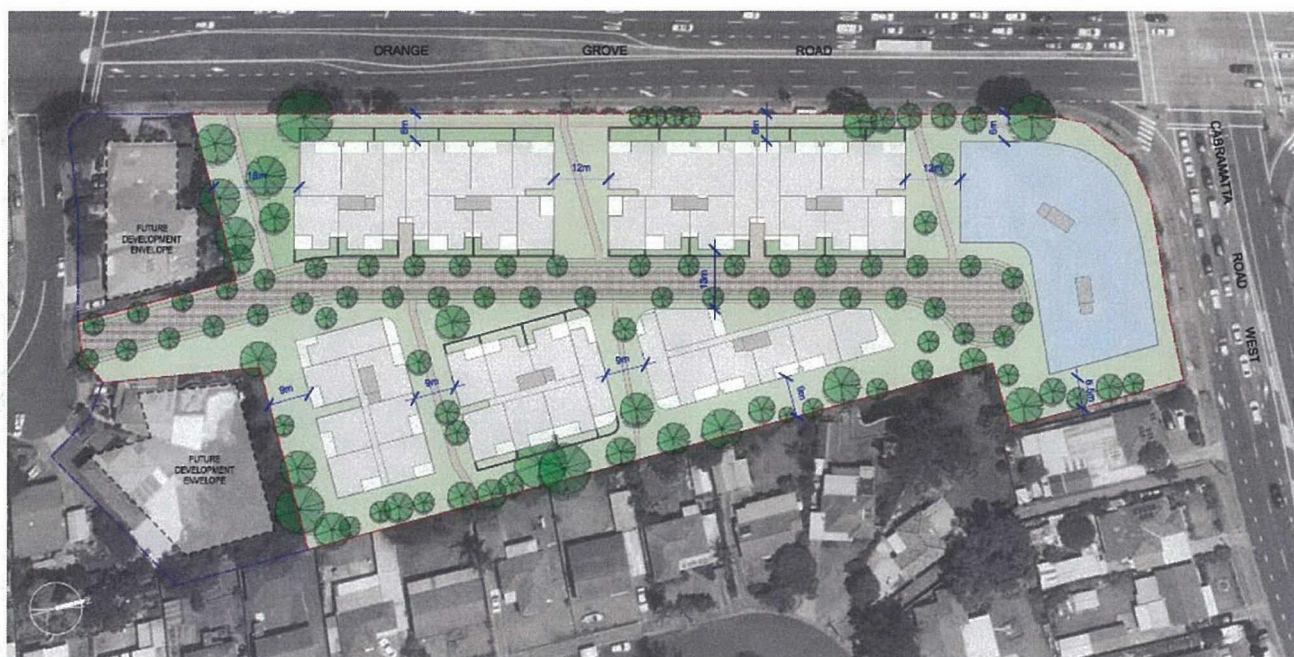


Figure 18 – Indicative ground floor plan
Source: Aleksandar Design Group



Figure 19 – Indicative typical upper floor plan (L4-L8)
Source: Aleksandar Design Group

4.2 Proposed amendments to the Fairfield Local Environmental Plan 2013

To enable the site to accommodate the concept design, the following amendments area required to the Fairfield LEP:

- Rezone the site to R1 General Residential;
- Increase the maximum building height for the site to part 14 metres and part 27 metres;
- Increase the maximum floor space ratio for the site to 2:1; and
- Allow 'office premises' and business premises as additional permitted uses on the site.

It is noted that the concept design prepared by Aleksandar Design Group shows maximum building heights of approximately 12 metres and 24 metres; however the maximum Fairfield LEP height is proposed to be part 14 metres and part 27 metres to allow for changes in ground levels, and to provide flexibility for floor to ceiling heights and building plant to be determined during any future detailed design of the site.

The maps provided at **Appendix G** illustrate the proposed amendments to the Fairfield LEP. Council may also wish to consider an alternative Planning Proposal option that includes the lots immediately south of the Site fronting Links Avenue. Whilst these lots are under separate ownership, including them as part of any future rezoning of the Site represents a logical extension of the proposed controls.

5.0 Strategic Justification

5.1 A Plan for Growing Sydney

The NSW Government's *A Plan for Growing Sydney* sets the future vision for Sydney as a 'strong global city, a great place to live'. In order to achieve this vision the following four goals are set out, which are further underpinned by directions and actions:

1. *a competitive economy with world class services and transport;*
2. *a city of housing choice with homes that meet our needs and lifestyles;*
3. *a great place to live with communities that are strong, healthy and well connected; and*
4. *a sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.*

The Plan identifies Liverpool as a 'Regional City Centre'. The previous draft South West Subregional Strategy identifies a 'regional centre' as having a catchment radius of 2km. The site sits on the immediate fringe of the Regional City Centre catchment being located 2.1km from the Liverpool CBD centre. This places the site in a strategically appropriate location to take advantage of the services expected to be provided by a Regional City Centre namely a full range of office, government, retail, cultural, entertainment and recreational activities.

The Planning Proposal will assist in achieving goals two and three of the Plan by meeting the strategic directions outlined below.

Direction 2.1: 'Accelerate housing supply across Sydney'

This direction seeks to remove barriers to increased housing production by implementing flexible planning controls to enable housing in feasible locations to reach the metropolitan target of 664,000 new dwellings across Sydney by 2034. The Council has rezoned land in the centres however, the Fairfield Residential Strategy (refer **Section 5.3**) acknowledges that significant development in the centres is constrained by barriers (strata ownership, traffic constraints and land fragmentation). The site is not burdened by any of these material barriers and the primary objective of the Planning Proposal is to amend the current planning controls for the site to enable an appropriate increase in housing density in a suitable location.

Direction 2.2: 'Accelerate urban renewal across Sydney – providing homes closer to jobs'

This direction seeks to support urban renewal in or near centres on the public transport network to utilise existing infrastructure and employment lands. The Plan identifies the major renewal corridors along Parramatta Road and the North West Rail Link as accommodating significant housing growth. On a smaller scale, the site's location on public transport routes connecting to the Liverpool CBD and the Bankstown to Liverpool Enterprise Corridor will deliver on the direction to provide housing close to employment land. The site is also a relatively short distance (20km) from the future Badgerys Creek airport site which is anticipated to create approximately 30,000 jobs.

The Plan includes actions to ensure long term employment growth in the Liverpool CBD and increase economic activity and jobs growth in the Liverpool to Bankstown Corridor. The site is a short bus ride from Liverpool and can contribute to the achievement of the strategic direction to locate new housing closer to jobs.

Direction 2.3 – 'Improve housing choice to suit different needs and lifestyles'

Council have acknowledged that the delivery of smaller housing types needs to be prioritised to meet the changing needs of the local community. The Planning Proposal will facilitate the provision of apartments which will increase the range and choice of dwelling types and price points to meet the increased demand from sole parents, older couples and single residents.

Direction 3.1 – 'Revitalise existing suburbs'

This direction seeks to prioritise the delivery of housing in or near established urban areas to help more people to live where they want. The Planning Proposal provides the opportunity to revitalise a vacant site and the surrounding area. It is at the gateway to the Fairfield LGA on the fringe of the Liverpool Regional City Centre and a short distance from Cabramatta town centre. The provision of high density residential buildings at the corner of Cabramatta Road West and Orange Grove Road will create a landmark building that will increase the legibility of the area and activate the vacant corner site. Furthermore, the Indicative Scheme is considered to be in accordance with the principles for a well-designed centre as it will:

- make it easy for residents and visitors to move around and travel to local and surrounding areas due to its highly accessible location;
- include private, semi-private spaces that will interface with the public domain; and
- contribute to the population and mix of uses in the local area which will increase activity, surveillance and safety for everyone.

5.1.1 Summary

The Planning Proposal is consistent with the above objectives of '*A Plan for Growing Sydney*' as it will deliver new homes on the Liverpool Regional City Centre fringe and a short distance to Cabramatta town centre. The site is adjacent to frequent bus services, close to public open space and retail services. The site's proximity to Liverpool CBD, the MegaCenta and Cabramatta town centre make it a suitable location for the delivery of higher density housing.

5.2 Fairfield City Plan 2012 – 2022

The Fairfield City Plan 2012 – 2022 is a community strategic plan which defines the goals that will inform Council's long term strategic planning. Specifically, the plan identifies the goal for building and infrastructure to meet the changing needs of the community. The plan also specifies the need to encourage development that allows members of the community to live locally.

The proposal is considered to be consistent with the strategic objectives of this plan in that the proposal is located on the fringe of the Liverpool Regional City and a short bus ride to Cabramatta. It will therefore provide housing close to employment opportunities, encouraging members of the community to live locally. Further, the proposal will address the changing needs of the community by contributing to housing diversity and demand through the provision of a range of smaller dwellings to suit single and two person households.

5.3 Fairfield Residential Development Strategy

The NSW Government's draft West Central Sub Regional Strategy (NSW Department of Planning 2007) required the Fairfield City LGA to provide 24,000 new dwellings by 2031.

Council resolved in May 2008 to prepare a Residential Development Strategy in a two stage approach. Stage 1 focuses on the LGA east of the Cumberland Highway (Orange Grove Road) and in particular, the centres of Fairfield, Cabramatta, Canley Vale, Canley Heights, Fairfield Heights and Villawood. Stage 2 will address the LGA west of the Cumberland Highway and has not been undertaken to date.

In 2009 the draft Residential Development Strategy East (the Fairfield Residential Strategy) was prepared to establish a sustainable development framework to guide decision making for the provision of 14,400 new dwellings in the eastern part of the LGA by 2031 (60% of the 24,000 required). The Fairfield Residential Strategy proposes that new dwellings will be located primarily within the established centres and corridors with opportunities for medium density growth on the fringes of the centres. A detailed review and analysis of the Residential Strategy has been undertaken and is submitted as **Appendix E**. The key matters are:

- The Residential Strategy states that rezoning existing centres and corridors within the eastern half of the LGA will provide capacity for 11,520 new high and medium dwellings to 2031. The balance of the 14,400 (2,880) are to be located as medium density on the fringe of the centres.
- Council have identified that their strategies to deliver medium density dwellings on the fringe of the centres have the capacity to deliver approximately 1,069 new dwellings. This results in a shortfall of 1,811 dwellings in the out of centre / fringe areas.
- The major centres of Fairfield and Cabramatta are severely constrained by various factors (existing strata development, small sites that require amalgamation, traffic impacts and environmental factors) and the practical ability for large scale residential redevelopment of both centres prior to 2031 is uncertain. There is no planned alternative to meeting the new dwelling requirements.
- LGA wide dwelling approvals from financial years 2007-08 to 2015-16 total 4,940 at an average of 549 per year (source: profile.id.com.au/Fairfield/building-approvals). This means another 19,060 new homes need to be approved from 2016 – 2031 at an average of 1,270 new dwellings per year. The number of approvals per year needs to increase by 721 on average to 2031 to meet the target.
- The Residential Development Strategy to locate 9,600 new dwellings by 2031 in the western half of the LGA has not been undertaken and there is no clear timeframe for this to occur.

In summary

- The market is not delivering new dwellings to meet the target under the existing planning controls. Council need to begin considering alternative locations to ensure the dwelling target is achieved to meet the future needs of the local population. In this regard, the site represents an ideal opportunity to deliver over 300 new dwellings in an appropriate location.
- This Planning Proposal does not seek to undermine the centres and corridors strategy adopted by Council. The Council's forecast target identifies an anticipated shortfall of 1,800 new dwellings through the implementation of Residential Strategy in the eastern LGA. The Planning Proposal will contribute

to meeting the 1,800 shortfall and the overall target – it will not undermine the hierarchy, or reduce the density of the established centres and corridors.

5.4 Fairfield City Centres Study and Policy 2015

Council adopted the Fairfield City Centres Study 2015 and the Fairfield City Centres Policy 2015 (Centres Policy) on 9 February 2016. The purpose of the Centres Policy is to outline and protect the role of the commercial and retail centres in the LGA and provide consistent criteria for the assessment of proposals that include the provision of retail/commercial floor space.

The closest centres to the site identified by the Centres Policy are Cabramatta and Cabramatta West. Cabramatta is identified as a Specialist Centre which is characterised by:

- *The provision of a wide range of retail and commercial services to a large ethnic community;*
- *The presence of the widest range of specialty shops targeting the needs of the ethnic community;*
- *Its location on a major public transport network;*
- *Generally containing in the order of 60,000sqm of retail floor space together with a wide range of non-retail services including office space, community services, health facilities and education services targeting the ethnic community;*
- *Providing for specialist shopping needs of the ethnic community; and*
- *Its ability to attract large numbers of day-trippers from outside LGA seeking a special shopping and cultural experience.*

Cabramatta West is located approximately 750m west of the site and identified as a Neighbourhood Centre. Neighbourhood Centres are characterised by:

- *The provision of retail and commercial services to the surrounding neighbourhood or suburb within Fairfield LGA (usually up to 10,000 persons);*
- *Generally containing <2,000sqm of retail floor space;*
- *Providing convenience retail services to the residents of the neighbourhood or suburb in which it is located and may contain a small grocery/supermarket store- usually of <500sqm; and*
- *Providing a limited range of non-retail services such as a medical practice or post office.*

The Centres Policy applies as the Planning Proposal seeks to amend the Fairfield LEP to permit 'neighbourhood shops', 'business premises' and 'office premises' on up to 1,200sqm of non-residential floor space.

The Planning Proposal will not have any adverse impact on the role and function of either Cabramatta or Cabramatta West as the characteristics of the site (i.e. the absence of convenient access and parking) and the anticipated size and nature of any future uses are highly unlikely to draw trade from the surrounding centres. The economic impacts of the proposed uses are discussed further at Section 7.2.

6.0 State Legislation and Planning Policies

6.1 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (the EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (EPA Reg.) set out amongst other things the:

- requirements for rezoning land;
- requirements regarding the preparation of a local environmental study as part of the rezoning process;
- matters for consideration when determining a development application; and
- approval permits and/or licences required from other authorities under other legislation.

This Planning Proposal has been prepared in accordance with the requirements set out in Section 55 of the EP&A Act in that it explains the intended outcomes of the proposed instrument. It also provides justification and an environmental analysis of the proposal.

Section 117 Directions

Ministerial directions under Section 117 of the EP&A Act require Councils to address a range of matters when seeking to rezone land. A summary assessment of the Planning Proposal against the Directions issued by the Minister under Section 117 of the EP&A Act is provided in **Table 7** below.

Table 7 – Assessment against 117 Directions

Ministerial Directions	Consistent		N/A	Comment
	YES	NO		
1. Employment and Resources				
1.1 Business and Industrial Zones	✓			Refer to Section 5.4 and 7.2 for further discussion.
1.2 Rural Zones			✓	Not applicable
1.3 Mining, Petroleum Production and Extractive Industries			✓	Not applicable
1.4 Oyster Aquaculture			✓	Not applicable
1.5 Rural Lands			✓	Not applicable
2. Environment and Heritage				
2.1 Environment Protection Zones	✓			The land is not located within an environmental protection zone or land identified for environmental purposes.
2.2 Coastal Protection			✓	Not applicable
2.3 Heritage Conservation	✓			The site is not a heritage listed item nor is it within a heritage conservation zone. The site is not located in the vicinity of any heritage items and therefore is not expected to have any adverse impacts on heritage conservation.
2.4 Recreation Vehicle Areas			✓	Not applicable
3. Housing, Infrastructure and Urban Development				

Ministerial Directions	Consistent		N/A	Comment
	YES	NO		
3.1 Residential Zones	✓			The site is proposed to be rezoned R1 General Residential. The Planning Proposal is consistent with this direction as it seeks to increase the residential density on the site which will make better use of infrastructure and services. The Planning Proposal will also increase the choice of building and housing types, in an area that is strategically located close to transport, opens space, schools, services, employment in Cabramatta and the Liverpool CBD.
3.2 Caravan Parks and Manufactured Home Estates			✓	Not applicable
3.3 Home Occupations			✓	Not applicable
3.4 Integrating Land Use and Transport	✓			The Planning Proposal, will facilitate a high density residential mixed use development to support the existing bus routes connecting the site, and improve access to housing, jobs and services by walking, cycling and public transport.
3.5 Development Near Licensed Aerodromes			✓	Not applicable
3.6 Shooting Ranges			✓	Not applicable
4. Hazard and Risk				
4.1 Acid Sulphate Soils			✓	The site is not identified under the Fairfield LEP as being potential Acid Sulphate Soils.
4.2 Mine Subsidence and Unstable Land			✓	Not applicable
4.3 Flood Prone Land			✓	The site is not identified as being located on flood prone land.
4.4 Planning for Bushfire Protection			✓	Not applicable
5. Regional Planning				
5.1 Implementation of Regional Strategies			✓	Not applicable
5.2 Sydney Drinking Water Catchments			✓	Not applicable
5.3 Farmland of State and Regional Significance on the NSW Far North Coast			✓	Not applicable
5.4 Commercial and Retail Development along the Pacific Highway, North Coast			✓	Not applicable
5.8 Second Sydney Airport: Badgerys Creek			✓	Not applicable
5.9 North West Rail Link Corridor Strategy			✓	Not applicable
6. Local Plan Making				
6.1 Approval and Referral Requirements	✓			No new concurrence provisions are proposed.
6.2 Reserving Land for Public Purposes	✓			No new road reservation is proposed.

Ministerial Directions	Consistent		N/A	Comment
	YES	NO		
6.3 Site Specific Provisions	✓			The LEP amendment does not impose any restrictive site specific provisions.
7. Metropolitan Planning				
7.1 Implementation of the Metropolitan Plan for Sydney 2036	✓			Refer to Section 5.1 .

6.2 State Environmental Planning Policies

The consistency of the Planning Proposal with the relevant State Environmental Planning Policies (SEPPs) is addressed in **Table 8** below.

Table 8 – Consistency with relevant SEPPs

State Environmental Planning Policies (SEPPs)	Consistent		N/A	Comment
	YES	NO		
SEPP No 1 Development Standards			✓	The Provisions of SEPP 1 are replaced with Clause 4.6 of the Fairfield LEP and it does not apply to the Planning Proposal.
SEPP No 4 Development Without Consent and Miscellaneous Exempt and Complying Development			✓	SEPP (Exempt and Complying Development Codes) 2008 applies to the site however is not relevant to the Planning Proposal.
SEPP No 6 Number of Storeys			✓	The Standard Instrument definition for the number of storeys applies.
SEPP No 32 Urban Consolidation (Redevelopment of Urban Land)	✓			The planning proposal is consistent with SEPP 32 in providing for the development of additional housing in an area where there is existing public infrastructure, transport, and community facilities, and is close to employment, leisure and other opportunities. Refer to Section 2.
SEPP No 55 Remediation of Land			✓	The site is not known to be contaminated and is currently zoned for residential uses. Notwithstanding this, contamination will be further addressed at the DA stage.
SEPP No 64 Advertising and signage			✓	SEPP 64 is not relevant to the Planning Proposal. The SEPP may be relevant to future DAs.
SEPP No 65 Design Quality of Residential Flat Development	✓			Detailed compliance with SEPP 65 will be demonstrated in a future DA for any building facilitated by this Planning Proposal. Testing of SEPP 65 and the Apartment Design Guide (ADG) was conducted throughout the design of the indicative scheme which is capable of satisfying the requirements of the SEPP and associated Apartment Design Guide. As outlined in the Urban Design Report (Appendix A) the proposal is capable of achieving solar access and natural ventilation requirements of the ADG and achieves compliant building separation and setbacks to the surrounding residential development. It is demonstrated that a high level of residential amenity can be achieved on the site under the Planning Proposal.
SEPP No.70 Affordable Housing (Revised Schemes)			✓	SEPP 70 is not relevant to proposed amendment.
SEPP (Affordable Rental Housing) 2009			✓	SEPP (Affordable Rental Housing) is not relevant to proposed amendment.

State Environmental Planning Policies (SEPPs)	Consistent		N/A	Comment
	YES	NO		
SEPP (BASIX) 2004	✓			Detailed compliance with SEPP (BASIX) will be demonstrated in a future development application for the scheme facilitated under this Planning Proposal.
SEPP (Exempt and Complying Development Codes) 2008	✓			SEPP (Exempt and Complying Development Codes) may apply to the future development of the site.
SEPP (Infrastructure) 2007	✓			SEPP (infrastructure) will apply to any future development of the site facilitated by the Planning Proposal.
SEPP (State and Regional Development) 2011	✓			The future development of the site is likely to be deemed as 'regional development' (meeting the relevant thresholds under Schedule 4A of the EP&A Act), with the JRPP acting as the determining authority.
Sydney Regional Environmental Plan No 18—Public Transport Corridors			✓	This SREP is not applicable to the land subject to this Planning Proposal.
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005			✓	Not applicable.

6.3 Fairfield Local Environmental Plan 2013

The Fairfield LEP is the key environmental planning instrument that applies to the site. It was implemented on 17 May 2013. Table 9 - 11 demonstrate that the Planning Proposal is consistent with the overall aims and relevant objectives of the Fairfield LEP.

Table 9 – Consistency with the relevant aims of the Fairfield LEP

Aim	Proposal
(a) to ensure that appropriate housing opportunities are provided for all existing and future residents and that those housing opportunities accommodate different lifestyles, incomes and cultures,	The Planning Proposal is consistent as it seeks to increase the number of dwellings permitted on the site. This will increase the range and diversity of housing opportunities the LGA.
(b) to ensure that the economic, employment and educational needs of the existing and future community are appropriately planned for,	The Planning Proposal is consistent as the site: <ul style="list-style-type: none"> Occupies a prominent location at the gateway to the LGA and a range of non-residential land uses are currently permitted under the R2 Low Density Residential zone. The Planning Proposal will facilitate the development of up to 1,200 sqm of non-residential land uses in a suitable location as outlined at Section 7.2. Is walking distance to Cabramatta West Primary School and Cabramatta High School.
(c) to ensure that the recreational and social needs of the existing and future community are appropriately planned for,	The Planning Proposal is consistent as it will utilise the site's proximity to the Panorama Reserve and Cabramatta Creek walking and cycle paths which connect to a wider network of parks and recreational facilities.
(d) to ensure that development is properly integrated with, or assists in improving, Fairfield's public services, infrastructure and amenities,	The Planning Proposal is consistent as it utilises its proximity to the existing public transport infrastructure and will not have adverse on impacts on the operation of the local road network.
(f) to conserve the environmental heritage of Fairfield,	The Planning Proposal is consistent as it will not have any impact on the preservation of the environmental heritage of Fairfield.

(g) to protect and manage areas of remnant bushland, natural watercourses and threatened species.	The Planning Proposal is consistent as it will not have any adverse impact on the sensitive ecological systems located in Fairfield. Refer to Section 7.4 .
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Table 10 – Consistency with the objectives of the R1 General Residential zone

Objective	Proposal
• To provide for the housing needs of the community.	The Planning Proposal will facilitate the development of the site for approximately 340 new homes in the LGA. The provision of higher density housing on the site will make a direct contribution to meeting an identified shortfall in housing supply as demonstrated at Section 5.3
• To provide for a variety of housing types and densities.	The Planning Proposal will facilitate a range of two bedroom apartments to meet the shortfall in smaller dwellings identified by Council in the Residential Strategy.
• To enable other land uses that provide facilities or services to meet the day to day needs of residents.	The Planning Proposal will facilitate the provision of floor space to accommodate uses (i.e. neighbourhood shops) that can meet the day to day needs of the local community.
• To permit a range of non-residential land uses that are capable of integration with the surrounding locality.	The Planning Proposal will facilitate the provision of up to 1,200sqm of non-residential floor space to accommodate uses that are complementary to the location and surrounding land uses.

Table 11 – Consistency with the Fairfield LEP height objectives

Objective	Proposal
(a) to establish the maximum height for buildings,	The Planning Proposal seeks to amend the maximum height for buildings on the site.
(b) to ensure that the height of buildings complements the streetscape and character of the area in which the buildings are located,	The site is large and has extensive street frontage to Cabramatta Road West and Orange Grove Road. The proposed 14 metre building height at the shared boundaries combined with the suitable building setbacks will provide an appropriate transition from the taller buildings along the street frontages to the lower scale residential development adjacent to the site.
(c) to minimise the visual impact, disruption of views, loss of privacy and loss of solar access to existing development.	The site comprises six amalgamated lots and has a large site area that will enable future development on the site to be appropriately setback from the adjoining properties while accommodating a larger building form. The potential impacts to the neighbouring dwellings is addressed at Section 7.1 .

Summary

The Fairfield LEP is the principal planning instrument for the site. The assessment above demonstrates that the Planning Proposal and the indicative design concept are consistent with the relevant aims and objectives of the Fairfield LEP. In summary, the Planning Proposal will:

- Provide appropriate housing types to meet a range of lifestyles and cultures;
- Provide non-residential uses that will meet the day-to-day needs of residents without generating any adverse impacts to the surrounding centres;
- Provide a built form that is sensitive to the existing character of the surrounding residential properties and will not generate any unacceptable impacts on the amenity of the neighbouring dwellings.

7.0 Environmental Impacts

This chapter of the Planning Proposal draws on the work undertaken by specialist consultants and summarises the existing environment of the site. The purpose is to provide an understanding of how the existing physical conditions and features of the land have shaped and informed the rezoning proposal and how, in turn, the rezoning proposal potentially impacts on these environmental features and conditions.

7.1 Impact on Neighbouring Dwellings

Privacy

The indicative design concept will maintain visual and acoustic privacy to the neighbouring dwellings. The eight storey buildings are located on Cabramatta Road West and Orange Grove Road away from the neighbouring dwellings to prevent opportunities for direct overlooking. The eight storey component of the building immediately north of Links Avenue has been setback a minimum of 24 metres from the common boundary 22 Orange Grove Road and 4 Links Avenue which complies with the requirements of the Apartment Design Guide which achieves good visual and acoustic separation between the existing and proposed dwellings.

The four storey buildings adjacent to the common boundaries with the Smiths Avenue properties are setback a minimum of nine metres from the boundary. This complies with the requirements of the Apartment Design Guide and the Fairfield Development Control Plan (DCP) and will ensure good separation between habitable areas of neighbouring properties to maintain visual and acoustic privacy. The existing trees along the boundary are proposed to be maintained which will further obscure views and prevent opportunities for direct overlooking.

Overshadowing

Shadow studies are included with the Urban Design Report prepared by Aleksandar Design Group (**Appendix B**). The shadow studies demonstrate that the indicative design concept will;

- Maintain existing solar access to all the neighbouring properties in mid-summer;
- Maintain the existing solar access to the Smiths Avenue properties in mid-winter between 9am and 12pm, with a marginal increase in overshadowing between 1pm and 2pm;
- Maintain a minimum of two hours solar access to the Links Avenue properties during mid-winter.

The level of solar access to the neighbouring properties is generally consistent with the requirements of the Fairfield DCP and it is noted that the design is indicative and massing to the south west can be revised to increase solar access to 22 Orange Grove Road and 4 Links Avenue. Therefore, the shadow impacts associated with the proposal can reasonably be considered minor and acceptable.

Traffic and parking

The Planning Proposal will accommodate all resident and visitor parking in basements on site. There will be no impact on the existing availability of on-street parking on Links Avenue or Smiths Avenue.

The Traffic Impact Assessment Report (**Appendix C**) indicates that the Planning Proposal will have an unnoticeable impact (maximum 1.5 second increase) on the existing waiting times at the intersection of Links Avenue. The intersection will maintain the existing level of service.

7.2 Economic Impacts

The indicative design scheme proposes 1,200sqm of non-residential floor space at the ground floor on the Cabramatta Road West corner. Locating dwellings on the ground floor at the corner is considered inappropriate as the amenity is poor adjacent to the intersection. Providing non-residential uses will activate the streetscape and deliver an improved urban outcome at this prominent location and in this regard, locating non-residential uses on the corner is consistent with the land uses on the other corners of the intersection (i.e. service station and Golf Club).

The following non-residential uses (amongst others) are currently permissible with consent on the site under the existing R2 Low Density Residential zone:

- Child care centres;
- Community facilities;
- Educational establishments;
- Health consulting rooms;
- Information and education facilities;
- Places of public worship; and
- Public administration buildings.

In addition to the uses listed above, 'neighbourhood shops' are permitted with consent under the proposed R1 General Residential zone. The Planning Proposal does not propose to amend Clause 5.4(7) of the Fairfield LEP which restricts the maximum retail area of a neighbourhood shop to 80sqm.

The Planning Proposal includes a request to allow 'business premises' and 'office premises' as additional permitted uses.

The Fairfield LEP defines business premises to mean:

a building or place at or on which:

- (a) *an occupation, profession or trade (other than an industry) is carried on for the provision of services directly to members of the public on a regular basis, or*
- (b) *a service is provided directly to members of the public on a regular basis, and includes a funeral home and, without limitation, premises such as banks, post offices, hairdressers, dry cleaners, travel agencies, internet access facilities, betting agencies and the like, but does not include an entertainment facility, home business, home occupation, home occupation (sex services), medical centre, restricted premises, sex services premises or veterinary hospital.*

The Fairfield LEP defines office premises to mean:

'a building or place used for the purpose of administrative, clerical, technical, professional or similar activities that do not include dealing with members of the public at the building or place on a direct and regular basis, except where such dealing is a minor activity (by appointment) that is ancillary to the main purpose for which the building or place is used'

Business and office premises are complementary and compatible with residential uses and the range of other non-residential uses currently permissible on the site. The Planning Proposal seeks to permit these uses to provide additional flexibility to the use of the non-residential space by increasing the range of permissible non-residential uses without increasing the provision of retail space. Locating neighbourhood shops, business and office premises on the site will not undermine the role and function of the closest centres at Cabramatta and Cabramatta West for the reasons discussed below.

7.2.1 Neighbourhood Shops

The Centres Policy places three restrictions on the location of neighbourhood shops to prevent adverse impacts on surrounding shopping centres. Table 12 below demonstrates that any future neighbourhood shop on the site is able to meet the locational criteria.

Table 12 – Centres Policy – neighbourhood shops locational criteria

Criteria	Comment
Maximum of 1 shop per allotment	The Planning Proposal does not seek to amend this restriction.
Not to be located within 1km of another shop or shops on the same side of the road	There are no shops operating on the southern side of Cabramatta Road West within 1km east of the site (i.e. to the Aladore Avenue intersection), and there are no shops operating on the southern side of Cabramatta Road West within 1km west of the site (i.e. to the Lime Street intersection).
Not to co-locate with other retail and quasi retail outlets (such as fast food, video hire, automotive services and the like)	It is acknowledged that the site is immediately south of the Hungry Jacks and BP service station at the intersection. Notwithstanding this, the provision of a neighbourhood shop on the site is not considered to be co-locating with the existing retail uses as the absence of on-street parking in the immediate area and the physical barrier created by Cabramatta Road West prevent any increase in shared trade that would be created by convenient access and co-location.

7.2.2 Business and Office Premises

It is noted that business and office premises are two of a number of non-residential uses that would be permissible with consent on the site. In this regard business and office space may accommodate a proportion, none, or all of the non-residential floor space. This assessment considers the impact of 1,200sqm of business and office space on the role and function of the surrounding centres.

The provision of up to 1,200 sqm of business and office space at the site will not have any impact on the role and function of the surrounding centres for the following reasons:

- Access to the site is constrained. There is no convenient on street parking nearby; visitors have to enter the site via Links Avenue south of Cabramatta Road West. This arrangement is unsuitable for any businesses that rely on foot traffic, colocation and convenience for trade. Therefore, these types of business will not locate at the site and permitting business and office premises on up to 1,200sqm floor space will not undermine the role and function of the surrounding centres or reduce the demand for commercial floor space in the centres.
- Up to 1,200sqm is equivalent to approximately 1.2% - 2% of the retail and commercial floor space in the major centres (Fairfield, Prairiewood, Bonnyrigg and Cabramatta). This represents a negligible proportion of the commercial floor space accommodated in the centres and will have no material impact on

their economic viability or reduce the supply and demand for business and office space in the major centres.

- Office premises offer a different consumer service to retail premises and can be conducted via email, video link and telephone. There is no reliance on passing trade and no commercial requirement to be located within the centre. Therefore offices do not rely on a defined trade area for customers.

7.2.3 Summary

The Planning Proposal will facilitate the provision of 80sqm of retail floor space and a component of non-residential uses that can include business and office premises. The site's accessibility constraints will restrict the range of business and office premises attracted to the site. Uses that typically locate in centres due to locational factors would not be commercially viable at the site. Therefore, the provision of 1,200sqm of non-residential floor space will not undermine the Council's Centres Policy, impact on retail trade areas or reduce demand for commercial floor space in the surrounding centres.

7.3 Traffic Impacts

A Traffic Impact Assessment Report has been prepared by Ason Group (**Appendix B**). The Report assessed the future development of the site for the purpose of 340 dwellings and 1,200sqm of commercial (office or business) premises. The key findings of the Report are summarised below.

7.3.1 Proposed RMS Upgrades

The road network at the Orange Grove Road intersection with Cabramatta Road West is proposed to be upgraded as part of the RMS Pinch Point Program. The following works are anticipated to be completed by early 2017:

- Extension of the third northbound lane on the Cumberland Highway from Cabramatta Road West intersection to the bridge over Cabramatta Creek. This would include widening in the Links Avenue intersection.
- Extension of the Cumberland Highway southbound and northbound right-turn bays.
- Conversion the southbound bus lane on the Cumberland Highway to an additional through lane.
- Extension of the Cabramatta Road West westbound right-turn bay.
- Conversion of the Cabramatta Road West eastbound right-turn bay into a dual right-turn bay.
- Conversion of the Cabramatta Road West eastbound left-slip lane into a through and left-turn lane.
- Improvements to traffic light phasing on the Cumberland Highway at the intersections of Cabramatta Road West and Links Avenue.
- Removal of shrubs in the median and replacement of the grass median with a concrete median.

Recognising that the program for the Planning Proposal estimates that (subject to approvals) the site would be occupied by early to mid-2019 – some 2 -2.5 years following the estimated completion of the upgrades, the analysis in the Ason Report assumes completion of the upgrade works and accordingly the traffic impacts of the Planning Proposal are assessed against this scenario.

7.3.2 Parking and Access

Parking

The indicative concept design for approximately 340 apartments and 1,200sqm of non-residential floor space generates a requirement for 455 parking spaces in accordance with the Fairfield DCP. The site is able to accommodate the required parking across two basement levels.

Access

All general and service vehicle access will be provided via a two-way road connecting to Links Avenue through the vacant lot at No.6 Links Avenue, a location which would comply with the design requirements of AS2890.1 and Austroads GRD4A. The location ensures adequately visibility (and inter-visibility) is provided between vehicles exiting the access road and vehicles on Links Avenue.

The indicative basement access point would be from the internal road via a single access point. The driveway would provide access to all parking and servicing areas, and all vehicles will enter and depart the site in a forward direction.

It is envisaged that waste servicing of the site would be provided at the street level on the internal access road connecting from Links Avenue. A cul-de-sac would be designed to ensure Council's waste collection vehicle could turn around and egress the site in a forward direction.

7.3.3 Trip Generation

The indicative concept design is anticipated to generate 126 additional trips during the weekday peak hours. Ason have used the 2011 Journey to Work data provided by the Bureau of Transport Statistics to determine the trip distribution and impacts of the indicative concept design on the operation of the local road network during the morning and afternoon peak hours. Ason's analysis determined the following:

- The Orange Grove Road intersection with Links Avenue will maintain a 'good' level of performance during peak times; and
- The Orange Grove Road intersection with Cabramatta Road West will experience a minimal increase in delay (0.7 seconds) during peak times.

In summary, Ason concluded that:

"the forecast traffic demand arising from the Proposal would be adequately accommodated on the local road network with no material increases in delays at the key intersections."

Therefore, the Planning Proposal can be supported on traffic and parking grounds.

7.4 Residential Amenity

The indicative design concept has been designed to meet the requirements of the Apartment Design Guide (ADG) and will achieve good levels of residential amenity for the future residents. Notably, the indicative design concept demonstrates that the site can accommodate higher density residential development that will provide:

- A pleasant outlook for residents across the Cabramatta Golf Course to the Blue Mountains;
- Apartments that are approximately 75 sqm which exceeds the ADG minimum requirements for two bedroom apartments;

- A minimum of two hours solar access to 71% of the proposed apartments;
- Natural cross ventilation to 68% of the proposed apartments;
- Separation distances between buildings in accordance with the minimum requirements of the ADG;
- Circulation cores that service no more than eight apartments per floor;
- 4,170sqm of communal open space (27% of the site area) of which 47% receives two hours of direct sunlight in mid-winter;
- 30% of the site is deep soil, which will allow the continued growth of the existing trees, future trees and assist with stormwater management;

It is noted that design prepared by Aleksandar Design Group is indicative for the purposes of understanding the opportunities on the site. Further design detail regarding apartment layouts would be resolved as part of any future development application. Any future detailed design would also ensure that facades and glazing on the apartments facing Cabramatta Road West and Orange Grove Road were designed to mitigate any traffic noise and achieve the relevant internal noise standards.

7.5 Social Impacts

The Residential Development Strategy identifies that the demand for the additional 24,000 dwellings will be driven by increased demand for smaller houses as the demographic changes and the average household size decreases (i.e. one parent families, lone person households and couples without children). The Planning Proposal will facilitate the provision of smaller apartments in a location that is close to public transport, open space, shops and schools. The Planning Proposal will have a positive social impact on the Fairfield LGA.

7.6 Ecological Impacts and Tree Retention

Ecological Impacts

An Ecological Issues and Assessment Report has been prepared by Gunninah (**Appendix D**) to support the Planning Proposal. The Report considers the existing flora, fauna and vegetation on the site in the context of the Planning Proposal and the indicative design concept. In summary the assessment concluded that,

- The site is located within a significant area of existing urban development and has been substantially cleared and developed in the past. The existing vegetation on the site is described as 'synthetic' and is dominated by introduced species and horticultural plantings.
- The development area is not considered critical or important for the survival of a viable local population of any threatened biota or threatened or migratory species.
- Therefore, the removal or modification of vegetation and trees from the site is not of particular concern. Where possible, trees around the periphery of the site should be retained for aesthetic and amenity reasons – they do not have any notable ecological value or function.

The Planning Proposal to facilitate higher density development on the site is supportable on ecological grounds.

Tree Retention

A Preliminary Arboricultural Assessment has been prepared by Urban Forestry Australia (**Appendix C**). The assessment identified 75 trees on-site. None of the trees are listed as threatened under the *Threatened Species Conservation Act*

1995 or the *Environmental Protection and Biodiversity Conservation Act* 1999. Of the 75 trees, 32 (i.e. 42%) are located around the perimeter of the site and are able to be successfully retained subject to detailed design at any future development application stage.

7.7 Flooding

A Flood Analysis Report has been prepared by KD Stormwater (**Appendix G**). The Reports states that the site is not affected by mainstream flooding or overland flow flooding. Therefore, the flood risk management requirements as per Schedule 6, Chapter 11 of the Fairfield City Wide DCP are not applicable to the development of the site. If the Planning Proposal proceeds to a positive 'Gateway' determination, further studies can be undertaken to determine the impact of the indicative design concept on stormwater runoff to the surrounding environment.

8.0 NSW Department of Planning and Infrastructure Guidelines

A guide to preparing planning proposals published by the former Department of Planning and Infrastructure (October 2012) outlines the components ('Parts') Planning Proposals must include to accord with Section 55 (2) of the EP&A Act. These are addressed below.

8.1 Part 1 – The Intended Outcome

The intended outcome of this Planning Proposal is to facilitate a mixed use redevelopment of the site as detailed in **Section 3**. The intended outcome will achieve the following:

- **provide more homes in the Fairfield LGA in a suitable location:** the Planning Proposal will provide approximately 340 new homes in a location close to schools, parks and shops. The site is adjacent to frequent bus connections to Liverpool and Cabramatta during the weekday peak hours;
- **provide greater housing choice for the Fairfield community:** the Planning Proposal will deliver new apartments that will meet the changing needs of the local population;
- **increase housing affordability:** the Planning Proposal will deliver apartments that will be more affordable than the existing or new detached houses in the area; and
- **increase employment opportunities:** the Planning Proposal will deliver the potential for up to 1,200sqm of business and office floor space without undermining the Council's centres hierarchy or the retail viability of the Cabramatta West and Cabramatta town centres.

8.2 Part 2 - Explanation of Provisions

The intended outcome can be achieved by amending the Fairfield LEP as follows:

- Amend the Land Zoning Map Sheet LZN_017 by rezoning the site to R1 General Residential;
- Amend the Height of Buildings Map Sheet HOB_17 by applying a part height limit of 14 metres and part height limit of 27 metres to the site; and
- Amend the Floor Space Ratio Map Sheet FSR_17 by applying a floor space ratio of 2:1 to the site.
- Amend Schedule 1 item 3 to delete 'multi dwelling housing' as an additional permitted use on the site;
- Amend Schedule 1 item 3 to include 'business premises' and 'office premises' as an additional permitted use on the site;

The R1 General Residential land use table and the proposed amendments to Schedule 1 and the Fairfield LEP maps are submitted as **Appendix F**.

8.3 Part 3 – Justification

8.3.1 The need for the Planning Proposal

Q1 - Is the planning proposal a result of any strategic study or report?

The Planning Proposal is not the result of any specific strategic study or report. The NSW State Government have set Council a target to provide 24,000 new

homes in the LGA by 2031. The Planning Proposal will deliver approximately 340 new dwellings to meet an identified 1,800 dwelling shortfall without undermining the Council's Residential Strategy (refer to **Appendix F**).

Q2 - Is the Planning Proposal the best means of achieving the intended outcome?

The Planning Proposal is the best means of achieving the intended outcome - the current land use zoning, height and FSR controls prohibit the proposed redevelopment of the site.

8.3.2 Relationship to the strategic planning framework

Q3 - Is the planning proposal consistent with the objectives and actions of the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?

Yes – refer to Section 5.1.

Q4 - Is the planning proposal consistent with a council's local strategy or other local strategic plan?

The Planning Proposal is consistent with the Fairfield City Plan 2012 – 2022 (refer to Section 5.2) and will not undermine the objectives of the Fairfield Residential Strategy (refer to Section 5.3).

Q5 - Is the planning proposal consistent with applicable State Environmental Planning Policies?

Yes – refer to Section 6.2.

Q6 - Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)?

Yes – refer to Section 6.1.

8.3.3 Environmental, social and economic impact

Q7 – Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The Planning Proposal will not adversely affect critical habitat or threatened species, populations or ecological communities or their habitats (refer to Section 7.6).

Q8 – Are there any other likely environmental effects as a result of the Planning Proposal and how are they proposed to be managed?

An assessment of the environmental impacts of the Planning Proposal is provided in Section 7.0. No unacceptable impacts will result from the achievement of the intended outcome.

Q9 – Has the Planning Proposal adequately addressed any social and economic effects?

An assessment of the social and economic effects of the Planning Proposal is provided in Sections 7.4 and 7.2. The Planning Proposal will have a positive social impact and will provide additional employment generating uses without undermining the Council's Centres Policy.

8.3.4 State and Commonwealth Interests

There are no significant Commonwealth or State interests in the Planning Proposal other than the general objective to achieve an appropriate planning and development outcome on the site that has considered the State's regional and subregional strategic planning framework as described in this report.

Q10 – Is there adequate public infrastructure for the Planning Proposal?

The site is immediately adjacent to bus routes that provide direct access to Liverpool and Cabramatta. These bus routes run frequently during peak times and have travel times of no more than approximately 12 minutes.

The RMS upgrades to the immediate road network are proposed to be completed by 2017 and will accommodate the proposed increase in vehicle movements generated by the Planning Proposal without creating any significant impact on the operation of the surrounding road network.

Additionally, the site is well serviced by social infrastructure in the form of schools, recreational and sporting facilities.

Q11 – What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway determination?

No formal consultation, at the time of writing this Planning Proposal, has been undertaken with Commonwealth or State authorities. Where necessary, consultation with relevant authorities will be undertaken in accordance with the initial Gateway determination.

8.4 Part 4 – Mapping

Maps of the proposed amendments to the Fairfield LEP zoning and height controls applying to the site are provided in **Appendix G**.

8.5 Part 5 - Community Consultation

It is proposed that in accordance with 'A guide to preparing local environmental plans' that the Planning Proposal undergo a 28 day public exhibition period. It is noted that confirmation of the public exhibition period and requirements for the Planning Proposal will be given by the Minister as part of the LEP Gateway determination. Any future DA for the site would also be exhibited in accordance with the Council's notification requirements at which time the public and relevant authorities can make further comments on the redevelopment of the site.

9.0 Conclusion

The Planning Proposal seeks to:

- Increase the maximum floor space ratio standard from 0.45:1 to 2:1;
- Increase the maximum height standard from 9 metres to part 14 metres and part 27 metres;
- Rezone the site to R1 General Residential; and
- Include 'office premises' and 'business premises' as additional permitted uses on the site.

The reasons for the Planning Proposal are:

- The State Government has set the Fairfield Local Government Area a housing target of providing an additional 24,000 dwellings from 2007 – 2031. Council have identified that 52% of the housing target (12,589 dwellings) can be accommodated in the Fairfield LEP in the eastern LGA town centres, on narrow lot precincts and by adopting the draft large lot policy. This leaves a shortfall of 11,411 dwellings in the LGA. The Fairfield LEP does not make provision for the shortfall. The Planning Proposal will contribute approximately 340 additional dwellings to the LGA housing target.
- Council have identified Fairfield, Cabramatta, Canley Vale, Canley Heights and Villawood as the key locations for increased density in the LGA. However, the centres generally contain a very limited number of suitable development sites due to multiple sites under strata ownership, multiple sites requiring amalgamation, and insufficient road infrastructure. Therefore, these centres are unable to be reasonably developed to achieve the required quantum of high and medium density residential dwellings.
- The subject site of this Planning Proposal is a significant site of approximately 15,349 sqm under single ownership. It is located on a prominent gateway to the LGA and on the immediate fringe of the Liverpool Regional City Centre. It is:
 - adjacent to bus stops that provide a short 8 minute trip to Cabramatta railway station and a 12 minute journey to Liverpool CBD;
 - a five minute walk to Cabramatta West Public School;
 - a five minute walk to Panorama Reserve and Cabramatta Creek;
 - a 10 minute walk to Cabramatta West village centre and a 10 minute walk to the Orange Grove MegaCenta; and
 - a 13 minute walk to Cabramatta High School.
- The proposed building heights will ensure an appropriate transition in scale to the existing lower density residential dwellings to the east and south. The Planning Proposal will not create any unacceptable or unreasonable overshadowing impacts to the surrounding dwellings and the existing perimeter trees can be maintained to preserve the existing edge character and privacy to neighbouring dwellings.
- The proposed residential flat buildings can meet the residential amenity requirements of the Apartment Design Guide.
- The proposal to include 'business premises' and 'office premises' as additional permitted uses will not have any impact on the economic viability, hierarchy, role or function of the existing centres in the LGA.
- The Planning Proposal will not have any adverse impacts on the future operation of the surrounding road network.

- The Planning Proposal will not have any adverse impact on any ecological systems.

The site is suitable location for the proposed mixed use residential flat development. We therefore request that Council progress the proposal to Gateway Determination under Section 56 of the *Environmental Planning and Assessment Act 1979*.



TREE MANAGEMENT CONSULTING ARBORICULTURISTS

**PRELIMINARY ARBORICULTURAL
ASSESSMENT
(Planning Proposal)**

for

TCON Constructions Pty Ltd

SITE ADDRESS

400-404 CABRAMATTA ROAD WEST
CABRAMATTA

AUGUST 2015

Prepared by Catriona Mackenzie

Accredited member of

INSTITUTE OF AUSTRALIAN



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EXECUTIVE SUMMARY

This Preliminary Arboricultural Assessment is an inventory of the existing tree assets on the site. The primary aim of this assessment was to present an analysis of the projected tree retention and removal relating to the planning proposal put forward for this site.

A total of seventy-five (75) trees were assessed and accorded retention values based on their current health and condition (i.e. their *Useful Life Expectancy*) and their significance in the landscape (Appendix E).

Twenty-eight (28) trees were identified as being of high retention value.

Twenty-five (25) trees are attributed with a medium retention value.

Twenty (20) trees were identified as being of low retention value.

Two (2) trees were identified as having no retention value (due to irreversible decline), and would inevitably be removed regardless of any future development of the site.

A tree location plan and schedule of all assessed trees, which included their landscape significance and tree retention values, was provided to the project team members to assist with the planning proposal. During discussions, tree retention was considered in the context of the permissible development of the site and the need to try and retain perimeter trees to assist in retaining some of the existing landscape trees facing the public domain.

A total of thirty-nine (39) trees are likely to be removed to facilitate the proposal.

It is expected that a replacement landscape will eventually provide a complimentary tree planting commensurate with and sympathetic to, the indigenous species assemblage current on the site.

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1 INTRODUCTION

- 1.1 This Preliminary Arboricultural Assessment (PAA) was commissioned by Orhan Kaba of Designiche, on behalf of the owners of the subject site. "The site" is identified as Lots 6 and 7 in D.P. 1709126, Lot 3 in D.P. 30217, Lots 1 and 2 in D.P. 503339 and Lot 1 in D.P. 29449, collectively known as 400–404 Cabramatta Road West, Cabramatta, New South Wales.
- 1.2 This report is to accompany a planning proposal to Fairfield City Council for a multi-unit residential/mixed-use development of the site.
- 1.3 The purpose of this PAA is to assess the *vigour* and *condition* of the surveyed trees, in, or in close proximity to the projected building envelope, and identify the probable removal and retention of trees associated with the projected building envelope.
- 1.4 This PAA gives recommendations for tree retention or removal, and provides guidelines for planning and designing built elements in proximity to existing trees to be retained.
- 1.5 Care has been taken to obtain all information from reliable sources. All data has been verified as far as possible; however, I can neither guarantee nor be responsible for the accuracy of information provided by others.
- 1.6 This PAA is not intended as an assessment of any impacts on trees by any proposed future development of the site, other than the current planning proposal.
- 1.7 This report is not intended to be a comprehensive tree *hazard* or *risk* assessment, nor is it intended as a development or construction impact assessment or tree protection specification; however the report may make recommendations, where appropriate, for further assessment, treatment or testing of trees where potential structural problems have been identified, or where below ground investigation may be required.

2 METHODOLOGY

- 2.1** In preparation for this PAA, ground level, *visual tree assessments*¹ of seventy-five (75) trees were undertaken by Catriona Mackenzie (AQF5 arboriculturist) and Mark Jamieson (AQF4 horticulturist) on 11th August, 2015. Inspection details of these trees are provided in Appendix E – *Schedule of Assessed Trees*.
- 2.2** Tree heights were measured where possible with a Nikon Forestry Pro laser rangefinder, and canopy spreads were visually estimated or measured with a Leica Distometer laser measurer. Unless otherwise noted in Appendix E, all trunk diameters were measured at 1.4 metres above ground level (DBH) using a Yamiyo diameter tape.
- 2.3** Field observations were written down at the time of site visit and tree inspections, and photographs of the site and trees taken using a Canon EOS1000D digital SLR and/or iphone 5 cameras.
- 2.4** No *aerial inspections*, *root mapping* or woody tissue testing were undertaken as part of this tree assessment. Information contained in this tree report covers only the trees that were examined and reflects the condition of those trees at the time of inspection.
- 2.5** Plans and documents referenced for the preparation of this report include:
- Detail Survey, Ref. No. 2437CD, dated 24/03/2015, prepared by Chami & Associates.
 - Preliminary Urban Design Report 400-404 Cabramatta Rd West, Cabramatta, prepared by Aleksandar Design Group
 - Plans MP01-04 (Concept Issue), June 2015, prepared by Aleksandar Design Group,
 - Fairfield Local Environment Plan 2013 (LEP) Schedules and Maps, Clauses 5.9, 5.9AA.
 - Fairfield Citywide Development Control Plan (DCP), Chapter 3 *Environmental Management and Constraints*.
 - AS4970-2009 *Protection of trees on development sites*, Standards Australia.
- 2.6** The subject trees are shown on a marked up copy of the site survey. This plan is attached as Appendix F—Tree Location Plan.

¹ Visual Tree Assessment (VTA) is a procedure of defect analysis developed by Mattheck and Breloer (1994) that uses the growth response and form of trees to detect defects.

3 OBSERVATIONS AND DISCUSSION

3.1 Assessed Trees—Species Recorded

3.1.1 Seventy-five (75) trees were assessed and included in this report. Details of these are included in the Schedule of Assessed Trees – Appendix E.

3.1.2 The main, indigenous canopy tree species found on the site are consistent with Cumberland Plain Woodlands. Of the 75 assessed trees, the following thirty-four (34) are considered indigenous (or are known to be associated with CPW vegetation communities):

- Sixteen (16) *Eucalyptus tereticornis* (Forest Red Gum),
- Nine (9) *Corymbia maculata* (Spotted Gum),
- Three (3) *Eucalyptus sideroxylon* (Mugga Ironbark),
- One (1) *Eucalyptus moluccana* (Grey Box)
- One (1) *Eucalyptus amplifolia* (Cabbage Gum),
- One (1) *Corymbia gummifera* (Red Bloodwood)
- One (1) *Acacia decurrens* (Black Wattle)
- One (1) *Melaleuca linariifolia* (Snow-in–summer),
- One (1) *Angophora costata* (Smooth-barked Apple),

3.1.3 The remaining thirty-six (36) assessed trees are considered to be exotic or introduced native Australian species:

- Ten (10) *Brachychiton acerifolius* (Illawarra Flame Tree),
- Three (3) *Grevillea robusta* (Silky Oak),
- Five (5) *Melaleuca quinquenervia* (Broad-leaved Paperbark)
- Three (3) *Corymbia citriodora* (Lemon-scented Gum)
- Two (2) *Eucalyptus microcorys* (Tallowwood),
- Two (2) *Allocasuarina littoralis* (Black She-oak)
- Two (2) *Quercus robur* (English Oak),
- Two (2) *Jacaranda mimosifolia* (Jacaranda),
- One (1) *Castanospermum australe* (Blackbean),
- One (1) *Eucalyptus elata* (River Peppermint),
- One (1) *Hymenosporum flavum* (Native Frangipani),
- One (1) *Lophostemon confertus* (Brush Box),
- One (1) *Lagerstroemia indica* (Crape Myrtle),
- One (1) *Nyssa sylvatica* (Tupelo)
- One (1) *Populus deltoides* (Cottonwood),

3.1.4 Five (5) trees found on the site are considered to be undesirable due to their weed status or detrimental species traits (in this site context), such as proliferate propagules or ability to out-compete nearby vegetation:

- Two (2) *Ligustrum lucidum* (Large-leaved Privet),
- One (1) *Ficus decora* (Rubber Plant),
- One (1) *Cinnamomum camphora* (Camphor Laurel),
- One (1) *Lagunaria patersonia* (Norfolk Island Hibiscus)

3.2 Assessed Trees—Retention Values

3.2.1 Based on the Useful Life Expectancy and Landscape significance of the trees, the following Retention Values are accorded.

- High Retention Value trees x 28.
 - 1, 2, 3, 4, 6, 7, 66, 67, 71—Spotted Gums.
 - 9, 21, 28, 33, 36, 40, 49—Forest Red Gums.
 - 52, 62, 65—Lemon-scented Gums.
 - 61, 63, 64—Mugga Ironbarks.
 - 69, 75—Tallowwoods.
 - 26, 35, 51, 54—Blackbean, Illawarra Flame Tree, Grey Box, Silky Oak.
- Medium Retention Value trees x 25
 - 13, 23, 24, 25, 30, 38, 45, 46, 70—Forest Red Gums.
 - 29, 34, 41, 48, 53, 58—Flame Trees.
 - 19, 50—Jacarandas.
 - 27, 59—Black She-oaks.
 - 42, 43—English Oaks.
 - 14, 31, 39, 56—Red Bloodwood, Native Frangipani, Cabbage Gum, Cottonwood.
- Low Retention Value trees x 20
 - 11, 12, 72—Broad-leaved Paperbarks.
 - 22, 32, 37—Flame Trees.
 - 15, 17—Large-leaved Privets.
 - 16, 44—Silky Oaks.
 - 5, 8, 18, 20, 47, 55, 57, 68, 73, 74—River Peppermint, Norfolk Island Hibiscus, Rubber Tree, Camphor Laurel, Black Wattle, Brush Box, Crape Myrtle, Tupelos, Snow-in-summer, Smooth-barked Apple.
- Nil (remove) Retention Value trees x 2
 - 10, 60—Broad-leaved Paperbarks.

3.2.2 The site is not zoned E2 Environmental Conservation, or E3 Environmental Management.

3.2.3 No trees are identified as, or contributing to, listed Heritage Items, or occurring within Riparian Zones or Biodiversity Areas (LEP Maps—017 area).

- 3.2.4 No species of assessed tree is listed as threatened under the Threatened Species Conservation Act 1995 (TSC Act) or Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act).

3.3 Assessed Trees—Consideration of Conservation Issues

- 3.3.1 It is acknowledged that the site contains tree species associated with Cumberland Plain Woodland, a critically endangered ecological community under the TSC and EPBC Acts. Under Section 3.2 of Chapter 3 of the DCP, it is generally only those sites zoned E2, E3 or affected by Riparian Lands and Waterways or Biodiversity, that might require preparation of a 7 Part Test². It would appear therefore, this site would be exempt from that 7 part test requirements. Despite the DCP allowing for arboriculturists to prepare a 7 part test, it is my opinion this is not appropriate unless the assessing arboriculturist has environmental consulting qualifications.
- 3.3.2 It is my advice that if it is deemed necessary, any potential impacts on threatened species, endangered ecological communities or populations on this site, must be assessed by an appropriately qualified consulting ecologist.

3.4 Projected Tree Removal

- 3.4.1 Of the 75 assessed trees, it is expected that thirty-nine (39) would be removed to accommodate the projected development footprint. Refer to Appendix E for trees likely to be removed under the planning proposal.
- 3.4.2 Trees removed would include the majority of trees concentrated in the site interior, as these pose considerable constraints on future site development. As the trees are relatively mature, they have correspondingly great *Tree Protection Zone* (TPZ) offsets. The retention of trees near site perimeters presents the greatest opportunities for successful retention.

² A '7 Part Test' is a statutory mechanism which allows Council to assess whether a proposed development or activity is likely to have a 'significant effect' on threatened species, populations or ecological communities, or their habitats. It describes and assesses the ecological impact of the proposal on a threatened species or its habitat.

3.5 Potential Impacts on Trees Proposed for Retention

- 3.5.1 Under the Australian Standard 4970-2009 *Protection of trees on development sites* (AS4970), encroachments less than 10% of the *Tree Protection Zone* (TPZ) are considered to be minor. There are no specifications provided in AS4970 for potential impacts of 10% or greater. The 10% figure is taken to be a threshold and trigger where arboricultural investigations into TPZ encroachments beyond this figure need to be considered.
- 3.5.2 Provision for the TPZ offsets of trees to be retained will be required at detailed design stage. Tree impact encroachments will need to be quantified and, if necessary, changes to footprints for paths, ancillary structures, services and building offsets to trees may be required. Refer to Appendix E for those TPZ offsets.
- 3.5.3 It is possible a number of trees mainly concentrated to the site perimeters could be successfully retained subject to advanced impact assessment and possible 'massaging' of the design to consider high retention values trees in locations where retention would not relate to major 'sterilisation' of the site for future development.
- 3.5.4 Trees potentially retained are as follows (not including weeds or undesirable species):
- 16, 19, 22, 23, 24, 25, 26, 38, 39, 40, 41, 42, 43, 48, 49, 50, 51, 52, 53, 54, 61, 62, 64, 65, 68, 69, 70, 71, 72, 73, 74 and 75 (Total = 32 trees)

4 PRELIMINARY GUIDELINES FOR PLANNING AND DESIGN

4.1 Minimising Impacts on Trees to be Retained

4.1.1 Generally, potential impacts from site development can be summarised as follows;

- Incursions (i.e. excavation or filling over existing ground, grading and removing of topsoils) into the root zones of trees resulting in loss of fine feeder roots, or severing of structural woody roots.
- Structural branch loss through close proximity of structures to trees.
- Significant changes to surrounding soil levels which can affect soil hydrology and tree root health.

4.1.2 Where tree retention is desired, the *Tree Protection Zone* (TPZ) of an individual tree is estimated at 12 times the stem diameter, or the outer extent of the *canopy dripline* (whichever is the greater). It is prudent to add, where possible, an additional 1–2 m to this TPZ setback to ensure construction scaffolding can be accommodated without excessive removal of foliage and branches from the tree. Where trees have high crowns this additional setback may be reduced following further arboricultural assessment of impacts on individual trees near proposed development.

4.1.3 To facilitate adequate protection of tree root zones and tree crowns, separate appraisal of each development area (e.g. proposed construction and future site access points and construction areas in proximity to trees to be retained) should be carried out. A suitably qualified arboriculturist (i.e. a minimum Australian Qualification Framework Level 5 [Diploma] in arboriculture) must be advised prior to any development proposed to occur within the TPZ offset of those trees, to enable assessment and protection recommendations. Refer to Appendix E for the TPZ offset for each tree.

4.1.4 Without any specific root zone investigation the entire TPZ is to be kept entirely free of any development works, e.g. changes to existing ground levels, use of machinery, stockpiling, etc.

4.1.5 On no account are any works approved within the *Structural Root Zone* (SRZ) of a tree without prior root investigation and the approval of the site arboriculturist or Council.

4.1.6 Wherever possible all major utilities and service corridors are to be located away from trees, and preferably outside the TPZ of trees to be retained.

5 CONCLUSIONS

- Seventy-five (75) trees in the site were assessed to provide base arboricultural data to assist in the planning and design footprint.
- The site is not zoned E2 or E3, and is not mapped as a Riparian Land and Waterway or Biodiversity area.
- No heritage items were identified on or directly adjoining the site.
- No tree species has identified conservation status under the TSC and EPBC Acts.
- Thirty-nine (39) trees would likely be removed based on the current building footprint.
- Thirty-two trees (32) could be retained if considered during the detailed design process.
- Four (4) trees are weeds or undesirable species and would be removed.
- Liaising with an arboriculturist during development design and review will improve the retention success of trees to be retained.

Report prepared by Catriona Mackenzie

August, 2015



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APPENDIX A

TERMS AND DEFINITIONS



TERMS AND DEFINITIONS

The following relates to terms or abbreviations that may have been used in this report and provides the reader with a detailed explanation of those terms.

Aerial inspection Where the subject tree is climbed by a professional tree worker or arborist specifically to inspect and assess the upper stem and crown of the tree for signs or symptoms of defects, disease, etc.

Aerial roots Above ground, adventitious roots generally formed on stems and/or branches. Depending on plant species these roots perform a specific function, e.g. support, access to oxygen, vegetative propagation, as a parasite, etc.

Age classes

Y	<i>Young</i> refers to a well-established but juvenile tree
SM	<i>Semi-mature</i> refers to a tree at growth stages between immaturity and full size
EM	<i>Early-mature</i> refers to a tree that is more or less full sized and vigourously growing.
M	<i>Mature</i> refers to a full sized tree with some capacity for further growth
LM	<i>Late Mature</i> refers to a full sized tree with little capacity for growth, not yet about to enter decline
OM	<i>Over-mature</i> refers to a tree about to enter decline or already declining.

Bracket fungus The rigid fruiting body of some fungus species, especially those associated with live trees or the decay of wood. The structure is often bracket shaped, usually protruding from the roots, trunk or branches of the host tree when the fungus matures. The fruiting body may be ephemeral or persist for many years, and may be solitary or gregarious.

Branch failure The structural collapse of a branch that is physically weakened by wounding or from the actions of pests diseases, or overcome by loading forces in excess of its load-bearing capacity.

Co-dominant refers to stems or branches equal in size and relative importance.

Compression fork A fork formed where two stems or branches with an acute branch crotch grow pressing against each other with included bark. Eventually the bark becomes enclosed bark where the stems flatten at their interface under increasing compression from each successive growth increment, forming a weak graft as a welded fork, which remains susceptible to tensile stress.

Condition refers to the tree's form and growth habit, as modified by its environment (aspect, suppression by other trees, soils) and the state of the scaffold (i.e. trunk and major branches), including structural defects such as cavities, crooked trunks or weak trunk/branch junctions. These are not directly connected with health and it is possible for a tree to be healthy but in poor condition.

Crown All the parts of a tree arising above the trunk where it terminates by its division forming branches, e.g. the branches, leaves, flowers and fruit: or the total amount of foliage supported by branches.

Deadwood refers to any whole limb that no longer contains living tissues (e.g. live leaves and/or bark). Some dead wood is common in a number of tree species.

Diameter at Breast Height (DBH) refers to the tree trunk diameter at breast height, i.e. at 1.4m above ground level.

Dieback Death of growth tips/shoots and partial limbs, generally from tip to base. Dieback is often an indicator of stress and tree health.

Epicormic Shoots which arise from adventitious or latent buds. These shoots often have a weak point of attachment. They are often a response to stress in the tree. Epicormic growth/shoots are generally a survival mechanism, often indicating the presence of a current, or past stress event such as fire, excessive pruning, drought, etc.

Inclusion - the pattern of development at branch or stem junctions where bark is turned inward rather than pushed out. This fault is located at the point where the stems/branches meet. This is normally a genetic fault and potentially a weak point of attachment as the bark obstructs healthy tissue from joining together to strengthen the joint.

Lopping Cutting between branch unions (not to branch collars), or at internodes on a tree, with the final cut leaving a stub. Lopping may result in dieback of the stub and can create infection courts for disease or pest attack.

Necrosis Dead areas of tissue that may be localised, or spread over large areas of leaves, branches, bark or roots.

Risk is the combination of the likelihood of an event and the severity of the potential consequences.

Root Mapping The exploratory process of recording the location of roots usually in reference to a datum point where depth, root diameter, root orientation and distance from trunk to existing or proposed structures are measured. It may be slightly invasive (disturbs or displaces soil to locate but not damage roots, e.g. hand excavation, or use of air or water knife), or non-invasive (does not disturb soil, e.g. ground penetrating radar).

Scaffold branch/root A primary structural branch of the crown or primary structural root of the tree.

Structural Root Zone (SRZ) Refers to the radial distance in metres, measured from the centre of the tree stem, which defines the critical area required to maintain stability of the tree. Only thorough investigation into the location of structural roots within this area can identify whether any minor incursions into this protection zone are feasible. Note: The SRZ is calculated on the diameter measured immediately above the root/stem buttress (DAB). Where this measurement is not taken in the field, it is calculated by adding 12.5% to the stem diameter at breast height (DBH). (Based on averages calculated from DBH and DAB measurements taken from 20 mature Brush Box and Camphor Laurel). Note: The SRZ may not be symmetrical in shape/area where there is existing obstruction or confinement to lateral root growth, e.g. structures such as walls, rocky outcrops, etc).

Sucker Epicormic shoots growing from latent buds in older wood. Such shoots are vigorous and usually upright, arising from below the graft union on the understock, or at or below ground from the trunk or roots.

Suppressed In crown class, trees which have been overtopped and whose crown development is restricted from above.

Sweep A curve in the trunk, generally near the ground. This usually occurs when a tree is partially wind thrown when young, but then stabilises itself and straightens due to reaction wood. Stem sweep can also be a naturally developed feature of some tree species. e.g. *Araucaria columnaris* (Cook Pine), that has no relationship to a defect or partial windthrow.

Tree Protection Zone (TPZ). Refers to the radial distance in metres, measured from the centre of the tree stem which defines the *tree protection zone* for a tree to be retained. This is generally the minimum distance from the center of the tree trunk where protective fencing or barriers are to be installed to create an exclusion zone. The **TPZ** surrounding a tree aids the tree's ability to cope with disturbances associated with construction works. Tree protection involves minimising root damage that is caused by activities such as construction. Tree protection also reduces the chance of a tree's decline in health or death and the possibly damage to structural stability of the tree from root damage.

To limit damage to the tree, protection within a specified distance of the tree's trunk must be maintained throughout the proposed development works. No excavation, stockpiling of building materials or the use of machinery is permitted within the TPZ. Note: In many circumstances the tree root zone does not occupy a symmetrically radial area from the trunk, but may be an irregular area due to the presence of obstructions to root spread or inhospitable growing conditions.

USEFUL LIFE EXPECTANCY (ULE) In a planning context, the time a tree can expect to be usefully retained is the most important long-term consideration. ULE i.e. a system designed to classify trees into a number of categories so that information regarding tree retention can be concisely communicated in a non-technical manner. ULE categories are easily verifiable by experienced personnel without great disparity. A tree's ULE category is the life expectancy of the tree modified first by its age, health, condition, safety and location (to give the life expectancy); then by economics (i.e. cost of maintenance - retaining trees at an excessive management cost is not normally acceptable); and finally, effects on better trees, and sustained amenity (i.e. establishing a range of age classes in a local population). ULE assessments are not static but may be modified as dictated by changes in tree health and environment. Trees with a short ULE may at present be making a contribution to the landscape, but their value to the local amenity will decrease rapidly towards the end of this period, prior to them being removed for safety or aesthetic reasons. For details of ULE categories see Appendix B, modified from Barrell 2001.

Vigour (syn. health) refers to the tree's health as exhibited by the crown density, leaf colour, presence of epicormic shoots, ability to withstand disease invasion, and the degree of dieback.

APPENDIX B

ULE CATEGORIES



Useful Life Expectancy (ULE) CATEGORIES (after Barrell 1996, updated 01/04/01)

The five categories and their sub-groups are as follows:

1. Long ULE - tree appeared retainable at the time of assessment for over 40 years with an acceptable degree of risk, assuming reasonable maintenance:

- A. structurally sound trees located in positions that can accommodate future growth
- B. trees which could be made suitable for long term retention by remedial care
- C. trees of special significance which would warrant extraordinary efforts to secure their long term retention

2. Medium ULE - tree appeared to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk, assuming reasonable maintenance:

- A. trees which may only live from 15 to 40 years
- B. trees which may live for more than 40 years but would be removed for safety or nuisance reasons
- C. trees which 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
- D. trees which could be made suitable for retention in the medium term by remedial care

3. Short ULE - tree appeared to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk, assuming reasonable maintenance:

- A. trees which may only live from 5 to 15 years
- B. trees which may live for more than 15 years but would be removed for safety or nuisance reasons
- C. trees which may live for more than 15 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting
- D. trees which require substantial remediation and are only suitable for retention in the short term

4. Removal - trees which should be removed within the next 5 years

- A. dead, dying, suppressed or declining trees
- B. dangerous trees through instability or recent loss of adjacent trees
- C. dangerous trees because of structural defects including cavities, decay, included bark, wounds or poor form.
- D. damaged trees that are clearly not safe to retain.
- E. trees which may live for more than 5 years but would be removed to prevent interference with more suitable individuals or to provide space for new planting.
- F. trees which are damaging or may cause damage to existing structures within the next 5 years.
- G. trees that will become dangerous after removal of other trees for the reasons given in (a) to (f).
- H. trees in categories (a) to (g) that have a high wildlife habitat value and, with appropriate treatment, could be retained subject to regular review.

5. Small, young or regularly pruned - Trees that can be reliably moved or replaced.

- A. small trees less than 5m in height.
- B. young trees less than 15 years old but over 5m in height.
- C. formal hedges and trees intended for regular pruning to artificially control growth.

APPENDIX C

SIGNIFICANCE OF A TREE ASSESSMENT RATING



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

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

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

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

Tree Significance - Assessment Criteria



1. High Significance in landscape

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

2. Medium Significance in landscape

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

3. Low Significance in landscape

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

Environmental Pest / Noxious Weed Species

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



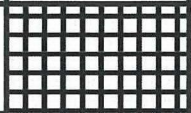





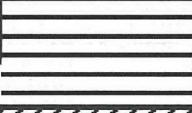






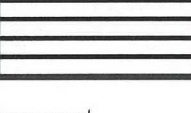









Hazardous/irreversible Decline

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

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

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

Table 1 - Tree Retention Value - Priority Matrix.

		Significance				
		1. High	2. Medium	3. Low		
		Significance in Landscape	Significance in Landscape	Significance in Landscape	Environmental Pest / Noxious Weed Species	Hazardous / Irreversible Decline
Estimated Life Expectancy	1. Long >40 years					
	2. Medium 15-40 Years					
	3. Short <1-15 Years					
	Dead					
<div>Legend for Matrix Assessment</div> <div><div>INSTITUTE OF AUSTRALIAN IACA CONSULTING ARBORICULTURISTS®</div></div>						
	Priority for Retention (High) - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 <i>Protection of trees on development sites</i> . Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.					
	Consider for Retention (Medium) - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.					
	Consider for Removal (Low) - These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.					
	Priority for Removal - These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.					

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

APPENDIX D

SITE PHOTOGRAPHS—PERIMETER TREES



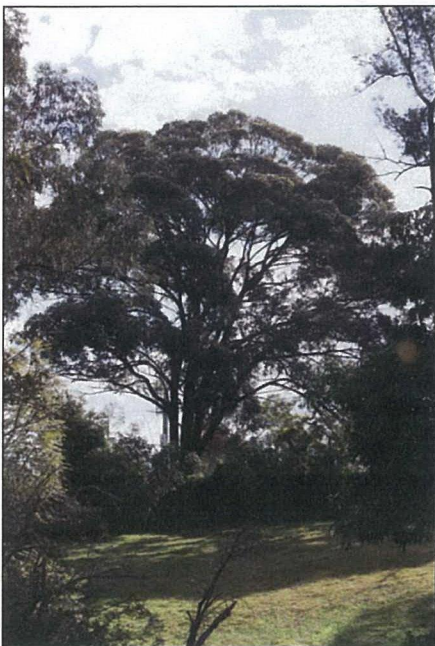


Plate 1
Looking west from within the site at high Retention Value (RV) perimeter tree 69 (Tallowwood).
C. Mackenzie



Plate 2
Looking southeast from within the site at medium and high RV trees 21-28 (Forest Red Gums). Low RV Camphor Laurel (Tree 20) is at left, foreground.
C. Mackenzie

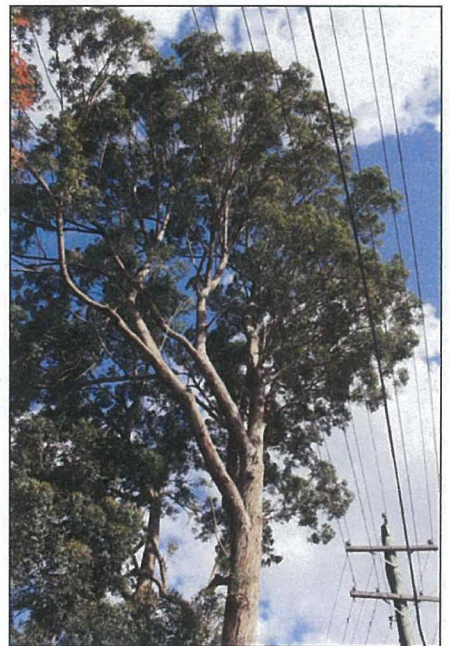


Plate 3
Looking south from Cumberland Road reserve near intersection with Cabramatta Rd. West, at high RV perimeter Tree 75 (Tallowwood).
C. Mackenzie



Plate 4
Looking south along Cumberland Road at high RV perimeter tree 71 (Spotted Gum).
C. Mackenzie

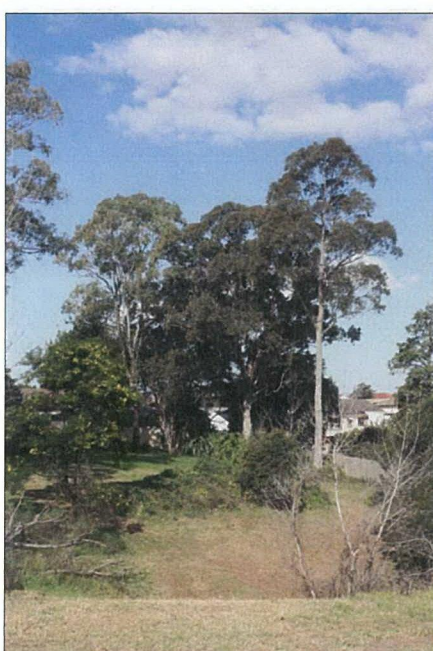


Plate 5
Looking south/southeast from within the site at high RV perimeter trees-left to right, 49 (Forest Red Gum), 51 (Grey Box) and 52 (Lemon-scented Gum).
C. Mackenzie



Plate 6
Looking southeast from within the site at medium RV perimeter trees 42 and 43 (English Oaks). Note when these are in full leaf they will function as a dense screen between the site and adjoining properties.

APPENDIX E

SCHEDULE OF ASSESSED TREES



SCHEDULE OF ASSESSED TREES

400-404 Cabramatta Road West, Cabramatta. 14 August, 2015.

Tree No.	Genus and species Common Name	Ht (m)	Sp (m)	DBH (mm)	Age	V	C	Observations/Comments	ULE	TSR	RV	SRZ† (m)	TPZ† (m)	TPZ (area)
1	<i>Corymbia maculata</i> Spotted Gum	20	9	525	EM	G	G	Dense crown. Low volume of medium Ø deadwood. Minor pruning in the past.	1A	H	H	2.7	6.4	129
2	<i>Corymbia maculata</i> Spotted Gum	13	7	325	EM	G	F-G	Mechanical damage to lower stem N side. Mistletoe in crown. Low volume of medium Ø deadwood.	1A	M	H	2.2	3.9	48
3	<i>Corymbia maculata</i> Spotted Gum	22	11	600	EM	F-G	F-G	Some minor dieback upper crown interior. Mistletoe in crown.	2A	H	H	2.9	7.2	163
4	<i>Corymbia maculata</i> Spotted Gum	17.5	9	500	EM	G	G	Some bark cracking/discolouration. Deadwood to 90mm Ø.	1A	H	H	2.7	6	113
5	<i>Eucalyptus elata</i> River Peppermint	8	7	*400 GL	SM	G	P	Basal suckers. Open, suppressed crown- sprawling habit.	4	L	L	2.3	4.8	72
6	<i>Corymbia maculata</i> Spotted Gum	20	12	625	EM	G	G	Mistletoes in crown. Very minor tip dieback.	1A	H	H	2.9	7.6	180
7	<i>Corymbia maculata</i> Spotted Gum	21	12	550	EM	G	G	Some bark necrosis to lower NNE scaffold noted. Low volume of small to medium Ø deadwood.	1A	H	H	2.8	6.6	137
8	<i>Lagunaria patersonia</i> Norfolk Island Hibiscus	9.5	5	300	SM	F-G	F-G	Badly 'lopped'. Overall tip dieback, although not severe. Undesirable species due to 'fibreglass-like' irritant filaments produced in seed capsule.	2B	L	L	2.2	3.6	41
9	<i>Eucalyptus tereticornis</i> Forest Red Gum	21	13	725	M	F-G	F	Scattered dieback. Mistletoes. Included primary stems.	2D	H	H	3.1	8.8	241
10	<i>Melaleuca quinquenervia</i> Broad-leaved Paperbark	11	4	475 AB	SM	V-P	P	Almost dead. Significant crown decline. Deadwood >200mm Ø.	4	L	L	2.5	5.4	92
11	<i>Melaleuca quinquenervia</i> Broad-leaved Paperbark	14	5	600 AB	SM	P	F	Significant dieback. Suppressed on 2 sides.	3D	M	L	2.9	7.2	163
12	<i>Melaleuca quinquenervia</i> Broad-leaved Paperbark	11	6	450 AB	SM	P	F	Suppressed to E. Notable, significant decline.	3D	M	L	2.4	5.1	84
13	<i>Eucalyptus tereticornis</i> Forest Red Gum	23	12	625	M	F	F	Small to medium Ø branch failures. Upper crown dieback and deadwood >100mm Ø.	2D	H	M	2.9	7.6	180

URBAN FORESTRY AUSTRALIA - TREE MANAGEMENT & CONSULTING ARBORICULTURISTS

Tree No.	Genus and species Common Name	Ht (m)	Sp (m)	DBH (mm)	Age	V	C	Observations/Comments	ULE	TSR	RV	SRZ† (m)	TPZ† (m)	TPZ (area)
14	<i>Corymbiummifera</i> Red Bloodwood	22	11	250+ 650	M	F-G	F	Crown decline in upper parts. Declining sub-stem. Deadwood >100mm Ø.	2D	H	M	2.9	7.8	191
15	<i>Ligustrum lucidum</i> Large-leaved Privet				NA			Weed species		L				
16	<i>Grevillea robusta</i> Silky Oak	20	8	600 AB	M	F-P	F	Kinked stem. Thin, sparse crown.	3B	M	L	2.9	7.2	163
17	<i>Ligustrum lucidum</i> Large-leaved Privet							Weed species		L	L			
18	<i>Ficus decora</i> Rubber Tree	17	15	*1400	M	G	F	Introduced <i>Ficus</i> species of undesirable species traits. Vigorous growth. Notable aerial roots.	3B	M	L	4	15	707
19	<i>Jacaranda mimosifolia</i> Jacaranda	14	16	350 + 500	M	G	F-G	Heavily suppressed to N. High crown. Minor tip dieback.	2D	M	M	2.9	7.2	163
20	<i>Cinnamomum camphora</i> Camphor Laurel	11	11	*600 AB	EM	F-G	F?	Undesirable species. Heavily infested with ivy.	3B?	M	L	2.7	7.2	163
21	<i>Eucalyptus tereticornis</i> Forest Red Gum	23	17	675	M	F	F-G	Typical growth habit and branch architecture. Co-dominant stems @ 3.5m. Thinning crown with tip and small branch dieback. Medium volume of deadwood to 100mm Ø.	2D	H	H	3.1	8.1	206
22	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	10	5	175 + 250	SM	G	F-P	Distinct, tightly included compression fork @ 1m.	3B	M	L	2.2	3.7	43
23	<i>Eucalyptus tereticornis</i> Forest Red Gum	25	18	1050	M	F-G	F	Co-dominant stems @ 1.8m. NE stem w/substantial wounds (old inclusion failures). Low to medium volume deadwood to 150mm Ø.	2B	H	M	3.6	12.6	499
24	<i>Eucalyptus tereticornis</i> Forest Red Gum	21	14	500	EM	F	F-P	Distinct stem kink to S. Poor form. Low volume dieback.	2D	H	M	2.7	6	113
25	<i>Eucalyptus tereticornis</i> Forest Red Gum	19	14	525	EM	G	F	Stem sweep to E. Crown bias to E. Low volume deadwood to 60mm Ø.	2D	H	M	2.7	6.4	129
26	<i>Castanospermum australe</i> Blackbean	10	10	300	SM	G	G	Some small, rubbing, crossing branches. Very minor deadwood. Young suckers/seedlings @ base.	1A	M	H	2.8	6.6	137
27	<i>Allocasuarina littoralis</i> Black She-oak	14	6	375	SM	F	F	Thin crown, w/notable dieback of tips and very small branches. Small Ø deadwood.	2D	M	M	2.4	4.5	64
28	<i>Eucalyptus tereticornis</i> Forest Red Gum	32	28	1800	M	F-G	F	Some very large Ø deadwood and old branch failures. Pruned in the past to W w/resulting dieback. Significant tree.	2D	H	H	4.5	15	707

URBAN FORESTRY AUSTRALIA - TREE MANAGEMENT & CONSULTING ARBORICULTURISTS

Tree No.	Genus and species Common Name	Ht (m)	Sp (m)	DBH (mm)	Age	V	C	Observations/Comments	ULE	TSR	RV	SRZ† (m)	TPZ† (m)	TPZ (area)
29	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	10	5	300	SM	F-G	F	Suppressed to SE. Heavy bias to W/NW. Co-dominant stems @ 3m.	3D	M	M	2.8	6.6	137
30	<i>Eucalyptus tereticornis</i> Forest Red Gum	15	12	575	EM	G	F-G	Slightly overtopped by T28. Low volume deadwood.	2A	M	M	2.9	7	152
31	<i>Hymenosporum flavum</i> Native Frangipani	13	5	275	SM	G	G	Minor, small branch dieback.	2A	M	M	2.1	3.3	35
32	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	11	7	525 AB	M	F-G	P	A little pale. Some dieback to SE, but not serious. Co-dominant, included stems near base. SE stem also co-dominant and included.	4	M	L	2.6	6	113
33	<i>Eucalyptus tereticornis</i> Forest Red Gum	22	13	675	M	G	F?	Lower stem wound – decaying N side. Decay diagnostic testing recommended if tree retained.	2?	H	H?	3.1	8.1	206
34	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	16	6	2 x 375	M	G	F-G	Lost leading stem in the past. Very minor volume deadwood. Co-dominant, included stems @ 1.1m.	2A	H	M	2.6	6.4	129
35	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	9	7	350	EM	G	G	No special problems observed at time of inspection.	1A	M	H	2.3	4.2	55
36	<i>Eucalyptus tereticornis</i> Forest Red Gum	25	12	575	EM	G	G	Tall, narrow, typical habit and form. Very minor dieback and deadwood.	1A	H	H	2.9	7	152
37	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	12	7	375	EM	P	F	Very distinct tip dieback overall, especially N side. Branch failures noted.	3D	M	L	2.4	4.5	64
38	<i>Eucalyptus tereticornis</i> Forest Red Gum	26	14	750	M	F	F	Thinning. E stem very poor. Medium volume of moderate Ø deadwood.	2D	H	M	3.1	9	255
39	<i>Eucalyptus amplifolia</i> Cabbage Gum	17	10	475	EM	G	F	Suppressed, w/bias to E over neighbour's. Badly 'lopped'. Deadwood to 120mm Ø. Included stems @ 4m.	2B	H	M	2.6	5.8	104
40	<i>Eucalyptus tereticornis</i> Forest Red Gum	22	15	700	EM	G	G	Emergent/dominant tree. Large, low, dead branch to SE, but remainder of tree pretty good.	2A	H	H	3.1	8.4	222
41	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	17	8	525	M	G	F	Distinct stem kink @8m. 'Gap' in crown E side.	2D	H	M	2.7	6.4	129
42	<i>Quercus robur</i> English Oak	14	9	600	EM	G	F-G	Exotic species. Dieback of some scaffolds to N (suppressed to N). Bifurcated @ 2m.	2D	M	M	2.9	7.2	163
43	<i>Quercus robur</i> English Oak	14	15	700	EM	G	F-G	Crown asymmetry. 'Lopped' badly. Vines in branches.	2D	M	M	3.1	8.4	222

URBAN FORESTRY AUSTRALIA - TREE MANAGEMENT & CONSULTING ARBORICULTURISTS

Tree No.	Genus and species Common Name	Ht (m)	Sp (m)	DBH (mm)	Age	V	C	Observations/Comments	ULE	TSR	RV	SRZ† (m)	TPZ† (m)	TPZ (area)
44	<i>Grevillea robusta</i> Silky Oak	22	6	775	LM	P	F-G	Straight stem, with no anomalies. Substantial dieback and overall crown decline.	4	M	L	3.1	9.3	272
45	<i>Eucalyptus tereticornis</i> Forest Red Gum	22	18	625	M	G	F-P	Large, old branch failure to SSE. Stem wound and <i>Phellinus bracket fungus</i> . Tip and small branch dieback.	3D	H	M	2.9	7.6	180
46	<i>Eucalyptus tereticornis</i> Forest Red Gum	16	7	450	EM	G	F-G	Slight suppression to S. No major dieback or deadwood.	2D	M	M	2.5	5.4	92
47	<i>Acacia decurrens</i> Black Wattle	8	8	2 x 150	M	G	F-G	'Gumming' at co-dominant stems and branch/stem junctions.	3C	L	L	1.8	2.7	23
48	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	11	7	475	EM	F	G	Upper crown a little pale, and leaves distorted – otherwise ok.	2D	M	M	2.6	5.8	104
49	<i>Eucalyptus tereticornis</i> Forest Red Gum	19	16	575	EM	G	G	Low volume, moderate Ø deadwood. Minor tip dieback.	1A	H	H	2.9	7	152
50	<i>Jacaranda mimosifolia</i> Jacaranda	10	14	*300 + 500	M	G	F?	In adjoining property. Limited inspection. Substantial stem pruned to E. Extends over site 4 – 5m @ 6 – 8m AGL.	2D?	M?	M?	2.7	7	152
51	<i>Eucalyptus moluccana</i> Grey Box	19	20	*750	M	G	G?	Straddling boundary. Limited inspection. Base obscured. Low volume deadwood mainly confined to lower crown (i.e. from 'shading out').	1A	H	H?	3.1	9	255
52	<i>Corymbia citriodora</i> Lemon-scented Gum	24	11	600	EM	G	G	High crown. Surface roots noted 3m NE. No special problems observed at time of inspection.	1A	H	H	2.9	7.2	163
53	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	12	7	425	EM	F-G	G	Minor stem kink. Minor dieback to S.	2A	M	M	2.5	5.1	84
54	<i>Grevillea robusta</i> Silky Oak	22	15	625	M	F	G	Slight suppression to N. Scattered tip dieback.	2D	H	H	2.9	7.6	180
55	<i>Lophostemon confertus</i> Brush Box	9	3	275	SM	G	F-P	Heavily suppressed by T55. Ivy up stem and scaffolds.	3C	L	L	2.1	3.3	35
56	<i>Populus ?deltoides</i> Cottonwood	21	15	675	M	G	G?	Slight stem lean to S. Mistletoe high in crown. Small branch failures noted.	2A	H	M	3.1	8.1	206
57	<i>Lagerstroemia indica</i> Crape Myrtle	4-5	4-5	*250 GL	SM	G	F?	Poorly pruned in the past. Basal suckering.	3B?	L	L	1.9	2.7	23
58	<i>Brachychiton acerifolius</i> Illawarra Flame Tree	12	9	500	M	F-G	G	Some dieback at top of crown.	2A	M	M	2.7	6	113




URBAN FORESTRY AUSTRALIA - TREE MANAGEMENT & CONSULTING ARBORICULTURISTS

Tree No.	Genus and species Common Name	Ht (m)	Sp (m)	DBH (mm)	Age	V	C	Observations/Comments	ULE	TSR	RV	SRZ† (m)	TPZ† (m)	TPZ (area)
59	<i>Allocasuarina littoralis</i> Black She-oak	15	5	350	EM	F	F	Tip and small branch dieback.	2D	M	M	2.3	4.2	55
60	<i>Melaleuca quinquenervia</i> Broad-leaved Paperbark	14	10	375 + 525	EM	F-P	F-P	Very thin, struggling. Typical stem/branch inclusions. Whole crown tip and branch dieback.	3C	M	L	2.8	7.8	191
61	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	13	12	350	SM	G	G	Slightly overtopped. No special problems observed at time of inspection.	1A	M	H	2.3	4.2	55
62	<i>Corymbia citriodora</i> Lemon-scented Gum	21	13	475	EM	G	F-G	Mistletoe @ old branch failure W/SW. No major dieback or deadwood.	2A	H	H	2.6	5.8	104
63	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	18	11	475	EM	G	F-G	Suppressed to S. Low volume deadwood to 40mm Ø.	2A	H	H	2.6	5.8	104
64	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	19	13	625	M	G	F?	Low dead branch to N. Stem bulges @ 4m. Deadwood to 100mm Ø.	2D?	H	H?	2.9	7.6	180
65	<i>Corymbia citriodora</i> Lemon-scented Gum	21	12	525	EM	G	G	Mistletoe in crown. No special problems observed at time of inspection.	1A	H	H	2.7	6.4	129
66	<i>Corymbia maculata</i> Spotted Gum	22	14	650	EM	G	G	No special problems observed at time of inspection.	1A	H	H	2.9	7.8	191
67	<i>Corymbia maculata</i> Spotted Gum	20	10	450	EM	G	G	No special problems observed at time of inspection.	1A	H	H	2.5	5.4	92
68	<i>Nyssa sylvatica</i> Tupelo	6-7	4	200-250	SM	G	F-G	Group of 4 x small, young trees. Some rubbing/crossing branches and co-dominant leaders. Wall about 1m W.	2A	L	L	2.1	3.0	28
69	<i>Eucalyptus microcorys</i> Tallowwood	19	24	1050	M	G	G?	Bias to E due to line clearance pruning. No significant deadwood. No notable dieback. Should be subject to aerial inspection if retained.	2D	H	H?	3.6	12.6	499
70	<i>Eucalyptus tereticornis</i> Forest Red Gum	16	11	*750 AB	EM	G	F?	Lopped for power lines. Stem obscured by vines.	2D	H	M?	3	8.4	222
71	<i>Corymbia maculata</i> Spotted Gum	17	10	500	EM	G	G	Crown is clear/above power lines. Retaining wall about 1m+ W. No other special problems observed at time of inspection.	2A	H	H	2.7	6	113
72	<i>Melaleuca quinquenervia</i> Broad-leaved Paperbark	6-8	2-3	*225-400	SM	G	F-P	Row of 3 x trees lopped to 2 – 4m and mainly consists of regrowth.	2D	L	L	2.5	4.8	72
73	<i>Melaleuca linariifolia</i> Snow-in-summer	4-6	4-5	*350-400	SM	G	F-P	Heavily lopped.	2D	L	L	2.5	4.8	72





URBAN FORESTRY AUSTRALIA - TREE MANAGEMENT & CONSULTING ARBORICULTURISTS

Tree No.	Genus and species Common Name	Ht (m)	Sp (m)	DBH (mm)	Age	V	C	Observations/Comments	ULE	TSR	RV	SRZ† (m)	TPZ† (m)	TPZ (area)
74	<i>Angophora costata</i> Smooth-barked Apple	8.5	7	350	SM	G	F-P	Lopped – proliferation of epicormic regrowth @ pruning locations.	3D	M	L	2.3	4.2	55
75	<i>Eucalyptus microcorys</i> Tallowwood	25	21	1450 DAB	M	G	F?	Heavily lopped to W. Sweep and crown bias to E. Low volume deadwood up to 100mm Ø. Aerial inspection if retained.	2D?	H	H?	3.9	15	707

KEY

	Trees to be retained.		Non-prescribed exotic, non-indigenous or weed trees proposed to be removed.		Prescribed trees likely to be removed.
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TREE RETENTION VALUE

	HIGH (Priority for Retention) —These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 <i>Protection of trees on development sites</i> . Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.		MEDIUM (Consider for Retention) —These trees may be retained and protected. These are considered less critical, however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.		LOW (Consider for Removal) — These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.		REMOVE (Priority for Removal) —These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.
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† Notional radial offset of a symmetrical, unrestricted root system – subject to change depending on site conditions affecting tree root growth.

* Visually estimated.

GL at ground level.

AGL above ground level.

LEGEND

H	refers to the approximate height of a tree in metres, from base of stem to top of tree crown.
Sp	refers to the approximate and average spread in metres of branches/canopy (the 'crown') of a tree.
DBH	refers to the approximate diameter of tree stem at breast height i.e. 1.4 metres above ground (unless otherwise noted), and expressed in millimetres.
Age	refer to Appendix A -Terms and Definitions for more detail.
V	refers to the tree's vigour (health). L – Low vigour, N – normal vigour, P = poor vigour. Refer to Appendix A -Terms and Definitions for more detail.
C	refers to the tree's structural condition. F = fair condition, G = good condition, P = poor condition. Refer to Appendix A -Terms and Definitions for more detail.
ULE	refers to the estimated <i>Useful Life Expectancy</i> of a tree. Refer to Appendices A and B for details. Where further investigation or testing of trees is required, a ULE can't be accorded until investigations have taken place.
TSR	The <i>Tree Significance Rating</i> considers the importance of the tree as a result of its prominence in the landscape and its amenity value, from the point of public benefit. Refer to Appendix C –for more detail.
RV	Refers to the retention value of a tree, based on the tree's ULE and Tree Significance. Refer to Appendix C –for more detail. Note: a RV cannot be accorded to a tree where the ULE is not provided.
SRZ†	Structural Root Zone (SRZ) refers to the critical <u>radial offset in metres</u> from the centre of the tree's stem required to maintain stability of the tree. The SRZ is calculated on the diameter measured immediately above the root buttress or flare (DAB). Where this measurement is not taken in the field, it is calculated by adding 12.5% to the stem diameter at breast height (DBH). Refer to Appendix A -Terms and Definitions for more detail.
TPZ†	Tree Protection Zone (TPZ) refers to the <i>tree protection zones</i> for trees to be retained. The measurement given is a <u>radial offset in metres</u> from the centre of the tree's stem. Refer to Appendix A -Terms and Definitions for more detail.

APPENDIX F
TREE LOCATION PLAN



